CABARRUS COUNTY

BOARD OF COMMISSIONERS WORK SESSION

May 04, 2026
5:00 PM

CALL TO ORDER - Chairperson

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1.2. Active Living & Parks - Frank Liske Park Soccer Complex Pg. 4

1.3. Facilities Design and Construction - Frank Liske Park Second Entrance Feasibility Study and Traffic Impact Analysis Update Pg. 13

1.4. Fire Marshal – County Employed Firefighters- Colocation Pg. 204

2. DISCUSSION ITEMS - FOR ACTION

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2.3. Boards and Committees - Centralina Workforce Development Board - Appointment Pg. 209

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2.5. BOC - Resolution Requiring Transparency on Federal and State Budget Impacts Pg. 213

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2.7. Consolidated Human Services Agency (CHSA) - Transportation Title VI Policy Pg. 219

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2.9. County Manager - Approval of Definitive Project Investment Agreement with North Carolina Railroad Company and RRB Beverage Operations Inc. and Definitive Project Investment Sub-agreement with RRB Beverage Operations, Inc. Pg. 266

2.10. County Manager - Fourth Amended and Restated Operating Agreement for the Elma C. Lomax Incubator Farm Park with Carolina Farm Stewardship Association Pg. 289

2.11. County Manager - Hickory Ridge at Raging Ridge Greenway Pg. 294

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2.16. Sheriff's Office - Approval of Axon/Skydio Drone Contract Pg. 369

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4. CLOSED SESSION

4.1. Closed Session - Consult with Attorney Pg. 399

5. ADJOURN

In accordance with ADA regulations, anyone who needs an accommodation to participate in the meeting should notify the ADA Coordinator at 704-920-2100 at least forty-eight (48) hours prior to the meeting.

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

May 4, 2026
5:00 PM

AGENDA CATEGORY:

DISCUSSION ITEMS - NO ACTION

SUBJECT:

BOC - North Carolina Office of the State Auditor

BRIEF SUMMARY:

Charlotte Regional Field Manager, Andrew Stiffel, will provide the Board an overview of the Office of the State Auditor and their functions. Andrew will share accomplishments in the last year, projects his team is working on now, and share ideas of how the office can help on the local level.

REQUESTED ACTION:

Receive input.

SUBMITTED BY:

Ariadne Olvera, Clerk to Board of Commissioners

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS – NO ACTION

SUBJECT:

Active Living and Parks - Frank Liske Park Soccer Complex

BRIEF SUMMARY:

The proposed contract for the Frank Liske Park Soccer Complex is being provided to the Board of Commissioners for advance review. The agreement was developed over the past year in coordination with County Management, Legal Counsel, Active Living and Parks Commission, and staff. It has been signed by the Charlotte Soccer Association and is currently with the City of Concord for Council approval. This item is intended to provide the Board with an overview of efforts to date to deliver recreational athletic services in the county while offsetting maintenance expenses.

REQUESTED ACTION:

No action; discussion only. The signed version (CSA and Concord) will come before the board in June requesting authorization for the county manager to execute.

SUBMITTED BY:

Byron Haigler, Active Living and Parks Director

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1. Frank Liske Park Soccer Complex Agreement

MEMORANDUM OF UNDERSTANDING REGARDING JOINT USE OF FACILITIES

Frank Liske Park

This **MEMORANDUM OF UNDERSTANDING REGARDING FACILITIES** (this "**Agreement**"), by and between **Cabarrus County**, a political subdivision of the State of North Carolina (hereinafter the "**County**"); the **City of Concord**, a N.C. municipal corporation (hereinafter the "City"); and **The Charlotte Soccer Academy** (hereinafter "CSA"), is effective this the 20 day of April, 2026 (the "**Effective Date**"). For purposes of this Agreement, the three entities are each referred to as a "**Party**" and collectively as the "**Parties**."

WHEREAS, the County owns Frank Liske Park located at 4001 Stough Road, Concord, N.C. which is used by all three parties for organized events as well as members of the general public; and

WHEREAS, the Parties desire to enter into an inter-local cooperation agreement, as authorized by N.C. Gen. Stat. § 160A-461, for the purpose of providing adequate facilities to the residents of Cabarrus County in a way that strengthens the community, optimizes public resources, effectively and efficiently manages the use of facilities, and establishes a coordinated facilities planning process;

NOW, THEREFORE, in consideration of the foregoing premises and other good and valuable consideration, the Parties agree as follows:

1. **Purpose of Agreement and Term.** This Agreement seeks to provide a framework and administrative support for collaboration and decision making among the Parties. The terms contained herein shall be effective July 1, 2026, and shall continue for the remainder of the County's fiscal year to June 30, 2027.

2. **Payment.** CSA shall pay a flat annual fee to the County of $90,000.00 (Ninety Thousand Dollars) per fiscal year, due and payable in full as set forth herein. This fee shall cover CSA's use and priority rights to the Frank Liske Park soccer fields as set forth herein and is in addition to the tournament fees set forth in Paragraph 3, infra. This fee is not refundable for any

reason, except a prorated refund of this fee will be paid by the County to CSA in the event that the County terminates this agreement during a fiscal year term.

3. **Schedule and Manner of Payments.** CSA will pay Cabarrus County the flat annual fee of $90,000.00 for the usage of each of the fields for the duration of the contract under the following schedule:

July 1st, 2026	$22,500.00
September 1st, 2026	$22,500.00
December 1st, 2026	$22,500.00
March 1st, 2027	$22,500.00

Additional payments for weekend tournaments at $5,000.00 each as set forth below shall be due and payable within 14 calendar days after the conclusion of each tournament. All payments shall be made in electronic format to the Cabarrus County Finance Office, the point of contact for this account being Daniel Reece, direece@cabarruscounty.us, Tel. 704-920-2212. The County Finance team for receiving payments may also be reached at ach@cabarruscounty.us

The proposed schedule, subject to change, will be as follows for CSA to have priority use of the fields:

Monday through Friday	6pm - 9pm for fields #2 and 3
Monday through Thursday	6pm - 7:30pm for fields #10 and 11
Tuesday and Thursday	6pm - 7:30pm for fields #8 and 9
Saturdays	8am - 5pm fields #2, 3, 8, 9, 10, 11
Sundays	9am - 5pm fields #2, 3, 10, 11

In addition to the above, CSA will have the use of all of the soccer fields at Frank Liske Park to host age groups at the following showcase tournaments at an additional fee of $5,000.00 each:

Dicks Sporting Goods Invitational Boys (approx. 2nd weekend in August)
Dicks Sporting Goods Invitational Girls (approx. 3rd weekend in August)
Carolina Shootout (approx. 2nd weekend in November)
First Strike (approx. middle weekend in April)

Tournament Cancellation Policy
One Day Tournaments:
If rain prevents the tournament from starting, there is no Tournament fee due;
If the tournament is cancelled by 3pm on the event day, 25% of the Tournament fee is due;
If tournament play occurs after 3pm on the event day, the full Tournament fee is due.

Two Day Tournaments:
If rain prevents the tournament from starting, there is no Tournament fee due.

4. **Fields.** The fields at Frank Liske Park are identified as follows, and the group named has "second priority" rights to the listed fields after the County:

City of Concord:	1, 4, 5, 6, 7,
CSA:	2, 3, 9, 10, 11
County:	8

When possible, the field layouts shall be adjusted at the County's request to due to wear patterns that form, or to avoid excessive wear patterns. The field layout schedule must be approved by the County at the start of the contract term.

Reservations of fields shall be submitted and processed through the County's FUR Form (Facility Usage Request Form). Each shall clearly specify the exact dates and times for all proposed practices, games, tournaments and related activities. Completed forms must be submitted by the following deadlines: Fall Season, no later than July 10, 2026; Spring Season, no later than February 12, 2027;

5. **Conflicts.** The Parties shall work cooperatively and in good faith to avoid conflicts of use, maximize the use of public resources, and reflect on the priorities set forth herein. The mutual goal of the Parties will be to maintain program continuity, giving adequate notification of scheduling changes or facility use to allow completion of a program cycle and, where necessary, to relocate programming. The County may blackout dates for field maintenance and other preplanned events.

CSA will work directly with Frank Liske Park site manager on Saturday game day schedules for the fall 2026 and spring 2027 season with an intent to condense club games/programming into using less fields and time slots. This process will allow Cabarrus County to rent some of the fields to other sports organizations throughout the year.

The above rentals will operate under the similar time frame as currently being used August through October (November weekends only) and March through May.

During the later time in the fall and early spring only fields 2 and 3 are being utilized due to darker evenings and the necessity to use the lights that are available on these fields. CSA will continue to pay the independent light bill upon demand when using these two fields for the duration of their contract.

6. **Priority of Use and Waiver of Fees.** Each Party will make its facilities available for use by the other Party on a priority basis and at no-cost to the user after the scheduling requirements for the owner's own programs have been met.

7. **Other CSA Duties and Obligations.** CSA and the City shall:

Line the fields they use for the duration of the contract as well as provide goals, corner flags, and the necessary equipment to conduct games and training sessions at the fields the club will utilize for the duration of each season. CSA also agrees to allow their goals to be used by Cabarrus County for other renters the County may obtain on the fields, when the fields become available outside of CSA usage;

Replace any nets and sandbags each season due to wear and tear on any/all of the goals and field equipment the club will utilize for the duration of the contract;

Keep any equipment in the storage building away from the green irrigation control boxes. No flammable liquids may be stored in the building at any time;

Provide at least one (1) off-duty, uniformed law enforcement officer for weekend games and tournaments;

Remove any goals from the playing field when not in use for purposes of mowing or applying turf treatments. If the goals are not removed from the playing field, the County may move them. In no event will the County be liable or responsible for any damage to the goals;

If Frank Liske Park has a desire to turf any of the fields in the future, CSA will offer their services as a free consultant to assist in the construction and marketing of the fields due to their extensive experience in complex development, to include but not limited to:

Introduction to Turf and light providers for RFPs;
Assistance in reviewing all RFPs to help evaluate the quality of the turf being offered;
CSA will help create a marketing packet to Frank Lisk in soliciting sponsors for the fields;
CSA will also open up dialogue to assist in investing in the fields being turfed.

8. **County Duties and Obligations.** The County shall:

Normal turf wear and tear excepted, ensure all fields are maintained to the current CSA's game standard for practice and game play for the duration of the agreement;

Grant CSA first right of refusal on any/all of the fields outside of the County and City programming before outside organizations can rent the fields;

CSA would request that if any of the tournament weekends are cancelled (partial or full weekends) Cabarrus County would refund $5,000.00 for each cancelled tournament weekend;

Grant CSA an opportunity to bid for soccer field equipment needs for the park and any other park needs with the Cabarrus County Park network for the duration of the contract;

The City of Concord would consider granting CSA access to their field equipment during the tournament weekends when CSA is utilization all of the soccer fields;

9. **Personnel and Supervision.** Each user shall provide adequate personnel to supervise the activities that take place at the host facility. Each user shall follow all rules, regulations, and policies set forth by the owner, which shall be available for review at the user's request.

10. **Single Use Requests.** The requesting Party will verify in advance that the facility is available at the date and time requested. Please note that the request will be granted only if the allotted time and space are available.

11. **Maintenance and Turf Chemicals.** The County is responsible for turf care, including mowing and application of needed chemicals. The County will issue notifications to the other Parties when entry upon the fields must be prohibited or delayed, due to turf maintenance. County instructions for access to the fields around maintenance activities shall be fully adhered to, to avoid illness, injury or death to a participant.

12. **Restitution and Repairs.** It shall be the responsibility of the user to make restitution for the repairs in excess of normal wear and tear deemed necessary by the County for damage to a space, area or facility; or equipment or personal property missing from the premises, which may occur as a result of scheduled programs contemplated under this document:

a. Inspection of Facilities- The owner agency shall, through its designated representative, inspect all buildings and grounds area after each use. Inspection shall be directed toward identification of damage to the facilities, fields, and equipment or missing property that may have been caused by the user agency through conduct of its program.

b. Reporting Method- The owner agency shall notify the user of damage or loss no later than three (3) working days after the inspection. Such notification shall consist of sending a facsimile or email to the user agency's designated representative identifying the facility, permit number, date of detection, name of inspector, area or areas involved, description of damage and estimated and/or fixed costs of repairs or property replacement.

c. Repairs- Except as otherwise mutually agreed, the user shall not cause repairs to be made to any building or item of equipment for which the owner agency has responsibility. The owner agency agrees to make such repairs within the estimated and/or fixed costs agreed upon. If it is mutually determined of if it is the result of problem-resolution under this Section that the user agency is responsible for the damage, then the user agency agrees to reimburse the owner agency at the estimated and/or fixed costs agreed upon.

d. Reimbursement Procedure- The owner agency shall invoice the user within seven (7) days of completion of repairs or replacement of missing property. The invoice shall itemize all work hours, equipment and materials with cost rates as applied to the repair work. If the repair is contracted, a copy of the contractor's itemized statement must be attached. Actual costs shall be invoiced if less than estimated and/or fixed costs. Reimbursement shall be made within 30 days from receipt of such invoice.

e. Disagreements- The user shall retain the right to disagree with any and all items of damage to buildings or equipment or missing property as identified by the owner agency provided this challenge is made within ten (10) working days after first notification. Disagreements shall be made in writing to the owner agency and shall clearly identify the reasons for refusing responsibility for damages to the building or equipment. Failure to do so within the prescribed time period shall be considered as acceptance of responsibility by the user. Settlement of disagreements, after property notification, shall be made by an on-site investigation involving both the owner and user agencies or their designated representatives. In the event agreement cannot be reached, the matter shall be referred to the Superintendent and County Manager for review and consideration. The owner shall have the right to make immediate emergency repairs or replace missing property without voiding the user's right to disagree.

13. **Designees.** Any request, notification, or communication required or permitted by this Agreement may be made or received by the Party's respective designee(s); provided, however, that the identification and contact information of such designee(s) is previously communicated to the other Party in writing. Without limiting the foregoing, the Director of the Active Living and Parks Department (the "Director") is hereby appointed as the designee of the County for the purposes of this Agreement.

14. **Term.** This Agreement shall commence on the Effective Date and continue for a period of one (1) thereafter unless otherwise terminated as called for herein.

15. **Termination.** Either CSA or the County may terminate this Agreement at any time, with or without cause, after providing the other with at least ninety (90) days' prior written notice.

16. **Insurance and Indemnification.** CSA shall be responsible for any respective claims or suits arising out of its use of the facility. CSA shall indemnify, defend, and hold the other Parties, including their directors, officers, employees, agents, and representatives, harmless from and against any and all damages, costs, liabilities, losses, injuries, deaths, and expenses (including without limitation, attorney's fees) arising out of or in any way attributable to any accident or other occurrence on or about the Frank Liske Park property.

17. **Notices.** All notices, demands, and other communications made pursuant to this Agreement shall be in writing and given one of the following methods: (i) hand delivery; (ii) first-class registered or certified U.S. Mail, with postage prepaid and return receipt requested; (iii) nationally recognized overnight courier, with all fees prepaid; or (iv) transmitted by facsimile or e-mail. Notice shall be deemed to have been duly given pursuant to this Section: (a) on the day of delivery, if delivered by hand or transmitted by facsimile or e-mail; (b) three (3) business days after the day sent by first-class registered or certified U.S. Mail; or (c) the next business day after

the day sent by nationally recognized overnight carrier. Notices must be addressed to the Parties at the address listed below. Notices are only effective if giving pursuant to this Section.

To the County:
Cabarrus County
c/o County Manager
PO Box 707
Concord, NC 28026
Office: 704-920-2100

To The CSA:
Charlotte Soccer Academy
13333 Dorman Rd.
Pineville, N.C. 28134
Office: 704-708-4166

18. **Miscellaneous.**

a. Materials. CSA shall furnish and supply all expendable materials necessary for carrying out their respective activities and events.

b. Signage. The County shall install or maintain signs at Frank Liske Park as reasonably necessary to inform the public of the location of the fields and the rules governing their use. All signage by the County pursuant to this Section shall be paid for by the County.

c. Amendments. This Agreement may only be amended by the mutual written consent of the Parties.

e. Severability. If any provision of this Agreement is held invalid or unenforceable for any reason, such invalidity or non-enforcement shall not affect the other provisions of this Agreement, and all other provisions shall, to the fullest extent permitted by applicable law, continue in full force and effect.

f. Waiver. No term or condition of this Agreement shall be deemed to have been waived, except by written instrument of the Party charged with such waiver. No such waiver shall be deemed a continue waiver unless specifically stated therein, and each such waiver shall operate only as to the specific term and condition waived.

g. Entire Agreement. This Agreement constitutes the final and complete agreement between the Parties. All prior and contemporaneous negotiations and agreements between the Parties regarding the same are expressly merged into and superseded by this Agreement.

h. Governing Terms. This Agreement shall be superseded by any applicable laws governing the joint use of North Carolina joint use facilities. If a conflict occurs between this Agreement and such laws, the terms and conditions of such laws shall govern.

i. All other ALPS policies apply. All applicable Cabarrus County ALPS policies and procedures shall be followed by the Parties, including abiding by the warnings issued by the Perry Weather System utilized by ALPS.

IN WITNESS WHEREOF, and pursuant to the authority granted by duly recorded resolutions, the Parties executed this Agreement as of the Effective Date.

ATTEST:

_____
County Clerk

CABARRUS COUNTY, N.C.

By: _____
Chair, Cabarrus County Board of Commissioners

By: _____
Cabarrus County Manager

CITY OF CONCORD, N.C.

By: _____
Mayor

_____
City Clerk

By: _____
City Manager

THE CHARLOTTE SOCCER ACADEMY,
A North Carolina Non-Profit Corporation

By: _____
Title: EXECUTIVE DIRECTOR

WITNESSED BY:

By: _____
Title: OPERATIONS DIRECTOR

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS - NO ACTION

SUBJECT:

Facilities Design and Construction - Frank Liske Park Second Entrance Feasibility Study and Traffic Impact Analysis Update

BRIEF SUMMARY:

Staff and consultants will present the feasibility study and traffic impact analysis that was completed for the second entrance into Frank Liske Park. They look to receive input on the schematic design and direction on how to proceed with the project.

REQUESTED ACTION:

Receive input.

SUBMITTED BY:

Michael Miller, Design and Construction Director

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1. Traffic Impact Analysis
2. Cost Estimate
3. Schematic Design

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Frank Liske Park Expansion

Traffic Impact Analysis

4001 Stough Road

Concord, North Carolina 28027

August 2025

Prepared For:

Cabarrus County
PO Box 707
Concord, NC 28026

Benesch Project No.: 1726-500003.00

Engineer in Responsible Charge: Cooper Grissom, PE, PTOE

Alfred Benesch & Company
8000 Regency Parkway, Suite 110
Cary, NC 27518

NORTH CAROLINA PROFESSIONAL ENGINEER COOPER GRISSOM
Signed by: Cooper Grissom
10/1/2025

benesch

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EXECUTIVE SUMMARY

A two-phase improvement is proposed to Frank Liske Park in Concord, North Carolina. Construction of additional onsite parking, improved internal circulation, and a second park driveway comprises Phase 1, to be completed in 2028. Phase 2 proposes a 75-acre expansion of park facilities by 2033. Upon full buildout, the park will be accessible via two full-access driveways: one existing along Stough Road and a second proposed along Jackson Terrace SW.

Upon completion of Phase 1, existing park traffic is expected to redistribute from the site's sole existing access along Stough Road. The improved site is expected to generate 164 additional daily trips, with 50 (20 inbound, 30 outbound) occurring during the park's peak hour after Phase 2 construction of the proposed facilities. Capacity and queue analysis analyzes the weekend midday peak hour of 2:30 – 3:30 PM.

Capacity analysis indicates that the study network operates acceptably in all scenarios: 2025 Existing, 2028 No-Build, 2033 No-Build, 2028 Build and 2033 Build Conditions. The study intersections operate at Level of Service (LOS) C or better in each scenario, with no movement exceeding LOS D. Inbound and outbound movements at the proposed site driveway along Jackson Terrace SW operate at LOS A in 2028 and 2033 Build Conditions. Overall network delays increase by less than 2% when adding site traffic from No-Build Conditions in either future year.

Planning level capacity analysis reveals that daily traffic volumes along major roads within the study network do not exceed the capacities outlined by the Cabarrus-Rowan Metropolitan Planning Organization (CRMPO) Comprehensive Transportation Plan (CTP) in 2025 Existing Conditions. The addition of three years of background growth causes daily volumes along Stough Road and Old Charlotte Road SW to exceed the capacities outlined by the CTP beginning in 2028 No-Build Conditions. Roberta Road is expected to operate over capacity in 2033 No-Build Conditions. Construction of site improvements does not have a significant impact on the daily volumes of nearby roads.

Simulated queueing analysis shows that queues in each study scenario are contained within corresponding turn bays. Typical queues at the proposed second site driveway are estimated to remain under two car lengths. Network wide queues are expected to increase by 1% or less when comparing No-Build and Build Conditions in both 2028 and 2033.

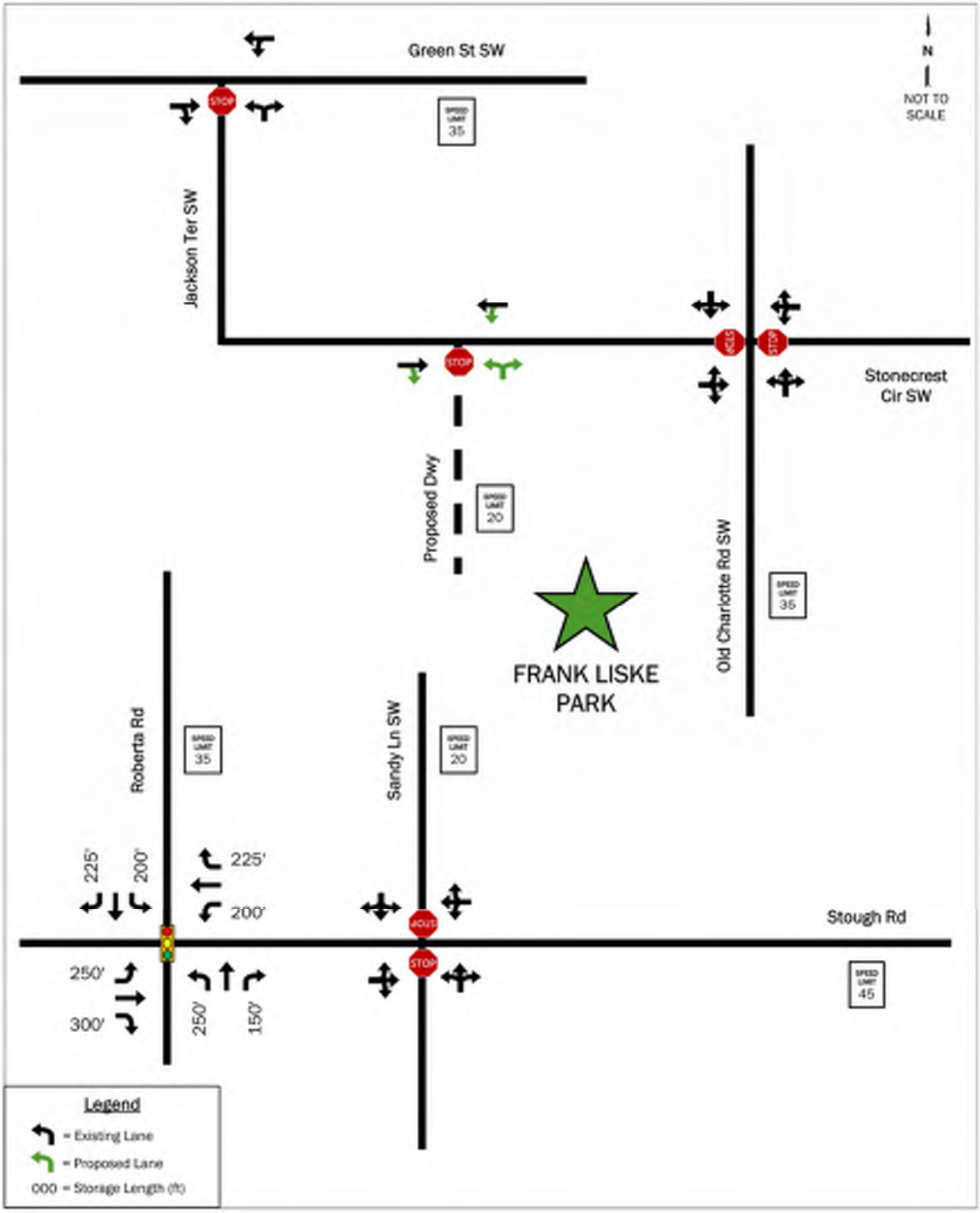
No operational – capacity or queueing – deficiencies are noted during the analyzed peak hour in any of this study's analysis scenarios. As a result, no mitigation measures are recommended to offset the proposed park expansion.

Relocation of an existing fence along Jackson Terrace SW is recommended to improve sight distance for outbound traffic at the proposed Jackson Terrace SW & Site Driveway intersection. The existing fence bounds a cemetery and while impacts to graves are not anticipated, further analysis and coordination with the attached church is recommended to confirm.

Exhibit E1 on the following page provides an overview of proposed geometric changes.

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Exhibit E1 – Proposed Road Geometry



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1.0 INTRODUCTION

Frank Liske Park is an existing public park operated by Cabarrus County in southern Concord, North Carolina and features multiple amenities including athletic fields, pickleball courts, a 10-acre lake, picnic shelters, event spaces and a miniature golf course. Improvements to the existing park – including construction of a secondary driveway along Jackson Terrace SW, improved internal circulation, expanded parking and a new cross-country course – are proposed. Approximately 75 undeveloped acres of the park will be improved, with construction expected to be completed in two phases in 2028 and 2033.

Benesch has prepared this Traffic Impact Analysis (TIA) to assess traffic operations in the following scenarios:

- 2025 Existing Conditions
- 2028 No-Build Conditions
- 2028 Build Conditions
- 2033 No-Build Conditions
- 2033 Build Conditions

The following intersections in the project vicinity have been identified in this TIA for analysis:

1. Stough Road & Roberta Road
2. Old Charlotte Road SW & Jackson Terrace SW
3. Green Street SW & Jackson Terrace SW
4. Stough Road & Sandy Lane SW
5. Jackson Terrace SW & Site Driveway

This report summarizes existing, background and projected traffic at each study location and summarizes analysis of traffic impacts in the form of Level of Service (LOS) and queue lengths. Conclusions and recommended mitigation measures will be drawn from the analysis's findings.

Exhibit 1 depicts the location of the site in Cabarrus County. **Exhibit 2** outlines the proposed site on an aerial image of the study area and labels each study intersection listed above. Scoping materials were approved by City of Concord staff on Thursday, July 31st, 2025 and Wednesday, August 13th, 2025; the TIA Scoping Document summarizing the study's assumptions is included in **Appendix A**.

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Exhibit 1 – Vicinity Map

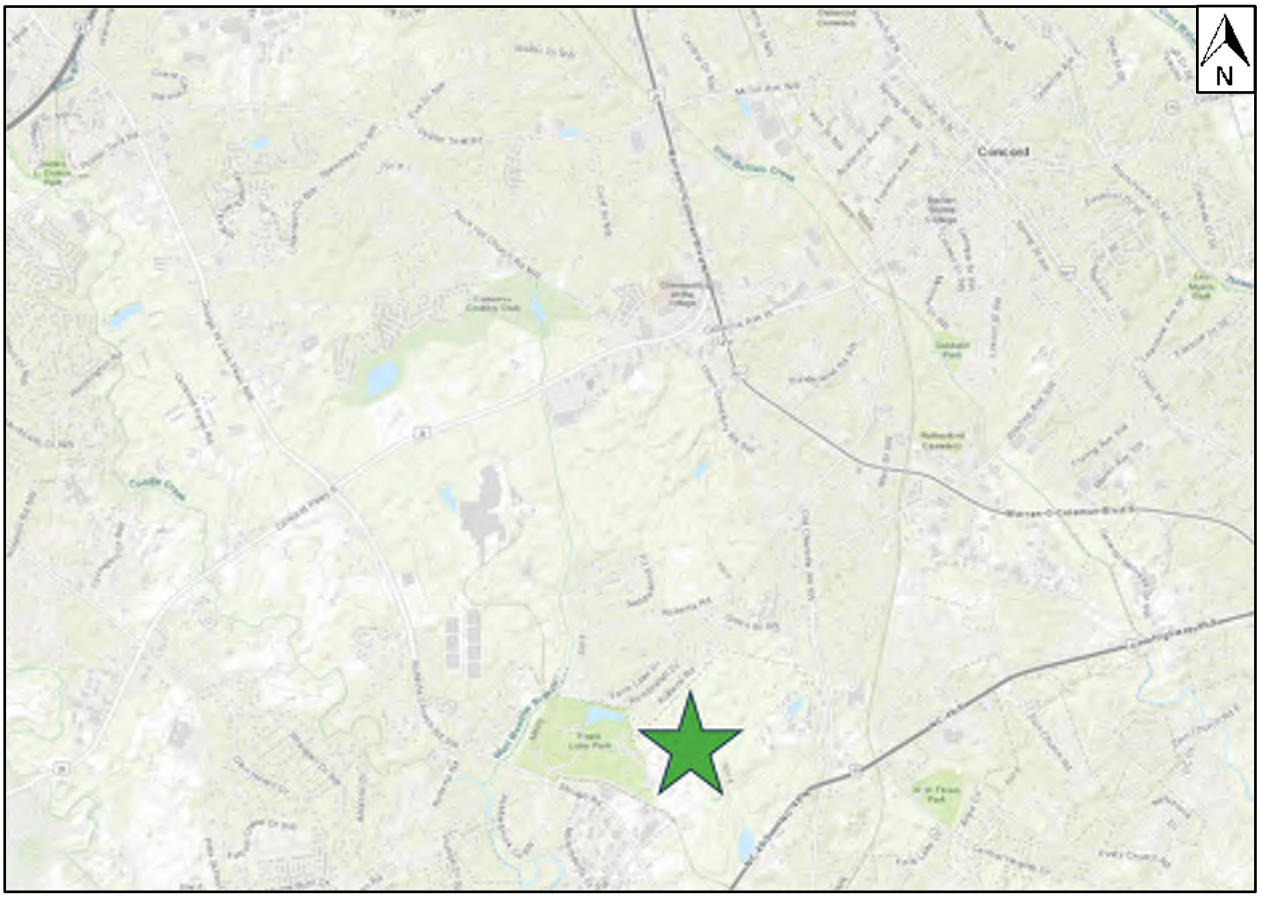
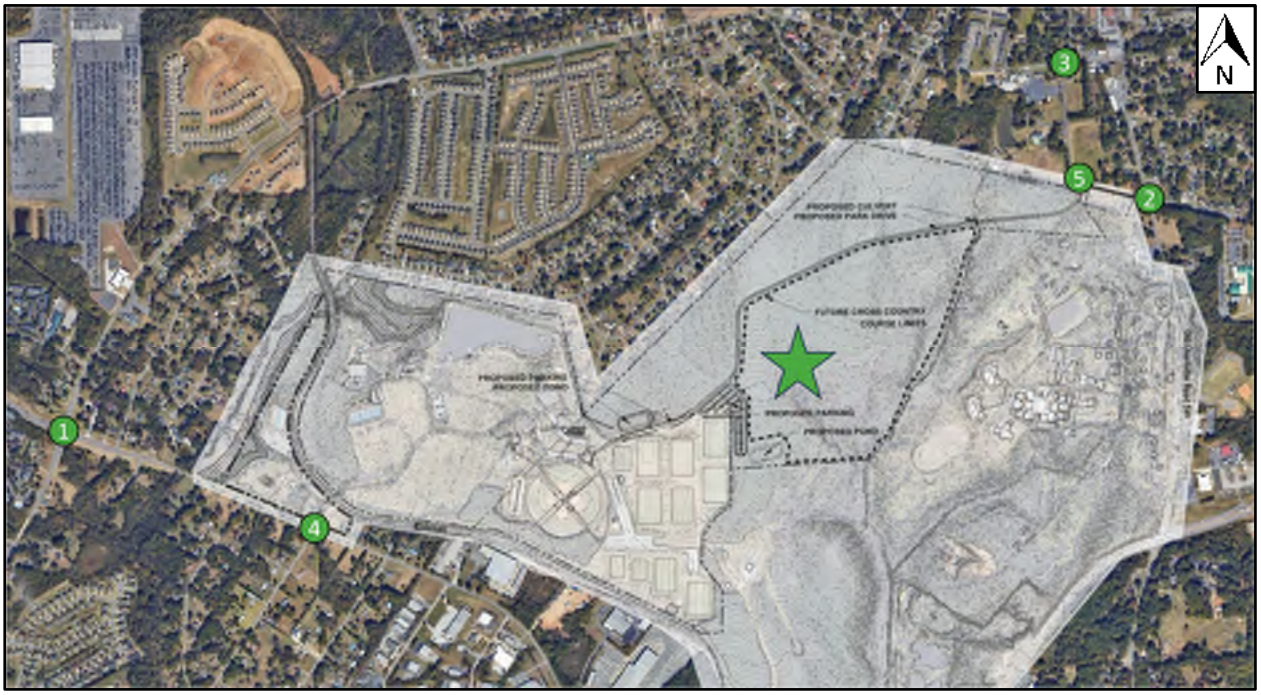


Exhibit 2 – Study Area Map



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Methodology

The *Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition, 2021* is used to estimate traffic generated by the site in its proposed configuration. A traffic count collected at the site's sole existing entrance is used to determine the site's existing trip generation.

Synchro 11 is used to complete intersection operational analysis utilizing *Highway Capacity Manual (HCM) 6th Edition* methodology. Synchro reports are available in **Appendix B**; individual Synchro files are included with the report's submittal.

Average vehicular delays are calculated and reported as Level of Service (LOS) for each study intersection in accordance with HCM 6th methodology. LOS is a system of ranking intersection performance using average stop delay as the evaluation criteria (expressed as seconds of delay per vehicle) and ranges from A to F as seen in **Table 1** below. The acceptable threshold is considered LOS D or better, though the City of Concord identifies LOS C as desirable. Movements operating at LOS E and F are highlighted orange and pink, respectively.

Queueing analysis is completed in SimTraffic 11. Ten 60-minute periods are simulated, with a 10-minute seed time prior to simulation; these ten simulations are then averaged to produce queue values. Available turn-bay lengths are compared to 95th percentile queue results. Queues extending 50 feet or less beyond the available storage length are highlighted in orange; queues exceeding the provided storage bay by more than 50 feet are highlighted in pink. Note that simulations produce variable results by nature. SimTraffic reports are provided in **Appendix C** for reference.

Table 1 – HCM Vehicular LOS Criteria

LOS	Average Delay (sec/veh)	
	Unsignalized	Signalized
A	≤ 10	≤ 10
B	>10-15	>10-20
C	>15-25	>20-35
D	>25-35	>35-55
E	>35-50	>55-80
F	>50	>80

Signalized intersection analyses use the most recent signal plans provided by the North Carolina Department of Transportation (NCDOT). As only one signal is analyzed in the study, coordinated timings are not considered. The signal plan is available in **Appendix D**.

The capacities of roads within the study network, as determined by the Cabarrus-Rowan Metropolitan Planning Organization (CRMPO) Comprehensive Transportation Plan (CTP), are compared to daily traffic volumes provided by NCDOT. Comparison of 2025, 2028 and 2033 volumes is accomplished by growing volumes utilizing an annual growth rate and the addition of site traffic. A specific LOS determination is not provided; a volume to capacity (v/c) ratio greater than 1.0 indicates a road operates at LOS F.

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Sight distance evaluation utilizes guidance found in Appendix E of the *Concord Technical Standards Manual – Traffic Impact Analysis*, which in turn references American Association of State Highway and Transportation Officials (AASHTO) methodology found in the *Policy on Geometric Design of Highways and Streets.*

Turn lane warrant analysis uses methodology found in the NCDOT *Policy on Street and Driveway Access to North Carolina Highways* and evaluates both 2028 and 2033 volumes at site driveways.

As the study area does not feature bicycle or pedestrian infrastructure and significant volumes of neither are present, multimodal analysis is omitted from this report.

2.0 PROPOSED DEVELOPMENT DESCRIPTION

The proposed improvements to the existing Frank Liske Park will be complete in two phases. Phase 1 – complete in 2028 – includes construction of a second driveway along Jackson Terrace SW, 410 new parking spaces along the newly constructed drive, and improvement of internal circulation. Phase 2 – complete in 2033 – will see improvement of 75 acres of currently undeveloped space into a new cross-country course. All current amenities are expected to remain.

Internal Circulation

The existing unsignalized, full-access driveway along Stough Road will remain, with a second access extending a mile southwest from Jackson Terrace SW before connecting with Sandy Lane SW at the existing roundabout near the park's baseball fields. The current roundabout will be improved to accommodate increased park traffic by enlarging the island, realigning the north and east legs, and adding splitter islands. An additional 410 parking spaces will be provided along this connection near the existing soccer fields, as shown in the attached site plan. Additional parking areas are planned near the proposed cross-country course. The preliminary site plan is provided in **Appendix E**.

Sight Distances

Intersection sight distance was evaluated at the potential location of the site driveway along Jackson Terrace SW to ensure that drivers have a clear view of oncoming traffic. Based on observations, no significant curvature is present that would impede sight lines in either direction. Maintenance of grass opposite the driveway will need to be maintained to ensure sight distance to the north. A five-foot tall, spaced bar fence is present along the property line of the cemetery adjacent to the site's proposed driveway and will likely impede sight lines to the east in its current configuration. Relocation of the fence to allow for improved sight lines is recommended. Coordination will be needed with Rocky Ridge United Methodist Church to relocate the fence; further analysis is required to ensure that no graves are impacted. See **Appendix F** for imagery showing sight distance triangles and the relevant fence. The City requested that the driveway be positioned as close to the center of the curve along Jackson Terrace SW as possible, which is accommodated in the attached site plan in **Appendix E**.

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3.0 EXISTING AREA CONDITIONS

Transportation Facilities

Stough Road is a minor arterial running east-west through Cabarrus County. It bounds Frank Liske Park to the south and is currently the sole access point for park users. Stough Road is a 2-lane undivided roadway with a posted speed limit of 45 MPH. It features industrial, institutional and residential uses, and provides regional connectivity to NC 49, US 29 and I-85. NCDOT Transportation Improvement Program (TIP) project R-2246A proposes widening of Stough Road from 2-lane undivided to 4-lane divided. No timeline for construction is currently provided; Stough Road's current laneage is analyzed.

Old Charlotte Road SW is a 2-lane undivided minor arterial that runs north-south to the east of the site. It intersects NC 49 to the south and extends north into Concord, providing access to site traffic approaching from the north and east. Old Charlotte Road SW has a posted speed limit of 35 MPH near the site and serves residential and commercial uses; it also provides access to JN Fries Middle School.

Green Street SW is a 2-lane undivided major collector that connects Old Charlotte Road SW and Roberta Road north of the site. Land uses along the road are primarily residential and institutional. Speeds are limited to 35 MPH along the road.

Jackson Terrace SW is a 2-lane undivided local road extending west from Old Charlotte Road SW before turning north to intersect with Green Street SW. Land along the road is largely undeveloped, though two churches' secondary driveways are accessible. No speed limit is signed; a 25 MPH limit is assumed.

Sandy Lane SW is a 2-lane undivided local road that serves as Frank Liske Park's sole existing driveway along Stough Road. Speeds are limited to 20 MPH within the park, and the road provides access to all park amenities. An at-grade rail crossing is present along the road shortly after entering the park. Upon completion of the site's secondary access, a portion of park traffic is expected to divert from Sandy Lane SW to the new driveway, though it will likely continue to serve a majority of site users.

Roberta Road is a major collector west of the site that extends north from its intersection with Stough Road, connecting Stough Road, Green Street SW and Old Charlotte Road SW. The road is limited to 35 MPH and serves a number of residential developments and institutional uses. It provides access to Wolf Meadow Elementary School to the west and Roberta Road Middle School south of the study area.

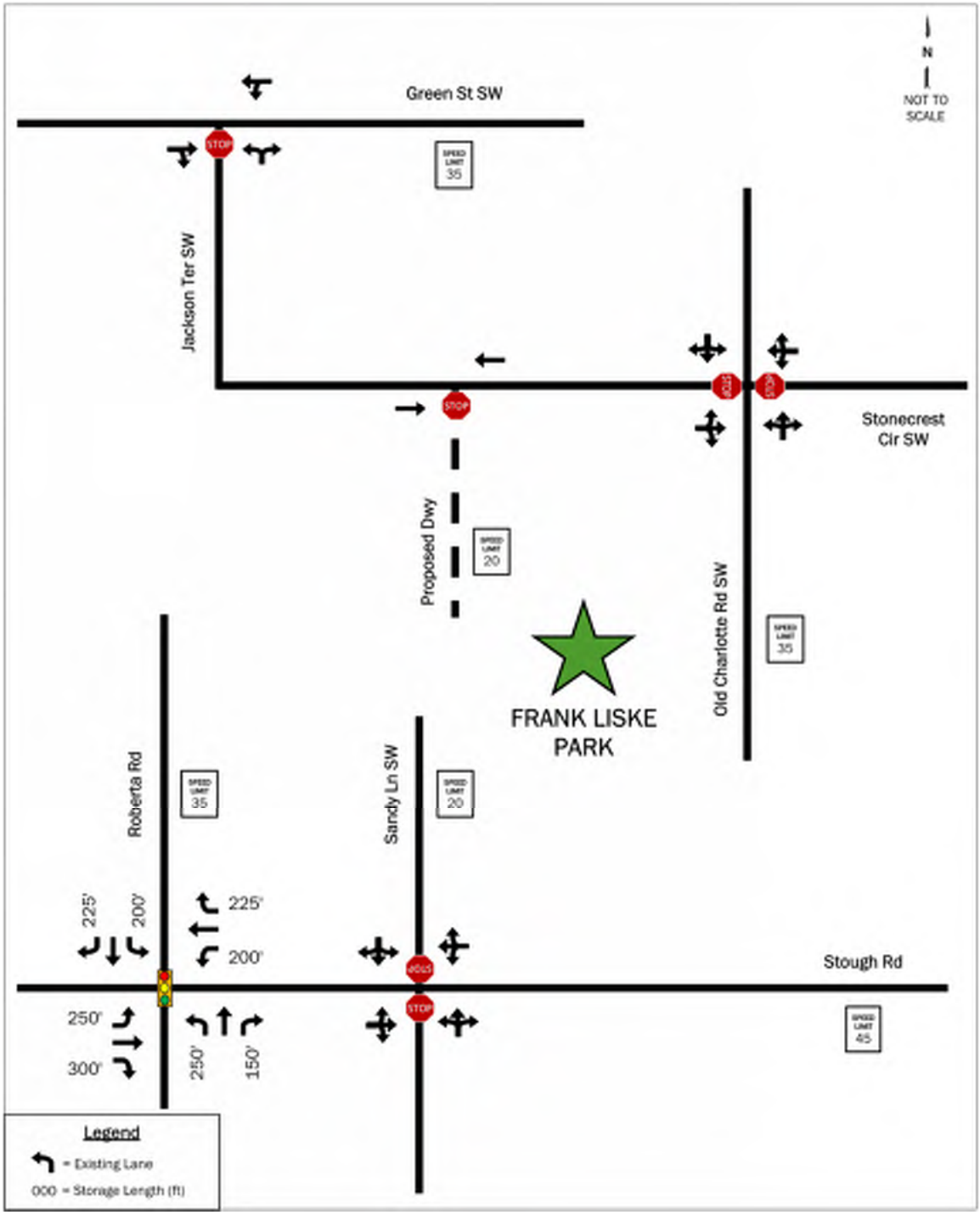
While fixed transit service is provided north of the study area by Concord Kannapolis Area Transit, no routes service the site. Note that bicycle lanes and sidewalks are currently not provided along any of the previously discussed facilities. **Exhibit 3** shows the study network's current lane configuration.

Site Access

Site access is currently provided to Frank Liske Park via one full-access, unsignalized driveway on Stough Road by way of Sandy Lane SW. An at-grade rail crossing is present approximately 300 feet north of Stough Road, potentially impeding access to the park in case of an emergency.

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Exhibit 3 – Existing Road Geometry



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Traffic Counts

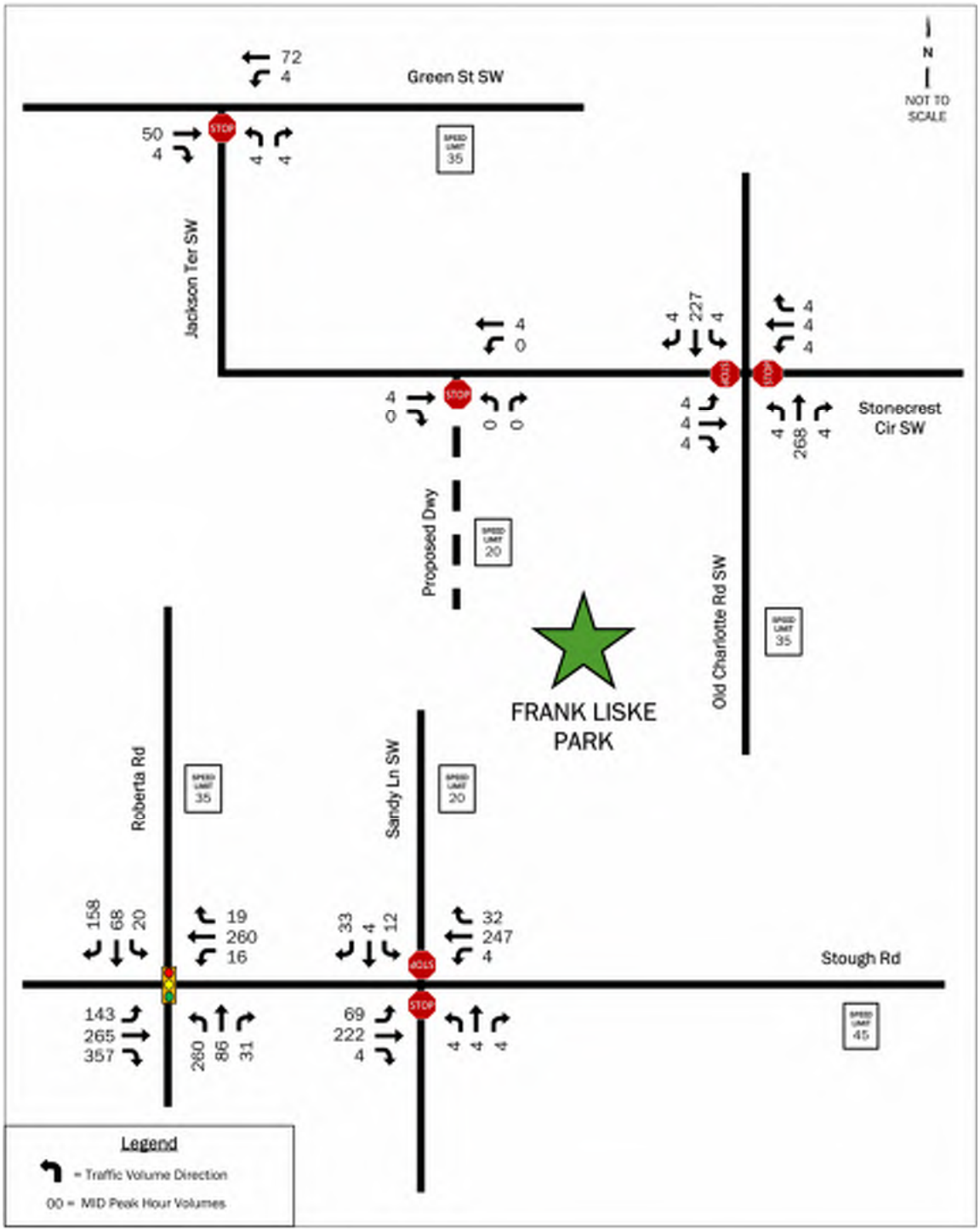
The Cabarrus County Active Living and Parks Department commissioned a Visitation Analysis in June 2025 that analyzed park attendance trends from April 2023 to March 2024. This analysis revealed attendance at Frank Liske Park was greatest on Saturdays, particularly between 2:00 and 4:00 PM. Relevant breakdowns showing daily attendance records from this report are included in **Appendix G**.

Two-hour turning movement counts (TMCs) were collected during the park's peak hours at each of the study area's four existing intersections on Saturday, August 2nd, 2025 from 2:00 to 4:00 PM. All counts included heavy vehicle, bicycle and pedestrian classification. The proposed Jackson Terrace SW & Site Driveway intersection was not counted; vehicles entering and exiting Jackson Terrace SW at its intersection with Old Charlotte Road SW were instead used to estimate through traffic.

An overall peak hour of 2:30 – 3:30 PM was determined; peak hour factors (PHF) and heavy vehicle percentages are calculated in this hour and used in the existing scenario's analysis. **Exhibit 4** shows the peak hour traffic volumes at each study intersection. The collected data is provided in **Appendix H**.

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Exhibit 4 – 2025 Existing Volumes



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4.0 DEVELOPMENT TRAFFIC

Existing Site Traffic Redistribution

Upon construction of the site's second driveway along Jackson Terrace SW in Phase 1 of development, a portion of existing site traffic currently using Sandy Lane SW to access the park is expected to divert and use the new entrance. Based on patterns in traffic count data, the density of surrounding land uses and connections to nearby roads, approximately 25% of site traffic is estimated to use the new driveway upon construction. To reflect this 75/25 split between Sandy Lane SW and the new proposed driveway, 25% of existing site trips are expected to divert to the new driveway, and will travel in the following directions:

- Approximately 20% of site traffic is expected to travel to/from the north along Old Charlotte Road SW
- Approximately 5% of site is traffic is expected to divert and travel to/from the west along Green Street SW

The proposed redistribution is shown in **Exhibit 5**, with trip reassignment volumes displayed in **Exhibit 6**.

Project Trip Generation

A total of 75 acres of Frank Liske Park is proposed for Phase 2 of development in 2033. The anticipated trips generated by the site are estimated using the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition, 2021* utilizing Land Use Code (LUC) 411 – Public Park. No adjustments for internal capture, mode split and pass-by are considered.

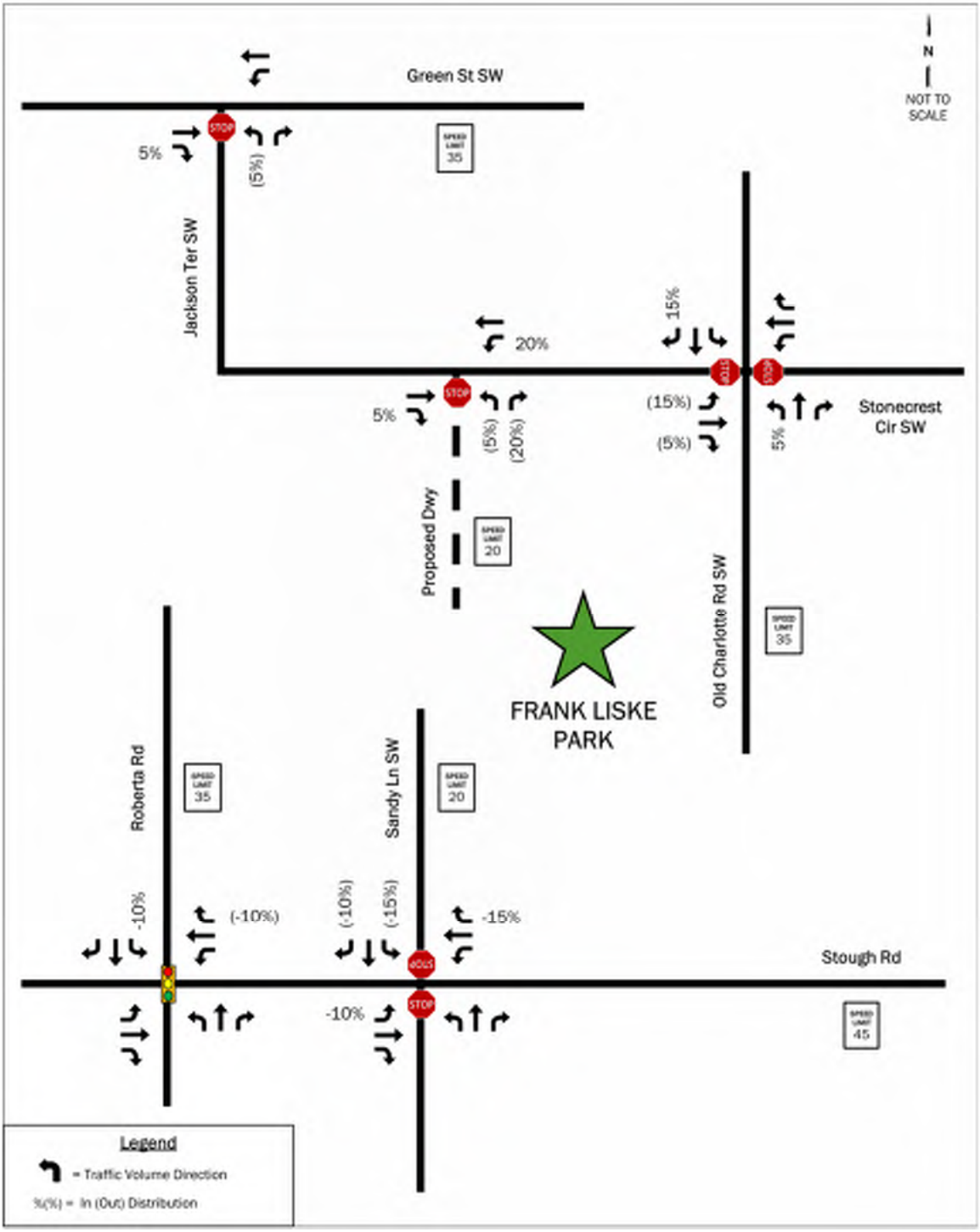
Table 2 summarizes the proposed development's trip generation on an average weekend – using the greater of the estimated trips generated on a Saturday or Sunday – as calculated using ITE Trip Generation formulae; the fitted curve equation is used over average rate when available. Note that these trips are only additional trips generated by the proposed changes, in addition to the park's existing traffic. Trip generation sheets are included in **Appendix I**.

Table 2 – Proposed Development Trip Generation

Land Use	Intensity	Daily	Midday		
			Total	In	Out
Public Park (411)	75 acres	164	50	20	30

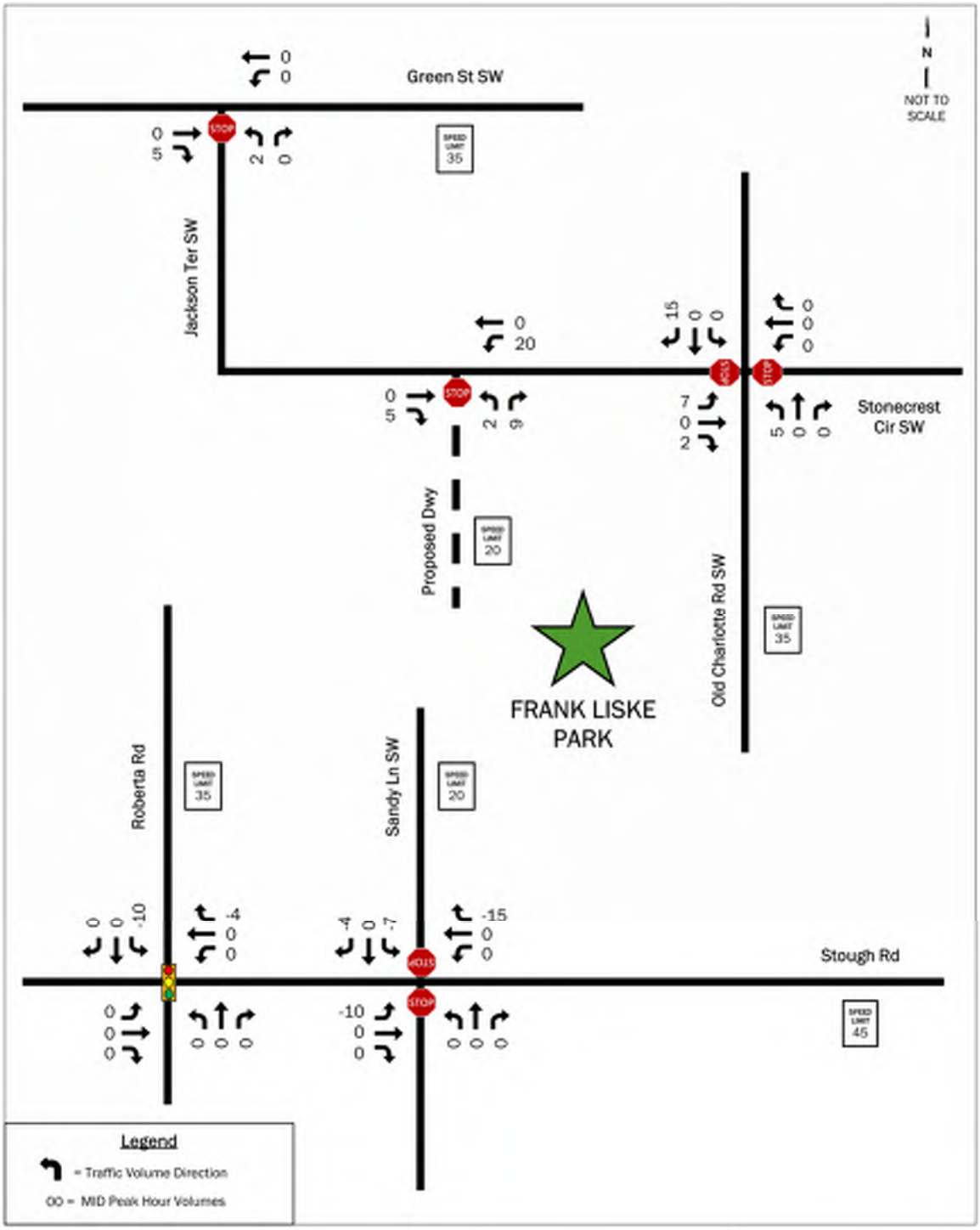
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Exhibit 5 – Existing Trip Redistribution (Phase 1)



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Exhibit 6 – Site Volumes (Phase 1)



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Trip Distribution and Assignment

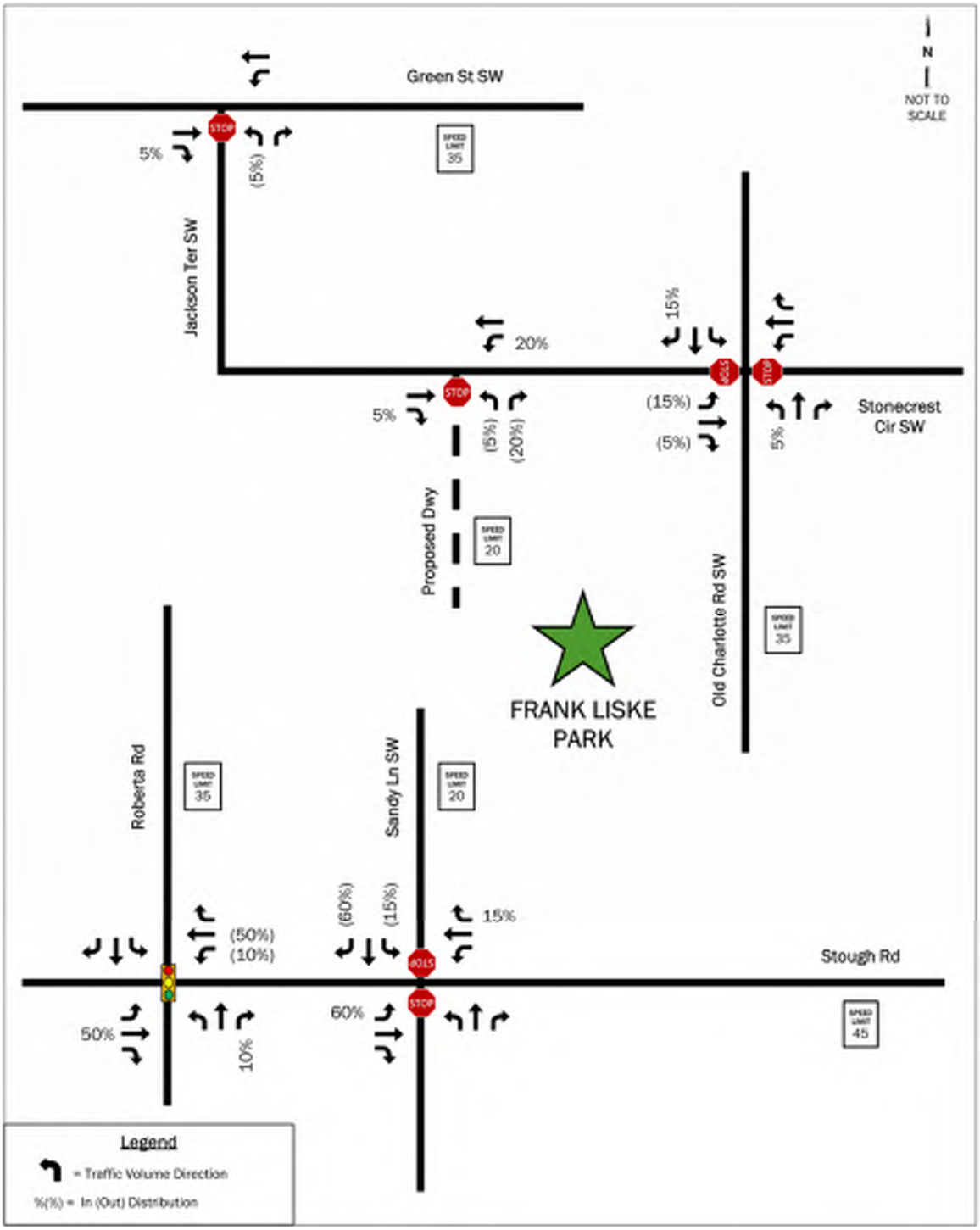
The assignment and directional distribution of new project trips on the transportation network is based on the density of surrounding land uses, location of major thoroughfares and turning movement counts at the site's existing driveway. Site users are expected to travel to and from the following directions:

- Approximately 50% of site traffic is expected to travel to/from the west along Stough Road
- Approximately 15% of site traffic is expected to travel to/from the east along Stough Road
- Approximately 10% of site traffic is expected to travel to/from the south via Roberta Road
- Approximately 15% of site traffic is expected to travel to/from the north via Old Charlotte Road SW
- Approximately 5% of site traffic is expected to travel to/from the south on Old Charlotte Road SW
- Approximately 5% of site traffic is expected to travel to/from the north along Green Street SW

The site's proposed primary trip distribution is summarized in **Exhibit 7**, while the individual trip assignment is provided in **Exhibit 8**.

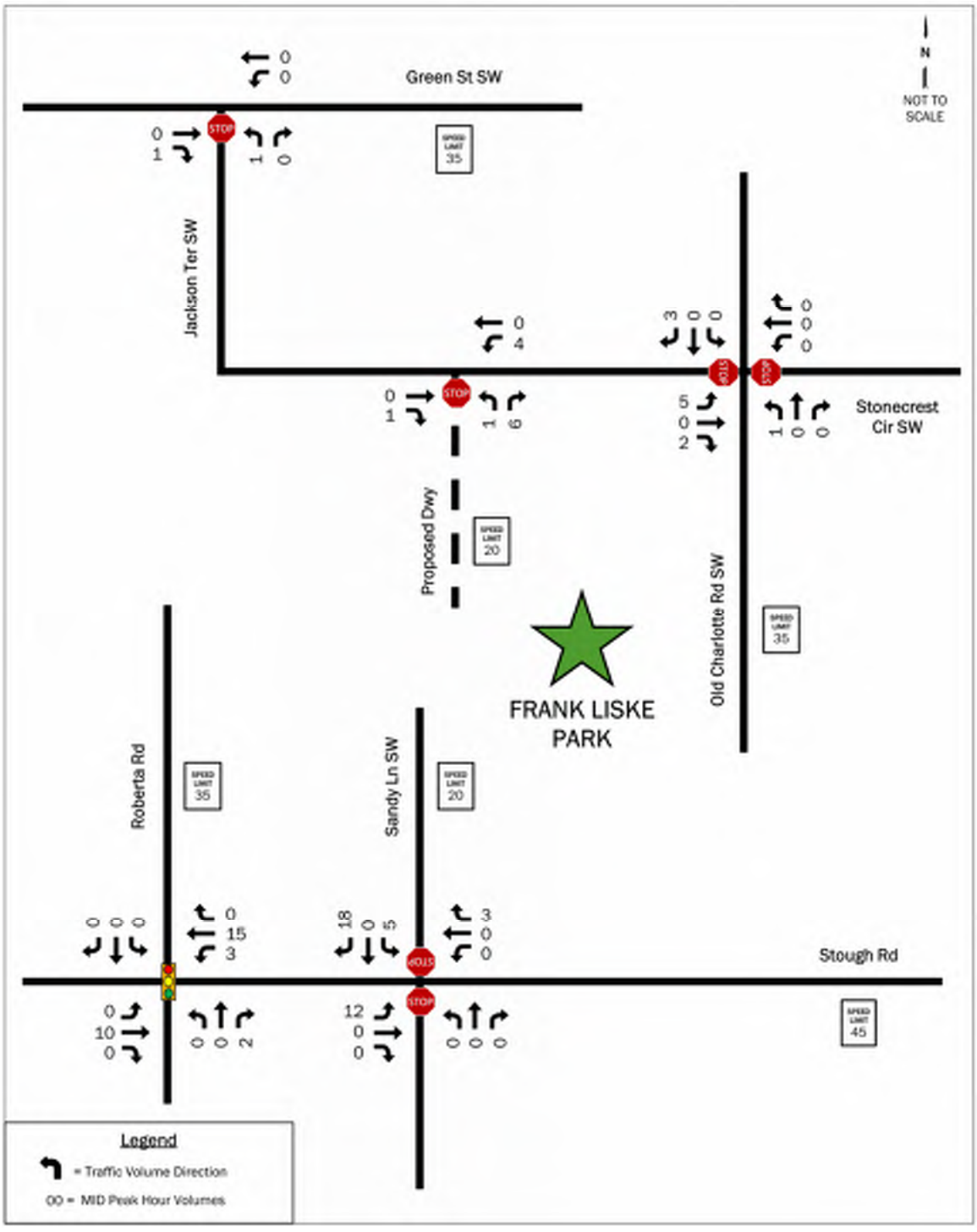
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Exhibit 7 – Trip Distribution (Phase 2)



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Exhibit 8 – Site Volumes (Phase 2)



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5.0 FUTURE TRAFFIC

Background Growth

This study utilizes an annual growth rate of 2% to simulate ambient traffic growth between Existing Conditions in 2025 and Future Conditions in both 2028 and 2033. This rate was determined by combining the annual growth rate of approximately 0.9% calculated from nearby NCDOT count stations along Stough Road, Roberta Road, Green Street SW, Old Charlotte Road SW and NC 49 from 2021 to 2024, with census records for the City of Concord ranging from 2010 and 2024. **Appendix J** provides traffic count data at the relevant NCDOT count stations, census records and a growth rate calculation.

Proposed Off-site Development Traffic

No adjacent developments were identified by Benesch or the City for inclusion in the TIA during the scoping process. As a result, no off-site developments' committed trips are accounted for in this study.

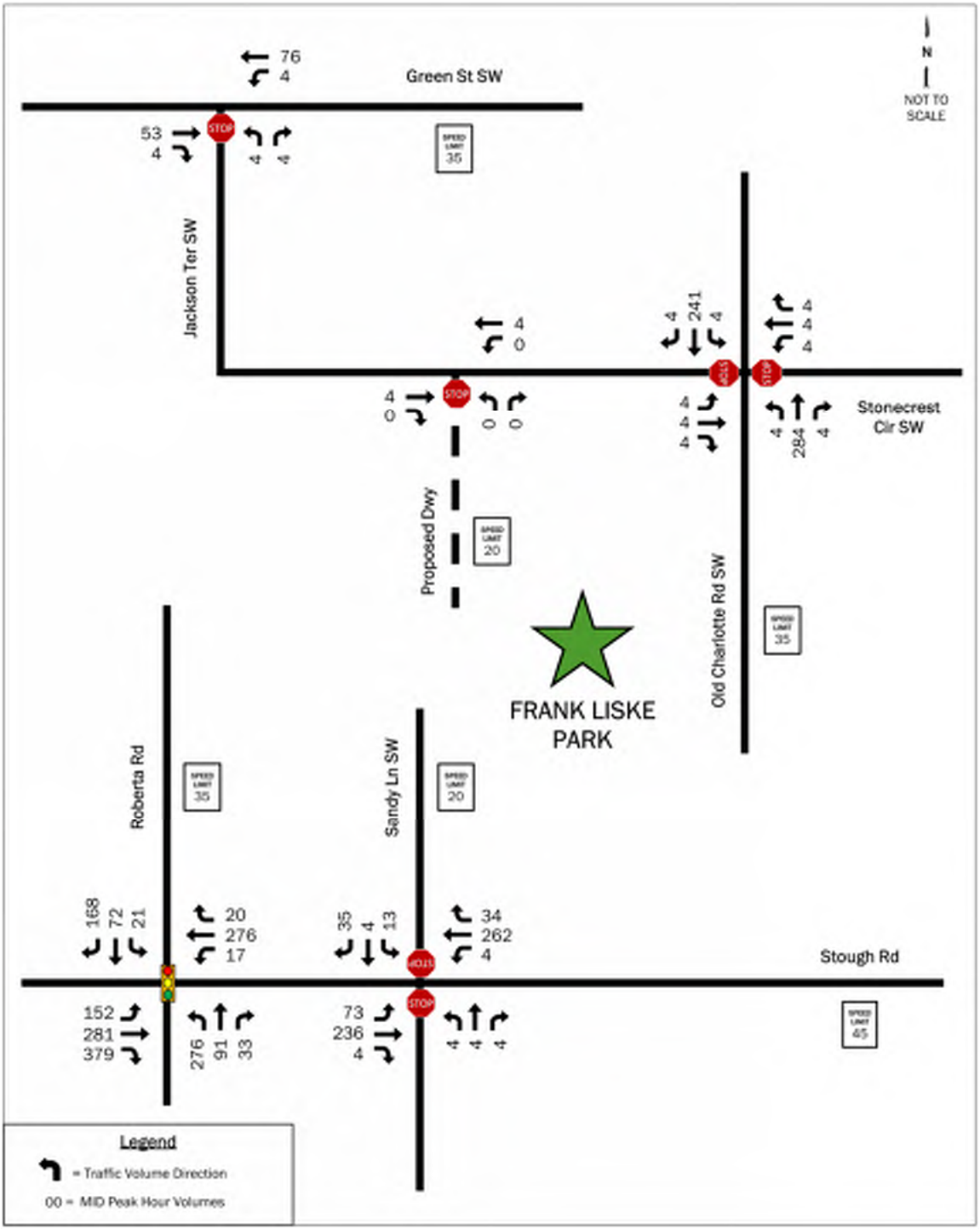
Total Traffic

Existing volumes shown in **Exhibit 4** are grown by 2% over three years to simulate background growth in the study network and develop the 2028 No-Build volumes represented in **Exhibit 9**. The 2033 No-Build volumes, included in **Exhibit 10**, are developed by growing 2028 No-Build volumes by another five years using the same 2% annual growth rate.

Future 2028 and 2033 Build volumes, displayed in **Exhibits 11** and **12**, respectively, are calculated by combining No-Build volumes and the appropriate Phase's site volumes as shown in **Exhibits 6** and **8**.

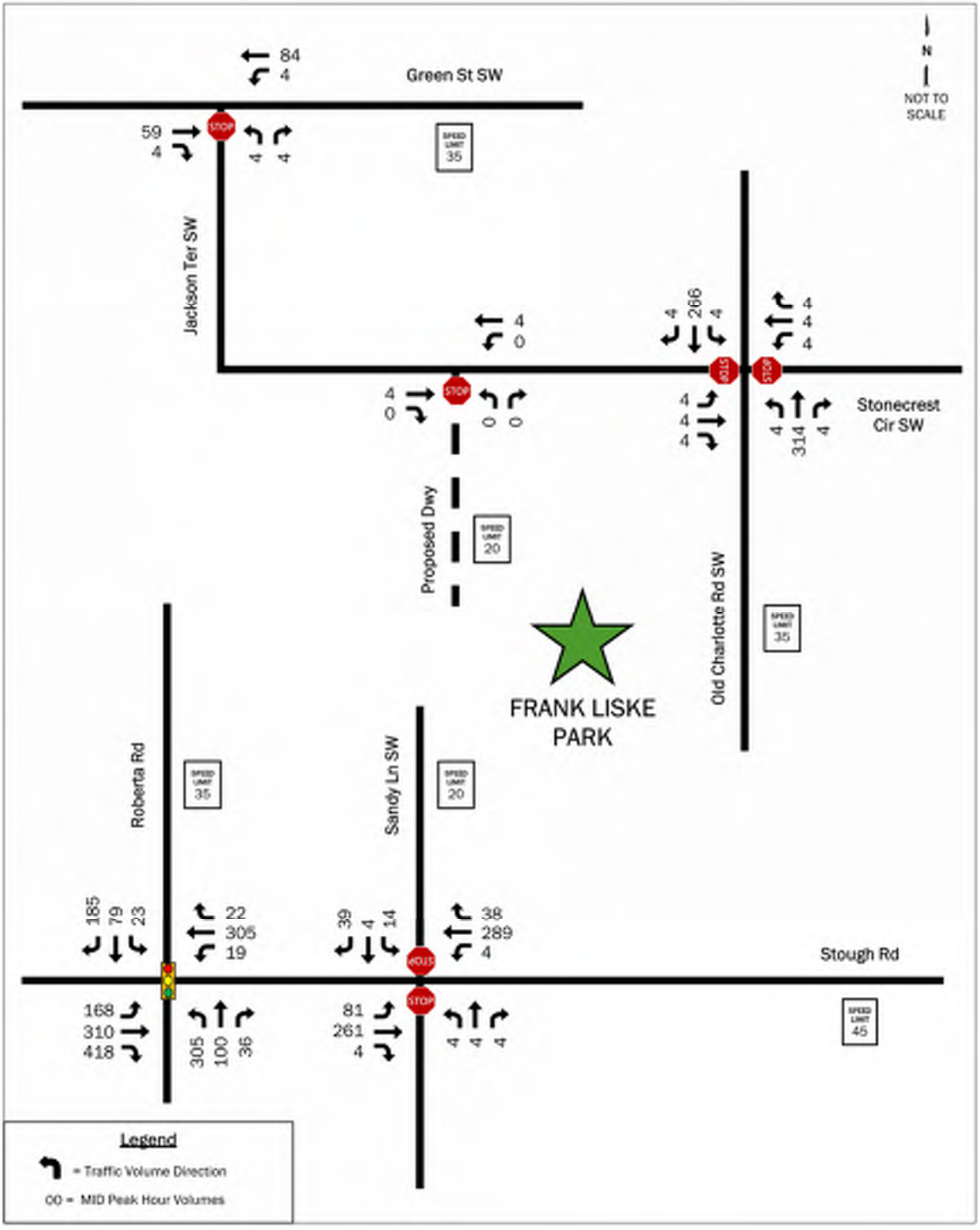
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Exhibit 9 – 2028 No-Build Volumes



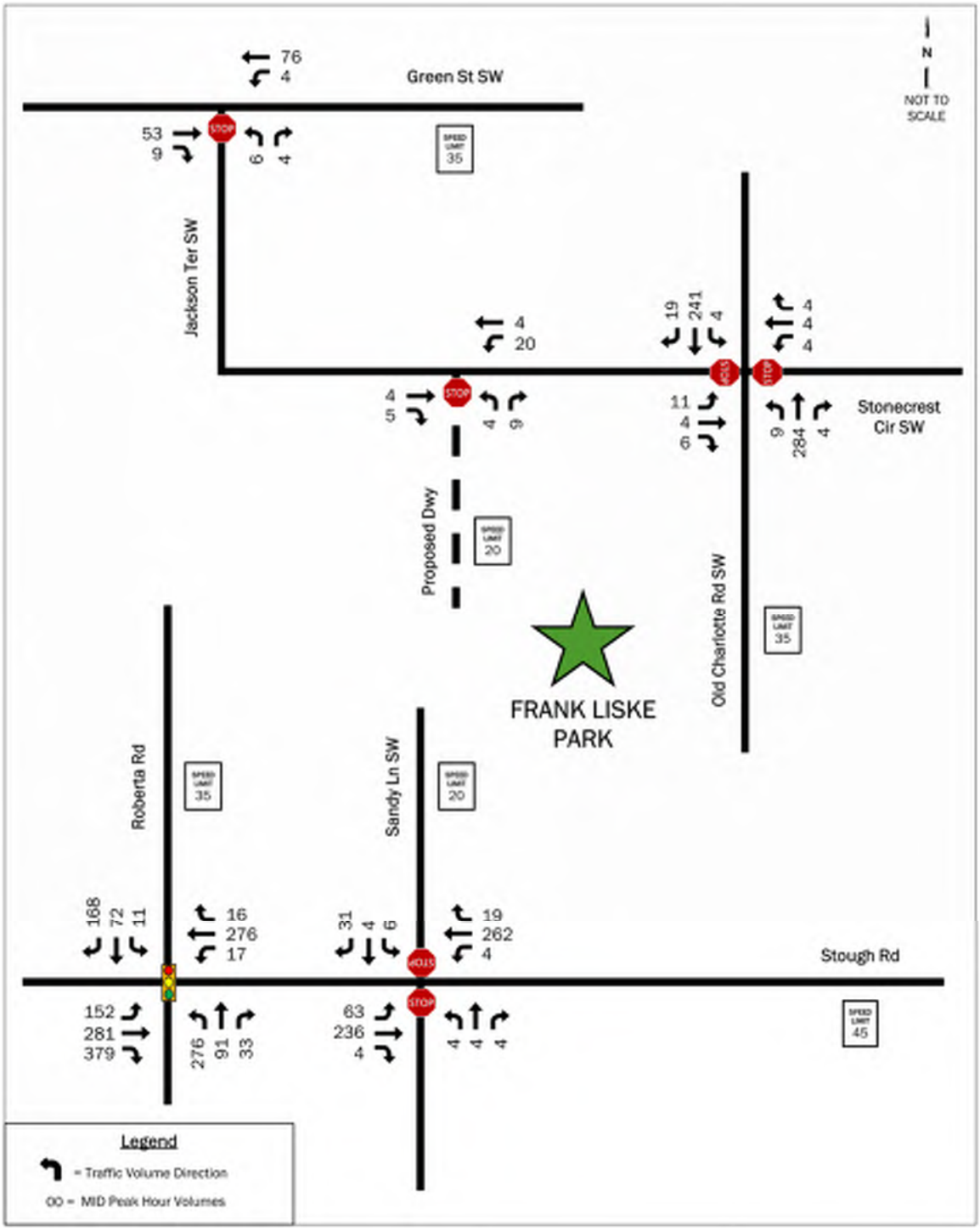
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Exhibit 10 – 2033 No-Build Volumes



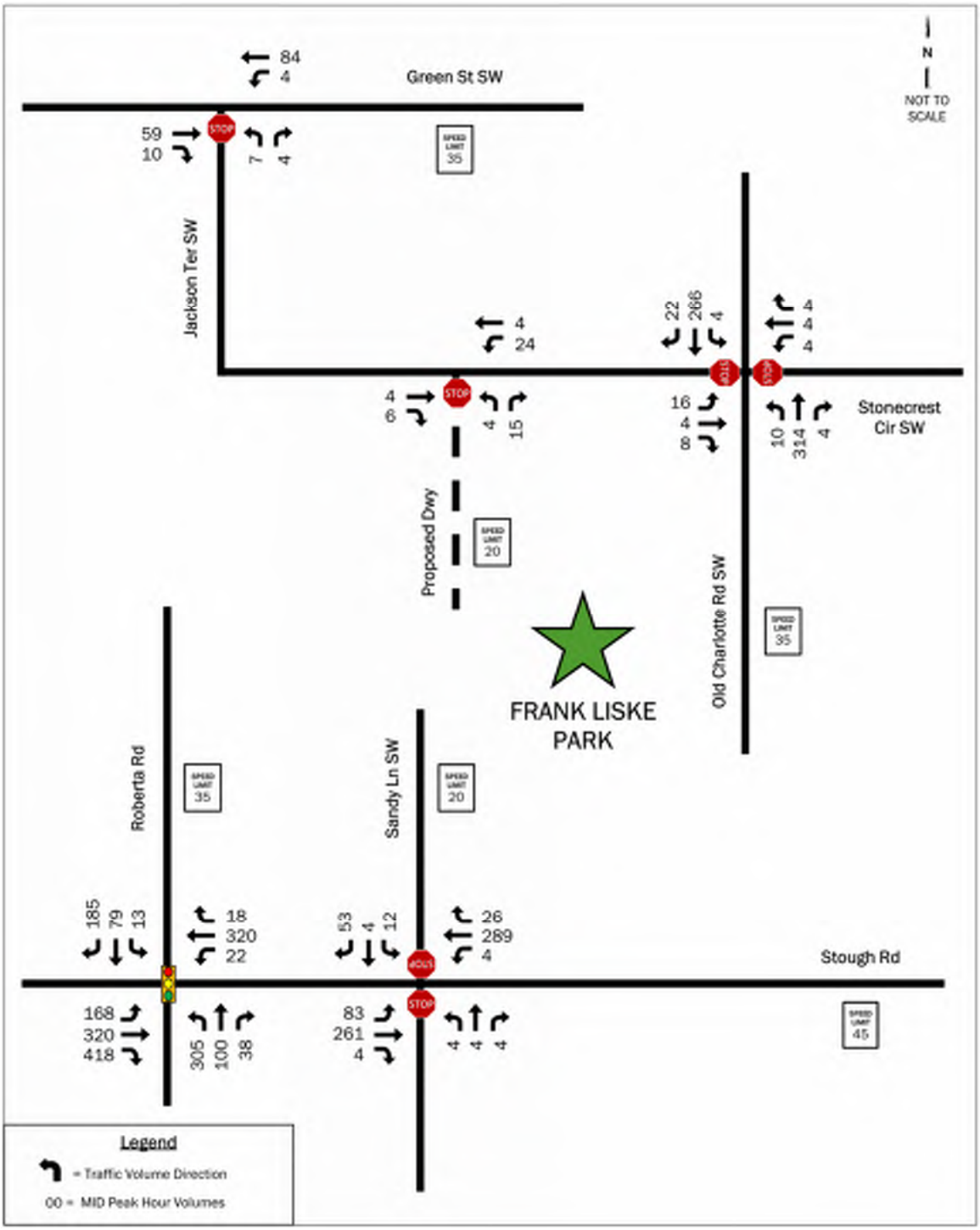
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Exhibit 11 – 2028 Build Volumes



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Exhibit 12 – 2033 Build Volumes



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6.0 OPERATIONAL ANALYSIS

2025 Existing Conditions Analysis

Results of the 2025 Existing Conditions capacity analysis are shown in **Table 3** and are reflective of the volumes shown in **Exhibit 4**. Each intersection in the study area operates well. While the westbound approach of Stough Road & Roberta Road operates at LOS D, the overall LOS of C indicates that the intersection's operations are acceptable.

Table 3 – 2025 Existing Conditions Capacity Analysis

ID	Intersection	Control	Movement	Midday	
				LOS	Delay
1	Stough Rd & Roberta Rd	Signal	**Overall**	**C**	**22.6**
			EB	B	19.1
			WB	D	35.8
			NB	C	20.1
			SB	C	21.2
2	Old Charlotte Rd SW & Jackson Ter SW	Stop-Control	EB	B	12.1
			WB	B	12.2
			NBL	A	7.7
			SBL	A	7.8
3	Green St SW & Jackson Ter SW	Stop-Control	NB	A	9.0
			WBL	A	7.4
4	Stough Rd & Sandy Ln SW	Stop-Control	NB	B	14.0
			SB	B	12.3
			EBL	A	8.0
			WBL	A	7.7

In addition to TMCs, daily traffic volumes of roads within the study area were obtained from NCDOT's Traffic Viewer and compared to the capacities outlined in the CRMPO CTP. **Table 4** outlines the study roads' reported capacities in the CTP, the 2024 volumes provided by NCDOT and a volume grown by one year to 2025 Existing Conditions using the annual growth rate discussed in Section 5.0. Note that the CTP does not report capacities along Green Street SW or Jackson Terrace SW.

Volumes along all study roads are below the reported capacities found within the CTP in 2025 Existing Conditions. Relevant portions of the CTP are included in **Appendix K**; the NCDOT count stations used are identified in **Appendix J**.

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Table 4 – 2025 Existing Conditions Planning Level Capacity Analysis

Roadway	Segment	Capacity	Daily Traffic Volume		v/c
			2024	Existing (2025)	
Stough Rd (George Liles Pkwy)	NC 49 to Roberta Rd	11200	10519	10729	<1.0
Old Charlotte Rd SW	NC 49 to Roberta Rd	9500	9230	9415	<1.0
Roberta Rd	George Liles Pkwy to Old Charlotte Rd SW	9700	8204	8368	<1.0

Queueing results in 2025 Existing Conditions are shown in **Table 5**; simulated queues do not exceed the provided storage lengths at any study intersection.

Table 5 – 2025 Existing Conditions Queue Analysis

ID	Intersection	Control	Movement	Storage Length	Queue[1]
					Midday
1	Stough Rd & Roberta Rd	Signal	EBL	250	116
			EBT	-	177
			EBR	300	170
			WBL	250	37
			WBT	-	210
			WBR	350	33
			NBL	250	178
			NBT	-	82
			NBR	250	25
			SBL	250	37
			SBT	-	80
			SBR	225	117
2	Old Charlotte Rd SW & Jackson Ter SW	Stop-Control	EB	-	19
			WB	-	17
			NB	-	10
			SB	-	9
3	Green St SW & Jackson Ter SW	Stop-Control	WB	-	5
			NB	-	26
4	Stough Rd & Sandy Ln SW	Stop-Control	EB	-	56
			WB	-	11
			NB	-	26
			SB	-	52

[1] *SimTraffic 11 95th Percentile Queue (ft)*

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2028 No-Build Conditions Analysis

Capacity analysis results in 2028 No-Build Conditions are shown in **Table 6** and analyze the volumes shown in **Exhibit 9**. No significant changes occur when compared to 2025 Existing Conditions, with delays increasing by less than three seconds and LOS remaining acceptable at all study intersections.

Table 6 – 2028 No-Build Conditions Capacity Analysis

ID	Intersection	Control	Movement	Midday	
				LOS	Delay
1	Stough Rd & Roberta Rd	Signal	**Overall**	**C**	**23.5**
			EB	B	19.3
			WB	D	36.8
			NB	C	22.2
			SB	C	22.6
2	Old Charlotte Rd SW & Jackson Ter SW	Stop-Control	EB	B	12.7
			WB	B	12.8
			NBL	A	7.8
			SBL	A	7.9
3	Green St SW & Jackson Ter SW	Stop-Control	NB	A	9.0
			WBL	A	7.3
4	Stough Rd & Sandy Ln SW	Stop-Control	NB	C	15.1
			SB	B	13.1
			EBL	A	8.1
			WBL	A	7.8

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Queues increase by one car length or less along each study movement when compared to 2025 Existing Conditions, indicating minimal expected changes to operations in the study area when accounting for background growth. **Table 7** shows results of the 2028 No-Build Conditions queueing analysis.

Table 7 – 2028 No-Build Conditions Queue Analysis

ID	Intersection	Control	Movement	Storage Length	Queue[1]
					Midday
1	Stough Rd & Roberta Rd	Signal	EBL	250	115
			EBT	-	183
			EBR	300	180
			WBL	250	38
			WBT	-	233
			WBR	350	39
			NBL	250	205
			NBT	-	87
			NBR	250	25
			SBL	250	36
			SBT	-	78
			SBR	225	125
2	Old Charlotte Rd SW & Jackson Ter SW	Stop-Control	EB	-	18
			WB	-	18
			NB	-	11
			SB	-	11
3	Green St SW & Jackson Ter SW	Stop-Control	WB	-	3
			NB	-	28
4	Stough Rd & Sandy Ln SW	Stop-Control	EB	-	63
			WB	-	11
			NB	-	30
			SB	-	53

[1] SimTraffic 11 95th Percentile Queue (ft)

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2033 No-Build Conditions Analysis

Results of the 2033 No-Build Conditions capacity analysis are shown in **Table 8** and analyze the volumes shown in **Exhibit 10**. Delays increase minimally when compared to 2028 No-Build Conditions, with no movement operating lower than LOS D.

Table 8 – 2033 No-Build Conditions Capacity Analysis

ID	Intersection	Control	Movement	Midday	
				LOS	Delay
1	Stough Rd & Roberta Rd	Signal	**Overall**	**C**	**25.2**
			EB	C	21.3
			WB	D	37.3
			NB	C	24.6
			SB	C	24.0
2	Old Charlotte Rd SW & Jackson Ter SW	Stop-Control	EB	B	13.4
			WB	B	13.5
			NBL	A	7.9
			SBL	A	8.0
3	Green St SW & Jackson Ter SW	Stop-Control	NB	A	9.0
			WBL	A	7.4
4	Stough Rd & Sandy Ln SW	Stop-Control	NB	C	16.4
			SB	B	14.0
			EBL	A	8.3
			WBL	A	7.8

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Queues increase by one car length along multiple study movements when comparing 2033 and 2028 No-Build Conditions. The westbound through queue at Stough Road & Roberta Road extends to 254 feet, potentially blocking the westbound left turn lane, which has a 250-foot turn bay. **Table 9** shows results of the 2033 No-Build Conditions queueing analysis.

Table 9 – 2033 No-Build Conditions Queue Analysis

ID	Intersection	Control	Movement	Storage Length	Queue[1]
					Midday
1	Stough Rd & Roberta Rd	Signal	EBL	250	130
			EBT	-	189
			EBR	300	195
			WBL	250	40
			WBT	-	254
			WBR	350	40
			NBL	250	223
			NBT	-	102
			NBR	250	29
			SBL	250	38
			SBT	-	101
			SBR	225	158
2	Old Charlotte Rd SW & Jackson Ter SW	Stop-Control	EB	-	19
			WB	-	19
			NB	-	14
			SB	-	11
3	Green St SW & Jackson Ter SW	Stop-Control	WB	-	6
			NB	-	29
4	Stough Rd & Sandy Ln SW	Stop-Control	EB	-	76
			WB	0	2
			NB	0	28
			SB	-	56

[1] SimTraffic 11 95th Percentile Queue (ft)

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2028 Build Conditions Analysis

Table 10 summarizes capacity analysis results in 2028 Build Conditions and analyzes the volumes shown in **Exhibit 11**. All intersections continue to operate acceptably; delays increase by less than one second along any existing movement in the study area. Both movements at the proposed driveway operate at LOS A.

Table 10 – 2028 Build Conditions Capacity Analysis

ID	Intersection	Control	Movement	Midday	
				LOS	Delay
1	Stough Rd & Roberta Rd	Signal	**Overall**	**C**	**23.6**
			EB	B	19.3
			WB	D	37.0
			NB	C	22.2
			SB	C	22.8
2	Old Charlotte Rd SW & Jackson Ter SW	Stop-Control	EB	B	13.4
			WB	B	13.1
			NBL	A	7.8
			SBL	A	7.9
3	Green St SW & Jackson Ter SW	Stop-Control	NB	A	9.1
			WBL	A	7.4
4	Stough Rd & Sandy Ln SW	Stop-Control	NB	B	14.5
			SB	B	12.0
			EBL	A	8.1
			WBL	A	7.8
5	Jackson Ter SW & Site Dwy	Stop-Control	NB	A	8.5
			WBL	A	7.3

Daily traffic volumes in future conditions along Stough Road, Old Charlotte Road SW and Roberta Road are provided on the next page in **Table 11**. Three years of background growth are added to volumes in 2025 Existing Conditions to calculate 2028 No-Build Conditions, while redistribution of existing park traffic upon completion of Phase 1 is considered when determining 2028 Build Conditions.

Daily volumes along Old Charlotte Road SW and Stough Road exceed the identified capacities from the CRMPO CTP beginning in 2028 No-Build Conditions. The volume to capacity ratio (v/c) along Roberta Road remains below 1.0 in 2028 Build Conditions.

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Table 11 – 2028 Build Conditions Planning Level Capacity Analysis

Roadway	Segment	Capacity	Daily Traffic Volume		v/c
			No-Build (2028)	Build (2028)	
Stough Rd (George Liles Pkwy)	NC 49 to Roberta Rd	11200	11386	11266	>1.0
Old Charlotte Rd SW	NC 49 to Roberta Rd	9500	9991	10024	>1.0
Roberta Rd	George Liles Pkwy to Old Charlotte Rd SW	9700	8880	8832	<1.0

Queues do not meaningfully increase from 2028 No-Build Conditions; simulations show queueing marginally increasing and decreasing based on the site's estimated reassignment of existing trips. Queue results in 2028 Build Conditions are shown in **Table 12**.

Table 12 – 2028 Build Conditions Queue Analysis

ID	Intersection	Control	Movement	Storage Length	Queue[1]
					Midday
1	Stough Rd & Roberta Rd	Signal	EBL	250	126
			EBT	-	187
			EBR	300	190
			WBL	250	40
			WBT	-	231
			WBR	350	37
			NBL	250	192
			NBT	-	82
			NBR	250	26
			SBL	250	27
			SBT	-	83
			SBR	225	147
2	Old Charlotte Rd SW & Jackson Ter SW	Stop-Control	EB	-	27
			WB	-	19
			NB	-	18
			SB	-	8
3	Green St SW & Jackson Ter SW	Stop-Control	WB	-	0
			NB	-	30
4	Stough Rd & Sandy Ln SW	Stop-Control	EB	-	63
			WB		11
			NB		31
			SB	-	57
5	Jackson Ter SW & Site Dwy	Stop-Control	WB	-	4
			NB	-	38

[1] SimTraffic 11 95th Percentile Queue (ft)

Docusign Envelope ID: BFC6B51A-6319-4F47-B5EA-FE2F8E3FEA0A

2033 Build Conditions Analysis

Capacity analysis results of 2033 Build Conditions upon completion of Phase 2 improvements are shown below in **Table 13**. These results analyze the volumes in **Exhibit 12**. All intersections continue to operate acceptably, with no movement falling below LOS D. Despite increased site traffic, each movement at the Park's driveways operates at LOS C or better.

Table 13 – 2033 Build Conditions Capacity Analysis

ID	Intersection	Control	Movement	Midday	
				LOS	Delay
1	Stough Rd & Roberta Rd	Signal	**Overall**	**C**	**25.6**
			EB	C	21.4
			WB	D	37.7
			NB	C	25.2
			SB	C	24.8
2	Old Charlotte Rd SW & Jackson Ter SW	Stop-Control	EB	B	14.5
			WB	B	13.9
			NBL	A	7.9
			SBL	A	8.0
3	Green St SW & Jackson Ter SW	Stop-Control	NB	A	9.2
			WBL	A	7.4
4	Stough Rd & Sandy Ln SW	Stop-Control	NB	C	16.6
			SB	B	13.2
			EBL	A	8.2
			WBL	A	7.8
5	Jackson Ter SW & Site Dwy	Stop-Control	NB	A	8.5
			WBL	A	7.3

Future 2033 traffic volumes along Stough Road, Old Charlotte Road SW and Roberta Road are summarized in **Table 14**. Volumes in 2025 Existing Conditions are combined with eight years of background growth to calculate 2033 No-Build Conditions; completion of all phased improvements and the corresponding increase in site traffic is added to these volumes to calculate 2033 Build volumes.

Each road is expected to operate over capacity by 2033, assuming a 2% annual growth rate occurs over that period. Note that CRMPO and NCDOT have plans to widen Stough Road to a 4-lane divided facility; no plans are in place to expand capacity along Old Charlotte Road SW or Roberta Road.

Docusign Envelope ID: BFC6B51A-6319-4F47-B5EA-FE2F8E3FEA0A

Table 14 – 2033 Build Conditions Planning Level Capacity Analysis

Roadway	Segment	Capacity	Daily Traffic Volume		v/c
			2033 No-Build	2033 Build	
Stough Rd (George Liles Pkwy)	NC 49 to Roberta Rd	11200	12571	12574	>1.0
Old Charlotte Rd SW	NC 49 to Roberta Rd	9500	11031	11064	>1.0
Roberta Rd	George Liles Pkwy to Old Charlotte Rd SW	9700	9804	9781	>1.0

While queueing increases from both 2028 Build Conditions and 2033 No-Build Conditions, queues are not expected to block adjacent lanes and remain contained within provided turn lane storage. Results of the 2033 Build Conditions queue analysis are shown in **Table 15**.

Table 15 – 2033 Build Conditions Queue Analysis

ID	Intersection	Control	Movement	Storage Length	Queue[1]
					Midday
1	Stough Rd & Roberta Rd	Signal	EBL	250	128
			EBT	-	196
			EBR	300	206
			WBL	250	40
			WBT	-	239
			WBR	350	35
			NBL	250	237
			NBT	-	93
			NBR	250	26
			SBL	250	28
			SBT	-	109
			SBR	225	160
2	Old Charlotte Rd SW & Jackson Ter SW	Stop-Control	EB	-	25
			WB	-	17
			NB	-	20
			SB	-	14
3	Green St SW & Jackson Ter SW	Stop-Control	WB	-	0
			NB	-	29
4	Stough Rd & Sandy Ln SW	Stop-Control	EB	-	70
			WB		2
			NB		32
			SB	-	57
5	Jackson Ter SW & Site Dwy	Stop-Control	WB	-	6
			NB	-	38

[1] SimTraffic 11 95th Percentile Queue (ft)

Docusign Envelope ID: BFC6B51A-6319-4F47-B5EA-FE2F8E3FEA0A

7.0 TURN LANE DETERMINATIONS

Turn lane warrants have been evaluated at both site driveways leading to Frank Liske Park in both 2028 and 2033 future scenarios. Due to the low amount of traffic along Jackson Terrace SW, right and left-turn lanes are not warranted at the proposed site driveway in either year. The primary site driveway at Stough Road & Sandy Lane SW does not meet the right-turn lane warrant, while meeting the left-turn lane warrant in both years. Note that the Stough Road & Sandy Lane SW intersection meets both turn lane warrants under 2025 Existing Conditions. Construction of a turn lane at this location is *not* recommended due to future plans to widen Stough Road (R-2246A) and acceptable operations. See **Appendix L** to reference the individual warrants.

8.0 FINDINGS

A comparison of the capacity analysis findings from the 2025 Existing, 2028 No-Build, 2033 No-Build, 2028 Build and 2033 Build scenarios is summarized below in **Table 16**. All movements within the study area operate acceptably in each analysis scenario; no system deficiencies have been identified.

Table 16 – Capacity Analysis Results Comparison

ID	Intersection	Control	Move-ment	Midday									
				Existing (25)		No-Build (28)		No-Build (33)		Build (28)		Build (33)	
				LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
1	Stough Rd & Roberta Rd	Signal	**Overall**	**C**	**22.6**	**C**	**23.5**	**C**	**25.2**	**C**	**24.6**	**C**	**25.6**
			EB	B	19.1	B	19.3	C	21.3	C	21.0	C	21.4
			WB	D	35.8	D	36.8	D	37.3	D	37.1	D	37.7
			NB	C	20.1	C	22.2	C	24.6	C	22.7	C	25.2
			SB	C	21.2	C	22.6	C	24.0	C	23.3	C	24.8
2	Old Charlotte Rd SW & Jackson Ter SW	Stop-Control	EB	B	12.1	B	12.7	B	13.4	B	13.6	B	14.5
			WB	B	12.2	B	12.8	B	13.5	B	13.2	B	13.9
			NBL	A	7.7	A	7.8	A	7.9	A	7.9	A	7.9
			SBL	A	7.8	A	7.9	A	8.0	A	7.9	A	8.0
3	Green St SW & Jackson Ter SW	Stop-Control	NB	A	9.0	A	9.0	A	9.0	A	9.1	A	9.2
			WBL	A	7.4	A	7.3	A	7.4	A	7.4	A	7.4
4	Stough Rd & Sandy Ln SW	Stop-Control	NB	B	14.0	C	15.1	C	16.4	C	15.2	C	16.6
			SB	B	12.3	B	13.1	B	14.0	B	12.4	B	13.2
			EBL	A	8.0	A	8.1	A	8.3	A	8.1	A	8.2
			WBL	A	7.7	A	7.8	A	7.8	A	7.8	A	7.8
5	Jackson Ter SW & Site Dwy	Stop-Control	NB	-	-	-	-	-	-	A	8.5	A	8.5
			WBL	-	-	-	-	-	-	A	7.3	A	7.3

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Queue analysis results of each analysis scenario are summarized for easy comparison in **Table 17**. All simulated queues are contained within their respective storage bays. Note how westbound through queues at the Stough Road & Roberta Road intersection extends beyond the adjacent westbound left turn lane storage bay in 2033 No-Build Conditions; no other queues are expected to affect access to other lanes.

Table 17 – Queue Analysis Results Comparison

ID	Intersection	Control	Move-ment	Storage Length	Queue[1]				
					Midday				
					Existing (25)	No-Build (28)	No-Build (33)	Build (28)	Build (33)
1	Stough Rd & Roberta Rd	Signal	EBL	250	116	115	130	120	128
			EBT	-	177	183	189	181	196
			EBR	300	170	180	195	190	206
			WBL	250	37	38	40	40	40
			WBT	-	210	233	254	219	239
			WBR	350	33	39	40	32	35
			NBL	250	178	205	223	195	237
			NBT	-	82	87	102	82	93
			NBR	250	25	25	29	27	26
			SBL	250	37	36	38	26	28
			SBT	-	80	78	101	106	109
			SBR	225	117	125	158	148	160
2	Old Charlotte Rd SW & Jackson Ter SW	Stop-Control	EB	-	19	18	19	23	25
			WB	-	17	18	19	19	17
			NB	-	10	11	14	15	20
			SB	-	9	11	11	9	14
3	Green St SW & Jackson Ter SW	Stop-Control	WB	-	5	3	6	5	0
			NB	-	26	28	29	30	29
4	Stough Rd & Sandy Ln SW	Stop-Control	EB	-	56	63	76	52	70
			WB	-	11	11	2	8	2
			NB	-	26	30	28	29	32
			SB	-	52	53	56	51	57
5	Jackson Ter SW & Site Dwy	Stop-Control	WB	-	-	-	-	3	6
			NB	-	-	-	-	31	38

[1] SimTraffic 11 95th Percentile Queue (ft)

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9.0 CONCLUSIONS/RECOMMENDATIONS

Improvements to the existing Frank Liske Park in Concord, North Carolina are proposed over the course of two phases. Phase 1, expected to be completed in 2028, consists of a second driveway along Jackson Terrace SW, improved internal circulation, and the addition of 410 additional parking spaces. Completion of Phase 2 is expected in 2033 and proposes construction of a cross-country course on 75 acres of currently undeveloped land in the park.

Upon completion, the development will be accessible via two full-access driveways, split between an existing access at Sandy Lane SW along Stough Road, and an additional driveway along Jackson Terrace SW. Completion of Phase 1 improvements will result in redistribution of existing park traffic as site users utilize the new driveway, while Phase 2 construction is expected to generate 164 trips on a typical Saturday or Sunday, with 50 (20 inbound, 30 outbound) occurring during the park's peak hour.

Analysis of existing traffic volumes indicates that operations at each intersection are acceptable in 2025 Existing Conditions, with no intersection operating beyond LOS C during the weekend peak hour. Queues at all study intersections are contained within existing storage bays. Daily traffic volumes along all available study roads do not exceed their respective capacities as outlined in the CRMPO CTP.

The addition of background growth over three years results in minimal increases to delays and queueing in the study network. Total delays increase by less than 5% when 2028 No-Build Conditions are compared to 2025 Existing Conditions, with no changes to LOS noted. Queues increase by no more than a single car length at any intersection. Volumes along Stough Road and Old Charlotte Road SW are expected to exceed their CRMPO CTP capacities beginning in 2028 No-Build Conditions.

Completion of Phase 1 improvements results in redistribution of existing park traffic and will have a negligible impact on operations in the study area, with delays in 2028 Build Conditions increasing (or decreasing) by less than one second along any existing movement when compared to the 2028 No-Build scenario. Queues increase by less than one car length when compared to 2028 No-Build Conditions. The proposed driveway along Jackson Terrace SW operates at LOS A with minimal queueing. No additional roads are expected to operate over capacity when compared to 2028 No-Build Conditions.

Adding five years of background growth to 2028 No-Build volumes results in 2033 No-Build traffic volumes. All study intersections continue to operate acceptably, with no movement falling below LOS D. Queues along the westbound through movement at Stough Road & Roberta Road are expected to block access to the adjacent westbound left turn lane. Roberta Road operates over capacity in 2033 No-Build Conditions upon adding another five years of background growth; resulting in all evaluated roads in the study network operating over capacity by 2033.

The addition of site traffic upon the completion of Phase 2 development results in minimal impacts to the study network. Construction of the proposed park improvements sees increases to study area delays of one second or less at existing movements, while the proposed driveway along Jackson Terrace SW operates at LOS A. All studied movements remain at LOS D or better. All queues are contained within their respective storage bays and are not expected to block other lanes.

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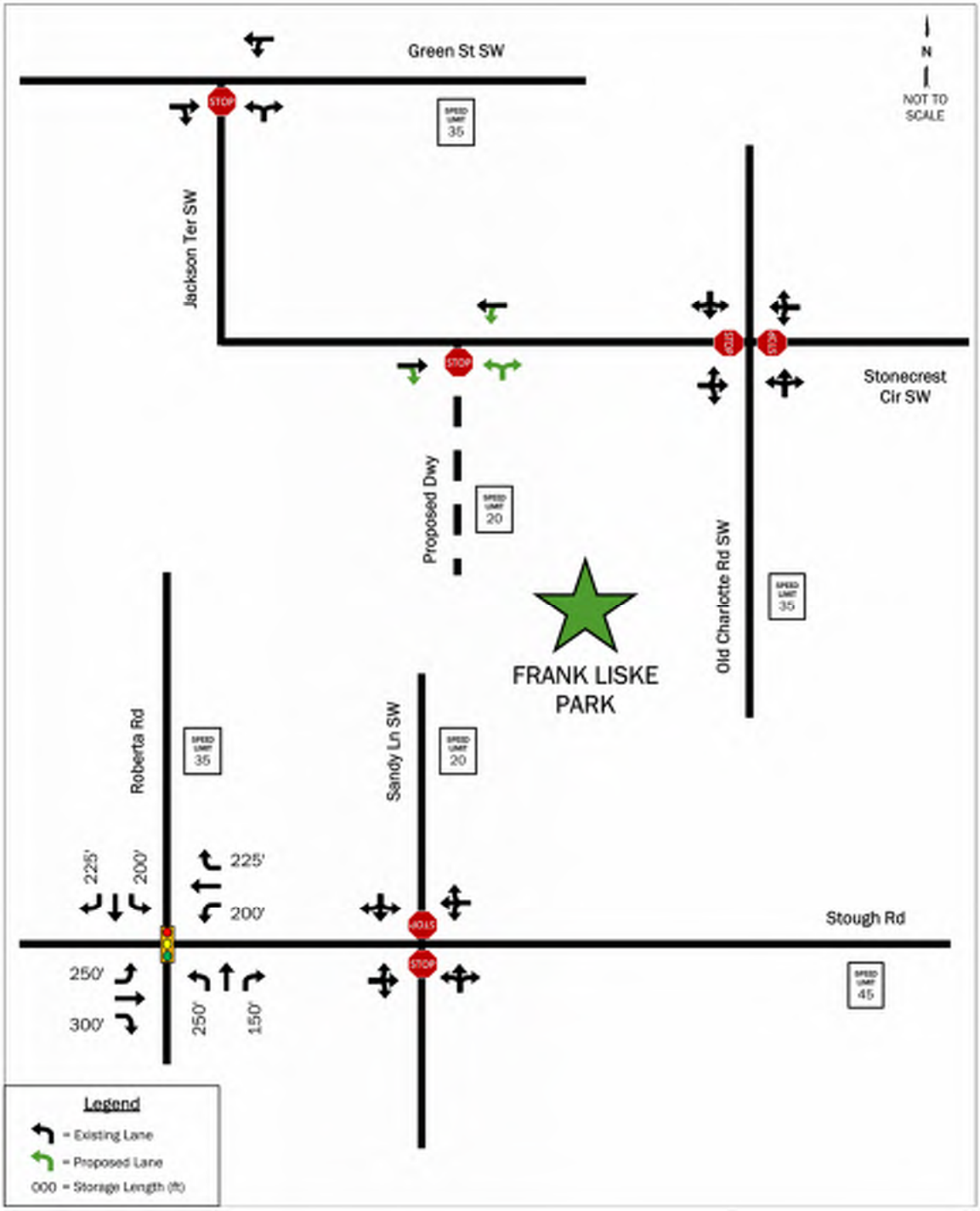
As no significant operational deficiencies are identified in the nearby road network, no improvements are recommended to mitigate the impact of the proposed park expansion. While all study roads are expected to operate over capacity in the future – caused primarily by background growth in the study network – plans to accommodate this growth along Stough Road and acceptable operations along other study roads indicate that improvements are not required at this time.

Relocation of an existing fence is recommended to improve sight distance when exiting the site's second driveway along Jackson Terrace SW, requiring coordination with Rocky Ridge United Methodist Church to ensure graves are not impacted.

Exhibit 13 on the next page provides an overview of all proposed geometric changes in the study network.

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Exhibit 13 – Proposed Road Geometry



Appendix A – Scoping Documents

City of Concord
Technical Standards Manual

Article VIII
Traffic Impact Analysis (TIA)
Appendix B

TIA Scoping Document

City of Concord TIA Scoping Document

A Traffic Impact Analysis (TIA) is required for all proposed non-residential and mixed-use developments, all multi-family and single-family attached residential developments, and all other developments with six (6) or more total dwelling units. This document is used to determine the scope of a TIA when required. An NCDOT *Traffic Impact Analysis Need Screening / Scoping Request* should also be submitted if applicable.

Project Name: Frank Liske Park Improvements **Previous Name** (*if applicable*)**:**

Location: 4001 Stough Rd, Concord, NC 28027

Project Description (*Attach additional pages if needed*)**:**

Construction of: second entrance to Frank Liske Park along Jackson Terrace SW, internal roadway, additional onsite parking, park expansion totaling ~75 acres

Project Contact:	**Applicant**	**TIA Consultant**
Company Name	Cabarrus County	Benesch
Contact Person	Michael Miller	Cooper Grissom, PE, PTOE
Phone Number	704.920.3212	984.212.3808
Email	mamiller@cabarruscounty.us	cgrissom@benesch.com
Mailing Address	PO Box 707	8000 Regency Pkwy, Ste 110
	Concord, NC 28026	Cary, NC 27518

Site Plan and Access – A Site Plan is required for TIA scoping. While the site plan may not be finalized during the TIA scoping stage, the graphic representation of the proposed development shall provide adequate details on the development scope and context. More specifically, the site plan/map shall clearly show the location and type of each access point, spacing to adjacent and opposing driveways or intersections, internal street network, any nearby interstate, US, NC or Secondary Roads (SR), proposed buildings/parcels with their anticipated uses and sizes at full build-out, and proposed phasing if applicable.

Site Plan Prepared By:	Benesch	**Site Plan Date:**	23 July 2025
Parcel Size (Acres):	393.6	**Preliminary Master Plan Provided?**	Yes
Ex. Zoning:	N/A (Cabarrus County)	**Proposed Zoning:**	N/A
Anticipated Build-Out Year	2028	**Number of Phases:**	1

Application Type: (*Rezoning, Special Use Permit, Driveway Permit, etc.*) See Attachment A.

Driveway permit

City of Concord TIA Scoping Document

Trip Generation – Use *ITE Trip Generation Handbook*, current edition. Do NOT adjust for pass-by, internal capture, or diverted trips. (*Attach additional sheets if needed*)

ITE LUC	Proposed Land Use	Size	Unit	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips			Data Source
					Enter	Exit	Total	Enter	Exit	Total	
411	Public Park	75	Acre	164	20	30	50	-	-	-	ITE TripGen
										-	
										-	
										-	
										-	
										-	
										-	
										-	
										-	
Total		75	Acre	164	20	30	50	-	-	-	ITE TripGen

Note: As park traffic is highest during weekends, trip generation here reflects the park's peak hour on Sunday (the higher of Saturday/Sunday data) found in the ITE Trip Generation Manual.

Trip Generation should be in accordance with City of Concord Technical Standards Manual, Article VIII. NCDOT MSTA calculator should be used for school sites.

Annual Growth Factor to be used: 2.0 %

See Attachment B.

Justification/Data Source: NCDOT counts (2021-2024), City census data (2010-2024)

Identify site access (*Attach additional sheets if needed*)**:**

New Access	On Road	Access Type		Driveway Spacing		
	Road Name	Permitted Movements[1]	Traffic Control[2]	Distance (ft)	Direction	Nearest Intersection/Access
Access A	Jackson Terrace SW	Conventional Full-Mvmt	2-Way Stop	465	East	Rocky Ridge United Methodist Church
Access B						
Access C						
Access D						
Access E						

Existing Access	Existing intersection of		Access Modification[3]	Proposed Interconnectivity (if applicable)		
	Road A	Road B		Connector #	Road Connected	Adjacent Development
Access 1	Stough Rd	Shady Ln SW	N/A	Connector 1		
Access 2				Connector 2		
Access 3				Connector 3		
Access 4				Connector 4		

[1]Conventional Full-Mvmt, Roundabout, RIRO, RIRO w/Left-Over, Median U-Turn, Other
[2]Signal, 2-Way Stop, All-Way Stop, Yield, Uncontrolled
[3]New Signal, New Roundabout, Mvmt Restriction, Other, N/A

Trip Distribution: See Attachment C.

Attach a graphic showing the proposed trip distribution throughout the Impact Analysis Area.

Note: As park facilities are not changing significantly, the provided trip distribution will be updated upon collection of turning movement counts at the site's existing driveway.

City of Concord TIA Scoping Document

City of Concord TIA Study Type Based on Trip Generation: Type 2: Small Development

Scenarios to be Analyzed:

☒	Existing Conditions Present Year:	2025	☐	Horizon Year (Build-Out + 5) w/o Dev.:	Year
☒	Full Build-Out Year w/out Dev.:	2028	☐	Horizon Year (Build-Out + 5) w/Dev.:	Year
☒	Full Build-Out Year w/Dev.:	2028	☐	NCDOT identified:	Year
☐	Build-Out Year for each Phase w/o Dev.:	Year	☐	Build-Out Year for each Phase w/Dev.:	Year
☐	CRMPO Long Range Plan year w/Dev.:	Year	☐	Other (attach description):	Year

Analysis Periods:

☐	Weekday AM Peak:		☐
☐	Weekday Midday Peak:		☐
☒	Weekend Peak:	2:00 - 4:00 PM	☐

Note: See Attachment D for historical park attendance used to estimate peak hours.

Compliance with Transportation Plan Notes:

Impact Analysis Area: Attach a map identifying all intersections to be analyzed. (*Attach additional sheets if needed*)

External Intersection	Intersection of		Traffic[1] Control	Intersection Turning Movement Counts			Notes
	Road A	Road B		New/Existing	Date of Counts	Growth Adjustment	
1	Stough Rd	Shady Ln SW	2-Way Stop	Existing	N/A	N/A	To be collected
2	Old Charlotte Rd SW	Jackson Terrace SW	2-Way Stop	Existing	N/A	N/A	To be collected
3	Jackson Terrace SW	Proposed Driveway	2-Way Stop	Existing	N/A	N/A	To be collected
4	Stough Rd	Shady Ln SW	2-Way Stop	Existing	N/A	N/A	To be collected
5	Jackson Terrace SW	Proposed Driveway	2-Way Stop	Proposed	N/A	N/A	To be collected
6							
7							
8							

Note: See Attachment E

Internal Intersection	Intersection of		Access Type		Intersection Spacing		
	Road A	Road B	Traffic Control[1]	Permitted Movements[2]	Distance (ft)	Direction	Nearest Intersection
101							
102							
103							
104							
105							

[1]Signal, 2-Way Stop, All-Way Stop, Yield, Uncontrolled
[2]Conventional Full-Mvmt, Roundabout, RIRO, RIRO w/Left-Over, Median U-Turn, Other

The Following data will be collected:

☒ New traffic turning movement counts in 15-min intervals

☐ Roadway/Intersection Configuration & Traffic Control

☐ Traffic Signal Phasing & Timing Data

☐ Crash Data: Period -

Intersection Locations (use intersection or access numbers from tables) -

Street Segments:	Street -		From:		To:	
	Street -		From:		To:	

☐ Other:

Traffic Signal and/or Multi-Way Stop Analyses:

☐ Traffic Signal Warrant Analysis:

Locations:

☐ Multi-Way Stop Warrant Analysis:

Locations:

Committed transportation improvements within the study area identified by City and/or NCDOT: (type, location, anticipated start year of construction)

R-2246A: Widen Stough Road (George Liles Parkway) to 4-lane divided from NC 49 to Roberta Road (2031-2040 construction)

List of approved developments to include as committed project traffic in the TIA:

Additional Comments: (NCDOT TIA requirements, approved variations from TIA guidelines, etc.)

Submittals:

The TIA Consultant shall provide at least one (1) electronic and one (1) hard copy of draft and final TIA Reports to the City Transportation Director at PO Box 308, Concord, NC 28026. If a TIA is identified for review by a pre-selected consultant, the Applicant shall also provide the number of hard and electronic copies as required by the review consultant. The TIA Consultant is responsible for providing required copies of TIAs to the NCDOT as applicable. Submittals to the City should include the TIA Submittal Checklist in Appendix H, Article VIII of the City of Concord Technical Standards Manual.

AGREEMENT BY ALL PARTIES

The undersigned agree to the contents and methodology described in this TIA Scoping Document and within Article VIII of the City of Concord Technical Standards Manual for completing the required TIA supportive of the development application identified herein. Any changes to the methodology or content contemplated by the Applicant or the TIA Consultant must be submitted, in writing, to the City Transportation Director and appropriate NCDOT representative, if applicable, and a revised TIA Scoping Document executed before such changes may be accepted for the TIA report. Subsequent revisions to the development plan (e.g. land use, density, site access, schedule, etc.) may require additional scoping and analysis, and may modify the TIA requirements.

This agreement shall become effective on the date approved by the City and shall expire nine (9) months from the effective date or upon changes to the roadway network and/or development assumptions which may alter the potential transportation system impacts, whichever occurs first. Once expired, renewal or re-scoping will be required prior to subsequent TIA submittals.

APPLICANT

Signature	Printed Name	Date
Michael Miller	Michael Miller	31 July 2025

TIA CONSULTANT

Signature	Printed Name	Date
Cooper Grissom	Cooper Grissom, PE, PTOE	31 July 2025

NCDOT REPRESENTATIVE (if applicable)

Signature	Printed Name	Date

Email concurrence may be used in lieu of the signature

CITY TRANSPORTATION REPRESENTATIVE

Reviewed and approved by City Transportation on: _____

Signature	Printed Name	Date

Grissom, Cooper

From: Jamie Williams <williamsjm@concordnc.gov>
Sent: Wednesday, August 13, 2025 12:07
To: Grissom, Cooper
Cc: 1726-500003 Cabarrus_FLP_2nd; Parry, David; Cox, Steven
Subject: RE: Transportation contact us (Frank Liske Park)

This email is acceptable, however just make sure that during the TIA you phase it correctly if any mitigation is required.

Thanks

Jamie Williams, PE
Project Engineer

Concord NORTH CAROLINA Transportation

PO Box 308
Concord, NC 28026
williamsjm@concordnc.gov
704-920-5341
concordnc.gov

From: Grissom, Cooper <CGrissom@benesch.com>
Sent: Wednesday, August 13, 2025 11:06 AM
To: Jamie Williams <williamsjm@concordnc.gov>
Cc: 1726-500003 Cabarrus_FLP_2nd <1726-500003@benesch.com>; Parry, David <DParry@benesch.com>; Cox, Steven <SCox@benesch.com>
Subject: RE: Transportation contact us (Frank Liske Park)

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Hey Jamie,

It's come to my attention that this development is actually planned to be phased, with the County looking to develop the cross country course a ways in the future. I know it wasn't in the original scope that we submitted, but I plan to keep the agreed upon 2028 scenario with the new driveway and add a 2033 scenario that captures both the driveway and 75-acre park expansion.

Let me know if you'd like me to submit a revised scoping document to you with these assumptions, or if this email is sufficient.

I've attached a site plan showing what's planned in which phase.

Thank you,

Cooper Grissom, PE, PTOE
Project Engineer

cgrissom@benesch.com
direct: 984-212-3808 **office:** 984-275-2490





From: Jamie Williams <williamsjm@concordnc.gov>
Sent: Thursday, July 31, 2025 15:27
To: Grissom, Cooper <CGrissom@benesch.com>
Subject: RE: Transportation contact us

We are good with this and can continue moving forward with site plans.

Thanks

Jamie Williams, PE
Project Engineer



PO Box 308
Concord, NC 28026
williamsjm@concordnc.gov
704-920-5341
concordnc.gov

From: Grissom, Cooper <CGrissom@benesch.com>
Sent: Thursday, July 31, 2025 1:01 PM
To: Jamie Williams <williamsjm@concordnc.gov>
Cc: Parry, David <DParry@benesch.com>; Cox, Steven <SCox@benesch.com>
Subject: RE: Transportation contact us

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Hey Jamie,

Here's an updated scope for your review. The proposed changes to the park result in needing a Type 2 TIA so we've included a couple extra intersections, resulting in slightly changed trip distributions.

Let me know if you have any questions, and I'll be happy to assist.

Thanks,

Cooper Grissom, PE, PTOE
Project Engineer

cgrissom@benesch.com
direct: 984-212-3808 **office:** 984-275-2490





From: Jamie Williams <williamsjm@concordnc.gov>
Sent: Thursday, July 31, 2025 9:54
To: Grissom, Cooper <CGrissom@benesch.com>
Cc: Parry, David <DParry@benesch.com>; Cox, Steven <SCox@benesch.com>
Subject: RE: Transportation contact us

Well I did just change the status to approved for the scoping but if you wouldn't mind sending me the updated scope and the large study so we can give comments there and move forward that would be acceptable.

Thanks

Jamie Williams, PE
Project Engineer



PO Box 308
Concord, NC 28026
williamsjm@concordnc.gov
704-920-5341
concordnc.gov

From: Grissom, Cooper <CGrissom@benesch.com>
Sent: Thursday, July 31, 2025 9:51 AM
To: Jamie Williams <williamsjm@concordnc.gov>

Cc: Parry, David <DParry@benesch.com>; Cox, Steven <SCox@benesch.com>
Subject: RE: Transportation contact us

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Good morning Jamie,

I hope you had a good vacation! I'll pass along that recommendation to our site folks, thank you.

Regarding the expanded scope, what's the recommended process on that? The original hasn't been approved on Accela but we want to go ahead and do the larger study so that we have our bases covered. Can you please advise on how you'd like us to proceed? We're looking to get started on the TIA as soon as possible given upcoming impacts to the park.

Thank you,

Cooper Grissom, PE, PTOE
Project Engineer

cgrissom@benesch.com
direct: 984-212-3808 **office:** 984-275-2490





From: Jamie Williams <williamsjm@concordnc.gov>
Sent: Thursday, July 31, 2025 7:53
To: Grissom, Cooper <CGrissom@benesch.com>
Cc: Parry, David <DParry@benesch.com>; Cox, Steven <SCox@benesch.com>
Subject: RE: Transportation contact us

Good Morning Cooper,

My apologies I thought I had sent the comment we had right before my vacation. Our only suggestion is to slide the drive as close to the middle of the curve as possible for sight distance.

Thanks

Jamie Williams, PE
Project Engineer



PO Box 308

Concord, NC 28026
williamsjm@concordnc.gov
704-920-5341
concordnc.gov

From: Grissom, Cooper <CGrissom@benesch.com>
Sent: Wednesday, July 30, 2025 2:28 PM
To: Jamie Williams <williamsjm@concordnc.gov>
Cc: Parry, David <DParry@benesch.com>; Cox, Steven <SCox@benesch.com>
Subject: RE: Transportation contact us

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Hey Jamie,

I'm checking in on the status of our TIA scope approval. I've checked on Accela but it's showing as pending for coming up on 6 weeks. Is there anything we can do to get this process moving? We have updates to the submittal that need to be reviewed as the project has expanded in scope, but want some guidance on the process for that.

Records

Showing 1-1 of 1 | Download results | Add to collection

	Date	Record Number	Record Type	Description	Project Name	Exp
☐	06/12/2025	CN-TIA-2025-00284	Concord Traffic Analysis	Construction of a second paved entrance road to Frank Liske Park (4001 Stough Rd, Concord, NC 28027) is proposed, extending north from the park's existing roundabout to a termination at Jackson Terrace SW.	Frank Liske Park Improvements	

Thanks,

Cooper Grissom, PE, PTOE
Project Engineer

cgrissom@benesch.com
direct: 984-212-3808 **office:** 984-275-2490

benesch



From: Grissom, Cooper <CGrissom@benesch.com>
Sent: Thursday, July 10, 2025 15:04
To: Jamie Williams <williamsjm@concordnc.gov>
Subject: RE: Transportation contact us

Hey Jamie,

Just wanted to follow up on this scope revision for our TIA in Concord. Any help would be appreciated, thanks!

Cooper Grissom, PE
Project Engineer

cgrissom@benesch.com
direct: 984-212-3808 **office:** 984-275-2490





From: Grissom, Cooper <CGrissom@benesch.com>
Sent: Wednesday, June 25, 2025 9:25
To: Jamie Williams <williamsjm@concordnc.gov>
Subject: RE: Transportation contact us

Good morning,

I received news yesterday from our client regarding this project and they're now proposing some improvements to the park in addition to the proposed second driveway. It looks like we'll be generating 50 peak hour trips on the weekend, which will bump us from a Type 1 to a Type 2 TIA. I'm happy to update the scoping document we submitted, but please advise on how you'd like me to resubmit, as I'm not familiar with the City's policies.

Thank you,

Cooper Grissom, PE
Project Engineer

cgrissom@benesch.com
direct: 984-212-3808 **office:** 984-275-2490





From: Grissom, Cooper <CGrissom@benesch.com>
Sent: Thursday, June 12, 2025 15:49
To: Jamie Williams <williamsjm@concordnc.gov>
Subject: RE: Transportation contact us

Hey Jamie,

I've submitted our documents on Accela as requested. The CN-TIA number is: **CN-TIA-2025-00284.**

Note that I was unable to initiate a TIA request for the park's address of 4001 Stough Road (I'm assuming because it's not within City bounds), so I used 780 Jackson Terrace SW. A portion of that property is being transferred to the County for the proposed connection.

Thanks for your help, and let me know if you need anything.

Cooper Grissom, PE
Project Engineer

cgrissom@benesch.com
direct: 984-212-3808 **office:** 984-275-2490

INSIGHTS from our EXPERTS READ MORE

From: Jamie Williams <williamsjm@concordnc.gov>
Sent: Thursday, June 12, 2025 14:54
To: Grissom, Cooper <CGrissom@benesch.com>
Subject: Transportation contact us

Good Afternoon,

I received a contact us about a TIA scope for a park improvement project. The scope will need to be submitted on Accela under a CN-TIA case number. Once submitted please send me a reply with the case number so I can put it in our queue for review.

If you should have any questions or concerns please feel free to contact me.

Thanks

Jamie Williams, PE
Project Engineer

Concord NORTH CAROLINA Transportation

PO Box 308

Concord, NC 28026
williamsjm@concordnc.gov
704-920-5341
concordnc.gov

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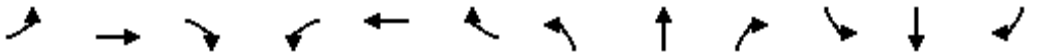
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Appendix B – Synchro Reports

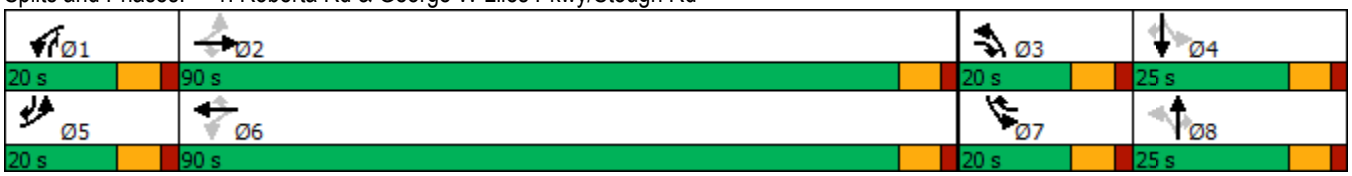
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	143	265	357	16	260	19	260	86	31	20	68	158
Future Volume (vph)	143	265	357	16	260	19	260	86	31	20	68	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		300	250		350	250		250	250		225
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	300			300			250			200		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	1863	1583	1770	1863	1583	1770	1863	1524	1770	1863	1583
Flt Permitted	0.322			0.588			0.583			0.698		
Satd. Flow (perm)	588	1863	1583	1095	1863	1583	1086	1863	1524	1300	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1417			1537			1303			1412	
Travel Time (s)		21.5			23.3			25.4			27.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	2%
Adj. Flow (vph)	151	279	376	17	274	20	274	91	33	21	72	166
Shared Lane Traffic (%)												
Lane Group Flow (vph)	151	279	376	17	274	20	274	91	33	21	72	166
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	12.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0	14.0	14.0	19.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	20.0	90.0	20.0	20.0	90.0	20.0	20.0	25.0	20.0	20.0	25.0	20.0
Total Split (%)	12.9%	58.1%	12.9%	12.9%	58.1%	12.9%	12.9%	16.1%	12.9%	12.9%	16.1%	12.9%
Maximum Green (s)	13.0	83.0	13.0	13.0	83.0	13.0	13.0	18.0	13.0	13.0	18.0	13.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	3.0	0.2	0.2	3.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	15.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	30.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	Min	None	None	Min	None	None	Max	None	None	Max	None
Act Effct Green (s)	37.4	29.6	49.2	28.9	19.8	33.9	39.7	31.6	45.7	29.2	20.1	37.9
Actuated g/C Ratio	0.43	0.34	0.56	0.33	0.23	0.39	0.45	0.36	0.52	0.33	0.23	0.43
v/c Ratio	0.36	0.44	0.42	0.04	0.65	0.03	0.45	0.14	0.04	0.04	0.17	0.24
Control Delay	17.8	26.8	14.0	14.5	38.5	16.9	19.4	24.2	15.1	16.2	30.5	17.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.8	26.8	14.0	14.5	38.5	16.9	19.4	24.2	15.1	16.2	30.5	17.8
LOS	B	C	B	B	D	B	B	C	B	B	C	B
Approach Delay		19.1			35.8			20.1			21.2	
Approach LOS		B			D			C			C	
Queue Length 50th (ft)	51	132	130	5	138	7	93	37	10	6	32	56
Queue Length 95th (ft)	88	207	201	16	223	21	178	83	30	22	75	112
Internal Link Dist (ft)		1337			1457			1223			1332	
Turn Bay Length (ft)	250		300	250		350	250		250	250		225
Base Capacity (vph)	451	1783	900	553	1783	723	611	674	902	604	428	728
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.16	0.42	0.03	0.15	0.03	0.45	0.14	0.04	0.03	0.17	0.23

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 87.4			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 22.6		Intersection LOS: C	
Intersection Capacity Utilization 55.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Roberta Rd & George W Liles Pkwy/Stough Rd



Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	4	4	4	4	4	4	268	4	4	227	4
Future Vol, veh/h	4	4	4	4	4	4	4	268	4	4	227	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	4	4	4	4	4	4	279	4	4	236	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	539	537	238	539	537	281	240	0	0	283	0	0
Stage 1	246	246	-	289	289	-	-	-	-	-	-	-
Stage 2	293	291	-	250	248	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	453	450	801	453	450	758	1327	-	-	1279	-	-
Stage 1	758	703	-	719	673	-	-	-	-	-	-	-
Stage 2	715	672	-	754	701	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	444	446	801	445	446	758	1327	-	-	1279	-	-
Mov Cap-2 Maneuver	444	446	-	445	446	-	-	-	-	-	-	-
Stage 1	755	700	-	716	670	-	-	-	-	-	-	-
Stage 2	704	669	-	743	698	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.1	12.2	0.1	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1327	-	-	522	516	1279	-	-
HCM Lane V/C Ratio	0.003	-	-	0.024	0.024	0.003	-	-
HCM Control Delay (s)	7.7	0	-	12.1	12.2	7.8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	50	4	4	72	4	4
Future Vol, veh/h	50	4	4	72	4	4
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	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	62	5	5	89	5	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	67	0	164	65
Stage 1	-	-	-	-	65	-
Stage 2	-	-	-	-	99	-
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	-	-	1535	-	827	999
Stage 1	-	-	-	-	958	-
Stage 2	-	-	-	-	925	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1535	-	825	999
Mov Cap-2 Maneuver	-	-	-	-	825	-
Stage 1	-	-	-	-	958	-
Stage 2	-	-	-	-	922	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	904	-	-	1535	-
HCM Lane V/C Ratio	0.011	-	-	0.003	-
HCM Control Delay (s)	9	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	69	222	4	4	247	32	4	4	4	12	4	33
Future Vol, veh/h	69	222	4	4	247	32	4	4	4	12	4	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	3	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	73	236	4	4	263	34	4	4	4	13	4	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	297	0	0	240	0	0	692	689	238	676	674	280
Stage 1	-	-	-	-	-	-	384	384	-	288	288	-
Stage 2	-	-	-	-	-	-	308	305	-	388	386	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1264	-	-	1327	-	-	358	369	801	367	376	759
Stage 1	-	-	-	-	-	-	639	611	-	720	674	-
Stage 2	-	-	-	-	-	-	702	662	-	636	610	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1264	-	-	1327	-	-	320	343	801	342	349	759
Mov Cap-2 Maneuver	-	-	-	-	-	-	320	343	-	342	349	-
Stage 1	-	-	-	-	-	-	596	570	-	672	671	-
Stage 2	-	-	-	-	-	-	663	659	-	586	569	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	0.1	14	12.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	412	1264	-	-	1327	-	-	544
HCM Lane V/C Ratio	0.031	0.058	-	-	0.003	-	-	0.096
HCM Control Delay (s)	14	8	0	-	7.7	0	-	12.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	0.3

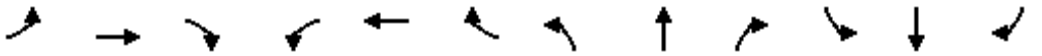
Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	4	0	0
Future Vol, veh/h	4	0	0	4	0	0
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	0	0	4	0	0

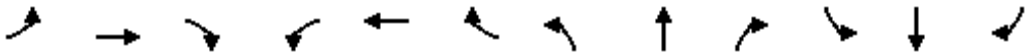
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	4	0	8	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	4	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1618	-	1013	1080
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1019	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1618	-	1013	1080
Mov Cap-2 Maneuver	-	-	-	-	1013	-
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1019	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1618	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-



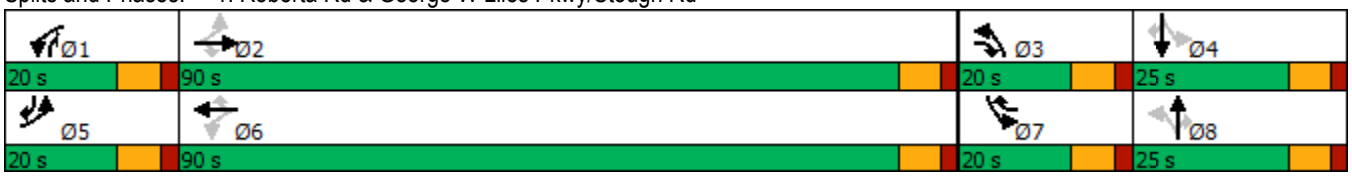
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	152	281	379	17	276	20	276	91	33	21	72	168
Future Volume (vph)	152	281	379	17	276	20	276	91	33	21	72	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		300	250		350	250		250	250		225
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	300			300			250			200		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	1863	1583	1770	1863	1583	1770	1863	1524	1770	1863	1583
Flt Permitted	0.290			0.547			0.579			0.692		
Satd. Flow (perm)	530	1863	1583	1019	1863	1583	1079	1863	1524	1289	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1417			1537			1303			1412	
Travel Time (s)		21.5			23.3			25.4			27.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	4%	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	2%
Adj. Flow (vph)	169	312	421	19	307	22	307	101	37	23	80	187
Shared Lane Traffic (%)												
Lane Group Flow (vph)	169	312	421	19	307	22	307	101	37	23	80	187
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	12.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0	14.0	14.0	19.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	20.0	90.0	20.0	20.0	90.0	20.0	20.0	25.0	20.0	20.0	25.0	20.0
Total Split (%)	12.9%	58.1%	12.9%	12.9%	58.1%	12.9%	12.9%	16.1%	12.9%	12.9%	16.1%	12.9%
Maximum Green (s)	13.0	83.0	13.0	13.0	83.0	13.0	13.0	18.0	13.0	13.0	18.0	13.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	3.0	0.2	0.2	3.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	15.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	30.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	Min	None	None	Min	None	None	Max	None	None	Max	None
Act Effct Green (s)	40.1	32.2	52.3	30.8	21.8	35.9	40.2	32.1	46.1	29.2	20.1	38.6
Actuated g/C Ratio	0.44	0.36	0.58	0.34	0.24	0.40	0.44	0.35	0.51	0.32	0.22	0.43
v/c Ratio	0.41	0.47	0.46	0.05	0.68	0.04	0.52	0.15	0.05	0.05	0.19	0.28
Control Delay	18.2	26.8	14.3	14.2	39.7	16.6	21.9	25.5	16.2	17.3	32.1	19.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.2	26.8	14.3	14.2	39.7	16.6	21.9	25.5	16.2	17.3	32.1	19.2
LOS	B	C	B	B	D	B	C	C	B	B	C	B
Approach Delay		19.3			36.8			22.2			22.6	
Approach LOS		B			D			C			C	
Queue Length 50th (ft)	57	151	152	6	159	7	114	43	12	7	37	67
Queue Length 95th (ft)	97	231	231	18	251	22	210	93	34	24	84	131
Internal Link Dist (ft)		1337			1457			1223			1332	
Turn Bay Length (ft)	250		300	250		350	250		250	250		225
Base Capacity (vph)	436	1764	915	540	1764	732	593	659	877	580	413	702
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.18	0.46	0.04	0.17	0.03	0.52	0.15	0.04	0.04	0.19	0.27

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 90.5			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 23.5		Intersection LOS: C	
Intersection Capacity Utilization 57.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Roberta Rd & George W Liles Pkwy/Stough Rd



Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	4	4	4	4	4	4	284	4	4	241	4
Future Vol, veh/h	4	4	4	4	4	4	4	284	4	4	241	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	4	4	4	4	4	4	316	4	4	268	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	608	606	270	608	606	318	272	0	0	320	0	0
Stage 1	278	278	-	326	326	-	-	-	-	-	-	-
Stage 2	330	328	-	282	280	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	408	411	769	408	411	723	1291	-	-	1240	-	-
Stage 1	728	680	-	687	648	-	-	-	-	-	-	-
Stage 2	683	647	-	725	679	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	400	408	769	400	408	723	1291	-	-	1240	-	-
Mov Cap-2 Maneuver	400	408	-	400	408	-	-	-	-	-	-	-
Stage 1	725	677	-	684	645	-	-	-	-	-	-	-
Stage 2	671	644	-	713	676	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.7	12.8	0.1	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1291	-	-	480	474	1240	-	-
HCM Lane V/C Ratio	0.003	-	-	0.028	0.028	0.004	-	-
HCM Control Delay (s)	7.8	0	-	12.7	12.8	7.9	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	53	4	4	76	4	4
Future Vol, veh/h	53	4	4	76	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	4	4	84	4	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	63	0	153	61
Stage 1	-	-	-	-	61	-
Stage 2	-	-	-	-	92	-
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	-	-	1540	-	839	1004
Stage 1	-	-	-	-	962	-
Stage 2	-	-	-	-	932	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1540	-	836	1004
Mov Cap-2 Maneuver	-	-	-	-	836	-
Stage 1	-	-	-	-	962	-
Stage 2	-	-	-	-	929	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	912	-	-	1540	-
HCM Lane V/C Ratio	0.01	-	-	0.003	-
HCM Control Delay (s)	9	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	73	236	4	4	262	34	4	4	4	13	4	35
Future Vol, veh/h	73	236	4	4	262	34	4	4	4	13	4	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	3	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	81	262	4	4	291	38	4	4	4	14	4	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	329	0	0	266	0	0	766	763	264	748	746	310
Stage 1	-	-	-	-	-	-	426	426	-	318	318	-
Stage 2	-	-	-	-	-	-	340	337	-	430	428	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1231	-	-	1298	-	-	320	334	775	329	342	730
Stage 1	-	-	-	-	-	-	606	586	-	693	654	-
Stage 2	-	-	-	-	-	-	675	641	-	603	585	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1231	-	-	1298	-	-	281	307	775	304	314	730
Mov Cap-2 Maneuver	-	-	-	-	-	-	281	307	-	304	314	-
Stage 1	-	-	-	-	-	-	559	541	-	640	651	-
Stage 2	-	-	-	-	-	-	632	638	-	549	540	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	0.1	15.1	13.1
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	370	1231	-	-	1298	-	-	503
HCM Lane V/C Ratio	0.036	0.066	-	-	0.003	-	-	0.115
HCM Control Delay (s)	15.1	8.1	0	-	7.8	0	-	13.1
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	0.4

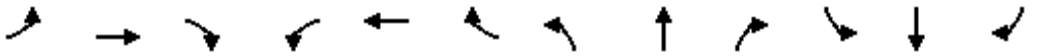
Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	4	0	0
Future Vol, veh/h	4	0	0	4	0	0
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	0	0	4	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	4	0	8	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	4	-
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	-	-	1618	-	1013	1080
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1019	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1618	-	1013	1080
Mov Cap-2 Maneuver	-	-	-	-	1013	-
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1019	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1618	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

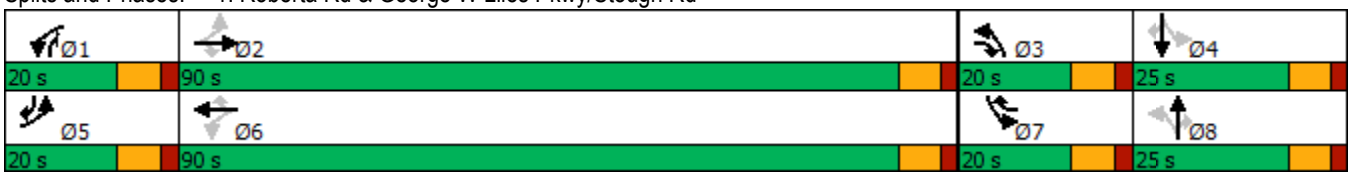


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	152	281	379	17	276	16	276	91	33	11	72	168
Future Volume (vph)	152	281	379	17	276	16	276	91	33	11	72	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		300	250		350	250		250	250		225
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	300			300			250			200		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	1863	1583	1770	1863	1583	1770	1863	1524	1770	1863	1583
Flt Permitted	0.290			0.547			0.579			0.692		
Satd. Flow (perm)	530	1863	1583	1019	1863	1583	1079	1863	1524	1289	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1417			1537			1303			1412	
Travel Time (s)		21.5			23.3			25.4			27.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	4%	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	2%
Adj. Flow (vph)	169	312	421	19	307	18	307	101	37	12	80	187
Shared Lane Traffic (%)												
Lane Group Flow (vph)	169	312	421	19	307	18	307	101	37	12	80	187
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	12.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0	14.0	14.0	19.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	20.0	90.0	20.0	20.0	90.0	20.0	20.0	25.0	20.0	20.0	25.0	20.0
Total Split (%)	12.9%	58.1%	12.9%	12.9%	58.1%	12.9%	12.9%	16.1%	12.9%	12.9%	16.1%	12.9%
Maximum Green (s)	13.0	83.0	13.0	13.0	83.0	13.0	13.0	18.0	13.0	13.0	18.0	13.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	3.0	0.2	0.2	3.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	15.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	30.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	Min	None	None	Min	None	None	Max	None	None	Max	None
Act Effct Green (s)	40.1	32.2	52.3	30.8	21.8	35.9	40.2	32.1	46.2	29.1	20.1	38.6
Actuated g/C Ratio	0.44	0.36	0.58	0.34	0.24	0.40	0.44	0.35	0.51	0.32	0.22	0.43
v/c Ratio	0.41	0.47	0.46	0.05	0.68	0.03	0.52	0.15	0.05	0.03	0.19	0.28
Control Delay	18.2	26.8	14.3	14.2	39.7	16.6	21.9	25.4	16.1	17.4	32.1	19.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.2	26.8	14.3	14.2	39.7	16.6	21.9	25.4	16.1	17.4	32.1	19.2
LOS	B	C	B	B	D	B	C	C	B	B	C	B
Approach Delay		19.3			37.0			22.2			22.8	
Approach LOS		B			D			C			C	
Queue Length 50th (ft)	57	151	152	6	159	6	114	43	12	4	37	67
Queue Length 95th (ft)	97	231	231	18	251	19	210	93	34	15	84	131
Internal Link Dist (ft)		1337			1457			1223			1332	
Turn Bay Length (ft)	250		300	250		350	250		250	250		225
Base Capacity (vph)	436	1764	915	540	1764	732	593	660	878	580	413	702
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.18	0.46	0.04	0.17	0.02	0.52	0.15	0.04	0.02	0.19	0.27

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 90.5			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 23.6		Intersection LOS: C	
Intersection Capacity Utilization 57.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Roberta Rd & George W Liles Pkwy/Stough Rd



Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	11	4	6	4	4	4	9	284	4	4	241	19
Future Vol, veh/h	11	4	6	4	4	4	9	284	4	4	241	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	4	7	4	4	4	10	316	4	4	268	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	629	627	279	630	635	318	289	0	0	320	0	0
Stage 1	287	287	-	338	338	-	-	-	-	-	-	-
Stage 2	342	340	-	292	297	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	395	400	760	394	396	723	1273	-	-	1240	-	-
Stage 1	720	674	-	676	641	-	-	-	-	-	-	-
Stage 2	673	639	-	716	668	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	385	394	760	383	390	723	1273	-	-	1240	-	-
Mov Cap-2 Maneuver	385	394	-	383	390	-	-	-	-	-	-	-
Stage 1	713	671	-	669	635	-	-	-	-	-	-	-
Stage 2	658	633	-	702	665	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.4	13.1	0.2	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1273	-	-	450	457	1240	-	-
HCM Lane V/C Ratio	0.008	-	-	0.052	0.029	0.004	-	-
HCM Control Delay (s)	7.8	0	-	13.4	13.1	7.9	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	53	9	4	76	6	4
Future Vol, veh/h	53	9	4	76	6	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	10	4	84	7	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	69	0	156	64
Stage 1	-	-	-	-	64	-
Stage 2	-	-	-	-	92	-
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	-	-	1532	-	835	1000
Stage 1	-	-	-	-	959	-
Stage 2	-	-	-	-	932	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1532	-	832	1000
Mov Cap-2 Maneuver	-	-	-	-	832	-
Stage 1	-	-	-	-	959	-
Stage 2	-	-	-	-	929	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	892	-	-	1532	-
HCM Lane V/C Ratio	0.012	-	-	0.003	-
HCM Control Delay (s)	9.1	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	63	236	4	4	262	19	4	4	4	6	4	31
Future Vol, veh/h	63	236	4	4	262	19	4	4	4	6	4	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	3	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	70	262	4	4	291	21	4	4	4	7	4	34

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	312	0	0	266	0	0	733	724	264	718	716	302
Stage 1	-	-	-	-	-	-	404	404	-	310	310	-
Stage 2	-	-	-	-	-	-	329	320	-	408	406	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1248	-	-	1298	-	-	336	352	775	344	356	738
Stage 1	-	-	-	-	-	-	623	599	-	700	659	-
Stage 2	-	-	-	-	-	-	684	652	-	620	598	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1248	-	-	1298	-	-	300	327	775	321	331	738
Mov Cap-2 Maneuver	-	-	-	-	-	-	300	327	-	321	331	-
Stage 1	-	-	-	-	-	-	582	559	-	654	656	-
Stage 2	-	-	-	-	-	-	645	649	-	571	559	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.7	0.1	14.5	12
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	391	1248	-	-	1298	-	-	563
HCM Lane V/C Ratio	0.034	0.056	-	-	0.003	-	-	0.081
HCM Control Delay (s)	14.5	8.1	0	-	7.8	0	-	12
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	5.6

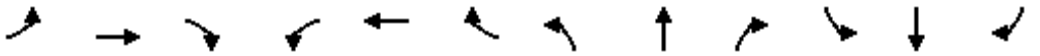
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	5	20	4	4	9
Future Vol, veh/h	4	5	20	4	4	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	6	22	4	4	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	10	0	55	7
Stage 1	-	-	-	-	7	-
Stage 2	-	-	-	-	48	-
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	-	-	1610	-	953	1075
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	974	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1610	-	940	1075
Mov Cap-2 Maneuver	-	-	-	-	940	-
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	960	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6.1	8.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1030	-	-	1610	-
HCM Lane V/C Ratio	0.014	-	-	0.014	-
HCM Control Delay (s)	8.5	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

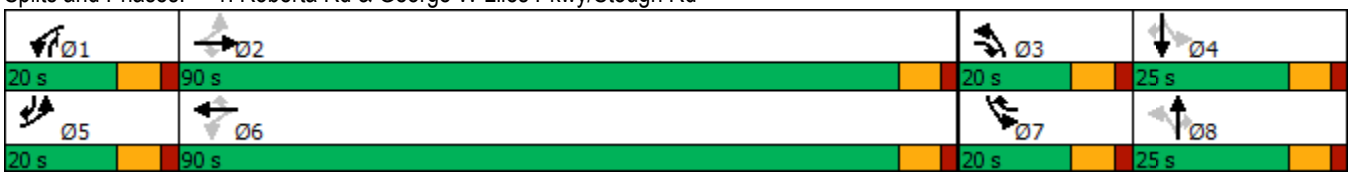
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	168	310	418	19	305	22	305	100	36	23	79	185
Future Volume (vph)	168	310	418	19	305	22	305	100	36	23	79	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		300	250		350	250		250	250		225
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	300			300			250			200		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	1863	1583	1770	1863	1583	1770	1863	1524	1770	1863	1583
Flt Permitted	0.251			0.460			0.575			0.685		
Satd. Flow (perm)	459	1863	1583	857	1863	1583	1071	1863	1524	1276	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1417			1537			1303			1412	
Travel Time (s)		21.5			23.3			25.4			27.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	4%	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	2%
Adj. Flow (vph)	187	344	464	21	339	24	339	111	40	26	88	206
Shared Lane Traffic (%)												
Lane Group Flow (vph)	187	344	464	21	339	24	339	111	40	26	88	206
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	12.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0	14.0	14.0	19.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	20.0	90.0	20.0	20.0	90.0	20.0	20.0	25.0	20.0	20.0	25.0	20.0
Total Split (%)	12.9%	58.1%	12.9%	12.9%	58.1%	12.9%	12.9%	16.1%	12.9%	12.9%	16.1%	12.9%
Maximum Green (s)	13.0	83.0	13.0	13.0	83.0	13.0	13.0	18.0	13.0	13.0	18.0	13.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	3.0	0.2	0.2	3.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	15.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	30.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	Min	None	None	Min	None	None	Max	None	None	Max	None
Act Effct Green (s)	42.2	31.5	51.6	32.8	23.8	37.9	40.2	32.1	46.1	29.2	20.1	38.8
Actuated g/C Ratio	0.46	0.34	0.56	0.35	0.26	0.41	0.43	0.35	0.50	0.31	0.22	0.42
v/c Ratio	0.47	0.54	0.53	0.05	0.71	0.04	0.59	0.17	0.05	0.06	0.22	0.31
Control Delay	19.0	29.3	16.3	13.9	40.2	16.3	24.8	26.7	17.3	18.4	33.6	20.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.0	29.3	16.3	13.9	40.2	16.3	24.8	26.7	17.3	18.4	33.6	20.7
LOS	B	C	B	B	D	B	C	C	B	B	C	C
Approach Delay		21.3			37.3			24.6			24.0	
Approach LOS		C			D			C			C	
Queue Length 50th (ft)	64	170	173	7	182	8	137	50	13	9	43	78
Queue Length 95th (ft)	106	255	261	19	277	23	244	104	38	27	93	150
Internal Link Dist (ft)		1337			1457			1223			1332	
Turn Bay Length (ft)	250		300	250		350	250		250	250		225
Base Capacity (vph)	417	1711	881	507	1711	748	577	644	857	564	403	686
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.20	0.53	0.04	0.20	0.03	0.59	0.17	0.05	0.05	0.22	0.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 92.7			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 25.2		Intersection LOS: C	
Intersection Capacity Utilization 61.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Roberta Rd & George W Liles Pkwy/Stough Rd



Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	4	4	4	4	4	4	314	4	4	266	4
Future Vol, veh/h	4	4	4	4	4	4	4	314	4	4	266	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	4	4	4	4	4	4	349	4	4	296	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	669	667	298	669	667	351	300	0	0	353	0	0
Stage 1	306	306	-	359	359	-	-	-	-	-	-	-
Stage 2	363	361	-	310	308	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	371	380	741	371	380	692	1261	-	-	1206	-	-
Stage 1	704	662	-	659	627	-	-	-	-	-	-	-
Stage 2	656	626	-	700	660	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	363	377	741	363	377	692	1261	-	-	1206	-	-
Mov Cap-2 Maneuver	363	377	-	363	377	-	-	-	-	-	-	-
Stage 1	701	659	-	656	624	-	-	-	-	-	-	-
Stage 2	645	623	-	688	657	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.4	13.5	0.1	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1261	-	-	444	438	1206	-	-
HCM Lane V/C Ratio	0.004	-	-	0.03	0.03	0.004	-	-
HCM Control Delay (s)	7.9	0	-	13.4	13.5	8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	59	4	4	84	4	4
Future Vol, veh/h	59	4	4	84	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	4	4	93	4	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	70	0	169	68
Stage 1	-	-	-	-	68	-
Stage 2	-	-	-	-	101	-
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	-	-	1531	-	821	995
Stage 1	-	-	-	-	955	-
Stage 2	-	-	-	-	923	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1531	-	819	995
Mov Cap-2 Maneuver	-	-	-	-	819	-
Stage 1	-	-	-	-	955	-
Stage 2	-	-	-	-	920	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	898	-	-	1531	-
HCM Lane V/C Ratio	0.01	-	-	0.003	-
HCM Control Delay (s)	9	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	81	261	4	4	289	38	4	4	4	14	4	39
Future Vol, veh/h	81	261	4	4	289	38	4	4	4	14	4	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	3	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	90	290	4	4	321	42	4	4	4	16	4	43

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	363	0	0	294	0	0	846	843	292	826	824	342
Stage 1	-	-	-	-	-	-	472	472	-	350	350	-
Stage 2	-	-	-	-	-	-	374	371	-	476	474	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1196	-	-	1268	-	-	282	300	747	291	308	701
Stage 1	-	-	-	-	-	-	573	559	-	666	633	-
Stage 2	-	-	-	-	-	-	647	620	-	570	558	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1196	-	-	1268	-	-	243	272	747	265	279	701
Mov Cap-2 Maneuver	-	-	-	-	-	-	243	272	-	265	279	-
Stage 1	-	-	-	-	-	-	521	509	-	606	630	-
Stage 2	-	-	-	-	-	-	600	618	-	511	508	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	0.1	16.4	14
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	329	1196	-	-	1268	-	-	464
HCM Lane V/C Ratio	0.041	0.075	-	-	0.004	-	-	0.136
HCM Control Delay (s)	16.4	8.3	0	-	7.8	0	-	14
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	0.5

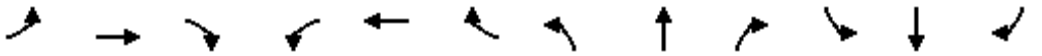
Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	4	0	0
Future Vol, veh/h	4	0	0	4	0	0
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	0	0	4	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	4	0	8	4
Stage 1	-	-	-	-	4	-
Stage 2	-	-	-	-	4	-
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	-	-	1618	-	1013	1080
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1019	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1618	-	1013	1080
Mov Cap-2 Maneuver	-	-	-	-	1013	-
Stage 1	-	-	-	-	1019	-
Stage 2	-	-	-	-	1019	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1618	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

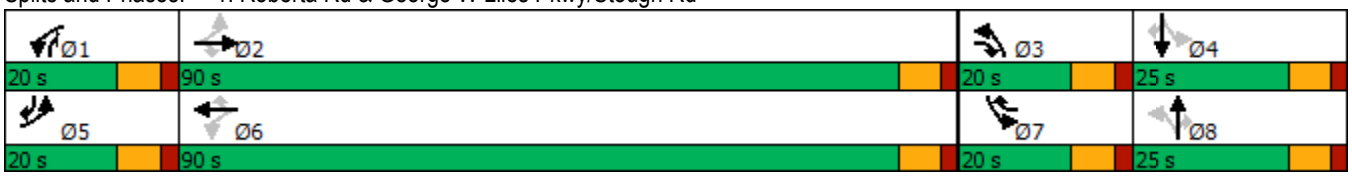


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	168	320	418	22	320	18	305	100	38	13	79	185
Future Volume (vph)	168	320	418	22	320	18	305	100	38	13	79	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		300	250		350	250		250	250		225
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	300			300			250			200		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1736	1863	1583	1770	1863	1583	1770	1863	1524	1770	1863	1583
Flt Permitted	0.238			0.444			0.575			0.685		
Satd. Flow (perm)	435	1863	1583	827	1863	1583	1071	1863	1524	1276	1863	1583
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		1417			1537			1303			1412	
Travel Time (s)		21.5			23.3			25.4			27.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	4%	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	2%
Adj. Flow (vph)	187	356	464	24	356	20	339	111	42	14	88	206
Shared Lane Traffic (%)												
Lane Group Flow (vph)	187	356	464	24	356	20	339	111	42	14	88	206
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	3	1	6	7	3	8	1	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	12.0	7.0	7.0	12.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	19.0	14.0	14.0	19.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Total Split (s)	20.0	90.0	20.0	20.0	90.0	20.0	20.0	25.0	20.0	20.0	25.0	20.0
Total Split (%)	12.9%	58.1%	12.9%	12.9%	58.1%	12.9%	12.9%	16.1%	12.9%	12.9%	16.1%	12.9%
Maximum Green (s)	13.0	83.0	13.0	13.0	83.0	13.0	13.0	18.0	13.0	13.0	18.0	13.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	3.0	0.2	0.2	3.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	15.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	30.0	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	Min	None	None	Min	None	None	Max	None	None	Max	None
Act Effct Green (s)	43.2	32.5	52.6	33.8	24.8	38.8	40.2	32.1	46.2	29.1	20.1	38.8
Actuated g/C Ratio	0.46	0.35	0.56	0.36	0.26	0.41	0.43	0.34	0.49	0.31	0.21	0.41
v/c Ratio	0.48	0.55	0.52	0.06	0.72	0.03	0.59	0.17	0.06	0.03	0.22	0.31
Control Delay	19.0	29.2	16.1	13.9	40.5	16.2	25.6	27.2	17.7	18.8	34.2	21.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.0	29.2	16.1	13.9	40.5	16.2	25.6	27.2	17.7	18.8	34.2	21.2
LOS	B	C	B	B	D	B	C	C	B	B	C	C
Approach Delay		21.3			37.7			25.2			24.8	
Approach LOS		C			D			C			C	
Queue Length 50th (ft)	64	177	173	7	193	7	139	51	14	5	44	80
Queue Length 95th (ft)	106	265	260	21	292	21	250	106	40	18	94	153
Internal Link Dist (ft)		1337			1457			1223			1332	
Turn Bay Length (ft)	250		300	250		350	250		250	250		225
Base Capacity (vph)	411	1695	888	503	1695	757	571	639	849	558	399	678
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.21	0.52	0.05	0.21	0.03	0.59	0.17	0.05	0.03	0.22	0.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 93.7			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 25.6		Intersection LOS: C	
Intersection Capacity Utilization 62.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Roberta Rd & George W Liles Pkwy/Stough Rd



Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	16	4	8	4	4	4	10	314	4	4	266	22
Future Vol, veh/h	16	4	8	4	4	4	10	314	4	4	266	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	4	9	4	4	4	11	349	4	4	296	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	693	691	308	696	701	351	320	0	0	353	0	0
Stage 1	316	316	-	373	373	-	-	-	-	-	-	-
Stage 2	377	375	-	323	328	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	358	368	732	356	363	692	1240	-	-	1206	-	-
Stage 1	695	655	-	648	618	-	-	-	-	-	-	-
Stage 2	644	617	-	689	647	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	348	362	732	344	358	692	1240	-	-	1206	-	-
Mov Cap-2 Maneuver	348	362	-	344	358	-	-	-	-	-	-	-
Stage 1	687	652	-	641	611	-	-	-	-	-	-	-
Stage 2	628	610	-	673	644	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.5	13.9	0.2	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1240	-	-	412	420	1206	-	-
HCM Lane V/C Ratio	0.009	-	-	0.076	0.032	0.004	-	-
HCM Control Delay (s)	7.9	0	-	14.5	13.9	8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	59	10	4	84	7	4
Future Vol, veh/h	59	10	4	84	7	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	11	4	93	8	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	77	0	173	72
Stage 1	-	-	-	-	72	-
Stage 2	-	-	-	-	101	-
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	-	-	1522	-	817	990
Stage 1	-	-	-	-	951	-
Stage 2	-	-	-	-	923	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1522	-	815	990
Mov Cap-2 Maneuver	-	-	-	-	815	-
Stage 1	-	-	-	-	951	-
Stage 2	-	-	-	-	920	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	871	-	-	1522	-
HCM Lane V/C Ratio	0.014	-	-	0.003	-
HCM Control Delay (s)	9.2	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	83	261	4	4	289	26	4	4	4	12	4	53
Future Vol, veh/h	83	261	4	4	289	26	4	4	4	12	4	53
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	3	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	92	290	4	4	321	29	4	4	4	13	4	59

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	350	0	0	294	0	0	851	834	292	824	822	336
Stage 1	-	-	-	-	-	-	476	476	-	344	344	-
Stage 2	-	-	-	-	-	-	375	358	-	480	478	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1209	-	-	1268	-	-	280	304	747	292	309	706
Stage 1	-	-	-	-	-	-	570	557	-	671	637	-
Stage 2	-	-	-	-	-	-	646	628	-	567	556	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1209	-	-	1268	-	-	235	275	747	266	280	706
Mov Cap-2 Maneuver	-	-	-	-	-	-	235	275	-	266	280	-
Stage 1	-	-	-	-	-	-	518	506	-	610	634	-
Stage 2	-	-	-	-	-	-	586	625	-	508	505	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	0.1	16.6	13.2
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	325	1209	-	-	1268	-	-	513
HCM Lane V/C Ratio	0.041	0.076	-	-	0.004	-	-	0.149
HCM Control Delay (s)	16.6	8.2	0	-	7.8	0	-	13.2
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	0.5

Intersection	
Int Delay, s/veh	5.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	6	24	4	4	15
Future Vol, veh/h	4	6	24	4	4	15
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	7	27	4	4	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	11	0	66	8
Stage 1	-	-	-	-	8	-
Stage 2	-	-	-	-	58	-
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	-	-	1608	-	939	1074
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	965	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1608	-	923	1074
Mov Cap-2 Maneuver	-	-	-	-	923	-
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	949	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6.2	8.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1038	-	-	1608	-
HCM Lane V/C Ratio	0.02	-	-	0.017	-
HCM Control Delay (s)	8.5	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Appendix C – SimTraffic Reports

Intersection: 1: Roberta Rd & George W Liles Pkwy/Stough Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R
Maximum Queue (ft)	139	210	192	43	235	39	217	104	51	50	101	142
Average Queue (ft)	64	101	94	12	129	11	104	38	4	13	38	48
95th Queue (ft)	116	177	170	37	210	33	178	82	25	37	80	117
Link Distance (ft)		1382			1470			1259			1368	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250		300	250		350	250		250	250		225
Storage Blk Time (%)	0	0			0		0					
Queuing Penalty (veh)	0	0			0		0					

Intersection: 2: Old Charlotte Rd SW & Jackson Ter SW/Stonecrest Cir SW

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	21	25	20	18
Average Queue (ft)	6	4	1	1
95th Queue (ft)	19	17	10	9
Link Distance (ft)	587	910	1102	795
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Jackson Ter SW & Green St SW

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	9	31
Average Queue (ft)	0	6
95th Queue (ft)	5	26
Link Distance (ft)	529	1111
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Sandy Ln SW & Stough Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	78	22	27	60
Average Queue (ft)	18	1	7	26
95th Queue (ft)	56	11	26	52
Link Distance (ft)	1123	1815	639	639
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Site Dwy & Jackson Ter SW

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 1

Intersection: 1: Roberta Rd & George W Liles Pkwy/Stough Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R
Maximum Queue (ft)	133	222	209	50	268	50	258	119	47	48	98	147
Average Queue (ft)	66	103	101	13	142	13	122	39	4	13	38	54
95th Queue (ft)	115	183	180	38	233	39	205	87	25	36	78	125
Link Distance (ft)		1382			1470			1259			1368	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250		300	250		350	250		250	250		225
Storage Blk Time (%)		0			1		0					
Queuing Penalty (veh)		0			0		1					

Intersection: 2: Old Charlotte Rd SW & Jackson Ter SW/Stonecrest Cir SW

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	23	19	22	24
Average Queue (ft)	5	5	1	1
95th Queue (ft)	18	18	11	11
Link Distance (ft)	587	910	1102	795
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Jackson Ter SW & Green St SW

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	3	31
Average Queue (ft)	0	7
95th Queue (ft)	3	28
Link Distance (ft)	529	1111
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Sandy Ln SW & Stough Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	88	24	34	59
Average Queue (ft)	20	1	9	30
95th Queue (ft)	63	11	30	53
Link Distance (ft)	1123	1815	639	639
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Site Dwy & Jackson Ter SW

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 1

Intersection: 1: Roberta Rd & George W Liles Pkwy/Stough Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R
Maximum Queue (ft)	149	211	237	51	246	40	235	109	51	31	149	186
Average Queue (ft)	68	106	101	14	138	10	118	35	4	8	46	65
95th Queue (ft)	120	181	190	40	219	32	195	82	27	26	106	148
Link Distance (ft)		1382			1470			1259			1368	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250		300	250		350	250		250	250		225
Storage Blk Time (%)		0	0		0		0				0	0
Queuing Penalty (veh)		1	0		0		0				0	0

Intersection: 2: Old Charlotte Rd SW & Jackson Ter SW/Stonecrest Cir SW

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	22	16	32	20
Average Queue (ft)	8	6	2	1
95th Queue (ft)	23	19	15	9
Link Distance (ft)	587	910	1102	795
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Jackson Ter SW & Green St SW

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	9	31
Average Queue (ft)	0	8
95th Queue (ft)	5	30
Link Distance (ft)	529	1111
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Sandy Ln SW & Stough Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	84	16	29	56
Average Queue (ft)	15	1	9	25
95th Queue (ft)	52	8	29	51
Link Distance (ft)	1123	1815	639	639
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Site Dwy & Jackson Ter SW

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	3	30
Average Queue (ft)	0	9
95th Queue (ft)	3	31
Link Distance (ft)	587	710
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 2

Intersection: 1: Roberta Rd & George W Liles Pkwy/Stough Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R
Maximum Queue (ft)	151	219	224	54	300	59	256	151	59	50	128	179
Average Queue (ft)	74	112	113	15	161	13	139	47	5	13	49	76
95th Queue (ft)	130	189	195	40	254	40	223	102	29	38	101	158
Link Distance (ft)		1382			1470			1259			1368	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250		300	250		350	250		250	250		225
Storage Blk Time (%)		0			1		0	0				0
Queuing Penalty (veh)		0			0		1	0				0

Intersection: 2: Old Charlotte Rd SW & Jackson Ter SW/Stonecrest Cir SW

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	23	23	24	24
Average Queue (ft)	6	5	1	1
95th Queue (ft)	19	19	14	11
Link Distance (ft)	587	910	1102	795
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Jackson Ter SW & Green St SW

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	9	31
Average Queue (ft)	0	7
95th Queue (ft)	6	29
Link Distance (ft)	529	1111
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Sandy Ln SW & Stough Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	102	2	27	64
Average Queue (ft)	28	0	8	31
95th Queue (ft)	76	2	28	56
Link Distance (ft)	1123	1815	639	639
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Site Dwy & Jackson Ter SW

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 2

Intersection: 1: Roberta Rd & George W Liles Pkwy/Stough Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	T	R
Maximum Queue (ft)	150	221	248	54	276	44	280	117	47	33	142	188
Average Queue (ft)	72	115	115	14	155	12	139	43	4	8	51	76
95th Queue (ft)	128	196	206	40	239	35	237	93	26	28	109	160
Link Distance (ft)		1382			1470			1259			1368	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250		300	250		350	250		250	250		225
Storage Blk Time (%)		0	0		1		1				0	0
Queuing Penalty (veh)		0	0		0		1				0	0

Intersection: 2: Old Charlotte Rd SW & Jackson Ter SW/Stonecrest Cir SW

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	28	19	36	27
Average Queue (ft)	10	5	3	2
95th Queue (ft)	25	17	20	14
Link Distance (ft)	587	910	1102	795
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Jackson Ter SW & Green St SW

Movement	NB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	7
95th Queue (ft)	29
Link Distance (ft)	1111
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Sandy Ln SW & Stough Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	114	2	34	65
Average Queue (ft)	22	0	10	32
95th Queue (ft)	70	2	32	57
Link Distance (ft)	1123	1815	639	639
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Site Dwy & Jackson Ter SW

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	9	33
Average Queue (ft)	0	14
95th Queue (ft)	6	38
Link Distance (ft)	587	710
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

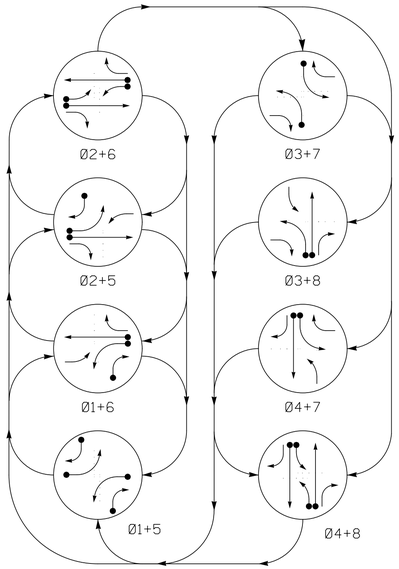
Network wide Queuing Penalty: 2

Appendix D – Signal Plans

DocuSign Envelope ID: 204B10E3-2CCC-4D1B-A1CC-F0017AEA77B6

PROJECT REFERENCE NO.	SHEET NO.
36249.4386	Sig. 3.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

EV PREEMPT PHASES

(Medium Priority)



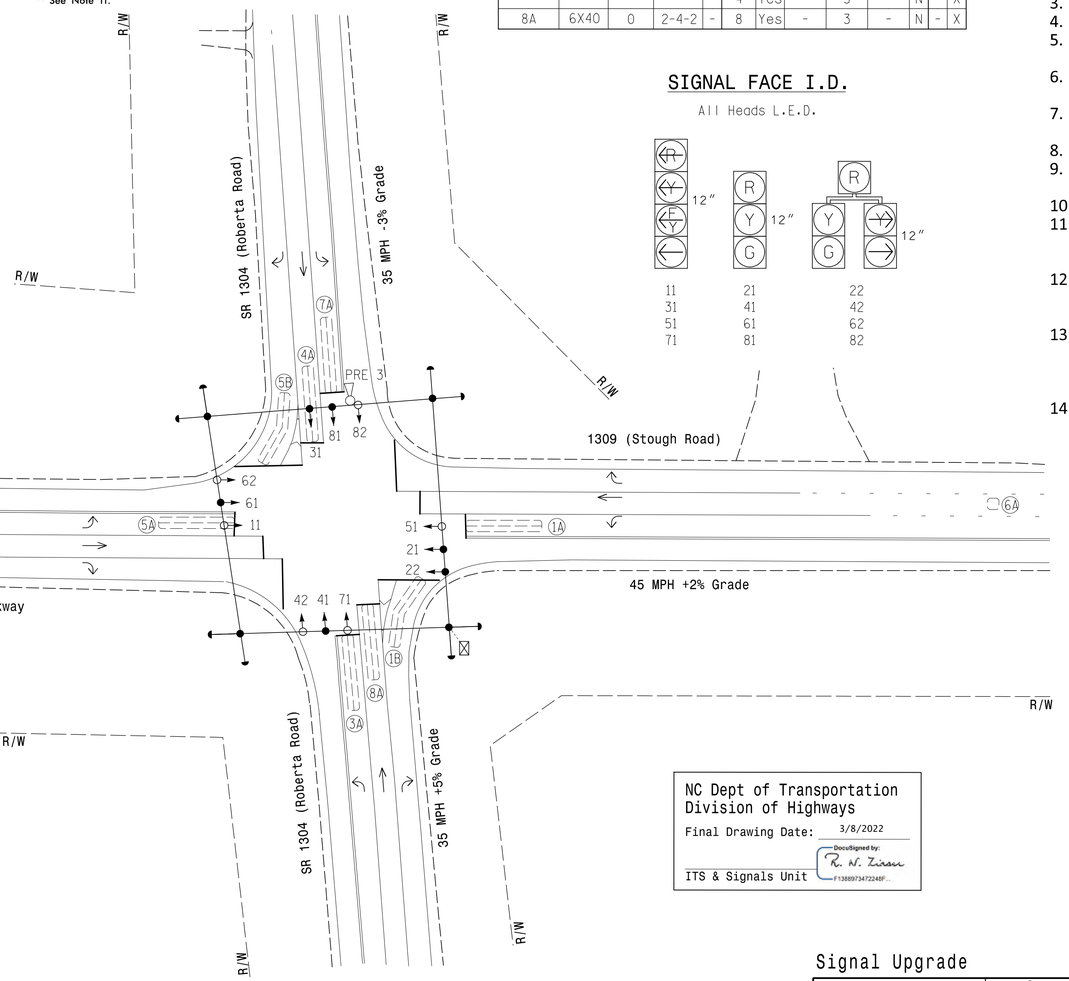
PRE 3
(Ø4+7)

ASC/3 EV PREEMPT	
FUNCTION	PRE 3
Exit Phase(s)	2+6
Preempt Override	OFF
Delay Time	**
Ped Clear Through Yellow	N
Terminate Phases	N
Entrance Walk	255*
Entrance Ped Clear	255*
Entrance Min Green	1
Entrance Yellow Change	25.5*
Entrance Red Clear	25.5*
Minimum Dwell Time	**
Preempt Input Extension Time	0
Preempt Max Time	120
Exit Yellow Change	25.5*
Exit Red Clear	25.5*

* Allows normal phase times to be used.
** See Note 11.

TABLE OF OPERATION

SIGNAL FACE	PHASE								
	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø3+7	Ø3+8	Ø4+7	EVP3	FLASH
11	←	←	F Y	F Y	R	R	R	R	Y
21	R	R	G	G	R	R	R	R	Y
22	R	R	G	G	R/→	R→	R	R	Y
31	R	R	R	R	←	←	F Y	F Y	R
41	R	R	R	R	R	R	G	G	R
42	R/→	R	R→	R	R	R	G	G	R
51	←	F Y	←	F Y	R	R	R	R	Y
61	R	G	R	G	R	R	R	R	Y
62	R	G	R	G	R/→	R	R/→	R	Y
71	R	R	R	R	F Y	←	F Y	←	R
81	R	R	R	R	R	G	R	G	R
82	R/→	R/→	R	R	R	G	R	G	R



ASC/3 DETECTOR INSTALLATION CHART												
DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	-	1	Yes	-	15	-	N	-	X
				-	6	Yes	-	3	-	G	-	X
1B	6X40	0	2-4-2	-	1	Yes	-	10	-	N	-	X
2A	6X6	300	EXIST	-	2	Yes	-	-	X	N	-	X
3A	6X40	0	2-4-2	-	3	Yes	-	15	-	N	-	X
				-	8	Yes	-	3	-	N	-	X
4A	6X40	0	2-4-2	-	4	Yes	-	3	-	N	-	X
5A	6X40	0	2-4-2	-	5	Yes	-	15	-	N	-	X
				-	2	Yes	-	3	-	G	-	X
5B	6X40	0	2-4-2	-	5	Yes	-	10	-	N	-	X
6A	6X6	300	EXIST	-	6	Yes	-	-	X	N	-	X
7A	6X40	0	2-4-2	-	7	Yes	-	15	-	N	-	X
				-	4	Yes	-	3	-	N	-	X
8A	6X40	0	2-4-2	-	8	Yes	-	3	-	N	-	X

SIGNAL FACE I.D.

All Heads L.E.D.

11	21	22
31	41	42
51	61	62
71	81	82

8 Phase
Fully Actuated
w/ Emergency Vehicle Preemption
City of Concord Central System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Phase 3 and/or phase 7 may be lagged.
5. Renumber existing loops 4B and 8B, to 5B and 1B, respectively.
6. Renumber existing signal heads 42 and 43, to 41 and 42, respectively.
7. Reposition existing signal heads numbered 21, 22, and 61.
8. Set all detector units to presence mode.
9. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
10. Pavement markings are existing.
11. The Division Traffic Engineer will determine the Delay Time and Preempt Dwell Min Time for the emergency vehicle preemption timing.
12. This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
13. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
14. Remove existing Left Arrow "ONLY" (R3-5L) signs.

LEGEND

PROPOSED		EXISTING
○→	Traffic Signal Head	○→
◐→	Modified Signal Head	N/A
⊣	Sign	⊣
□↓	Pedestrian Signal Head With Push Button & Sign	■↓
○→	Signal Pole with Guy	●→
○↷	Signal Pole with Sidewalk Guy	●↷
▭	Inductive Loop Detector	▭
⊠	Controller & Cabinet	⊠
□	Junction Box	■
·-·-·	2-in Underground Conduit	·-·-·
N/A	Right of Way	———
→	Directional Arrow	→
○◅	Optical Detection Receiver	●◅

ASC/3 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green *	7	12	7	7	7	12	7	7
Walk *	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0	0	0
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max 1 *	20	90	20	25	20	90	20	25
Yellow	3.0	4.3	3.0	4.1	3.0	4.3	3.0	4.1
Red Clear	1.8	1.5	2.8	2.2	2.6	1.5	3.1	2.2
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Actuations B4 Add *	-	-	-	-	-	-	-	-
Seconds /Actuation *	-	2.5	-	-	-	2.5	-	-
Max Initial *	-	34	-	-	-	34	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	30	-	-	-	30	-	-
Minimum Gap	-	3.0	-	-	-	3.0	-	-
Locking Detector	-	X	-	-	-	X	-	-
Recall Position	-	VEH. RECALL	-	-	-	VEH. RECALL	-	-
Dual Entry	-	-	-	X	-	-	-	X
Simultaneous Gap	X	X	X	X	X	X	X	X

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

NC Dept of Transportation
Division of Highways
Final Drawing Date: 3/8/2022
DocuSigned by: R. N. Zirau F13689734722486F...
ITS & Signals Unit

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Signal Upgrade

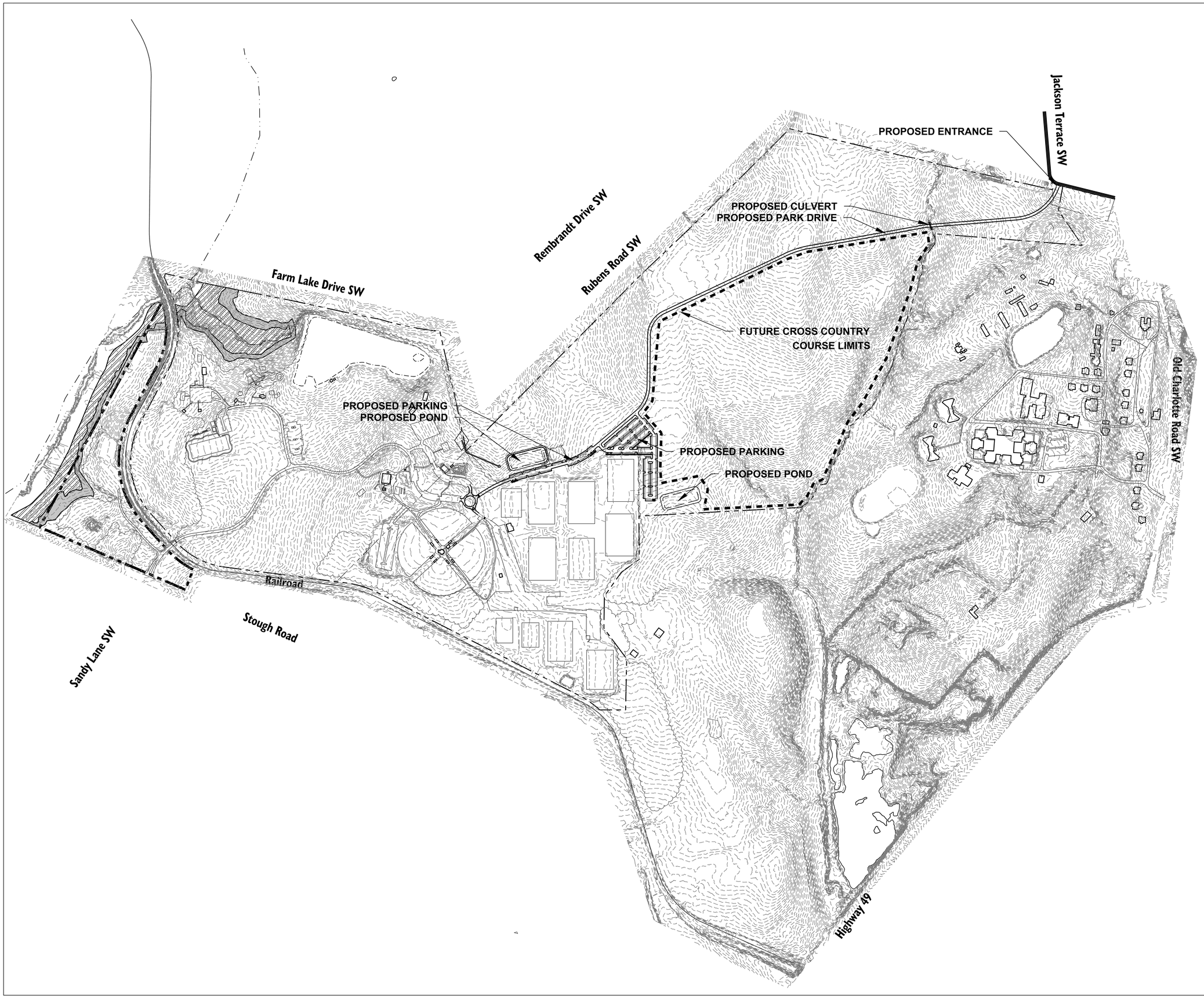
PLANS PREPARED BY:
JADE
JAD Engineering, PC
PO BOX 243
Kannapolis, NC 28081
PH: 704-796-7649
LICENSE: NO. C-4713

Prepared for the Offices of:
Transportation Mobility and Safety Division
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

George W. Liles Parkway/
SR 1309 (Stough Road)
at
SR 1304 (Roberta Road)
Division 10 Cabarrus County Concord
PLAN DATE: November 2021 REVIEWED BY: D Johnson
PREPARED BY: D Johnson REVIEWED BY:
SCALE 0 40 1"-40'
REVISIONS | INIT. | DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 34372 ENGINEER DANIEL A. JOHNSON
DocuSigned by: Daniel A. Johnson F30CB4513D4848F...
3/7/2022
DATE
SIG. INVENTORY NO. 10-1498

Appendix E – Site Plans



CABARRUS COUNTY
65 CHURCH STREET
CONCORD, NC 28025
P 704-920-2100

ALFRED BENESCH & COMPANY
2359 PERIMETER POINTE PARKWAY, SUITE 350
CHARLOTTE, NC 28208
WWW.BENESCH.COM
P 704.521.9880

SEALS:

PRELIMINARY
NOT FOR
CONSTRUCTION

CORP. NC LICENSE: F-1320

Frank Liske Park

4001 STOUGH ROAD
CONCORD, NC 28027

PROJECT NO: 1726.500003
DATE: 07.23.25
REVISIONS:

SCALE:

NORTH

300 0 300 600

SCALE: 1"=300'

SHEET TITLE:

OVERALL SCHEMATIC PLAN

SHEET NO:

S100

Appendix F – Sight Distance


5. Jackson Terrace SW & Proposed Dwy
PROPOSED PARK ENTRY
DRIVE



Appendix G – Cabarrus County Park Attendance Records

Visitor Trends Annual

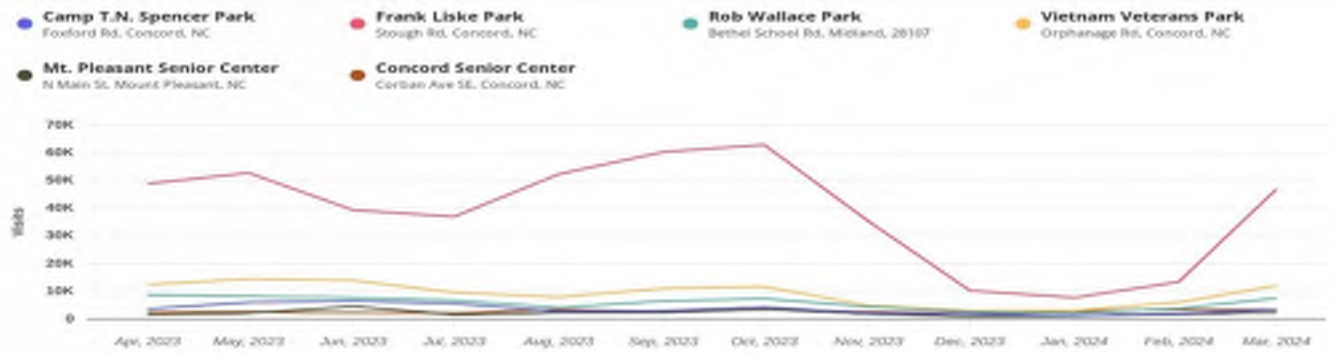
The following sections reflect mobility data, including when guests are most often visiting facilities through the year, week, and day.

Annual

Figure 2 reflects visitation trends from the past 12 months by facility as well as total visits from the last 12 months and for years 2021 – 2023. Frank Liske Park had the most visitors overall in 2023 (more than 450,000). Mt. Pleasant Senior Center had the least visitors in 2023, seeing just over 24,000 visitors.

Figure 2: Visitation

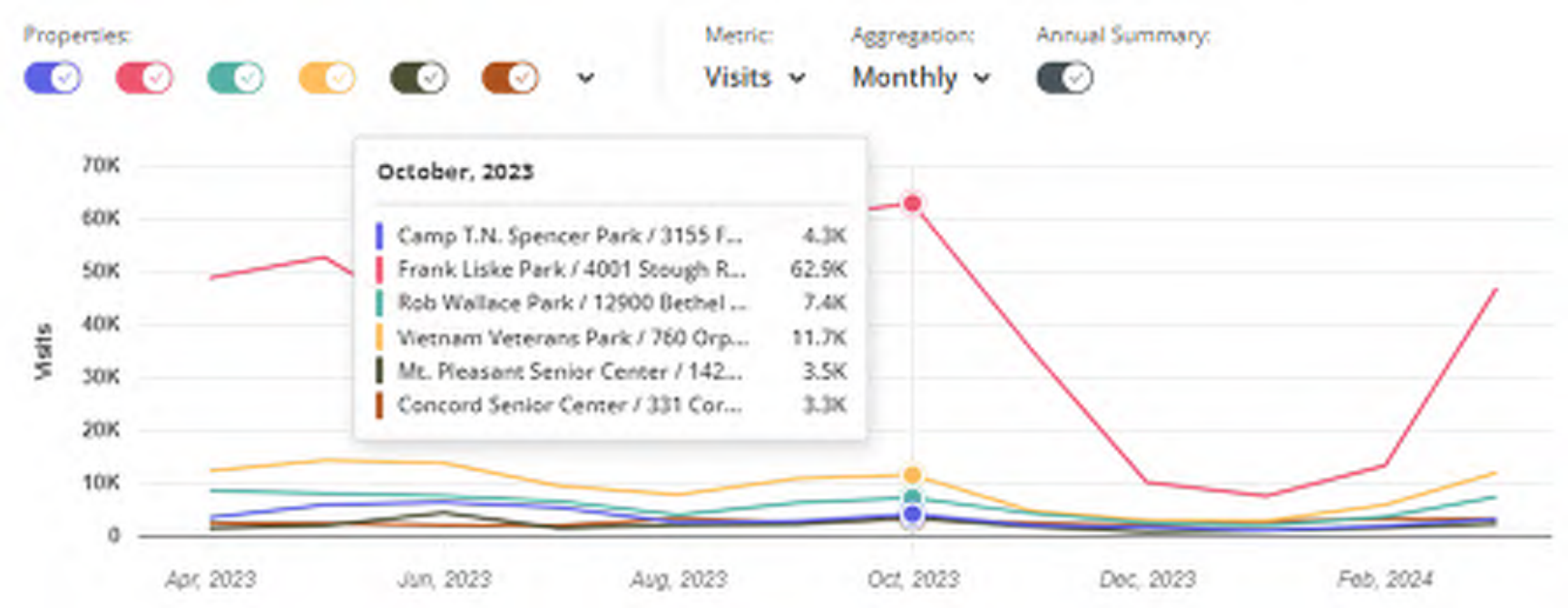
Visits Trend



	2021	2022	2023	Last 12 Months
	30.3K	39.4K	42.5K	42.2K
	439.7K	462.4K	450.8K	467K
	66.7K	61.4K	70.9K	69.7K
	97.4K	100.7K	109.6K	110.1K
	21.5K	29.1K	24.6K	25.9K
	15.6K	24.5K	31.1K	33.1K

Monthly | Visits | Apr 1st, 2023 - Mar 31st, 2024
Data provided by Placer Labs Inc. (www.placer.ai)

Placer.ai



Monthly

Table 2 provides a more in-depth look at the visitation trends over the past 12 months. Orange cells reflect the months with the lowest attendance, and green cells reflect the months with the highest attendance.

Table 2: Monthly Visitation

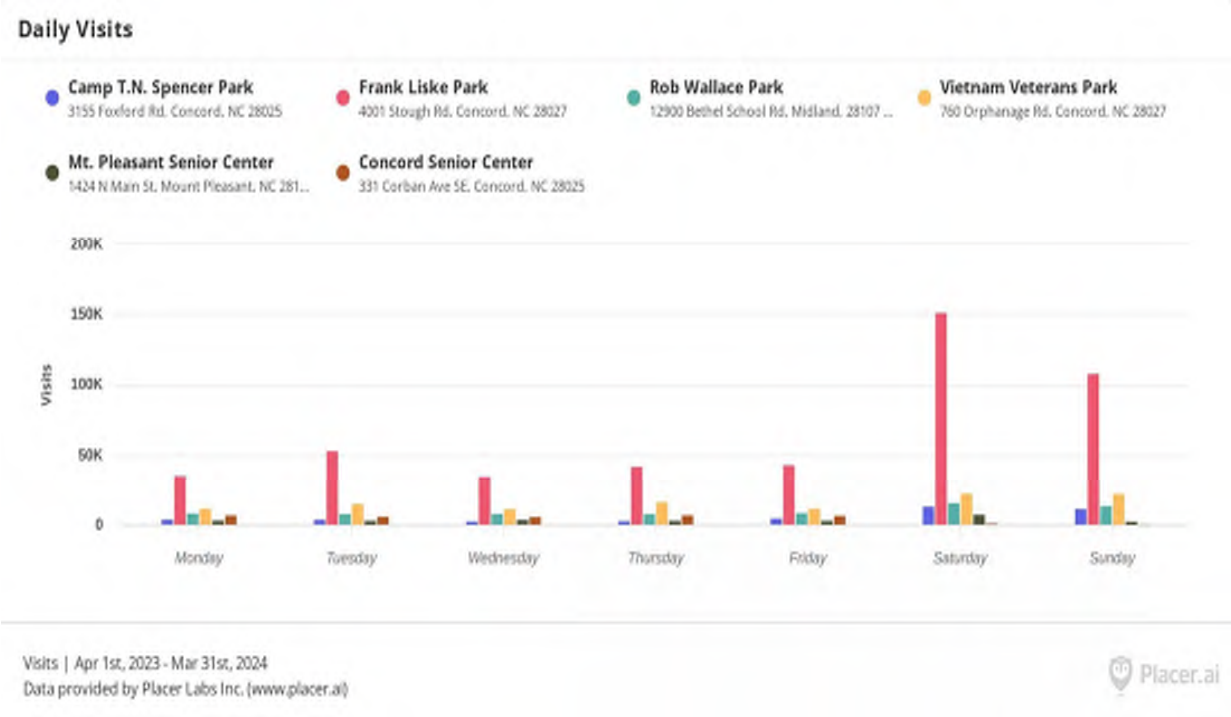
	Camp T.N. Spencer Park	Frank Liske Park	Rob Wallace Park	Vietnam Veterans Park	Mt. Pleasant Senior Center	Concord Senior Center
February 2024	2,018	13,429	3,797	5,983	3,424	4,651
January 2024	1,195	7,712	2,103	3,055	2,385	4,104
December 2023	1,800	10,265	2,623	3,124	2,154	2,955
November 2023	2,118	35,253	4,399	4,841	3,041	3,372

	Camp T.N. Spencer Park	Frank Liske Park	Rob Wallace Park	Vietnam Veterans Park	Mt. Pleasant Senior Center	Concord Senior Center
October 2023	4,301	62,947	7,350	11,672	5,671	4,373
September 2023	2,967	60,319	6,461	11,053	3,839	3,597
August 2023	2,709	52,307	4,128	7,910	3,765	4,665
July 2023	5,564	36,969	6,717	9,599	2,937	3,145
June 2023	6,483	39,321	7,712	13,919	7,050	2,878
May 2023	6,033	52,755	8,182	14,438	3,892	3,735
April 2023	3,611	48,847	8,688	12,463	3,072	3,526
March 2023	3,285	31,372	7,176	9,864	2,959	3,455
Highest Attendance		Lowest Attendance				

Daily

Figure 3 reflects daily visitation over the past 12 months. Saturday is the most popular day of the week to visit for all locations except for the Concord Senior Center, which sees peek attendance on Thursdays.

Figure 3: Daily Visitation



Hourly

Figure 4 reflects hourly visitation trends over the past 12 months. The most popular time to visit is between 2 and 4 p.m. Frank Liske Park sees the greatest number of visitors between 10 a.m. and 7 p.m., with Vietnam Veterans Park seeing the greatest number of visitors between 3 and 6 p.m.

Figure 4: Hourly Visitation



Dwell Time

Figure 5 reflects the average length of time—or dwell time—visitors spend at each park or facility. On average, visitors spend between 74 to 175 minutes at park locations and 71 to 93 minutes at senior center locations. Camp T.N. Spencer Park visitors dwell the longest at more than 170 minutes.

Figure 5: Length of Stay



Appendix H – Traffic Counts

Peak Hour Turning Movement Count

Click here for Map

Concord, NC

Marr Traffic DATA COLLECTION

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Saturday, August 2, 2025		
Cloudy		70°F
Period	1400 - 1600	**APPLY**
Peak Hour	1430 - 1530	**APPLY**
Global PH	1430 - 1530	**APPLY**

* the Peak Hour Diagram does not include bicycles

Session Parameters

(Drop Down Menu)

Peak Hour

Volume

Roberta Rd (North)

Southbound

158	68	20	0	246	247	(1-3)
0	0	0	0	0	1	(4-7)
0	0	0	0	0	0	(8-13)
158	68	20	0	246	248	Total

0

0

SR-1430 George W Liles Pkwy

Eastbound

(1-3)	(4-7)	(8-13)	Total	
674	3	1	678	←
756	8	1	765	→
0	0	0	0	↶
142	1	0	143	↰
259	6	0	265	↑
355	1	1	357	↱

0

0

Classes	(1-3)	(4-7)	(8-13)	Total
Volume	1668	13	2	1683
PHF				0.95
ADT (Calc)			10	16830

0

0

Westbound

		(8-13)	(4-7)	(1-3)
19	↱	0	0	19
260	↰	1	2	257
16	↑	0	0	16
0	↶	0	0	0
295	←	1	2	292
316	→	0	8	308
Total				

SR-1309 Stough Rd

0

0

	↓	↑	↶	↰	↑	↱
Total	441	377	0	260	86	31
(8-13)	1	0	0	0	0	0
(4-7)	1	3	0	1	0	2
(1-3)	439	374	0	259	86	29

Northbound

Roberta Rd (South)

All vehicles

Time	Northbound Roberta Rd (South)						Southbound Roberta Rd (North)						Eastbound SR-1430 George W Liles Pkwy						Westbound SR-1309 Stough Rd						Int Total
	Left 1.1	Thru 1.2	Right 1.3		U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7		U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11		U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15		U-Turn 1.16	App Total	
1430 - 1445	68	21	4	-	0	93	6	16	40	-	0	62	44	75	89	-	0	208	1	71	6	-	0	78	441
1445 - 1500	68	15	5	-	0	88	4	22	45	-	0	71	35	58	82	-	0	175	6	56	7	-	0	69	403
1500 - 1515	60	26	14	-	0	100	7	13	37	-	0	57	28	66	86	-	0	180	5	64	1	-	0	70	407
1515 - 1530	64	24	8	-	0	96	3	17	36	-	0	56	36	66	100	-	0	202	4	69	5	-	0	78	432
Total	260	86	31	0	0	377	20	68	158	0	0	246	143	265	357	0	0	765	16	260	19	0	0	295	1683
Approach %	68.97	22.81	8.22	0.00	0.00	-	8.13	27.64	64.23	0.00	0.00	-	18.69	34.64	46.67	0.00	0.00	-	5.42	88.14	6.44	0.00	0.00	-	
PHF	0.96	0.83	0.55	0.00	0.00	**0.94**	0.71	0.77	0.88	0.00	0.00	**0.87**	0.81	0.88	0.89	0.00	0.00	**0.92**	0.67	0.92	0.68	0.00	0.00	**0.95**	**0.95**

Passenger Vehicles (1-3)

Time	Northbound Roberta Rd (South)						Southbound Roberta Rd (North)						Eastbound SR-1430 George W Liles Pkwy						Westbound SR-1309 Stough Rd						Int Total
	Left 1.1	Thru 1.2	Right 1.3		U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7		U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11		U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15		U-Turn 1.16	App Total	
1430 - 1445	68	21	3	-	0	92	6	16	40	-	0	62	43	72	89	-	0	204	1	70	6	-	0	77	435
1445 - 1500	68	15	4	-	0	87	4	22	45	-	0	71	35	58	82	-	0	175	6	56	7	-	0	69	402
1500 - 1515	60	26	14	-	0	100	7	13	37	-	0	57	28	64	85	-	0	177	5	62	1	-	0	68	402
1515 - 1530	63	24	8	-	0	95	3	17	36	-	0	56	36	65	99	-	0	200	4	69	5	-	0	78	429
Total	259	86	29	0	0	374	20	68	158	0	0	246	142	259	355	0	0	756	16	257	19	0	0	292	1668
Approach %	69.25	22.99	7.75	0.00	0.00	-	8.13	27.64	64.23	0.00	0.00	-	18.78	34.26	46.96	0.00	0.00	-	5.48	88.01	6.51	0.00	0.00	-	
PHF	0.95	0.83	0.52	0.00	0.00	**0.94**	0.71	0.77	0.88	0.00	0.00	**0.87**	0.83	0.90	0.90	0.00	0.00	**0.93**	0.67	0.92	0.68	0.00	0.00	**0.94**	**0.96**

Single Unit Trucks (4-7)

Time	Northbound Roberta Rd (South)						Southbound Roberta Rd (North)						Eastbound SR-1430 George W Liles Pkwy						Westbound SR-1309 Stough Rd						Int Total
	Left 1.1	Thru 1.2	Right 1.3		U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7		U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11		U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15		U-Turn 1.16	App Total	
1430 - 1445	0	0	1	-	0	1	0	0	0	-	0	0	1	3	0	-	0	4	0	1	0	-	0	1	6
1445 - 1500	0	0	1	-	0	1	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	1
1500 - 1515	0	0	0	-	0	0	0	0	0	-	0	0	0	2	1	-	0	3	0	1	0	-	0	1	4
1515 - 1530	1	0	0	-	0	1	0	0	0	-	0	0	0	1	0	-	0	1	0	0	0	-	0	0	2
Total	1	0	2	0	0	3	0	0	0	0	0	0	1	6	1	0	0	8	0	2	0	0	0	2	13
Approach %	33.33	0.00	66.67	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	12.50	75.00	12.50	0.00	0.00	-	0.00	100.00	0.00	0.00	0.00	-	
PHF	0.25	0.00	0.50	0.00	0.00	**0.75**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.25	0.50	0.25	0.00	0.00	**0.50**	0.00	0.50	0.00	0.00	0.00	**0.50**	**0.54**

Combination Trucks (8-13)

Time	Northbound Roberta Rd (South)						Southbound Roberta Rd (North)						Eastbound SR-1430 George W Liles Pkwy						Westbound SR-1309 Stough Rd						Int Total
	Left 1.1	Thru 1.2	Right 1.3		U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7		U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11		U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15		U-Turn 1.16	App Total	
1430 - 1445	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1445 - 1500	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1500 - 1515	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	0	1	1
1515 - 1530	0	0	0	-	0	0	0	0	0	-	0	0	0	0	1	-	0	1	0	0	0	-	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	1	2
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	100.00	0.00	0.00	-	0.00	100.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.25	0.00	0.00	**0.25**	0.00	0.25	0.00	0.00	0.00	**0.25**	**0.50**

Bicycles

Time	Northbound Roberta Rd (South)						Southbound Roberta Rd (North)						Eastbound SR-1430 George W Liles Pkwy						Westbound SR-1309 Stough Rd						Int Total
	Left 1.1	Thru 1.2	Right 1.3		U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7		U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11		U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15		U-Turn 1.16	App Total	
1430 - 1445	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1445 - 1500	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1500 - 1515	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1515 - 1530	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Classified Turn Movement Count || All vehicles

Concord, NC

Marr Traffic DATA COLLECTION

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Site 1

Roberta Rd (South)
Roberta Rd (North)
SR-1430 George W Liles Pkwy
SR-1309 Stough Rd

Date

Saturday, August 2, 2025

Lat/Long

35.361830°, -80.633415°
Click here for Map

Weather

Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)

All vehicles

	Northbound					Southbound					Eastbound					Westbound					
	Roberta Rd (South)					Roberta Rd (North)					SR-1430 George W Liles Pkwy					SR-1309 Stough Rd					
TIME	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	Int Total
1400 - 1415	65	16	2	0	83	4	15	38	0	57	32	70	71	0	173	3	50	4	0	57	370
1415 - 1430	58	26	4	0	88	5	18	26	0	49	39	67	93	0	199	3	61	10	0	74	410
1430 - 1445	68	21	4	0	93	6	16	40	0	62	44	75	89	0	208	1	71	6	0	78	441
1445 - 1500	68	15	5	0	88	4	22	45	0	71	35	58	82	0	175	6	56	7	0	69	403
Hourly Total	259	78	15	0	**352**	19	71	149	0	**239**	150	270	335	0	**755**	13	238	27	0	**278**	**1624**
1500 - 1515	60	26	14	0	100	7	13	37	0	57	28	66	86	0	180	5	64	1	0	70	407
1515 - 1530	64	24	8	0	96	3	17	36	0	56	36	66	100	0	202	4	69	5	0	78	432
1530 - 1545	65	14	4	0	83	5	23	32	0	60	38	57	81	0	176	4	84	1	0	89	408
1545 - 1600	68	11	3	0	82	4	19	29	0	52	35	57	71	0	163	10	76	7	0	93	390
Hourly Total	257	75	29	0	**361**	19	72	134	0	**225**	137	246	338	0	**721**	23	293	14	0	**330**	**1637**
Grand Total	516	153	44	0	**713**	38	143	283	0	**464**	287	516	673	0	**1476**	36	531	41	0	**608**	**3261**
Approach %	72.37	21.46	6.17	0.00	-	8.19	30.82	60.99	0.00	-	19.44	34.96	45.60	0.00	-	5.92	87.34	6.74	0.00	-	
Intersection %	15.82	4.69	1.35	0.00	21.86	1.17	4.39	8.68	0.00	14.23	8.80	15.82	20.64	0.00	45.26	1.10	16.28	1.26	0.00	18.64	
Heavy Vehicle %	0	1	5	-	**1**	0	0	0	-	**0**	0	2	1	-	**1**	0	1	5	-	**1**	**1**
PHF	0.96	0.83	0.55	0.00	**0.94**	0.71	0.77	0.88	0.00	**0.87**	0.81	0.88	0.89	0.00	**0.92**	0.67	0.92	0.68	0.00	**0.95**	**0.95**
Peak Hour Total	260	86	31	0	**377**	20	68	158	0	**246**	143	265	357	0	**765**	16	260	19	0	**295**	**1683**
Peak Hour HV %	0	0	6	0	**1**	0	0	0	0	**0**	1	2	1	0	**1**	0	1	0	0	**1**	**1**

Classified Turn Movement Count || Passenger Vehicles (1-3)

Concord, NC

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 1

Roberta Rd (South)
Roberta Rd (North)
SR-1430 George W Liles Pkwy
SR-1309 Stough Rd

Date

Saturday, August 2, 2025

Lat/Long

35.361830°, -80.633415°
Click here for Map

Weather

Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)

Passenger Vehicles (1-3)

	Northbound					Southbound					Eastbound					Westbound					
	Roberta Rd (South)					Roberta Rd (North)					SR-1430 George W Liles Pkwy					SR-1309 Stough Rd					
TIME	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	Int Total
1400 - 1415	64	16	2	0	82	4	15	37	0	56	32	69	70	0	171	3	50	4	0	57	366
1415 - 1430	58	26	4	0	88	5	18	26	0	49	39	66	93	0	198	3	60	8	0	71	406
1430 - 1445	68	21	3	0	92	6	16	40	0	62	43	72	89	0	204	1	70	6	0	77	435
1445 - 1500	68	15	4	0	87	4	22	45	0	71	35	58	82	0	175	6	56	7	0	69	402
Hourly Total	258	78	13	0	**349**	19	71	148	0	**238**	149	265	334	0	**748**	13	236	25	0	**274**	**1609**
1500 - 1515	60	26	14	0	100	7	13	37	0	57	28	64	85	0	177	5	62	1	0	68	402
1515 - 1530	63	24	8	0	95	3	17	36	0	56	36	65	99	0	200	4	69	5	0	78	429
1530 - 1545	65	14	4	0	83	5	23	32	0	60	38	57	80	0	175	4	84	1	0	89	407
1545 - 1600	68	10	3	0	81	4	19	29	0	52	35	56	70	0	161	10	75	7	0	92	386
Hourly Total	256	74	29	0	**359**	19	72	134	0	**225**	137	242	334	0	**713**	23	290	14	0	**327**	**1624**
Grand Total	514	152	42	0	**708**	38	143	282	0	**463**	286	507	668	0	**1461**	36	526	39	0	**601**	**3233**
Approach %	72.60	21.47	5.93	0.00	-	8.21	30.89	60.91	0.00	-	19.58	34.70	45.72	0.00	-	5.99	87.52	6.49	0.00	-	
Intersection %	15.90	4.70	1.30	0.00	21.90	1.18	4.42	8.72	0.00	14.32	8.85	15.68	20.66	0.00	45.19	1.11	16.27	1.21	0.00	18.59	

Classified Turn Movement Count || Single Unit Trucks (4-7)

Concord, NC

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 1
Roberta Rd (South)
Roberta Rd (North)
SR-1430 George W Liles Pkwy
SR-1309 Stough Rd

Date
Saturday, August 2, 2025

Lat/Long
35.361830°, -80.633415°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)

Single Unit Trucks (4-7)

	Northbound					Southbound					Eastbound					Westbound					
	Roberta Rd (South)					Roberta Rd (North)					SR-1430 George W Liles Pkwy					SR-1309 Stough Rd					
TIME	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	Int Total
1400 - 1415	1	0	0	0	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	3
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	0	2	3
1430 - 1445	0	0	1	0	1	0	0	0	0	0	1	3	0	0	4	0	1	0	0	1	6
1445 - 1500	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hourly Total	1	0	2	0	**3**	0	0	1	0	**1**	1	5	0	0	**6**	0	2	1	0	**3**	**13**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	1	0	0	1	4
1515 - 1530	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	2
Hourly Total	1	0	0	0	**1**	0	0	0	0	**0**	0	3	3	0	**6**	0	2	0	0	**2**	**9**
Grand Total	2	0	2	0	**4**	0	0	1	0	**1**	1	8	3	0	**12**	0	4	1	0	**5**	**22**
Approach %	50.00	0.00	50.00	0.00	-	0.00	0.00	100.00	0.00	-	8.33	66.67	25.00	0.00	-	0.00	80.00	20.00	0.00	-	
Intersection %	9.09	0.00	9.09	0.00	18.18	0.00	0.00	4.55	0.00	4.55	4.55	36.36	13.64	0.00	54.55	0.00	18.18	4.55	0.00	22.73	

Classified Turn Movement Count || Combination Trucks (8-13)

Concord, NC

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 1

Roberta Rd (South)
Roberta Rd (North)
SR-1430 George W Liles Pkwy
SR-1309 Stough Rd

Date

Saturday, August 2, 2025

Lat/Long

35.361830°, -80.633415°
Click here for Map

Weather

Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)

Combination Trucks (8-13)

	Northbound					Southbound					Eastbound					Westbound					
	Roberta Rd (South)					Roberta Rd (North)					SR-1430 George W Liles Pkwy					SR-1309 Stough Rd					
TIME	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	**0**	0	0	0	0	**0**	0	0	1	0	**1**	0	0	1	0	**1**	**2**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Hourly Total	0	1	0	0	**1**	0	0	0	0	**0**	0	1	1	0	**2**	0	1	0	0	**1**	**4**
Grand Total	0	1	0	0	**1**	0	0	0	0	**0**	0	1	2	0	**3**	0	1	1	0	**2**	**6**
Approach %	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	33.33	66.67	0.00	-	0.00	50.00	50.00	0.00	-	
Intersection %	0.00	16.67	0.00	0.00	16.67	0.00	0.00	0.00	0.00	0.00	0.00	16.67	33.33	0.00	50.00	0.00	16.67	16.67	0.00	33.33	

Classified Turn Movement Count || Bicycles

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Concord, NC

Site 1
Roberta Rd (South)
Roberta Rd (North)
SR-1430 George W Liles Pkwy
SR-1309 Stough Rd

Date
Saturday, August 2, 2025

Lat/Long
35.361830°, -80.633415°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
Bicycles

	Northbound					Southbound					Eastbound					Westbound					
	Roberta Rd (South)					Roberta Rd (North)					SR-1430 George W Liles Pkwy					SR-1309 Stough Rd					
TIME	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**
Grand Total	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Classified Turn Movement Count || All Trucks (4-13)

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Concord, NC

Site 1
Roberta Rd (South)
Roberta Rd (North)
SR-1430 George W Liles Pkwy
SR-1309 Stough Rd

Date
Saturday, August 2, 2025

Lat/Long
35.361830°, -80.633415°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)

All Trucks (4-13)

	Northbound					Southbound					Eastbound					Westbound					
	Roberta Rd (South)					Roberta Rd (North)					SR-1430 George W Liles Pkwy					SR-1309 Stough Rd					
TIME	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	Int Total
1400 - 1415	1	0	0	0	1	0	0	1	0	1	0	1	1	0	2	0	0	0	0	0	4
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	2	0	3	4
1430 - 1445	0	0	1	0	1	0	0	0	0	0	1	3	0	0	4	0	1	0	0	1	6
1445 - 1500	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hourly Total	1	0	2	0	**3**	0	0	1	0	**1**	1	5	1	0	**7**	0	2	2	0	**4**	**15**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	2	0	0	2	5
1515 - 1530	1	0	0	0	1	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	3
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
1545 - 1600	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	0	1	0	0	1	4
Hourly Total	1	1	0	0	**2**	0	0	0	0	**0**	0	4	4	0	**8**	0	3	0	0	**3**	**13**
Grand Total	2	1	2	0	**5**	0	0	1	0	**1**	1	9	5	0	**15**	0	5	2	0	**7**	**28**
Approach %	40.00	20.00	40.00	0.00	-	0.00	0.00	100.00	0.00	-	6.67	60.00	33.33	0.00	-	0.00	71.43	28.57	0.00	-	
Intersection %	7.14	3.57	7.14	0.00	17.86	0.00	0.00	3.57	0.00	3.57	3.57	32.14	17.86	0.00	53.57	0.00	17.86	7.14	0.00	25.00	

Crosswalk Counts || Pedestrians

Concord, NC

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 1
Roberta Rd (South)
Roberta Rd (North)
SR-1430 George W Liles Pkwy
SR-1309 Stough Rd

Date
Saturday, August 2, 2025

Lat/Long
35.361830°, -80.633415°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
Pedestrians

	Northbound			Southbound			Eastbound			Westbound			
	Roberta Rd (South)			Roberta Rd (North)			SR-1430 George W Liles Pkwy			SR-1309 Stough Rd			
TIME	EB 1a	WB 1b	App Total	EB 1c	WB 1d	App Total	NB 1e	SB 1f	App Total	NB 1g	SB 1h	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Grand Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Approach %	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Crosswalk Counts || Bicycles

Concord, NC

www.marrtraffic.com

Site 1
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Roberta Rd (North)
SR-1430 George W Liles Pkwy
SR-1309 Stough Rd

Date
Saturday, August 2, 2025

Lat/Long
35.361830°, -80.633415°
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Weather
Cloudy
70°F
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1400 - 1600 (Saturday 2h Session) (08-02-2025)
Bicycles

	Northbound			Southbound			Eastbound			Westbound			
	Roberta Rd (South)			Roberta Rd (North)			SR-1430 George W Liles Pkwy			SR-1309 Stough Rd			
TIME	EB 1a	WB 1b	App Total	EB 1c	WB 1d	App Total	NB 1e	SB 1f	App Total	NB 1g	SB 1h	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Grand Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Approach %	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Crosswalk Counts || Motorized Vehicles

Marr Traffic DATA COLLECTION

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Concord, NC

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SR-1309 Stough Rd

Date
Saturday, August 2, 2025

Lat/Long
35.361830°, -80.633415°
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Cloudy
70°F
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1400 - 1600 (Saturday 2h Session) (08-02-2025)
Motorized Vehicles

	Northbound			Southbound			Eastbound			Westbound			
	Roberta Rd (South)			Roberta Rd (North)			SR-1430 George W Liles Pkwy			SR-1309 Stough Rd			
TIME	EB 1a	WB 1b	App Total	EB 1c	WB 1d	App Total	NB 1e	SB 1f	App Total	NB 1g	SB 1h	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Grand Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Approach %	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Start Date: 8/2/2025	SR-1430 George W Liles Pkwy Eastbound			SR-1309 Stough Rd Westbound			Roberta Rd (South) Northbound			Roberta Rd (North) Southbound			
Time	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**Total**
15 Minute Totals													
12:00 AM - 12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM - 12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM - 12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM - 01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 AM - 01:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 AM - 01:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 AM - 01:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 AM - 02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 AM - 02:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 AM - 02:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 AM - 02:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 AM - 03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 AM - 03:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 AM - 03:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 AM - 03:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 AM - 04:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 AM - 04:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 AM - 04:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 AM - 04:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 AM - 05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 AM - 05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 AM - 05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 AM - 05:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM - 06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 AM - 06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM - 06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM - 06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM - 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM - 07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM - 07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM - 07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM - 08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM - 08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM - 08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM - 08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM - 09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 AM - 09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM - 09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM - 09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM - 10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM - 10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM - 10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM - 10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM - 11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM - 12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM - 12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM - 01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM - 01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM - 01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM - 01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM - 02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 PM - 02:15 PM	32	70	71	3	50	4	65	16	2	4	15	38	370
02:15 PM - 02:30 PM	39	67	93	3	61	10	58	26	4	5	18	26	410
02:30 PM - 02:45 PM	44	75	89	1	71	6	68	21	4	6	16	40	441
02:45 PM - 03:00 PM	35	58	82	6	56	7	68	15	5	4	22	45	403
03:00 PM - 03:15 PM	28	66	86	5	64	1	60	26	14	7	13	37	407
03:15 PM - 03:30 PM	36	66	100	4	69	5	64	24	8	3	17	36	432
03:30 PM - 03:45 PM	38	57	81	4	84	1	65	14	4	5	23	32	408
03:45 PM - 04:00 PM	35	57	71	10	76	7	68	11	3	4	19	29	390
04:00 PM - 04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM - 04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM - 04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM - 05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM - 05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM - 05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM - 05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM - 06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM - 06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM - 06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM - 06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM - 07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 PM - 07:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 PM - 07:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 PM - 07:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 PM - 08:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 PM - 08:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 PM - 08:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 PM - 08:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 PM - 09:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 PM - 09:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 PM - 09:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 PM - 09:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 PM - 10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM - 10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM - 10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM - 10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM - 11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM - 11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM - 11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM - 11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM - 12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Turning Movement Count

Concord, NC

Click here for Map

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Saturday, August 2, 2025		
Cloudy		70°F
Period	1400 - 1600	**APPLY**
Peak Hour	1500 - 1600	**APPLY**
Global PH	1430 - 1530	**APPLY**

* the Peak Hour Diagram does not include bicycles

Session Parameters

(Drop Down Menu)

Peak Hour

Volume



All vehicles

Time	Northbound Old Charlotte Rd SW (South)						Southbound Old Charlotte Rd SW (North)						Eastbound Jackson Terrace SW						Westbound Stonecrest Cir SW						Int Total
	Left 2.1	Thru 2.2	Right 2.3		U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7		U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11		U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15		U-Turn 2.16	App Total	
1500 - 1515	1	62	1	-	0	64	0	59	0	-	0	59	0	0	1	-	0	1	0	1	0	-	0	1	125
1515 - 1530	0	64	0	-	0	64	0	67	0	-	0	67	0	0	0	-	0	0	0	0	1	-	0	1	132
1530 - 1545	0	68	0	-	0	68	0	45	1	-	0	46	0	0	0	-	0	0	0	0	1	-	0	1	115
1545 - 1600	0	86	0	-	0	86	0	50	0	-	1	51	0	0	0	-	0	0	0	0	0	-	0	0	137
Total	1	280	1	0	0	282	0	221	1	0	1	223	0	0	1	0	0	1	0	1	2	0	0	3	509
Approach %	0.35	99.29	0.35	0.00	0.00	-	0.00	99.10	0.45	0.00	0.45	-	0.00	0.00	100.00	0.00	0.00	-	0.00	33.33	66.67	0.00	0.00	-	
PHF	0.25	0.81	0.25	0.00	0.00	**0.82**	0.00	0.82	0.25	0.00	0.25	**0.83**	0.00	0.00	0.25	0.00	0.00	**0.25**	0.00	0.25	0.50	0.00	0.00	**0.75**	**0.93**

Passenger Vehicles (1-3)

Time	Northbound Old Charlotte Rd SW (South)						Southbound Old Charlotte Rd SW (North)						Eastbound Jackson Terrace SW						Westbound Stonecrest Cir SW						Int Total
	Left 2.1	Thru 2.2	Right 2.3		U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7		U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11		U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15		U-Turn 2.16	App Total	
1500 - 1515	1	62	1	-	0	64	0	59	0	-	0	59	0	0	1	-	0	1	0	0	0	-	0	0	124
1515 - 1530	0	64	0	-	0	64	0	67	0	-	0	67	0	0	0	-	0	0	0	0	1	-	0	1	132
1530 - 1545	0	67	0	-	0	67	0	45	1	-	0	46	0	0	0	-	0	0	0	0	1	-	0	1	114
1545 - 1600	0	86	0	-	0	86	0	50	0	-	1	51	0	0	0	-	0	0	0	0	0	-	0	0	137
Total	1	279	1	0	0	281	0	221	1	0	1	223	0	0	1	0	0	1	0	0	2	0	0	2	507
Approach %	0.36	99.29	0.36	0.00	0.00	-	0.00	99.10	0.45	0.00	0.45	-	0.00	0.00	100.00	0.00	0.00	-	0.00	0.00	100.00	0.00	0.00	-	
PHF	0.25	0.81	0.25	0.00	0.00	**0.82**	0.00	0.82	0.25	0.00	0.25	**0.83**	0.00	0.00	0.25	0.00	0.00	**0.25**	0.00	0.00	0.50	0.00	0.00	**0.50**	**0.93**

Single Unit Trucks (4-7)

Time	Northbound Old Charlotte Rd SW (South)						Southbound Old Charlotte Rd SW (North)						Eastbound Jackson Terrace SW						Westbound Stonecrest Cir SW						Int Total
	Left 2.1	Thru 2.2	Right 2.3		U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7		U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11		U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15		U-Turn 2.16	App Total	
1500 - 1515	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1515 - 1530	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1530 - 1545	0	1	0	-	0	1	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	1
1545 - 1600	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
Total	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Approach %	0.00	100.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.25	0.00	0.00	0.00	**0.25**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.25**

Combination Trucks (8-13)

Time	Northbound Old Charlotte Rd SW (South)						Southbound Old Charlotte Rd SW (North)						Eastbound Jackson Terrace SW						Westbound Stonecrest Cir SW						Int Total
	Left 2.1	Thru 2.2	Right 2.3		U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7		U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11		U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15		U-Turn 2.16	App Total	
1500 - 1515	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1515 - 1530	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1530 - 1545	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1545 - 1600	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Bicycles

Time	Northbound Old Charlotte Rd SW (South)						Southbound Old Charlotte Rd SW (North)						Eastbound Jackson Terrace SW						Westbound Stonecrest Cir SW						Int Total
	Left 2.1	Thru 2.2	Right 2.3		U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7		U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11		U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15		U-Turn 2.16	App Total	
1500 - 1515	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	0	1	1
1515 - 1530	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1530 - 1545	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1545 - 1600	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.25	0.00	0.00	0.00	**0.25**	**0.25**

Classified Turn Movement Count || All vehicles

Concord, NC

Marr Traffic DATA COLLECTION

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Site 2
Old Charlotte Rd SW (South)
Old Charlotte Rd SW (North)
Jackson Terrace SW
Stonecrest Cir SW

Date
Saturday, August 2, 2025

Lat/Long
35.368259°, -80.597029°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
All vehicles

	Northbound					Southbound					Eastbound					Westbound					
	Old Charlotte Rd SW (South)					Old Charlotte Rd SW (North)					Jackson Terrace SW					Stonecrest Cir SW					
TIME	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	Int Total
1400 - 1415	0	67	1	0	68	0	48	0	0	48	0	0	0	0	0	0	0	0	0	0	116
1415 - 1430	0	66	2	0	68	1	40	0	0	41	0	0	0	0	0	0	0	2	0	2	111
1430 - 1445	0	65	1	0	66	0	55	0	0	55	1	0	0	0	1	1	0	2	0	3	125
1445 - 1500	0	77	1	0	78	0	46	0	0	46	0	0	0	0	0	0	0	0	0	0	124
Hourly Total	0	275	5	0	**280**	1	189	0	0	**190**	1	0	0	0	**1**	1	0	4	0	**5**	**476**
1500 - 1515	1	62	1	0	64	0	59	0	0	59	0	0	1	0	1	0	1	0	0	1	125
1515 - 1530	0	64	0	0	64	0	67	0	0	67	0	0	0	0	0	0	0	1	0	1	132
1530 - 1545	0	68	0	0	68	0	45	1	0	46	0	0	0	0	0	0	0	1	0	1	115
1545 - 1600	0	86	0	0	86	0	50	0	1	51	0	0	0	0	0	0	0	0	0	0	137
Hourly Total	1	280	1	0	**282**	0	221	1	1	**223**	0	0	1	0	**1**	0	1	2	0	**3**	**509**
Grand Total	1	555	6	0	**562**	1	410	1	1	**413**	1	0	1	0	**2**	1	1	6	0	**8**	**985**
Approach %	0.18	98.75	1.07	0.00	-	0.24	99.27	0.24	0.24	-	50.00	0.00	50.00	0.00	-	12.50	12.50	75.00	0.00	-	
Intersection %	0.10	56.35	0.61	0.00	57.06	0.10	41.62	0.10	0.10	41.93	0.10	0.00	0.10	0.00	0.20	0.10	0.10	0.61	0.00	0.81	
Heavy Vehicle %	0	1	0	-	**1**	0	0	0	0	**0**	0	-	0	-	**0**	0	0	0	-	**0**	**1**
PHF	0.25	0.81	0.25	0.00	**0.82**	0.00	0.82	0.25	0.25	**0.83**	0.00	0.00	0.25	0.00	**0.25**	0.00	0.25	0.50	0.00	**0.75**	**0.93**
Peak Hour Total	1	280	1	0	**282**	0	221	1	1	**223**	0	0	1	0	**1**	0	1	2	0	**3**	**509**
Peak Hour HV %	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**

Classified Turn Movement Count || Passenger Vehicles (1-3)

Concord, NC

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 2

Old Charlotte Rd SW (South)
Old Charlotte Rd SW (North)
Jackson Terrace SW
Stonecrest Cir SW

Date

Saturday, August 2, 2025

Lat/Long

35.368259°, -80.597029°
Click here for Map

Weather

Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)

Passenger Vehicles (1-3)

	Northbound					Southbound					Eastbound					Westbound					
	Old Charlotte Rd SW (South)					Old Charlotte Rd SW (North)					Jackson Terrace SW					Stonecrest Cir SW					
TIME	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	Int Total
1400 - 1415	0	66	1	0	67	0	48	0	0	48	0	0	0	0	0	0	0	0	0	0	115
1415 - 1430	0	65	2	0	67	1	40	0	0	41	0	0	0	0	0	0	0	2	0	2	110
1430 - 1445	0	64	1	0	65	0	54	0	0	54	1	0	0	0	1	1	0	2	0	3	123
1445 - 1500	0	76	1	0	77	0	46	0	0	46	0	0	0	0	0	0	0	0	0	0	123
Hourly Total	0	271	5	0	**276**	1	188	0	0	**189**	1	0	0	0	**1**	1	0	4	0	**5**	**471**
1500 - 1515	1	62	1	0	64	0	59	0	0	59	0	0	1	0	1	0	0	0	0	0	124
1515 - 1530	0	64	0	0	64	0	67	0	0	67	0	0	0	0	0	0	0	1	0	1	132
1530 - 1545	0	67	0	0	67	0	45	1	0	46	0	0	0	0	0	0	0	1	0	1	114
1545 - 1600	0	86	0	0	86	0	50	0	1	51	0	0	0	0	0	0	0	0	0	0	137
Hourly Total	1	279	1	0	**281**	0	221	1	1	**223**	0	0	1	0	**1**	0	0	2	0	**2**	**507**
Grand Total	1	550	6	0	**557**	1	409	1	1	**412**	1	0	1	0	**2**	1	0	6	0	**7**	**978**
Approach %	0.18	98.74	1.08	0.00	-	0.24	99.27	0.24	0.24	-	50.00	0.00	50.00	0.00	-	14.29	0.00	85.71	0.00	-	
Intersection %	0.10	56.24	0.61	0.00	56.95	0.10	41.82	0.10	0.10	42.13	0.10	0.00	0.10	0.00	0.20	0.10	0.00	0.61	0.00	0.72	

Classified Turn Movement Count || Single Unit Trucks (4-7)

Concord, NC

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 2
Old Charlotte Rd SW (South)
Old Charlotte Rd SW (North)
Jackson Terrace SW
Stonecrest Cir SW

Date
Saturday, August 2, 2025

Lat/Long
35.368259°, -80.597029°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)

Single Unit Trucks (4-7)

	Northbound					Southbound					Eastbound					Westbound					
	Old Charlotte Rd SW (South)					Old Charlotte Rd SW (North)					Jackson Terrace SW					Stonecrest Cir SW					
TIME	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	Int Total
1400 - 1415	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
1445 - 1500	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hourly Total	0	3	0	0	**3**	0	1	0	0	**1**	0	0	0	0	**0**	0	0	0	0	**0**	**4**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	1	0	0	**1**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**1**
Grand Total	0	4	0	0	**4**	0	1	0	0	**1**	0	0	0	0	**0**	0	0	0	0	**0**	**5**
Approach %	0.00	100.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	
Intersection %	0.00	80.00	0.00	0.00	80.00	0.00	20.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Classified Turn Movement Count || Combination Trucks (8-13)

Concord, NC

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 2
Old Charlotte Rd SW (South)
Old Charlotte Rd SW (North)
Jackson Terrace SW
Stonecrest Cir SW

Date
Saturday, August 2, 2025

Lat/Long
35.368259°, -80.597029°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
Combination Trucks (8-13)

	Northbound					Southbound					Eastbound					Westbound					
	Old Charlotte Rd SW (South)					Old Charlotte Rd SW (North)					Jackson Terrace SW					Stonecrest Cir SW					
TIME	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	1	0	0	**1**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**1**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**
Grand Total	0	1	0	0	**1**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**1**
Approach %	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	
Intersection %	0.00	100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Classified Turn Movement Count || Bicycles

Concord, NC

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 2

Old Charlotte Rd SW (South)
Old Charlotte Rd SW (North)
Jackson Terrace SW
Stonecrest Cir SW

Date

Saturday, August 2, 2025

Lat/Long

35.368259°, -80.597029°
Click here for Map

Weather

Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)

Bicycles

	Northbound					Southbound					Eastbound					Westbound					
	Old Charlotte Rd SW (South)					Old Charlotte Rd SW (North)					Jackson Terrace SW					Stonecrest Cir SW					
TIME	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	1	0	0	**1**	**1**
Grand Total	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	1	0	0	**1**	**1**
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00	

Classified Turn Movement Count || All Trucks (4-13)

Concord, NC

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 2
Old Charlotte Rd SW (South)
Old Charlotte Rd SW (North)
Jackson Terrace SW
Stonecrest Cir SW

Date
Saturday, August 2, 2025

Lat/Long
35.368259°, -80.597029°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)

All Trucks (4-13)

	Northbound					Southbound					Eastbound					Westbound					
	Old Charlotte Rd SW (South)					Old Charlotte Rd SW (North)					Jackson Terrace SW					Stonecrest Cir SW					
TIME	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	Int Total
1400 - 1415	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1415 - 1430	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1430 - 1445	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
1445 - 1500	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hourly Total	0	4	0	0	**4**	0	1	0	0	**1**	0	0	0	0	**0**	0	0	0	0	**0**	**5**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	1	0	0	**1**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**1**
Grand Total	0	5	0	0	**5**	0	1	0	0	**1**	0	0	0	0	**0**	0	0	0	0	**0**	**6**
Approach %	0.00	100.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	
Intersection %	0.00	83.33	0.00	0.00	83.33	0.00	16.67	0.00	0.00	16.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Crosswalk Counts || Pedestrians

Concord, NC

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 2
Old Charlotte Rd SW (South)
Old Charlotte Rd SW (North)
Jackson Terrace SW
Stonecrest Cir SW

Date
Saturday, August 2, 2025

Lat/Long
35.368259°, -80.597029°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
Pedestrians

	Northbound			Southbound			Eastbound			Westbound			
	Old Charlotte Rd SW (South)			Old Charlotte Rd SW (North)			Jackson Terrace SW			Stonecrest Cir SW			
TIME	EB 2a	WB 2b	App Total	EB 2c	WB 2d	App Total	NB 2e	SB 2f	App Total	NB 2g	SB 2h	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Grand Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Approach %	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Crosswalk Counts || Bicycles

Concord, NC

www.marrtraffic.com

Site 2
Old Charlotte Rd SW (South)
Old Charlotte Rd SW (North)
Jackson Terrace SW
Stonecrest Cir SW

Date
Saturday, August 2, 2025

Lat/Long
35.368259°, -80.597029°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
Bicycles

	Northbound			Southbound			Eastbound			Westbound			
	Old Charlotte Rd SW (South)			Old Charlotte Rd SW (North)			Jackson Terrace SW			Stonecrest Cir SW			
TIME	EB 2a	WB 2b	App Total	EB 2c	WB 2d	App Total	NB 2e	SB 2f	App Total	NB 2g	SB 2h	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Grand Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Approach %	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Crosswalk Counts || Motorized Vehicles

Marr Traffic DATA COLLECTION

Concord, NC

www.marrtraffic.com

Site 2
Old Charlotte Rd SW (South)
Old Charlotte Rd SW (North)
Jackson Terrace SW
Stonecrest Cir SW

Date
Saturday, August 2, 2025

Lat/Long
35.368259°, -80.597029°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
Motorized Vehicles

	Northbound			Southbound			Eastbound			Westbound			
	Old Charlotte Rd SW (South)			Old Charlotte Rd SW (North)			Jackson Terrace SW			Stonecrest Cir SW			
TIME	EB 2a	WB 2b	App Total	EB 2c	WB 2d	App Total	NB 2e	SB 2f	App Total	NB 2g	SB 2h	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Grand Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Approach %	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Start Date: 8/2/2025	Jackson Terrace SW Eastbound			Stonecrest Cir SW Westbound			Old Charlotte Rd SW (South) Northbound			Old Charlotte Rd SW (North) Southbound			
Time	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**Total**
15 Minute Totals													
12:00 AM - 12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM - 12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM - 12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM - 01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 AM - 01:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 AM - 01:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 AM - 01:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 AM - 02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 AM - 02:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 AM - 02:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 AM - 02:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 AM - 03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 AM - 03:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 AM - 03:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 AM - 03:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 AM - 04:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 AM - 04:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 AM - 04:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 AM - 04:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 AM - 05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 AM - 05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 AM - 05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 AM - 05:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM - 06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 AM - 06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM - 06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM - 06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM - 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM - 07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM - 07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM - 07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM - 08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM - 08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM - 08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM - 08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM - 09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 AM - 09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM - 09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM - 09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM - 10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM - 10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM - 10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM - 10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM - 11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM - 12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM - 12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM - 01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM - 01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM - 01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM - 01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM - 02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 PM - 02:15 PM	0	0	0	0	0	0	0	67	1	0	48	0	116
02:15 PM - 02:30 PM	0	0	0	0	0	2	0	66	2	1	40	0	111
02:30 PM - 02:45 PM	1	0	0	1	0	2	0	65	1	0	55	0	125
02:45 PM - 03:00 PM	0	0	0	0	0	0	0	77	1	0	46	0	124
03:00 PM - 03:15 PM	0	0	1	0	1	0	1	62	1	0	59	0	125
03:15 PM - 03:30 PM	0	0	0	0	0	1	0	64	0	0	67	0	132
03:30 PM - 03:45 PM	0	0	0	0	0	1	0	68	0	0	45	1	115
03:45 PM - 04:00 PM	0	0	0	0	0	0	0	86	0	0	50	0	136
04:00 PM - 04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM - 04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM - 04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM - 05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM - 05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM - 05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM - 05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM - 06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM - 06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM - 06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM - 06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM - 07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 PM - 07:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 PM - 07:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 PM - 07:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 PM - 08:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 PM - 08:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 PM - 08:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 PM - 08:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 PM - 09:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 PM - 09:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 PM - 09:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 PM - 09:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 PM - 10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM - 10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM - 10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM - 10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM - 11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM - 11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM - 11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM - 11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM - 12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Turning Movement Count

Click here for Map

Concord, NC

Marr Traffic DATA COLLECTION

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Saturday, August 2, 2025		
Cloudy		70°F
Period	1400 - 1600	**APPLY**
Peak Hour	1500 - 1600	**APPLY**
Global PH	1430 - 1530	**APPLY**

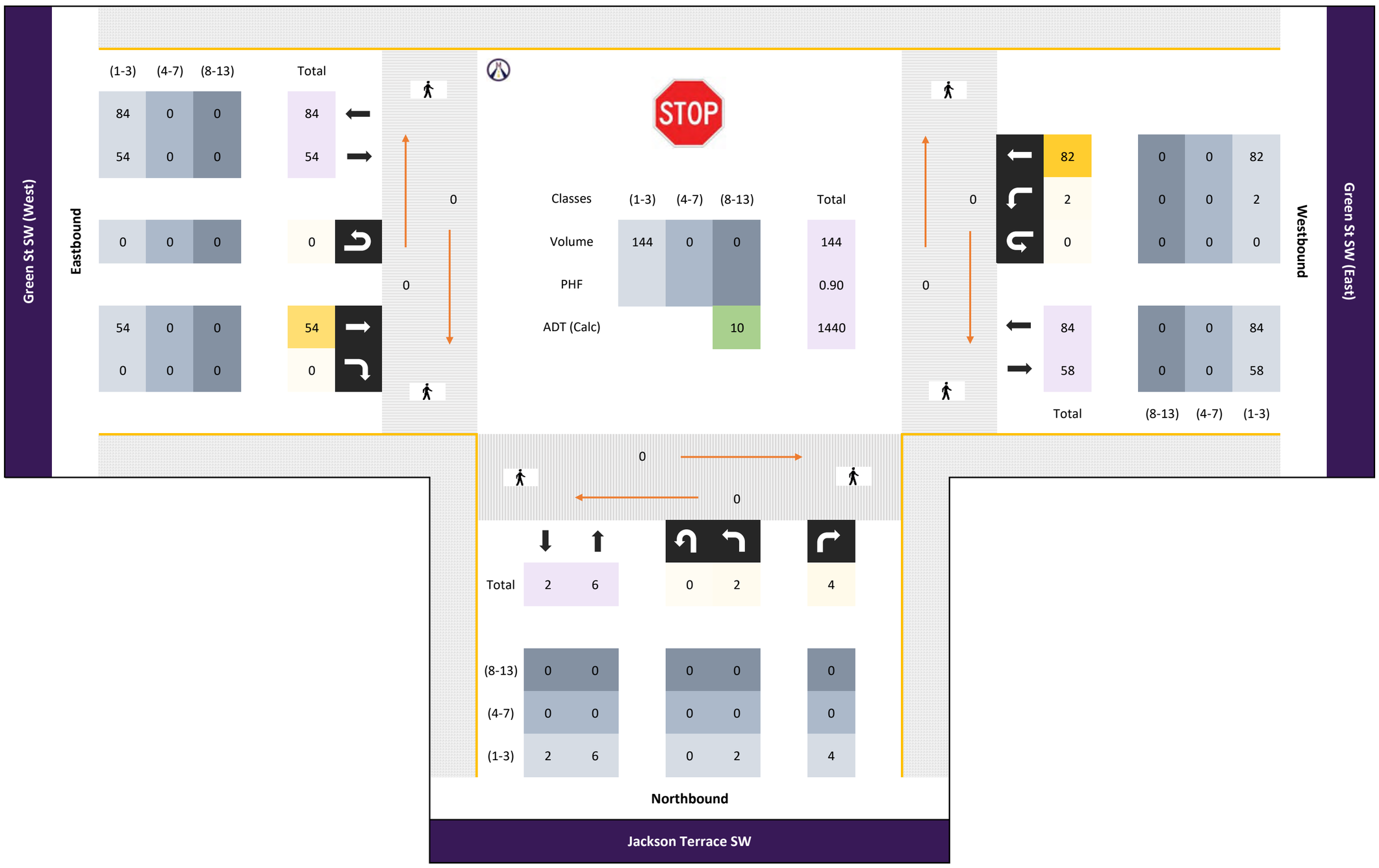
* the Peak Hour Diagram does not include bicycles

Session Parameters

(Drop Down Menu)

Peak Hour

Volume



All vehicles

	Northbound												Eastbound						Westbound						
	Jackson Terrace SW												Green St SW (West)						Green St SW (East)						
Time	Left 3.1		Right 3.2		U-Turn 3.3	App Total						App Total		Thru 3.4	Right 3.5		U-Turn 3.6	App Total	Left 3.7	Thru 3.8			U-Turn 3.9	App Total	Int Total
1500 - 1515	0	-	1	-	0	1	-	-	-	-	-	0	-	17	0	-	0	17	1	21	-	-	0	22	40
1515 - 1530	1	-	2	-	0	3	-	-	-	-	-	0	-	9	0	-	0	9	0	20	-	-	0	20	32
1530 - 1545	1	-	1	-	0	2	-	-	-	-	-	0	-	15	0	-	0	15	1	21	-	-	0	22	39
1545 - 1600	0	-	0	-	0	0	-	-	-	-	-	0	-	13	0	-	0	13	0	20	-	-	0	20	33
Total	2	0	4	0	0	6	0	0	0	0	0	0	0	54	0	0	0	54	2	82	0	0	0	84	144
Approach %	33.33	0.00	66.67	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	0.00	-	2.38	97.62	0.00	0.00	0.00	-	
PHF	0.50	0.00	0.50	0.00	0.00	**0.50**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.79	0.00	0.00	0.00	**0.79**	0.50	0.98	0.00	0.00	0.00	**0.95**	**0.90**

Passenger Vehicles (1-3)

	Northbound												Eastbound						Westbound						
	Jackson Terrace SW												Green St SW (West)						Green St SW (East)						
Time	Left 3.1		Right 3.2		U-Turn 3.3	App Total						App Total		Thru 3.4	Right 3.5		U-Turn 3.6	App Total	Left 3.7	Thru 3.8			U-Turn 3.9	App Total	Int Total
1500 - 1515	0	-	1	-	0	1	-	-	-	-	-	0	-	17	0	-	0	17	1	21	-	-	0	22	40
1515 - 1530	1	-	2	-	0	3	-	-	-	-	-	0	-	9	0	-	0	9	0	20	-	-	0	20	32
1530 - 1545	1	-	1	-	0	2	-	-	-	-	-	0	-	15	0	-	0	15	1	21	-	-	0	22	39
1545 - 1600	0	-	0	-	0	0	-	-	-	-	-	0	-	13	0	-	0	13	0	20	-	-	0	20	33
Total	2	0	4	0	0	6	0	0	0	0	0	0	0	54	0	0	0	54	2	82	0	0	0	84	144
Approach %	33.33	0.00	66.67	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	0.00	-	2.38	97.62	0.00	0.00	0.00	-	
PHF	0.50	0.00	0.50	0.00	0.00	**0.50**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.79	0.00	0.00	0.00	**0.79**	0.50	0.98	0.00	0.00	0.00	**0.95**	**0.90**

Single Unit Trucks (4-7)

	Northbound												Eastbound						Westbound						
	Jackson Terrace SW												Green St SW (West)						Green St SW (East)						
Time	Left 3.1		Right 3.2		U-Turn 3.3	App Total						App Total		Thru 3.4	Right 3.5		U-Turn 3.6	App Total	Left 3.7	Thru 3.8			U-Turn 3.9	App Total	Int Total
1500 - 1515	0	-	0	-	0	0	-	-	-	-	-	0	-	0	0	-	0	0	0	0	-	-	0	0	0
1515 - 1530	0	-	0	-	0	0	-	-	-	-	-	0	-	0	0	-	0	0	0	0	-	-	0	0	0
1530 - 1545	0	-	0	-	0	0	-	-	-	-	-	0	-	0	0	-	0	0	0	0	-	-	0	0	0
1545 - 1600	0	-	0	-	0	0	-	-	-	-	-	0	-	0	0	-	0	0	0	0	-	-	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Combination Trucks (8-13)

	Northbound												Eastbound						Westbound						
	Jackson Terrace SW												Green St SW (West)						Green St SW (East)						
Time	Left 3.1		Right 3.2		U-Turn 3.3	App Total						App Total		Thru 3.4	Right 3.5		U-Turn 3.6	App Total	Left 3.7	Thru 3.8			U-Turn 3.9	App Total	Int Total
1500 - 1515	0	-	0	-	0	0	-	-	-	-	-	0	-	0	0	-	0	0	0	0	-	-	0	0	0
1515 - 1530	0	-	0	-	0	0	-	-	-	-	-	0	-	0	0	-	0	0	0	0	-	-	0	0	0
1530 - 1545	0	-	0	-	0	0	-	-	-	-	-	0	-	0	0	-	0	0	0	0	-	-	0	0	0
1545 - 1600	0	-	0	-	0	0	-	-	-	-	-	0	-	0	0	-	0	0	0	0	-	-	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Bicycles

	Northbound												Eastbound						Westbound						
	Jackson Terrace SW												Green St SW (West)						Green St SW (East)						
Time	Left 3.1		Right 3.2		U-Turn 3.3	App Total						App Total		Thru 3.4	Right 3.5		U-Turn 3.6	App Total	Left 3.7	Thru 3.8			U-Turn 3.9	App Total	Int Total
1500 - 1515	0	-	0	-	0	0	-	-	-	-	-	0	-	0	0	-	0	0	0	0	-	-	0	0	0
1515 - 1530	0	-	0	-	0	0	-	-	-	-	-	0	-	0	0	-	0	0	0	0	-	-	0	0	0
1530 - 1545	0	-	0	-	0	0	-	-	-	-	-	0	-	0	0	-	0	0	0	0	-	-	0	0	0
1545 - 1600	0	-	0	-	0	0	-	-	-	-	-	0	-	0	0	-	0	0	0	0	-	-	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Classified Turn Movement Count || All vehicles

Marr Traffic DATA COLLECTION

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Concord, NC

Site 3
Jackson Terrace SW

Green St SW (West)
Green St SW (East)

Date
Saturday, August 2, 2025

Lat/Long
35.371973°, -80.599907°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
All vehicles

	Northbound				Eastbound				Westbound				
	Jackson Terrace SW				Green St SW (West)				Green St SW (East)				
TIME	Left 3.1	Right 3.2	U-Turn 3.3	App Total	Thru 3.4	Right 3.5	U-Turn 3.6	App Total	Left 3.7	Thru 3.8	U-Turn 3.9	App Total	Int Total
1400 - 1415	1	0	0	1	14	1	0	15	0	15	0	15	31
1415 - 1430	0	0	0	0	15	1	0	16	0	13	0	13	29
1430 - 1445	0	0	0	0	11	0	0	11	1	14	0	15	26
1445 - 1500	0	0	0	0	13	1	0	14	0	17	0	17	31
Hourly Total	1	0	0	**1**	53	3	0	**56**	1	59	0	**60**	**117**
1500 - 1515	0	1	0	1	17	0	0	17	1	21	0	22	40
1515 - 1530	1	2	0	3	9	0	0	9	0	20	0	20	32
1530 - 1545	1	1	0	2	15	0	0	15	1	21	0	22	39
1545 - 1600	0	0	0	0	13	0	0	13	0	20	0	20	33
Hourly Total	2	4	0	**6**	54	0	0	**54**	2	82	0	**84**	**144**
Grand Total	3	4	0	**7**	107	3	0	**110**	3	141	0	**144**	**261**
Approach %	42.86	57.14	0.00	-	97.27	2.73	0.00	-	2.08	97.92	0.00	-	
Intersection %	1.15	1.53	0.00	2.68	41.00	1.15	0.00	42.15	1.15	54.02	0.00	55.17	
Heavy Vehicle %	0	0	-	**0**	1	0	-	**1**	0	0	-	**0**	**0**
PHF	0.50	0.50	0.00	**0.50**	0.79	0.00	0.00	**0.79**	0.50	0.98	0.00	**0.95**	**0.90**
Peak Hour Total	2	4	0	**6**	54	0	0	**54**	2	82	0	**84**	**144**
Peak Hour HV %	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	**0**

Classified Turn Movement Count || Passenger Vehicles (1-3)

Concord, NC

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 3
Jackson Terrace SW

Green St SW (West)
Green St SW (East)

Date
Saturday, August 2, 2025

Lat/Long
35.371973°, -80.599907°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
Passenger Vehicles (1-3)

	Northbound				Eastbound				Westbound				
	Jackson Terrace SW				Green St SW (West)				Green St SW (East)				
TIME	Left 3.1	Right 3.2	U-Turn 3.3	App Total	Thru 3.4	Right 3.5	U-Turn 3.6	App Total	Left 3.7	Thru 3.8	U-Turn 3.9	App Total	Int Total
1400 - 1415	1	0	0	1	14	1	0	15	0	15	0	15	31
1415 - 1430	0	0	0	0	15	1	0	16	0	13	0	13	29
1430 - 1445	0	0	0	0	10	0	0	10	1	14	0	15	25
1445 - 1500	0	0	0	0	13	1	0	14	0	17	0	17	31
Hourly Total	1	0	0	**1**	52	3	0	**55**	1	59	0	**60**	**116**
1500 - 1515	0	1	0	1	17	0	0	17	1	21	0	22	40
1515 - 1530	1	2	0	3	9	0	0	9	0	20	0	20	32
1530 - 1545	1	1	0	2	15	0	0	15	1	21	0	22	39
1545 - 1600	0	0	0	0	13	0	0	13	0	20	0	20	33
Hourly Total	2	4	0	**6**	54	0	0	**54**	2	82	0	**84**	**144**
Grand Total	3	4	0	**7**	106	3	0	**109**	3	141	0	**144**	**260**
Approach %	42.86	57.14	0.00	-	97.25	2.75	0.00	-	2.08	97.92	0.00	-	
Intersection %	1.15	1.54	0.00	2.69	40.77	1.15	0.00	41.92	1.15	54.23	0.00	55.38	

Classified Turn Movement Count || Single Unit Trucks (4-7)

Concord, NC

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 3
Jackson Terrace SW

Green St SW (West)
Green St SW (East)

Date
Saturday, August 2, 2025

Lat/Long
35.371973°, -80.599907°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)

Single Unit Trucks (4-7)

	Northbound				Eastbound				Westbound				
	Jackson Terrace SW				Green St SW (West)				Green St SW (East)				
TIME	Left 3.1	Right 3.2	U-Turn 3.3	App Total	Thru 3.4	Right 3.5	U-Turn 3.6	App Total	Left 3.7	Thru 3.8	U-Turn 3.9	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	1	0	0	1	0	0	0	0	1
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	**0**	1	0	0	**1**	0	0	0	**0**	**1**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	**0**
Grand Total	0	0	0	**0**	1	0	0	**1**	0	0	0	**0**	**1**
Approach %	0.00	0.00	0.00	-	100.00	0.00	0.00	-	0.00	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	

Classified Turn Movement Count || Combination Trucks (8-13)

Concord, NC

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 3
Jackson Terrace SW

Green St SW (West)
Green St SW (East)

Date
Saturday, August 2, 2025

Lat/Long
35.371973°, -80.599907°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
Combination Trucks (8-13)

	Northbound				Eastbound				Westbound				
	Jackson Terrace SW				Green St SW (West)				Green St SW (East)				
TIME	Left 3.1	Right 3.2	U-Turn 3.3	App Total	Thru 3.4	Right 3.5	U-Turn 3.6	App Total	Left 3.7	Thru 3.8	U-Turn 3.9	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	**0**
Grand Total	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	**0**
Approach %	0.00	0.00	0.00	-	0.00	0.00	0.00	-	0.00	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Classified Turn Movement Count || Bicycles

Concord, NC

Marr Traffic DATA COLLECTION

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Site 3
Jackson Terrace SW

Green St SW (West)
Green St SW (East)

Date
Saturday, August 2, 2025

Lat/Long
35.371973°, -80.599907°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
Bicycles

	Northbound				Eastbound				Westbound				
	Jackson Terrace SW				Green St SW (West)				Green St SW (East)				
TIME	Left 3.1	Right 3.2	U-Turn 3.3	App Total	Thru 3.4	Right 3.5	U-Turn 3.6	App Total	Left 3.7	Thru 3.8	U-Turn 3.9	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	**0**
Grand Total	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	**0**
Approach %	0.00	0.00	0.00	-	0.00	0.00	0.00	-	0.00	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Classified Turn Movement Count || All Trucks (4-13)

Concord, NC

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 3
Jackson Terrace SW

Green St SW (West)
Green St SW (East)

Date
Saturday, August 2, 2025

Lat/Long
35.371973°, -80.599907°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)

All Trucks (4-13)

	Northbound				Eastbound				Westbound				
	Jackson Terrace SW				Green St SW (West)				Green St SW (East)				
TIME	Left 3.1	Right 3.2	U-Turn 3.3	App Total	Thru 3.4	Right 3.5	U-Turn 3.6	App Total	Left 3.7	Thru 3.8	U-Turn 3.9	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	1	0	0	1	0	0	0	0	1
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	**0**	1	0	0	**1**	0	0	0	**0**	**1**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	**0**
Grand Total	0	0	0	**0**	1	0	0	**1**	0	0	0	**0**	**1**
Approach %	0.00	0.00	0.00	-	100.00	0.00	0.00	-	0.00	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	

Crosswalk Counts || Pedestrians

Concord, NC

Marr Traffic DATA COLLECTION

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Site 3
Jackson Terrace SW

Green St SW (West)
Green St SW (East)

Date
Saturday, August 2, 2025

Lat/Long
35.371973°, -80.599907°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
Pedestrians

	Northbound			Eastbound			Westbound			
	Jackson Terrace SW			Green St SW (West)			Green St SW (East)			
TIME	EB 3a	WB 3b	App Total	NB 3e	SB 3f	App Total	NB 3g	SB 3h	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Grand Total	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Approach %	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Crosswalk Counts || Bicycles

Concord, NC

www.marrtraffic.com

Site 3
Jackson Terrace SW

Green St SW (West)
Green St SW (East)

Date
Saturday, August 2, 2025

Lat/Long
35.371973°, -80.599907°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
Bicycles

	Northbound			Eastbound			Westbound			
	Jackson Terrace SW			Green St SW (West)			Green St SW (East)			
TIME	EB 3a	WB 3b	App Total	NB 3e	SB 3f	App Total	NB 3g	SB 3h	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Grand Total	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Approach %	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Crosswalk Counts || Motorized Vehicles

Marr Traffic DATA COLLECTION

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Concord, NC

Site 3
Jackson Terrace SW

Green St SW (West)
Green St SW (East)

Date
Saturday, August 2, 2025

Lat/Long
35.371973°, -80.599907°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
Motorized Vehicles

	Northbound			Eastbound			Westbound			
	Jackson Terrace SW			Green St SW (West)			Green St SW (East)			
TIME	EB 3a	WB 3b	App Total	NB 3e	SB 3f	App Total	NB 3g	SB 3h	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Grand Total	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Approach %	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Start Date: 8/2/2025	Green St SW (West) Eastbound			Green St SW (East) Westbound			Jackson Terrace SW Northbound			Southbound			
Time	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**Total**
15 Minute Totals													
12:00 AM - 12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM - 12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM - 12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM - 01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 AM - 01:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 AM - 01:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 AM - 01:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 AM - 02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 AM - 02:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 AM - 02:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 AM - 02:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 AM - 03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 AM - 03:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 AM - 03:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 AM - 03:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 AM - 04:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 AM - 04:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 AM - 04:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 AM - 04:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 AM - 05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 AM - 05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 AM - 05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 AM - 05:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM - 06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 AM - 06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM - 06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM - 06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM - 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM - 07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM - 07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM - 07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM - 08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM - 08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM - 08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM - 08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM - 09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 AM - 09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM - 09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM - 09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM - 10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM - 10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM - 10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM - 10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM - 11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM - 12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM - 12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM - 01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM - 01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM - 01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM - 01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM - 02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 PM - 02:15 PM	0	14	1	0	15	0	1	0	0	0	0	0	31
02:15 PM - 02:30 PM	0	15	1	0	13	0	0	0	0	0	0	0	29
02:30 PM - 02:45 PM	0	11	0	1	14	0	0	0	0	0	0	0	26
02:45 PM - 03:00 PM	0	13	1	0	17	0	0	0	0	0	0	0	31
03:00 PM - 03:15 PM	0	17	0	1	21	0	0	0	1	0	0	0	40
03:15 PM - 03:30 PM	0	9	0	0	20	0	1	0	2	0	0	0	32
03:30 PM - 03:45 PM	0	15	0	1	21	0	1	0	1	0	0	0	39
03:45 PM - 04:00 PM	0	13	0	0	20	0	0	0	0	0	0	0	33
04:00 PM - 04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM - 04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM - 04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM - 05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM - 05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM - 05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM - 05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM - 06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM - 06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM - 06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM - 06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM - 07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 PM - 07:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 PM - 07:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 PM - 07:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 PM - 08:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 PM - 08:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 PM - 08:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 PM - 08:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 PM - 09:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 PM - 09:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 PM - 09:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 PM - 09:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 PM - 10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM - 10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM - 10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM - 10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM - 11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM - 11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM - 11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM - 11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM - 12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Turning Movement Count

Concord, NC

Click here for Map

Marr Traffic DATA COLLECTION

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Saturday, August 2, 2025		
Cloudy		70°F
Period	1400 - 1600	**APPLY**
Peak Hour	1430 - 1530	**APPLY**
Global PH	1430 - 1530	**APPLY**

* the Peak Hour Diagram does not include bicycles

Session Parameters

(Drop Down Menu)

Peak Hour

Volume



All vehicles

Time	Northbound Sandy Ln SW (South)						Southbound Sandy Ln SW (North)						Eastbound SR-1309 Stough Rd (West)						Westbound SR-1309 Stough Rd (East)						Int Total
	Left 4.1	Thru 4.2	Right 4.3		U-Turn 4.4	App Total	Left 4.5	Thru 4.6	Right 4.7		U-Turn 4.8	App Total	Left 4.9	Thru 4.10	Right 4.11		U-Turn 4.12	App Total	Left 4.13	Thru 4.14	Right 4.15		U-Turn 4.16	App Total	
1430 - 1445	1	1	0	-	0	2	1	0	11	-	1	13	18	60	2	-	0	80	0	64	7	-	0	71	166
1445 - 1500	1	0	0	-	0	1	1	0	11	-	0	12	18	49	1	-	0	68	0	60	12	-	0	72	153
1500 - 1515	0	0	1	-	0	1	1	0	4	-	0	5	16	63	0	-	0	79	1	60	5	-	0	66	151
1515 - 1530	2	0	0	-	0	2	8	0	7	-	0	15	17	50	0	-	0	67	0	63	8	-	0	71	155
Total	4	1	1	0	0	6	11	0	33	0	1	45	69	222	3	0	0	294	1	247	32	0	0	280	625
Approach %	66.67	16.67	16.67	0.00	0.00	-	24.44	0.00	73.33	0.00	2.22	-	23.47	75.51	1.02	0.00	0.00	-	0.36	88.21	11.43	0.00	0.00	-	
PHF	0.50	0.25	0.25	0.00	0.00	**0.75**	0.34	0.00	0.75	0.00	0.25	**0.75**	0.96	0.88	0.38	0.00	0.00	**0.92**	0.25	0.96	0.67	0.00	0.00	**0.97**	**0.94**

Passenger Vehicles (1-3)

Time	Northbound Sandy Ln SW (South)						Southbound Sandy Ln SW (North)						Eastbound SR-1309 Stough Rd (West)						Westbound SR-1309 Stough Rd (East)						Int Total
	Left 4.1	Thru 4.2	Right 4.3		U-Turn 4.4	App Total	Left 4.5	Thru 4.6	Right 4.7		U-Turn 4.8	App Total	Left 4.9	Thru 4.10	Right 4.11		U-Turn 4.12	App Total	Left 4.13	Thru 4.14	Right 4.15		U-Turn 4.16	App Total	
1430 - 1445	1	1	0	-	0	2	1	0	11	-	1	13	18	56	2	-	0	76	0	62	7	-	0	69	160
1445 - 1500	1	0	0	-	0	1	1	0	11	-	0	12	18	48	1	-	0	67	0	60	12	-	0	72	152
1500 - 1515	0	0	1	-	0	1	1	0	4	-	0	5	16	61	0	-	0	77	1	58	5	-	0	64	147
1515 - 1530	2	0	0	-	0	2	8	0	7	-	0	15	17	50	0	-	0	67	0	63	8	-	0	71	155
Total	4	1	1	0	0	6	11	0	33	0	1	45	69	215	3	0	0	287	1	243	32	0	0	276	614
Approach %	66.67	16.67	16.67	0.00	0.00	-	24.44	0.00	73.33	0.00	2.22	-	24.04	74.91	1.05	0.00	0.00	-	0.36	88.04	11.59	0.00	0.00	-	
PHF	0.50	0.25	0.25	0.00	0.00	**0.75**	0.34	0.00	0.75	0.00	0.25	**0.75**	0.96	0.88	0.38	0.00	0.00	**0.93**	0.25	0.96	0.67	0.00	0.00	**0.96**	**0.96**

Single Unit Trucks (4-7)

Time	Northbound Sandy Ln SW (South)						Southbound Sandy Ln SW (North)						Eastbound SR-1309 Stough Rd (West)						Westbound SR-1309 Stough Rd (East)						Int Total
	Left 4.1	Thru 4.2	Right 4.3		U-Turn 4.4	App Total	Left 4.5	Thru 4.6	Right 4.7		U-Turn 4.8	App Total	Left 4.9	Thru 4.10	Right 4.11		U-Turn 4.12	App Total	Left 4.13	Thru 4.14	Right 4.15		U-Turn 4.16	App Total	
1430 - 1445	0	0	0	-	0	0	0	0	0	-	0	0	0	4	0	-	0	4	0	2	0	-	0	2	6
1445 - 1500	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	0	1	0	0	0	-	0	0	1
1500 - 1515	0	0	0	-	0	0	0	0	0	-	0	0	0	2	0	-	0	2	0	1	0	-	0	1	3
1515 - 1530	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	0	3	0	0	0	3	10
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.44	0.00	0.00	0.00	**0.44**	0.00	0.38	0.00	0.00	0.00	**0.38**	**0.42**

Combination Trucks (8-13)

Time	Northbound Sandy Ln SW (South)						Southbound Sandy Ln SW (North)						Eastbound SR-1309 Stough Rd (West)						Westbound SR-1309 Stough Rd (East)						Int Total
	Left 4.1	Thru 4.2	Right 4.3		U-Turn 4.4	App Total	Left 4.5	Thru 4.6	Right 4.7		U-Turn 4.8	App Total	Left 4.9	Thru 4.10	Right 4.11		U-Turn 4.12	App Total	Left 4.13	Thru 4.14	Right 4.15		U-Turn 4.16	App Total	
1430 - 1445	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1445 - 1500	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1500 - 1515	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	0	1	1
1515 - 1530	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.25	0.00	0.00	0.00	**0.25**	**0.25**

Bicycles

Time	Northbound Sandy Ln SW (South)						Southbound Sandy Ln SW (North)						Eastbound SR-1309 Stough Rd (West)						Westbound SR-1309 Stough Rd (East)						Int Total
	Left 4.1	Thru 4.2	Right 4.3		U-Turn 4.4	App Total	Left 4.5	Thru 4.6	Right 4.7		U-Turn 4.8	App Total	Left 4.9	Thru 4.10	Right 4.11		U-Turn 4.12	App Total	Left 4.13	Thru 4.14	Right 4.15		U-Turn 4.16	App Total	
1430 - 1445	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1445 - 1500	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1500 - 1515	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
1515 - 1530	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Classified Turn Movement Count || All vehicles

Concord, NC

Marr Traffic DATA COLLECTION

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Site 4
Sandy Ln SW (South)
Sandy Ln SW (North)
SR-1309 Stough Rd (West)
SR-1309 Stough Rd (East)

Date
Saturday, August 2, 2025

Lat/Long
35.359215°, -80.624940°
Click here for Map

Weather
Cloudy
70°F
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1400 - 1600 (Saturday 2h Session) (08-02-2025)
All vehicles

	Northbound					Southbound					Eastbound					Westbound					
	Sandy Ln SW (South)					Sandy Ln SW (North)					SR-1309 Stough Rd (West)					SR-1309 Stough Rd (East)					
TIME	Left 4.1	Thru 4.2	Right 4.3	U-Turn 4.4	App Total	Left 4.5	Thru 4.6	Right 4.7	U-Turn 4.8	App Total	Left 4.9	Thru 4.10	Right 4.11	U-Turn 4.12	App Total	Left 4.13	Thru 4.14	Right 4.15	U-Turn 4.16	App Total	Int Total
1400 - 1415	0	0	0	0	0	3	0	7	0	10	17	61	0	0	78	0	50	6	0	56	144
1415 - 1430	2	0	0	0	2	4	1	6	0	11	10	57	0	0	67	1	58	5	0	64	144
1430 - 1445	1	1	0	0	2	1	0	11	1	13	18	60	2	0	80	0	64	7	0	71	166
1445 - 1500	1	0	0	0	1	1	0	11	0	12	18	49	1	0	68	0	60	12	0	72	153
Hourly Total	4	1	0	0	**5**	9	1	35	1	**46**	63	227	3	0	**293**	1	232	30	0	**263**	**607**
1500 - 1515	0	0	1	0	1	1	0	4	0	5	16	63	0	0	79	1	60	5	0	66	151
1515 - 1530	2	0	0	0	2	8	0	7	0	15	17	50	0	0	67	0	63	8	0	71	155
1530 - 1545	0	0	0	0	0	8	0	14	0	22	18	40	0	0	58	0	69	9	0	78	158
1545 - 1600	0	0	1	0	1	5	1	23	0	29	9	43	1	0	53	0	69	8	0	77	160
Hourly Total	2	0	2	0	**4**	22	1	48	0	**71**	60	196	1	0	**257**	1	261	30	0	**292**	**624**
Grand Total	6	1	2	0	**9**	31	2	83	1	**117**	123	423	4	0	**550**	2	493	60	0	**555**	**1231**
Approach %	66.67	11.11	22.22	0.00	-	26.50	1.71	70.94	0.85	-	22.36	76.91	0.73	0.00	-	0.36	88.83	10.81	0.00	-	
Intersection %	0.49	0.08	0.16	0.00	0.73	2.52	0.16	6.74	0.08	9.50	9.99	34.36	0.32	0.00	44.68	0.16	40.05	4.87	0.00	45.09	
Heavy Vehicle %	0	0	0	-	**0**	0	0	0	0	**0**	0	2	0	-	**2**	0	1	0	-	**1**	**1**
PHF	0.50	0.25	0.25	0.00	**0.75**	0.34	0.00	0.75	0.25	**0.75**	0.96	0.88	0.38	0.00	**0.92**	0.25	0.96	0.67	0.00	**0.97**	**0.94**
Peak Hour Total	4	1	1	0	**6**	11	0	33	1	**45**	69	222	3	0	**294**	1	247	32	0	**280**	**625**
Peak Hour HV %	0	0	0	0	**0**	0	0	0	0	**0**	0	3	0	0	**2**	0	2	0	0	**1**	**2**

Classified Turn Movement Count || Passenger Vehicles (1-3)

Concord, NC

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 4

Sandy Ln SW (South)
Sandy Ln SW (North)
SR-1309 Stough Rd (West)
SR-1309 Stough Rd (East)

Date

Saturday, August 2, 2025

Lat/Long

35.359215°, -80.624940°
Click here for Map

Weather

Cloudy
70°F
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1400 - 1600 (Saturday 2h Session) (08-02-2025)

Passenger Vehicles (1-3)

	Northbound					Southbound					Eastbound					Westbound					
	Sandy Ln SW (South)					Sandy Ln SW (North)					SR-1309 Stough Rd (West)					SR-1309 Stough Rd (East)					
TIME	Left 4.1	Thru 4.2	Right 4.3	U-Turn 4.4	App Total	Left 4.5	Thru 4.6	Right 4.7	U-Turn 4.8	App Total	Left 4.9	Thru 4.10	Right 4.11	U-Turn 4.12	App Total	Left 4.13	Thru 4.14	Right 4.15	U-Turn 4.16	App Total	Int Total
1400 - 1415	0	0	0	0	0	3	0	7	0	10	17	60	0	0	77	0	50	6	0	56	143
1415 - 1430	2	0	0	0	2	4	1	6	0	11	10	56	0	0	66	1	56	5	0	62	141
1430 - 1445	1	1	0	0	2	1	0	11	1	13	18	56	2	0	76	0	62	7	0	69	160
1445 - 1500	1	0	0	0	1	1	0	11	0	12	18	48	1	0	67	0	60	12	0	72	152
Hourly Total	4	1	0	0	**5**	9	1	35	1	**46**	63	220	3	0	**286**	1	228	30	0	**259**	**596**
1500 - 1515	0	0	1	0	1	1	0	4	0	5	16	61	0	0	77	1	58	5	0	64	147
1515 - 1530	2	0	0	0	2	8	0	7	0	15	17	50	0	0	67	0	63	8	0	71	155
1530 - 1545	0	0	0	0	0	8	0	14	0	22	18	40	0	0	58	0	69	9	0	78	158
1545 - 1600	0	0	1	0	1	5	1	23	0	29	9	42	1	0	52	0	68	8	0	76	158
Hourly Total	2	0	2	0	**4**	22	1	48	0	**71**	60	193	1	0	**254**	1	258	30	0	**289**	**618**
Grand Total	6	1	2	0	**9**	31	2	83	1	**117**	123	413	4	0	**540**	2	486	60	0	**548**	**1214**
Approach %	66.67	11.11	22.22	0.00	-	26.50	1.71	70.94	0.85	-	22.78	76.48	0.74	0.00	-	0.36	88.69	10.95	0.00	-	
Intersection %	0.49	0.08	0.16	0.00	0.74	2.55	0.16	6.84	0.08	9.64	10.13	34.02	0.33	0.00	44.48	0.16	40.03	4.94	0.00	45.14	

Classified Turn Movement Count || Single Unit Trucks (4-7)

Concord, NC

Marr Traffic DATA COLLECTION

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Site 4

Sandy Ln SW (South)
Sandy Ln SW (North)
SR-1309 Stough Rd (West)
SR-1309 Stough Rd (East)

Date

Saturday, August 2, 2025

Lat/Long

35.359215°, -80.624940°
Click here for Map

Weather

Cloudy
70°F
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1400 - 1600 (Saturday 2h Session) (08-02-2025)

Single Unit Trucks (4-7)

	Northbound					Southbound					Eastbound					Westbound					
	Sandy Ln SW (South)					Sandy Ln SW (North)					SR-1309 Stough Rd (West)					SR-1309 Stough Rd (East)					
TIME	Left 4.1	Thru 4.2	Right 4.3	U-Turn 4.4	App Total	Left 4.5	Thru 4.6	Right 4.7	U-Turn 4.8	App Total	Left 4.9	Thru 4.10	Right 4.11	U-Turn 4.12	App Total	Left 4.13	Thru 4.14	Right 4.15	U-Turn 4.16	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	2	0	0	2	6
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Hourly Total	0	0	0	0	**0**	0	0	0	0	**0**	0	7	0	0	**7**	0	3	0	0	**3**	**10**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	3
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Hourly Total	0	0	0	0	**0**	0	0	0	0	**0**	0	2	0	0	**2**	0	2	0	0	**2**	**4**
Grand Total	0	0	0	0	**0**	0	0	0	0	**0**	0	9	0	0	**9**	0	5	0	0	**5**	**14**
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.29	0.00	0.00	64.29	0.00	35.71	0.00	0.00	35.71	

Classified Turn Movement Count || Combination Trucks (8-13)

Concord, NC

Marr Traffic DATA COLLECTION

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Site 4

Sandy Ln SW (South)
Sandy Ln SW (North)
SR-1309 Stough Rd (West)
SR-1309 Stough Rd (East)

Date

Saturday, August 2, 2025

Lat/Long

35.359215°, -80.624940°
Click here for Map

Weather

Cloudy
70°F
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1400 - 1600 (Saturday 2h Session) (08-02-2025)

Combination Trucks (8-13)

	Northbound					Southbound					Eastbound					Westbound					
	Sandy Ln SW (South)					Sandy Ln SW (North)					SR-1309 Stough Rd (West)					SR-1309 Stough Rd (East)					
TIME	Left 4.1	Thru 4.2	Right 4.3	U-Turn 4.4	App Total	Left 4.5	Thru 4.6	Right 4.7	U-Turn 4.8	App Total	Left 4.9	Thru 4.10	Right 4.11	U-Turn 4.12	App Total	Left 4.13	Thru 4.14	Right 4.15	U-Turn 4.16	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	1	0	0	**1**	**1**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Hourly Total	0	0	0	0	**0**	0	0	0	0	**0**	0	1	0	0	**1**	0	1	0	0	**1**	**2**
Grand Total	0	0	0	0	**0**	0	0	0	0	**0**	0	1	0	0	**1**	0	2	0	0	**2**	**3**
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.33	0.00	0.00	33.33	0.00	66.67	0.00	0.00	66.67	

Classified Turn Movement Count || Bicycles

Concord, NC

Marr Traffic DATA COLLECTION

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Site 4

Sandy Ln SW (South)
Sandy Ln SW (North)
SR-1309 Stough Rd (West)
SR-1309 Stough Rd (East)

Date

Saturday, August 2, 2025

Lat/Long

35.359215°, -80.624940°
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Weather

Cloudy
70°F
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1400 - 1600 (Saturday 2h Session) (08-02-2025)

Bicycles

	Northbound					Southbound					Eastbound					Westbound					
	Sandy Ln SW (South)					Sandy Ln SW (North)					SR-1309 Stough Rd (West)					SR-1309 Stough Rd (East)					
TIME	Left 4.1	Thru 4.2	Right 4.3	U-Turn 4.4	App Total	Left 4.5	Thru 4.6	Right 4.7	U-Turn 4.8	App Total	Left 4.9	Thru 4.10	Right 4.11	U-Turn 4.12	App Total	Left 4.13	Thru 4.14	Right 4.15	U-Turn 4.16	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**
Grand Total	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	**0**
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Classified Turn Movement Count || All Trucks (4-13)

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Concord, NC

Site 4
Sandy Ln SW (South)
Sandy Ln SW (North)
SR-1309 Stough Rd (West)
SR-1309 Stough Rd (East)

Date
Saturday, August 2, 2025

Lat/Long
35.359215°, -80.624940°
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Weather
Cloudy
70°F
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1400 - 1600 (Saturday 2h Session) (08-02-2025)
All Trucks (4-13)

	Northbound					Southbound					Eastbound					Westbound					
	Sandy Ln SW (South)					Sandy Ln SW (North)					SR-1309 Stough Rd (West)					SR-1309 Stough Rd (East)					
TIME	Left 4.1	Thru 4.2	Right 4.3	U-Turn 4.4	App Total	Left 4.5	Thru 4.6	Right 4.7	U-Turn 4.8	App Total	Left 4.9	Thru 4.10	Right 4.11	U-Turn 4.12	App Total	Left 4.13	Thru 4.14	Right 4.15	U-Turn 4.16	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	3
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	2	0	0	2	6
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Hourly Total	0	0	0	0	**0**	0	0	0	0	**0**	0	7	0	0	**7**	0	4	0	0	**4**	**11**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	4
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
Hourly Total	0	0	0	0	**0**	0	0	0	0	**0**	0	3	0	0	**3**	0	3	0	0	**3**	**6**
Grand Total	0	0	0	0	**0**	0	0	0	0	**0**	0	10	0	0	**10**	0	7	0	0	**7**	**17**
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58.82	0.00	0.00	58.82	0.00	41.18	0.00	0.00	41.18	

Crosswalk Counts || Pedestrians

Concord, NC

Marr Traffic DATA COLLECTION

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Site 4
Sandy Ln SW (South)
Sandy Ln SW (North)
SR-1309 Stough Rd (West)
SR-1309 Stough Rd (East)

Date
Saturday, August 2, 2025

Lat/Long
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Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
Pedestrians

	Northbound			Southbound			Eastbound			Westbound			
	Sandy Ln SW (South)			Sandy Ln SW (North)			SR-1309 Stough Rd (West)			SR-1309 Stough Rd (East)			
TIME	EB 4a	WB 4b	App Total	EB 4c	WB 4d	App Total	NB 4e	SB 4f	App Total	NB 4g	SB 4h	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	3	3	0	0	0	3
Hourly Total	0	0	**0**	0	0	**0**	0	3	**3**	0	0	**0**	**3**
Grand Total	0	0	**0**	0	0	**0**	0	3	**3**	0	0	**0**	**3**
Approach %	0.00	0.00	-	0.00	0.00	-	0.00	100.00	-	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	0.00	0.00	0.00	

Crosswalk Counts || Bicycles

Concord, NC

www.marrtraffic.com

Site 4
Sandy Ln SW (South)
Sandy Ln SW (North)
SR-1309 Stough Rd (West)
SR-1309 Stough Rd (East)

Date
Saturday, August 2, 2025

Lat/Long
35.359215°, -80.624940°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
Bicycles

	Northbound			Southbound			Eastbound			Westbound			
	Sandy Ln SW (South)			Sandy Ln SW (North)			SR-1309 Stough Rd (West)			SR-1309 Stough Rd (East)			
TIME	EB 4a	WB 4b	App Total	EB 4c	WB 4d	App Total	NB 4e	SB 4f	App Total	NB 4g	SB 4h	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Grand Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Approach %	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Crosswalk Counts || Motorized Vehicles

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Concord, NC

Site 4
Sandy Ln SW (South)
Sandy Ln SW (North)
SR-1309 Stough Rd (West)
SR-1309 Stough Rd (East)

Date
Saturday, August 2, 2025

Lat/Long
35.359215°, -80.624940°
Click here for Map

Weather
Cloudy
70°F
Click here for Detailed Weather

1400 - 1600 (Saturday 2h Session) (08-02-2025)
Motorized Vehicles

	Northbound			Southbound			Eastbound			Westbound			
	Sandy Ln SW (South)			Sandy Ln SW (North)			SR-1309 Stough Rd (West)			SR-1309 Stough Rd (East)			
TIME	EB 4a	WB 4b	App Total	EB 4c	WB 4d	App Total	NB 4e	SB 4f	App Total	NB 4g	SB 4h	App Total	Int Total
1400 - 1415	0	0	0	0	0	0	0	0	0	0	0	0	0
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0
1545 - 1600	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Grand Total	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	**0**
Approach %	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	0.00	0.00	-	
Intersection %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Start Date: 8/2/2025	SR-1309 Stough Rd (West) Eastbound			SR-1309 Stough Rd (East) Westbound			Sandy Ln SW (South) Northbound			Sandy Ln SW (North) Southbound			
Time	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**Total**
15 Minute Totals													
12:00 AM - 12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM - 12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM - 12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM - 01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 AM - 01:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 AM - 01:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 AM - 01:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 AM - 02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 AM - 02:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 AM - 02:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 AM - 02:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 AM - 03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 AM - 03:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 AM - 03:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 AM - 03:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 AM - 04:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 AM - 04:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 AM - 04:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 AM - 04:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 AM - 05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 AM - 05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 AM - 05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 AM - 05:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 AM - 06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 AM - 06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 AM - 06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 AM - 06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM - 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM - 07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM - 07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM - 07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM - 08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM - 08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM - 08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM - 08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM - 09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 AM - 09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM - 09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM - 09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM - 10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM - 10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM - 10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM - 10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM - 11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM - 11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM - 11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM - 11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM - 12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM - 12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM - 12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM - 12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM - 01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 PM - 01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM - 01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM - 01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM - 02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 PM - 02:15 PM	17	61	0	0	50	6	0	0	0	3	0	7	144
02:15 PM - 02:30 PM	10	57	0	1	58	5	2	0	0	4	1	6	144
02:30 PM - 02:45 PM	18	60	2	0	64	7	1	1	0	1	0	11	165
02:45 PM - 03:00 PM	18	49	1	0	60	12	1	0	0	1	0	11	153
03:00 PM - 03:15 PM	16	63	0	1	60	5	0	0	1	1	0	4	151
03:15 PM - 03:30 PM	17	50	0	0	63	8	2	0	0	8	0	7	155
03:30 PM - 03:45 PM	18	40	0	0	69	9	0	0	0	8	0	14	158
03:45 PM - 04:00 PM	9	43	1	0	69	8	0	0	1	5	1	23	160
04:00 PM - 04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM - 04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM - 04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM - 05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM - 05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM - 05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM - 05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM - 06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM - 06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM - 06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM - 06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM - 07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 PM - 07:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 PM - 07:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 PM - 07:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 PM - 08:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 PM - 08:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 PM - 08:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 PM - 08:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 PM - 09:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 PM - 09:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 PM - 09:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 PM - 09:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 PM - 10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM - 10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM - 10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM - 10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM - 11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM - 11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM - 11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM - 11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM - 12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix I – Trip Generation

Query | Filter

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
411

LAND USE GROUP:
(400-499) Recreational

LAND USE :
411 - Public Park

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

INDEPENDENT VARIABLE (IV):
Acres

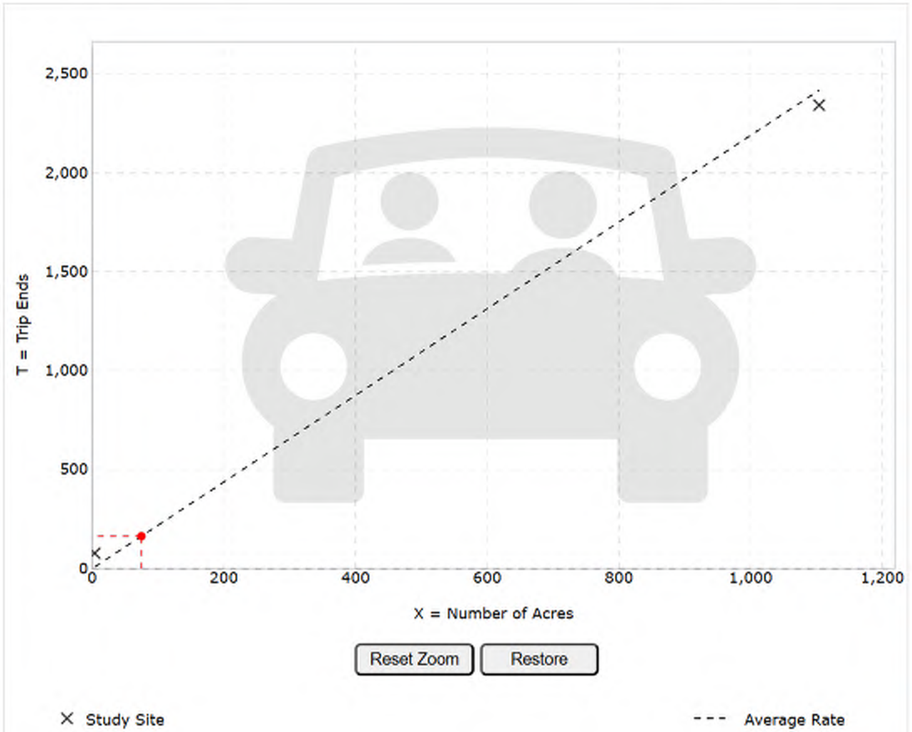
TIME PERIOD:
Sunday

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
75 Calculate

Data Plot and Equation

Caution – Small Sample Size



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Public Park (411) Click for Description and Data Plots

Independent Variable:
Acres

Time Period:
Sunday

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
2

Avg. Num. of Acres:
554

Average Rate:
2.19

Range of Rates:
2.12 - 19.50

Standard Deviation:
****

Fitted Curve Equation:
Not Given

R^2:
****

Directional Distribution:
50% entering, 50% exiting

Calculated Trip Ends:
Average Rate: 164 (Total), 82 (Entry), 82 (Exit)

Query | Filter

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
411

LAND USE GROUP:
(400-499) Recreational

LAND USE :
411 - Public Park

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

INDEPENDENT VARIABLE (IV):
Acres

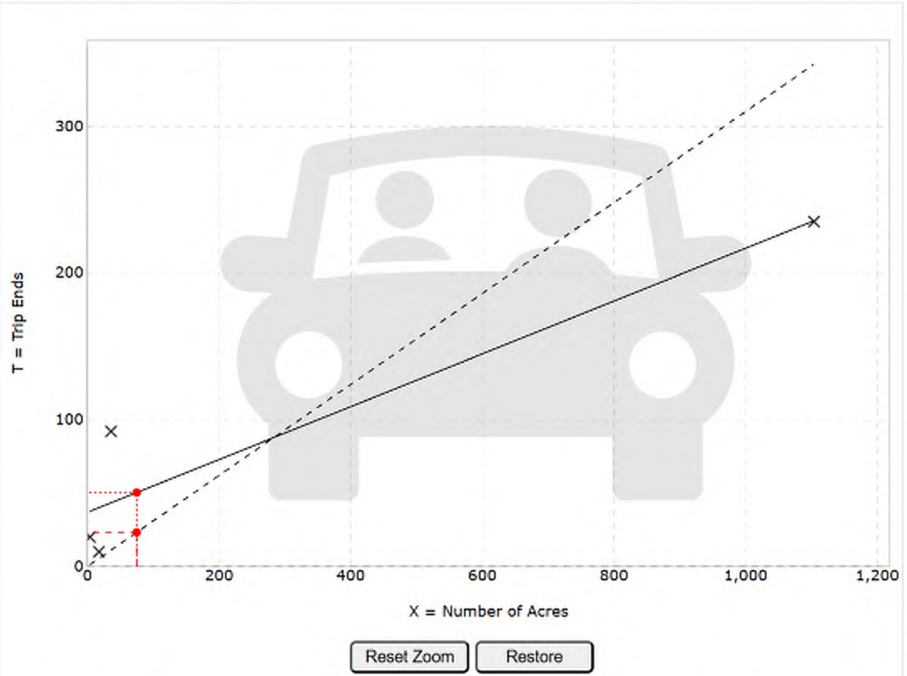
TIME PERIOD:
Sunday, Peak Hour of Generator

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
75 Calculate

Data Plot and Equation

Caution – Small Sample Size



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Public Park (411) Click for Description and Data Plots

Independent Variable:
Acres

Time Period:
Sunday
Peak Hour of Generator

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
4

Avg. Num. of Acres:
290

Average Rate:
0.31

Range of Rates:
0.21 - 5.00

Standard Deviation:
0.57

Fitted Curve Equation:
T = 0.18(X) + 36.85

R^2:
0.89

Directional Distribution:
39% entering, 61% exiting

Calculated Trip Ends:
Average Rate: 23 (Total), 9 (Entry), 14 (Exit)
Fitted Curve: 50 (Total), 20 (Entry), 30 (Exit)

Appendix J – Growth Rate Calculations

Compound Annual Growth Rate - Count stations

			Historical Data				Projected Volumes		
	Segment	Count Station	2021	2022	2023	2024	2028	2030	2033
1	Stough Rd w/o NC 49	130000435	9289	11231	11849	10519	13091	13953	15245
2	Roberta Rd n/o Stough Rd	130000434	7921	7296	7697	8204	8467	8717	9092
3	Green St w/o Old Charlotte Rd	130000469	2627	2202	2323	2362	2008	1873	1671
4	Old Charlotte Rd n/o Green St	130000442	10807	8675	9152	9230	7126	6276	4999
5	NC 49 s/o Old Charlotte Rd	130000011	32274	30131	31788	33985	35779	37137	39174
Total	-	-	62918	59535	62809	64300	66471	67956	70181
						Rate	0.92%	1.91%	1.24%

Compound Annual Growth Rate - Census

		Historical Data			Projected Volumes		
	Location	2010	2020	2024	2028	2030	2033
1	City of Concord, NC	79066	105240	112395	123162	128014	135293
				Rate	2.64%	2.57%	2.47%

Appendix K – CRMPO CTP Road Capacities

CRMPO CTP INVENTORY AND RECOMMENDATIONS (AMENDED DATE JUNE 26, 2024)

HIGHWAY																		
					2013 Existing System						2040 Proposed System							
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 AADT	2040 AADT E+C	2040 AADT with MTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	Five Row Rd	Long Ferry Rd (SR 2120) - Hackett St (SR 2134)	Spencer	0.4	18	2	60							2-A	60	Min	Sub	
	Flat Rock Rd (SR 1210)	Mt. Moriah Church Rd (SR 1197) - Patterson St (SR 1211)	Rowan County	1.6	22	2	60	45	11800	2200	2700	2900	11800	2-A	60	Min	Sub	
	Flowes Store Rd (SR 1132)	NC 24/27 - US 601	Cabarrus County	3.0	24	2	60	45	14600	3200	-	5100	14600	3-A	90	Maj	Sub	**MA**
	Forest St Ext	Caldwell Rd (SR 1173) - Forest St	Harrisburg	0.6	-	-	-	-	-	-	-	600	10200	2-A	60	Min	Sub	
	Forest St Ext	Forest St - Sims Parkway	Harrisburg	0.3	16	-	35	20	9000	-	-	600	10200	2-A	60	Min	Sub	
	Fulton St	US 29 (Main St) - Lincolnton Rd	Salisbury	0.6	30	2	50	30	10000	-	-	500	10000	2-H	75	Min	Sub	
	Fulton St	Lincolnton Rd - Monroe St	Salisbury	0.3	24	2	50	30	10000	-	-	500	10000	2-H	75	Min	Sub	
	Fulton St	Monroe St - Innes St (SR 2200) -	Salisbury	0.4	30	2	50	30	10000	-	-	400	10000	2-H	75	Min	Sub	
	Fulton St	Innes St (SR 2200) - Kerr St	Salisbury	0.2	35	2	50	30	10000	-	-	500	10000	2-H	75	Min	Sub	
	Fulton St	Kerr St - Cemetery St	Salisbury	0.1	24	2	50	25	10000	-	-	500	10000	2-H	75	Min	Sub	
R-2246A	**George Liles Pkwy (SR 1309)**	NC 49 - Roberta Rd (SR 1304)	Concord	1.9	19	2	40	45	11200	3800	11900	7900	35100	4-A	180	B	Sub	**MA**
R-2246B	**George Liles Pkwy (SR 1310)**	Roberta Rd (SR 1304)- US 29 (Concord Pkwy)	Concord	1.7	20	2	40	35	11400	7700	21900	18300	28100	4-A	180	B	Sub	
R-2246B	**George Liles Pkwy**	US 29 (Concord Pkwy) - Weddington Rd (SR 1341)	Concord	1.3	-	-	-	-	-	-	-	24700	35100	4-A	180	B	Sub	
R-2246C	**George Liles Pkwy (SR 1430)**	Weddington Rd (SR 1341) - Poplar Tent (SR 1394)	Concord	1.1	60-100	4D	90-250	50	12700	20000	47000	45500	43900	4-A	180	B	Sub	**MA**
R-2246C	**George Liles Pkwy (SR 1430)**	Poplar Tent (SR 1394) - I-85	Concord	0.6	60-100	4D	90-250	50	12700	20000	47000	45500	43900	4-A	180	B	Sub	
	Gheen Rd (SR 1945)	Woodleaf Rd (SR 2048)- US 601 (Mocksville Hwy)	Rowan County	3.0	20	2	60	45	13600	700	800	800	13600	2-A	60	Min	Sub	
	Glen Afton Blvd (SR 1441))	Kannapolis Parkway (SR 1430) - Kannapolis City Limits	Kannapolis	1.2	48	4D	60	45	-	-	-	-	13200	3-B	80	Maj	Sub	
	Gold Hill Rd (SR 2408)	NC 73 - Mt. Pleasant Rd (SR 1006)	Cabarrus County	1.2	22	2	40	45	14100	2300	2300	3000	14100	2-B	60	Min	Sub	
	Gold Hill Dr	Old Concord Rd. (SR 1002) - Faith Rd (SR 1006)	Salisbury	0.9	20	2	50	35	9500	1800		2300	9500	2-C	50	Min	Sub	
	Gold Knob Rd (SR 2375)	Upper Palmer Rd (SR 2341) - Barger Rd (SR 2377)	Rowan County	0.2	16	2	60	55	13100	1700	2100	1800	14600	2-A	60	Min	Sub	
	Goodman Rd (SR 1441)	Kannapolis City Limits - Poplar Tent Rd (SR 1394)	Cabarrus County	1.2	22	2	60	45	-	-	-	-	28100	3-C	80	B	Sub	
	Goodman Lake Rd (SR 2168)	Bringle Ferry Rd (SR 1002) - Providence Church Rd (SR 2134)	Rowan County	2.3	22	2	60	45	14100	2900	-	1300	14100	2-A	60	Min	Sub	
	Goodman Lake Rd (SR 2168)	Providence Church Rd (SR 2134) - Long Ferry Rd (SR 2120)	Rowan County	2.2	22	2	60	45	14100	1100	800	800	14100	2-A	60	Min	Sub	
	Goodson Rd (SR 1954)	US 70 (Statesville Blvd) - Woodleaf Rd (SR 2048)	Rowan County	2.2	22	2	60	45	14100	900	1300	1300	14100	2-A	60	Min	Sub	
	Grace Church Rd (SR 1503)	Miller Rd (SR 1509) - Shue Rd (SR 1506)	Rowan County	1.0	20	2	60	45	13600	3400	4700	3500	13600	2-A	60	Min	Sub	
	Grace Church Rd (SR 1503)	Shue Rd (SR 1506) - US 29 (Main St)	Rowan County	2.3	22	2	60	55	14600	3000	3900	3200	14600	2-A	60	Min	Sub	
	Graham Rd (SR 1547)	NC 150 (Mooresville Rd) - NC 801	Rowan County	3.2	18	2	60	55	13600	1000	2100	1800	14600	2-A	60	Min	Sub	
	Granite Quarry Connector	US 52 - Dusty Lane	Rowan County	0.4	--	--	--	--	-	-	-	9200	14600	2-A	60	Min	Sub	
	Granite Quarry Connector	Dusty Lane - US 52 Bypass	Rowan County	0.5	22	2	60	55	14600	5800	6600	10600	14600	2-A	60	Min	Sub	
	Grove St	W. Innes St (SR 2200) - Mocksville Ave (SR 1949)	Salisbury	0.5	30	2	50	35	10000	-	-	2200	10000	2-H	75	Min	Sub	

(1) 4-lane undivided

CRMPO CTP INVENTORY AND RECOMMENDATIONS (AMENDED DATE JUNE 26, 2024)

HIGHWAY																			
					2013 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 AADT	2040 AADT E+C	2040 AADT with MTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	Newsome Rd Extension	Bendix Dr - US 52 (Innes Street)	Salisbury	0.2	-	-	-	-	-	-	-	1000	11700	3-B	80	Min	Sub	
	Newsome Rd.	US 52 (Innes Street) - Stokes Ferry Rd (SR 1004)	Salisbury	<.1	39	2	50	35	10200	-	4500	4800	11700	3-B	80	Min	Sub	
	Newsome Rd.	Stokes Ferry Rd (SR 1004) - Bringle Ferry Rd (SR 1002)	Salisbury	1.0	18	2	40	35	10500	3700	4500	3500	11700	2-E	60	Min	Sub	
	Northern Connector	Jim Sossoman Rd (SR 1123) - US 601	Cabarrus County	1.0	-	-	-	-	-	-	-	5900	12200	2-I	85	B	Sub	
	Northern Connector	US 601 - Widenhouse Rd	Cabarrus County	0.7	-	-	-	-	-	-	-	1300	12200	2-I	85	B	Sub	
	Northern Connector	Widenhouse Rd - NC 24/27	Cabarrus County	1.1	-	-	-	-	-	-	-	1300	12200	2-I	85	B	Sub	
	Oakwood Ave (SR 1745)	Orphanage Rd (SR 1778) - Rogers Lake Rd (SR 1625)	Kannapolis	2.2	18	2	30	45	11000	3900	6400	4400	11700	2-E	60	Min	Sub	
	Oakwood Ave Extension (SR 1745)	Rogers Lake Rd (SR 1625) - Bethpage Rd (SR 1643)	Kannapolis	0.9	-	-	-	-	-	2700	3900	1600	11700	2-E	60	Min	Sub	
	Odell School Rd (SR 1442)	Poplar Tent Rd (SR 1394) - NC 73 (Davidson Hwy)	Concord	1.5	22	2	40	45	11800	7700	12500	16400	36600	**4-D**	110	B	Sub	**MB**
	Odell School Rd (SR 1442)	NC 73 (Davidson Hwy) - Windy Rd (SR 1442)	Cabarrus County	1.5	22	2	40	45	11800	9700	12700	22800	36600	4-C	110	B	Sub	
	Odell School Rd (SR 1601)	Windy Rd (SR 1442) - NC 3 (Mooresville Hwy)	Cabarrus County	2.6	20	2	40	45	11400	8000	15500	18100	36600	4-C	110	B	Sub	
	Old Airport Rd (SR 2635)	NC 3 (Branchview Dr)- Crestmont Dr (SR 2641)	Concord	0.9	20	2	60	45	11400	4600	10200	6500	13200	3-C	80	Min	Sub	
	Old Airport Rd (SR 2635)	Crestmont Dr (SR 2641) - NC 49	Concord	2.4	18	2	40	45	11000	2000	7700	2400	13200	3-C	80	Min	Sub	
	Old Beatty Ford Rd (SR 1210)	US 29 - Bostian Rd (SR 1221)	Rowan County	0.9	18	2	60	45	10500	1500	2600	2700	12200	2-A	60	Maj	Sub	
	Old Beatty Ford Rd (SR 1221)	Bostian Rd (SR 1221) - Ebeneezer Rd (SR 1322)	Rowan County	0.4	18	2	60	55	11600	1700	3200	3500	12200	2-A	60	Min	Sub	
	Old Beatty Ford Rd (SR 1221)	Ebeneezer Rd (SR 1322) - I-85	Rowan County	0.8	22	2	60	55	14100	1500	2600	3200	14600	2-A	60	Min	Sub	
	Old Beatty Ford Rd (SR 1221)	I-85 - Lentz Rd (SR 1337)	Rowan County	1.8	22	2	60	55	14100	1300	3700	2700	14600	2-A	60	Min	Sub	
	Old Beatty Ford Rd (SR 1221)	Lentz Rd (SR 1337) - Old Concord Road (SR 1002)	Rowan County	0.7	24	2	60	45	14600	2900	5700	3100	14600	2-A	60	Maj	Sub	
	Old Beatty Ford Rd (SR 1221)	Old Concord Rd (SR 1002) - Organ Church Rd (SR 1006)	Rowan County	4.8	20	2	60	45	13600	3400	5100	4300	14600	2-A	60	Maj	Sub	
	Old Beatty Ford Rd (SR 1221)	Organ Church Rd (SR 1006) - Lower Stone Ch Rd (SR 2335)	Rowan County	1.9	20	2	60	55	14100	2000	5100	3100	14600	2-A	60	Maj	Sub	
	Old Beatty Ford Rd (SR 1221)	Lower Stone Church Rd (SR 2335) - Emmanual Church Rd (SR 2338)	Rowan County	2.1	20	2	60	55	14100	1400	3500	2000	14600	2-A	60	Maj	Sub	
	Old Beatty Ford Rd (SR 1221)	Emanuel Church Rd (SR 2338) - St. Stephens Church Rd (SR 2352)	Rowan County	2.4	20	2	60	55	14100	1500	3000	2600	14600	2-A	60	Maj	Sub	
	Old Beatty Ford Rd (SR 1221)	St. Stephens Church Rd (SR 2352) - Old US 80 (SR 2350)	Rowan County	1.2	20	2	60	55	14100	1200	3000	2200	14600	2-A	60	Maj	Sub	
	Old Beatty Ford Rd (SR 1221)	Old US 80 (SR 2350) - US 52	Rowan County	0.4	20	2	60	55	14100	1300	3300	2500	14600	2-A	60	Maj	Sub	
	Old Beatty Ford Rd (SR 2356)	US 52 - Stokes Ferry Rd (SR 1004)	Rowan County	4.1	18	2	60	45	13100	700	1500	400	13100	2-A	60	Min	Sub	
	Old Beatty Ford Rd Relocation	Bostian Rd (SR 1221) - China Grove Rd (SR 1238)	Rowan County	0.5	-	-	-	-	-	-	-	10400	36600	4-C	110	B	Sub	
	Old Beatty Ford Rd Relocation	China Grove Rd (SR 1238) - I-85	Rowan County	0.4	-	-	-	-	-	-	-	13000	36600	4-C	110	B	Sub	
	Old Beatty Ford Rd Relocation	I-85 - Lentz Rd (SR 1337)	Rowan County	1.4	-	-	-	-	-	-	-	5600	36600	4-C	110	B	Sub	
	Old Camden Rd (SR 1132)	Mecklenburg Co - NC 24/27	Cabarrus County	1.5	22	2	60	45	11400	5600	-	1800	11700	2-A	60	Min	Sub	
	Old Charlotte Rd (SR 1157)	NC 49 - Roberta Rd (SR 1304)	Concord	1.7	20	2	60	35	9500	10000	16400	16900	28100	**4-D**	110	B	Sub	
	Old Charlotte Rd (SR 1335)	Roberta Rd (SR 1304) - US 601	Concord	0.3	20	2	60	35	9500	8300	11800	16200	28100	**4-D**	110	B	Sub	
	Old Charlotte Rd	US 601 - Cabarrus Ave (SR 1002)	Concord	1.1	22	2	40	35	9900	5600	9700	6700	11700	3-C	80	Min	Sub	
	Old Concord Rd (SR 1002)	Lane St (SR 2180) - Rowan Co	Cabarrus County	0.7	22	2	40	55	14100	8900	11900	12300	36600	4-B	130	B	Sub	
	Old Concord Rd (SR 1002)	Cabarrus Co - Old Beatty Ford Rd (SR 1221)	Rowan County	1.5	19	2	60	55	13350	6500	8200	9100	36600	4-E	130	B	Sub	
	Old Concord Rd (SR 1002)	Old Beatty Ford Rd (SR 1221) - E NC 152	Rowan County	2.9	19	2	60	45	11200	4000	5300	5500	36600	4-E	130	B	Sub	
	Old Concord Rd (SR 1002)	E NC 152 - St. Pauls Church Rd (SR 2529)	Rowan County	3.9	22	2	60	45	11800	5000	6900	6700	36600	4-E	130	B	Sub	
	Old Concord Rd (SR 1002)	St. Pauls Church Rd (SR (2529) - Julian Rd (SR 2528)	Rowan County	1.5	24	2	60	55	14600	6300	8600	10200	36600	4-E	130	B	Sub	

(1) 4-lane undivided

CRMPO CTP INVENTORY AND RECOMMENDATIONS (AMENDED DATE JUNE 26, 2024)

HIGHWAY																			
					2013 Existing System						2040 Proposed System								
Local ID	Facility	Section (From - To)	Jurisdiction	Dist. (mi)	Cross-Section (ft)	Cross-Section lanes	ROW (ft)	Speed Limit (mph)	Existing Capacity (vpd)	2013 AADT	2040 AADT E+C	2040 AADT with MTP	Proposed Capacity (vpd)	Cross-Section	ROW (ft)	CTP Classification	Tier	Other Modes
	Ridge Ave	Ebenezer Rd (SR 1267) - US 29 (Cannon Blvd)	Kannapolis	0.4	20	2	40	35	9500	2400	-	2600	10200	2-E	60	Min	Sub	
	Ridge Rd (SR 1944)	Woodleaf Rd (SR 2048) - US 601 (W Innes St)	Rowan County/Salisbur	1.8	22	2	60	45	11800	2100	2600	3400	11800	2-B	60	Min	Sub	
	Ridge Rd (SR 1915)	US 601 (W Innes St) - Douglass St (SR 2069)	Rowan County/Salisbur	0.5	24	2	60	45	12200	3300	5300	3700	12200	2-B	60	Min	Sub	
	E Ridge Rd (SR 1915)	Douglass St (SR 2069) - Old Mocksville Rd (SR 1910)	Rowan County	1.7	20	2	60	45	13600	3100	5000	3700	13600	2-A	60	Min	Sub	
	E Ridge Rd (SR 1915)	Old Mocksville Rd (SR 1910) - Hollywood Dr (SR 1915)	Rowan County	1.2	22	2	60	45	14100	2600	5200	3300	14100	2-A	60	Min	Sub	
	Roberta Rd Ext	Tom Query Rd Ext - Stallings Rd (SR 1161)	Harrisburg	0.3	-	-	-	-	-	-	-	17400	28100	4-D	110	B	Sub	
	Roberta Rd Ext	Stallings Rd (SR 1161) - NC 49	Harrisburg	0.5	-	-	-	-	-	-	-	19200	28100	4-D	110	B	Sub	
	Roberta Rd (SR 1304)	NC 49 - Carl Parmer Dr	Harrisburg	0.5	36	3	90	35	11700	13000	12800	21300	28100	3-C	80	B	Sub	
	Roberta Rd (SR 1304)	Carl Parmer Dr - Pitts School Rd (SR 1305)	Harrisburg	1.1	24	2	100	35	10200	6400	20900	15500	35100	4-D	110	B	Sub	
	Roberta Rd (SR 1304)	Pitts School Rd (SR 1305) - George Liles Pkwy (SR 1310)	Concord	1.7	20	2	50	45	10900	7400	13400	19200	35100	**4-D**	110	B	Sub	
	Roberta Rd (SR 1304)	George Liles Pkwy (SR 1310) - Old Charlotte Rd (SR 1335)	Concord	3.3	21	2	60	35	9700	4900	8500	7400	28100	**4-D**	110	B	Sub	
	Robinson Church Rd (SR 1168)	Mecklenburg Co - Tom Query Rd (SR 1166)	Harrisburg	1.6	22	2	40- 60	45	11300	7000	10700	12100	36600	3-E	90	B	Sub	
	Robinson Church Rd (SR 1166)	Tom Query (SR 1166) – Stallings Rd (SR 1161)	Harrisburg	0.4	20	2	40- 85	45	11400	9600	14600	10000	11700	3-E	90	Min	Sub	
	Rock Hill Church Rd (SR 1414)	US 29 (Cannon Blvd) - Weddington Rd (SR 1431)	Concord	0.8	24	2	60	45	12200	12000	19100	10900	35100	**4-D**	110	B	Sub	**MB**
	Rock Hill Church Rd (SR 1414)	Weddington Rd (SR 1431) - Poplar Tent Rd (SR 1394)	Concord	1.2	22	2	60	35	9900	3500	6600	6600	12700	3-C	80	Min	Sub	**MB**
	Rocky River Rd (SR 1139)	Mecklenburg Co - Robinson Church Rd (SR 1168)	Harrisburg	1.5	20	2	60	45	11400	9200	16300	15300	43600	4-J	125	B	Sub	
	Rocky River Rd (SR 1139)	Robinson Church Rd (SR 1168) - Hickory Ridge Rd (SR 1138)	Cabarrus County	1.4	16	2	60	45	11000	6500	12000	14700	43600	4-C	110	B	Sub	
	Rocky River Rd (SR 1139)	Hickory Ridge Rd (SR 1138) - Pharr Mill Rd (SR 1158)	Concord	1.7	20	2	60	45	11400	7200	14300	14900	43600	**4-D**	110	B	Sub	
	Rocky River Rd (SR 1139)	Pharr Mill Rd (SR 1158) - NC 49	Concord	5.7	20	2	60	45	11400	6500	13100	17000	43600	**4-D**	110	B	Sub	
	Rogers Lake Rd (SR 1625)	Kannapolis Pkwy (SR 1624) - Irish Buffalo Creek	Kannapolis	0.9	60-72	4D	100-115	45	35100	6800	9000	11800	35100	4-D	110	B	Sub	
	Rogers Lake Rd (SR 1625)	Irish Buffalo Creek - Main St (SR 1008)	Kannapolis	1.8	16	2	40	35	9200	6500	8400	14000	11700	3-C	80	Min	Sub	
	Rogers Lake Rd (SR 1766)	Main Street (SR 1008) - NC 3 (Dale Earnhardt Blvd)	Kannapolis	0.7	18	2	30	35	9200	5100	8700	7900	14600	3-C	80	Min	Sub	
	Roseman Rd (SR 1500)	Grace Church Rd (SR 1503) - Southern Lane	Rowan County	0.6	20	2	60	45	11400	3600	4500	3900	11400	2-A	60	Min	Sub	
	Roseman Rd (SR 1500)	Southern Lane - US 29 (S Main St)	Rowan County	0.5	20	2	60	35	9500	3600	4900	4300	9500	2-A	60	Min	Sub	
	Rowan Mill Road (SR 1526)	NC 150 (Mooresville Rd) - Airport Pkwy	Salisbury	0.7	20	2	50-60	45	10900	3400	3900	6400	10900	2-B	50-60	Min	Sub	
	Rowan Mill Road (SR 1526)	Airport Pkwy - Foxfire Dr	Salisbury	0.6	22	2	50	35	9900	3800	4900	2900	9900	2-B	60	Min	Sub	
	Rowan Mill Road (SR 1526)	Foxfire Dr - US 29 (S Main St)	Salisbury	0.5	22	2	44-50	35	9900	3800	4500	1500	9900	2-B	60	Min	Sub	
	Ruth Ave	Jackson St - N. Little Texas Rd	Kannapolis	0.5	18	2	60	25	9000	-	-	-	10200	2-E	60	Min	Sub	
	Ryder Ave (SR 1210)	Mt Moriah Church Rd (SR 1197) - Main St (SR 2739)	Landis	0.7	30	2	50	35	10200	3700	5300	3900	10200	2-E	60	Min	Sub	
	Ryder Ave (SR 1210)	Main St (SR 2739) - US 29 (Cannon Blvd)	Landis	0.7	30	2	50	35	11100	4000	5800	5300	11100	2-C	50	Maj	Sub	
	Safrit Rd (SR 2547)	Cruse Rd (SR 2551) - Webb Rd (SR 1500)	Rowan County	1.3	16	2	60	45	11000	-	800	400	11000	2-A	60	Min	Sub	
	Shamrock Rd	NC 49 - Pharr Mill Rd	Harrisburg			2								3-E	90	Min	Sub	
	St. Lukes Church Rd. (SR 2380)	US 52 - Miracle Dr (SR 2457)	Granite Quarry	1.1	24	2	60	35	10200	2300	-	2300	11700	3-A	80	Min	Sub	

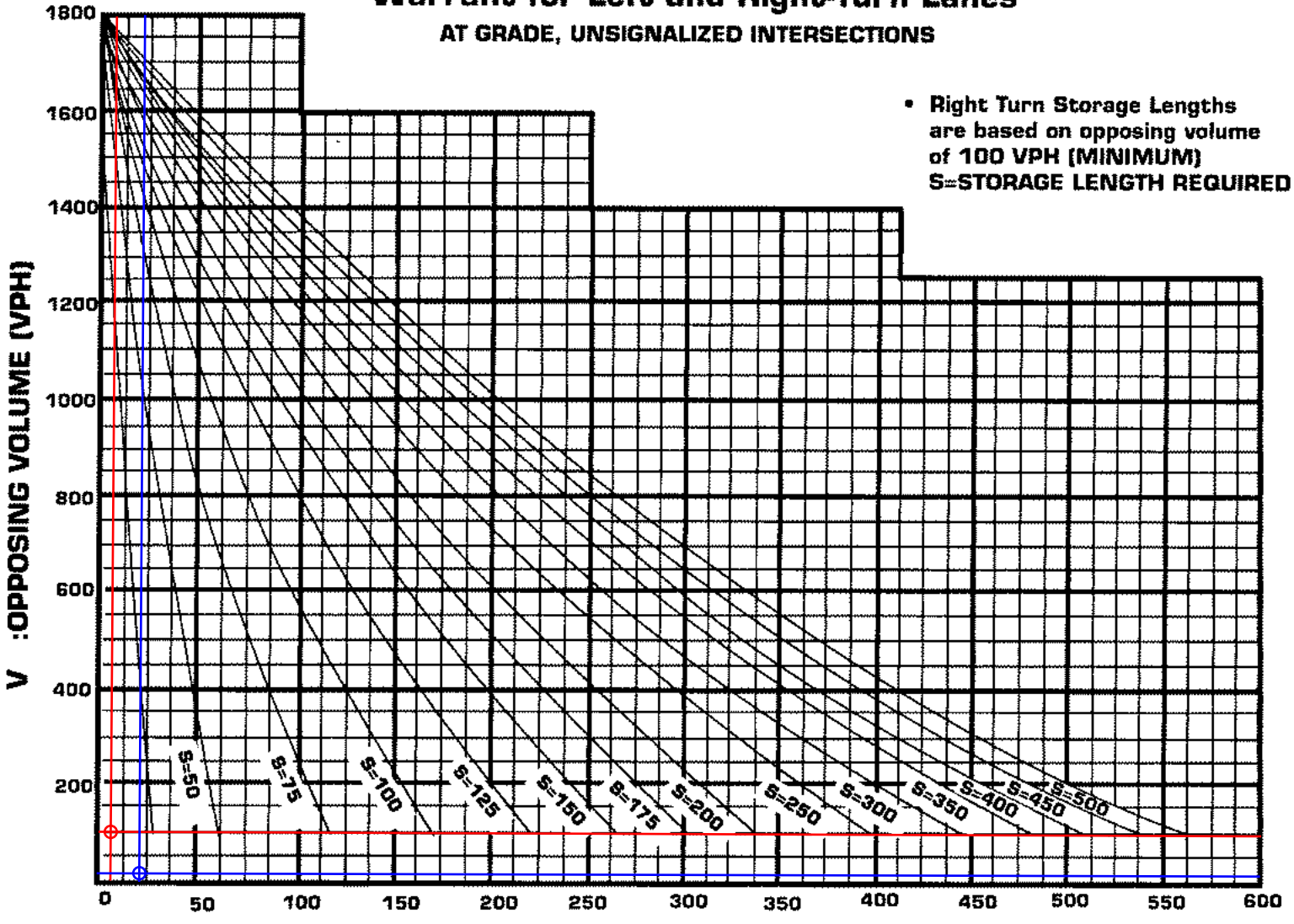
(1) 4-lane undivided

Appendix L – Turn Lane Warrants

PHASE 1 - 2028 BUILD
JACKSON TER SW & SITE DWY
EASTBOUND RIGHT TURN LANE - 5 EBR, 100 OPPOSING
WESTBOUND LEFT TURN LANE - 20 WBL, 9 OPPOSING

Warrant for Left and Right-Turn Lanes

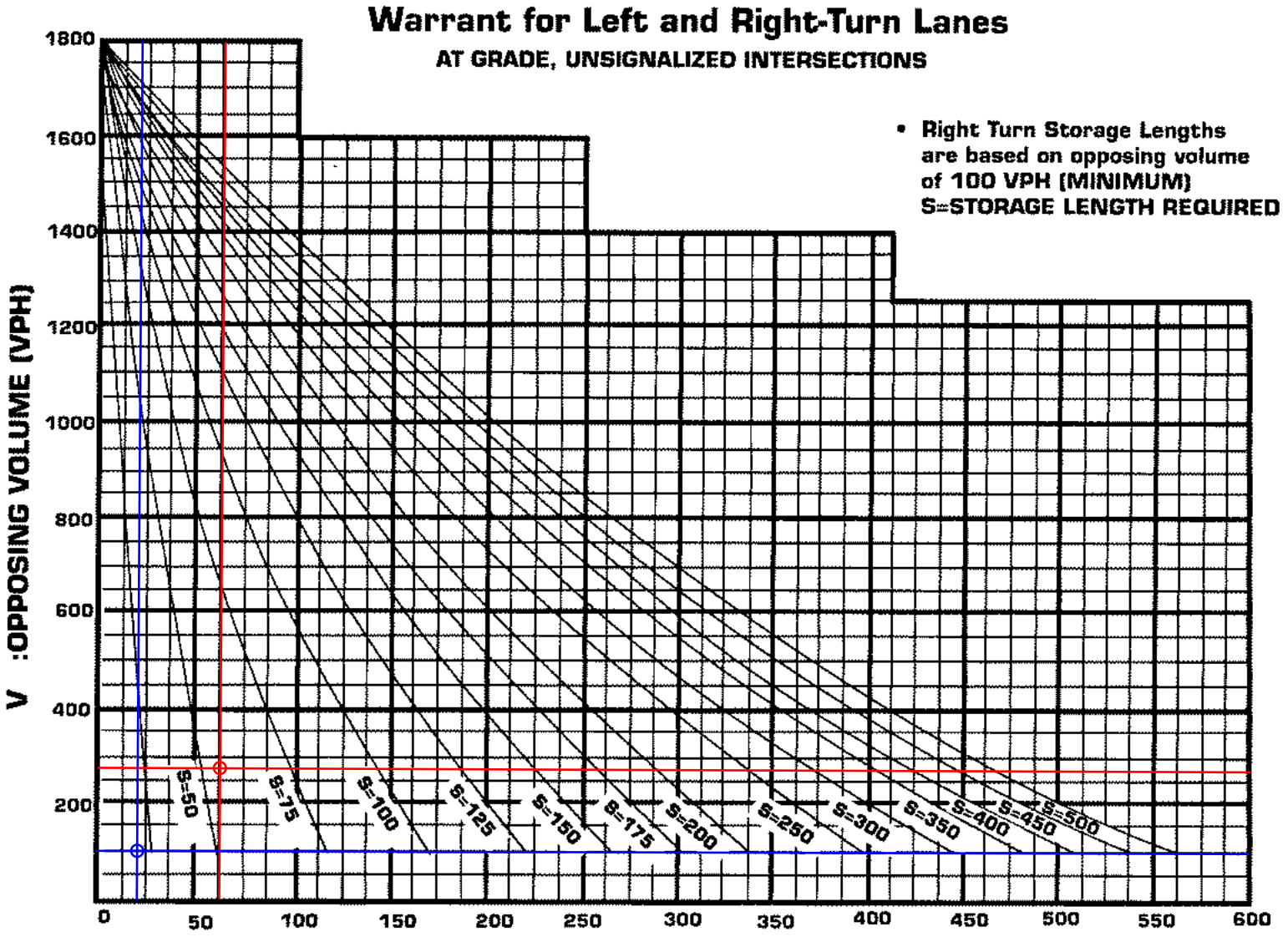
AT GRADE, UNSIGNALIZED INTERSECTIONS



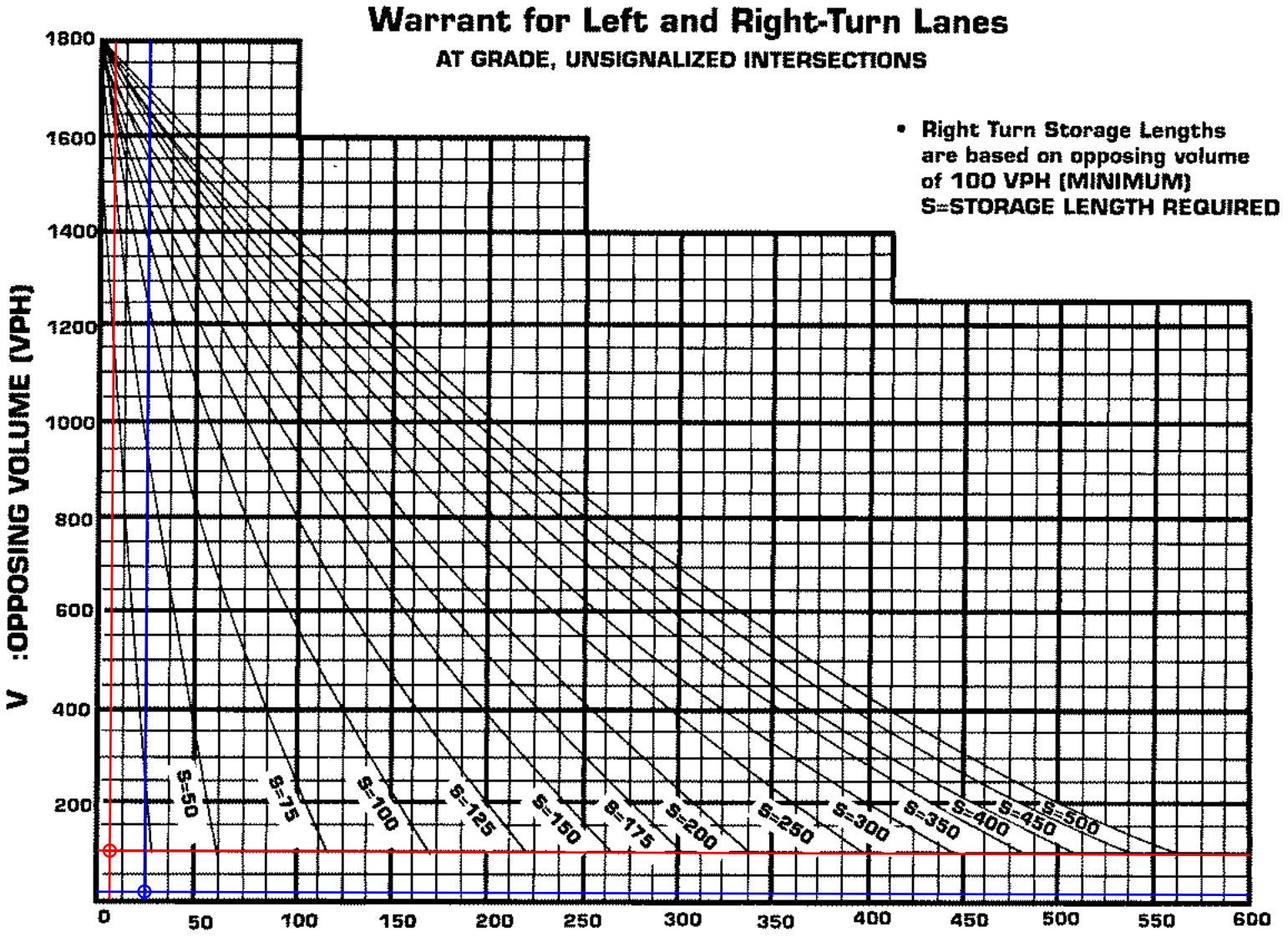
V_L: LEFT TURNING VOLUME (VPH)
V_R: RIGHT TURNING VOLUME (VPH)

Note: Where adjacent signalization may provide opportunities for gaps in the traffic stream a reduction in the above storage values can be considered on a case by case basis.

PHASE 1 - 2028 BUILD
STOUGH ROAD & SANDY LANE SW
EASTBOUND LEFT TURN LANE - 63 EBL, 281 OPPOSING
WESTBOUND RIGHT TURN LANE - 19 WBR, 100 OPPOSING



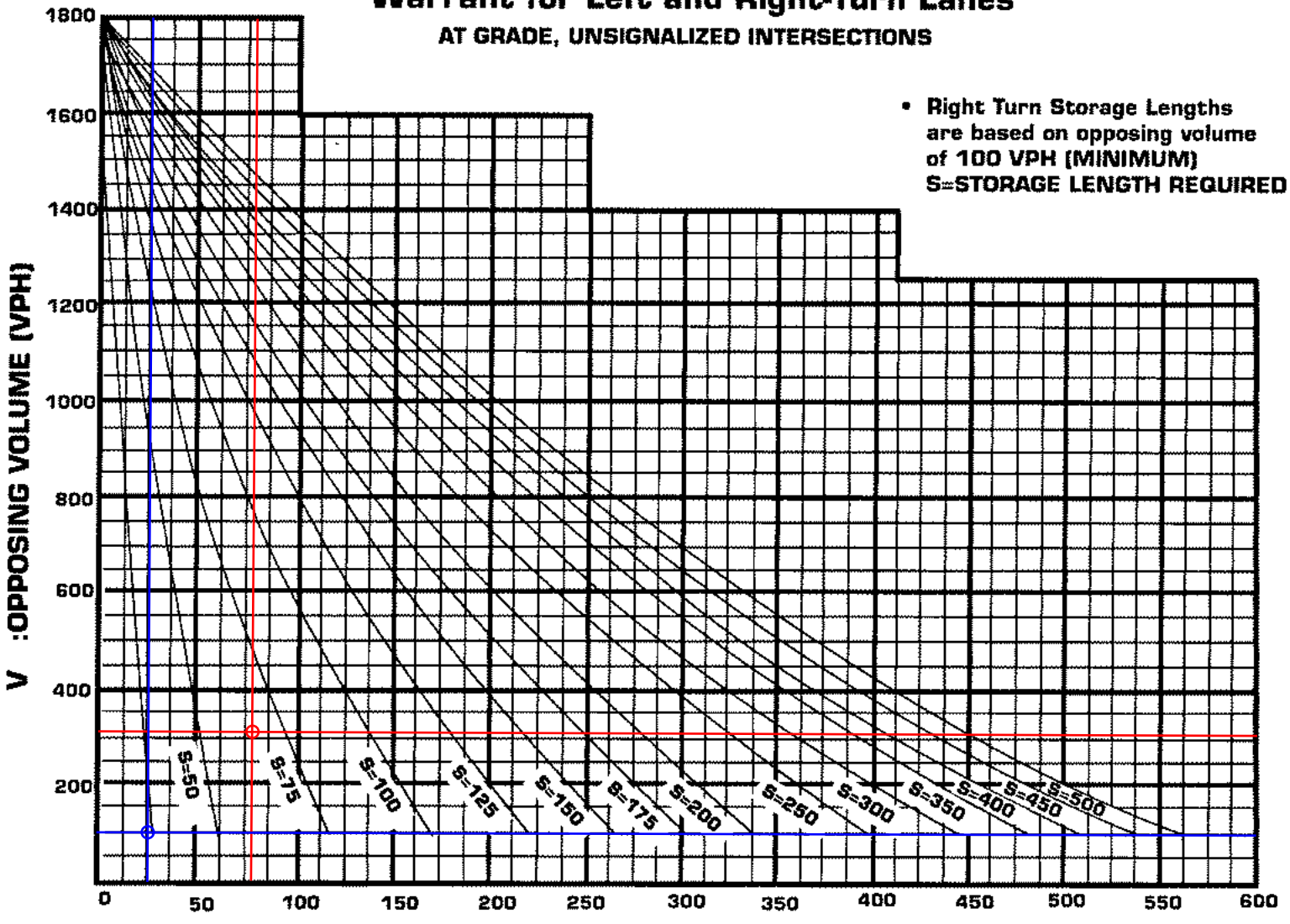
PHASE 2 - 2033 BUILD
JACKSON TER SW & SITE DWY
EASTBOUND RIGHT TURN LANE - 6 EBR, 100 OPPOSING
WESTBOUND LEFT TURN LANE - 24 WBL, 10 OPPOSING



PHASE 2 - 2033 BUILD
STOUGH ROAD & SANDY LANE SW
EASTBOUND LEFT TURN LANE - 83 EBL, 315 OPPOSING
WESTBOUND RIGHT TURN LANE - 26 WBR, 100 OPPOSING

Warrant for Left and Right-Turn Lanes

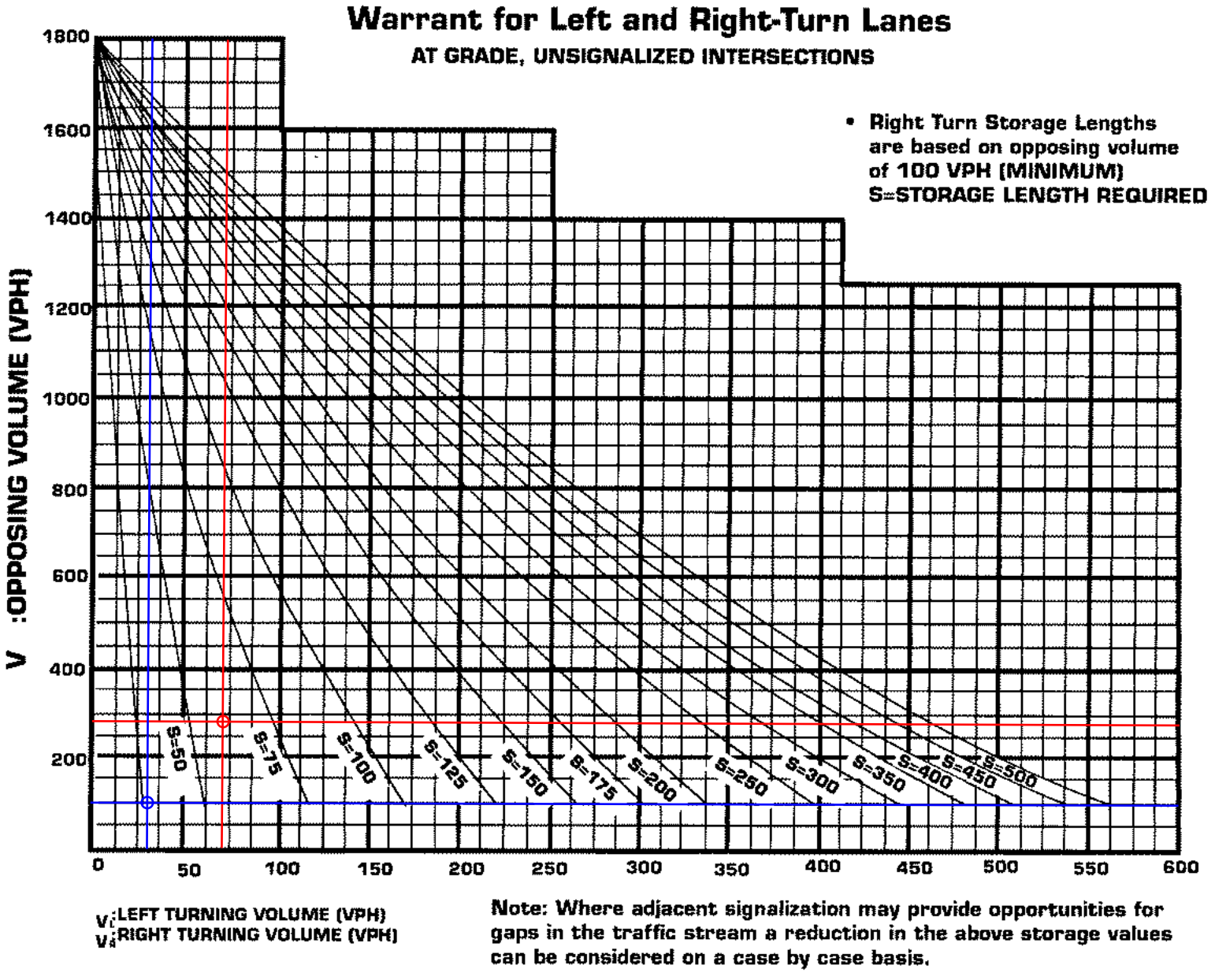
AT GRADE, UNSIGNALIZED INTERSECTIONS



V_L :LEFT TURNING VOLUME (VPH)
V_R :RIGHT TURNING VOLUME (VPH)

Note: Where adjacent signalization may provide opportunities for gaps in the traffic stream a reduction in the above storage values can be considered on a case by case basis.

EXISTING 2025
STOUGH ROAD & SANDY LANE SW
EASTBOUND LEFT TURN LANE - 69 EBL, 279 OPPOSING
WESTBOUND RIGHT TURN LANE - 32 WBR, 100 OPPOSING



CABARRUS COUNTY
America Thrives Here

Frank Liske Park

Opinion of Probable Cost

Based on Schematic Plan

10/1//2025

Item	Cost
Demolition and Mobilization	**$319,933.65**
Grading and Erosion Control Measures	**$629,920.00**
Parking,Sidewalk and Drive	**$1,801,251.99**
Fence and Gates	**$124,080.00**
Utility Repair Allowance	**$50,000.00**
Storm Drainage	**$1,046,200.00**
Landscaping	**$60,400.00**
Probable Total Construction Budget	**$4,031,785.64**
Contingency - 10%	**$403,178.56**
Contractor OHP, General Conditions, and Insurance - 20%	**$806,358.00**
Total Construction Budget Estimate	**$5,241,322.20**

Estimate assumes no road improvements for
Estimate excludes irrigation
Estimate excludes soft cost (design fees, permit fees, testing, etc.)
Estimate excludes site lighting.
Estimate assumes a balanced site for earthwork.

benesch
engineers · scientists · planners

Schematic Development

Demolition and Mobilization

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Mobilization 3%	ls	1	$117,430.65	$117,430.65
2	Demolish existing buildings, concrete, and asphalt	sf	14,229	$7.00	$99,603.00
3	Clearing & Grubbing	ac	17	$6,000.00	$102,900.00
				Probable Demolition Budget	**$319,933.65**

Grading and EC Measures

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Grading-cut to fill	cy	23,153	$14.00	$324,142.00
2	Topsoil stripping, assumed 6"	cy	6,144	$9.00	$55,296.00
3	Silt Fence	lf	9,222	$6.00	$55,332.00
4	Silt Fence Stone Outlet	ea	64	$300.00	$19,200.00
5	Temporary Drainage Ditch	lf	1,970	$5.00	$9,850.00
6	Matting	sy	10,000	$7.00	$70,000.00
7	Temporary Skimmer Basin	ea	2	$30,000.00	$60,000.00
8	Inlet Protection	ea	38	$200.00	$7,600.00
9	Check Dams	ea	20	$300.00	$6,000.00
10	Temporary grass	ac	9	$2,500.00	$22,500.00
				Probable Grading Budget	**$629,920.00**

Parking, Sidewalk, and Drive

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	ABC stone, 6" depth	ton	3,498	$55.00	$192,391.38
2	Standard Duty Asphalt, 2"	ton	1,220	$160.00	$195,180.41
3	ABC stone, 8" depth	ton	5,188	$55.00	$285,350.60
4	Standard Duty Asphalt, 3"	ton	2,139	$160.00	$342,249.60
5	Striping	lf	16,800	$1.00	$16,800.00
6	Traffic symbols	ls	1	$2,600.00	$2,600.00
7	Entrance Sign	ls	1	$30,000.00	$30,000.00
8	Stop Signs, Misc. Signage, Facility identification sign	ea	23	$2,000.00	$46,000.00
9	Concrete Paving, 6" thick	sy	497	$65.00	$32,305.00
10	Concrete Sidewalk, 4" thick	sy	375	$55.00	$20,625.00
11	24" Curb and Gutter	lf	17,370	$30.00	$521,100.00
12	Conc. Wheelstops (ADA parking)	ea	11	$150.00	$1,650.00
13	Rock Allowance	cy	500	$200.00	$100,000.00
14	Undercut Allowance	cy	500	$30.00	$15,000.00
				Probable Pavement Budget	**$1,801,251.99**

Fence and Gates

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Fence, 6' ht. (Chainlink)	lf	1,856	$55.00	$102,080.00
2	Fence, Decorative to Match Existing	ls	1	$3,000.00	$3,000.00
3	Gate, 24' Wide	ea	3	$5,000.00	$15,000.00
4	Gate, 20' Wide	ea	1	$4,000.00	$4,000.00
				Probable Metals Budget	**$124,080.00**

Utilities

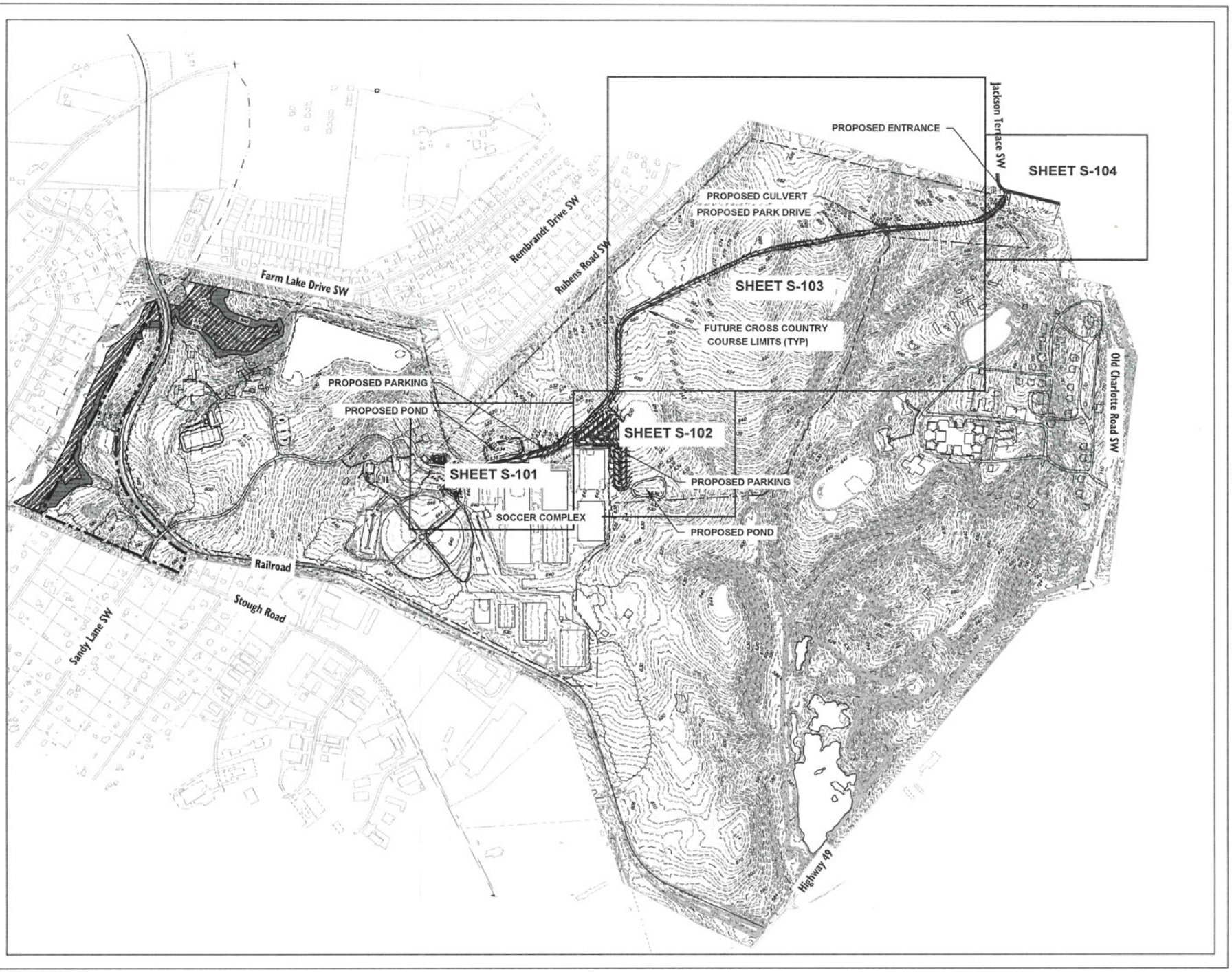
Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Utility Repair allowance	ls	1	$50,000.00	$50,000.00
				Probable Utilities Budget	**$50,000.00**

Storm Drainage

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Drainage Structures	ea	39	$3,500.00	$136,500.00
2	Stormwater Detention	ea	2	$130,000.00	$260,000.00
3	15" RCP	lf	2,136	$60.00	$128,160.00
4	18" RCP	lf	1,548	$65.00	$100,620.00
5	24" RCP	lf	668	$70.00	$46,760.00
6	24" FES	ea	8	$2,000.00	$16,000.00
7	60" stream culvert	ea	1	$350,000.00	$350,000.00
8	Riprap	ton	96	$85.00	$8,160.00
				Probable Storm Drainage Budget	**$1,046,200.00**

Landscaping

Item No.	Item	Unit	Estimated Quantity	Unit Price	Sub-Total
1	Large Maturing Trees	ea	61	$400.00	$24,400.00
2	Grassing	ac	9	$4,000.00	$36,000.00
				Probable Landscaping Budget	**$60,400.00**



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CHARLOTTE, NC 28208
WWW.BENESCH.COM
T 704 571 9880

SEALS:

PRELIMINARY
NOT FOR CONSTRUCTION

CORP. NC LICENSE: F-1320

Frank Liske Park
Park Road Improvements

4001 STOUGH ROAD
CONCORD, NC 28027

PROJECT NO: 1726.500003
DATE: 10.1.25
REVISIONS:

SCALE:

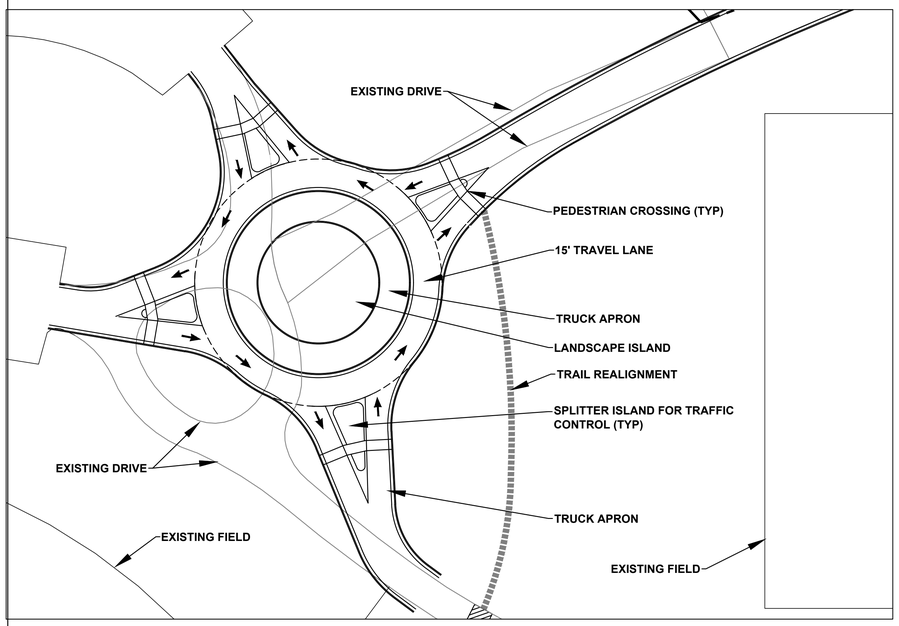
NORTH
300 0 300 600
SCALE: 1"=300'

SHEET TITLE:

OVERALL SCHEMATIC PLAN

SHEET NO:

S100



PROPOSED TRAFFIC CIRCLE

30 0 15 30 60

SCALE: 1"=30'

APPROXIMATE PARK BOUNDARY (TYP)

PROPOSED STORM WATER PIPING (TYP)

127 PROPOSED PARKING SPACES (INCLUDING 8 ADA SPACES AND 114 ± RELOCATED EXISTNG SPACES)

PROPOSED STORMWATER POND

EXISTING IRRIGATION POND

LIMITS OF EXISTING GRAVEL DRIVE

EXISTING PARKING LOT

EXISTING PARKING LOT

PROPOSED 24' ASPHALT PARK DRIVE WITH 24" CURB AND GUTTER

PROPOSED TRAFFIC CIRCLE - (SEE INSET THIS SHEET)

EXISTING SOCCER FIELD

EXISTING SOCCER FIELD

EXISTING SOCCER FIELD

TRAIL REALIGNMENT

EXISTING DRIVE

SHEET S-101
SHEET S-102

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CONCORD, NC 28025
P 704-920-2100

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WWW.BENESCH.COM
P 704.521.9880

SEALS:

PRELIMINARY
NOT FOR CONSTRUCTION

CORP. NC LICENSE: F-1320

Frank Liske Park
Park Road Improvements

4001 STOUGH ROAD
CONCORD, NC 28027

PROJECT NO: 1726.500003
DATE: 10.1.25
REVISIONS:

SCALE:

NORTH

40 0 20 40 80

SCALE: 1"=40'

SHEET TITLE:

SCHEMATIC SITE PLAN

SHEET NO:

S101

SHEET S-103
SHEET S-102

PROPOSED 24' ASPHALT PARK DRIVE WITH 24" CURB AND GUTTER

PROPOSED STORM WATER PIPING (TYP)

PROPOSED 24" CURB AND GUTTER

PROPOSED SIDEWALK

405 SPACES INCLUDING 4 ADA SPACES

EXISTING SOCCER FIELD

FUTURE CROSS COUNTRY COURSE LIMITS (TYP)

PROPOSED STORMWATER POND

MAINTENANCE VEHICLE ENTRY

EXISTING SOCCER FIELD

SHEET S-101
SHEET S-102

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SEALS:

PRELIMINARY
NOT FOR CONSTRUCTION

CORP. NC LICENSE: F-1320

Frank Liske Park
Park Road Improvements

4001 STOUGH ROAD
CONCORD, NC 28027

PROJECT NO: 1726.500003
DATE: 10.1.25
REVISIONS:

SCALE:

NORTH

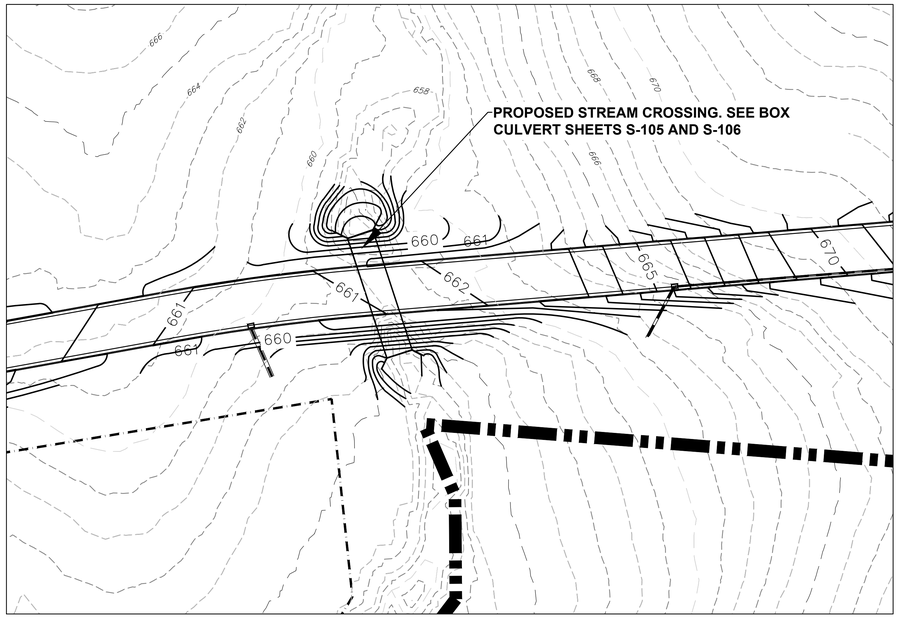
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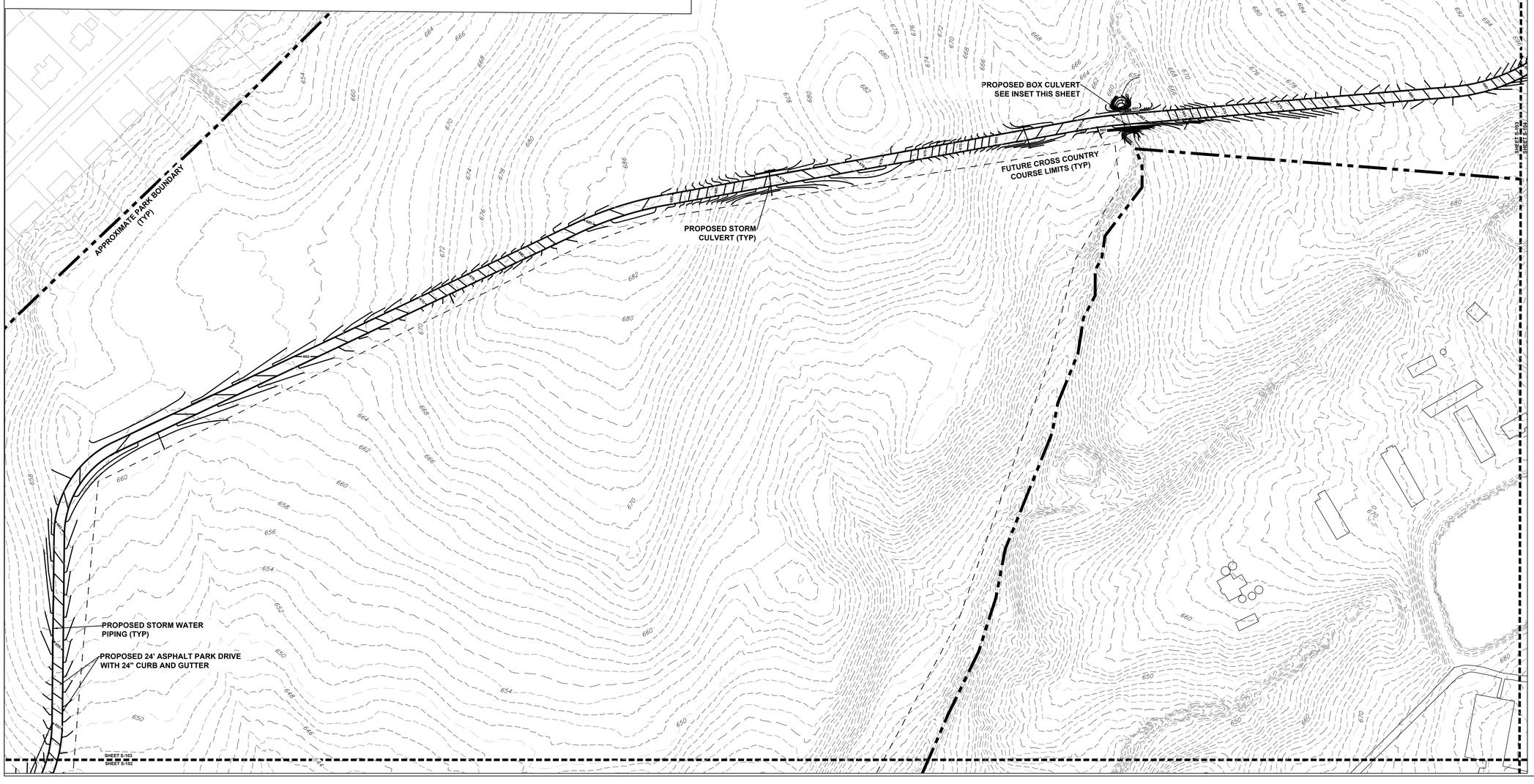
SHEET TITLE:

SCHEMATIC SITE PLAN

SHEET NO:

S102





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65 CHURCH STREET
CONCORD, NC 28025
P 704-920-2100

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SEALS:

PRELIMINARY
NOT FOR
CONSTRUCTION

CORP. NC LICENSE: F-1320

Frank Liske Park
Park Road Improvements

4001 STOUGH ROAD
CONCORD, NC 28027

PROJECT NO: 1726.500003
DATE: 10.1.25
REVISIONS:

SCALE:

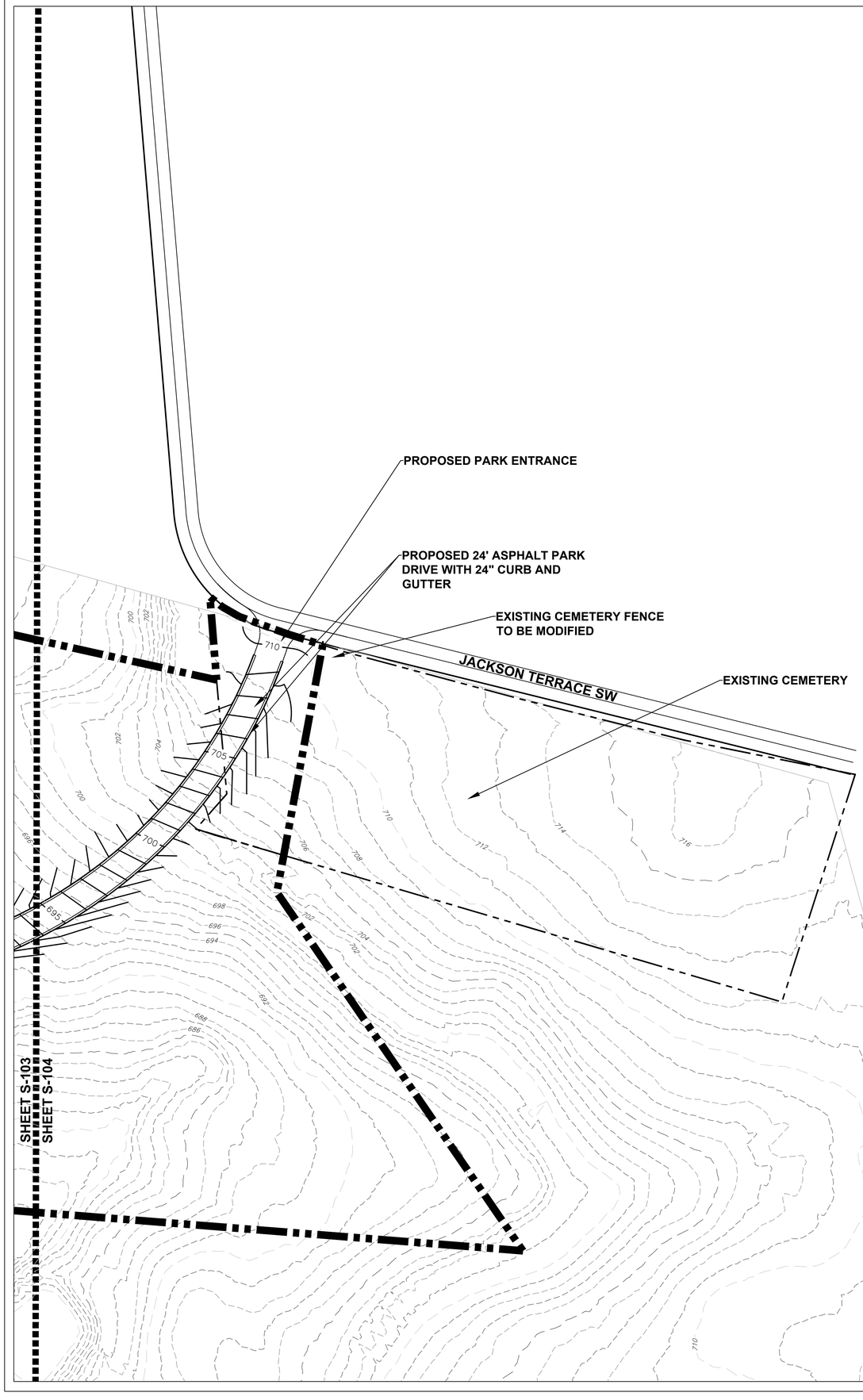
NORTH
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SCALE: 1"=100'

SHEET TITLE:

SCHEMATIC SITE PLAN

SHEET NO:

SI03



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65 CHURCH STREET
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P 704.521.9880

SEALS:

PRELIMINARY
NOT FOR CONSTRUCTION

CORP. NC LICENSE: F-1320

Frank Liske Park
Park Road Improvements

4001 STOUGH ROAD
CONCORD, NC 28027

PROJECT NO: 1726.500003
DATE: 10.1.25
REVISIONS:

SCALE:

NORTH

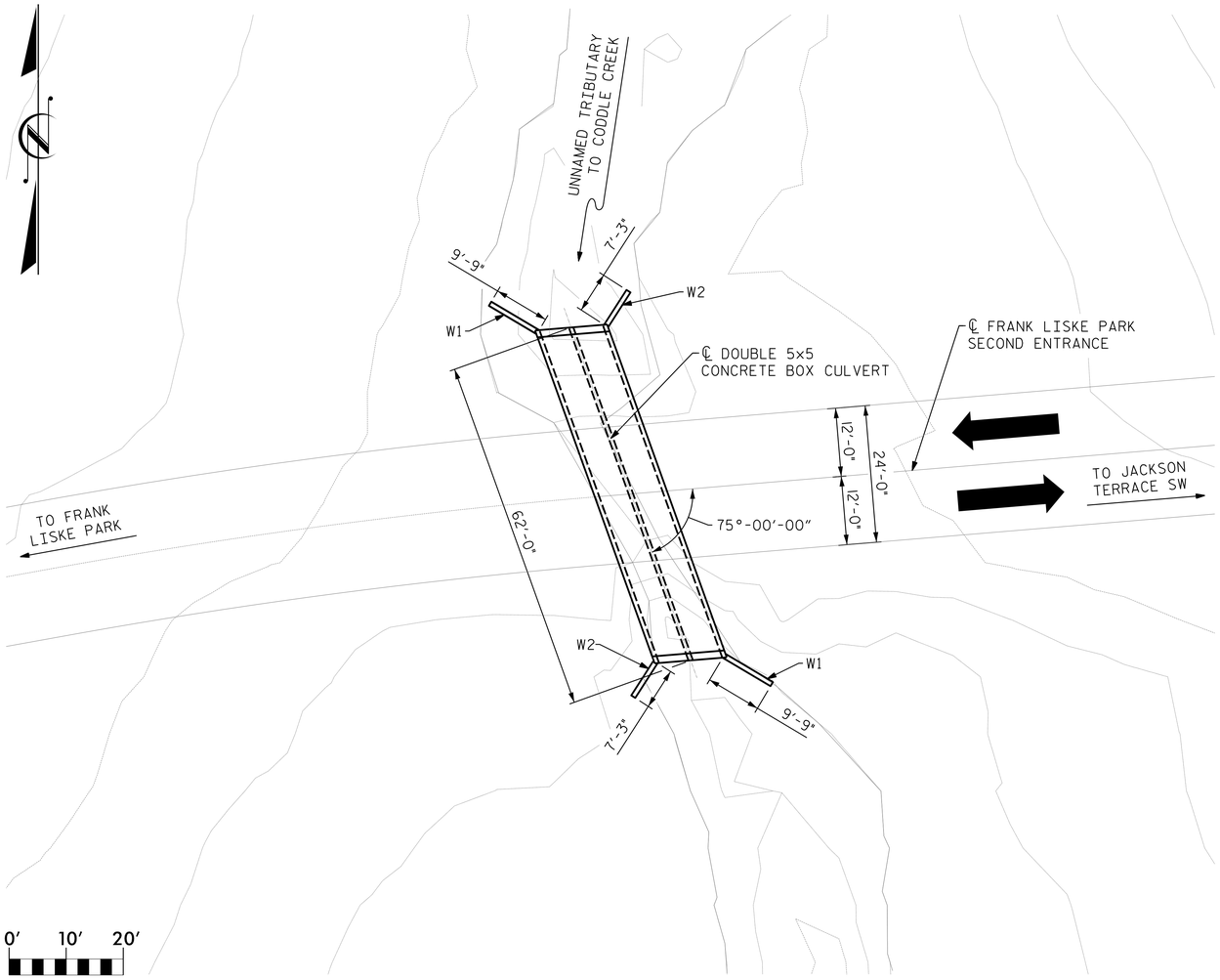
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SCALE: 1"=40'

SHEET TITLE:

SCHEMATIC SITE PLAN

SHEET NO:

S104



LOCATION SKETCH

PROPOSED LOCATION	
LATITUDE	LONGITUDE
35°-22'-03.3"	-80°-36'-13.3"

NOTES

ASSUMED LIVE LOAD ---------- HL-93 OR ALTERNATE LOADING.

DESIGN FILL ---------- TO BE INCLUDED WITH FINAL DESIGN.

FOR OTHER DESIGN DATA AND NOTES SEE STANDARD NOTE SHEET.

3" Ø WEEP HOLES INDICATED TO BE IN ACCORDANCE WITH THE SPECIFICATIONS.

CONCRETE IN CULVERTS TO BE POURED IN THE FOLLOWING ORDER:

1. WING FOOTINGS AND FLOOR SLAB INCLUDING 4" OF ALL VERTICAL WALLS.
2. THE REMAINING PORTIONS OF THE WALLS AND WINGS FULL HEIGHT FOLLOWED BY ROOF SLAB AND HEADWALLS.

THE RESIDENT ENGINEER SHALL CHECK THE LENGTH OF CULVERT BEFORE STAKING IT OUT TO MAKE CERTAIN THAT IT WILL PROPERLY TAKE CARE

STEEL IN THE BOTTOM SLAB MAY BE SPLICED AT THE PERMITTED CONSTRUCTION JOINT AT THE CONTRACTOR'S OPTION. EXTRA WEIGHT OF STEEL DUE TO THE SPLICES SHALL BE PAID FOR BY THE CONTRACTOR.

AT THE CONTRACTOR'S OPTION, HE MAY SPLICE THE VERTICAL REINFORCING STEEL IN THE INTERIOR FACE OF EXTERIOR WALL AND BOTH FACES OF INTERIOR WALLS ABOVE LOWER WALL CONSTRUCTION JOINT. THE SPLICE LENGTH SHALL BE AS PROVIDED IN THE SPLICE LENGTH CHART SHOWN ON THE PLANS. EXTRA WEIGHT OF STEEL DUE TO THE SPLICES SHALL BE PAID FOR BY THE CONTRACTOR.

DEPENDING ON THE FINDINGS OF THE GEOTECHNICAL INVESTIGATION, THE CONTRACTOR HAS THE OPTION TO SUBMIT, TO THE ENGINEER FOR APPROVAL, DESIGN AND DETAIL DRAWINGS FOR A PRECAST REINFORCED CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE CULVERT SHOWN ON THE PLANS. THE DESIGN SHALL PROVIDE THE SAME SIZE AND NUMBER OF BARRELS AS USED ON THE CAST-IN-PLACE DESIGN, FOR OPTIONAL PRECAST REINFORCED CONCRETE BOX CULVERT, SEE SPECIAL PROVISIONS.

TOTAL STRUCTURE QUANTITIES		
CLASS A CONCRETE		
BARREL	74.0	C.Y.
WINGS ETC.	19.0	C.Y.
TOTAL	93.0	C.Y.
REINFORCING STEEL		
BARREL	10,984	LBS.
WINGS ETC.	1,843	LBS.
TOTAL	12,827	LBS.
CULVERT EXCAVATION	LUMP SUM	
FOUNDATION COND. MATERIAL	71	TONS
REMOVAL OF EXISTING STRUCTURE	LUMP SUM	

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SEALS:

PRELIMINARY
NOT FOR CONSTRUCTION

CORP. NC LICENSE: F-1320

Frank Liske Park
Park Road Improvements
4001 STOUGH ROAD
CONCORD, NC 28027

PROJECT NO: 1726.500003
DATE: 10.1.25
REVISIONS:

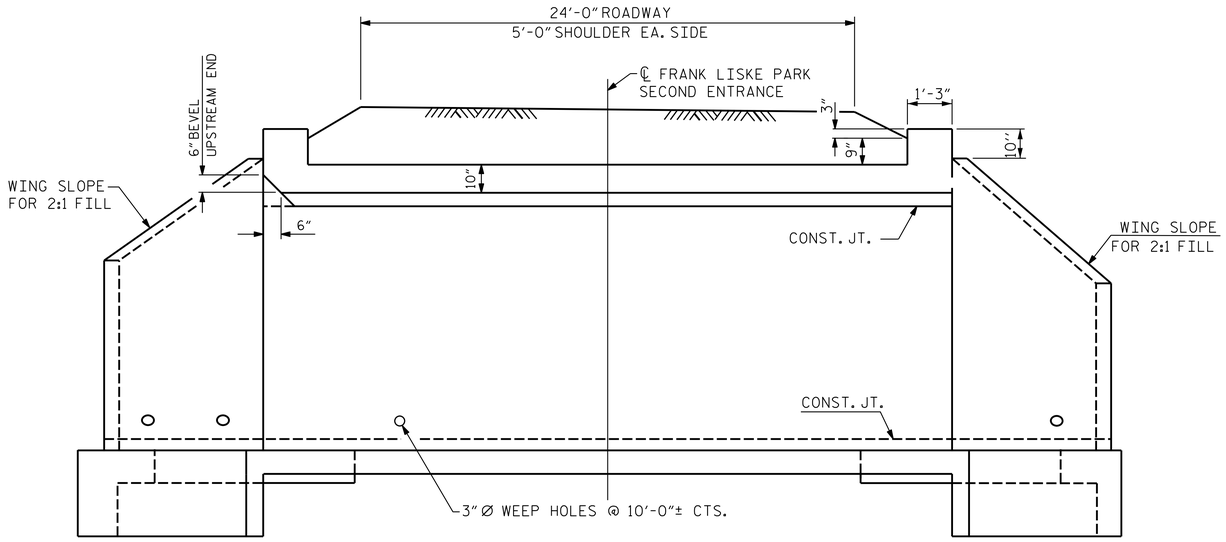
SCALE:

SHEET TITLE:

DOUBLE 5 FT. X 5 FT. CONCRETE BOX CULVERT 75° SKEW

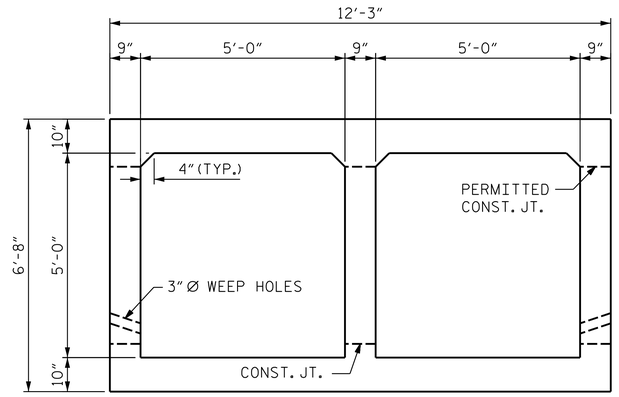
SHEET NO:

S105

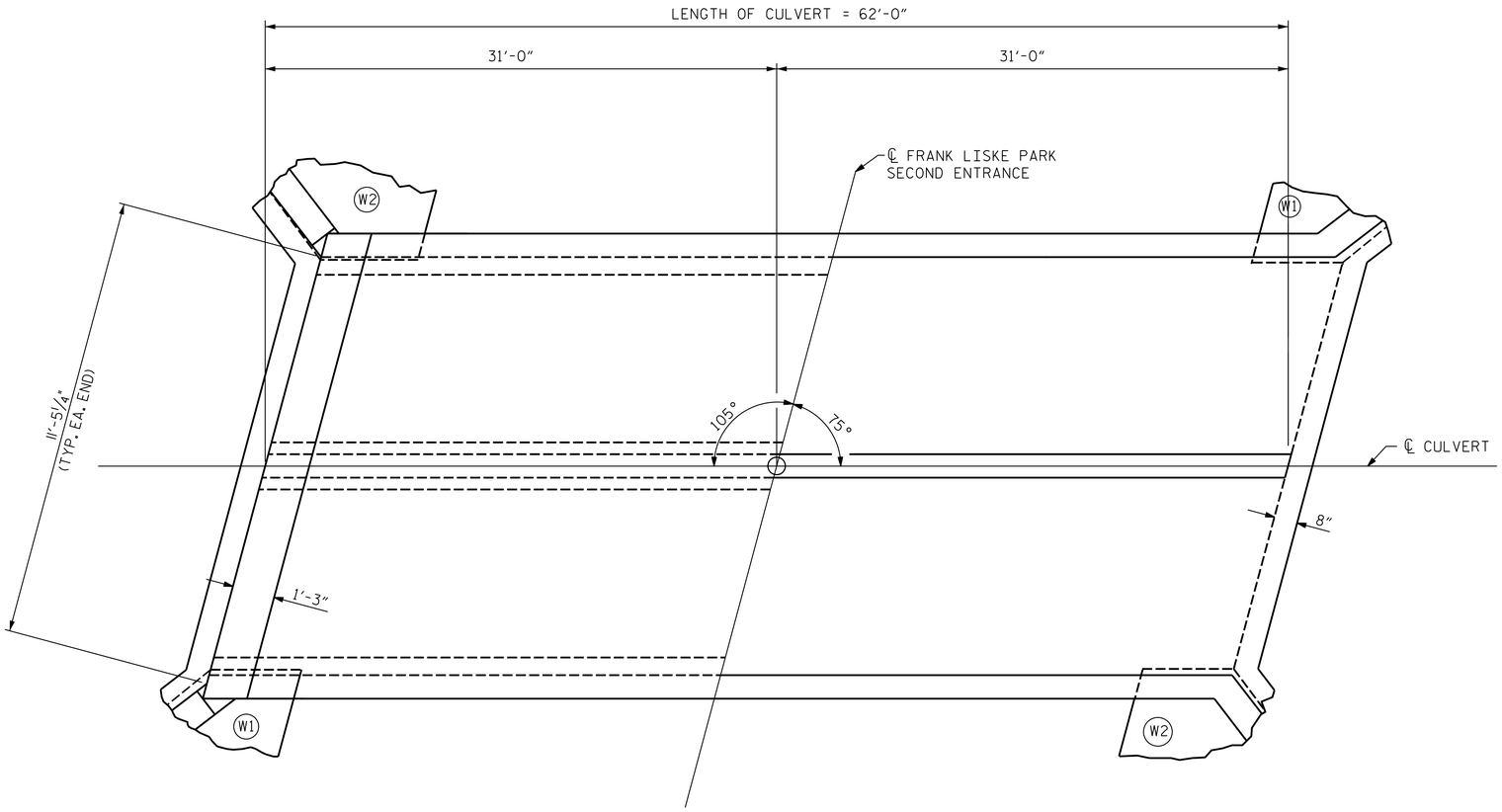


EXTERIOR WALL INTERIOR WALL

CULVERT SECTION NORMAL TO ROADWAY



RIGHT ANGLE SECTION OF BARREL



PART PLAN - ROOF SLAB PART PLAN - FLOOR SLAB

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SEALS:

PRELIMINARY
NOT FOR CONSTRUCTION

CORP. NC LICENSE: F-1320

Frank Liske Park Road Improvements

4001 STOUGH ROAD
CONCORD, NC 28027

PROJECT NO: 1726.500003
DATE: 10.1.25
REVISIONS:

SCALE:

SHEET TITLE:

DOUBLE 5 FT. X 5 FT. CONCRETE BOX CULVERT 75° SKEW

SHEET NO:

S106

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS - NO ACTION

SUBJECT:

Fire Mashal - County Employed Firefighters- Colocation

BRIEF SUMMARY:

Fire Services previously presented a proposal at the Board of Commissioners' budget retreat regarding the colocation of county-employed firefighters with the Town of Mt. Pleasant Fire Department. At that time, the Board requested that Fire Services obtain feedback from county fire chiefs during the April Chiefs Meeting and return in May for further discussion and direction. Fire Services has since gathered input from the county fire chiefs and is returning to present that feedback to the Board.

REQUESTED ACTION:

Provide input and direction based on collected county fire chief and staff input.

SUBMITTED BY:

Jacob A Thompson, Fire Marshal

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS - FOR ACTION

SUBJECT:

Boards and Committees – Active Living and Parks Commission - Appointment

BRIEF SUMMARY:

Rebecca Chasteen was appointed to fill the remainder of Tim Cook's term ending May 31st, 2026. The Active Living and Parks Commission unanimously voted to appoint her to the Midland seat as she is also the only eligible application for that district for a term ending May 31, 2029.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

Motion to appoint Rebecca Chasteen to the Active Living and Parks Commission for a three-year term ending May 31, 2029; and to include any necessary exceptions to the Appointment Policy.

SUBMITTED BY:

Byron A Haigler, Active Living and Parks Director

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1. Membership List

Active Living and Parks Commission – Membership List

Name	*Seat*	*Appointment*	*Term Expiration*	*Number of Terms*	*Number of Boards Serving*
Active Living and Parks					
Emily Baldwin	Concord Planning Area	8/18/2025	1/31/2028	1	1
Patsy Brown	Eastern Planning Area	12/18/2023	1/31/2027	2	1
Ronnie Tucker	Senior Centers Adv. Committee	Perpetual			2
	Cabarrus School Board	Perpetual			
Kenny Robinson	Central	8/18/2025	1/31/2028	2	1
Millicent Malit	Kannapolis	4/17/2023	4/30/2026	1	1
John Poole	At-Large	5/15/2023	5/31/2026	1	1
Kevin Clark	Kannpolis School Board	Perpetual			1
Rebecca Chasteen	Midland	3/16/2026	5/31/2026		1
Megan Baumgardner	Northwest Cabarrus	8/18/2025	1/31/2029	4	2
Chad Roberts	Harrisburg	8/18/2025	1/31/2028	1	1

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

May 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS – FOR ACTION

SUBJECT:

Boards and Committees - Active Living & Parks Commission - Appointment

BRIEF SUMMARY:

Millicent Malit's term for the Kannapolis seat ends April 30, 2026 and she is eligible for reappointment. The Cabarrus Active Living and Park Commission unanimously voted to reappoint her for this seat ending April 30, 2029 based on previous service.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

Motion to reappoint Millicent Malit to the Active Living and Parks Commission for a three- year term ending April 30, 2029; and to include any necessary exceptions to the Appointment Policy.

SUBMITTED BY:

Byron A Haigler, Active Living and Parks Director

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1. Membership List

Active Living and Parks Commission – Membership List

Name	*Seat*	*Appointment*	*Term Expiration*	*Number of Terms*	*Number of Boards Serving*
Active Living and Parks					
Emily Baldwin	Concord Planning Area	8/18/2025	1/31/2028	1	1
Patsy Brown	Eastern Planning Area	12/18/2023	1/31/2027	2	1
Ronnie Tucker	Senior Centers Adv. Committee	Perpetual			2
	Cabarrus School Board	Perpetual			
Kenny Robinson	Central	8/18/2025	1/31/2028	2	1
Millicent Malit	Kannapolis	4/17/2023	4/30/2026	1	1
John Poole	At-Large	5/15/2023	5/31/2026	1	1
Kevin Clark	Kannpolis School Board	Perpetual			1
Rebecca Chasteen	Midland	3/16/2026	5/31/2026		1
Megan Baumgardner	Northwest Cabarrus	8/18/2025	1/31/2029	4	2
Chad Roberts	Harrisburg	8/18/2025	1/31/2028	1	1

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS - FOR ACTION

SUBJECT:

Boards and Committees - Centralina Workforce Development Board - Appointment

BRIEF SUMMARY:

Tracie Hampton holds the Private Sector Seat #3 – HR/Professional on the Centralina Workforce Development Board whose term ends June 30, 2026 and will need filled. It is requested by the advisory board to reappoint Tracie Hampton for a two-year term ending June 30, 2028 to fill the seat.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

Motion to appoint Tracie Hampton to fill the Private Sector Seat #3 – HR/Professional on the Centralina Workforce Development Board, term expiring June 30, 2028; and to include any necessary exceptions to the Appointment Policy.

SUBMITTED BY:

David Hollars, Centralina Workforce Development Board, Executive Director

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1. Membership List

Centralina Workforce Development Board Membership List

Name	*Seat*	*Appointment*	*Term Expiration*	*Number of Terms*	*Number of Boards Serving*
Centralina Workforce Development Board					
Anna Badiru	Private Sector #1 - Manufacturing	6/17/2025	6/30/2027	2	1
Angela B. Reid	Private Sector #2 - Healthcare	6/16/2025	6/30/2027	2	2
Tracie Hampton	Private Sector #3	6/17/2024	6/30/2026	6	1
Chad Champine	Private Sector #4 - Construction	6/16/2025	6/30/2026		1

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS - FOR ACTION

SUBJECT:

Boards and Committees - Centralina Workforce Development Board - Appointment

BRIEF SUMMARY:

Chad Champine holds the Private Sector Seat #4 - Construction on the Centralina Workforce Development Board whose term will end June 30, 2026. The seat will need filled. It is requested by the advisory board to reappoint Chad Champine to fill the seat for a two-year term ending June 30, 2028.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

Motion to reappoint Chad Champine to fill the Private Sector Seat #3 - Construction on the Centralina Workforce Development Board for a two-year term expiring June 30, 2028; and to include any necessary exceptions to the Appointment Policy.

SUBMITTED BY:

David Hollars, Centralina Workforce Development Board, Executive Director

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1. Membership List

Centralina Workforce Development Board Membership List

Name	*Seat*	*Appointment*	*Term Expiration*	*Number of Terms*	*Number of Boards Serving*
Centralina Workforce Development Board					
Anna Badiru	Private Sector #1 - Manufacturing	6/17/2025	6/30/2027	2	1
Angela B. Reid	Private Sector #2 - Healthcare	6/16/2025	6/30/2027	2	2
Tracie Hampton	Private Sector #3	6/17/2024	6/30/2026	6	1
Chad Champine	Private Sector #4 - Construction	6/16/2025	6/30/2026		1

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS - FOR ACTION

SUBJECT:

BOC - Resolution Requiring Transparency on Federal and State Budget Impacts

BRIEF SUMMARY:

The following resolution commits to providing clear, accessible, and timely information to county residents about budget impacts resulting from federal and state government decisions.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

Motion to approve the resolution.

SUBMITTED BY:

On behalf of the Board

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1. Resolution

CABARRUS BOARD OF COUNTY COMMISSIONERS

RESOLUTION REQUIRING TRANSPARENCY ON FEDERAL AND STATE BUDGET IMPACTS

PREAMBLE

WHEREAS, our county government and school system rely significantly on federal and state funding streams to deliver essential services to our community; and

WHEREAS, our Cabarrus County School System serves nearly 35,000 students and relies on federal funding for special education services, Title I programs, school nutrition, and Medicaid reimbursements; and

WHEREAS, federal budgets have created uncertainty about the continuation of critical programs including the Supplemental Nutrition Assistance Program (SNAP), Women, Infants and Children (WIC) program, Medicaid, and educational funding; and

WHEREAS, federal and state government funding streams for the services we administer are becoming increasingly unpredictable, due to H.R.1 passed by the 119th U.S. Congress creating cascading impacts on state and local budgets for years to come; and

WHEREAS, the North Carolina General Assembly has not yet passed a comprehensive state budget, forcing state agencies and local governments to operate on continuation budgets that do not account for population growth, inflation, or increased service demands; and

WHEREAS, these combined federal and state budget uncertainties create cascading impacts on Cabarrus County's ability to plan, budget, and deliver services that our residents depend on; and

WHEREAS, residents have a right to understand how decisions made by federal and state governments affect their access to local services; and

WHEREAS, transparency and accountability are essential principles of democratic governance, especially during times of budgetary uncertainty;

NOW, THEREFORE, BE IT RESOLVED

That the Cabarrus Board of County Commissioners hereby commits to providing clear, accessible, and timely information to county residents about budget impacts resulting from federal and state government decisions.

Section 1: Public Transparency Requirements

The County Manager shall establish and maintain a dedicated webpage on the school system's website that provides:

1. **Clear explanations** of how federal government shutdowns and state budget delays impact school services
2. **Regular updates** on the status of federal and state funding for programs administered by the county
3. **Itemized information** showing which services may face cuts or disruptions and the government entity (federal, state, or local) responsible for funding decisions
4. **Plain-language summaries** accessible to residents of all educational backgrounds and language proficiencies
5. **Historical context** showing funding trends and the cumulative impact of budget cuts over time
6. **Contact information** for federal and state elected officials who have decision-making authority over affected programs

Section 2: Public Hearing

Within 30 days of the adoption of this resolution, the Cabarrus Board of County Commissioners shall hold a public hearing on the impacts of federal government shutdowns and state budget delays on Cabarrus County services.

The County Manager is directed to:

1. **Invite** the Cabarrus County Board of Education to participate in a joint public hearing
2. **Publicize** the hearing through multiple channels including the county website, local media, social media, email lists, and community organizations
3. **Provide** simultaneous interpretation services as needed to ensure accessibility
4. **Collect** written and oral testimony from residents, service providers, educators, healthcare workers, and other community stakeholders
5. **Document** the real-life impacts that residents of Cabarrus County are experiencing due to budget uncertainty

Section 3: Public Report

Within 90 days following the public hearing, the County Manager shall prepare and publish a comprehensive report that includes:

1. **Summary of testimony** received at the public hearing
2. **Quantification of impacts** on county residents, including:
    - Number of residents at risk of losing SNAP or WIC benefits
    - Impact on school nutrition programs
    - Medicaid service disruptions

    - Effects on public school funding and services
    - Impacts on county infrastructure and service delivery
3. **Recommendations** for interventions by city, county, state, and federal agencies to mitigate harm
4. **Advocacy priorities** for Cabarrus County's delegation to the General Assembly and U.S. Congress
5. **Action plan** for how the county will respond to various budget scenarios including recommendations of specific funded programmatic measures to offset the impacts the cuts will have on residents of Cabarrus County
6. **Public Meeting** with community leaders to discuss pressing community issues and explore ways to collaborate effectively.

Section 4: Intergovernmental Advocacy

The Board of Commissioners requests the County Manager to:

1. **Publish** an official statement opposing the federal cuts resulting from H.R.1 passed by the 119th U.S. Congress that both names the total dollar amount our school system will lose due to the bill along with the names of the NC elected officials who are responsible for the passage of this bill that takes millions of dollars from our community
2. **Transmit** this resolution to North Carolina's Governor, members of the state legislature representing Cabarrus County, and members of North Carolina's congressional delegation
3. **Advocate** for passage of a comprehensive state budget that fully funds county services and public education and ends the state's scheduled corporate and individual tax cuts
4. **Urge** state and federal officials to increase transparency about how their budget decisions affect local communities
5. **Coordinate** with other North Carolina counties facing similar challenges to amplify advocacy efforts

---

ADOPTED

This resolution was adopted by the Cabarrus Board of County Commissioners on [date] by a vote of [] in favor and [] opposed.

BOARD CHAIR: _____

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS - FOR ACTION

SUBJECT:

Consolidated Human Services Agency (CHSA) - Social Services - Home and Community Care Block Grant (HCCBG)

BRIEF SUMMARY:

The Department of Social Services serves as the lead agency for the Home and Community Care Block Grant (HCCBG). The Home and Community Care Block Grant serves Cabarrus County citizens ages 60 and older and promotes health and well-being services for qualified recipients in Cabarrus County. The recipients of the Home and Community Care Block Grant funding consist of the following community service providers: Department of Social Services, Transportation Services, Housing Home & Improvement Program, Active Living & Parks and Cabarrus Meals on Wheels. The grant is administered by the North Carolina Division of Aging and Adult Services (DAAS) through the Centralina Area Agency on Aging. We have received information that the grant funding amount for Fiscal Year 2027 will be $1,115,126 with a required 10% County match of $123,903 for a total of $1,239,029.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

Motion to approve the Home and Community Care Block Grant (HCCBG) Funding Plan for FY27.

SUBMITTED BY:

Tammy Bare, Adult and Aging Services

Suzanne Moose, Business Services Division Director

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1. HCCBG Funding Plan

FY27 HCCBG SERVICE ALLOCATIONS FOR COUNTY FINANCE DIRECTOR

Due Annually to County Finance by April 30th

COUNTY Cabarrus

Fiscal Year FY27

July 1, 2026 - June 30, 2027

Agency Name	HCCBG Service	HCCBG Allocation	Match Required	Total
Department of Social Services (012)	Adult Day Health (155)	200,723	22,303	223,026
Department of Social Services (012)	Congregate Meals (180)	146,466	16,274	162,740
Department of Social Services (012)	In-Home Aide II-PC (042)	122,664	13,629	136,293
Department of Social Services (012)	In-Home Aide III-PC (045)	111,513	12,390	123,903
Department of Human Services(011)	Medical Transportation (250)	157,618	17,513	175,131
Department of Human Services(011)	General Transportation (033)	89,210	9,912	99,122
Planning & Development (010)	Housing/Home Improvement (140)	63,767	7,085	70,852
Active Living and Parks (021)	Senior Center Operations (170)	89,210	9,912	99,122
Cabarrus Meals on Wheels (003)	Home Delivered Meals (020)	133,955	14,884	148,839
			0	0
			0	0
			0	0
			0	0
			0	0
			0	0
			0	0
			0	0
			0	0
			0	0
			0	0
			0	0
			0	0
	TOTAL	**$1,115,126**	**$123,903**	**$1,239,029**

Date Approved by HCCBG Committee: 4/17/2026	Pending Approval by Board of County Commissioners and Final Allocations

****Pending FINAL allocations.

Submitted by	Tammy Bare
Title	Adult & Aging Program Administrator
Lead Agency	Department of Social Services
Date	4/17/26
Signature	Tammy Bare

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS - FOR ACTION

SUBJECT:

Consolidated Human Services Agency (CHSA) - Transportation Title VI Policy

BRIEF SUMMARY:

Cabarrus County Transportation provides public transit and paratransit services for the residents of Cabarrus County. The State of North Carolina and the Federal Transportation Authority require a review and approval of the Title VI policy every 3 years. Title IV of the Civil Rights Act of 1964 prohibits discrimination based on race, color or national origin for programs or activities who receive Federal funding.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

Motion to Suspend the Rules of Procedure.

Motion to approve Transportation Title VI Policy.

SUBMITTED BY:

Charles Ratliff, Transportation Manager

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1. Transportation Title IV Policy

Cabarrus County Transportation Services



CABARRUS COUNTY
Health and Human Services

Cabarrus County Transportation Services Social Services | Behavioral Health | Veterans Services | Transportation

Date Adopted
5/4/2026

Title VI Program Plan

CABARRUS COUNTY
Health and Human Services
Social Services | Behavioral Health | Veterans Services | Transportation

TITLE VI PLAN REVIEW AND ADOPTION

On behalf of the Cabarrus County Board of Commissioners, I hereby acknowledge receipt of the Title VI Nondiscrimination Plan. We, the Cabarrus County Board of Commissioners, have ***reviewed and hereby adopt*** this Plan. We are committed to ensuring that all decisions are made in accordance with the nondiscrimination guidelines of this Plan, to the end the no person is excluded from participation in, denied the benefits of, or otherwise subjected to discrimination under any Cabarrus County Transportation Services and activities on the basis of race, color, national origin, sex, age, creed (religion), or disability, as protected by Title VI of the Civil Rights Act of 1964 and the nondiscrimination provisions of the Federal Transit Administration.

_____ _____

Laura Lindsey Chair to the Board of Commissioners Date

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TITLE VI NONDISCRIMINATION AGREEMENT
BETWEEN
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
AND
CABARRUS COUNTY TRANSPORTATION SERVICES

In accordance with DOT Order 1050.2A, CCTS assures the North Carolina Department of Transportation (NCDOT) that no person shall, on the ground of **race, color, national origin, sex, creed, age, or disability**, as provided by Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987 and related nondiscrimination authorities, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination or retaliation under any program or activity undertaken by Cabarrus County Transportation Services (CCTS) .

Further, Cabarrus County Transportation Services (CCTS) hereby agrees to:

1. Designate a Title VI Coordinator that has a responsible position within the organization and easy access to the County Manager of the organization.
2. Issue a policy statement, signed by the County Manager of the organization, which expresses a commitment to the nondiscrimination provisions of Title VI and related applicable statutes. The signed policy statement shall be posted and circulated throughout the organization and to the general public and published where appropriate in languages other than English. The policy statement will be re-signed when there is a change of County Manager
3. Insert the clauses of the contract language from Section 6.1 in every contract awarded by the organization. Ensure that every contract awarded by the organization's contractors or consultants also includes the contract language.
4. Process all and, when required, investigate complaints of discrimination consistent with the procedures contained within this Plan. Log all complaints for the administrative record.
5. Collect statistical data (race, color, national origin, sex, age, disability) on participants in, and beneficiaries of, programs and activities carried out by the organization.
6. Participate in training offered on Title VI and other nondiscrimination requirements. Conduct or request training for employees or the organization's subrecipients.
7. Take affirmative action, if reviewed or investigated by NCDOT, to correct any deficiencies found within a reasonable time period, not to exceed 90 calendar days, unless reasonable provisions are granted by NCDOT.
8. Document all Title VI nondiscrimination-related activities as evidence of compliance. Submit information and reports to NCDOT on a schedule outlined by NCDOT.

THIS AGREEMENT is given in consideration of, and for the purpose of obtaining, any and all federal funds, grants, loans, contracts, properties, discounts or other federal financial assistance under all programs and activities and is binding.

Authorized Signature

Date

Kelly Sifford
Interim County Manager

1.0 INTRODUCTION

Title VI of the 1964 Civil Rights Act, 42 U.S.C. 2000d provides that: "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." The broader application of nondiscrimination law is found in other statutes, executive orders, and regulations, which provide additional protections based on age, sex, creed (religion), and disability, including the 1987 Civil Rights Restoration Act, which extended nondiscrimination coverage to all programs and activities of federal-aid recipients, subrecipients, and contractors, including those that are not federally-funded (see Appendix A – Applicable Nondiscrimination Authorities).

Cabarrus County Transportation Services (CCTS) is a recipient of Federal Transit Administration (FTA) funds from the North Carolina Department of Transportation (NCDOT). Cabarrus County Transportation Services (CCTS) establishes this Title VI Nondiscrimination Plan for the purpose of complying with Title VI of the Civil Rights Act of 1964, as required by FTA Circular 4702.1B, and related requirements outlined within the FTA Certifications & Assurances, "Nondiscrimination Assurance." This document details the nondiscrimination program, policies, and practices administered by Cabarrus County Transportation Services (CCTS), and will be updated periodically to incorporate changes and additional responsibilities as they are made. This Plan will be submitted to NCDOT or FTA, upon request.

2.0 DESCRIPTION OF PROGRAMS AND SERVICES

2.1 PROGRAM(S) AND SERVICES ADMINISTERED

Cabarrus County Transportation Services (CCTS) provides response transportation options to its customers within Cabarrus County, North Carolina. Rides can be scheduled by calling the call center at 704-920-2246. Riders are approved through various applications. Cabarrus County Transportation Services (CCTS) follows the County wide Holiday schedule, which can be accessed on the website: www.cabarruscounty.us/Government/Departments/Human-Resources/Holiday-Calendar-and-Weather-Closings

Type of Service	Days of week	Times	Fare (if applicable)
Senior Trips/DOA	Monday-Friday	5am-5pm	N/A
EH	Monday-Friday	5am-5pm	N/A
Employment	Monday-Friday	5am-5pm	N/A
Cabarrus Vocational Opportunities	Monday-Friday	5am-5pm	N/A
RGP	Monday-Friday	5am-5pm	$3 per trip
Medicaid	Monday-Friday	5am-5pm	N/A
Life Sustaining	Monday-Friday	5am-12pm	N/A
Non-Life Sustaining	Closed on Holiday		N/A

2.2 FUNDING SOURCES / TABLES

For the purpose of federally assisted programs, "federal assistance" shall include:

1. grants and loans of Federal funds;
2. the grant or donation of Federal property and interest in property;
3. the detail of Federal personnel;
4. the sale and lease of, and the permission to use (on other than a casual or transient basis), Federal property or any interest in such property without consideration or at a nominal

consideration, or at a consideration which is reduced for the purpose of assisting the recipient, or in recognition of the public interest to be served by such sale or lease to the recipient; and

5. any Federal agreement, arrangement, or other contract which has, as one of its purposes, the provision of assistance.

Each FTA Formula Grant received by our system during the past year, and whether the funds were received through NCDOT or directly from FTA, is checked below

Grant Title	NCDOT	FTA	Details (i.e., purpose, frequency, and duration of receipt)
5307 (Urbanized Area Formula)	☐	☐	
5309 (b)(2) (Fixed Guideway Modernization)	☐	☐	
5310 (Transportation for Elderly Persons and Persons with Disabilities)	☐	X	Trips for senior and persons with disabilities
5311 (Formula Grants for Other than Urbanized Areas)	X	☐	Admin funds
5311 (b)(3) (Rural Transit Assistance)	☐	☐	
5303, 5304 and/or 5305 (Metropolitan & Statewide Planning)	☐	☐	
5339 (Bus and Bus Facilities Formula)	☐	☐	
Other:	X	☐	ROAP provides funding for trips for employment, RGP and EH

2.3 Decision-Making Process

The Board of Commissioner vote to accept any documents presented to them. Must pass with a majority vote. Documents are presented at the monthly work session and either accepted and put on consent agenda to be adopted at the regular meeting or added to new business agenda for the regular meeting.

Board or Committee Name	Appointed	Elected	# of Members
Board of Commissioners	☐	X	5

2.4 Title VI Coordinator

The individual below has been designated as the Title VI Coordinator for CCTS, and is empowered with enough authority and responsibility to implement the Title VI Nondiscrimination Program:

Name: Suzanne Moose
Official Title: Business Services Director
Address: 4855 Milestone Ave Kannapolis, NC 28081
Phone: 704-920-1569
Email: ehmoose@cabarrusconuty.us

Key responsibilities of the Coordinator include:

- Maintaining knowledge of Title VI and related requirements.
- Attending civil rights training when offered by NCDOT or any other regulatory agency.
- Administering the Title VI Nondiscrimination Program and coordinating implementation of this Plan.
- Training internal staff and officials on their Title VI nondiscrimination obligations.

- Disseminating Title VI information internally and to the general public, including in languages other than English.
- Presenting Title VI-related information to decision-making bodies for input and approval.
- Ensuring Title VI-related posters are prominently and publicly displayed.
- Developing a process to collect data related to race, national origin, sex, age, and disability to ensure minority, low-income, and other underserved groups are included and not discriminated against.
- Ensuring that non-elected boards and committees reflect the service area and minorities are represented.
- Implementing procedures for prompt processing (receiving, logging, investigating and/or forwarding) of discrimination complaints.
- Coordinating with, and providing information to, NCDOT and other regulatory agencies during compliance reviews or complaint investigations.
- Promptly resolving areas of deficiency to ensure compliance with Title VI nondiscrimination requirements.

2.5 Change of Title VI Coordinator and/or Head of Decision-making Body's Title or "CAO"

If Title VI Coordinator or Cabarrus County Manager changes, this document and all other documents that name the Coordinator, will immediately be updated, and an updated policy statement (and nondiscrimination agreement, if standalone) will be signed by the new Cabarrus County Manager.

2.6 Organizational Chart

CCTS currently employs 33 staff which consist of the following job categories:

- Transportation Manager
- Operations and Training Supervisor
- Driver Supervisor (2)
- Business Services Director-Title VI Coordinator
- Call Center Clerk (4)
- Fleet Support Coordinator
- Part time Driver (undisclosed number)
- Dispatchers (2)
- Drivers (21 Full time)

An organizational chart showing the Title VI Coordinator's place within the organization is in **Appendix B**.

2.7 Subrecipients

Cabarrus County Transportation Services does not have pass through funds to any other organizations and, therefore, does not have any subrecipients.

TITLE VI NONDISCRIMINATION POLICY STATEMENT

It is the policy of CCTS, as a federal-aid recipient, to ensure that no person shall, on the ground of **race, color, national origin, sex, creed (religion), age or disability**, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any of our programs and activities, as provided by Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, and all other related nondiscrimination laws and requirements.



Charles Ratliff, Transportation Manager

Date 1/14/2026

Title VI and Related Authorities

Title VI of the Civil Rights Act of 1964 (42 U.S.C. Section 2000d) provides that, "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." The 1987 Civil Rights Restoration Act (P.L. 100-259) clarified and restored the original intent of Title VI by expanding the definition of "programs and activities" to include all programs and activities of federal-aid recipients, subrecipients, and contractors, whether such programs and activities are federally assisted or not.

Related nondiscrimination authorities include, but are not limited to: U.S. DOT regulation, 49 CFR part 21, "Nondiscrimination in Federally-assisted Programs of the Department of Transportation–Effectuation of Title VI of the Civil Rights Act"; 49 U.S.C. 5332, "Nondiscrimination (Public Transportation)"; FTA Circular 4702.1B - Title VI Requirements and Guidelines for Federal Transit Administration Recipients; DOT Order 5610.2a, "Actions to Address Environmental Justice in Minority Populations and Low-Income Populations"; FTA C 4703.1 - Environmental Justice Policy Guidance For Federal Transit Administration Recipients; Policy Guidance Concerning (DOT) Recipient's Responsibilities to Limited English Proficient (LEP) Persons, 74 FR 74087; The Americans with Disabilities Act of 1990, as amended, P.L. 101-336; Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. 790; Age Discrimination Act of 1975, as amended 42 U.S.C. 6101; Title IX of the Education Amendments of 1972, 20 U.S.C. 1681; Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, 42 U.S.C. 4601; Section 508 of the Rehabilitation Act of 1973, 29 U.S.C. 794d

Implementation

- This statement will be signed by the County Manager of Cabarrus County and re-signed whenever a new person assumes that position.
- The signed statement will be posted on office bulletin boards, near the receptionist's desk, in meeting rooms, at transit stops, inside vehicles, and disseminated within brochures and other written materials.
- The *core* of the statement (signature excluded) will circulate *internally* within annual acknowledgement forms.
- The statement will be posted or provided in languages other than English, when appropriate.

3.0 TITLE VI NONDISCRIMINATION POLICY STATEMENT

- Cabarrus County Transportation Services (CCTS) operates its programs and services without regard to **race, color, national origin, sex, creed (religion), age, and disability** in accordance with Title VI of the Civil Rights Act and related statutes. Any person who believes she or he has been aggrieved by any unlawful discriminatory practice may file a complaint with Cabarrus County Transportation Services.
- For more information on Cabarrus County Transportation Services (CCTS) civil rights program, and the procedures to file a complaint, contact Suzanne Moose at 704-920-1569; email ehmoose@cabarruscounty.us; or visit our administrative office at 4855 Milestone Ave Kannapolis, NC 28081. For more information, visit www.cabarruscounty.us
- If information is needed in another language, contact 704-920-2246.
- A complainant may file a complaint directly with the North Carolina Department of Transportation by filing with the Office of Civil Rights, External Civil Rights Section, 1511 Mail Service Center, Raleigh, NC 27699-1511, Attention: Title VI Nondiscrimination Program; phone: 919-508-1808 or 800-522-0453, or TDD/TTY: 800-735-2962.
- A complainant may file a complaint directly with the Federal Transit Administration by filing a complaint with the Office of Civil Rights, Attention: Title VI Program Coordinator, East Building, 5th Floor-TCR, 1200 New Jersey Ave., SE, Washington, DC 20590.

Implementation

- The notice will be posted in its entirety on our website and in any documents and reports we distribute.
- The notice will be posted in our offices and inside our vehicles.
- Ads in newspapers and other publications shall include the following: "Cabarrus County Transportation Services operates without regard to **race, color, national origin, sex, creed (religion), age or disability.** For more information on Cabarrus County Transportation Services Title VI program or how to file a discrimination complaint, please contact Suzanne Moose at 704-920-1569; ehmoose@cabarruscounty.us."
- The statement will be posted or provided in languages other than English, when appropriate.
- See **Appendix C** for Spanish and French versions of this notice.

4.0 NOTICE OF NONDISCRIMINATION

We are committed to nondiscriminatory administration of our programs and services, organization wide. CCTS will remind employees of Title VI nondiscrimination obligations through staff training and use of the **Annual Education and Acknowledgment Form** below. The Title VI Coordinator will periodically assess program operations to ensure this policy is being followed.

Annual Education and Acknowledgement Form

Title VI Nondiscrimination Policy
(Title VI and related nondiscrimination authorities)

No person shall, on the grounds of race, color, national origin, sex, age, creed, or disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity of a Federal-aid recipient.

All employees and representatives of Cabarrus County Transportation Services (CCTS) are expected to consider, respect, and observe this policy in their daily work and duties. If any person approaches you with a civil rights-related question or complaint, please direct him or her to Suzanne Moose, 704-920-1569 or by email at ehmoose@cabarruscounty.us

In all dealings with the public, use courtesy titles (e.g., Mr., Mrs., Miss, Dr.) to address or refer to them without regard to their race, color, national origin, sex, age or disability.

Acknowledgement of Receipt of Title VI Program

I hereby acknowledge receipt of Cabarrus County Transportation Services Title VI Program and other nondiscrimination guidelines. I have read the Title VI Program and I am committed to ensuring that no person is excluded from participation in or denied the benefits of Cabarrus County Transportation Services programs, policies, services and activities on the basis of race, color, national origin, sex, age, creed (religion), or disability, as provided by Title VI of the Civil Rights Act of 1964 and related nondiscrimination statutes.

Signature

4/14/2026
Date

Implementation

- Periodically, but not more than once a year, employees and representatives will receive, review and certify commitment to the Title VI Program.
- New employees shall be informed of Title VI provisions and expectations to perform their duties, accordingly, asked to review the Title VI Program, and required to sign the acknowledgement form.
- Periodic review of operational practices and guidelines by the Title VI Coordinator to verify compliance with the Title VI Program. Maintain documents of each review on file.
- Signed acknowledgement forms and records of internal assessments will remain on file for at least three years.

5.0 PROCEDURES TO ENSURE NONDISCRIMINATORY ADMINISTRATION OF PROGRAMS AND SERVICES

We are committed to nondiscriminatory administration of our programs and services, organization wide. Cabarrus County Transportation Services will remind employees of Title VI nondiscrimination obligations through staff training and use of the **Annual Education and Acknowledgment Form** below. The Title VI Coordinator will periodically assess program operations to ensure this policy is being followed.

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Suzanne Moose — Signature

4-17-26 — Date

Implementation

- Periodically, but not more than once a year, employees and representatives will receive, review and certify commitment to the Title VI Program.
- New employees shall be informed of Title VI provisions and expectations to perform their duties, accordingly, asked to review the Title VI Program, and required to sign the acknowledgement form.
- Periodic review of operational practices and guidelines by the Title VI Coordinator to verify compliance with the Title VI Program. Maintain documents of each review on file.
- Signed acknowledgement forms and records of internal assessments will remain on file for at least three years.

6.0 CONTRACT ADMINISTRATION

Cabarrus County Transportation Services ensures all contractors will fulfill their contracts in a nondiscriminatory manner. While contractors are not required to prepare a Title VI Program, they must comply with the non-discrimination requirements of the organization to which they are contracted. Cabarrus County Transportation Services and its contractors will not discriminate in the selection and retention of contractors (at any level) or discriminate in employment practices in connection with any of our projects.

6.1 CONTRACT LANGUAGE

I. During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

(1) Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Transit Administration (FTA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

(2) Nondiscrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin, sex, age, creed (religion), low-income, limited English proficiency, or disability in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

(3) Solicitations for Subcontractors, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Nondiscrimination on the grounds of race, color, or national origin.

(4) Information and Reports: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the FTA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the FTA, as appropriate, and will set forth what efforts it has made to obtain the information.

(5) Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the FTA may determine to be appropriate, including, but not limited to:

(a) withholding payments to the contractor under the contract until the contractor complies; and/or
(b) cancelling, terminating, or suspending a contract, in whole or in part.

(6) Incorporation of Provisions: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the FTA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

II. During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following nondiscrimination statutes and authorities; including but not limited to:

Pertinent Nondiscrimination Authorities

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been

acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Nondiscrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq);
- Federal transit laws, specifically 49 U.S.C. § 5332 (prohibiting discrimination based on race, color, religion, national origin, sex (including gender identity), disability, age, employment, or business opportunity).

*The Contractor has read and is familiar with the terms above:

Contractor's Initials

4/14/2026 **Date**

Implementation

- The nondiscrimination language above (**with** initials line) will be appended to any *existing* contracts, purchase orders, and agreements that do not include it, and initialed by the responsible official of the other organization.
- The nondiscrimination language above (**without** initials line) will be incorporated as standard language before the signature page of our standard contracts, purchase orders, and agreements.
- The Title VI Coordinator will review *existing* contracts to ensure the language has been added.

6.2 Nondiscrimination Notice to Prospective Bidders

The Cabarrus County Transportation Services, in accordance with Title VI of the Civil Rights Act of 1964 and related nondiscrimination authorities, and Title 49 Code of Federal Regulations, Parts 21 and 26, hereby notifies all bidders that it will affirmatively insure that in any contact entered into pursuant to this advertisement, minority and women business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, sex, age, creed, limited English proficiency, low-income, or disability in consideration for an award.

Implementation

- The nondiscrimination language above will be included in all solicitations for bids for work or material and proposals for negotiated agreements to assure interested firms that we provide equal opportunity and do not discriminate.
- Outreach efforts will be made to minority and women-owned firms that work in requested fields and documented.
- Unless specifically required under Disadvantaged Business Enterprise (DBE) or Affirmative Action programs, all contractors will be selected without regard to their race, color, national origin, or sex.

7.0 EXTERNAL DISCRIMINATION COMPLAINT PROCEDURES

These discrimination complaint procedures outline the process used by Cabarrus County Transportation Services to process complaints of alleged discrimination filed under Title VI of the Civil Rights Act of 1964 and related nondiscrimination laws that are applicable to Cabarrus County Transportation Services programs, services, and activities. Complaints will be investigated by the appropriate authority. Upon completion of an investigation, the complainant will be informed of all avenues of appeal. Every effort will be made to obtain early resolution of complaints at the lowest level possible by informal means.

FILING OF COMPLAINTS

1. **Applicability** – These procedures apply to the beneficiaries of our programs, activities, and services, such as the members of the public and any consultants/contractors we hire.
2. **Eligibility** – Any person or class of persons who believes that he/she has been subjected to discrimination or retaliation prohibited by any of the Civil Rights authorities based upon race, color, sex, age, national origin, creed (religion) or disability, may file a written complaint. The law prohibits intimidation or retaliation of any sort. The complaint may be filed by the affected individual or a representative and must be in writing.
3. **Time Limits and Filing Options** – A complaint must be filed no later than 180 calendar days after the following:
   - The date of the alleged act of discrimination; or
   - The date when the person(s) became aware of the alleged discrimination; or
   - Where there has been a continuing course of conduct, the date on which that conduct was discontinued or the latest instance of the conduct.

   Complaints may be submitted to the following entities:
   - **Cabarrus County Transportation Services-**Suzanne Moose, 704-920-1569, ehmoose@cabarruscounty.us 4855 Milestone Ave Kannapolis, NC 28081
   - **North Carolina Department of Transportation**, Office of Civil Rights, External Civil Rights Section, 1511 Mail Service Center, Raleigh, NC 27699-1511; 984-236-1200
   - **US Department of Transportation**, Departmental Office of Civil Rights, External Civil Rights Programs Division, 1200 New Jersey Avenue, SE, Washington, DC 20590; 202-366-4070

     Federal Transit Administration, Office of Civil Rights, ATTN: Title VI Program Coordinator, East Bldg. 5th Floor – TCR, 1200 New Jersey Avenue, SE, Washington, DC 20590
   - **US Department of Justice**, Special Litigation Section, Civil Rights Division, 950 Pennsylvania Avenue, NW, Washington, DC 20530, 202-514-6255 or toll free 877-218-5228
4. **Format for Complaints –** Complaints shall be in **writing** and **signed** by the complainant(s) or a representative and include the complainant's name, address, and telephone number. Complaints received by fax or e-mail will be acknowledged and processed. Allegations received by telephone or in person will be reduced to writing, may be recorded and will be provided to the complainant for confirmation or revision before processing. Complaints will be accepted in other languages, including Braille.
5. **Discrimination Complaint Form –** The Discrimination Complaint Form is consistent with the FTA Certifications & Assurances, "Nondiscrimination Assurance."
6. **Complaint Basis –** Allegations must be based on issues involving race, color, national origin, sex, age, creed (religion) or disability. The term "basis" refers to the complainant's membership in a protected group category.

Protected Categories	Definition	Examples	Applicable Statutes and Regulations
			FTA
Race	An individual belonging to one of the accepted racial groups; or the perception, based usually on physical characteristics that a person is a member of a racial group	Black/African American, Hispanic/Latino, Asian, American Indian/Alaska Native, Native Hawaiian/Pacific Islander, White	Title VI of the Civil Rights Act of 1964; 49 CFR Part 21; 49 U.S.C. 5332(b); FTA Circular 4702.1B
Color	Color of skin, including shade of skin within a racial group	Black, White, brown, yellow, etc.	
National Origin	Place of birth. Citizenship is not a factor. Discrimination based on language or a person's accent is also covered.	Mexican, Cuban, Japanese, Vietnamese, Chinese	
Sex	Gender	Women and Men	49 U.S.C. 5332(b); Title IX of the Education Amendments of 1972
Age	Persons of any age	21-year-old person	Age Discrimination Act of 1975
Disability	Physical or mental impairment, permanent or temporary, or perceived.	Blind, alcoholic, para-amputee, epileptic, diabetic, arthritic	Section 504 of the Rehabilitation Act of 1973; Americans with Disabilities Act of 1990
Creed	Religion.	Muslim, Christian, Hindu, Atheist	49 U.S.C. 5332(b)

Complaint Processing

1. When a complaint is received, an Acknowledgment Letter and a Complainant Consent/Release Form will be mailed to the complainant within ten (10) business days by registered mail.
2. We will consult with the NCDOT Title VI Program to determine the acceptability and jurisdiction of all complaints received. (Note: If NCDOT investigates, the Title VI Program will be responsible for the remainder of this process. We will record the transfer of responsibility in our complaints log.)
3. Additional information will be requested if the complaint is incomplete. The complainant will be provided 15 business days to submit any requested information and the signed Consent Release form. Failure to do so may be considered good cause for a determination of no investigative merit.
4. Upon receipt of the requested information and determination of jurisdiction, we will notify the complainant and respondent of whether the complaint has enough merit to warrant investigation.
5. If the complaint is investigated, the notification shall state the grounds of our jurisdiction, while informing the parties that their full cooperation will be required in gathering additional information and assisting the investigator.
6. If the complaint does not warrant investigation, the notification to the complainant shall specifically state the reason for the decision.

Complaint Log

1. When a complaint is received, the complaint will be entered into the Discrimination Complaints Log with other pertinent information and assigned a **Case Number.** (Note: All complaints must be logged).
2. The complaints log will be submitted to the NCDOT's Civil Rights office during Title VI compliance reviews. (Note: NCDOT may also be requesting the complaints log during pre-grant approval processes).
3. The **Log Year(s)** since the last submittal will be entered (e.g., 2015-2018, 2017-2018, FFY 2018, or 2018) and the complaints log will be signed before submitting the log to NCDOT.
4. When reporting **no complaints**, check the **No Complaints or Lawsuits** box and sign the log.

Cabarrus County Transportation Services

DISCRIMINATION COMPLAINT FORM

Any person who believes that he/she has been subjected to discrimination based upon race, color, creed, sex, age, national origin, or disability may file a written complaint with Cabarrus County Transportation Services**, within 180 days after the discrimination occurred.**

Last Name:	First Name:	☐ Male ☐ Female

Mailing Address:	City	State	Zip

Home Telephone:	Work Telephone:	E-mail Address

Identify the Category of Discrimination:

☐ RACE ☐ COLOR ☐ NATIONAL ORIGIN ☐ SEX

☐ CREED (RELIGION) ☐ DISABILITY ☐ LIMITED ENGLISH PROFICIENCY ☐ AGE

**NOTE: Title VI bases are race, color, national origin. All other bases are found in the "Nondiscrimination Assurance" of the FTA Certifications & Assurances.*

Identify the Race of the Complainant

☐ Black ☐ White ☐ Hispanic ☐ Asian American

☐ American Indian ☐ Alaskan Native ☐ Pacific Islander ☐ Other _____

Date and place of alleged discriminatory action(s). Please include earliest date of discrimination and most recent date of discrimination.

Names of individuals responsible for the discriminatory action(s):

How were you discriminated against? Describe the nature of the action, decision, or conditions of the alleged discrimination. Explain as clearly as possible what happened and why you believe your protected status (basis) was a factor in the discrimination. Include how other persons were treated differently from you. **(Attach additional page(s), if necessary).**

The law prohibits intimidation or **retaliation** against anyone because he/she has either taken action, or participated in action, to secure rights protected by these laws. If you feel that you have been retaliated against, separate from the discrimination alleged above, please explain the circumstances below. Explain what action you took which you believe was the cause for the alleged retaliation.

Names of persons (witnesses, fellow employees, supervisors, or others) whom we may contact for additional information to support or clarify your complaint: (Attached additional page(s), if necessary).

Name	**Address**	**Telephone**
1.		
2.		
3.		
4.		

DISCRIMINATION COMPLAINT FORM

Have you filed, or intend to file, a complaint regarding the matter raised with any of the following? If yes, please provide the filing dates. Check all that apply.

- ☐ NC Department of Transportation _____
- ☐ Federal Transit Administration _____
- ☐ US Department of Transportation _____
- ☐ US Department of Justice _____
- ☐ Federal or State Court _____
- ☐ Other _____

Have you discussed the complaint with any Cabarrus County Transportation Services representative? If yes, provide the name, position, and date of discussion.

Please provide any additional information that you believe would assist with an investigation.

Briefly explain what remedy, or action, are you seeking for the alleged discrimination.

****WE CANNOT ACCEPT AN UNSIGNED COMPLAINT. PLEASE SIGN AND DATE THE COMPLAINT FORM BELOW.**

_____	_____
COMPLAINANT'S SIGNATURE	**DATE**

MAIL COMPLAINT FORM TO:
Cabarrus County Transportation Services
Attn: Suzzane Moose Title VI Officer
4855 Milestone Ave Kannapolis, NC 28081
704-920-1569, ehmoose@cabarruscounty.us

FOR OFFICE USE ONLY

Date Complaint Received: _____
Processed by: _____
Case #: _____
Referred to: ☐NCDOT ☐FTA Date Referred: _____

DISCRIMINATION COMPLAINT LOG

Log Year(s): 2022-2025

CASE NO.	COMPLAINANT NAME	RACE/ GENDER	RESPONDENT NAME	BASIS	DATE FILED	DATE RECEIVED	ACTION TAKEN	DATE INVESTIG. COMPLETED	DISPOSITION

No Complaints or Lawsuits ☒

I certify that to the best of my knowledge, the above described complaints or lawsuits alleging discrimination, or **no complaints or lawsuits** alleging discrimination, have been filed with or against Cabarrus County Transportation Services since the previous Title VI Program submission to NCDOT.

Suzanne Moose 4-17-26

Suzanne Moose, Business Services Director **Date**

Print Name and Title of Authorized Official

INVESTIGATIVE GUIDANCE

A. **Scope of Investigation** – An investigation should be confined to the issues and facts relevant to the allegations in the complaint, unless evidence shows the need to extend the issues.

B. **Developing an Investigative Plan** – It is recommended that the investigator prepares an Investigative Plan (IP) to define the issues and lay out the blueprint to complete the investigation. The IP should follow the outline below:

1. Complainant(s) Name and Address (Attorney name and address if applicable)
2. Respondent(s) Name and Address (Attorney for the Respondent(s) name and address)
3. Applicable Law(s)
4. Basis/(es)
5. Allegation(s)/Issue(s)
6. Background
7. Name of Persons to be interviewed
    a. Questions for the complainant(s)
    b. Questions for the respondent(s)
    c. Questions for witness(es)
8. Evidence to be obtained during the investigation
    a. Issue – e.g., Complainant alleges his predominantly African American community was excluded from a meeting concerning a future project which could affect the community.
        i. Documents needed: e.g., mailing list which shows all physical addresses, P.O. Box numbers, property owner names, and dates when the meeting notification was mailed; other methods used by the RPO to advertise the meeting.

C. **Request for Information** – The investigator should gather data and information pertinent to the issues raised in the complaint.

D. **Interviews** – Interviews should be conducted with the complainant, respondent, and appropriate witnesses during the investigative process. Interviews are conducted to gain a better understanding of the situation outlined in the complaint of discrimination. The main objective during the interview is to obtain information that will either support or refute the allegations.

E. **Developing an Investigative Report** – The investigator should prepare an investigative report setting forth all relevant facts obtained during the investigation. The report should include a finding for each issue. A sample investigative report is provided below.

TEMPLATE/SAMPLE **Investigative Report**

I. **COMPLAINANT(S) NAME** (or attorney for the complainant(s) – Name: Suzanne Moose, Address: 4855 Milestone Ave Kannapolis, NC 28081, Phone number: 704-920-1569

II. **RESPONDENT(S)** (or attorney for the respondent(s) – Name: Doug Hall, Address: 65 Church St S Concord, NC 28025, Phone number: 704-920-2408

III. **APPLICABLE LAW/REGULATION**
[For example, Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d); 49 CFR §21.11; 49 CFR §26.53)]

IV. **COMPLAINT BASIS/(ES)**
[For example, Race, Color, National Origin, Creed (Religion), Sex, Age, Disability)]

V. **ISSUES/ALLEGATIONS**
[Describe in logical sequence, each allegation including the prohibited basis for the alleged discriminatory conduct, (e.g., race, color, creed, sex, national origin, age, or disability) and the specific statutory or regulatory provision the allegation would violate, if proven to be true.]

Issue #1 – Complainant alleges that transit system failed to inform minority communities of rate increases.
Issue #2 – Complainant alleges that transit system has not sufficiently publicized or held public meetings to share information regarding fare increases and route changes that impacts low-income and minority citizens.

VI. **BACKGROUND**
[Provide detailed information regarding the complaint, including a historical overview of the case, including any activities or actions taken prior to accepting the complaint for investigation.]

VII. **INVESTIGATIVE PROCEDURE**
[Describe in detail, methods used to conduct the investigation, such as document requests, interviews and site visits. Include witnesses' names and addresses, documents received and/or reviewed, emails sent and received.]

VIII. **ISSUES / FINDINGS OF FACT**
[Provide a detailed description of the investigator's analysis of each allegation, based on clear and factual findings. Include specific evidence used to support your findings.]

IX. **CONCLUSION**
[State whether discrimination did or did not occur. Conclusions must be evidence-based and defensible. Test conclusions by considering all possible rebuttal arguments from the respondent and complainant. Both respondent and the complainant should be given an opportunity to confirm or rebut the assertions of the other party and your findings, but all the evidence you've presented should speak for itself.]

X. **RECOMMENDED ACTIONS**
[Outline what should be done to remedy the findings or, if necessary, provide justice for the complainant.]

APPENDIX
[Include in the Appendix any supplemental materials that support your findings and conclusion.]

8.0 SERVICE AREA POPULATION CHARACTERISTICS

To ensure that Title VI reporting requirements are met, we will collect and maintain population data on potential and actual beneficiaries of our programs and services. This section contains relevant population data for our overall service area. This data provides context for the Title VI Nondiscrimination Program and will be used to ensure nondiscrimination in public outreach and delivery of our programs and services.

8.1 Race and Ethnicity

The following table was completed using data from Census Table DP05, ACS Demographics and Housing Estimates.

Race and Ethnicity	Number	Percent
Total Population	236,133	100%
White	139,597	59.1%
Black or African American	45,644	19.3%
American Indian or Alaska Native	437	0.2%
Asian	14,549	6.2%
Native Hawaiian and Other Pacific Islander	32	0.0%
Some other Race	16,178	6.9%
Two or More Races	19,696	8.3%
HISPANIC OR LATINO (of any race)	30,081	12.7%
Mexican	13,291	5.6%
Puerto Rican	4,485	1.9%
Cuban	628	0.3%
Other Hispanic or Latino	11,677	4.9%

8.2 Age & Sex

The following table was completed using data from Census Table S0101, Age Groups and Sex.

	Number			Percent		
Age	Both sexes	Male	Female	Both sexes	Male	Female
Total Population	236,133	115,835	12,0298	100%	49.1%	50.9%
Under 5 years	14,293	7,452	6,841	6.1%	3.2%	2.9%
Under 18 years	59,433	30,552	28,881	25.2%	12.9%	12.2%
18 to 64 years	144,662	71,178	73,484	61.3%	30.1%	31.1%
65 years and over	32,038	14,105	17,933	13.6%	6.0%	7.6%
Median Age	**37.7**	**36.7**	**38.6**			

8.3 Disability

The following table was completed using data from Census Table S1810, Disability Characteristics:

Subject	Total		With a Disability		Percent with a Disability	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Total civilian noninstitutionalized population	234403	222	26234	1517	11.2	0.6
Population under 5 years	14293	53	33	42	0.2	0.3
Population 5 to 17 years	45072	74	2242	505	5.0	1.1
Population 18 to 64 years	143686	237	2113	385	1.5	0.3
Population 65 years and over	31352	74	4378	543	14.0	1.7
SEX						
Male	114890	187	12502	991	10.9	0.9
Female	119513	188	13732	1066	11.5	0.9
RACE AND HISPANIC OR LATINO ORIGIN						
White	138573	1315	17791	1187	12.8	0.9
Black or African American	45071	1598	4890	741	10.8	1.6
American Indian and Alaska Native	429	249	61	49	14.2	11.6
Asian	14524	444	564	224	3.9	1.5
Native Hawaiian and Other Pacific Islander	32	39	6	21	18.8	49.3
Some other Race	16168	2086	1405	471	8.7	2.5
Two or more races	19606	1998	1517	386	7.7	1.9
Hispanic or Latino	30003	54	2240	537	7.5	1.8

8.4 POVERTY

The following table was completed using data from Census Table S1701, Poverty Status in the Past 12 Months:

Subject	Total		Below poverty level		Percent below poverty level	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Population for whom poverty status is determined	234099	253	21707	2059	9.3	0.9
AGE						
Under 18	58823	264	7671	1547	13.0	2.6
18 to 64	150115	859	11624	2239	7.7	1.5
65 years and over	31352	74	2895	490	9.2	1.6
SEX						
Male	114813	199	9437	1332	8.2	1.2
Female	119286	238	12270	1046	10.3	0.9
RACE AND HISPANIC OR LATINO ORIGIN						
White	138457	1368	10455	1263	7.6	0.9
Black or African American	45049	1666	5466	1289	12.1	2.8
American Indian and Alaska Native	429	249	288	230	67.1	28.2
Asian	14544	454	204	200	1.4	1.4
Native Hawaiian and Other Pacific Islander	32	39	21	34	65.6	45.6
Some other Race	15996	2043	2681	1148	16.8	6.3
Two or more races	19592	1994	2592	806	13.2	3.9
Hispanic or Latino	29844	175	4522	1344	15.2	4.5
RACE AND HISPANIC OR LATINO ORIGIN						
All individuals below:						
50 percent of poverty level	10479	1697	(X)	(X)	(X)	(X)
125 percent of poverty level	30353	2217	(X)	(X)	(X)	(X)
150 percent of poverty level	38635	2793	(X)	(X)	(X)	(X)
185 percent of poverty level	49368	3408	(X)	(X)	(X)	(X)
200 percent of poverty level	54456	3447	(X)	(X)	(X)	(X)

8.5 Household Income

The following table was completed using data from Census Table S1901, Income in the Past 12 Months (In 2024 Inflation-Adjusted Dollars):

Subject	Households	
	Estimate	Margin of Error +/-
Total	84246	966
Less than $10,000	4.2	0.7
$10,000 to $14,999	2.0	0.5
$15,000 to $24,999	5.5	0.7
$25,000 to $34,999	5.8	0.9
$35,000 to $49,999	9.0	0.9
$50,000 to $74,999	15.9	1.2
$75,000 to $99,999	13.9	1.1
$100,000 to $149,999	18.7	1.3
$150,000 to $199,999	10.5	0.9
$200,000 or more	14.6	1.2
Median income (dollars)	89005	3534
Mean income (dollars)	115945	3573

8.6 Limited English Proficiency Populations

LANGUAGE SPOKEN AT HOME	Estimate	Margin of Error	Percent of Population	Margin of Error
Total (population 5 years and over)	221,840	+/-53	94.9%	+/- 0.8%
Speak Only English	185,032	+/-1741	83.4%	+/- 0.8%
Spanish or Spanish Creole:	22,028	+/-1,383	9.9%	+/- 0.6%
Speak English "very well"	13,385	+/-1327	6.0%	+/- 4.8%
Speak English "less than very well"	8643	+/- 1214	3.9%	+/- 4.8%

8.7 Population Locations

Federal-aid recipients are required to identify the characteristics and locations of populations they serve, particularly by race/ethnicity, poverty and limited English proficiency. We will document this narratively or

through maps that overlay boundaries and demographic features on specific communities, and provide this information to NCDOT, upon request.

9.0 TITLE VI EQUITY ANALYSES (AND ENVIRONMENTAL JUSTICE ASSESSMENTS)

Title VI Equity Analyses. In accordance with FTA Circular 4702.1B, a Title VI equity analysis will be conducted whenever we construct a facility, such as a vehicle storage facility, maintenance facility, or operation center. The equity analysis will be conducted during the planning stage, with regard to the location of the facility, to determine if the project could result in a disparate impact to minority communities based on race, color or national origin. Accordingly, we will look at various alternatives before selecting a site for the facility. Project-specific demographic data on potentially affected communities and their involvement in decision-making activities will be documented. Title VI Equity Analyses will remain on file indefinitely, and copies will be provided to NCDOT, upon request, during compliance reviews or complaint investigations.

Environmental Justice Analyses. As required by FTA C 4703.1, environmental justice (EJ) analyses will be conducted to determine if our programs, policies, or activities will result in disproportionately high and adverse human health and environmental effects on minority populations and low-income populations. EJ applies to our projects, such as when we construct or modify a facility, and our policies, such as when there will be a change in service, amenities or fares. Thus, we will look at various alternatives and seek input from potentially affected communities before making a final decision. Demographic data will be collected to document their involvement in the decision-making process. EJ analyses will remain on file indefinitely, and copies will be provided to NCDOT, upon request, during compliance reviews or complaint investigations.

10.0 PUBLIC INVOLVEMENT

10.1 Introduction

Effective public involvement is a key element in addressing Title VI in decision-making. This **Public Participation Plan** describes how Cabarrus County Transportation Services will disseminate vital agency information and engage the public. We will seek out and consider the input and needs of interested parties and groups traditionally underserved by transportation systems who may face challenges accessing our services, such as minority and limited English proficient (LEP) persons. Underlying these efforts is our commitment to determining the most effective outreach methods for a given project or population.

General public involvement practices will include:

- Expanding traditional outreach methods use of social media and newspapers to post public hearing for grant requirements.
- Providing for early, frequent and continuous engagement by the public.
- Use of social media and other resources as a way to gain public involvement.
- Coordinating with community- and faith-based organizations such as the Hispanic Liaison, educational institutions, and other entities to implement public engagement strategies that reach out specifically to members of affected minority and/or LEP communities.
- Providing opportunities for public participation through means other than written communication, such as personal interviews or use of audio or video recording devices to capture oral comments.
- Considering radio, television, or newspaper ads on stations and in publications that serve LEP populations. Outreach to LEP persons could also include audio programming available on podcasts.

10.2 Public Notification

Passengers and other interested persons will be informed of their rights under Title VI and related authorities with regard to our program. The primary means of achieving this will be posting and disseminating the policy statement and notice as stipulated in Sections 3.0 and 4.0, respectively. Additional measures may include verbally announcing our obligations and the public's rights at meetings, placing flyers at places frequented by targeted populations, and an equal opportunity tag-on at the end of radio announcements. The method of notification will be determined through an initial screening of the area.

10.3 Dissemination of Information

Information on Title VI and other programs will be crafted and disseminated to employees, contractors and subrecipients, stakeholders, and the general public. Public dissemination efforts may vary depending on factors present, but will generally include: posting public statements setting forth our nondiscrimination policy in eye-catching designs and locations; placing brochures in public places, such as government offices, transit facilities, and libraries; having nondiscrimination language within contracts; including nondiscrimination notices in meeting announcements and handouts; and displaying our Notice of Nondiscrimination at all our public meetings.

At a minimum, nondiscrimination information will be disseminated on our website and on posters in conspicuous areas at our office(s). Project-related information and our most current Title VI-related information will be maintained online.

10.4 Meetings and Outreach

There is no one-size-fits-all approach to public involvement. A variety of comprehensive and targeted public participation methods will be used to facilitate meaningful public involvement. Methods for engaging stakeholders and target audiences, including traditionally underserved and excluded populations (i.e., minorities, youth, low-income, the disabled, etc.) will include the following:

Public Relations and Outreach

Public relations and outreach (PRO) strategies aim to conduct well-planned, inclusive and meaningful public participation events that foster good relations and mutual trust through shared decision-making with the communities we serve.

- We will seek out and facilitate the involvement of those potentially affected.
- Public events will aim to be collaborative, fun, and educational for all, rather than confrontational and prescriptive.
- Media plans will typically involve multiple channels of communication like mailings, radio, TV, and newspaper ads.
- Abstract objectives will be avoided in meeting announcements. Specific "attention-grabbing" reasons to attend will be used, such as "Help us figure out how to relieve congestion on [corridor name]" or "How much should it cost to ride the bus? Let us know on [date]."
- Efforts will be made to show how the input of participants can, or did, influence final decisions.
- We will do our best to form decision-making committees that look like and relate to the populations we serve.
- We will seek out and identify community contacts and partner with local community- and faith-based organizations that can represent, and help us disseminate information to, target constituencies.
- Demographic data will be requested during public meetings, surveys, and from community contacts and committee members.

Public Meetings

"Public meeting" refers to any meeting open to the public, such as hearings, charrettes, open house and board meetings.

- Public meetings will be conducted at times, locations, and facilities that are convenient and accessible.
- Meeting materials will be available in a variety of predetermined formats to serve diverse audiences.
- An assortment of advertising means may be employed to inform the community of public meetings.
- Assistance to persons with disabilities or limited English proficiency will be provided, as required.

Small Group Meetings

A small group meeting is a targeted measure where a meeting is held with a specific group, usually at their request or consent. These are often closed meetings, as they will typically occur on private property at the owner's request.

- If it is determined that a targeted group has not been afforded adequate opportunities to participate, the group will be contacted to inquire about possible participation methods, including a group meeting with them individually.
- Unless unusual circumstances or safety concerns exist, hold the meeting at a location of the target group's choosing.
- Share facilitation duties or relinquish them to members of the target group.
- Small group discussion formats may be integrated into larger group public meetings and workshops. When this occurs, the smaller groups will be as diverse as the participants in the room.

Community Surveying

- Opinion surveys will occasionally be used to obtain input from targeted groups or the general public on their transportation needs, the quality or costs of our services, and feedback on our public outreach efforts.
- Surveys may be conducted via telephone, door-to-door canvassing, at community fairs, by placing drop boxes in ideal locations, or with assistance from other local agencies like social services.
- Surveys will be translated into languages other than English, when appropriate.

10.5 Language Access Plan

Limited English Proficient (LEP) persons are individuals for whom English is not their primary language and who have a limited ability to read, write, speak, or understand English. These individuals reported to the U.S. Census Bureau that they speak English less than very well.

To comply with USDOT, this section of our Title VI Plan outlines the steps we will take to ensure meaningful access by LEP persons to all benefits, services and information provided under our programs and activities. A four-factor analysis was conducted to determine the LEP language groups present in our planning area and the specific language services that are needed.

Four Factor Analysis

This Four Factor Analysis is an individualized assessment that balances the following four factors:

(1) The number or proportion of LEP persons eligible to be served or likely to be encountered by a program, activity, or service of the recipient or grantee;
(2) The frequency with which LEP individuals come in contact with the program;
(3) The nature and importance of the program, activity, or service provided by the recipient to people's lives; and
(4) The resources available to the recipient and costs.

Factor #1: ***The number or proportion of LEP persons eligible to be served or likely to be encountered by the program, activity, or service of the recipient.***

Subject	Households		Speak English less than "very well"		Percent speak English less than "very well"	
	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-	Estimate	Margin of Error +/-
Population 5 years and over	221840	53	11210	1306	5.1	0.6
Speak only English	185032	1741	(X)	(X)	(X)	(X)
Speak a language other than English	36808	1739	11210	1306	30.5	3.2
SPEAK A LANGUAGE OTHER THAN ENGLISH						
Spanish	22028	1383	8643	1214	39.2	4.8
Other Indo-European languages	6429	1126	1503	461	23.4	5.6
Asian and Pacific Island languages	7010	943	885	336	12.6	4.3
Other languages	1341	505	179	169	13.3	11.1
CITIZENS 18 YEARS AND OVER						
All citizens 18 years old and over	163332	1293	3501	740	2.1	0.4
Speak only English	147561	1148	(X)	(X)	(X)	(X)
Speak a language other than English	15771	1352	3501	740	22.2	3.8
Spanish	8395	1095	2219	696	26.4	6.3
Other languages	7376	756	1282	350	17.4	4.2

Cabarrus County Transportation Services utilizes the United States Census Bureau to determine the proportion of individuals in Cabarrus County that "speak English less than very well". According to the 2024 Census, 11,210 persons in Cabarrus County report speaking English less than "very well", representing approximately 5.1% of the total population residing in the service area. CCTS meets the Title VI Safe Harbor standard for Limited English Proficiency (LEP) obligations and will take reasonable steps to provide meaningful access to services for individuals who speak English less than very well, consistent with federal guidelines. CCTS will have material in both English and Spanish. Interpreters are also available when needed.

Factor #2: ***The frequency with which LEP individuals come in contact with the program.***

Cabarrus County Transportation Services the LEP population daily in our area. We will continue to provide outreach to the LEP community through surveys and public outreach.

Factor #3: ***The nature and importance of the program, activity, or service provided by the recipient to people's lives.***

Cabarrus County Transportation Service is a very important resource to our citizens. This includes the LEP community. As we provide medical trips, dialysis trips, and work-related trips. Our service is door to door service with wheelchair accessible vehicles. All of our drivers are trained in defensive driving, CPR, First-Aid and ADA/Passenger sensitivity.

Factor #4: ***The resources available to the recipient and costs.***

CABARRUS COUNTY TRANSPORTATION HAS RESOURCES FOR THE LEP COMMUNITY. WE HOLD PUBLIC HEARING FOR YEARLY GRANTS RELATED TO TRANSPORTATION. ALL OF OUR BROCHURES COME IN BOTH ENGLISH AND SPANISH VERSIONS. TYPICAL COST IS AROUND $1500 PER YEAR.

LANGUAGE ASSISTANCE PLAN

As a result of the above four factor analysis, a Language Assistance Plan (Plan) was required. This Plan represents our commitment to ensuring nondiscrimination and meaningful access by persons who are Limited English Proficient (LEP). This Plan also details the mechanisms we will use to reach LEP persons and the language assistance services we provide. We will provide services to any person, upon request. If an individual is LEP, we will work with the individual to ensure they receive the needed transportation service. Our employees will be routinely oriented on the principles and practices of Title VI and LEP to ensure fairness in the administration of this Plan.

Language Assistance Measures

The following general language assistance measures are reasonable and achievable for our organization at this time:

- Translating public notices posted in the local paper and at stations, stops, and in vehicles into **any languages that meet the safe harbor threshold in Factor 1**.
- Vital documents—such as brochures with service times and routes—are translated into Spanish across the entire service area, and available in our facilities, doctor's offices and shopping centers.
- Making a concerted effort to inform LEP persons of available language assistance via staff, broadcast media, relationship-building with organizations, and our website.
- Posting vital bulletin board information and disseminating community surveys in various languages.
- Providing translation and interpretive services when appropriate (upon request or predetermined) at meetings.

- Determining how best to take public involvement to LEP groups directly, including through small group meetings.
- Language line translation services at our call center at 704-920-2246
- Where possible, utilizing or hiring staff who speak a language other than English and can provide competent language assistance.
    - Note: We will not ask community-based organizations (CBO) to provide, or serve as, interpreters at our meetings. Relying upon CBOs in that capacity could raise ethical concerns. If a CBO decides (on its own) to translate any materials for its constituents, or bring interpreters it trusts to our meetings, we will not object. That is their right.
- Using language identification flashcards to determine appropriate services.
- Establishing a process to obtain feedback on our language assistance measures.

Specific Measures by Language Group:

- Spanish

Written Translation and Oral Interpretation

Vital documents will be translated for each eligible LEP language group in our service area that constitutes 5% or 1,000, whichever is less, of the population of persons eligible to be served or likely to be encountered. Translated materials will be placed online and in appropriate public (or private) places accessible to LEP persons. The safe harbor provisions apply to the translation of written documents only, and do not affect the requirement to provide meaningful access to LEP individuals through competent oral interpreters where oral language services are needed and are reasonable. When appropriate, translation of any document will be communicated orally in the appropriate language.

In the event that the 5% trigger is reached for a LEP language group that is fewer than 50 persons, written notice will be provided in the primary language of that group of the right to receive competent oral interpretation of vital written materials, free of cost. The most effective method of notice, which could be an ad in the local newspaper or other publication, a radio commercial, or door hangers, will be determined in consideration of the circumstances on the ground and in coordination with LEP community contacts.

Staff Support for Language Assistance

- Agency staff (including call center staff) will be provided with a list of referral resources that can assist LEP persons with written translation and oral interpretation, including the Title VI Officer and any outside consultant contracted to provide language services. This list will be updated as needed to remain current.
- All main offices and vehicles will have on hand a supply of language assistance flashcards and materials translated into the languages of the largest LEP language groups. When encountered by an LEP person, staff (including drivers) should present the individual with an iSpeak flashcard and let them choose the language. Do not assume you know their preferred language. Drivers are permitted to seek volunteer assistance from other passengers before contacting a referral resource. Document the encounter and report it to the Title VI Coordinator.
- Training: All employees will be instructed on our procedures for providing timely and reasonable assistance to LEP persons. New employee orientation will also explain these procedures to new hires. Staff routinely encountering LEP persons by telephone or in person will receive annual refresher training. All other employees will be reminded of LEP through annual Title VI program acknowledgements (Section 5.0) and basic Title VI trainings (Section 11.0).

Project-Specific LEP Outreach

A project-specific four factor analysis will be conducted for any project or outreach event limited to a specific geographical area (i.e., the project study area or outreach area, respectively). Language

assistance will be provided in accordance with the measures already outlined, including translating written materials for each LEP language group that is 5% or 1,000, whichever is less, of the project or outreach area population.

Monitoring and Updating the LAP

Monitoring of daily interactions with LEP persons will be continuous, thus language assistance techniques may be refined at any time. This Plan will be periodically reviewed—at least annually—to determine if our assistance measures and staff training are working. Resource availability and feedback from agency staff and the general public will be factors in the evaluation and any proposed updates. Among other practices, this process will include working with LEP community contacts to determine if our employees are responding appropriately to requests made with limited English or in languages other than English, and observing how agency staff responds to requests, including observing drivers or surveying riders. To the best of our ability, we will attempt to never eliminate a successful existing LEP service. Significant LEP program revisions will be approved or adopted by our board or designated official and dated accordingly. LEP data and procedures will be reviewed and updated at least once every three years.

10.6 Demographic Request

The following form was used to collect required data on Key Community Contacts and nonelected committee members.

Cabarrus County Transportation Services is required by Title VI of the Civil Rights Act of 1964 and related authorities to record demographic information on members of its boards and committees. Please provide the following information:

Race/Ethnicity: ☐ White ☐ Black/African American ☐ Asian ☐ American Indian/Alaskan Native ☐ Native Hawaiian/Pacific Islander ☐ Hispanic/Latino ☐ Other (please specify): _____	**National Origin:** (if born outside the U.S.) ☐ Mexican ☐ Central American: _____ ☐ South American: _____ ☐ Puerto Rican ☐ Chinese ☐ Vietnamese ☐ Korean ☐ Other (please specify): _____
Gender: ☐ Male ☐ Female	**Age:** ☐ Less than 18 ☐ 45-64 ☐ 18-29 ☐ 65 and older ☐ 30-44
Disability: ☐ Yes ☐ No	
I choose not to provide any of the information requested above: ☐	

Completed forms will remain on file as part of the public record. For more information regarding Title VI or this request, please contact the Cabarrus County Transportation Services at 704-920-2246 or by email at crratliff@cabarruscounty.us

Point of contact
Suzanne Moose, Title VI Coordinator

Please sign below acknowledging that you have completed this form.

Thank you for your participation!

Name (print): _____

Signature: _____

Implementation

- Forms will be completed prior to NCDOT Title VI reviews and remain on file for three years.
- All new and existing members of appointed decision-making boards or committees will be ***required*** to complete this form for reporting purposes.
- If a member, for whatever reason, selects *"I choose not to provide any of the information requested above,"* this will be accepted as a ***completed*** form.
- If a member chooses not to provide any of the information on the form, the Title VI Coordinator will be permitted to indicate that member's race and gender, based on the Coordinator's best guess.
- Data from these forms will be used to complete the Demographic Request Table.
- Once a new member submits this form, the Demographic Request Table for the associated committee will be updated.

10.7 Key Community Contacts

Contact Name	Community Name	Interest or Affiliation	Also a Committee Member? (Y/N)
Ann Benfield	Headstart	General Transportation	yes
Mitchell Burris	Kannapolis Police	General Transportation	Yes
Judy Coble	Coltrane LIFE Center	General Transportation	Yes
Megan Shuping	CHA	General Transportation	Yes
Charles Hendrix	Citizen	General Transportation	Yes
Skip Kraft	Vocational Opportunity	General Transportation	Yes

Contact information for key community contacts is not public information and is maintained outside of this document. Any staff member who wishes to contact any individual listed above must request that information from the Title VI Coordinator.

10.8 Summary of Outreach Efforts Made Since the Last Title VI Program submission

The following format is used to document CCTS outreach efforts in reports to NCDOT. All meetings and disseminations of information capture information for the table below:

Meeting Date	Meeting Time	Meeting Purpose	Target Audience	Information Disseminated
N/A	N/A	N/A	N/A	N/A

11.0 STAFF TRAINING

All employees will receive basic Title VI training at least once every three years. New hires will receive this training within 15 days of their start date. Basic training will cover all sections of this Plan and our overall Title VI obligations. Staff may receive specialized training on how Title VI applies to their specific work areas. Those who routinely encounter the public, such as office personnel, call center staff, and vehicle drivers, will receive annual refresher training. Trainings will be provided or organized by the Title VI Coordinator and will often coincide with updates to our nondiscrimination policies and procedures. Records of staff trainings, such as agendas, sign-in sheets, copies of calendars, and certificates, will remain on file for at least three years (and in personnel files).

12.0 NONELECTED BOARDS AND COMMITTEES – BY RACE AND GENDER

The table below depicts race and gender compositions for each of our nonelected (appointed) decision-making bodies. Member names and full demographics for each committee are available, upon request.

Body	Male %	Female %	Caucasian %	African American %	Asian American %	Native American %	Other %	Hispanic %
Service Area Population								
Transit Advisory Board	53.3	47.7	91.7	8.3	0	0	0	0

Strategies for Representative Committees

Diversification goals will be provided to our non-elected boards and committees to help ensure that their membership mirrors our service area demographics, as adequately as possible. We will provide periodic updates on our outreach efforts at meetings. When there is an opening on a board or committee, we will ensure the following:

- Current members will be made aware of diversity goals and polled for nominees.
- Officials from local minority groups will be made aware of the diversity goals and polled for nominees.
- Key Contacts from LEP groups will be contacted and polled for nominees.
- A recruitment notice for a Board Member opening will be posted on our website.
- An advertisement of recruitment notice for a Board Member will be placed with the local newspaper and other publications popular with minorities and other protected groups.

13.0 RECORD-KEEPING AND REPORTS

As a subrecipient of FTA funds through NCDOT, we are required to submit a Title VI Program update to NCDOT every three years, on a schedule determined by NCDOT. Records will be kept to document compliance with the requirements of the Title VI Program. Unless otherwise specified, Title VI-related records shall be retained indefinitely. These records will be made available for inspection by authorized officials of the NCDOT and/or FTA. Reports on Title VI-related activities and progress to address findings identified during Title VI compliance reviews may also be provided, upon request. It will occasionally be necessary to update this Title VI Plan or any of its components (e.g., complaints, Public Involvement, and LEP). Updates will be submitted to NCDOT for review and approval and adopted by our Board when required.

In addition to items documented throughout this Plan, records and reports due at the time of compliance reviews or investigations may include:

Compliance Reviews

- Title VI Program Plan
- List of civil rights trainings provided or received
- Summaries from any *internal* reviews conducted
- Ads and notices for specific meetings
- Findings from reviews by any other *external* agencies
- Title VI equity analyses and EJ assessments
- Discrimination Complaints Log

Complaint Investigations

- Investigative Reports
- Discrimination complaint, as filed
- List of interviewees (names and affiliations)
- Supporting Documentation (e.g., requested items, photos taken, dates and methods of contact, etc.)

Appendix A
Applicable Nondiscrimination Authorities

During the implementation of this Title VI Program, the organization, for itself, its assignees and successors in interest, is reminded that it has agreed to comply with the following non-discrimination statutes and authorities, including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.,* 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.),* as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.),* (prohibits discrimination on the basis of age);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.P.R. parts 37 and 38;
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).
- Title VII of the Civil Rights Act of 1964 (42 U.S.C. § 2000e *et seq.,* Pub. L. 88-352), (prohibits employment discrimination on the basis of race, color, creed (religion), sex, or national origin);
- 49 CFR Part 26, regulation to ensure nondiscrimination in the award and administration of DOT-assisted contracts in the Department's highway, transit, and airport financial assistance programs;
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.),* (prohibits discrimination on the basis of sex);
- Airport and Airway Improvement Act of 1982, (49 USC § 4 71, Section 4 7123), as amended, (prohibits discrimination based on race, creed (religion), color, national origin, or sex);
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Federal transit laws, specifically 49 U.S.C. § 5332 (prohibiting discrimination based on race, color, religion, national origin, sex (including gender identity), disability, age, employment, or business opportunity).

Appendix B
Organizational Chart

Transportation

CABARRUS COUNTY
Health and Human Services
Social Services | Behavioral Health | Veterans Services | Transportation



Appendix C
NCDOT's Compliance Review Checklist for Transit

I. Program Administration (General Requirements)

Requirement: *FTA C 4702.1B – Title VI Requirements and Guidelines for FTA Recipients, Chapter III – General Requirements and Guidelines.*

Note: Every NCDOT subrecipient receiving any of the FTA Formula Grants listed above must complete this section.

Requested Items (Please attach electronic documents (.pdf, .doc, etc.) or provide links to online versions)	**Completed**
1. A copy of the recipient's *signed* NCDOT's Title VI Nondiscrimination Agreement	☐
2. Title VI Policy Statement *(signed)*	☐
3. Title VI Notice to the Public, including a list of locations where the notice is posted	☐
4. Type the name and title of your Title VI Coordinator and attach a list of their Title VI duties **Name/Title:** Suzanne Moose-Business Services Director	☒
5. Title VI Complaint Procedures (i.e., instructions to the public regarding how to file a Title VI discrimination complaint)	☒
6. Title VI Complaint Form	☒
7. List of transit-related Title VI investigations, complaints, and lawsuits (i.e., discrimination complaints log)	☒
8. Public Participation Plan, including information about outreach methods to engage traditionally underserved constituencies (e.g., minorities, limited English proficient populations (LEP), low-income, disabled), as well as a summary of outreach efforts made since the last Title VI Program submission	☒
9. Language Assistance Plan for providing language assistance to persons with limited English proficiency (LEP), based on the DOT LEP Guidance, which requires conducting four-factor analyses	☒
10. A table depicting the membership of non-elected committees and councils, the membership of which is selected by the recipient, broken down by race, and a description of the process the agency uses to encourage the participation of minorities on such committees	☒
11. A copy of board meeting minutes, resolution, or other appropriate documentation showing the board of directors or appropriate governing entity or official(s) responsible for policy decisions ***reviewed and approved*** the Title VI Program	☒
12. A description of the procedures the agency uses to ensure nondiscriminatory administration of programs and services	☒
13. **If you pass through FTA funds to other organizations**, include a description of how you monitor your subrecipients for compliance with Title VI, and a schedule for your subrecipients' Title VI Program submissions. ➢ **No Subrecipients** ☒	☐
14. A Title VI equity analysis **if you have constructed or conducted planning for a facility**, such as a vehicle storage facility, maintenance facility, operation center, etc. ➢ **No Facilities Planned or Constructed** ☒	☐
15. Copies of environmental justice assessments conducted for **any construction projects during the past three years** and, if needed based on the results, a description of the program or other measures used or planned to mitigate any identified adverse impact on the minority or low-income communities ➢ **No Construction Projects** ☒	☐

16. If the recipient has undergone a Title VI Compliance Review in the last 3 years, please indicate the year of the last review and who conducted it. **Year/Agency:**	☐

II. Transit Providers

Requirement: *FTA C 4702.1B, Chapter IV – Requirements and Guidelines for Fixed Route Transit Providers.*

Note: All NCDOT subrecipients that provide ***fixed route*** public transportation services (e.g., local, express or commuter bus; bus rapid transit; commuter rail; passenger ferry) must complete this section.

➢ **Not Applicable** ☒ **(Check this box if you do not provide *fixed route* services, and skip questions 17 and 18.** This section does not apply to you if you ***only*** provide demand response services.)

Requested Items (Please attach electronic documents (.pdf, .doc, etc.) or provide links to online versions)	**Completed**
17. Service standards **(quantitative measures)** developed for *each specific fixed route mode* that the recipient provides (standards may vary by mode) must be submitted for each of the following indicators:	
• Vehicle load for each mode *(Can be expressed as the ratio of passengers to the total number of seats on a vehicle. For example, on a 40-seat bus, a vehicle load of 1.3 means all seats are filled and there are approximately 12 standees.)*	☐
• Vehicle headway for each mode *(Measured in minutes (e.g., every 15 minutes), headway refers to the amount of time between two vehicles traveling in the same direction on a given line or combination of lines. A shorter headway corresponds to more frequent service. Service frequency is measured in vehicles per hour (e.g., 4 buses per hour).)*	☐
• On time performance for each mode *(Expressed as a percentage, this is a measure of runs completed as scheduled. The recipient must define what is considered to be "on time." Performance can be measured against route origins and destinations only, or against origins and destinations as well as specified time points along a route.)*	☐
• Service availability for each mode *(Refers to a general measure of the distribution of routes within a transit provider's service area, such as setting the maximum distance between bus stops or train stations, or requiring that a percentage of all residents in the service area be within a one-quarter mile walk of bus service.)*	☐
18. Service policies **(system-wide policies)** adopted to ensure that service design and operations practices do not result in discrimination on the basis of race, color or national origin, must be submitted for each of the following:	
• Transit amenities for each mode *(e.g., benches, shelters/canopies, printed materials, escalators/elevators, and waste receptacles. **NOTE:** Attach this information only if you have decision-making authority over siting transit amenities or you set policies to determine the siting of amenities.)*	☐
• Vehicle assignment for each mode *(Refers to the process by which transit vehicles are placed into service throughout a system. Policies for vehicle assignment may be based on the type or age of the vehicle, where age would be a proxy for condition, or on the type of service offered.)*	☐

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS - FOR ACTION

SUBJECT:

Consolidated Human Services (CHSA) - Veteran's Service Grant Budget Amendment and Fund 460 Project Ordinance

BRIEF SUMMARY:

The North Carolina Department of Military and Veteran's Affairs awarded Cabarrus County Veteran's Service a grant on February 16, 2026 in the amount of $20,000. The funds awarded to Veteran's Services are to be utilized for Technology Enhancements, Community Outreach, Staff Training, and Supplies/Service Enhancement. The grant requires Board approval for a Budget Amendment to allocate the award for Veteran's Services and an update to the Cabarrus County Small Projects Fund 460 Project Ordinance. There is no County Match.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

Motion to approve the Budget Amendment and the Cabarrus County Small Projects Fund 460 Project Ordinance

SUBMITTED BY:

Aalece Pugh, Assistant County Manager

Suzanne Moose, Business Services Division Director

BUDGET AMENDMENT REQUIRED:

Yes

ATTACHMENTS:

1.Budget Amendment

2. Project Ordinance

Budget Revision/Amendment Request

Date: 4/20/2026 **Amount:** 20,000.00

Dept. Head: Chad Gurley (prepared by Suzanne Moose) **Department:** Veteran's Service

☐ **Internal Transfer Within Department** ☐ **Transfer Between Departments/Funds** ☑ **Supplemental Request**

Cabarrus County Veteran Services was awarded a grant in amount of $20,000 on 2/16/2026 by the North Carolina Department of Military and Veteran's Affairs. There is no county match. 100% grant funded.

Fund	Indicator	Department/ Object/ Project	Account Name	Approved Budget	Increase Amount	Decrease Amount	Revised Budget
460	6	5110-6201-GPCVO	Veteran's Services Grant	15,482.00	20,000.00		35,482.00
460	9	5110-9862-GPCVO	Technology	-	7,500.00		7,500.00
460	9	5110-9301-GPCVO	Office Supplies	3,500.00	2,500.00		6,000.00
460	9	5110-9610-GPCVO	Travel and Education	-	5,000.00		5,000.00
460	9	5110-9601-GPCVO	Advertising	5,500.00	5,000.00	-	10,500.00

Budget Officer

☐ Approved

☐ Denied

Signature _____

_____

Date

County Manager

☐ Approved

☐ Denied

Signature _____

_____

Date

Board of Commissioners

☐ Approved

☐ Denied

Signature _____

_____

Date

CABARRUS COUNTY SMALL PROJECTS
CAPITAL PROJECT ORDINANCE

BE IT ORDAINED, by the Board of County Commissioners of the County of Cabarrus, North Carolina that, pursuant to Section 13.2 of Chapter 159 of the General Statutes of North Carolina, the following capital project ordinance is hereby adopted:

Section I.

A. The project authorized is for the purpose of accumulating and appropriating general fund revenues and federal and state grants funds received specifically for use by the appropriate Cabarrus County Department who has received the funds.

B. The officers of this unit are hereby directed to proceed with this capital project within the terms of the guidelines as set forth by the federal and state government, Generally Accepted Accounting Principles (GAAP) and the budget contained herein.

C. It is estimated that the following revenues will be available to complete capital projects as listed:

Board of Elections Department	
Interest on Investments	$ 34,195
Contribution from General Fund	61,484
Contribution from Capital Reserve	150,000
	$ 245,679
Register of Deeds Department:	
Register of Deeds Fees	$2,547,302
Interest on Investments	122,780
Contribution from General Fund	77,505
	$2,747,587
Veteran Services	$38,289
Community Development	
Contribution from General Fund	$54,901
Duke Power Rebate	135,402
	$190,303
Cabarrus Visitors Bureau Athletic Fund	$213,715
Soil and Water Department:	
Deferred Tax Collections	$1,085,102
Interest on Investments	1,693
Contributions and Private Donations	3,898
Contribution from General fund	86,146
EEP Contract	3,225
ADFP Grant	54,000
Drill Program Fees	22,052
Easement	275,396
Suther Farm Project	780,000
StRAP	258,798
Hill Farm Project	99,000
Creek Week	1,500
Stewardship Fund	56,971
AGZ and WILL Grant	855,825
	$3,580,706
Educational Farming	$687,000

Local Agricultural Preservation Projects:	
Contribution from General Fund	$13,801
Deferred Farm Tax Collections	3,659,410
Deferred Farm Tax Interest	829,584
Lease	39,075
Interest on Investments	318,109
	$4,859,979
TOTAL REVENUES	**$12,563,258**

D. The following appropriations are made as listed:

Board of Elections Department:	
Board of Elections Equipment and Furniture	$ 245,679
Register of Deeds Department:	
Register of Deeds Automation & Preservation	$ 2,747,587
Community Development	
Duke Rebate Projects	$190,303
Cabarrus Visitors Bureau Athletic Funds	$213,715
Soil and Water Department:	
Other Improvement Projects	$1,858,764
EEP Contract	3,225
ADFP Conservation Easement	54,000
Drill Repair & Maintenance	22,052
Suther Farm Project	780,000
StRAP	258,798
Hill Farm Project	99,000
Easement	445,396
Creek Week	1,500
Stewardship	57,971
	$3,580,706
Veteran Services	$38,289
Educational Farming	
Educational Farming (Lomax)	$ 687,000
Local Agricultural Preservation Projects:	
Other Improvement Projects	$4,859,979
TOTAL EXPENDITURES	**$11,672,044**
GRAND TOTAL – REVENUES	**$12,563,258**
GRAND TOTAL – EXPENDITURES	**$12,563,258**

Section II.

A. Special appropriations to non-profit organizations shall be distributed after the execution of an agreement which ensures that all County funds are used for statutorily permissible public purposes.

B. The County Manager or designee is hereby authorized to transfer appropriations within or between funds, or modify revenue and expenditure projections as contained herein under the following conditions:

1. The County Manager may transfer amounts between objects of expenditures and revenues within a function without limitation.

2. The County Manager may transfer amounts up to $100,000 between functions of the same fund.

3. The County Manager may transfer amounts between contingency funds which are set aside for a specific project for budgetary shortfalls or upon the appropriate approval of a change order.

4. The County Manager is authorized to transfer funds from the General Fund or Capital Reserve Fund to the appropriate fund for projects approved within the Capital Improvement Plan for the current fiscal year.

5. The County Manager may enter into and execute change orders or amendments to County construction contracts in amounts less than $90,000 when the appropriate annual budget or capital project ordinance contains sufficient appropriated but unencumbered funds.

6. The County Manager may award and execute contracts which are not required to be bid or which G.S. 143-131 allows to be let on informal bids so long as the annual budget or appropriate capital project ordinance contains sufficient appropriated but unencumbered funds for such purposes.

7. The County Manager may execute contracts with outside agencies to properly document budgeted appropriation to such agencies where G.S. 153 A-248(b), 259. 449 and any similar statutes require such contracts.

8. The County Manager may reject formal bids when deemed appropriate and in the best interest of Cabarrus County pursuant to G.S. 143-129 (a).

Section III.

This ordinance and the budget documents shall be the basis of the financial plan for the County of Cabarrus.

a. The Finance Director is hereby directed to maintain within the Capital Projects Fund sufficient detailed accounting records to satisfy the requirements of the law.

b. The Finance Director is directed to report**,** at the request of the Board, on the financial status of each project element in Section I and on the total revenues received or claimed.

c. Copies of this capital project ordinance shall be furnished to the Clerk to the Governing Board, and to the Finance Director for direction in carrying out this project.

d. At the completion of a construction project, all unrestricted excess funds are transferred to the General Fund and the portion of the Capital Project Ordinance associated with the project is closed.

Adopted this 18 day of May 2026.

CABARRUS COUNTY BOARD OF COMMISSIONERS

BY: _____
Chairperson

ATTEST:

_____
Clerk to the Board

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS – FOR ACTION

SUBJECT:

County Manager - Approval of Definitive Project Investment Agreement with North Carolina Railroad Company and RRB Beverage Operations Inc. and Definitive Project Investment Sub-agreement with RRB Beverage Operations, Inc.

BRIEF SUMMARY:

The North Carolina Railroad Company (NCRR) has a program called “NCRR Invests". That program is investing $700,000 in rail infrastructure improvements on the RRB Beverage Operations Inc. manufacturing site. Cabarrus County will act as a pass through for the funds and Cabarrus County is not supplying any funds for this infrastructure project. Cabarrus County is simply the pass through for the funds after NCRR verifies the completion of the project milestones. The project includes land preparation, track work, drainage, and signal work. County staff can provide details on both agreements, county involvement throughout the project, and narrative on pass through projects like these.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

Motion to authorize the County Manager to execute both agreements with North Carolina Railroad Company and RRB Beverage Operations Inc.

SUBMITTED BY:

Kyle D Bilafer, Assistant County Manager

Samantha Grass, Economic Development Manager, Cabarrus EDC

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1. County and RRB Agreement

2. Exhibit
3. Investment Agreement



DEFINITIVE PROJECT INVESTMENT SUBAGREEMENT

This DEFINITIVE PROJECT INVESTMENT SUBAGREEMENT ("Agreement"), effective as of _____, 2026 ("Effective Date"), is by and between the COUNTY OF CABARRUS, NORTH CAROLINA (hereinafter the "County") and RRB BEVERAGE OPERATIONS, INC. (hereinafter the "Company").

RECITALS

WHEREAS, the County seeks to promote economic development, job creation, and capital investment; and

WHEREAS, the Company is establishing a manufacturing facility in Cabarrus County, North Carolina (the "Facility"); and

WHEREAS, the project requires rail infrastructure improvements (the "Rail Project"); and

WHEREAS, pursuant to that certain Definitive Project Investment Agreement (the "DPIA") dated on even date herewith, by and between the County, the Company and the North Carolina Railroad Company ("NCRR"), the County expects to receive, in connection with the Rail Project, grant funding from NCRR in an amount up to $700,000 (the "NCRR Investment"), which NCRR Investment is conditioned under the DPIA upon Company performance; and

WHEREAS, the County shall be obligated to disburse to the Company any portion of the NCRR Investment it receives in accordance with the terms hereof; and

WHEREAS, provided the County makes any required disbursements hereunder, the parties intend that the Company shall be responsible for repayment of such disbursements if such repayment is required under the DPIA, subject to the terms and conditions hereof;

NOW, THEREFORE, the Parties agree as follows:

1. TERM

This document shall be effective as of the date of execution and through the Expiration Date (as defined in the DPIA). The obligations imposed on each of the Company and the County hereunder shall survive the termination date.

2. RAIL PROJECT

As part of the "NCRR Invests" program, NCRR has agreed to reimburse the County up to $700,000 for the actual, documented costs incurred in the design and construction of the Rail Project to be used by the Company (the "NCRR Investment").

The County and the Company entered into an "NCRR Invests" Term Sheet dated August 10, 2021, contingent upon the Company choosing North Carolina as the location for the investment in the Facility.

The Rail Project is described in the attached six exhibits referenced as EDC 1 through EDC 6. These Exhibits are incorporated fully herein by reference. This Agreement is a companion and corollary to the DPIA, which is to be executed concurrently to this Agreement and fully incorporated herein by reference. In summary, pursuant to this Agreement, (i) the County is hereby obligated to disburse any portion of the NCRR Investment it receives from NCRR under the DPIA to the Company within thirty (30) days following its receipt of such payment from NCRR, (ii) the Company shall be responsible for all Rail Project costs not covered by the NCRR Investment and (iii) the Company shall be responsible for the reimbursement of any Disbursed NCRR Investment (as defined below) in the event the County is required under the DPIA to repay the Disbursed NCRR Investment as a result of the Company's default of its obligations under the DPIA, provided the Company has received the Disbursed NCRR Investment from the County.

The Rail Project shall consist of the design and construction of the Rail Project including any land preparation, track work (ballast, ties, rail-turnouts, and engineering), drainage, signal work, and any other incidental work associated with the construction needed for a Railroad to serve the Facility. Unless otherwise agreed, all Rail Project costs over the NCRR Investment shall be borne by the Company or other parties. Moreover, no portion of the NCRR Investment shall be used to pay for administrative costs or overhead fees above the level of Rail Project construction manager.

3. DISBURSEMENT OF NCRR INVESTMENT

Within thirty (30) days following the County's receipt of any portion of the NCRR Investment (the "Disbursed NCRR Investment"), the County shall disburse such Disbursed NCRR Investment to the Company via payment instructions provided by the Company to the County (the "Disbursement").

4. PERFORMANCE REQUIREMENTS

The Company must meet all performance requirements set forth in the DPIA, pursuant to and in accordance with the terms thereof.

5. REPORTING

The Company must meet all reporting requirements set forth in the DPIA, pursuant to and in accordance with the terms thereof.

The County hereby agrees to reasonably cooperate with the Company, if and as needed, to facilitate the delivery to NCRR of any reports, invoices or other documentation required to be delivered to NCRR under the DPIA.

6. INDEMNIFICATION, DEFAULT AND CURE

The Company acknowledges that failure of the Company to meet the performance and/or reporting requirements set forth in the DPIA, may result in repayment obligations being imposed on the County with respect to the Disbursed NCRR Investment, as more particularly described in the DPIA.

To induce the County's participation in the DPIA and this Agreement, the Company will indemnify and hold harmless the County from any and all out-of-pocket costs, actual loss, claims, lawsuits arising from the failure of the Company to make the Reimbursement (as defined below), if and as required hereunder. The foregoing indemnity shall not extend to any costs, loss, claims or lawsuits ("Claims") to the extent arising from the gross negligence or willful misconduct of the County and shall not be applicable or enforceable unless and until the Disbursement is made hereunder. Further, so long as the Company makes the Reimbursement as and when required hereunder, the Company shall not be liable to the County for any Claims arising from the County's failure to reimburse the Disbursed NCRR Investment (or any portion thereof) to NCRR as and when required under the DPIA.

If the County shall fail to make the Disbursement as and when required hereunder, and such failure continues five (5) business days after the County's written notice thereof from the Company, the Company shall be entitled to pursue all rights and remedies available to it at law or in equity.

7. REMEDIES

If NCRR exercises its rights under the DPIA to require the County to reimburse the any Disbursed NCRR Investment, then, so long as the County has disbursed the Disbursed NCRR Investment to the Company in accordance with the terms hereof, the County may demand reimbursement of the Disbursed NCRR Investment from the Company, which

demand by the County shall be made within fifteen (15) days following the County's receipt of written demand for reimbursement under the DPIA and which reimbursement by the Company shall be made within thirty (30) days following the Company's receipt of a written demand from the County for same (the "Reimbursement"). In the event the Company fails to make the Reimbursement as and when required hereunder, the County may in its sole but reasonable discretion seek (i) specific performance and (ii) seek any reasonable out-of-pocket costs and expenses (including reasonable attorneys' fees) incurred by the County in the enforcement of this Agreement or incurred by the County under the DPIA.

8. INTENTIONALLY DELETED

9. INTENTIONALLY DELETED

10. RESERVED

11. GOVERNMENTAL IMMUNITY

Nothing herein shall be construed to waive the County's sovereign and governmental immunity.

12. GOVERNING LAW AND VENUE

This Agreement shall be deemed to have been formed and executed in Cabarrus County, North Carolina, regardless of the place, time or manner of execution. This Agreement shall be construed applying the laws of the State of North Carolina.

13. MISCELLANEOUS PROVISIONS

This Agreement, together with the DPIA, contains the entire agreement between the parties as to the Rail Project. Any changes to this document mut be in writing and executed by all parties.

The Company may not assign any of its responsibilities under this Agreement to any other party.

If any part of this Agreement is deemed to be unenforceable by a court of competent jurisdiction, then the remaining provisions shall continue in full force and effect.

A waiver by the County of any provision herein, or failure of the County to enforce any provision herein, shall not constitute a waiver of any of the County's rights and protections herein.

The completion of the work for the Rail Project covered by this Agreement shall be pursued as expeditiously as possible. If the work for the Rail Project specified in this Agreement is unable to be completed due to a condition of *force majeure* or other conditions beyond the reasonable control of the Company, then the Company will diligently pursue completion of the Rail Project once said conditions are no longer in effect.

If an unforeseen calamity, an Act of God, financial disaster, a condition of *force majeure* or other conditions beyond the reasonable control of the Company is the cause of the Company's failure to meet its Company Performance Requirements as set forth in the DPIA or this Agreement, then the Company may request an extraordinary modification of this Agreement from NCRR, including an extension of the term of this Agreement. The Parties agree that any decision to allow such modification shall be in the sole discretion of NCRR. Any modifications to the Company Performance Requirements or the obligation to repay provisions set forth in the DPIA may only be modified by the signed written agreement of NCRR, the County and the Company.

14. NOTICES

Any notice, request, or other communication between the Parties shall be delivered in writing, sent by first-class mail, overnight courier, and/or electronic transmission and shall be deemed given upon actual receipt by the addressee. Notice shall be addressed as follows:

If to County:

Kyle Bilafer, Assistant County Manager
Cabarrus County
P.O. Box 707
Concord, N.C. 28026

If to Company:

RRB Beverage Operations Inc
10501 North Reems Road
Waddell, AZ 85355
ATTN: Mr. Harald Krammer

If to NCRR:

North Carolina Railroad Company
2809 Highwoods Boulevard
Raleigh, North Carolina 27604
ATTN: General Counsel
corpsec@ncrr.com

IN WITNESS WHEREOF, this Agreement has been executed, in duplicate, the day and year heretofore set out, on the part of the County and the Company by authority duly given.

COUNTY
County of Cabarrus

By:_____
Name:_____
Title:_____

COMPANY
RRB Beverage Operations Inc

By:_____
Name:_____
Title:_____



CABARRUS COUNTY, NC

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RAIL
- EXISTING RAIL TO BE REMOVED
- EXISTING RAIL
- EXISTING NS RAIL
- EXISTING CONTOURS
- PROPOSED CONTOURS

LAND LEASE TABLE

LAND TO BE LEASED	0.00 AC

GENERAL NOTES

1. THE WORK FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE NORFOLK SOUTHERN (REFERRED TO AS NS FROM HEREIN) STANDARD SPECIFICATIONS FOR MATERALS AND CONSTRUCTION DATED 03.2025 AND SPECIAL PROVISIONS.
2. NS WILL FURNISH A FLAGMAN AT NO COST TO THE CONTRACTOR. THE CONTRACTOR WILL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE NS FLAGMAN.
3. THE CONTRACTOR SHALL SUBMIT TO NS A PROPOSED CONSTRUCTION SCHEDULE PRIOR TO BEGINNING WORK.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT, BUT NS DOES NOT GUARANTEE THEIR ACCURACY OF COMPLETENESS. THE CONTRACTOR SHOULD VERIFY LOCATIONS WITH THE UTILITY COMPANIES NOT LESS THAN 48 HOURS BEFORE STARTING EXCAVATION ACTIVITIES.
5. ONSITE AND GENERATED CONSTRUCTION DEBRIS IS TO BE DISPOSED OF AS NON-REGULATED SOLID WASTE IN COMPLIANCE WITH LOCAL REGULATIONS. IF SUSPECTED ENVIRONMENTAL PROBLEMS ARE ENCOUNTERED, CONTACT THE NS ENVIRONMENTAL PROTECTION DEPARTMENT TO ASSIST IN THEIR PROPER HANDLING AND REMOVAL.
6. ALL CONSTRUCTION WORK WILL BE PERFORMED IN SUCH A MANNER AS TO CONTROL EROSION AND PREVENT SEDIMENTATION FROM LEAVING THE SITE. EROSION CONTROL MEASURES AND PRACTICES SHALL BE INSTALLED PRIOR TO OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES. CONTRACTOR TO MAINTAIN ALL EROSION CONTROL MEASURES FOR THE LIFE OF THE PROJECT OR UNTIL THE SITE HAS BEEN STABILIZED.
7. NS SHALL PERFORM WORK AS SHOWN ON THE PLANS.
8. ALL RAIL JOINTS MADE IN NEW TRACK CONSTRUCTION SHALL BE MADE WITH JOINT BARS WITH 4 BOLTS PER JOINT. RAIL JOINTS SHALL BE SET UP FOR FIELD WELDS TO BE MADE BY OTHERS.
9. THE CONTRACTOR MUST TAKE ALL FIELD MEASUREMENTS NECESSARY FOR COMPLETION OF THE WORK PRIOR TO ORDERING ANY MATERIAL OR STARTING WORK.

SPECIFICATIONS & REFERENCES

1. IF THERE IS ANY CONFLICT BETWEEN AGENCIES, PLANS, ETC., THE MOST STRINGENT CRITERIA WILL APPLY.
2. IF THERE IS ANY CONFLICT BETWEEN PLANS AND SPECIFICATIONS, THE PLANS GOVERN.

UTILITY NOTES

1. CONTRACTOR SHALL COMPLY WITH THE PREPARED EROSION AND SEDIMENT CONTROL PLAN AND ALL APPLICABLE PERMIT REQUIREMENTS.
2. IF POSSIBLE, CONTRACTOR TO UTILIZE EXISTING UTILITY SERVICES ON SITE. CONTRACTOR SHALL COORDINATE ALL PROPOSED CONNECTIONS WITH THE PROPER UTILITY COMPANIES
3. CONTRACTOR IS REQUIRED TO CALL THE STATE OF NORTH CAROLINA ONE CALL SYSTEM AT 811 IN ACCORDANCE WITH NORTH CAROLINA LAW PRIOR TO STARTING CONSTRUCTION ACTIVITIES.

LandDesign.
223 NORTH GRAHAM STREET
CHARLOTTE, NC 28202
704.333.0325
WWW.LANDDESIGN.COM
NC ENG. FIRM LICENSE # C-0658

KEY MAP



SEAL

NORTH CAROLINA LANDSCAPE ARCHITECTURAL BOARD C-015 LandDesign

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 37425 CHRISTOPHER A. LEACH
12/23/2025

PROJECT

RRB CONCORD PRODUCTION & DISTRIBUTION HUB

1465 CONCORD PKWY S

CONCORD, NC

LANDDESIGN PROJ.#

1023147

REVISION / ISSUANCE

NO.	DATE	DESCRIPTION
F	2025.06.27	75% TENDER PACKAGE ADDENDUM 3
G	2025.08.15	ISSUED FOR PERMIT
H	2025.08.26	PERMIT REVISION
I	2025.09.09	NCDEQ PERMIT REVISION
J	2025.09.12	GC TENDER PACKAGE
K	2025.09.26	75% TENDER PACKAGE ADDENDUM 4
L	2025.10.21	LAND DEVELOPMENT SECOND SUBMITTAL
M	2025.10.23	GC TENDER PACKAGE ADDENDUM 02
N	2025.11.25	LAND DEVELOPMENT THIRD SUBMITTAL
O	2025.12.23	LAND DEVELOPMENT FOURTH SUBMITTAL

DESIGNED BY: LD
DRAWN BY: LD
CHECKED BY: LD

SCALE

VERT: N/A
HORZ: 1" = 200'

0 100 200 400

NORTH

SHEET TITLE

OVERALL RAIL LAYOUT

SHEET NUMBER

C9.01

RRB Onsite Rail Scope Budget (based on 75% design drawings)

?

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT	NOTES
	QUEEN CITY RAILROAD CONSTRUCTION					
10	Mobilization & General Conditions	1.00	LS	43,500.00	43,500.00	Based on current QC proposal rate
	SUBTOTAL MOBILIZATION & GENERAL CONDITIONS				**43,500.00**	
20	Remove Existing Turnouts	6.00	EA	10,000.00	60,000.00	Based on current QC proposal rate
40	Remove Existing Ballasted Track	4,380.00	TF	28.00	122,640.00	Based on current QC proposal rate
	SUBTOTAL EXISTING MATERIALS REMOVAL				**182,640.00**	
200	Install Turnouts No. 8	4.00	EA	79,500.00	318,000.00	Based on current QC proposal rate
201	Additional Ballast for No. 8 Turnout	500.00	TN	72.00	36,000.00	Based on breakout rate from QC
205	Install No. 10 Turnouts	5.00	EA	82,450.00	412,250.00	Based on current QC proposal rate
206	Additional Ballast for No. 10 Turnout	750.00	TN	72.00	54,000.00	Based on breakout rate from QC
210	Install Model WD Bumping Posts	2.00	EA	5,400.00	10,800.00	Based on current QC proposal rate
230	Install Road Crossing - Loop Road - Tub Crossing	64.00	TF	850.00	54,400.00	Based on current QC proposal rate
235	Track at Sugar Unload Building	400.00	TF	190.00	76,000.00	Based on current QC proposal rate
240	Install Ballasted Track	4,608.00	TF	209.00	963,072.00	Based on current QC proposal rate
241	Ballast at $72.00/TN and 1/2TN/TF	4,608.00	TF	36.00	165,888.00	Based on breakout rate from QC
260	Replace Existing NS lead Track	4,380.00	TF	214.00	937,320.00	Based on current QC proposal rate
261	Ballast at $72.00/TN and 1/2TN/TF	4,380.00	TF	36.00	157,680.00	Based on breakout rate from QC
270	Bond & Ground Track	400.00	TF	28.00	11,200.00	Based on current QC proposal rate

	SUBTOTAL STEEL TIE TRACK				**3,196,610.00**	
	SUBTOTAL RAIL SCOPE				**3,422,750.00**	
300	ALTERNATE - DEDUCT for M8 Steel Ties	1.00	LS	-38,000.00	-38,000.00	
310	ALTERNATE - DEDUCT for #1 Relay Rail	1.00	LS	-310,000.00	-310,000.00	
ITEM	**DESCRIPTION**	**QUANTITY**	**UNIT**	**UNIT PRICE**	**AMOUNT**	
	PARAGON					
	Removal of trees and vegetation	8988.00	TF	8.00	71,904.00	Allowance
	Removal of Ballast - push to side and use to create access road	8988.00	TF	9.00	80,892.00	Allowance
	SUBTOTAL SITEWORK				**152,796.00**	
	TOTAL FOR RAIL SCOPE				3,575,546.00	

NORTH CAROLINA
CABARRUS

NORTH CAROLINA RAILROAD COMPANY

DEFINITIVE PROJECT INVESTMENT AGREEMENT

AND

RRB BEVERAGE OPERATIONS INC

AND

COUNTY OF CABARRUS

This DEFINITIVE PROJECT INVESTMENT AGREEMENT ("Agreement"), effective as of the ___ day of April, 2026 by and between the **COUNTY OF CABARRUS** (hereinafter "Government Entity"), **RRB Beverage Operations Inc** (hereinafter "Company") and the **North Carolina Railroad Company** (hereinafter "NCRR"). All parties hereto are individually referred to as a "Party" and collectively referred to as the "Parties".

RECITALS

WHEREAS, the Government Entity desires to stimulate and develop the local economy of its region, alleviate the problems of unemployment and underemployment by creating and/or retaining jobs for its citizens, and develop its local tax base; and

WHEREAS, NCRR created the "NCRR Invests" program to partner with industries and local and state governments to facilitate industrial rail projects in North Carolina that result in job creation, capital investment, and rail use in counties throughout the State; and

WHEREAS, the Company has chosen to establish a new manufacturing facility ("Facility") at 2321 Concord Parkway South, Concord, North Carolina ("Property"); and

WHEREAS, the Company requires improvements to the lead track located on the Property and serving the Facility and construction of new spur tracks on the Property ("Rail Project") as is necessary for Norfolk Southern ("Railroad") to serve the Facility. The preliminary estimate of the Rail Project to be completed by (or at the direction of) the Company is $3,500,000; and

WHEREAS, as part of the "NCRR Invests" program, NCRR has agreed to reimburse the Government Entity up to $700,000 ("NCRR Investment") for the actual, documented costs incurred in the design and construction of the Rail Project to be used by the Company ("Rail Project Costs"); and

WHEREAS, the Government Entity and the Company entered into an "NCRR Invests" Term Sheet dated August 10, 2021, contingent upon the Company choosing North Carolina as the location for the investment in the Facility, and pursuant to that certain Definitive Project Investment Subagreement dated on even date herewith, by and between the Government Entity and the Company (the "Subagreement"), the Government Entity shall disburse the NCRR Investment to the Company to reimburse the Company for a portion of the Rail Project Costs up to an amount equal to the NCRR Investment; and

WHEREAS, the Government Entity, Company, and NCRR now desire to enter into this Agreement setting forth the business terms and conditions for the NCRR Investment.

NOW THEREFORE, the Parties hereto, each in consideration of the promises and undertakings of the other as herein provided, do hereby covenant and agree, each with the other, as follows:

1. TERM AND COMPLIANCE DEADLINE.

The term of this Agreement shall begin on 3/13/2026 (the date the agreement was fully executed; hereinafter the "Commencement Date") and shall end on 7/13/2031 ("Expiration Date") unless sooner terminated as set forth herein. The deadline for the Company to meet the Company Performance Requirements, set forth in Section 6 hereof, shall be 3/13/2031 ("Compliance Date").[1]

2. RAIL PROJECT DESCRIPTION; USE OF NCRR INVESTMENT.

The Rail Project shall consist of the design and construction of the Rail Project including any land preparation, track work (ballast, ties, rail-turnouts, and engineering), drainage, signal work, and any other incidental work associated with the construction needed for a Railroad to serve the Facility. Unless otherwise agreed, all Rail Project costs over the NCRR Investment shall be borne by the Company, Government Entity, or other parties. Moreover, no portion of the NCRR Investment shall be used to pay for administrative costs or overhead fees above the level of Rail Project construction manager.

3. RAIL PROJECT ESTIMATE AND REIMBURSEMENT TO GOVERNMENT ENTITY.

A. Rail Project concept estimate. The preliminary Rail Project conceptual and corresponding estimate are attached hereto as Exhibit A. Within thirty (30) days of execution of this Agreement, the Company (or the Government Entity on behalf of the Company) shall cause to be provided to NCRR an updated estimate and specifications for the Rail Project. In addition, the Company (or the Government Entity on behalf of the Company) shall provide a current, updated NCRR Invests Rail Project Budget which delineates the sources and uses of funds). The updated Rail Project estimate is subject to the review of NCRR Engineering prior to

[1] NTD: dates to be updated prior to execution.

construction. Within five (5) days of execution of this Agreement or within five (5) days of execution of a construction agreement, whichever is later, the Company (or the Government Entity on behalf of the Company) shall cause to be provided to NCRR a copy of the construction agreement for the Rail Project. Prior to requesting any payment from NCRR as set forth in Section 3(B) below, the Government Entity (or, where appropriate, the Company) shall cause to be provided to NCRR signed, sealed construction plans, a construction schedule, specifications, and the final, detailed engineering Rail Project estimate. All are subject to the review of NCRR Engineering.

B. Reimbursement shall be pursuant to the following procedures:

i. Invoicing. The Company (or the Government Entity on behalf of the Company) shall cause invoices to be submitted to NCRR for progress payments and/or a final payment at intervals no more frequently than thirty (30) days with the amounts based on actual costs of work completed. The Company shall send, together with such invoices, appropriate Supporting Documentation (as defined below). NCRR reimbursement of the actual, documented costs submitted with each paid invoice may also be subject to on-site inspection by NCRR Engineering. NCRR payment to the Government Entity will be made within sixty (60) days of receipt of the copies of paid invoices for costs associated with the activities described in Section 2. The payment schedule set forth in this section may be modified only upon approval of NCRR.

ii. Retainage. Notwithstanding the foregoing in Section 3(B)(i), prior to completion, NCRR will retain fifteen percent (15%) of the total NCRR Investment. This 15% retainage will be paid upon completion of the construction of the Rail Project and final inspection by NCRR Engineering. Within thirty (30) days of a request for a final inspection, NCRR Engineering shall conduct the final inspection and either approve issuance of retainage payment or inform the Company of any punch list items to be completed before approval to issue payment. For the avoidance of doubt, for purposes of this Agreement, "completion" shall mean completion of the onsite Rail Project and shall not include any offsite work to be performed in connection with the Railroad. Together with the issuance of the retainage payment, NCRR shall deliver to the Company and the Government Entity written confirmation that the Rail Project, for purposes of this Agreement, has been completed.

iii. Deadline After Completion. The Company (or the Government Entity on behalf of the Company) shall cause to be submitted all paid invoices not previously submitted, together with appropriate Supporting Documentation, for the Rail Project by no later than one hundred eighty (180) days after completion and acceptance of the work by the NCRR.

iv. Record Keeping. The Company shall retain all books, documents, papers, accounting records, and such other evidence as may be appropriate to substantiate actual costs, including but not limited to any forms supplied by NCRR, incurred under this Agreement, including, without limitation, receipts, vouchers, invoices, waivers of mechanic's and materialmen's liens by contractors and subcontractors, and certificates of the contractors ("Supporting Documentation"). The Company shall make such materials available at its office at all reasonable times during the construction period, and for three (3) years from the date of final payment for the Rail Project under this Agreement, for inspection and audit by NCRR at reasonable times during normal working hours at the location where such records are normally maintained by the Company. This provision shall survive the expiration or earlier termination of this Agreement.

4. SUBAGREEMENT CONTINGENCY.

This Agreement is contingent upon the Government Entity and the Company entering the Subagreement on even date herewith, the execution of which is a material factor in NCRR entering this Agreement.

5. MAINTENANCE, OPERATION, LIABILITY AND INSURANCE.

The maintenance, operation, liability and insurance requirements for the Rail Project shall be set forth in a separate side agreement to be entered into between or among Railroad, the Company, and any other necessary parties.

6. COMPANY PERFORMANCE REQUIREMENTS.

The Company's performance requirements include the following (RRB full campus targets are contributed to by other entities such as RBNA and Ball and any other owner or lessee of all or any portion of the Facility):

A. Job Creation – The Company shall create a minimum of 570 new, full-time jobs at the Facility (which represents 90% of the Company's job creation goal of 633 new full-time jobs) by the Compliance Date. As used in this Agreement, a "full-time job" shall mean a position that requires at least 1,600 hours of work per year and is intended to be held by one employee during the entire year, as defined by North Carolina General Statute § 105-129.81(11). A "new, full-time job" shall mean a full-time job that represents a net increase in the number of full-time employees in the Company.

B. Average Annual Wage – The total number of new, full-time jobs created as described in Section 6(A)(i) above shall pay a minimum average annual wage of $45,348 (which represents 90% of the Company's commitment to pay an average annual wage of $50,387) by the Compliance Date.

C. Capital Investment – After the Commencement Date, the Company shall invest or cause to be invested a minimum of $861,186,960 (which represents 90% of the Company's commitment to invest $947,305,656) in the Facility by the Compliance Date. As used in this Agreement, "capital investment" by the Company shall mean taxable, private investment by the Company in Business Property and Real Property in Cabarrus County. Business Property is defined as tangible personal property that is used in a business and capitalized by the taxpayer for tax purposes. Real Property is defined as land; or building, structures, or permanent fixtures to land.

D. Rail Use – The Company shall commence active use of the Rail Project by 3/2/2029[3] ("Rail Use Date"). The Company shall use the Rail Project to receive and/or distribute a minimum of 1000 rail cars over any 12-month period for the Facility by the Compliance Date.

E. Determination of Compliance. Whether the Company has fully complied with these Company Performance Requirements shall be determined by the compliance reports and letters that the Company shall submit to the NCRR Economic Development Department on or before the Expiration Date. Upon final determination of compliance, NCRR shall deliver to the Company and the Government Entity written confirmation that the Company Performance Requirements have been satisfied, completed and complied for purposes of this Agreement.

7. COMPANY COMPLIANCE REPORTING REQUIREMENTS.

The Company shall demonstrate compliance with the minimum performance standards set forth in Section 6 above by submitting the following compliance reports and letters to the NCRR Director of Economic Development.

A. Demonstration of Job Creation, Average Annual Wage and Capital Investment. On or before the Expiration Date, the Company shall submit copies of the reports required by the North Carolina Department of Commerce Job Development Investment Grant ("JDIG") or other relevant compliance reports confirming the Company has met the minimum requirements for:

a. Job Creation set forth in Section 6(A);
b. Average Annual Wage set forth in Section 6(B); and
c. Capital Investment set forth in Section 6(C).

B. Demonstration of Required Rail Service, Use, and Minimum Shipments.

[3] NTD: date to be updated prior to execution.

i. Rail Service and Use set forth in Section 6(D) – Within three (3) months of the Rail Use Date, the Company shall submit to NCRR a copy of a letter from Norfolk Southern confirming;

a. The existence of an executed commercial agreement for rail service between Norfolk Southern and the Company; and
b. The date the Rail Project is placed into service by the Company and Norfolk Southern.

ii. Minimum Rail Car Shipments set forth in Section 6(D) – On or before the Expiration Date, the Company shall submit a copy of a letter from Norfolk Southern confirming a minimum of 1000 active rail car deliveries and/or distributions to or from the Facility over any 12-month period, or a reasonable pro rata portion thereof, by the Compliance Date.

8. GOVERNMENT ENTITY REQUIREMENTS AND OBLIGATION TO REPAY.

A. NCRR Reimbursement. If the Company fails to meet any of the Company Performance Requirements for job creation, average annual wage, capital investment or rail use as and when set forth below in Section 6(A)(i) -(iv), the Government Entity shall, if required by NCRR in NCRR's sole discretion, reimburse the NCRR Investment in an amount up to one hundred percent (100%) of the total funds previously disbursed by NCRR to the Government Entity.

B. Government Entity Acknowledgment. The Government Entity acknowledges that failure of the Company to meet the performance and/or reporting requirements set forth herein may result in repayment obligation being imposed on the Government Entity. The Government Entity further acknowledges that no provision in this Agreement addresses any obligation of the Company to the Government Entity with regard to any such repayment. Such provisions are provided in the Subagreement.

C. NCRR Reimbursement Deadline. If NCRR demands in writing repayment from the Government Entity under this section for failure of the Company to meet any of the performance and/or reporting requirements described above, then the Government Entity shall reimburse NCRR within sixty (60) days of receiving a written notification of demand from NCRR. This provision expressly survives the Expiration Date.

9. TERMINATION AND MODIFICATIONS.

A. Intentionally Deleted.

B. Company Failure. Failure on part of the Company to comply substantially with any of the material provisions of this Agreement will be grounds for NCRR to withdraw

participation in the Rail Project and to seek reimbursement from the Government Entity pursuant to the terms set forth in this Agreement.

C. No Physical Construction. If physical construction of the Rail Project (actual land-disturbing activities) has not begun by the Rail Use Date, this Agreement terminates automatically as of the Rail Use Date.

D. *Force Majeure*. The completion of the work for the Rail Project covered by this Agreement shall be pursued as expeditiously as possible. If the work for the Rail Project specified in this Agreement is unable to be commenced, continued or completed due to a condition of *force majeure* or other conditions beyond the reasonable control of the Government Entity or the Company, then the Government Entity and the Company will diligently pursue completion of the Rail Project once said condition or conditions are no longer in effect.

E. Modification Request. If unforeseen calamity, an Act of God, financial disaster, a condition of *force majeure* or other conditions beyond the reasonable control of the Company is the cause of the Company's failure to meet its Company Performance Requirements as set forth in Section 6(A) above, then the Government Entity and the Company may request an extraordinary modification of this Agreement from NCRR, including an extension of the term of this Agreement. The Parties agree that any decision to allow such modification shall be in the sole discretion of NCRR. Any modifications to the Company Performance Requirements or the obligation to repay provisions set forth herein may only be modified by the signed written agreement of NCRR, the Government Entity and the Company.

10. NOTICES.

Any notice, request, or other communication among the Parties shall be delivered in writing, sent by first-class mail, overnight courier, and/or electronic transmission and shall be deemed given upon actual receipt by the addressee. Notice shall be addressed as follows:

If to Government Entity, use:
Cabarrus County
65 Church St SE
Concord, NC 28025

If to Company, use:
RRB Beverage Operations Inc
10501 North Reems Road,
Waddell, AZ, 85355
ATTN: Mr. Harald Krammer

If to NCRR, use:
North Carolina Railroad Company

2809 Highwoods Boulevard
Raleigh, North Carolina 27604
ATTN: General Counsel
corpsec@ncrr.com

11. MISCELLANEOUS.

A. Failure to Require Performance. Failure of the Government Entity, Company or NCRR at any time to require performance of any term or provision of this Agreement shall in no manner affect the rights of the Parties at a later date to enforce the same or to enforce any future compliance with or performance of any of the terms or provisions herein.

B. Conflict of Laws and Venue. This Agreement constitutes a legally enforceable contract and shall be governed and construed in accordance with the laws of the State of North Carolina. The Parties agree and submit, solely for matters concerning this Agreement, to the exclusive jurisdiction of the courts of North Carolina and agree that the only venue for any legal proceedings shall be Wake County, North Carolina. The Parties further expressly waive any objection based on forum *non-conveniens* or any objection to the venue of any such action.

C. This Agreement may be executed in one or more counterparts, each of which shall be an original, and all of which together shall be one and the same instrument.

D. If any provision of this Agreement is determined to be unenforceable, invalid or illegal, then the enforceability, validity and legality of the remaining provisions will not in any way be affected or impaired, and such provision will be deemed to be restated to reflect the original intentions of the parties as nearly as possible in accordance with applicable law.

E. This Agreement and each Party's rights and obligations hereunder shall not be assignable or delegable, in whole or in part, by any Party without the written consent of the other Parties.

[Remainder of Page Intentionally Left Blank – Signature Page Follows]

IN WITNESS WHEREOF, this Agreement has been executed, in duplicate, the day and year heretofore set out, on the part of the Government Entity, Company and NCRR by authority duly given.

GOVERNMENT ENTITY
County of Cabarrus

By:_____
Name:_____
Title:_____

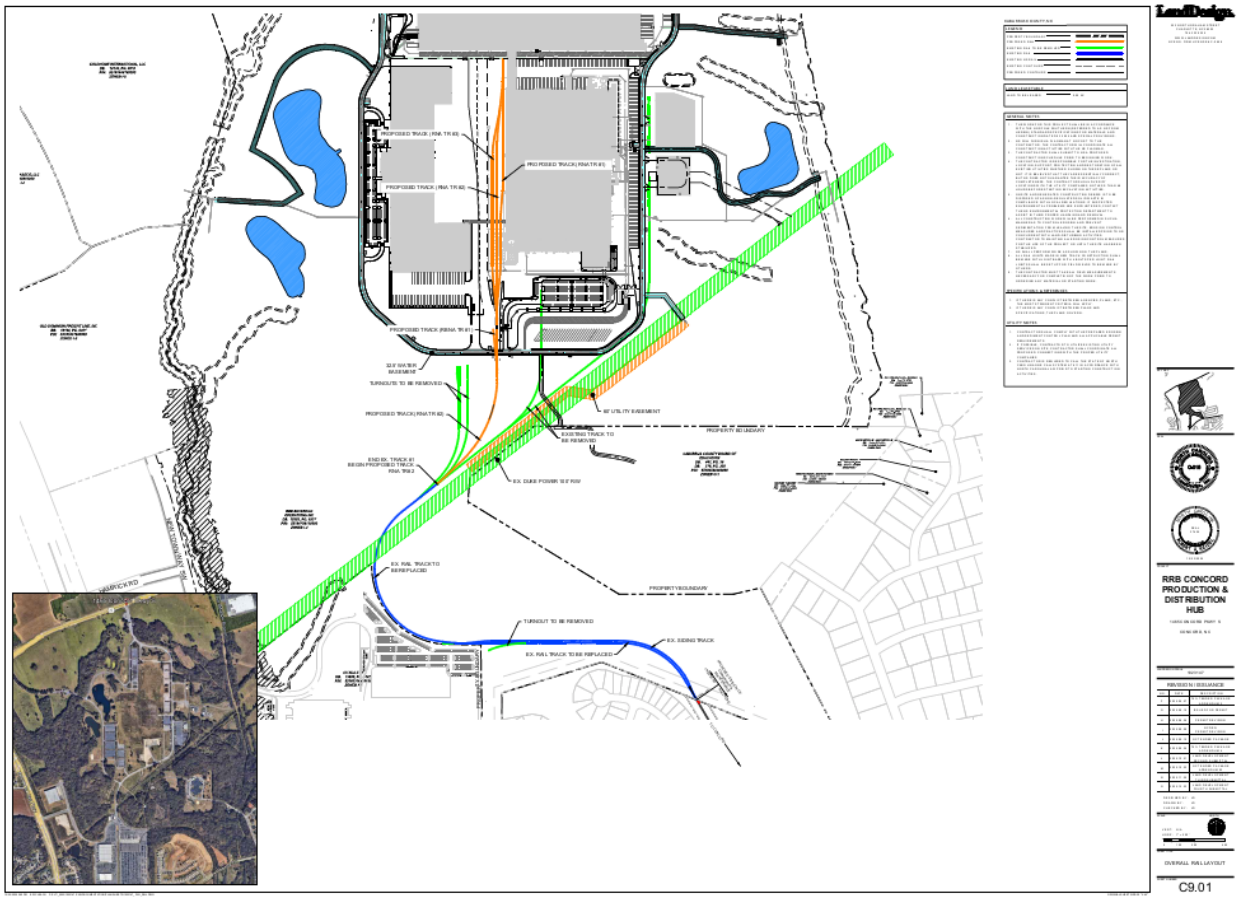
COMPANY
RRB Beverage Operations Inc

By:_____
Name:_____
Title:_____

NCRR
North Carolina Railroad Company

By:_____
Name: Carl Warren
Title: President & CEO

Exhibit A
Preliminary Rail Project Conceptual and Estimate



*The Company has delivered to Government Entity and NCRR a separate copy.

RRB Onsite Rail Scope Budget (based on 75% design drawings)

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT	NOTES
	QUEEN CITY RAILROAD CONSTRUCTION					
10	Mobilization & General Conditions	1.00	LS	43,500.00	43,500.00	Based on current QC proposal rate
	SUBTOTAL MOBILIZATION & GENERAL CONDITIONS				**43,500.00**	
20	Remove Existing Turnouts	6.00	EA	10,000.00	60,000.00	Based on current QC proposal rate
40	Remove Existing Ballasted Track	4,380.00	TF	28.00	122,640.00	Based on current QC proposal rate
	SUBTOTAL EXISTING MATERIALS REMOVAL				**182,640.00**	
200	Install Turnouts No. 8	4.00	EA	79,500.00	318,000.00	Based on current QC proposal rate
201	Additional Ballast for No. 8 Turnout	500.00	TN	72.00	36,000.00	Based on breakout rate from QC
205	Install No. 10 Turnouts	5.00	EA	82,450.00	412,250.00	Based on current QC proposal rate
206	Additional Ballast for No. 10 Turnout	750.00	TN	72.00	54,000.00	Based on breakout rate from QC
210	Install Model WD Bumping Posts	2.00	EA	5,400.00	10,800.00	Based on current QC proposal rate
230	Install Road Crossing - Loop Road - Tub Crossing	64.00	TF	850.00	54,400.00	Based on current QC proposal rate
235	Track at Sugar Unload Building	400.00	TF	190.00	76,000.00	Based on current QC proposal rate
240	Install Ballasted Track	4,608.00	TF	209.00	963,072.00	Based on current QC proposal rate
241	Ballast at $72.00/TN and 1/2TN/TF	4,608.00	TF	36.00	165,888.00	Based on breakout rate from QC
260	Replace Existing NS lead Track	4,380.00	TF	214.00	937,320.00	Based on current QC proposal rate
261	Ballast at $72.00/TN and 1/2TN/TF	4,380.00	TF	36.00	157,680.00	Based on breakout rate from QC
270	Bond & Ground Track	400.00	TF	28.00	11,200.00	Based on current QC proposal rate

	SUBTOTAL STEEL TIE TRACK				**3,196,610.00**	
	SUBTOTAL RAIL SCOPE				**3,422,750.00**	
300	ALTERNATE - DEDUCT for M8 Steel Ties	1.00	LS	-38,000.00	-38,000.00	
310	ALTERNATE - DEDUCT for #1 Relay Rail	1.00	LS	-310,000.00	-310,000.00	
ITEM	**DESCRIPTION**	**QUANTITY**	**UNIT**	**UNIT PRICE**	**AMOUNT**	
	PARAGON					
	Removal of trees and vegetation	8988.00	TF	8.00	71,904.00	Allowance
	Removal of Ballast - push to side and use to create access road	8988.00	TF	9.00	80,892.00	Allowance
	SUBTOTAL SITEWORK				**152,796.00**	
	TOTAL FOR RAIL SCOPE				3,575,546.00	

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS - FOR ACTION

SUBJECT:

County Manager - Fourth Amended and Restated Operating Agreement for the Elma C. Lomax Incubator Farm Park with Carolina Farm Stewardship Association

BRIEF SUMMARY:

Staff and Carolina Farm Stewardship Association presented to the board in February. Since that point county staff, including legal, have worked on an amendment to extend the operating agreement for the Elma C. Lomax Incubator Farm. Staff will discuss the changes to the agreement from the previous agreements.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

Motion to authorize the County Manager to negotiate and execute an operating agreement amendment for the Elma C. Lomax Incubator Farm with the Carolina Farm Stewardship Association.

SUBMITTED BY:

Kyle D Bilafer, Assistant County Manager

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1. Agreement
2. Schedule

STATE OF NORTH CAROLINA

COUNTY OF CABARRUS

FOURTH AMENDED AND RESTATED OPERATING AGREEMENT FOR THE ELMA C. LOMAX INCUBATOR FARM PARK

This FOURTH AMENDED AND RESTATED OPERATING AGREEMENT FOR THE ELMA C. LOMAX INCUBATOR FARM PARK ("Fourth Restated Agreement") is made and entered into effective the 1st day of July, 2026 by and between CABARRUS COUNTY ("County"), a body politic and political subdivision of the State of North Carolina and the CAROLINA FARM STEWARDSHIP ASSOCIATION ("CFSA"), an Internal Revenue Code §501(c)(3) recognized non-profit North Carolina corporation.

RECITALS

1. The County owns the Elma C. Lomax Research and Education Farm ("Farm Park"), which has been utilized as a unique County Park for training and developing local farmers as part of a larger local sustainability effort.

2. The Farm Park is located on a 30.601-acre tract (PIN 5549-22-1579-0000) and a one acre tract (PIN 5549-22-3844-0000) owned by the County with a physical address of 3438 and 3445 Atando Road, Concord, Cabarrus County, North Carolina.

3. The County's ownership of its Farm Park tract contains restrictions on its usage, which restrictions have been construed to include the farming activities on-going at the Farm Park.

4. CFSA is a member-based, farmer-driven, non-profit organization located in Pittsboro, North Carolina, with a mission to promote local and organic agriculture in the Carolinas, including education and support for new farmers.

5. The County and CFSA agreed to operate the Farm Park on a temporary basis, until December 31, 2014, pursuant to a Temporary Operating Agreement ("TOA").

6. On or about February 2, 2015, the County and CFSA entered into an Extension to the TOA, which extended the duration of the relationship between these parties to December 31, 2015. Further Amended and Restated Operating Agreements were then entered into between the two parties for the period of July 1, 2015 to June 30, 2016; July 1, 2016 to June 30, 2021; and July 1, 2021 to June 30, 2026.

7. CFSA desires to continue to operate the Farm Park with the ultimate objective of establishing a long-term arrangement for management and operation of the Farm Park on a permanent basis.

8. Both parties desire to amend their agreement for the maintenance and operation of the Farm Park, as more particularly described in the Terms contained below.

In consideration of these Recitals and Terms, which the parties agree are sufficient to make this Fourth Restated Agreement legally valid and binding, the parties agree as follows:

TERMS

1. Beginning July 1, 2026, CFSA shall continue to assume and exercise management and operating control of the Farm Park. Unless earlier terminated, the duration of this Fourth Restated Agreement shall be through and including June 30, 2028.

2. Such management and operation includes the continued assumption of all expenses for and obligations of the Farm Park. This includes, but is not limited to, all utilities, supplies, and maintenance.

3. Any modifications of this Agreement, or entry into any new agreement(s) with reference to the Farm Park must be approved in advance in writing by the County. Notwithstanding, so long as CFSA uses the County-approved form for leases with Farm Park farmers, the individual farmer leases do not have to be separately approved by the County. However, the CFSA shall account to the County for all sums generated by any such subleases.

4. CFSA shall be entitled to use without charge all tools, equipment, furniture and supplies owned by the County currently on hand at or being used at the Farm Park. A list is attached as Schedule A. All such items shall continue to be owned by the County. CFSA at its expense shall timely and properly maintain and/or repair all such items, which except for consumable supplies shall be returned to the County in their present condition at the conclusion of this Agreement, normal wear and tear excepted. Any items purchased by CFSA for use at the Farm Park shall remain the property of CFSA.

5. CFSA agrees that County funds received by it for operation of the Farm Park and for its programs shall only be used for the Farm Park and its programs. The County has the right to audit the books and records of the Farm Park to monitor usage of the funds.

6. CFSA at its expense shall provide coverage through insurance for all insurable risks incident to its obligations under this Fourth Restated Agreement in coverage amounts as mutually determined by CFSA and the County's Risk Manager. Cabarrus County, its agents, officers and employees shall be named as an additional insured.

7. The County Manager and CFSA Executive Director Roland McReynolds shall be the primary contacts for all matters relating to this Fourth Restated Agreement.

8. CFSA shall indemnify and hold the County harmless from any and all demands, claims, losses, damages, expenses or costs of whatever nature and kind, including any claims based on any environmental law or regulation, including attorney's fees, arising from the TOA or this Fourth Restated Agreement and/or CFSA's management or operation of the Farm Park.

9. Should CFSA at any time fail to timely pay any amount or fulfill any other obligation imposed on it by this Fourth Restated Agreement or should it curtail or cease operation or management of the Farm Park, the County may, but it is

not obligated to, upon ten (10) days prior written notice to or demand upon CFSA, declare CFSA in default of this Fourth Restated Agreement and terminate it. Upon termination, CFSA shall immediately vacate the Farm Park and turn over to the County all the County's assets.

10. The County may in its sole and absolute discretion, discontinue this Agreement with 180 days written notice to CFSA for any reason or no reason at all. Upon the termination notice end date, CFSA shall immediately vacate the Farm Park and turn over to the County all the County's assets.

11. CFSA acknowledges that the County cannot bind its future boards of commissioners regarding future funding of the Farm Park. Any payments or financial assistance from the County to CFSA are uncertain, unknown at the execution of this Agreement, and are in the sole and absolute discretion of the County.

12. Should CFSA determine that continued operation or management of the Farm Park is not financially feasible, CFSA may terminate this Fourth Restated Agreement on thirty (30) days prior written notice.

13. CFSA may not assign this Fourth Restated Agreement without the prior written consent of the County.

14. This Fourth Restated Agreement represents the entire understanding of the parties with reference to this subject matter and supersedes and replaces all prior agreements. There are no side deals or oral understandings. Any modification or amendment must be in writing and signed by both parties in order to be legally valid and effective.

IN WITNESS, the parties have executed this Fourth Restated Agreement as shown below, pursuant to authority previously given.

CABARRUS COUNTY

By:_____ Date: _____
Kelly F. Sifford
Interim County Manager

CAROLINA FARM STEWARDSHIP ASSOCIATION

By: _____ Date: _____
Roland McReynolds
Executive Director

ELMA C. LOMAX EQUIPMENT LIST - SCHEDULE A	
Insurance List -Equipment (Inland Marine)	
Tractor - Kubota - 81869 - Model L3400HST-1F 2009 -	$14,675.00
Loader - D4514 - Kubota - 2009	$3,999.00
Tiller -002508 - Phoenix FTH66G 2009	$2,250.00
Fail Mower - Phoenix - PFLL-665 2009	$2,495.00
Field Cultivator - 2009 - Lenback (model)	$760.00
Green House - Clear Span - 106317	$13,200.00
Ice machine - 993-07P -	$7,400.00
Walk In Cooler 107/14-1	$11,637.00
Tractor – Grillo G107D Tractor, 11.5hp -	$7,565.00

Property -Building

Modular Unit - built in 1999 – Sq. Footage - 1439	$97,282.00
Contents	$13,982.00

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS – FOR ACTION

SUBJECT:

County Manager - Hickory Ridge at Raging Ridge Greenway

BRIEF SUMMARY:

The Town of Harrisburg has reached out to Cabarrus County Schools regarding obtaining an easement for a walking path on Hickory Ridge Middle School property that connects to the greenway on Back Creek. The Town would like to design the path and then complete the easement documents after the construction is complete. Cabarrus County Schools has worked with the staff and have approved the general layout and process. Cabarrus County owns the property due to the deed of trust required for the financing of the project and must be the agency to grant the easement. Additionally, county staff will need to obtain a subordination agreement from the lending agency.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

Motion to approve the concept of the walking path and allow Interim County Manager to execute the necessary documents to grant the easement upon subordination of the property by the lending agency.

SUBMITTED BY:

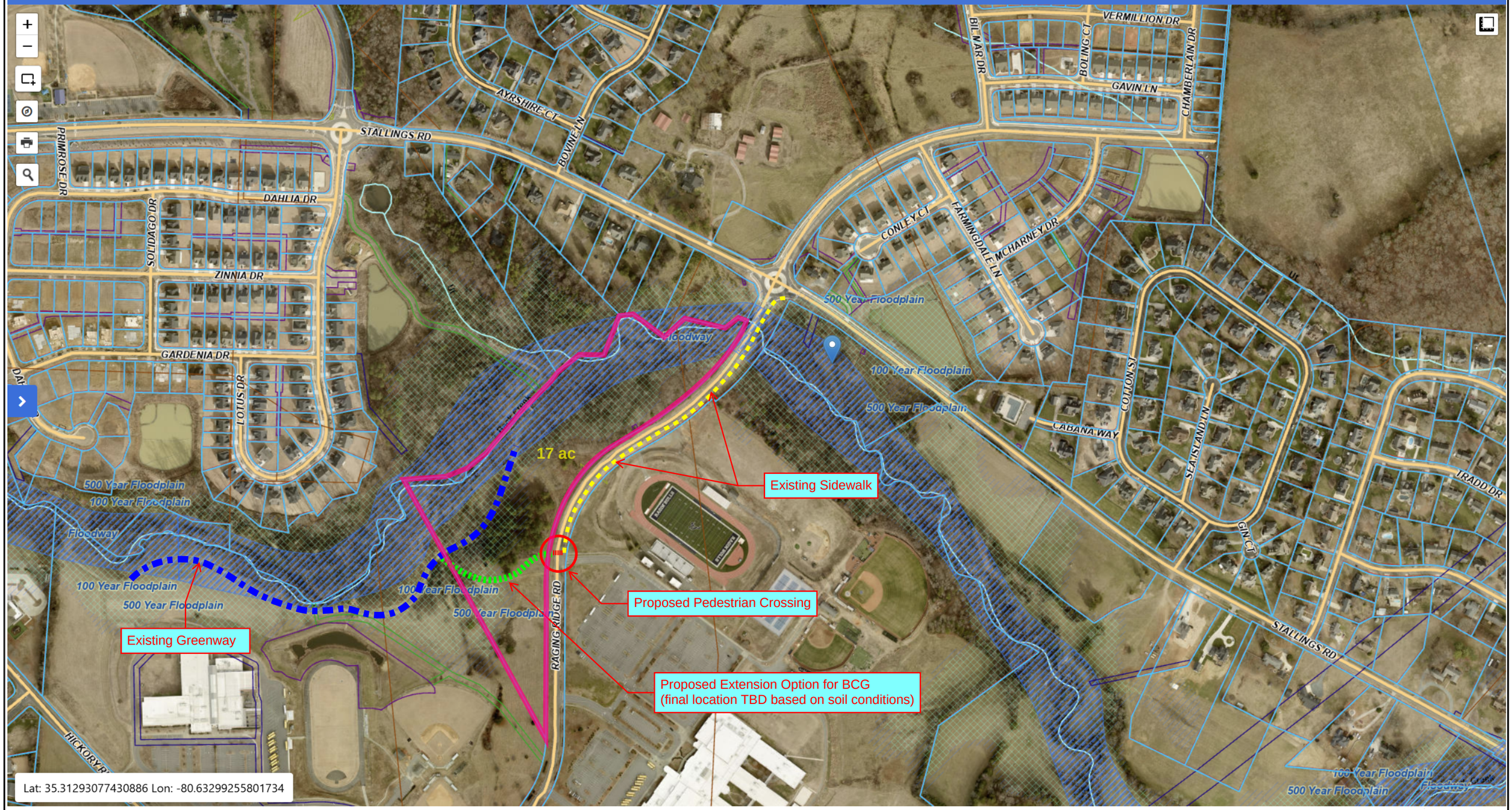
Kelly Sifford, Interim County Manager

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1. Map



1
A-1

Proposed Back-Creek Greenway Extension Area-bcc v.2

Scale: NTS

NO.	DATE	APP'D	DESCRIPTION
–	–		–

REVISIONS

OWNERS APPROVAL: | DATE: | FILE NAME:

DRN BY: BCC | CHK BY: | DATE: April 23, 2026

Cabarrus County Schools
Engaging minds. Shaping futures.

Address:
3425 STALLINGS RD HARRISBURG NC 28075

Project:
Back Creek Greenway Trail head parking

A-1 OF 1

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS - FOR ACTION

SUBJECT:

County Manager - Stephen M. Morris Behavioral Health Center Lease with Monarch

BRIEF SUMMARY:

In June 2023, the Cabarrus County Board of Commissioners approved the agreement to operate the Stephen M. Morris Behavioral Health Center (at that time just known as the Regional Behavioral Health Center) with Monarch after a request for proposal process. The agreement contains several sections dealing with the provided care responsibilities and responsibilities of the facility, but it is in fact not a true lease. In order to comply with NCGS 160A-272 and 153A-176, we must advertise by public notice and enter a formal lease.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

Motion to authorize the County Manager to negotiate and execute a lease for the Stephen M. Morris Behavioral Health Center with Monarch subject to review and revision by the County Attorney.

SUBMITTED BY:

Kyle D Bilafer, Assistant County Manager

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1. Lease Agreement
2. Draft Lease for BHC
3. Obligation Matrix

AGREEMENT FOR BEHAVIORAL HEALTH SERVICES

THIS AGREEMENT FOR BEHAVIORAL HEALTH SERVICES is made and entered into this 1st day of **NOVEMBER, 2023,** by and between **CABARRUS COUNTY** (hereinafter referred to as the "County") and **MONARCH** (hereinafter referred to as the "Provider). The County and Monarch may be individually referred to as a "Party" or collectively as "the Parties".

WITNESSETH

WHEREAS: the Parties have a mutual interest in improving behavioral health services and in integrating physical health and behavioral health and substance abuse care for Cabarrus County citizens regardless of their ability to pay; and

WHEREAS: the Parties desire to support a community-based center (the "Center") to house behavioral health operations for Cabarrus County citizens and residents from surrounding communities as more fully described in this Agreement.

THEREFORE, in consideration of mutual commitments and subject to the conditions contained herein, the Parties hereby agree to the following:

1. **County Obligations.** For the term of this Agreement, the County agrees to:

   a. Maintain and lease to the Provider, the Center for One Dollar ($1.00) per year, pursuant to a lease agreement (coterminous with this Agreement, except as otherwise specifically provided therein) that is satisfactory in form and substance to each of the Parties (the "Lease Agreement").

   b. Cover the cost of initial facility equipment such as cabinetry, furniture, fixtures, and medical equipment for the Center. Provider shall furnish and install at its expense any replacements, of same quality and safety, of such equipment over time as reasonably needed (unless such repairs or replacements are required due to the County, in which case the County shall be responsible for the cost of repair and replacement).

   c. There will be two 8 bed facility-based crisis ("FBC") units to be used as Child and Adolescent FBC and/or Child and Adolescent Substance Use Disorder ("SUD").

   d. There will be two 16 chair units to be used as a Tier IV Adult and Child/Adolescent Behavioral Health Urgent Care ("BHUC") units.

   e. There will be a 24 bed Child and Adolescent Psychiatric Residential Treatment Facility ("PRTF") unit.

   f. See **Exhibit C** for a list of services and maintenance the County will provide at no cost to the Provider. All other routine maintenance and repairs/replacements not listed in **Exhibit C** shall be the responsibility of the Provider.

   g. Participate in Advisory Board" (as defined herein) meetings per the scope and duties

defined in **Exhibit B**.

h. Provide the necessary wiring and upfit of the Center to support the phone, security, video surveillance, and IT systems funded and administered by the Provider.

i. Maintain property insurance on the Center, with the Provider as a named insured, at commercially appropriate levels.

j. Educate and inform government agencies and related county organizations about the Center and the process to make appropriate referrals.

k. Provide administrative and clinical guidance through the role of the Behavioral Health Director (the "BH Director"). The BH Director will be part of substantive decisions affecting Center operations and programming.

2. **Provider Obligations.** For the term of this Agreement, the Provider agrees to:

a. Operate the Center consistent with the initial Plan of Operation attached hereto as **Exhibit A**. The Provider will have sole and exclusive responsibility for medical and treatment services and decisions.

b. Establish and abide by policies, procedures, and protocols at the Center, which Provider represents are appropriate patient care protocols based upon industry best practices.

c. Designate a contact person for communication and coordination with the County to maintain an interchange of information between the County and the Provider.

d. Secure all necessary medical and other health-related licenses and certifications to operate the Center, including maintaining the designation for custody and treatment of individuals under petitions for involuntary commitment in the State of North Carolina, and provide the behavioral health, medical, and pharmaceutical services as identified in the Initial Plan of Operation.

e. Hire, train, compensate, and supervise all staff of the Center unless otherwise specified herein.

f. Ensure the County's BH Director is an integral part of decision-making related to Center operations and programming. The BH Director shall participate in the interview process for the vice president of the behavioral health center and other high-level leadership positions related to operations of the Center. The BH Director shall be included in decisions related to significant changes affecting Center operations or oversight. The Provider agrees to regular meetings with the BH Director regarding the Center, programming, and related matters.

g. Cover all costs associated with operating the Center unless otherwise specified herein. Costs include utilities, custodial, security, among others.

h. Install and administer telephone, computer, network, or other information technology ("IT

Resources) as Provider deems necessary and appropriate for operation of the Center. All IT Resources, including any data or records generated through the services provided by Provider at the Center will be under the control of and owned by Provider.

i. Parties agree and acknowledge that, for purposes of the NC Public Records Law, records created or received by Provider in connection with the operation of the Center are not "public records."

j. Provide the County with basic patient demographic data as needed for local, state, or federal public health reports, subject to compliance with HIPAA and similar privacy statutes.

k. Obtain sufficient medical and liability insurance with limits of at least $1 million per incident, $3 million aggregate, for the operation of the Center, including any off-site provision of care. Coverage may be provided through self-insurance. Proof of coverage shall be provided to the County prior to operation of the Center.

l. Fully comply with all applicable HIPAA and state law privacy requirements.

m. Fully comply with all applicable Federal, State, and local laws regarding the proper operation of a medical and psychiatric facility including, but not limited to, medical practice standards of care, disposal of medical waste, drug and pharmaceutical management and use protocols and medical referrals.

n. Participate in Advisory Board meetings per the scope and duties defined in **Exhibit B**.

o. Bill for, collect and receive all revenues generated by the Center including health insurance, Medicare, Medicaid and any other authorized third-party payer, and all accounts receivable generated by such billings shall belong to Provider.

p. Remain an in-network provider, in good standing, with an active and fully executed participation contract with NC Local Management Entities/Managed Care Organizations, including Partners Health Management, Alliance Health, Trillium Health Resources, and Vaya Health and any future LME/MCO and/or publicly funded health plans, as applicable.
    a. In good standing is defined as:
        i. In compliance with the standards and requirements of all applicable oversight entities
        ii. Submits in a timely manner all required documents, payments, and fees to the Internal Revenue Service, NC Department of Revenue, NC Department of Health and Human Services, and NC Department of Labor.
        iii. Has not filed for nor is currently in bankruptcy.
        iv. Has not had any recent sanctions imposed by NC LME/MCOs, NCDHHS, NC Medicaid/NC Division of Health Benefits, and/or the Division of Mental Health, Development Disabilities, and Substance Use Services (MH/DD/SUS).
    b. Should sanctions be imposed in the future by any listed agencies/entities above, the Provider is required to disclose to Cabarrus County all pending or final sanctions under the Medicaid or Medicare programs.

q. Hold current program/agency accreditation from at least one of the following: Council on Accreditation, The Joint Commission, Council for Quality Leadership, Council for Accreditation of Rehabilitation Facilities.

r. Provider is responsible for utilizing and adhering to the Medicaid and State service definitions.

3. **Term and Termination.**

a. It is the desire of the Parties that, during the term of this Agreement, it be an ongoing contract continuing from year to year (crossing the County's fiscal years) without the necessity of re-execution, subject to continued appropriation by the Cabarrus County Board of Commissioners or other funding source, pursuant to N.C.G.S. Chapter § 153A-133. Accordingly, unless earlier terminated as provided in this Article 3, the initial term of this Agreement is for five (5) years beginning as of the first day that the Center is open for patients.

b. Thereafter, this Agreement will renew for an additional five (5) year term unless one or both Parties provides written notice of nonrenewal at least 60 days prior to the end of the initial term.

c. Either Party may terminate this Agreement, at any time and for any reason, upon Ninety (90) days prior written notice to the other Party: provided that each Party shall fully comply with their obligations hereunder, including, without limitation, any County funding requirements, during such 90-day period.

d. Upon expiration or termination of this Agreement for any reason, the interests of those to be served by the Center served shall be of highest priority. The Parties shall cooperate with each other to ensure proper and diligent transition of services such that continuity of care exists as needed by those served and as required by applicable law. To that end, Provider shall have access to necessary medical records and related information until transition of care to another provider is completed. The obligations of both Parties under this Agreement shall continue following expiration or termination only as to the terms and conditions that by their nature are intended to survive, including those related to continuity of care priority.

4. **Miscellaneous.**

a. Neither Party shall discriminate according to age, sex, race, religion, national origin, handicap, or other protected status in compliance with applicable state and Federal laws and regulations issued pursuant thereto.

b. Unless specifically hired by the County, the staff members of Provider are not in any way employees of the County and thus are not entitled to any employee benefits from the County, including Workers' Compensation.

c. The Parties agree that Provider may operate the Center under a "doing business as" name.

d. If Provider should undergo merger, acquisition, bankruptcy or any change in its ownership or its name for any reason, Provider must immediately notify the County in writing of these changes and provide the County with legal documentation supporting the change, such as an Assumption Agreement, Bill of Sale, Articles of Incorporation, Articles of Amendment, sales contract, merger documents, etc. Further, Provider will submit the name and address of the assuming entities registered agent for service of process and/or all notices required under this Agreement. This Agreement may not be assumed or otherwise transferred to another party by Provider without the express written consent of the County, which said consent will be evidenced by acceptance memo or letter from the County Manager, or designee, to Provider.

e. If any provision of this Agreement is held unenforceable, then such provision will be modified or removed. All remaining provisions of this Agreement shall remain in full force and effect.

f. All services shall be provided in a competent, workmanlike and professional manner.

g. The Parties shall cooperate on community outreach and efforts to educate and promote the availability of the Center to the target patient base and referral sources initially and periodically throughout the term of this Agreement.

h. The Parties agree to conduct regular (at least quarterly) discussions about, and analysis of: (1) the utilization rates of the Center; and (2) the Parties' respective financial wherewithal related to the Center and this Agreement.

i. Modifications or changes in this Agreement may only be made via written contract amendment executed by the Parties.

j. This Agreement, including the Exhibits attached hereto, represents the entire agreement between the Parties and its terms may not be modified except by a written Amendment subscribed to by the Parties as set out herein.

k. This Agreement shall be construed and governed by North Carolina law and any disputes shall be filed in a North Carolina court of competent jurisdiction.

(1) Notwithstanding the foregoing and subject to emergency relief under Article 4(k)(2) below, if a dispute arises from or relates to this Agreement or the breach thereof, and if the dispute cannot be resolved through direct negotiations, the Parties agree to endeavor first to settle the dispute by mediation. Any Party may initiate mediation by serving written notice upon the other Party setting forth the nature of the controversy or dispute at any time and requesting mediation. The Parties shall attempt in good faith to agree upon a single mediator. If the Parties are unable to do so, then each Party shall select a mediator and the mediators so selected shall jointly agree upon a third mediator who shall attempt resolution of the dispute. The mediation shall be held no later than twenty (20) days after the written notice initiating the mediation unless the schedule of the chosen mediator(s) causes the

mediation to occur following the deadline. Any resolution from the mediation shall be documented and performed within ten (10) days following the mediation. Each Party shall be responsible for their own costs during the mediation, except that the mediator(s)'s fees and costs shall be split evenly between the parties.

(2) A Party may pursue emergency interim relief in a North Carolina federal or state court, including without limitation to seek a temporary restraining order, preliminary injunction, or decree, as may be necessary, to protect a Party against, or on account of, any breach or violation of this Agreement. The Parties agree that action under this paragraph is restricted to situations requiring emergency intervention by a court. A court is authorized to award reasonable attorneys' fees and costs to a Party (or Parties) based upon improper use of this paragraph.

l. To the extent permitted by the North Carolina law and without waiving sovereign immunity, the Parties agree to each be solely responsible for their own acts or omissions in the performance of each of their individual duties hereunder and shall be financially and legally responsible for all liabilities, costs, damages, expenses and attorney fees resulting from, or attributable to any and all of their individual acts or omissions to the extent allowable by law.

m. Nothing contained in herein shall be deemed or construed so as to in any way estop, limit, or impair the County from exercising or performing any regulatory, policing, legislative, governmental, or other powers, including governmental immunity and any defenses under the law. In addition to those set forth in Article 2, Provider shall comply with all applicable laws, rules, and regulations.

n. If it shall be determined or asserted that this Agreement is a contract between Provider and a subcontractor within the meaning of Section 1861(v)(l)(I) of the Social Security Act or any rules, regulation, or judicial or administrative interpretations or decisions promulgated or made pursuant to that Section, then the Parties hereby agree that: (i) until the expiration of four (4) years after the furnishing of any service pursuant to this Agreement, each shall make available, upon written request of the Secretary of the Department of Health and Human Services (the "Secretary"), or upon written request of the Comptroller General, or any of their duly authorized representatives, this Agreement and any books, documents, and records that are necessary to certify the nature and extent of the costs incurred by either Party with respect to this Agreement and the services provided pursuant to it, and (ii) if either Party carries out any of the duties of this Agreement through a subcontract with a value or cost of $10,000 or more over a twelve (12) month period with a related organization, that subcontract shall contain a clause to the effect that until the expiration of four (4) years alter the furnishing of any services pursuant to the subcontract, the related organization shall make available, upon written request of the Secretary, or upon request of the Comptroller General, or any of their duly authorized representatives, the subcontract, and any books, documents, and records of such organization as are necessary to verify the nature and extent of the costs incurred with respect to the subcontract and the services provided pursuant to it.

o. Provider shall operate as an independent contractor for all purposes. Nothing in this

Agreement shall be interpreted or construed as creating or establishing the relationship of employer and employee between the County and either the Provider or any employee or agent of Provider.

p. Notices. All notices and communications provided in this Agreement shall be in writing and deemed received as follows: (a) when personally delivered; or (b) one business day after notice being deposited with a nationally recognized delivery service (e.g., Federal Express, UPS, etc.) for overnight delivery (postage prepaid). Notices and communications will be delivered to the following addresses:

Monarch:

Peggy Terhune,
President / Chief Executive Officer
350 Pee Dee Avenue, Suite 101
Albemarle, NC 28001
Phone No. (866) 272-7826

with copy to:

Fred Parker
Gardner Skelton, PLLC
505 East Boulevard
Charlotte, North Carolina 28203
Phone No. (704) 335-0350

Cabarrus County:

Aalece Pugh-Lilly
Cabarrus County Behavioral Health Director
4855 Milestone Ave.
Kannapolis, NC 28081
Phone No. (704) 920-2153

q. Mutual Indemnification.

(1) Each Party (the "Indemnifying Party") agrees to indemnify, defend, and hold harmless the other Party (the "Indemnified Party") from and against any and all third party claims, damages, and liabilities, including any and all expense and costs, legal or otherwise, caused by the negligent act or omission of the Indemnifying Party, its employees, representatives, contractors, or agents, incurred by the Indemnified Party in the investigation and defense of any claim, demand, or action arising out of the work performed under this Agreement. However, the Indemnifying Party shall not be liable for any claims, damages, or liabilities caused by the negligence of the Indemnified Party, its employees, representatives, contractors, or agents.

(2) The Indemnified Party shall notify promptly the Indemnifying Party of the existence of any claim, demand, or other matter to which the Indemnifying Party's indemnification obligations would apply and shall give them a reasonable opportunity to settle or defend the same at their own expense and with counsel of their own selection. If the Indemnifying Party, within a reasonable time after this notice, fails to take appropriate steps to settle or defend the claim, demand, or the matter, the Indemnified Party shall, upon written notice, have the right, but not the obligation, to undertake such settlement or defense and to compromise or settle the claim, demand, or other matter on behalf, for the account, at the cost and expense, and at the risk, of the Indemnifying Party.

(3) The rights and obligations of the Parties under this Article shall be binding upon and inure to the benefit of any successors, assigns, and heirs of the Parties.

r. Agreement to Cooperate and Act in Good Faith. The Parties mutually warrant and represent to each other that, now and in the future, they will cooperate and act in good faith with each other with respect to this Agreement, including making every reasonable and commercial effort to resolve disputes, including through mediation, prior to initiating any formal dispute resolution process.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be signed by their respective administrative officers.

Monarch

By: Peggy A. Terhune
Name: Peggy Terhune,
Title: President / Chief Executive Officer

Witness: Chris Grimwood
Name: Chris Grimwood

Cabarrus County

By: _____
Name: Mike Downs
Title: Cabarrus County Manager

Witness: _____
Name: _____

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

By: _____
Finance Director/Deputy Finance Director, Cabarrus County, NC

Date: 11/20/2023

EXHIBIT A
Initial Plan of Operation

The Provider will operate the Cabarrus County Regional Behavioral Health Center abiding by all required rules set forth by Federal, State and Local Authorities.

Introduction and Overview

Child and Adolescent FBC and SUD units
The Child and Adolescent FBC and SUD will provide comprehensive care and intervention for youth dealing with crisis situations and substance use issues. The unit will offer a safe and controlled environment where trained professionals will address immediate mental health concerns and guide adolescents through the detoxification process. There will be 16 available beds, 8 for each disability, although the numbers may vary depending on referrals.

Adult and Child and Adolescent Behavioral Health Urgent Care Units
The Tier IV BHUC will provide high quality, immediate and intensive mental health services to those experiencing acute behavioral health issues with an aim to reduce emergency department visits, promote early intervention and enhance the overall mental health outcomes for the community. The county will promote this center to its residents to ensure adequate use.

Child and Adolescent Psychiatric Residential Treatment Facility Unit
The Child and Adolescent PRTF will provide long term intensive mental health care in a residential setting where youth will receive comprehensive trauma informed treatment for various psychiatric disorders and emotional challenges. A team of trained professionals including therapists, psychiatrists, certified occupational therapy assistants, nurses, educators and direct support professionals will create and educational therapeutic environment that promotes healing, skill-building and stability. The focus is on addressing the unique needs of each resident through therapy, education, and personalized treatment plans to help youth achieve improved mental health and overall well-being. There will be three 8 bed units. The units shall be designated but may vary depending on referrals.

Scope of Services

Child and Adolescent FBC and SUD units
To ensure the highest quality of care for youth in need of crisis intervention and substance use disorder treatment the Provider is committed to delivering the following services:

1. Crisis Intervention:

- Immediate assessment and intervention for children and adolescents in crisis situations.
- 24/7 availability of trained professionals to respond to crises effectively.
- Creation of a safe and supportive environment to stabilize individuals during crisis episodes.

2. Substance Use Disorder Treatment:

- Evaluation and diagnosis of substance use disorders among adolescents.
- Medically supervised detoxification services to ensure safe withdrawal from substances.
- Development of personalized treatment plans addressing both mental health and substance use aspects.

3. Comprehensive Assessment:

- Holistic assessment of the individual's mental health, substance use history, and emotional well-being.
- Identification of co-occurring disorders and underlying factors contributing to crisis and substance use.

4. Therapeutic Interventions:

- Individual and group therapy sessions targeting crisis resolution, coping skills, and relapse prevention.
- Evidence-based therapeutic modalities tailored to the unique needs of each child and adolescent.

5. Family Involvement:

- Collaboration with families to provide education, support, and family therapy sessions.
- Inclusion of family input in treatment planning to promote lasting recovery and stability.

6. Educational Support:

- Provision of educational services to ensure continuity of learning during the stay using an accredited curriculum.
- Coordination with educational institutions to facilitate academic progress.

7. Medical Care:

- Medical assessments and ongoing monitoring of physical health throughout the treatment process.
- Coordination with medical professionals as needed to address medical concerns.

8. Discharge and Aftercare Planning:

- Development of comprehensive aftercare plans to ensure a smooth transition after treatment.
- Referral to appropriate community resources for continued support and follow-up care.

9. Collaboration and Coordination:

- Collaboration with external agencies, mental health professionals, and social services to ensure holistic care.
- Timely communication and coordination with referring entities and involved parties.

10. Quality Assurance:

- Regular review and assessment of services to maintain and enhance quality of care.
- Compliance with all relevant state and federal regulations and standards.

Adult and Child and Adolescent Behavioral Health Urgent Care Units

The comprehensive scope of services to be provided by the Tier IV Behavioral Health Urgent Care is to ensure the delivery of prompt, efficient, and effective behavioral health care services. Upon establishing medical clearance, the BHUC is dedicated to offering the following services:

1. **Urgent Behavioral Health Assessments (Clinical Evaluation)**:

- Immediate and thorough assessments of individuals presenting with acute behavioral health concerns.
- Evaluation of risk factors, clinical history, and mental health status to determine appropriate intervention.
- Psychiatric evaluation to diagnose and determine treatment recommendations.
- Evaluation of co-occurring disorders and formulation of targeted intervention plans.

2. **Crisis Intervention:**

- Swift response to crisis situations, providing de-escalation techniques and stabilization services.
- Collaboration with law enforcement, emergency departments, and community resources as needed.

3. Medication Management:

- Psychiatric medication evaluation, prescription, and monitoring by qualified medical professionals.
- Collaboration with patients to ensure safe and effective medication regimens.

4. Stabilization and Short-Term Treatment:

- Implementation of brief therapeutic interventions to stabilize acute symptoms and prevent hospitalization.
- Development of personalized treatment plans focused on rapid symptom reduction.

5. Collaboration with Outpatient Providers:

• Communication and coordination with existing outpatient treatment teams to ensure continuity of care.
• Facilitation of smooth transitions between levels of care for ongoing support.

6. 24/7 Availability:

• Provision of services on a 24/7 basis to accommodate individuals in crisis at any time.
• Availability of trained clinicians and support staff to respond promptly to urgent care needs.

7. Family and Support System Involvement:

• Engaging families and support systems in treatment planning and education to enhance recovery.

8. Discharge Planning and Follow-Up:

• Collaborative development of discharge plans, including referrals to appropriate aftercare services.

9. Data Privacy and Confidentiality:

• Strict adherence to state and federal regulations governing patient privacy and confidentiality.
• Secure management of patient records and information in compliance with HIPAA standards.

10. Quality Improvement:

• Regular review and evaluation of services to maintain high-quality care and identify areas for improvement.
• Commitment to continuous training and development of staff to ensure competence.

Child and Adolescent Psychiatric Residential Treatment Facility Unit

To ensure the delivery of specialized, trauma informed holistic care for children and adolescents requiring intensive psychiatric treatment, the Provider is committed to offering the following services:

1. **Psychiatric Evaluation and Assessment or Comprehensive Clinical Assessment (CCA):**

• Thorough psychiatric assessments upon admission to diagnose and assess the individual's mental health needs.
• Ongoing evaluations to monitor progress and adjust treatment plans as necessary.

2. Individualized Treatment Planning:

• Development of personalized treatment plans tailored to the unique needs and goals of each resident.
• Integration of evidence-based therapeutic approaches to address psychiatric and emotional needs.

3. Therapeutic Interventions:

• Provision of individual, group, and family therapy sessions led by licensed therapists.
• Implementation of therapeutic modalities aimed at enhancing coping skills, emotional regulation, and interpersonal relationships.

4. Medication Management:

• Expert assessment of medication needs, prescription, and monitoring by qualified medical professionals.
• Regular review of medication efficacy and potential adjustments based on individual response.

5. Structured Daily Programming:

• Design and implementation of a structured daily schedule including therapy, education, recreation, and skill-building activities.
• Fostering a therapeutic milieu that promotes growth, learning, and positive engagement.

6. Academic Support:

• Collaboration with educational institutions to provide on-site or off-site educational services.
• Individualized education program and support to help residents maintain or improve their academic progress.
• Delivery of accredited curriculum.

7. **Family Involvement and Therapy:**

• Inclusion of family in treatment planning and therapy sessions to support family dynamics and recovery.
• Regular family updates and education to enhance understanding and participation in the treatment process.

8. Recreation and Therapeutic Activities:

• Engagement in recreational and therapeutic activities designed by a Certified Occupational Therapy Assistant (COTA) to promote self-expression, socialization, and well-being.

- Incorporation of creative arts, physical fitness, and mindfulness practices.

9. Discharge Planning and Transition:

- Collaborative development of discharge plans to ensure a smooth transition back to the community.
- Referrals to outpatient services, community resources, and ongoing support.

10. Safety and Clinical Oversight:

- 24/7 clinical supervision by qualified mental health professionals to ensure residents' safety and well-being.
- Implementation of risk assessment and crisis intervention protocols as needed.

11. Quality Assurance and Continuous Improvement:

- Regular review of services to maintain quality and adherence to best practices.
- Continuous training and professional development of staff to provide competent care.

12. Privacy and Confidentiality:

- Adherence to strict standards of patient privacy and confidentiality as required by state and federal regulations.

Hours of Operation
All units will operate 24 hours, 7 days a week, 365 days a year.

Staffing
A highly skilled and diverse team of mental health professionals will be recruited as defined by the NC DHHS service definitions of each program. Continuous training and education programs will be implemented to ensure staff members are equipped with the latest evidence-based practices.

EXHIBIT B

Advisory Board

The Parties will establish an Advisory Board that is not involved in operations, but rather is responsible for general oversight and evaluation of success/performance metrics. The Board shall be structured as follows:

1. The eleven-member Advisory Board with representatives appointed as follows:

    a. The Provider shall appoint three (3) members including the Center Director and two other representatives appointed by the CEO.

    b. The County shall appoint four (4) members including the BH Director, Human Services Director, a County Commissioner or designee, and the County Manager or designee.

    c. The Advisory Board shall jointly appoint four (4) behavioral health community representatives including one representative from the Cabarrus Health Alliance.

    d. The Advisory Board shall develop and adopt bylaws consistent with the requirements herein.

    e. The representatives appointed will serve a three-year term, with no term limit.

    f. The Advisory Board shall have a chair, vice chair, and secretary. The chair shall rotate on a three-year cycle, with the vice chair being from the other organization.

    g. The County BH Director will also serve as staff to the Board.

    h. The Advisory Board shall meet at least quarterly, of which one of the meetings shall serve as the annual meeting. Initially, the Advisory Board will likely meet more frequently.

    i. A quorum shall require at least two Provider members and two County members.

    j. The Advisory Board shall provide a formal written report to Provider and the County every six months.

    k. The Advisory Board shall have the opportunity to review and give input on the annual budget and other financial reports but shall not have decision rights.

    l. The Advisory Board shall establish measures of success and performance metrics at its initial meetings and Provider shall provide to the Board such data as requested.

EXHIBIT C

Delineation of responsibility for maintenance of major building systems and parking lots; repair/replacement of major building systems and parking lots; and upkeep of grounds is outlined below. (See Attachment.)

Monarch Service Obligation - Responsibility Matrix

Client: Cabarrus County
Project: Behavioral Health Facility
Date: 10/31/23 - DRAFT

	Service Obligation	Landlord	Tenant	Not Applicable	*Notes*
	Artwork		X		Non-Integral Artwork
	Asphalt and Concrete	X			parking lot, roads, aprons, curbing, sidewalks. Repairs and Replacements.
	Backflow Preventers	X			Repairs and Replacements
	Cable TV		X		Internet based - no coax
	Cameras	X			Repairs and Replacements
	Card Readers	X			Repairs and Replacements
	Chemical Suppression Systems			X	
	Courtyard Turfing and hardscape	X			Repairs and Replacements
	Custodial		X		daily/weekly cleaning, trash removal, floor care, interior glass
	Dock Lift	X			
	Doors and Door Hardware		X		Repairs and Replacements
	Electric	X			Billed back to Tenant
	Electric Panels	X			Repairs and Replacements
	Emergency Lighting	X	X		Monthly Testing by Tenant, bulb replacement by Tenant, if replacement needed Landlord will be responsible
	Exterior Façade	X			Annual Window Cleaning (including Courtyards) based on needs, pressure washing, painting, exterior façade repair. Damage by Tenant staff will not be covered by Landlord. All other repairs/replacements by Landlord.
	Exterior Signage	X			Repairs and Replacements
	Fiber -Data	X			Yes
	Fire Alarm	X			includes bi-annual testing, monitoring, repairs, replacement
	Fire Doors			X	
	Fire Extinguishers	X	X		Tenant to handle monthly inspections only, County to handle annual certifications and replacements
	Furniture		X		Includes patio/courtyard furniture. Repairs and Replacements
	Generator and ATS	X			fueling, PM's, monitoring, repairs, replacement without capacity increase
	Grease Trap	X			Landlord to have periodically scheduled pump outs
	Hood Suppression for Kitchen	X			Landlord to schedule inspections and cleanings with tenant
	HVAC	X			PM's, repairs, troubleshooting, replacements, hot/cold calls
	Inclement Weather		X		Ice melt, courtyard cleanliness, etc..
	Interior Ceiling Tiles and Grid		X		Repairs and Replacements (includes Winlock)
	Interior Glass		X		Repairs and Replacements
	Interior Flooring		X		Cleaning and care by Tenant. Replacement is the Landlord's responsibility
	Interior Signage		X		Repairs and Replacements
	Interior Walls		X		Pending something structural Tenant is responsible for wall repairs and painting

	Irrigation System	X			Intent is to avoid an irrigation system through native selections
	Kitchen Equipment		X		Repairs, PM contract, replacements
	Landscaping	X			trees, shrubs, turf, hardscape
	Light Fixtures				Landlord responsible for exterior repairs and replacements. Tenant responsible for interior repairs and replacements.
	Minor Electrical		X		Repairs and Replacements
	Natural Gas	X			Billed back to Tenant
	Paging System		X		
	Pest Control	X			Monthly Treatments, does not include fire ant control
	Plumbing Fixtures		X		toilets, toilet accessories, shower, sinks, mirrors, soap dispensers, etc. Repairs and Replacements
	Pressure Vessels	X			Repairs and Replacements
	Refuge Removal	X			Weekly pickups, recycling not included
	Roll Up Doors	X			
	Roof	X			repairs, leaks, replacement
	Security System		X		Monarch: All panic devices and panic related panels/monitoring.
	Sewer	X			Billed back to Tenant
	Sprinkler System	X			includes annual testing, monitoring via FACP, repairs, replacement
	Stormwater	X			Billed back to Tenant if applicable but that is pending design of subgrade system
	Telephone		X		VOIP system
	Water	X			Billed back to Tenant
	Water Heaters	X			Repairs and Replacements
	White Noise Devices		X		



THIS LEASE AGREEMENT is made and entered into as of the _____ day of _____, 2026, by and between Cabarrus County, (hereinafter called "County") and Monarch, (hereinafter called "Monarch"), a North Carolina Nonprofit Corporation.

WITNESSETH:

WHEREAS, County is the owner of all of that certain tract or parcel of improved real property located at 925 Progress Place N.E., Concord, North Carolina 28025 upon which is currently located a 59,910 square foot building under construction by the County to house a Behavioral Health Center; and

WHEREAS, County is the owner of certain furniture, fixtures, office, and miscellaneous equipment which is being furnished by the County in connection with the operation of a Behavioral Health Center on the Premises, said equipment being more particularly described on Exhibit "A", which is to be compiled by the County and approved by Monarch at the initial walk-through of the property and thereafter by consent of all the parties to this Lease, shall be deemed to be incorporated herein by specific reference thereto (hereinafter referred to as the "County Owned Personal Property") without further consideration, but as part and parcel of the consideration to enter into this Lease; and

WHEREAS, Monarch is desirous of leasing the Premises from County in accordance with the terms and provisions set forth herein below.

NOW, THEREFORE, for and in consideration of the sum of One Dollar, the premises and covenants herein contained, and other good and valuable consideration, the receipt, adequacy and sufficiency of which is hereby acknowledged, the parties hereby covenant and agree as follows:

TO HAVE AND TO HOLD the said Premises unto the Monarch upon the following terms and conditions:

1. THE DEMISED PREMISES. All of that certain improved real property located at and known as 925 Progress Place N.E., Concord, North Carolina 28025 which is a 59,910 square foot building under construction by the County to house a Behavioral Health Center, together with a reasonably sufficient surface parking rights for operation of the Center and a right of ingress, egress and regress over the remaining lands of the County to Progress Place N.E., a privately maintained road which leads to Copperfield Boulevard N.E., a publicly maintained street or highway.

   The parties waive any more particular description of the Demised Premises, and agree that a metes and bounds description of the Demised Premises is not necessary. Monarch acknowledges that two other County owned and operated buildings are located on the same parcel, and Monarch will not have the right to exclude other persons or entities from the use of any surface parking, Progress Place N.E., or any other amenities or common spaces which may exist on the subject parcel.

2. TERM. The term of this Lease shall begin on July 1, 2026 and shall end on June 30, 2031 unless the beginning and ending dates of the Lease terms are advanced or delayed by written agreement between the parties, or unless the Lease term is further extended or earlier terminated under any applicable provisions of this Agreement. For purposes of this Agreement, the terms “commencement date” and “expiration date” shall be deemed respectively to be the dates specified herein above. This Lease shall thereafter automatically renew for an additional five year term from July 1, 2031 through June 30,

2036 unless one or both Parties provides written notice of nonrenewal at least sixty (60) days prior to the end of the initial term, or unless otherwise terminated as called for herein. Either Party may terminate this Agreement, at any time and for any reason or no reason at all, upon One Hundred and Twenty (120) days prior written notice to the other Party: provided that each Party shall fully comply with their obligations during such 120-day period.

3. INTEGRATION OF OPERATING AGREEMENT. On or about November 1, 2023, the parties entered into an "Agreement for Behavioral Health Services" (which shall hereinafter be referred to as the "Operating Agreement" or the "Agreement") (attached hereto as "Exhibit "B") for the operation of this property by Monarch as a Behavioral Health Center. The terms of that Agreement are incorporated fully herein by reference, and all of the terms of said Agreement shall be deemed to be terms of this Lease and all extensions to this Lease. To the extent there may be a conflict between said Agreement and this Lease, the terms of this Lease shall control.

4. CONVEYANCE AND DOCUMENTS. Upon execution of this Lease by all parties, the County will cause same to be recorded in the Office of the Register of Deeds for Cabarrus County, N.C.

5. PRORATIONS.

    a. The following items shall be prorated and adjusted between County and Monarch as of the commencement date (hereinafter called "the cut-off date"): All operating expenses for or pertaining to the Premises for utilities and assigned service contracts and agreements. If final readings are not possible, a final adjustment will be made within thirty (30) days after request thereof by Monarch or County after receipt of the final bills. Monarch shall be responsible for making all arrangements for the continuation of utility service, including, but not limited to, changing the billing name

for such service into the name of Monarch immediately upon commencement of the lease.

6. LATE CHARGES. Monarch's failure to pay Lease payments or any other amount payable hereunder promptly may cause County to incur unanticipated costs, and the parties hereto agree that the exact amount of such costs are impracticable or extremely difficult to ascertain. Such costs may include, but are not limited to, processing and accounting charges and late charges which may be imposed upon County by any holder of a mortgage or security deed encumbering the Premises. Therefore, if County does not receive payment of a Lease payment or any other amount payable hereunder within five (5) days of the due date, Monarch shall pay County liquidated damages equal to Ten percent (10%) of such overdue amount. The parties agree that such late charge represents a fair and reasonable good faith estimate of the costs and damages County expects to incur by reason of any such late payment and shall in no event be construed to constitute a penalty.

6. INTEREST ON PAST DUE AMOUNTS. Any amount of Lease payments or any other amount owed by Monarch to County hereunder which is not paid when due shall bear interest at the rate of One Percent (1%) per month, from the due date until such outstanding amount is paid. The payment of any such interest shall not, however, excuse or cure any default by Monarch under this Agreement. However, if the interest rate specified in this Agreement is at any time determined to be higher than the highest rate permitted by applicable law, the interest rate shall be reduced to the maximum interest rate permitted by law.

7. DEFAULT. The occurrence of one or more of the following events (herein called "Events of Default") shall constitute a default by Monarch:

   a. Violation of any term of the November 1, 2023 Operating Agreement;

b. Failure to pay a lease payment or other any amount due to the County for damages or repairs which are the responsibility of Monarch;

c. Failure to perform any other provision of this Lease if the failure to perform is not cured within Thirty (30) calendar days after notice thereof has been given to Monarch.

8. COUNTY'S REMEDIES UPON DEFAULT BY MONARCH. County shall have the following remedies if Monarch commits a default. These remedies are not exclusive; they are cumulative in addition to any remedies now or later allowed by law. Notice of Default and Notice to Vacate will be given by the County pursuant to the terms of this Lease and the Operating Agreement:

a. The County shall have the right to continue this Lease in full force and effect, to give written notice of default to Monarch, and demand correction of the default(s) within Thirty (30) calendar days;

b. In the alternative, the County shall have the right to terminate this Lease without formal notice to vacate (any right to which is hereby waived by Monarch) and terminate Monarch's rights to possession of the Premises at any time, and re-enter the Premises for purposes of taking possession of the premises and excluding Monarch from same including changing all locks and/or disabling Monarch's access to the premises. The County shall have the right to pursue its remedies at law or in equity to recover of Monarch all amounts of Lease payments then due or thereafter accruing and such other damages as are caused by Monarch's default.

c. In the event of the invocation of (a) or (b) above, the County and Monarch will endeavor to preserve limited operations of the Center as may be necessary for the provisions of necessary medical services to any patients or customers of the Center, until said services can be transferred to another location or another Provider.

Monarch will take all reasonable steps and actions to wind down operations of the Center in a timely manner if directed to vacate by the County.

11. CONDITION PRECEDENT TO LEASE-TRANSFER. In the event of default by Monarch, or if Monarch decides to terminate the Operating Agreement and this Lease with the County as called for in both documents, Monarch agrees to cooperate with County and use its best efforts in facilitating the transfer of the subject property to the County, or to a new Provider.

    Those efforts shall require, among other things, that Monarch fully perform their obligations under these documents, under any applicable local, State or Federal law, and pursuant to the applicable governing authorities for the operation of a Behavioral Health Center necessary for the transfer of the existing Licensing Agreement or issuance of a new Licensing Agreement and consent to change of operation of the Premises.

12. COUNTY DOES NOT WARRANT PROPERTY. The subject property is new construction and Monarch will be the first occupant. Monarch and the County agree that there may be certain adjustments, corrections, missing or incomplete items, and "punch list" items that may be apparent when Monarch takes possession, or which may become apparent only after the property is activated. Monarch will make the County immediately aware in writing of any such deficiencies, and the County will use all available reasonable efforts to cause the correction of any such issues.

    Otherwise, the Premises is leased by County to Monarch in an "as is" condition with no guarantees, warranties, either express or implied, except warranties as may be hereinafter set out. Monarch acknowledges that it has been given the opportunity to make a full and complete investigation and inspection of the Premises and that Monarch has had an opportunity to make full inquiry of the County as to all matters deemed relevant by Monarch in evaluating the Premises. Monarch expressly acknowledges that the Premises is being leased "as is", "where is" and "with all faults". Without limiting the generality of

the foregoing, COUNTY HAS NOT MADE AND WILL NOT MAKE, AND HEREBY EXPRESSLY DISCLAIMS ANY WARRANTY WHATSOEVER, EXPRESS OR IMPLIED, WITH RESPECT OR RELATING TO THE PROPERTY INCLUDING WITHOUT LIMITATION, HABITABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Monarch expressly acknowledges that (i) it is not authorized to rely, has not relied, and will not rely on any representation, statement or warranty of County or of any agent, or representative, or broker of County, not expressly set forth herein, and (ii) County has not agreed to perform any other work on or about the property as a condition to Monarch's lease of the same, aside from turn-key completion of the building and the installation of certain items of personal property which shall be itemized on Exhibit "A" during the initial walk-through of the building.

13. WARRANTIES OF COUNTY. County warrants and represents to Monarch that:

    a. The County has received no notice from any governmental authority of zoning, environment, building, or fire violations with respect to the Premises.

    b. The County has received no notice from any public authority of any eminent domain or condemnation proceedings conceding the Premises or any part thereof. County further warrants that in the event it receives any such notice prior to execution, it will notice Monarch in writing.

    c. The County is a political subdivision of the State of North Carolina, organized and created under the laws of the State of North Carolina, and is in good standing. The County's intent to enter into this Lease has been properly advertised as required by law. County warrants that it has the full right, power, and authority to enter into this Agreement, to perform its obligations hereunder, and to execute and deliver this Agreement and all other documents to be executed and delivered by County in connection with the transaction contemplated herein.

d. County warrants that Monarch shall have the right to have quiet possession of the property. No act of omission or commission of the County shall affect such right of Monarch.

14. MAINTENANCE AND REPAIR OBLIGATIONS. Monarch hereby agrees, at Monarch's sole cost and expense, to maintain, repair, restore, and replace all portions of the Premises listed as "Tenant" obligations in the maintenance matrix attached hereto and incorporated fully herein as Exhibit "C". In connection with the foregoing, Monarch shall perform such maintenance duties, contract for such services with competent providers, and employ such other competent persons or entities as may be reasonably necessary in order to properly fulfill Monarch's obligations and responsibilities as herein set forth.

The County shall have no duty or obligation to maintain or repair the Premises at any time during the lease term except as to those items listed as "Landlord" obligations in the maintenance matrix attached hereto and incorporated fully herein as Exhibit "C". Monarch shall pay promptly when due any and all costs and expenses incurred by the County in the performance of any "Tenant" obligations on the matrix if Monarch fails to perform them, or if Monarch requests the County to perform any "Tenant" obligations for Monarch's convenience, which the County may agree to perform or decline to perform.

All maintenance and repairs required to be performed by Monarch hereunder shall be completed and accomplished in a good and workmanlike manner and in compliance and in conformity with all applicable laws, statutes, rules and regulations of any and all applicable governmental authorities relating thereto. It is the intention of County and Monarch in this regard that Monarch shall take any and all actions as may be necessary to maintain all portions of the Premises in an attractive and fully operative condition in a manner consistent with the existing condition of the Premises, and in conformity with the County's maintenance procedures in its operation of similar new construction County buildings.

15. ALTERATIONS, ADDITIONS, AND IMPROVEMENTS. Monarch shall not make any alterations, additions, or improvements to the Premises without County's prior written consent.

16. INSURANCE. Monarch shall procure and maintain for the duration of the use of the facility, insurance against claims for injuries or death to persons or damages to property which may arise from or in connection with the use of the facilities and the activities of Monarch, its guests, patients, invitees, permittees, agents, representatives, employees or sub-contractors. Monarch shall provide and maintain the following commercial general liability, automobile liability, workers' compensation and property coverage. Coverage shall be at least as broad as the following:

a. **General Liability -** Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG 00 01) including property damage, bodily injury and personal & advertising injury with limits of at least Two Million Dollars ($2,000,000.00) per occurrence or the full per occurrence limits of the policies available, whichever is greater. If Commercial General Liability Insurance or other form with a general aggregate limit, either the general aggregate limit shall apply separately to the project/location (with the ISO CG 25 03, or ISO CG 25 04, or insurer's equivalent endorsement provided to Cabarrus County, N.C.) or the general aggregate limit shall be twice the required occurrence limit.

b. **Workers' Compensation Insurance -** Monarch shall provide workers' compensation coverage as required by the State of North Carolina, with Statutory Limits, and Employer's Liability Insurance with limits of no less than One Million Dollars ($1,000,000.00) per accident for bodily injury or disease. **Waiver of Subrogation:** The insurer(s) named above agree to waive all rights of subrogation against the Cabarrus County, N.C., its elected or appointed officers, officials, agents, authorized volunteers and employees for losses paid under the terms of this policy which arise from work performed

by the Named Insured for the Agency, but this provision applies regardless of whether or not the Cabarrus County, N.C. has received a waiver of subrogation from the insurer.

c. **Professional Liability** (Errors and Omissions) Insurance appropriate to the profession, with limits of no less than Three Million Dollars ($3,000,000.00) per occurrence or claim, Three Million Dollars ($3,000,000.00) aggregate.

d. **Automobile Liability:** Insurance Services Office Form Number CA 0001 covering, Code 1 (any auto), or if Monarch has no owned autos, Code 8 (hired) and 9 (non-owned), with limits of no less than One Million Dollars ($1,000,000.00) per accident for bodily injury and property damage.

If Monarch maintains broader coverage and/or higher limits than the minimums shown above, Cabarrus County, N.C. requires and shall be entitled to the broader coverage and/or the higher limits maintained by Monarch. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to Cabarrus County, N.C.

e. **Required Provisions -** The Commercial General Liability policy is to contain, or be endorsed to contain, the following provisions:

Additional Insured Status: Cabarrus County, N.C., its directors, officers, employees, and authorized volunteers are to be given insured status (at least as broad as ISO Form CG 20 10 10 01 or CG 20 11) as respects: liability arising out of the use of the facilities, work or activities performed by or on behalf of Monarch including materials, parts, or equipment furnished in connection with such work or operations, and automobiles owned, leased, hired or borrowed by Monarch. The coverage shall contain no special limitations on the scope of protection afforded to Cabarrus County, N.C., its directors, officers, employees, and authorized volunteers.

Primary Coverage: For any claims related to this facility's use, Monarch's insurance coverage shall be primary and at least as broad as ISO CG 20 01 04 13 in respect to Cabarrus County, N.C., its directors, officers, employees, and authorized volunteers. Any insurance or self-insurance maintained by Cabarrus County, N.C., its directors, officers, employees, and authorized volunteers shall be excess of Monarch's insurance and shall not contribute with it.

Notice of Cancellation: Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to Cabarrus County, N.C.

Acceptability of Insurers - Insurance is to be placed with insurers having a current A.M. Best rating of no less than A:VII or as otherwise approved by Cabarrus County, N.C., or the County's third party administrator.

Monarch agrees to comply with such provisions before commencing the Lease. All of the insurance shall be provided on policy forms and through companies satisfactory to Cabarrus County, N.C. Cabarrus County, N.C. reserves the right to obtain complete, certified copies of all required insurance policies, including the declaration page. Failure to continually satisfy the Insurance requirements contained herein is a material breach of this Lease.

Verification of Coverage - Monarch shall furnish Cabarrus County, N.C. with certificates and amendatory endorsements effecting coverage required by the above provisions. All certificates and endorsements are to be received and approved by Cabarrus County, N.C. *at least five days* before Monarch commences the use of the contemplated facilities, including training and activation prior to patients being seen at the facility. Cabarrus County, N.C. reserves the right to require complete, certified copies of all required insurance policies, including policy Declaration pages and Endorsement pages.

17. DESTRUCTION OR DAMAGE OF PREMISES. If the Premises are totally destroyed by storm, fire, lightning, Act of God or other casualty, then at the option of the Monarch, this Agreement shall terminate as of the date of such destruction, and payment of lease payments shall be accounted for as between County and Monarch as of that date. Such option to terminate this Agreement shall be exercised by the delivery of written notice by Monarch to County within thirty (30) days of the date of such destruction. In the event the Agreement is terminated as set forth above, County shall retain such portion of the insurance proceeds received in connection with such damage or destruction from the property and casualty insurance required to be maintained by Monarch.

    a. If the Premises are not totally destroyed or if the Premises are totally destroyed but Monarch fails to exercise the option to terminate as set forth above, then the County covenants and agrees to promptly make such repairs and improvements as may be necessary to restore the Premises to their condition prior to the date of such damage or destruction if commercially and economically reasonable to do so. In this regard, Monarch hereby agrees to remit to the County any and all insurance proceeds actually received by Monarch in connection with the property and casualty insurance policies required to be maintained by Monarch with respect to the Premises hereunder. Rent shall not abate during any period of the lease term as to which the Premises or any portion thereof are rendered unusable or untenantable. For purposes of the foregoing paragraph, the term "totally destroyed" shall be deemed to mean damage or destruction which renders the Premises incapable of being restored to their prior condition within 120 days of the date of such destruction, as determined by an independent construction contractor.

    b. Whether the premises are totally destroyed or not, the County shall have the option to terminate this Lease and the Operating Agreement pursuant to the termination terms as set forth in said documents, if the County determines that a reasonably expedient

repair or rebuilding of the demised premises is not possible in the County's sole judgment and discretion.

18. CONDEMNATION. If the whole of the Premises or such portion thereof as will render the Premises totally unusable for the purposes for which leased, shall be taken by any legally constituted authority for any public use or purpose in any eminent domain proceeding or any conveyance made in lieu thereof, then in either of said events, the lease term shall terminate as of the date when possession thereof is so taken by said public authority, and the County shall be entitled to all condemnation proceeds.

    For this purpose, the Premises shall be conclusively deemed to have been rendered totally unusable for the purposes for which leased if more than thirty percent (30%) of the floor area of the building located on the Premises is taken in connection with any such action, proceeding or conveyance. If the Premises are not wholly condemned or otherwise rendered totally unusable, then this Agreement shall remain in full force and effect as to the portion of the Premises not so taken, and the County shall be entitled to all condemnation proceeds.

19. CONDITION UPON TERMINATION. Upon termination of this Agreement, Monarch shall surrender the Premises to County broom clean and in the same condition as received, normal wear and tear excepted. All alterations, additions, and improvements to the Premises shall become County's property and shall be surrendered to County upon the expiration or earlier termination of this Agreement, except that Monarch may remove any of Monarch's purchased machinery, equipment, furniture, and furnishings which can be removed without material damage to the Premises. In no event, however, shall Monarch be permitted to remove any electrical wiring or power panels; internet or local area network cabling and equipment; security features, cameras and devices; lighting fixtures; wall coverings; blinds or window coverings; carpets or other floor coverings; heating and air-conditioning equipment; or any other similar building operating equipment and

decorations, all of which shall be deemed to be and become the sole property of County at the expiration of the lease term. This obligation shall expressly survive the expiration or earlier termination of this Agreement.

20. TERMINATION OF AGREEMENT. No termination of this Agreement prior to the scheduled expiration date hereof, by lapse of time or otherwise, shall affect County's right to collect the lease payments for the period prior to the termination thereof. Monarch covenants and agrees not to vacate the Premises or exercise any right of termination arising out of any breach by County of any provision in this Agreement or relating to the condition or state of repair of the Premises. No surrender of the Premises or any part thereof by delivery of keys or otherwise shall operate to terminate this Agreement, unless and until such termination is expressly acknowledged in writing by an authorized officer of County.

21. LICENSES, PERMITS, HAZARDOUS MATERIALS, ENVIRONMENTAL LAWS. Monarch agrees that it will comply fully and promptly with any and all laws, regulations, statutes, ordinances, policies, and orders issued by any Federal, state, county, or local governmental authority; that it will obtain, maintain in full force and effect, and strictly comply with any and all governmental permits, approvals and authorizations necessary for the conduct of its business operations; that it will supply County with copies of any such permits, approvals, and authorizations; that it will promptly notify County of the expiration or revocation of any such permits, approvals, and authorizations; and that it will promptly notify County and supply County with a copy of any notice of violation of any law, regulation, statute, ordinance, policy, or order.

    Monarch shall not place within the property any hazardous waste or materials as such materials are defined under any statute, Federal regulation, state regulation or court interpretation of the same. County reserves the right to inspect the property for purposes of determining compliance with this paragraph. Should Monarch place hazardous materials or waste on the property (including medical waste as that term is commonly understood),

Monarch shall be solely responsible for the removal of same, and if County incurs any liability either during the term of this Lease or following the termination of same for the removal of hazardous waste or materials, or for damage caused by said hazardous waste or materials placed on the Premises by Monarch, the Monarch shall be solely responsible to County for those damages, including, but not limited to, the cost of removing said materials and any penalties imposed for having materials on the site. Monarch agrees to indemnify and hold County harmless in regard to any damages which may result from Monarch's placing said materials on the Premises and for the acts referred to herein.

22. INDEMNITY. To the extent permitted by law, Monarch shall indemnify and hold harmless and defend Cabarrus County, N.C., its Board of Commissioners, officers, employees, and authorized volunteers, and each of them from and against any and all liability, loss, damage, expense, costs (including without limitation costs and fees of litigation), of every kind or nature arising out of or in connection with Monarch's use of facilities or its failure to comply with any of its obligations contained in the Operating Agreement or this Lease, except such loss or damage which was caused by the sole negligence or willful misconduct of Cabarrus County, N.C., or its Board of Commissioners, officers, employees, or authorized volunteers.

23. UTILITIES. Monarch shall pay, directly to the appropriate utility supplier thereof, all utility bills relating to services rendered or supplied to the Premises or otherwise relating to Monarch's use or occupancy thereof, including, but not limited to, bills for water, sewer, gas, electricity, fuel, garbage collection, and sanitary services.

24. PAYMENT AND LIENS. Monarch hereby agrees to make prompt payment when due for any services, equipment or materials furnished to the Premises in performing Monarch's required duties of maintenance and repair hereunder and/or in otherwise constructing any alterations, additions, or improvements to the Premises, and Monarch shall not permit any lien to be placed on the Premises with respect thereto which remains undischarged or is not bonded off in accordance with the following provisions. Furthermore, Monarch hereby

agrees to indemnify and hold County harmless from and against any and all claims, liens, liabilities, or damages resulting from Monarch's failure to make payment promptly when due for any such services, equipment or materials furnished pursuant to Monarch's duties hereunder. Such indemnification shall expressly survive the expiration or earlier termination of this Agreement.

25. ASSIGNMENT AND SUBLETTING. Monarch shall not assign this Agreement or any interest hereunder, or sublet the Premises or any part thereof, or permit the use of the Premises by any party other than Monarch, without first obtaining the prior written consent of County, which consent shall not be unreasonably withheld. The Parties acknowledge that prior to the entry of this Lease, Monarch has subleased a portion of the premises to Genoa Healthcare, LLC for the provision of pharmacy services to the Center pursuant to a Commercial Lease dated April 1, 2026.

    Said sublease is ratified and approved by the County with the execution of this Lease, however, said sublease is subject to all of the terms and conditions of this Lease and the Operating Agreement between the parties. If Genoa assigns the sublease to another pharmacy provider, or if the Genoa sublease is terminated and Monarch selects another pharmacy provider, any subsequent pharmacy sublease must be approved before execution by the County.

    To the extent that the terms of the sublease to Genoa or another sublessee, this Lease, and the Operating Agreement may conflict, the terms of this Lease and the Operating Agreement shall control, and Monarch shall be liable to Genoa for any damages experienced by Genoa as a result.

26. SUBORDINATION. Monarch agrees that this Lease is and shall remain subject and subordinate to and may be assigned as security for any present and future mortgages or deeds of trusts which may now or hereafter affect such leases of the Premises and to and for all renewals, modifications, consolidations, replacements, and extensions thereof. This

clause shall be self-operative, and no further instrument shall be necessary to give effect to such subordination; however, Monarch shall execute promptly and deliver to County any such certificate or certificates in writing as County may request evidencing the subordination of this Lease to or the assignment of this Lease as additional security for such mortgage or deed of trust.

27. USE OF PREMISES. The Premises shall be used by the Monarch only for the operation of a Behavioral Health Center and all reasonably related uses and services. The Premises shall not be used for any illegal purposes or in violation of any regulation of any governmental body, or in any manner so as to create any nuisance or trespass, or so as to vitiate any insurance or increase the rate of insurance on the Premises. Monarch shall not abandon or vacate the Premises during the lease term, and shall use the Premises for the purposes set forth herein above until the expiration date or earlier termination of this Agreement.

28. QUIET ENJOYMENT AND TRANSFER OF TENANTS. County agrees that Monarch on paying the rent and performing all of the terms and conditions of this Lease shall quietly have, hold and enjoy the Premises for the term aforesaid subject to the terms of this Agreement and any underlying mortgage or deed to secure debt encumbering the Premises.

29. NOTICES. Any notice or demand which by any provision of this Agreement is required or allowed to be given by either party to the other shall be deemed to have been sufficiently given for all purposes when made in writing and sent in the United States Mail as certified or registered mail, return receipt requested, postage prepaid and addressed:

    a. If to Monarch, to Peggy Terhune or successor, President/CEO, 350 Pee Dee Ave., Suite 101, Albemarle, N.C. 28001 with an additional copy to McKenna Ronan, Esq., Gardner Skelton, PLLC, 3746 N. Davidson St., Charlotte, N.C. 28205.

b. If to the County, to Aalece Pugh or successor, Assistant County Manager / Human Services Director, P.O. Box 707, Concord, N.C. 28026 with an additional copy to Kyle Bilafer or successor, Assistant County Manager, P.O. Box 707, Concord, N.C. 28026.

30. HEIRS AND ASSIGNS. The provisions of this Lease shall bind and inure to the benefit of County and Monarch, and their respective successors, heirs, legal representatives, and assigns.

31. END OF TERM, HOLDING OVER, AND ATTORNEY'S FEES. Upon the expiration of the term or other termination of this Lease, Monarch shall quit and surrender to County the Premises, in the Premises' original condition.

    If Monarch shall hold over after the expiration of the term or other termination of this Lease, such holding over shall not be deemed to be a renewal of this Lease but shall be deemed to create a tenancy-at-will and a month-to-month tenancy with a monthly lease payment of Seventy Five Thousand Dollars ($106,040.70) per month, which is the actual fair rental value of the property based upon a fair market rental value of $1.77 per square foot, per month.

    By such holding over Monarch shall be deemed to have agreed to be bound by all of the terms and conditions of this Lease except those as to the term hereof. If any rent or other sum owing under this Lease is collected by or through an attorney-at-law, Monarch agrees to pay County's reasonable attorney's fees not in excess of fifteen percent (15%) (or if the statutes or other laws of the State of North Carolina in effect at the time of such collection limit the amount so payable as attorney's fees, then the maximum percentage allowed by such laws or statutes) of the amount so collected.

32. INSPECTION. The County shall have the right to enter upon any portion of the Premises at any reasonable hour to inspect for compliance with the terms of this Lease, or to maintain the Landlord obligations on the maintenance matrix.

For life-safety issues (smoke detectors, fire sprinklers, access controls and the like), or other significant mechanical faults (plumbing or HVAC failures and the like), the County or any County subcontractor or vendor shall provide Monarch with an announcement of their presence consistent with Monarch's protocols, but access to any needed areas shall not be denied by Monarch.

No notice from the County is required to maintain or repair the exterior or grounds, or to enter mechanical rooms accessed from the exterior of the building.

Monarch acknowledges that certain maintenance and repair items may constitute an inconvenience or partial disruption of their operations due to noise, fumes or dust such as the required testing of the fire alarm system. Any such transient disruptions to Monarch's operations shall not constitute a default by the County of the terms of this Lease, or the Operating Agreement.

33. TIME IS OF THE ESSENCE. Time is of the essence as to all deadline dates named in this Agreement, including the Lease portions of this Agreement as noted herein above.

34. ARBITRATION. Any disagreement between the parties with respect to the interpretation or application of this Lease or the obligations of the parties hereunder shall be resolved by arbitration. Such arbitration shall be conducted, upon request of either County or Monarch, before a single arbitrator designated by the American Arbitration Association and in accordance with the rules of that Association. The arbitrator designated and acting under this Lease shall make the award in strict conformity with such rules and shall have no power to depart from or change any of the provisions thereof. The expense of arbitration proceedings conducted hereunder shall be born equally by the parties. All arbitration proceedings hereunder shall be physically conducted in Cabarrus County, N.C. or may be conducted virtually consistent with the American Arbitration Association rules for same. During the period of any dispute, the parties will continue to abide by the terms of this Lease.

35. SEVERABILITY. If any part of this Lease is determined to be unenforceable, the remainder of the Lease shall be unaffected.

36. INTEGRATION AND BINDING EFFECT. The entire Agreement, intent and understanding between County and Monarch is contained in the provisions of this Lease and the Operating Agreement attached hereto and incorporated fully herein as Exhibit "B". Any stipulations, representations, promises or agreements, written or oral, made prior to or contemporaneous with this Lease shall have no legal or equitable effect or consequence unless reduced to writing herein. This Lease shall be governed by and construed pursuant to the laws of the State of North Carolina.

37. COSTS. Both parties agree to pay their own attorney's fees in connection with the signing and commencement of this Lease Agreement. IN WITNESS WHEREOF, the parties have hereunto set their hands and seals as of the day and year set forth opposite their respective signatures.

SIGNATURE PAGE FOLLOWS

For the COUNTY:

Date: _____

Signature: _____
Kelly F. Sifford, Interim County Manager

Attest: _____
Ariadne Olvera, Clerk to the Board (SEAL)

For MONARCH:

Date: _____

Signature: _____
Peggy Terhune, President/CEO

Attest: _____

Name: _____ (SEAL)

Approved as to Form:

_____, Counsel for County

_____, Counsel for Monarch

EXHIBIT "A"

Inventory of County Owned Personal Property

To be compiled by the County and Monarch at initial walk-through and integrated into this document at that time by specific consent of the Parties hereto

Kelly F. Sifford Initial Here: _____

Peggy Terhune Initial Here: _____

EXHIBIT "B"

November 1, 2023 Operating Agreement

Kelly F. Sifford Initial Here: _____

Peggy Terhune Initial Here: _____

EXHIBIT "C"

Maintenance Responsibility Matrix

Kelly F. Sifford Initial Here: _____

Peggy Terhune Initial Here: _____

	Irrigation System	x			Intent is to avoid an system though native selections
	Kitchen Equipment				Repairs. PM contract. replacements
	Landscaping	x			trees. shrubs, turf. hardscape
	Light Fixtures				Landlord responsible for exterior repairs and replacements Tenant responsible tnter'0r repairs and replacements
	Minor Electrical		x		Repairs and Replacements
	Natural Gas	x			Billed back to Tenant
	Paging System		x		
	Pest Control				Monthly Treatments. does not include fire ant control
	Plumbing Fixtures		x		Toilets, toilet accessories. shower, sinks mirrors. soap dispensers etc. Repairs and Replacements
	Pressure Vessels	x			Repasts and Replacements
	Refuge Removal				Weekly pickups, recycling not included
	Roll up Doors				
	Roof				repairs. leaks, replacement
	Security System		x		Monarch: All panic devices and panic related panels/monitoring
	Sewer	x			Billed back to Tenant
	Spnnkler System	x			includes annual testing. Monitoring via FACP. repairs, replacement
	Stormwater				Billed back to Tenant If applicable but that pending design of subgrade system
	Telephone				VOIP system
	Water				billed to tenant
	Water Heaters				Repairs and Replacements
	White Noise Devices				

Service Obligation	Landlord	Tenant	Not Applicable	Notes
Artwork		X		If incorpated into the actual structure and walls, not free standing
Asphalt and Concrete	X			parking lot, roads, aprons, curbing, sidewalks. Repairs and Replacements.
Backflow Preventers	X			Repairs and Replacements
Cable TV		X		
Cameras	X			Repairs and Replacements
Card Readers	X			Repairs and Replacements
Chemical Suppression Systems			X	
Courtyard Turfing and hardscape	X			Repairs and Replacements
Custodial		X		daily/weekly cleaning, trash removal, floor care, interior glass
Dock Leveler	X			
Doors and Door Hardware		X		Repairs and Replacements
Electric	X			Billed back to Tenant
Electric Panels	X			Repairs and Replacements
Emergency Lighting	X	X		Monthly Testing by Tenant, bulb replacement by Tenant, if replacement needed Landlord will be responsible
Exterior Façade	X			Annual Window Cleaning based on needs, pressure washing, painting, exterior façade repair. Damage by Tenant staff will not be covered by Landlord. All other repairs/replacements by Landlord.
Exterior Signage	X			Repairs and Replacements
Fiber -Data	X			
Fire Alarm	X			includes bi-annual testing, monitoring, repairs, replacement
Fire Doors			X	
Fire Extinguishers	X	X		Tenant to handle monthly inspections only, County to handle annual certifications and replacements
Furniture		X		Includes patio/courtyard furniture. Repairs and Replacements
Generator and ATS	X			fueling, PM's, monitoring, repairs, replacement without capacity increase
Grease Trap	X			Landlord to have periodically scheduled pump outs
Hood Suppression for Kitchen	X			Landlord to schedule inspections and cleanings with tenant
HVAC	X			PM's, repairs, troubleshooting, replacements, hot/cold calls
Inclement Weather		X		
Interior Ceiling Tiles and Grid		X		Repairs and Replacements (includes Winlock)
Interior Glass		X		Repairs and Replacements
Interior Flooring		X		Cleaning and care by Tenant. Replacement is the Landlord's responsibility
Interior Signage		X		Repairs and Replacements
Interior Walls		X		Pending something structural Tenant is responsible for wall repairs and painting
Irrigation System	X			
Kitchen Equipment		X		Repairs, PM contract, replacements

Landscaping	**X**			trees, shrubs, turf, hardscape
Light Fixtures	**X**	**X**		Landlord responsible for exterior repairs and replacements. Tenant responsible for interior repairs and replacements
Minor Electrical		**X**		Repairs and Replacements
Natural Gas	**X**			Billed back to Tenant
Paging System		**X**		
Pest Control	**X**			Monthly Treatments, does not include fire ant control
Plumbing Fixtures		**X**		toilets, toilet accessories, shower, sinks, mirrors, soap dispensers, etc. Repairs and Replacements
Pressure Vessels	**X**			Repairs and Replacements
Refuse Removal	**X**			Weekly pickups, recycling not included
Roll Up Doors	**X**			
Roof	**X**			repairs, leaks, replacement
Security System		**X**		Monarch: All panic devices and panic related panels/monitoring.
Sewer	**X**			Billed back to Tenant
Sprinkler System	**X**			includes annual testing, monitoring via FACP, repairs, replacement
Stormwater	**X**			Billed back to Tenant if applicable but that is pending design of subgrade system
Telephone		**X**		
Water	**X**			Billed back to Tenant
Water Heaters	**X**			Repairs and Replacements
White Noise Devices		**X**		

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS – FOR ACTION

SUBJECT:

County Manager - Monarch Sub Lease Approval with Genoa Healthcare LLC

BRIEF SUMMARY:

Monarch currently has an executed operating agreement with Cabarrus County for services being provided at the Stephen M. Morris Behavioral Health Center. After the public notice and agenda item tonight about the Monarch prime lease, we will have a lease in place with Monarch. Monarch wishes to enter a sub lease for 239 square feet in order to provide pharmaceutical services at the facility. The County will need to sign the sub lease agreement as the owner of the facility.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

Motion to authorize the County Manager to sign the sublease agreement between Cabarrus County, Monarch and Genoa Healthcare LLC.

SUBMITTED BY:

Kyle D Bilafer, Assistant County Manager

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1. Sublease

COMMERCIAL SUBLEASE

DATED:	**April ___, 2026**	(the "Effective Date")
PARTIES:	Monarch 1000 Progress Place Concord, NC 28025	(Sublandlord)
	And	
	Genoa Healthcare LLC a Pennsylvania limited liability company 707 S. Grady Way Suite 400 Renton, WA 98057	(Subtenant)

This Sublease Agreement (this "***Sublease***") is made and entered into as of the Effective Date, by and between Monarch ("***Sublandlord***") and Genoa Healthcare LLC ("***Subtenant***").

WHEREAS, pursuant to that certain lease dated _____, by and between Cabarrus County ("***Prime Landlord***") and Sublandlord, as tenant (the "***Prime Lease***"), Prime Landlord leased and let unto Sublandlord that certain building, together with improvements thereon and appurtenances thereto, all located at 1000 Progress Place, Concord, NC 28025 (hereinafter the "***Premises***") and more particularly described in the Prime Lease; and

WHEREAS, Sublandlord wishes to sublease and sublet unto Subtenant, and Subtenant desires to sublease and take from Sublandlord, a portion of the Premises demised under the Prime Lease on the terms and conditions set forth herein.

NOW, THEREFORE, Sublandlord leases to Subtenant and Subtenant leases from Sublandlord the Subleased Premises described below on the terms and conditions stated below:

1. **The Subleased Premises**. The Subleased Premises contains approximately 239 square feet of space located in Room 1705 in the building known as 1000 Progress Place, Concord, NC 28025-2449 (the "***Building***") as more fully shown on the site plan ("***Site Plan***") attached hereto as Exhibit A and inclusive of the improvements thereto that are identified on Exhibit C (the "***Subleased Premises***"). Sublandlord grants to Subtenant access to and use of the common areas (the "***Common Areas***") in the Building and on the land surrounding the Building (the "***Land***").

2. **Performance for the Benefit of Sublandlord**. Except as the context may otherwise require, Subtenant's agreements, covenants, and obligations under this Sublease are made, given, and are to be performed, solely for the benefit of Sublandlord, and not for the benefit of Prime Landlord or any other person or entity, and it is specifically acknowledged and agreed that Subtenant shall have no contractual privity with or obligation to Prime Landlord.

3. **Covenants of Quiet Enjoyment and Possession**.

3.1. Subtenant's Right to Quiet Enjoyment. Sublandlord warrants, covenants and agrees that Subtenant may peaceably hold and enjoy the Subleased Premises during the Term of this Sublease, subject to the terms and conditions of the Prime Lease.

3.2. Sublandlord's Authority. Sublandlord represents and warrants that Sublandlord has the power and authority to execute and deliver this Sublease and to comply with all the provisions hereof and that the Subleased Premises will be delivered to Subtenant free and clear of the right of possession of any party other than Subtenant. Sublandlord further represents that if the consent of Prime Landlord is necessary for Sublandlord to enter into this Sublease, Sublandlord obtained that consent from Prime Landlord.

4. **Use of the Subleased Premises**. Subtenant may use the Subleased Premises only for the purpose of an on-site pharmacy and for providing the ***Contractor Services*** (the "***Permitted Use***"), as that term is defined in that certain Professional Services Agreement, dated November 18, 2015, and as amended, between Sublandlord and Subtenant (the "***PSA***"). Sublandlord represents and warrants that the Permitted Use is in compliance with all applicable laws, regulations, rules and ordinances governing same.

5. **Prime Lease: Subtenant's Rights and Obligations**.

5.1. Subject to Prime Lease. Sublandlord and Subtenant acknowledge that this Sublease is subject to and under the Prime Lease. In connection with the Prime Lease, Sublandlord hereby certifies, represents and warrants to Subtenant that:

(a) The Prime Lease is unmodified and is in full force and effect as of the date hereof and shall remain unmodified and in full force and effect as of the Effective Date. Sublandlord covenants and agrees that it shall not terminate, amend, modify, supplement or change in any way the terms and provisions of the Prime Lease in any manner that would adversely affect Subtenant without the express prior written consent of Subtenant and shall deliver copies of any such modifications to the Prime Lease to Subtenant within five (5) days of execution;

(b) There is no default under the Prime Lease by Prime Landlord or Sublandlord and to Sublandlord's actual knowledge, information and belief, no event exists which, with the passage of time, or the giving of notice, or both, would result in an event of default under the Prime Lease;

(c) There are no past due rents and/or other charges owing under the Prime Lease as of the date hereof;

(d) The Prime Lease has not been assigned, modified, supplemented, or amended, except as disclosed herein;

(e) The Prime Lease represents the entire agreement between Prime Landlord and Sublandlord;

(f) The term of the Prime Lease is scheduled to expire on the 5th anniversary Sublandlord begins operations in the Building;

(g) Prime Landlord has satisfied all its requirements under the Prime Lease as of the date of this Sublease;

(h) Prime Landlord has no defenses against the enforcement of the Prime Lease by Sublandlord or other claims against Sublandlord; and

(i) Sublandlord has delivered to Subtenant a true, correct and complete copy in all respects of the Prime Lease and attached hereto as Exhibit B.

5.2. Sublandlord duties. Sublandlord shall not: (i) breach or default under the Prime Lease, or (ii) take any action, or fail to take any action, under the Prime Lease that is inconsistent with the terms and provisions of this Sublease, that would terminate the Prime Lease or that would in any way impair, impede, jeopardize, or otherwise adversely affect Subtenant's rights and benefits under this Sublease or Subtenant's rights to full and unfettered use and enjoyment of the Subleased Premises. Sublandlord agrees to indemnify, defend and hold harmless Subtenant from and against all claims, liabilities, damages, costs and expenses (including reasonable attorneys' fees) of any kind whatsoever by reason of which the Prime Lease may be breached, terminated or forfeited due, in whole or in part, to the act, failure to act or negligence of Sublandlord or anyone claiming by or through Sublandlord, except for Subtenant.

5.3. Sublandlord Compliance. Sublandlord shall comply with Sublandlord's obligations as tenant under the Prime Lease and shall cause Prime Landlord to comply with the obligations of Prime Landlord as landlord under the Prime Lease. Sublandlord shall deliver to Subtenant, promptly upon receipt, copies of any default notices that Sublandlord either receives from Prime Landlord or sends to Prime Landlord with respect to defaults under the Prime Lease.

6. **Occupancy.**

6.1. Term. The term of this Sublease shall be three (3) years commencing on the Effective Date (the "***Initial Term***"), and shall be coterminous with the term of the PSA, unless earlier terminated as provided subsection 6.1(a) below. Subtenant shall have the option to renew this Sublease for up to seven (7) successive additional terms of one (1) year each (each a "***Renewal Term***," the Initial Term and each Renewal Term are collectively referred to herein as the "***Term***"), under the same terms and conditions set forth herein except that Rent shall be determined in accordance with subsection 7.2 below. Subtenant may exercise each renewal option by providing written notice to Sublandlord no later than sixty (60) days prior to the expiration of the then-current Term. Notwithstanding the foregoing, in no event shall this Sublease be extended for a period to constitute a conveyance or subject the parties to transfer tax, the parties agreeing that this Sublease shall terminate automatically prior to such time. Sublandlord covenants and agrees to exercise any and all extension options available to Sublandlord under the Prime Lease, within the notice periods provided therein, necessary for Sublandlord to fulfill its obligations to Subtenant upon the terms set forth in this Sublease, and so that the term of the Prime Lease is at all times at least one (1) day longer than the Term of this Sublease, as same may have been extended.

(a) Termination. On or after the one-year anniversary of the Effective Date, either Party may terminate this Sublease at any time during the Term, upon one hundred twenty (120) days prior written notice to the other Party; provided however, if this Sublease is terminated by either Party within the Initial Term, the Parties shall not enter into any replacement

lease, sublease, or similar lease or arrangement at the Building until after the one year anniversary of the date the Sublease was executed.

6.2. Possession. Subtenant's right to possession shall commence on the Effective Date. If Sublandlord is not able to give Subtenant possession of the Subleased Premises within thirty (30) calendar days of the Effective Date, Subtenant may rescind this Sublease by notice in writing to Sublandlord given at any time thereafter before the date on which possession is tendered by Sublandlord.

6.3. Relocation. If Sublandlord relocates to a new Building within the Initial Term, then Sublandlord shall be responsible for relocating Subtenant.

6.3.1. Sublandlord shall be responsible for all costs associated with the build out of the relocated Premises in accordance with all board of pharmacy requirements.

7. **Rent**.

7.1. Rent. Rent is based upon arm's length negotiation between Sublandlord and Subtenant and Subtenant's assessment of fair market value for similar properties in the market in which the Subleased Premises is located. The Base Rent and the Additional Rent together represent the Rent.

7.1.1. Rent. Commencing on the Rent Commencement Date (defined below), during the Initial Term, Subtenant shall pay to Sublandlord, in advance, on or before the first day of each month, as rent the sum of $557.67 per month at the rate of $28.00 per square foot per year (the "***Rent***"). Rent is based upon an arm's length negotiation between Sublandlord and Subtenant and Subtenant's assessment of fair market value for similar properties in the market in which the Subleased Premises is located.

7.2. Rent Commencement Date**.** The Rent Commencement Date means the date on which Subtenant has begun the operation of the pharmacy in the Sublease Premises. Rent shall be prorated for any portion of a month in the event the Rent Commencement Date or the date the Term expires or is earlier terminated is on a date other than the first or last day of a month. Rent shall be paid to Sublandlord at the address set forth in Section 23.4 below. Subtenant shall also pay as additional rent any other payments as required of Subtenant pursuant to the provisions of this Sublease.

7.3. Rent Adjustment for Renewal Terms. The Rent for each Renewal Term shall be determined as follows: The monthly Rent in effect and payable for the immediately preceding Term shall be automatically increase by three percent (3%) over the Rent.

8. **Compliance with Law**.

8.1. General Regulatory Compliance. Sublandlord and Subtenant shall comply with all applicable state and federal laws. Specifically, Sublandlord and Subtenant intend that this Agreement comply with the federal Anti-Kickback Statute (42 U.S.C. § 1320a-7b) and satisfy the requirements of the Space Rental Safe Harbor to the federal Anti-Kickback Statute codified at 42 C.F.R. § 1001.952(b).

8.2. Fair Market Value. Sublandlord and Subtenant agree that the Rent is consistent with the fair market value of the Subleased Premises being subleased, including the value of such services and maintenance as required to be provided to the Subleased Premises by Sublandlord pursuant to the terms of this Sublease, and that the Rent is not based, in whole or in part, on any current or expected value or volume of business generated by or between Sublandlord and Subtenant. Sublandlord and Subtenant agree that this Sublease in no way requires, and in no way is contingent upon, the recommendation, referral, certification, purchase, lease, order, or any other form of arrangement for any good, facility, service, or item offered by Sublandlord or Subtenant or any person or entity related to or affiliated with Sublandlord or Subtenant.

9. **Repairs and Maintenance**.

9.1. Subtenant's Obligations. Subtenant shall keep the Subleased Premises neat, clean, and in a sanitary condition, subject to reasonable wear and tear, damage by casualty or condemnation, and Prime Landlord's and Sublandlord's repair obligations. Subtenant's responsibilities for maintenance shall extend to the inside surfaces of interior walls and ceilings which are on the perimeter of the Subleased Premises, and flooring, paint, cabinetry, and interior fixtures located within the Subleased Premises.

9.2. Sublandlord's Obligations. Sublandlord represents and warrants that the Subleased Premises are in good repair without any material defects at the commencement of the Term. Sublandlord shall be responsible, at Sublandlord's sole expense, for all areas outside the Subleased Premises, and shall maintain the Building in which the Subleased Premises are located, the Common Areas, and the Land in a safe and sound, neat, clean, and sanitary condition and to the standard of comparable medical buildings in the county in which the Subleased Premises are situated. Sublandlord agrees to provide and maintain the plumbing, electrical, heating, air conditioning and ventilation systems servicing the Subleased Premises in accordance with USP guidelines for safe drug storage. Sublandlord shall furnish and maintain all fire extinguishers and equipment necessary to comply with applicable law and provide pest control services for the Subleased Premises. Sublandlord further agrees to maintain the Building and the structure, walls, roof, windows, and exterior of the Building, the Common Areas, and the Land. In performing any repairs, replacements, alterations, or other work, Sublandlord shall not cause unreasonable interference with use of the Subleased Premises by Subtenant.

9.3. Reimbursement for Repairs Assumed. If either Party fails to make any required repairs, the other Party may make the repairs and charge the actual costs of repairs to the first Party. Such expenditures by Sublandlord shall be reimbursed by Subtenant with Subtenant's next monthly payment of Rent. Such expenditures by Subtenant may be deducted from Rent or collected directly from Sublandlord. Except in an emergency creating an immediate risk of personal injury or property damage, neither Party may perform repairs that are the obligation of the other Party unless the defaulting Party fails to initiate such repairs within thirty (30) days following written notice specifying the failure, and thereafter to diligently complete such repairs.

10. **Alterations and Improvements**.

10.1. Required Alterations. The improvements and alterations on Exhibit C shall be performed by, and at the cost of, the Party designated thereon and within the time stated thereon and shall be considered to constitute a part of the Subleased Premises.

10.2. Additional Permitted Alterations. Subtenant may make alterations and improvements to the Subleased Premises with Sublandlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed. All alterations, improvements, or additions shall be constructed in a good and workmanlike manner and in compliance with all applicable governmental laws, ordinances, codes and regulations. Sublandlord shall cooperate, at no cost to Sublandlord, with Subtenant in obtaining all required licenses, permits, and approvals. To the extent the permission of Prime Landlord is required for any such alteration or improvement, Sublandlord shall diligently and in good faith pursue such consent. All improvements and alterations performed or installed in the Subleased Premises by either Sublandlord or Subtenant, other than Subtenant's trade fixtures, shall be the property of Sublandlord when installed unless Exhibit C specifically provides otherwise.

10.3. Hazardous Materials Remediation. If, during the course of completing alterations or improvements, either Party or either Party's contractor obtain knowledge of actual or suspected asbestos containing materials, lead-based paints or other hazardous materials (collectively, the "Hazardous Materials") in the Subleased Premises, the discovering Party shall promptly notify Sublandlord and Subtenant of the existence of the same. Sublandlord and/or Prime Landlord and its agents shall have the right at any time prior to the Commencement Date of the Sublease, or after the Commencement Date of the Sublease, during normal business hours, to enter the Subleased Premises and conduct tests and take samples within the Subleased Premises. If such tests determine the presence of Hazardous Materials, then Sublandlord and/or Prime Landlord shall promptly cause such material to be removed and remediated from the Subleased Premises, as required by law, at Prime Landlord and/or Sublandlord's sole cost and expense.

11. **Utilities and Services**.

11.1. Utilities to be Obtained by Subtenant. Subtenant shall make arrangements for the provision to the Subleased Premises of telephone service, fax line, computer service and data lines, hazardous waste disposal, and janitorial services ("***Subtenant's Utilities***"). Sublandlord shall cooperate as necessary with Subtenant in the provision of such Subtenant's Utilities. Subtenant shall directly pay for all of Subtenant's Utilities supplied to the Subleased Premises, or if provided by Sublandlord, Subtenant shall pay Sublandlord reasonable charges for such utilities and services as additional rent.

11.2. Utilities to be Provided by Sublandlord. Sublandlord represents and warrants that all utilities are readily available to the Subleased Premises through existing lines or equipment and access to the same through the Building, the Common Areas, and the Land shall remain throughout the Term and any Renewal Term of this Sublease. Sublandlord shall be responsible to arrange for delivery of all utilities to the Subleased Premises and shall pay directly for all utilities, including but not limited to, electricity, heat, air conditioning, and water, other than Subtenant's Utilities.

12. **Taxes and Assessments.** Subtenant shall pay, prior to delinquency, all taxes on its personal property located on the Subleased Premises. In accordance with the Prime Lease, either Sublandlord or Prime Landlord, as the case may be, shall pay, prior to delinquency, all real property taxes and assessments levied against the Subleased Premises, the Building, and the Land. As used herein, real property taxes includes any fee or charge relating to the ownership, use, or

rental of the Subleased Premises, Premises, the Building, and/or the Land other than taxes on the net income of Sublandlord or Subtenant.

6. **Omitted.**

7. **Access.**

7.1. By Subtenant. Sublandlord shall provide Subtenant with access to the Common Areas and Subleased Premises twenty (24) hours per day, seven (7) days per week. Sublandlord shall provide Subtenant with a key and security card to permit Subtenant to have such access. Subtenant shall be permitted to install any security system Subtenant deems necessary at Subtenant's sole cost and expense.

7.2. By Sublandlord. Subject to applicable laws and upon reasonable advance notice, Subtenant shall provide Sublandlord access to enter the Subleased Premises at reasonable times (only during Subtenant's business hours) for the purpose of inspecting them, to determine the necessity of repair, showing them to prospective purchasers or lenders or, within three (3) months of the end of the Term, to sublessees, and making necessary alterations, repairs, improvements, or additions to the Subleased Premises as required or allowed by this Sublease. Any access by Sublandlord shall be given in a manner so as to not disturb Subtenant's business or prevent Subtenant from complying with the PSA between the Parties. Sublandlord, and Prime Landlord if Sublandlord provides Prime Landlord with access to the Subleased Premises, shall be accompanied at all times while on the Subleased Premises by a representative of Subtenant who is a licensed pharmacist. Sublandlord and/or Prime Landlord may immediately enter the Subleased Premises in an emergency so long as accompanied by police or members of the fire department. Without Subtenant's prior written consent, Sublandlord and/or Prime Landlord shall not have the right to enter the Subleased Premises when Subtenant is not open for business except in the event of an emergency as above provided.

8. **Insurance.**

8.1. Subtenant's Insurance. Subtenant shall, at Subtenant's expense, obtain and keep in force during the Term a policy or policies of commercial general liability insurance in a responsible company with limits of not less than $1,000,000 per occurrence and $3,000,000 in the aggregate, and $1,000,000 for damage to property per occurrence. Certificates evidencing such insurance shall be furnished to Sublandlord before Subtenant's occupancy of the Subleased Premises. Certificates of insurance evidencing such coverage ("***COIs***") shall be furnished to Sublandlord and Prime Landlord prior to Subtenant's occupancy of the Subleased Premises, annually during the Initial Term, and upon commencement of each Renewal Term, as applicable.

8.2. Sublandlord's Insurance. Sublandlord shall maintain all of the insurance policies as may be required pursuant to the Prime Lease. At all times during the Term, Sublandlord shall maintain, or ensure that Prime Landlord maintains, in force special form causes of loss insurance insuring the Building, Premises, Sublease Premises and the Land for the full insurable value thereof with commercially reasonable deductibles. In addition, Sublandlord will maintain in force during the entire Term of this Sublease commercial general liability insurance in commercially reasonable amounts and with such endorsements as may be necessary to cover Sublandlord for claims on account of the obligations assumed by Sublandlord under subsection 16.2.

15.3. Waiver of Subrogation. Neither Subtenant nor Sublandlord shall be liable to the other (or to the other's successors or assigns) for any loss or damage caused by fire or any of the risks enumerated in a standard fire insurance policy with an extended coverage endorsement, and in the event of insured loss, neither Party's insurance company shall have a subrogated claim against the other Party hereto.

16. **Indemnity.**

16.1. Subtenant's Indemnity. Subject to the waiver of subrogation set forth in Section 15.3 above, Subtenant shall indemnify and defend and hold harmless Sublandlord from any liability, loss, cost, expense (excluding attorneys' fees), claim, action or cause of action of a third-party arising out of or related to Subtenant's use and occupancy of the Subleased Premises, or any negligent activity of Subtenant on the Subleased Premises. Subtenant shall not have any liability for special, incidental or consequential damages under this Sublease.

16.2. Sublandlord's Indemnity. Subject to the waiver of subrogation set forth in Section 15.3 above, Sublandlord shall indemnify, defend and hold harmless Subtenant from any liability, loss, cost, expense, including, but not limited to, reasonable attorneys' fees, claim, action or cause of action of a third party arising out of or related to any breach or failure to perform by Sublandlord under this Sublease or any negligent act or willful misconduct by Sublandlord. Sublandlord shall not have any liability for special, incidental or consequential damages under this Sublease.

17. **Damage or Destruction of Subleased Premises**. In the event during the Term of this Sublease, the Subleased Premises, or any portion thereof, are destroyed or damaged by fire of any other casualty or occurrence whatsoever, Subtenant's rights pertaining to such destruction or damage shall be the same as the rights of Sublandlord, as tenant, under the Prime Lease, except that (a) Subtenant shall have the right, for a period of ninety (90) days after the occurrence of such damage or destruction, to elect to terminate this Sublease effective as of the date set forth in Subtenant's notice to Sublandlord of such election by Subtenant, and (b) in no event shall Subtenant have any obligation to repair or restore the Subleased Premises.

18. **Condemnation**.

18.1. Termination. In the event that title to all of the Subleased Premises, or to such portion of the Building, Common Areas or Subleased Premises so as to materially impair Subtenant's operations from or at the Subleased Premises, shall be taken during the Term under the exercise of the power of eminent domain, Subtenant may, by written notice to Sublandlord, elect to terminate this Sublease as of the date that Subtenant vacates the Subleased Premises. In the event of such termination, Subtenant shall be entitled to a refund of any rent paid by Subtenant relating to any period after such date of termination.

18.2. Rent Adjustment. In the event of any taking under the power of eminent domain which does not terminate this Sublease as aforesaid, but which interferes with the use of the balance of the Subleased Premises by Subtenant, the Rent payable by Subtenant hereunder shall be reduced, commencing as of the date on which possession is taken by the condemning authority, in the proportion which the floor space so taken or made unusable bears to the floor space usable by Subtenant prior to such taking.

9. **Estoppel Certificates**. Either Party shall, within twenty (20) days after notice from the other, execute and deliver to the other Party a certificate stating whether or not this Sublease has been modified and is in full force and effect and specifying any modifications or alleged breaches by the other Party. The certificate shall also state the amount of monthly Rent, the dates to which Rent has been paid in advance, and the amount of any security deposit or prepaid Rent. Failure to deliver the certificate within the specified time shall be conclusive on the Party from whom the certificate was requested that this Sublease is in full force and effect and has not been modified except as represented in the notice requesting the certificate.

10. **Defaults; Remedies.**

10.1. Default by Subtenant. Each of the following is a material default and breach of this Sublease by Subtenant (each, a "***Default***"):

(a) Default in Rent. Failure to make any required Rent or other payment as and when due, if the failure continues for a period of ten (10) days after written notice from Sublandlord.

(b) Default in Other Covenants. Subtenant's failure to comply with any of the covenants or provisions of the Sublease, other than those described in subsection 20.1(a), if the failure continues for a period of thirty (30) days after written notice thereof; provided that if such default reasonably requires more than thirty (30) days for its cure, Subtenant shall not be in default if it commences to cure within the 30-day period and thereafter diligently pursues its completion.

10.2. Remedies Upon Subtenant's Default. If any Default occurs, Sublandlord may, at any time thereafter without notice or demand, do any or all of the following:

(a) Termination. Upon thirty (30) days' written notice to Subtenant, terminate this Sublease and Subtenant's right to possession of the Subleased Premises by any lawful means; Sublandlord may, subject to the requirements of Section 21.3 hereof, re-enter and take possession of and remove all persons or property, and Subtenant shall immediately surrender possession of the Subleased Premises to Sublandlord. Sublandlord may recover from Subtenant all damages incurred by Sublandlord for Subtenant's default including, but not limited to, the reasonable costs of recovering possession of the Subleased Premises and expenses of reletting.

(b) Maintain Subtenant's Right to Possession. Maintain Subtenant's right to possession and continue this Sublease in force whether or not Subtenant has abandoned the Subleased Premises in which event Sublandlord shall be entitled to enforce all of its rights and remedies under this Sublease, including the right to recover Rent as it becomes due.

(c) Remedies Cumulative. The foregoing remedies shall be cumulative and in addition to any other remedy available to Sublandlord by law. Sublandlord shall have a duty to mitigate its damages.

10.3. Default by Sublandlord and Subtenant's Remedies.

(a) If Sublandlord fails, refuses or neglects to perform any of its obligations pursuant to this Sublease, then: (i) Subtenant may, but is not obligated to, upon

Sublandlord's failure to cure such default within thirty (30) days after Sublandlord's receipt of notice from Subtenant which specifies the particular default complained of, make such payment or do or cause to be done such things, at Sublandlord's cost and expense, or (ii) terminate this Sublease by notice to Sublandlord and vacate the Subleased Premises by the date set forth in such notice for termination, in which event Subtenant shall have no further obligations under this Sublease after the date Subtenant vacates the Subleased Premises. All money advanced or expended by Subtenant in connection with the aforesaid matters shall be payable by Sublandlord on demand and/or, at Subtenant's election, credited to the monthly installments of Rent accruing under this Sublease. In addition, in the event of an emergency where it is not practical to notify Sublandlord or to wait for Sublandlord to perform any maintenance or to make any repairs that are Sublandlord's obligations hereunder, Subtenant shall have the right, at Sublandlord's cost and expense, to perform temporary maintenance or to make temporary repairs.

(b) If, without fault on the part of Subtenant, the Prime Lease is cancelled or terminated prior to the expiration of the Term of this Sublease, then Subtenant shall have the right, but not the obligation, to cancel or terminate this Sublease, effective as of the date of cancellation or termination of the Prime Lease and/or to enter into a direct lease with Prime Landlord for the Subleased Premises upon the terms and conditions (including provisions relating to Rent) contained in this Sublease, in which event this Sublease shall be terminated and Subtenant shall be relieved of all obligations and liabilities arising hereunder or pursuant hereto.

20.4. Immediate Termination. Notwithstanding the above remedies, in the event the PSA between the Parties expires or is terminated for any reason, Subtenant shall have the right to terminate this Sublease upon written notice to Sublandlord specifying the date of such termination, and the Parties shall be released from any and all liabilities and obligations hereunder, except for those accruing prior to the date of such termination.

21. **Surrender at Expiration.**

21.1. Condition of Subleased Premises. At the expiration or termination of the Sublease, Subtenant will quit and surrender the Subleased Premises in broom clean and "white box" condition, with all improvements, trade fixtures and furnishings removed. Any damage caused by such removal shall be repaired at Subtenant's cost.

21.2. Holdover. If Subtenant to continues to occupy the Subleased Premises after the expiration of the Term, without any express agreement as to such occupancy, then such holding over will be considered as a month-to-month tenancy subject to all terms and conditions of this Sublease, as long as Subtenant continues to timely pay Rent in an amount equal to the monthly Rent payable during the last month of the Term of this Sublease. If a month-to-month tenancy results from a holdover by Subtenant under this subsection 21.2, the tenancy shall be terminable at the end of any monthly rental period on written notice from Sublandlord given not less than ten (10) days before the termination date which shall be specified in the notice.

21.3. Compliance with Pharmacy Laws on Termination. Notwithstanding anything set forth in this Sublease to the contrary, Sublandlord shall not interfere with Subtenant's compliance with applicable pharmacy laws, rules or regulations and Subtenant's proper handling or disposition of its pharmaceutical products upon termination of this Sublease. This provision shall be effective even upon a termination of this Sublease by Sublandlord following the occurrence of a Default.

11. **Brokers.** Each of Sublandlord and Subtenant warrants to the other that it has had no dealings with any real estate broker or agents in connection with the negotiation of this Sublease, and it knows of no real estate broker or agent entitled to a commission in connection with this Sublease. Each of Sublandlord and Subtenant agrees to indemnify and hold the other harmless from any loss, cost, liability, or expense incurred by the other as a result of any claim by any broker or agent on the basis of any arrangements or agreements made by or on behalf of indemnifying Party.

12. **General Provisions.**

12.1. Severability. The invalidity of any provision of this Sublease as determined by a court of competent jurisdiction shall not affect the validity of any other provision.

12.2. Time of Essence. Time is of the essence of this Sublease.

12.3. Entire Agreement. This Sublease and the PSA constitute the entire agreement of the Parties hereto with respect to the subject matter contemplated hereby and thereby and supersede all previous and contemporaneous oral or written negotiations, agreements, arrangements, and understandings relating to the subject matter hereof and thereof.

12.4. Notices. Any notice given under this Sublease shall be in writing and may be given by personal delivery, by overnight delivery, or by certified mail, postage prepaid, addressed to Subtenant or to Sublandlord at their addresses set forth below their signatures to the Sublease. Either Party may, by notice under this subsection, change its address for notice purposes. Notices personally delivered are considered received upon delivery. Notices sent by overnight delivery are considered received on the next business day. Mailed notices are considered received three (3) days after deposit in the mail. To be valid as notice, a copy of any notice given to Subtenant shall be concurrently given to:

Attn: Genoa Legal Dept.
Genoa Healthcare LLC
707 S. Grady Way
Suite 400
Renton, WA 98057

and a copy of any notice given to Sublandlord shall be concurrently given to:

Attn: Blake Martin, President
Monarch
1000 Progress Place
Concord, NC 28025

23.4 Waiver. Waiver by either Party of strict performance of any provision of this Sublease shall not be a waiver of or prejudice the Party's right to require strict performance of the same provision in the future or of any other provision. No waiver shall be enforced except if set forth in writing and signed by the Party against whom such waiver is asserted.

23.5. Binding Effect. The terms of this Sublease shall be binding upon and shall inure to the benefit of the Parties hereto and their respective personal representatives, successors, heirs and assigns.

23.6. Assignment and Subletting. Subtenant shall not assign, sublet, convey or transfer this Sublease or any interest therein without the prior written consent of Sublandlord, which consent shall not be unreasonably withheld, conditioned or delayed. Notwithstanding anything herein to the contrary, if not prohibited by the Prime Lease, Subtenant may assign this Sublease, without Sublandlord's consent, to any affiliated or related entity, to any entity with which Subtenant may merge or consolidate and to any person or entity that acquires all or substantially all of the assets of Subtenant or the business that is being conducted by Subtenant at or from the Subleased Premises, provided that the assignee assumes or is legally responsible for the obligations of Subtenant under this Sublease thereafter arising.

23.7. Authority. Each individual executing this Sublease on behalf of an entity represents and warrants that he is duly authorized to execute and deliver this Sublease on behalf of the entity, in accordance with duly adopted resolutions or such entity's governing documents, and that this Sublease is binding upon that entity in accordance with its terms.

23.8. Attorneys' Fees. If suit or action is instituted in connection with any controversy arising out of this Sublease, the prevailing Party shall be entitled to recover, in addition to costs, attorneys' fees.

23.9. Relationship of Parties. For the purpose of this Sublease, the relationship of the Parties hereto is strictly that of sublandlord and subtenant. Sublandlord has no interest in Subtenant's enterprise and this Sublease cannot be construed as a joint venture or partnership. Except as otherwise set forth in this Sublease or in the PSA, neither Sublandlord nor Subtenant is an agent or representative of the other for any purpose.

23.10. Counterparts. This Sublease may be executed in any number of counterparts, each of which shall be deemed an original. Electronic signatures shall be valid as originals.

23.11. Governing Law. The validity of this Sublease, the interpretation of the rights and duties of the Parties hereunder, and the construction of the terms hereof shall be governed in accordance with the internal laws of the state in which the Subleased Premises are situated.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have executed this Sublease on the dates specified below their respective signatures below:

SUBLANDLORD:	SUBTENANT:
Monarch	Genoa Healthcare LLC
By:_____	By:_____
Its: President	Its: Chief Executive Officer
Address: 1000 Progress Place Concord, NC 28025	Address: 707 S. Grady Way, Suite 400 Renton, WA 98057
Date:_____	Date:_____

Prime Landlord hereby acknowledges and consents to this Sublease.

Cabarrus County

By: _____

Name: _____

Title: _____

EXHIBIT A

Site Plan showing the Subleased Premises

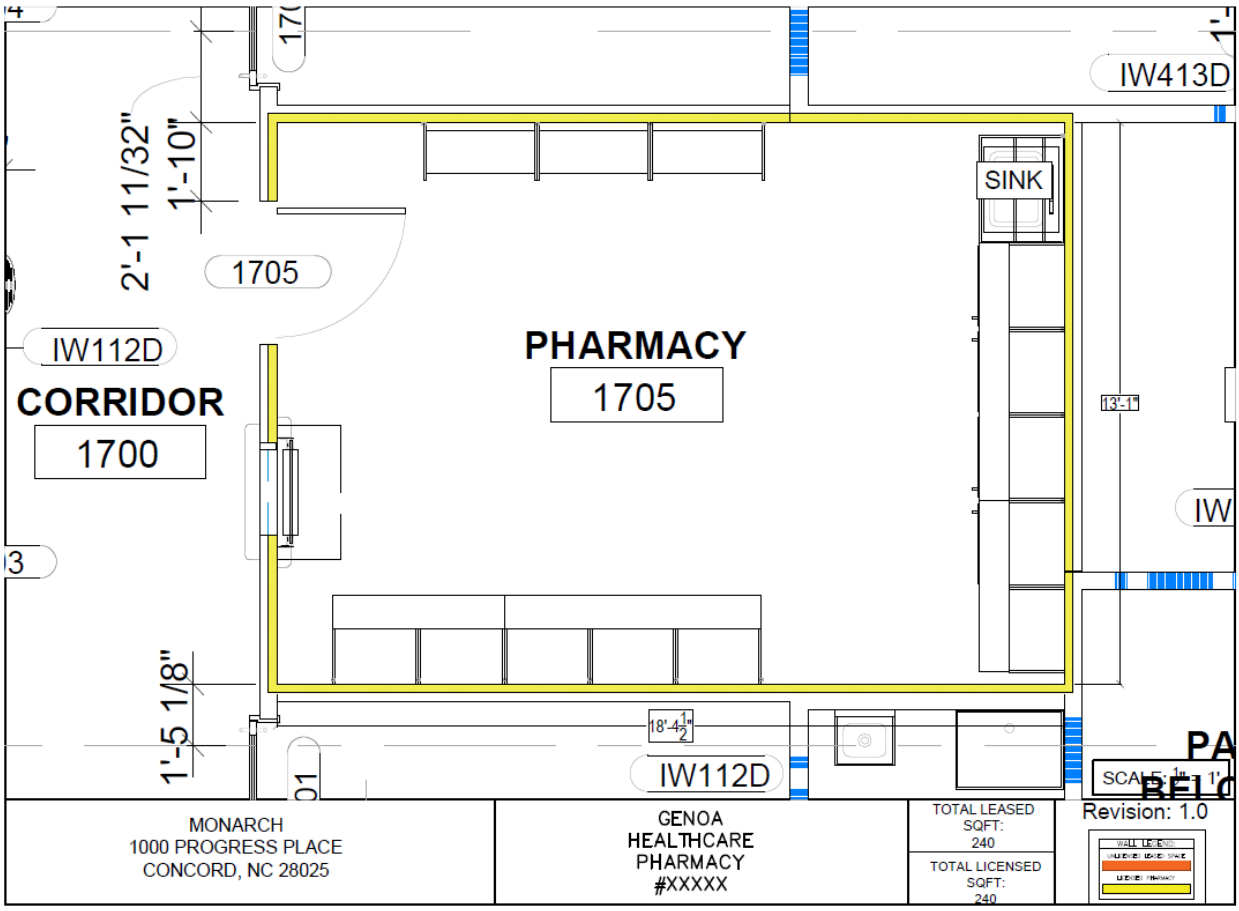


EXHIBIT B

Prime Lease

See Attached

EXHIBIT C

Improvements to Subleased Premises

Subtenant and Sublandlord shall mutually agree on the Party responsible for completing the improvements and alternations to Subleased Premises, with Subtenant being financially responsible for the approved work to be completed.

- Create lobby access
- Build counter space
- Extend phone and electrical as required
- Extend plumbing as required or acquire Board of Pharmacy variance
- Add security system or extend current security system to conform to Board of Pharmacy requirements
- Acquire necessary building permits
- Bring space into conformity with all Board of Pharmacy Rules and Regulations

Subtenant and Sublandlord agree that all improvements and alterations to the Subleased Premises are necessary to the conduct of Subtenant's business operations and further agree that the improvements and alterations shall be considered to constitute a part of the Subleased Premises.

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS - FOR ACTION

SUBJECT:

Facilities Design and Construction - Approval of GMP2 for Progress Place Renovations

BRIEF SUMMARY:

Staff and Messer Construction will present the Guaranteed Maximum Price #2 for the Progress Place renovations. This will be an amendment to the existing contract with Messer Construction.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

Motion to approve the GMP #2 amendment and authorize the Interim County Manager to execute the contract change order to the existing contract between Cabarrus County and Messer Construction subject to review by the County Attorney.

SUBMITTED BY:

Michael A Miller, Design and Construction Manager

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS - FOR ACTION

SUBJECT:

Finance - General Obligation Bond Referendum Resolution

BRIEF SUMMARY:

Initial General Obligation Bond Referendum Resolution making certain findings and determinations and authorizing the filing of an application with the Local Government Commissioner in connection with the proposed issuance of school bonds and community college bonds by the County of Cabarrus, North Carolina.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

The Board of Commissioners approve the General Obligation Bond Referendum Resolution making certain findings and determinations and authorizing the filing of an application with the Local Government Commissioner in connection with the proposed issuance of school bonds and community college bonds by the County of Cabarrus, North Carolina.

SUBMITTED BY:

Jim M Howden, Finance Director

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1.GO Bond Resolution

2. Notice of Intent

Draft No. 1
April 14, 2026

The Board of Commissioners for the County of Cabarrus, North Carolina met in a regular meeting in the Commissioners' Meeting Room at the Cabarrus County Governmental Center located at 65 Church Street S in Concord, North Carolina, at 6:00 p.m. on May 18, 2026.

Present: Chair Laura Blackwell Lindsey, presiding, and Commissioners _____

_____

Absent: Commissioners _____

_____

Also present: _____

_____

* * * * * *

_____ introduced the following resolution the title of which was read and a copy of which had been previously distributed to each Commissioner:

RESOLUTION MAKING CERTAIN FINDINGS AND DETERMINATIONS AND AUTHORIZING THE FILING OF AN APPLICATION WITH THE LOCAL GOVERNMENT COMMISSION IN CONNECTION WITH THE PROPOSED ISSUANCE OF SCHOOL BONDS AND COMMUNITY COLLEGE BONDS BY THE COUNTY OF CABARRUS, NORTH CAROLINA

BE IT RESOLVED by the Board of Commissioners (the "Board") for the County of Cabarrus, North Carolina (the "County"):

Section 1. The Board does hereby find and determine as follows:

(a) Preliminary studies have been completed to demonstrate the need for financing the costs of (i) constructing, renovating, expanding, improving and equipping school buildings and other school facilities and (ii) constructing, renovating, expanding, improving and equipping community college facilities in the County for Rowan-Cabarrus Community College.

(b) The County wishes to commence the procedures for the authorization and issuance of not to exceed $_____ School Bonds and not to exceed $_____ Community College Bonds at this time.

(c) The capital projects to be funded by the proposed bonds are necessary or expedient, and the amount of proposed bonds is adequate and not excessive to fund said capital projects.

(d) The debt management and the budgetary and fiscal management policies of the County have been carried out in compliance with applicable law.

(e) The increase in taxes, if any, necessary to service the proposed debt will not be excessive.

Section 2. The Finance Director of the County is hereby directed to file an application of the County with the North Carolina Local Government Commission for approval of not to exceed $_____ School Bonds and not to exceed $_____ Community College Bonds of the County. The Clerk to the Board for the County is hereby authorized to publish a notice of intent to file such application in the manner provided by law, and any action heretofore taken to publish such notice is hereby approved, ratified and confirmed.

Section 3. The appropriate officers of the County are hereby authorized and directed to do any and all things necessary, appropriate or convenient to carry into effect the provisions of this resolution.

Section 4. This resolution shall take effect immediately upon its adoption.

Upon motion of _____, seconded by _____, the foregoing resolution entitled "RESOLUTION MAKING CERTAIN FINDINGS AND DETERMINATIONS AND AUTHORIZING THE FILING OF AN APPLICATION WITH THE LOCAL GOVERNMENT COMMISSION IN CONNECTION WITH THE PROPOSED ISSUANCE OF SCHOOL BONDS AND COMMUNITY COLLEGE BONDS BY THE COUNTY OF CABARRUS, NORTH CAROLINA" was adopted by the following vote:

Ayes:_____

_____

Noes:_____

_____

* * * * * *

I, Ariadne Olvera, Clerk to the Board of Commissioners for the County of Cabarrus, North Carolina, DO HEREBY CERTIFY that the foregoing is a true copy of so much of the proceedings of said Board of Commissioners for said County at a regular meeting held on May 18, 2026, as it relates in any way to the introduction and adoption of the foregoing resolution and that said proceedings are recorded in the minutes of said Board of Commissioners.

I DO HEREBY FURTHER CERTIFY that proper notice of such regular meeting was given as required by North Carolina law.

WITNESS my hand and official seal of said County this 18th day of May, 2026.

_____

Clerk to the Board of Commissioners

[SEAL]

To be published once in the Independent Tribune

NOTICE OF INTENT TO
APPLY TO THE LOCAL GOVERNMENT COMMISSION OF NORTH CAROLINA
FOR APPROVAL OF BONDS

NOTICE is hereby given of the intention of the undersigned to file an application with the Local Government Commission of North Carolina in Raleigh, North Carolina, for its approval of the issuance of the following proposed bonds of the County of Cabarrus, North Carolina, which bonds shall be subject to the approval of the voters of said County at a referendum:

$_____ SCHOOL BONDS of the County of Cabarrus, North Carolina, for the purpose of providing funds to construct, renovate, expand, improve and equip school buildings and other school facilities.

$_____ COMMUNITY COLLEGE BONDS of the County of Cabarrus, North Carolina, for the purpose of providing funds to construct, renovate, expand, improve and equip community college facilities in said County for Rowan-Cabarrus Community College.

Any citizen or taxpayer of the County of Cabarrus, North Carolina who objects to said bonds in whole or in part may file with the Local Government Commission of North Carolina a statement setting forth his or her objections and containing his or her name and address as provided in Section 159-50 of the General Statutes of North Carolina, in which event such person shall also file a copy of said statement with the undersigned, at any time within seven days from the date of publication of this notice. Objections set forth in said statement will be considered by said Commission, along with said application, in determining whether to approve or disapprove said application.

BOARD OF COMMISSIONERS FOR THE COUNTY OF CABARRUS, NORTH CAROLINA

By: Ariadne Olvera
Title: Clerk to the Board of Commissioners

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

DISCUSSION ITEMS – FOR ACTION

SUBJECT:

Sheriff's Office - Approval of Axon/Skydio Drone Contract

BRIEF SUMMARY:

The Cabarrus County Sheriff's Office requests the approval of the attached Axon Contract to replace the existing drone fleet, which are currently DJI manufactured with potential federal bans and FAA restrictions. They would be replaced with Skydio drones under an Axon contract. The contract provides discounts for the DJI drones being replaced. This contract is structured with built in replacement and upgrade provisions. This also replaces our smaller indoor drone that can be used on barricaded subjects and high-risk warrant service. And finally adds the Drone as a First Responder piece that will launch remotely and be piloted by our Real Time Information Center operators (all drones can/will be piloted by the RTIC). The Drone as a First Responder (DFR) allows for immediate deployment to see what assets are needed, get invaluable intelligence about any type of emergent incident and in fractions of normal response times. The CCSO's drone program has become essential in our response to endangered missing subjects, fleeing offenders, investigations, oversite and intelligence of critical incidents and surveillance of criminal activity. This is a five-year contract at $166,789.36 per year for a total amount of $833,946.80. We will be using revenues from radio tower rental space as well as Asset Forfeiture funds to fully fund this project.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

Motion to approve the contract and any necessary budget amendment.

SUBMITTED BY:

Tessa D Burchett, Chief Deputy

BUDGET AMENDMENT REQUIRED:

Yes

ATTACHMENTS:

1. Contract

Axon Enterprise, Inc.
17800 N 85th St
Scottsdale, Arizona 85255
United States
VAT: 86-0741227
Domestic:(800) 978-2737
International: +1.800.978.2737

Q-826801-46108DJ

Issued: 03/27/2026

Quote Expiration: 12/31/2026

Estimated Contract Start Date: 10/01/2026

Account Number: 110599

Payment Terms: N30

Mode of Delivery: AUTO-GND

Credit/Debit Amount: $0.00

SHIP TO	BILL TO
Cabarrus County Sheriff's Office - NC 30 Corban Ave SE Concord, NC 28025-3571 USA	Cabarrus County Sheriff's Office - NC 30 Corban Ave SE Concord NC 28025-3571 USA Email:

SALES REPRESENTATIVE	PRIMARY CONTACT
Andrea Swann Phone: Email: aswann@axon.com Fax:	Christopher Dial Phone: (704) 920-3016 Email: ccdial@cabarruscounty.us Fax: (704)-784-1919

Quote Summary

Program Length	60 Months
TOTAL COST	$833,946.80
ESTIMATED TOTAL W/ TAX	$868,936.19

Discount Summary

Average Savings Per Year	$10,647.44
TOTAL SAVINGS	$53,237.20

Payment Summary

Date	Subtotal	Tax	Total
Sep 2026	$166,789.36	$6,997.87	$173,787.23
Sep 2027	$166,789.36	$6,997.87	$173,787.23
Sep 2028	$166,789.36	$6,997.87	$173,787.23
Sep 2029	$166,789.36	$6,997.87	$173,787.23
Sep 2030	$166,789.36	$6,997.91	$173,787.27
Total	**$833,946.80**	**$34,989.39**	**$868,936.19**

Quote Unbundled Price:	**$38,088.45**
Quote List Price:	**$38,088.45**
Quote Subtotal:	**$833,946.80**

Pricing

All deliverables are detailed in Delivery Schedules section lower in proposal

Item	Description	Qty	Term	Unbundled	List Price	Net Price	Subtotal	Tax	Total
Program									
A00046	AXON AIR DFR PATROL PLAN	5	60			$3,958.37	$475,004.00	$21,298.62	$496,302.62
A00044	AXON AIR DFR DOCK PLAN	1	60			$5,877.47	$352,648.00	$13,600.12	$366,248.12
A la Carte Hardware									
101558	AXON AIR - SKYDIO DOCK BATTERY FOR X10	3			$495.00	$0.00	$0.00	$0.00	$0.00
101540	AXON AIR - SKYDIO SAFE - SPEAKER REFRESH 1	5			$340.00	$0.00	$0.00	$0.00	$0.00
101522	AXON AIR - SKYDIO SAFE - SPOTLIGHT REFRESH 1	5			$280.00	$0.00	$0.00	$0.00	$0.00
101229	AXON AIR - SKYDIO SPOTLIGHT FOR X10	5			$265.00	$0.00	$0.00	$0.00	$0.00
101237	AXON AIR - SKYDIO BATTERY (150W) FOR X10	4			$370.00	$0.00	$0.00	$0.00	$0.00
101211	AXON AIR - SKYDIO SPEAKER FOR X10	5			$320.00	$0.00	$0.00	$0.00	$0.00
A00031	AXON AIR R10 TEAM KIT BUNDLE	1	60		$24,098.45	$21.58	$1,294.80	$90.65	$1,385.45
A la Carte Services									
101513	AXON AIR - SKYDIO - DOCK INSTRUCTOR TRAINING	1			$5,000.00	$5,000.00	$5,000.00	$0.00	$5,000.00
Total							**$833,946.80**	**$34,989.39**	**$868,936.19**

Delivery Schedule

Hardware

Bundle	Item	Description	QTY	Shipping Location	Estimated Delivery Date
AXON AIR DFR DOCK PLAN	102768	AXON AIR - SKYDIO X10 DOCK DFR HW KIT	1	1	09/01/2026
AXON AIR DFR PATROL PLAN	102765	AXON AIR - SKYDIO X10 PATROL DFR HW KIT	5	1	09/01/2026
AXON AIR R10 TEAM KIT BUNDLE	102465	AXON AIR - SKYDIO R10 TEAM HW KIT	1	1	09/01/2026
A la Carte	101211	AXON AIR - SKYDIO SPEAKER FOR X10	5	1	09/01/2026
A la Carte	101229	AXON AIR - SKYDIO SPOTLIGHT FOR X10	5	1	09/01/2026
A la Carte	101237	AXON AIR - SKYDIO BATTERY (150W) FOR X10	4	1	09/01/2026
A la Carte	101558	AXON AIR - SKYDIO DOCK BATTERY FOR X10	3	1	09/01/2026
AXON AIR DFR DOCK PLAN	102771	AXON AIR - SKYDIO SAFE - X10 DOCK DFR OPS HW KIT - REFRESH 1	1	1	03/01/2029
AXON AIR DFR PATROL PLAN	102767	AXON AIR - SKYDIO SAFE - X10 PATROL DFR HW KIT - REFRESH 1	5	1	03/01/2029
AXON AIR R10 TEAM KIT BUNDLE	102476	AXON AIR - SKYDIO SAFE R10 TEAM HW KIT - REFRESH 1	1	1	03/01/2029
A la Carte	101522	AXON AIR - SKYDIO SAFE - SPOTLIGHT REFRESH 1	5	1	03/01/2029
A la Carte	101540	AXON AIR - SKYDIO SAFE - SPEAKER REFRESH 1	5	1	03/01/2029

Software

Bundle	Item	Description	QTY	Estimated Start Date	Estimated End Date

Software

Bundle	Item	Description	QTY	Estimated Start Date	Estimated End Date
AXON AIR DFR DOCK PLAN	102656	AXON AIR - AXON EVIDENCE UNLIMITED DATA STORAGE PER DRONE	1	10/01/2026	09/30/2031
AXON AIR DFR DOCK PLAN	102766	AXON AIR - SKYDIO X10 DOCK DFR SUBCRIPTION PLAN W/ DATA	1	10/01/2026	09/30/2031
AXON AIR DFR PATROL PLAN	102656	AXON AIR - AXON EVIDENCE UNLIMITED DATA STORAGE PER DRONE	5	10/01/2026	09/30/2031
AXON AIR DFR PATROL PLAN	102678	AXON AIR - SKYDIO X10 PATROL DFR SUBSCRIPTION PLAN W/ DATA	5	10/01/2026	09/30/2031
AXON AIR R10 TEAM KIT BUNDLE	102467	AXON AIR - SKYDIO R10 SUBSCRIPTION PLAN	1	10/01/2026	09/30/2031
AXON AIR R10 TEAM KIT BUNDLE	102656	AXON AIR - AXON EVIDENCE UNLIMITED DATA STORAGE PER DRONE	1	10/01/2026	09/30/2031

Services

Bundle	Item	Description	QTY
AXON AIR DFR DOCK PLAN	101498	AXON AIR - SKYDIO - IN-PERSON TRAINING - DOCK FOR X10	1
AXON AIR DFR DOCK PLAN	101499	AXON AIR - SKYDIO X10 DOCK COMMISSIONING	1
AXON AIR DFR DOCK PLAN	102666	AXON AIR - SKYDIO X10 DOCK DFR SERVICES - PREMIUM SOLUTION	1
AXON AIR DFR PATROL PLAN	102526	PSO 1-DAY ONSITE TRAINING	1
AXON AIR DFR PATROL PLAN	102667	AXON AIR - SKYDIO X10 PATROL DFR SERVICES - PREMIUM SOLUTION	5
AXON AIR R10 TEAM KIT BUNDLE	12021	AXON AIR - PROFESSIONAL IMPLEMENTATION	1
A la Carte	101513	AXON AIR - SKYDIO - DOCK INSTRUCTOR TRAINING	1

Shipping Locations

Location Number	Street	City	State	Zip	Country
1	30 Corban Ave SE	Concord	NC	28025-3571	USA

Payment Details

Sep 2026

Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
Annual Payment 1	101211	AXON AIR - SKYDIO SPEAKER FOR X10	5	$0.00	$0.00	$0.00
Annual Payment 1	101229	AXON AIR - SKYDIO SPOTLIGHT FOR X10	5	$0.00	$0.00	$0.00
Annual Payment 1	101237	AXON AIR - SKYDIO BATTERY (150W) FOR X10	4	$0.00	$0.00	$0.00
Annual Payment 1	101513	AXON AIR - SKYDIO - DOCK INSTRUCTOR TRAINING	1	$1,000.00	$0.00	$1,000.00
Annual Payment 1	101522	AXON AIR - SKYDIO SAFE - SPOTLIGHT REFRESH 1	5	$0.00	$0.00	$0.00
Annual Payment 1	101540	AXON AIR - SKYDIO SAFE - SPEAKER REFRESH 1	5	$0.00	$0.00	$0.00
Annual Payment 1	101558	AXON AIR - SKYDIO DOCK BATTERY FOR X10	3	$0.00	$0.00	$0.00
Annual Payment 1	A00031	AXON AIR R10 TEAM KIT BUNDLE	1	$258.96	$18.13	$277.09
Annual Payment 1	A00044	AXON AIR DFR DOCK PLAN	1	$70,529.60	$2,720.02	$73,249.62
Annual Payment 1	A00046	AXON AIR DFR PATROL PLAN	2	$95,000.80	$4,259.72	$99,260.52
Total				**$166,789.36**	**$6,997.87**	**$173,787.23**

Sep 2027

Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
Annual Payment 2	101211	AXON AIR - SKYDIO SPEAKER FOR X10	5	$0.00	$0.00	$0.00
Annual Payment 2	101229	AXON AIR - SKYDIO SPOTLIGHT FOR X10	5	$0.00	$0.00	$0.00
Annual Payment 2	101237	AXON AIR - SKYDIO BATTERY (150W) FOR X10	4	$0.00	$0.00	$0.00
Annual Payment 2	101513	AXON AIR - SKYDIO - DOCK INSTRUCTOR TRAINING	1	$1,000.00	$0.00	$1,000.00
Annual Payment 2	101522	AXON AIR - SKYDIO SAFE - SPOTLIGHT REFRESH 1	5	$0.00	$0.00	$0.00
Annual Payment 2	101540	AXON AIR - SKYDIO SAFE - SPEAKER REFRESH 1	5	$0.00	$0.00	$0.00
Annual Payment 2	101558	AXON AIR - SKYDIO DOCK BATTERY FOR X10	3	$0.00	$0.00	$0.00
Annual Payment 2	A00031	AXON AIR R10 TEAM KIT BUNDLE	1	$258.96	$18.13	$277.09
Annual Payment 2	A00044	AXON AIR DFR DOCK PLAN	1	$70,529.60	$2,720.02	$73,249.62
Annual Payment 2	A00046	AXON AIR DFR PATROL PLAN	2	$95,000.80	$4,259.72	$99,260.52
Total				**$166,789.36**	**$6,997.87**	**$173,787.23**

Sep 2028

Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
Annual Payment 3	101211	AXON AIR - SKYDIO SPEAKER FOR X10	5	$0.00	$0.00	$0.00
Annual Payment 3	101229	AXON AIR - SKYDIO SPOTLIGHT FOR X10	5	$0.00	$0.00	$0.00
Annual Payment 3	101237	AXON AIR - SKYDIO BATTERY (150W) FOR X10	4	$0.00	$0.00	$0.00
Annual Payment 3	101513	AXON AIR - SKYDIO - DOCK INSTRUCTOR TRAINING	1	$1,000.00	$0.00	$1,000.00
Annual Payment 3	101522	AXON AIR - SKYDIO SAFE - SPOTLIGHT REFRESH 1	5	$0.00	$0.00	$0.00
Annual Payment 3	101540	AXON AIR - SKYDIO SAFE - SPEAKER REFRESH 1	5	$0.00	$0.00	$0.00
Annual Payment 3	101558	AXON AIR - SKYDIO DOCK BATTERY FOR X10	3	$0.00	$0.00	$0.00
Annual Payment 3	A00031	AXON AIR R10 TEAM KIT BUNDLE	1	$258.96	$18.13	$277.09
Annual Payment 3	A00044	AXON AIR DFR DOCK PLAN	1	$70,529.60	$2,720.02	$73,249.62
Annual Payment 3	A00046	AXON AIR DFR PATROL PLAN	2	$95,000.80	$4,259.72	$99,260.52
Total				**$166,789.36**	**$6,997.87**	**$173,787.23**

Sep 2029

Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
Annual Payment 4	101211	AXON AIR - SKYDIO SPEAKER FOR X10	5	$0.00	$0.00	$0.00
Annual Payment 4	101229	AXON AIR - SKYDIO SPOTLIGHT FOR X10	5	$0.00	$0.00	$0.00
Annual Payment 4	101237	AXON AIR - SKYDIO BATTERY (150W) FOR X10	4	$0.00	$0.00	$0.00
Annual Payment 4	101513	AXON AIR - SKYDIO - DOCK INSTRUCTOR TRAINING	1	$1,000.00	$0.00	$1,000.00
Annual Payment 4	101522	AXON AIR - SKYDIO SAFE - SPOTLIGHT REFRESH 1	5	$0.00	$0.00	$0.00
Annual Payment 4	101540	AXON AIR - SKYDIO SAFE - SPEAKER REFRESH 1	5	$0.00	$0.00	$0.00
Annual Payment 4	101558	AXON AIR - SKYDIO DOCK BATTERY FOR X10	3	$0.00	$0.00	$0.00
Annual Payment 4	A00031	AXON AIR R10 TEAM KIT BUNDLE	1	$258.96	$18.13	$277.09
Annual Payment 4	A00044	AXON AIR DFR DOCK PLAN	1	$70,529.60	$2,720.02	$73,249.62
Annual Payment 4	A00046	AXON AIR DFR PATROL PLAN	2	$95,000.80	$4,259.72	$99,260.52
Total				**$166,789.36**	**$6,997.87**	**$173,787.23**

Sep 2030

Invoice Plan	Item	Description	Qty	Subtotal	Tax	Total
Annual Payment 5	101211	AXON AIR - SKYDIO SPEAKER FOR X10	5	$0.00	$0.00	$0.00
Annual Payment 5	101229	AXON AIR - SKYDIO SPOTLIGHT FOR X10	5	$0.00	$0.00	$0.00
Annual Payment 5	101237	AXON AIR - SKYDIO BATTERY (150W) FOR X10	4	$0.00	$0.00	$0.00
Annual Payment 5	101513	AXON AIR - SKYDIO - DOCK INSTRUCTOR TRAINING	1	$1,000.00	$0.00	$1,000.00
Annual Payment 5	101522	AXON AIR - SKYDIO SAFE - SPOTLIGHT REFRESH 1	5	$0.00	$0.00	$0.00
Annual Payment 5	101540	AXON AIR - SKYDIO SAFE - SPEAKER REFRESH 1	5	$0.00	$0.00	$0.00
Annual Payment 5	101558	AXON AIR - SKYDIO DOCK BATTERY FOR X10	3	$0.00	$0.00	$0.00
Annual Payment 5	A00031	AXON AIR R10 TEAM KIT BUNDLE	1	$258.96	$18.13	$277.09
Annual Payment 5	A00044	AXON AIR DFR DOCK PLAN	1	$70,529.60	$2,720.04	$73,249.64
Annual Payment 5	A00046	AXON AIR DFR PATROL PLAN	2	$95,000.80	$4,259.74	$99,260.54
Total				**$166,789.36**	**$6,997.91**	**$173,787.27**

Tax is estimated based on rates applicable at date of quote and subject to change at time of invoicing. If a tax exemption certificate should be applied, please submit prior to invoicing.

Standard Terms and Conditions

Axon Enterprise Inc. Sales Terms and Conditions

Axon Master Services and Purchasing Agreement:

This Quote is limited to and conditional upon your acceptance of the provisions set forth herein and Axon's Master Services and Purchasing Agreement (posted at https://www.axon.com/sales-terms-and-conditions), as well as the attached Statement of Work (SOW) for Axon Fleet and/or Axon Interview Room purchase, if applicable. In the event you and Axon have entered into a prior agreement to govern all future purchases, that agreement shall govern to the extent it includes the products and services being purchased and does not conflict with the Axon Customer Experience Improvement Program Appendix as described below.

ACEIP:

The Axon Customer Experience Improvement Program Appendix, which includes the sharing of de-identified segments of Agency Content with Axon to develop new products and improve your product experience (posted at www.axon.com/legal/sales-terms-and-conditions), is incorporated herein by reference. By signing below, you agree to the terms of the Axon Customer Experience Improvement Program.

Acceptance of Terms:

Any purchase order issued in response to this Quote is subject solely to the above referenced terms and conditions. By signing below, you represent that you are lawfully able to enter into contracts. If you are signing on behalf of an entity (including but not limited to the company, municipality, or government agency for whom you work), you represent to Axon that you have legal authority to bind that entity. If you do not have this authority, please do not sign this Quote.

Exceptions to Standard Terms and Conditions

Rewrite Estimates

Estimated Amounts and Contract Terminations. Any amounts stated as due under existing or terminated contracts — including contract transfer balances carried forward to new or pending contracts — are estimates based on payments received as of the calculation date. These estimates may be adjusted if new contracts are not executed on the anticipated dates or if expected payments are not made.

Refresh Shipment Timing

Technology Assurance Plan (TAP) Refresh Prior to Renewal. For Customers with expiring agreements that include TAP refresh rights, Axon may, in its discretion, ship refresh hardware under the existing contract while renewal or replacement agreements are in progress. Any such shipments will be deemed made under the terms of the existing contract until the new contract is fully executed, after which any applicable updates, fees, or adjustments will apply.

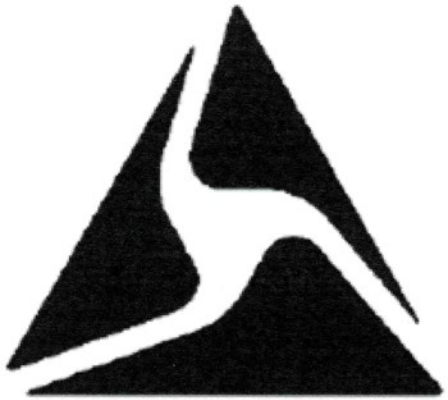
Shipment Timing

Shipment Variance. Estimated shipment dates are provided for planning purposes only and are not guarantees. Axon may ship hardware before or after the estimated shipment date, and failure to meet an estimated shipment date will not, by itself, constitute a breach, provided Axon uses commercially reasonable efforts to meet estimated shipment dates.

_____ _____

Signature Date Signed

3/27/2026



CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 PM

AGENDA CATEGORY:

DISCUSSION ITEMS - FOR ACTION

SUBJECT:

Tourism Authority - FY 2027 Budget

BRIEF SUMMARY:

The Cabarrus County Tourism Authority will be presenting their FY2027 Budget and providing a tourism update.

REQUESTED ACTION:

Recommended Motion for the Regular Meeting:

Motion to adopt the FY27 Cabarrus County Tourism Authority Budget of $7,563,100.

SUBMITTED BY:

Donna Carpenter, President/CEO, Cabarrus County CVB

John Mills, Executive Vice President, Cabarrus County CVB

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1. Tourism Authority FY2027 Budget Message
2. Tourism Authority FY2027 Budget
3. Presentation

FY2027 Budget Message

April 22nd, 2026

Cabarrus County CVB Board of Directors and Cabarrus County Board of Commissioners:

Cabarrus County lodging revenues in FY2025 set a record by surpassing FY2024 revenues by 5.5%. Lodging revenues for the first half of FY2026 were down 6.3%. The Embassy Suites Convention Center Resort & Spa has undergone a complete renovation. The renovation started in the fall of 2025 and will continue through the spring of 2026. The lack of a convention center and reduced room supply prevented the destination from hosting larger meetings and conventions during this time. In addition, in the fall of 2024 Hurricane Helene created strong room demand for the Cabarrus County area and that business was not replicated in the fall of 2025. With the newly remodeled Embassy Suites and the addition of the Home2/Tru dual brand hotel, overall lodging business is expected to recover quickly to normalized levels. During the budget process decisions were made utilizing the Bureau's Mission and Vision Statements.

MISSION

Drive visitation to Cabarrus County
to generate the maximum impact through hotel stays
and visitor spending.

VISION

To continually grow and sustain
a dynamic travel industry to become the
number one economic force for Cabarrus County

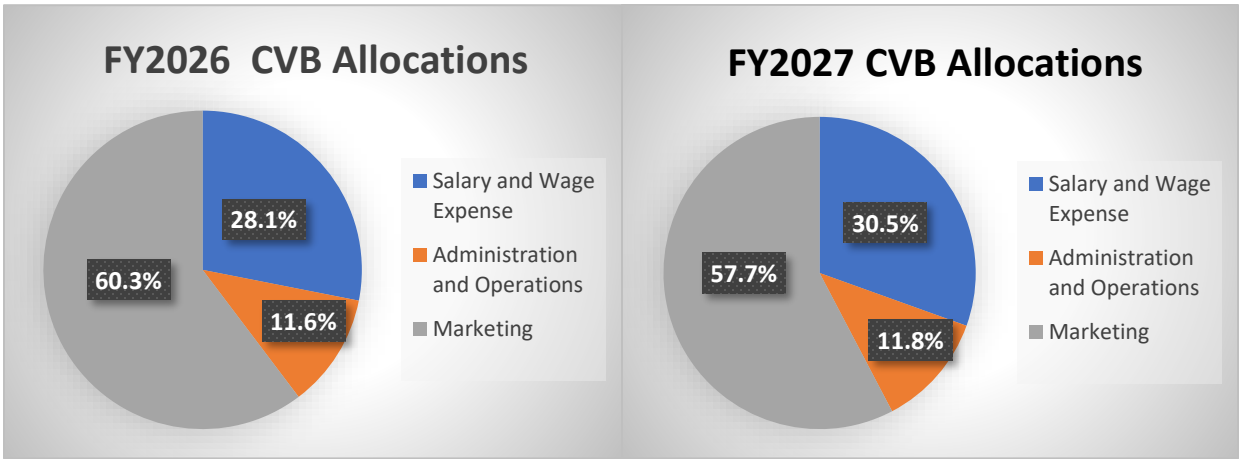
The budget for FY2027 of $7,563,100 represents a flat budget compared to FY2026. The Bureau will continue leveraging data and research to target high-return markets for advertising investments. Currently, those markets include Raleigh, Greensboro, Atlanta, and Greenville, SC. FY2027 budget allocations are set at 31% for Salary and Wage Expense, 12% for Administration, and 58% for Sales and Marketing. These allocations outperform industry standards where Destination Marketing Organizations are spending 50% in Sales and Marketing.

I would like to thank the individuals who contributed to the preparation of the FY2027 budget and offer them my sincere gratitude.

Respectfully submitted,
Donna Carpenter
President/CEO - Cabarrus County Tourism Authority

Expenditures:

The CVB operates on a zero-based budget; therefore, all revenues received in FY2027 are budgeted to be expended. Expenditures for the CVB are divided into three categories. They are Salary and Wage Expense, Administration and Operations, and Sales and Marketing Activities. The following charts illustrate how expenditures are budgeted in FY2027 compared to FY2026.



FY2027 Operating Budget

		FY2027	FY2026 Budget	FY2027 Budget Difference	FY2025 Actual	FY2024 Actual	FY2023 Actual
REVENUE							
4000	OCCUPANCY TAX	7,330,000	$ 7,330,000	$ -	$ 7,520,760	$ 7,129,626	$ 6,975,016
4010	INTEREST ON INVESTMENTS	195,600	$ 196,000	$ (400)	$ 207,781	$ 228,305	$ 43,154
4020	ADVERTISING REVENUES	25,000	$ 18,000	$ 7,000	$ 30,041	$ 22,781	$ 30,602
4030	MISC REVENUE	8,000	$ 8,000	$ -	$ 8,158	$ 7,028	$ 5,019
4040	FUND BALANCE APPROPRIATED	0	$ -	$ -	$ 496,700	$ 323,399	$ 2,147,774
4060	ITEMS FOR RESALE	4,500	$ 4,500	$ -	$ 3,419	$ 3,529	$ 2,516
	TOTAL REVENUE	**7,563,100**	**$ 7,556,500**	**$ 6,600**	**$ 8,266,859**	**$ 7,714,668**	**$ 9,204,081**
OPERATING BUDGET:							
SALARIES							
5000	SALARIES	1,410,529	$ 1,348,813	$ 61,716	$ 1,310,065	$ 1,206,209	$ 989,623
5010	HOURLY LABOR	170,563	$ 124,646	$ 45,917	$ 91,544	$ 79,993	$ 33,398
5020	FICA	98,028	$ 91,059	$ 6,969	$ 87,244	$ 80,175	$ 63,888
5030	MEDICARE	22,922	$ 21,607	$ 1,315	$ 20,621	$ 18,939	$ 15,196
5040	MEDICAL INSURANCE	250,020	$ 212,060	$ 37,960	$ 192,916	$ 173,099	$ 128,809
5050	RETIREMENT	237,212	$ 216,651	$ 20,561	$ 191,390	$ 172,858	$ 124,210
5060	WORKMENS COMP	3,550	$ 3,250	$ 300	$ 2,566	$ 2,200	$ 1,781
5070	DEFERRED 401K	75,166	$ 69,014	$ 6,152	$ 66,903	$ 61,370	$ 48,655
5080	PERFORMANCE INCENTIVES	35,000	$ 32,000	$ 3,000	$ 31,480	$ 31,000	$ 29,688
5090	UNEMPLOYMENT INSURANCE	3,860	$ 4,150	$ (290)	$ 3,314	$ 1,381	$ 1,193
	TOTAL SALARY AND WAGES EXPENSE	**2,306,850**	**$ 2,123,250**	**$ 183,600**	**$ 1,998,043**	**$ 1,827,224**	**$ 1,436,441**
ADMINISTRATION & OPERATIONS							
6000	ADMIN FEE	366,500	$ 366,500	$ -	$ 376,038	$ 356,481	$ 348,751
6004	CAPITAL OUTLAY	0	$ -		$ 26,678	$ 155,424	$ 56,360
6010	EMPLOYEE/COMMUNITY RELATIONS	7,100	$ 6,600	$ 500	$ (502)	$ 4,893	$ 2,564
6020	INSURANCE	22,700	$ 23,950	$ (1,250)	$ 17,614	$ 14,607	$ 8,159
6030	MILEAGE	1,500	$ 1,500	$ -	$ 744	$ 316	$ 62
6040	OFFICE EQUIPMENT/MNT	83,880	$ 80,535	$ 3,345	$ 96,898	$ 55,799	$ 59,729
6050	OFFICE SUPPLIES	13,800	$ 14,000	$ (200)	$ 10,813	$ 14,302	$ 7,197
6060	OTHER OPERATING COST	10,080	$ 10,120	$ (40)	$ 8,008	$ 7,206	$ 7,787
6070	POSTAGE/SHIPPING	15,650	$ 12,900	$ 2,750	$ 11,366	$ 12,515	$ 11,872
6080	PROFESSIONAL SERVICES	17,500	$ 19,200	$ (1,700)	$ 16,630	$ 30,472	$ 15,720
6090	RENT/BUILDING EXPENSE	73,530	$ 63,050	$ 10,480	$ 57,843	$ 55,200	$ 36,059
6100	STAFF DEVELOPMENT	6,200	$ 10,500	$ (4,300)	$ 8,888	$ 5,379	$ 3,638
6110	TELEPHONE	30,300	$ 30,300	$ -	$ 31,040	$ 25,444	$ 28,183
6120	VEHICLE EXPENSE	10,070	$ 8,900	$ 1,170	$ 9,080	$ 7,705	$ 5,131
6130	DEBT SERVICE - INTEREST (GASB 87)	22,846	$ 24,489	$ (1,643)	$ 17,949	$ 16,777	$ 19,338
6131	DEBT SERVICE - PRINCIPAL (GASB 87)	207,066	$ 203,437	$ 3,629	$ 202,035	$ 206,299	$ 200,954
	TOTAL ADMIN & OPS	**888,722**	**$ 875,981**	**$ 12,741**	**$ 891,122**	**$ 968,819**	**$ 811,504**
SALES AND MARKETING ACTIVITIES							
7000	ADVERTISING/E-MARKETING	2,084,219	$ 2,117,648	$ (33,429)	$ 1,835,918	$ 1,567,533	$ 1,468,448
7015	BUSINESS DEVELOPMENT	229,500	$ 273,500	$ (44,000)	$ 175,589	$ 256,934	$ 143,299
7020	COLLATERAL/PRODUCTION	221,000	$ 273,200	$ (52,200)	$ 209,738	$ 183,950	$ 211,304
7030	CORPORATE COMMUNICATIONS	12,800	$ 15,250	$ (2,450)	$ 11,896	$ 10,974	$ 11,022
7040	DUES & SUBSCRIPTIONS	71,700	$ 68,070	$ 3,630	$ 71,275	$ 59,698	$ 57,116
7060	EVENT EXPENSE	72,000	$ 79,975	$ (7,975)	$ 74,130	$ 90,087	$ 84,674
7070	FAM TOURS/SITE INSPECTIONS	55,500	$ 54,500	$ 1,000	$ 50,222	$ 97,357	$ 96,803
7120	MEDIA RELATIONS	120,396	$ 120,396	$ -	$ 91,839	$ 128,539	$ 114,201
7125	PARTNERSHIP	203,000	$ 203,000	$ -	$ 125,460	$ 59,225	$ 21,389
7130	AGREEMENTS/BID FEES	887,495	$ 934,090	$ (46,595)	$ 1,234,579	$ 910,809	$ 2,543,501
7140	TRADE SHOWS/CONFERENCES	166,338	$ 168,305	$ (1,967)	$ 151,952	$ 163,759	$ 118,161
7150	WEB TECHNOLOGY	36,010	$ 36,010	$ -	$ 26,523	$ 25,586	$ 123,816
7160	DESTINATION SERVICES	167,595	$ 173,350	$ (5,755)	$ 197,317	$ 182,601	$ 170,027
7170	MARKETING - INTEREST (GASB 96)	1,088	$ 1,088	$ -	$ 69	$ 415	$ 551
7180	MARKETING - PRINCIPAL (GASB96)	38,887	$ 38,887	$ -	$ 53,406	$ 26,585	$ 26,449
9000	BAD DEBT	0	$ -	$ -	$ -	$ -	$ 7,260
	TOTAL MARKETING	**4,367,528**	**$ 4,557,269**	**$ (189,741)**	**$ 4,309,913**	**$ 3,764,052**	**$ 5,198,021**
	GRAND TOTAL EXPENSES	**7,563,100**	**$ 7,556,500**	**$ 6,600**	**$ 7,199,078**	**$ 6,560,095**	**$ 7,445,966**
	REVENUES OVER EXPENDITURES	**0**	**$ -**	**$ -**	**$ 1,067,781**	**$ 1,154,573**	**$ 1,758,115**

EXPLORE CABARRUS COUNTY • NC

MISSION

Drive visitation to Cabarrus County to generate the maximum impact through hotel stays and visitor spending.

VISION

To continually grow and sustain a dynamic travel industry to become the number one economic force of Cabarrus County.

2024 Tourism Impact





2024 Tourism Impact





Burger Madness



SUPPORTING
LOCAL BUSINESSES

2524 Total Check-ins at Participating Restaurants

Reported **Over 9,500** Burgers Sold

One User Visited **18 Locations**!

PARTICIPANT DATA

1599 Users Total – **1584** from 14 States

97.1% of Participants from North Carolina

PR COVERAGE

10 pieces of online coverage, **1** piece of broadcast coverage, **1** piece of print coverage, and **2** pieces of YouTube coverage, resulting in a total UMV of **821,159,743** and an ad value of **$475,001.**

Hosted **5** influencers, resulting in a total of **20** posts, a total reach of **1,440,300** and an ad value of **$5,500.**

Meeting Sales







22 Events
22,000 Room Nights
$13 Million in Economic Impact

Turf Sales



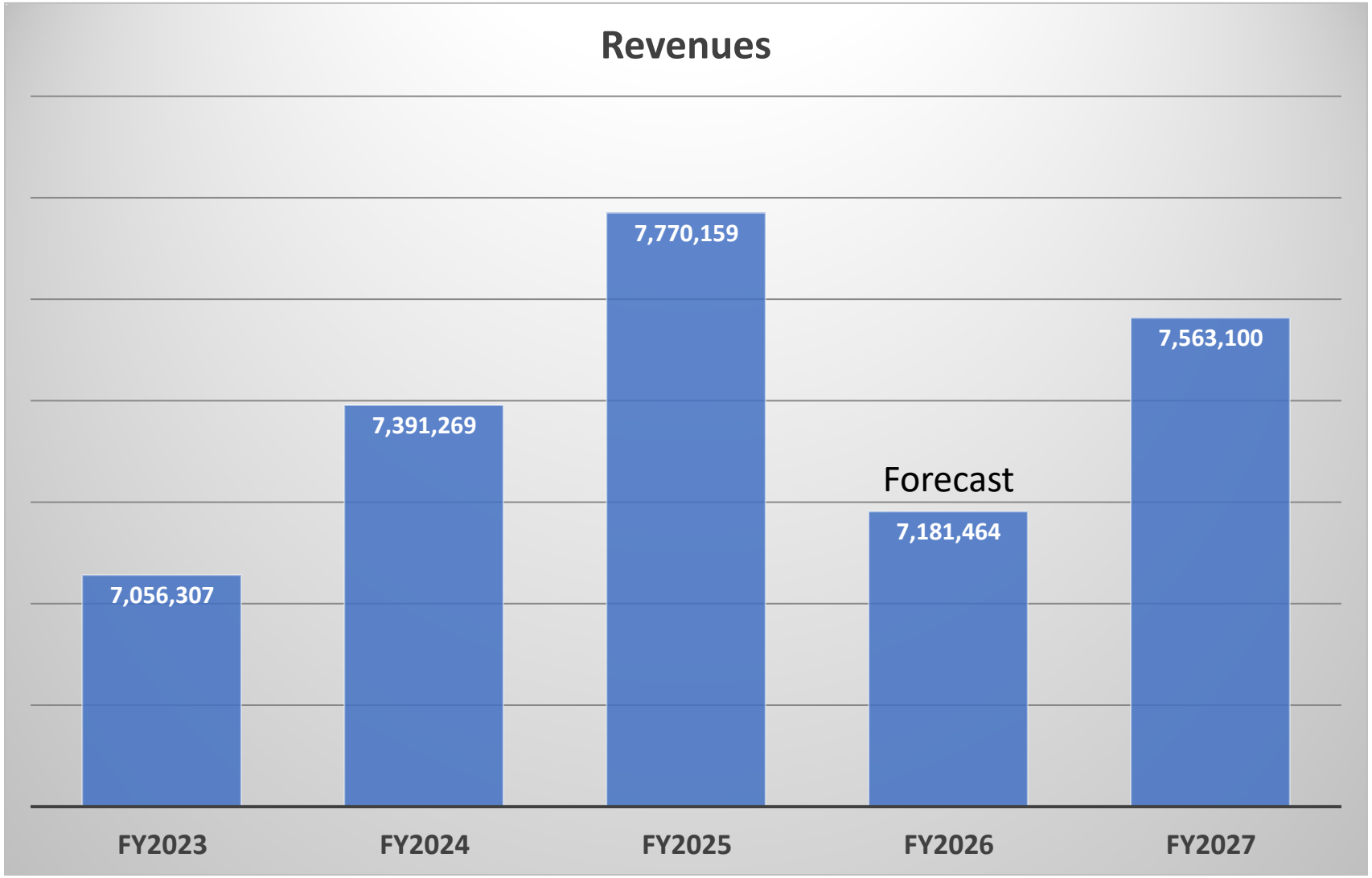
Mondo Sales



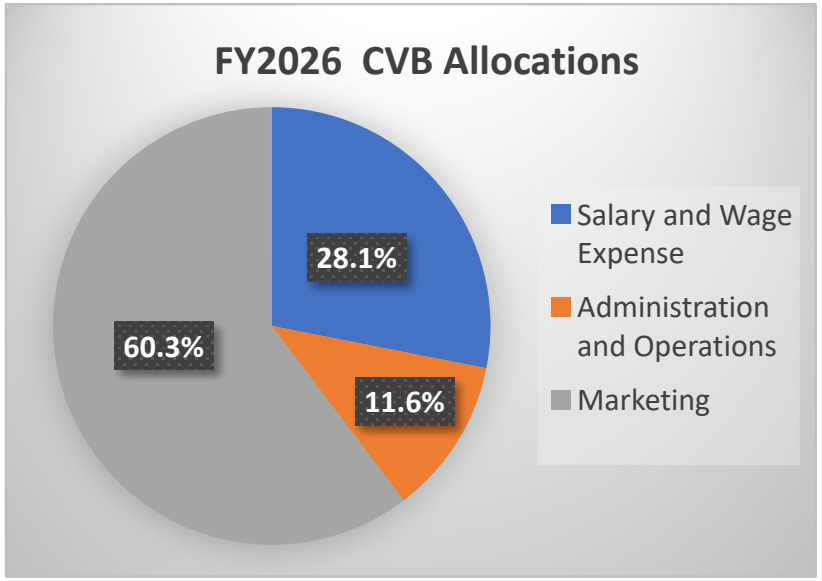
Opportunity Market Sales

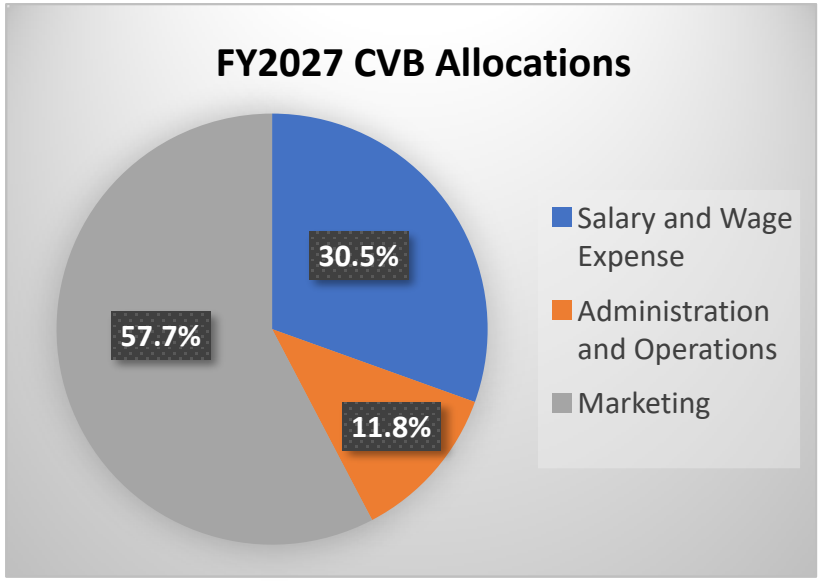


FY2027 Budget



FY2027 Budget





BY2027 Budget $7,563,100

County Retains
5% Administrative Fee - $366,500
5% Sports Development Fund - $366,500

EXPLORE CABARRUS COUNTY · NC

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Questions?

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

MAY 4, 2026
5:00 P.M.

AGENDA CATEGORY:

APPROVAL OF REGULAR AGENDA

SUBJECT:

BOC - Approval of Regular Meeting Agenda

BRIEF SUMMARY:

The proposed agenda for the May 18, 2026 regular meeting is attached.

REQUESTED ACTION:

Recommended Motion:

Motion to approve the agenda for the May 18, 2026 regular meeting as presented.

SUBMITTED BY:

Ariadne Olvera, Clerk to Board of Commissioners

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS:

1. Proposed May 18, 2026 Regular Meeting Agenda

CABARRUS COUNTY

BOARD OF COMMISSIONERS REGULAR MEETING

May 18, 2026 6:00 PM

CALL TO ORDER

PLEDGE OF ALLEGIANCE

INVOCATION

A. APPROVAL OR CORRECTION OF MINUTES

B. APPROVAL OF THE AGENDA

C. RECOGNITIONS AND PRESENTATIONS

1. Active Living & Parks - AARP Tax Volunteers Recognition
2. Active Living & Parks - Older Americans Month 2026 Proclamation
3. BOC - Cabarrus County Foster Care

D. INFORMAL PUBLIC COMMENTS

E. CONSENT AGENDA

1. Boards and Committees - Active Living and Parks - Appointment
2. Boards and Committees - Active Living and Parks - Appointment
3. Boards and Committees - Centralina Workforce Development Board - Appointment

4. Boards and Committees - Centralina Workforce Development Board - Appointment

5. BOC - Resolution Requiring Transparency on Federal and State Budget Impacts

6. Consolidated Human Services - Social Services - Home and Community Care Block Grant (HCCBG)

7. Consolidated Human Services Agency (CHSA) - Transportation Title VI Policy

8. Consolidated Human Services Agency (CHSA) - Veteran's Service Grant Budget Amendment and Fund 460 Project Ordinance

9. County Manager - Approval of Definitive Project Investment Agreement with North Carolina Railroad Company and RRB Beverage Operations Inc. and Definitive Project Investment Sub-agreement with RRB Beverage Operations, Inc.

10. County Manager - Fourth Amended and Restated Operating Agreement for the Elma C. Lomax Incubator Farm Park with Carolina Farm Stewardship Association

11. County Manager - Hickory Ridge at Raging Ridge Greenway

12. County Manager - Stephen M. Morris Behavioral Health Center Lease with Monarch

13. County Manager - Monarch Sub Lease Approval with Genoa Healthcare LLC

14. Facilities Design and Construction - Approval of GMP2 for Progress Place Renovations

15. Finance – General Obligation Bond Referendum Resolution

16. Sheriff's Office - Approval of Axon/Skydio Drone Contract

17. Tax Administration - Refund and Release Reports – April 2026

18. Tourism Authority - FY2027

F. NEW BUSINESS

1. County Manager - Presentation of the FY27 Recommended Budget

G. REPORTS

1. BOC - Receive Updates From Commission Members Who Serve As Liaisons To Municipalities Or On Various Boards/Committees
2. BOC - Request for Applications for County Boards/Committees
3. Budget - Monthly Budget Amendment Report
4. Budget - Monthly Financial Update
5. Communications and Outreach - Monthly Summary Report
6. County Manager - Cabarrus Arena and Events Center Financial Report
7. County Manager - Monthly Building Activity Reports
8. EDC - April 2026 Monthly Summary Report
9. Fire Marshal - Cabarrus County Fire Services Monthly Report
10. Super Cab Co - Monthly Report

H. GENERAL COMMENTS BY THE BOARD MEMBERS

I. CLOSED SESSION

J. RETURN TO OPEN SESSION

K. ADJOURN

In accordance with ADA regulations, anyone who needs an accommodation to participate in the meeting should notify the ADA Coordinator at 704-920-2100 at least forty-eight (48) hours prior to the meeting.

CABARRUS COUNTY

BOARD OF COMMISSIONERS
WORK SESSION

May 4, 2026
5:00 P.M.

AGENDA CATEGORY:

CLOSED SESSION

SUBJECT:

Closed Session - Consult with Attorney

BRIEF SUMMARY:

A closed session is needed for consult with attorney as authorized by NCGS 143-318.11(a)(3).

REQUESTED ACTION:

Motion to go into closed session for consult with attorney as authorized by NCGS 143-318.11(a)(3).

SUBMITTED BY:

Ariadne Olvera, Clerk to Board of Commissioners

BUDGET AMENDMENT REQUIRED:

No

ATTACHMENTS: