

STATE OF NORTH CAROLINA)
)
WAKE COUNTY)

TRANSPORTATION INFRASTRUCTURE
REIMBURSEMENT AGREEMENT

This TRANSPORTATION INFRASTRUCTURE REIMBURSEMENT AGREEMENT (this “**Agreement**”) is entered into this the _____ day of _____, 2025, by and between the TOWN OF HOLLY SPRINGS, NORTH CAROLINA, a municipal corporation organized and existing under the laws of the State of North Carolina (“**Holly Springs**”), and the TOWN OF APEX, NORTH CAROLINA, a municipal corporation organized and existing under the laws of the State of North Carolina (“**Apex**”) (collectively, the “**Parties**”).

RECITALS

WHEREAS, Apex and Holly Springs desire to provide safe and efficient transportation infrastructure in the areas within and proximate to their corporate boundaries;

WHEREAS, Apex is willing and able to improve the intersection at Old US Highway 1 and Friendship Road (the “**Intersection**”), located within the corporate boundaries of Apex and proximate to the corporate boundaries of Holly Springs, for the purpose of enhancing the safety and capacity of the intersection;

WHEREAS, the project known as Old US 1 and Friendship Road Turn Lanes (the “**Developer Project**” as further described in pages 9 and 10 of **Exhibit A**) to complete the following improvements to the Intersection is in the design phase: (1) a westbound left turn lane on Old US Highway 1 at Friendship Road, and (2) a northbound left turn lane on Friendship Road at Old US Highway 1;

WHEREAS, the project known as Old US 1 and Friendship Road Traffic Signal (the “**Town Project**” as further described in **Exhibit B**) to complete the following improvements to the Intersection is in the design phase: a traffic signal at the Intersection;

WHEREAS, Apex entered into the Development Agreement with Beazer Homes, LLC on November 4, 2024 attached hereto as **Exhibit A**, wherein Apex agreed to reimburse Beazer Homes, LLC up to \$189,000.00 for completing the Developer Project;

WHEREAS, Apex will complete the Town Project at an estimated cost of \$300,000.00;

WHEREAS, the total sum of expected cost to Apex to complete the Developer Project and the Town Project (collectively, the “**Projects**”) is approximately \$489,000.00;

WHEREAS, Apex and Holly Springs as neighbors in the region collaborate on providing safe and efficient transportation infrastructure to their residents and visitors;

WHEREAS, Holly Springs is agreeable to reimburse Apex for a portion of the Projects;
and

WHEREAS, this Agreement is authorized by N.C.G.S § 160A-20.1, § 160A-296, and § 160A-461.

NOW THEREFORE, in consideration of the premises and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. RECITALS; PURPOSE. The recitals are incorporated into this Agreement. This Agreement shall be effective upon execution by both parties (“**Effective Date**”). This Purpose of this Agreement is for Holly Springs to reimburse Apex for a portion of the Projects’ expenses.
2. COMPENSATION: Holly Springs shall pay to Apex the total sum of one hundred fifty thousand two hundred and fifty-three dollars (\$150,253.00) upon completion of the Projects. Payment shall be made within thirty (30) days of receipt of an invoice from Apex.
3. DELAY BEYOND THE CONTROL OF THE PARTIES. Neither Holly Springs nor Apex, having taken commercially reasonable precautions, shall be in default of the provisions of this Agreement for delays in performance due to forces beyond the control of the Parties. “Forces beyond the control of the parties” shall mean, but is not limited to, delay caused by natural disaster, fire, flood, earthquakes, storms, lightning, epidemic, pandemic, war, riot, civil disobedience, or other event reasonably outside of the parties’ control.
4. NO JOINT AGENCY AND NO PERSONNEL. No joint agency is established by this Agreement, and this Agreement does not create a partnership, joint venture, other joint endeavor, joint ownership, joint operations, or personnel sharing of any kind. No joint personnel are needed by the Parties to carry out this Agreement; this Agreement does not provide for the appointment of any personnel joint or otherwise. Nothing herein shall serve to waive governmental or qualified immunity of either of the Parties.
5. AMENDMENT. This Agreement may be amended at any time by the mutual written consent of both Parties.
6. NOTICE. All notices and other communications required or permitted by this Agreement shall be in writing and shall be given either by personal delivery, or deposited in the United States mail, postage prepaid, addressed as follows:

The notice address for Holly Springs shall be:

Attn: Randy Harrington, Town Manager
Town of Holly Springs
PO Box 8
Holly Springs, NC 27540

The notice address for Apex shall be:

Attn: Randal E. Vosburg, Town Manager
Town of Apex
PO Box 250
Apex, NC 27502

7. DISPUTE RESOLUTION; GOVERNING LAW; VENUE. In the event a dispute arises between the Parties or involving a third-party lawsuit regarding performance under this Agreement, the Parties agree to bargain in good faith towards a mutual resolution. If the Parties, after honest good faith negotiations, cannot reach a mutually agreeable resolution of the dispute, then a Party may adjudicate its dispute as allowed by North Carolina State Laws. This Agreement shall be governed by the laws of the State of North Carolina. Any and all suits or actions related to this Agreement shall be brought in Wake County, North Carolina. In the event of third-party litigation challenging this contract as ultra vires, the Parties agree to defend this action and indemnify each other as if the Parties engaged in a joint venture, irrespective of the covenants in paragraph 4. This indemnity provision is not insurance purchased and shall not waive governmental or qualified immunity of the Parties.
8. NON-EXCLUSIVE REMEDIES/NO WAIVER. The selection of one or more remedies for breach shall not limit a Party's right to invoke any other remedy available under Agreement or by law. No delay, omission or forbearance to exercise any right, power or remedy accruing to a Party shall impair any such right, power or remedy or shall be construed to be a waiver of any breach hereof or default. Every right, power or remedy may be exercised from time to time and as often as deemed expedient.
9. NO THIRD-PARTY BENEFICIARIES. There are no third-party beneficiaries to Agreement.
10. ELECTRONIC SIGNATURES. Pursuant to Article 40 of Chapter 66 of the North Carolina General Statutes (the Uniform Electronic Transactions Act) this Agreement and all documents related hereto containing an electronic or digitized signature are legally binding in the same manner as are hard copy documents executed by hand signature. The Parties hereby consent to use electronic or digitized signatures in accordance with Apex's Electronic Signature Policy and intend to be bound by the Agreement and any related documents. If electronic signatures are used the Agreement shall be delivered in an electronic record capable of retention by the recipient at the time of receipt.

Remainder of page left blank intentionally.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized officials.

APEX, Town of Apex

Randal E. Vosburg, Town Manager

Date

Attest:

Allen Coleman, Town Clerk

Date

HOLLY SPRINGS, Town of Holly Springs

Randy Harrington, Town Manager

Date

This instrument has been preaudited in the manner required by Local Government Budget and Fiscal Control Act.

Date

NORTH CAROLINA

DEVELOPMENT AGREEMENT

WAKE COUNTY

This Development Agreement (the "**Agreement**"), made this the 4th day of November, 2024, by and between the Town of Apex, a municipal corporation under the laws of North Carolina (the "**Town**") and Beazer Homes, LLC a North Carolina limited liability company (the "**Developer**").

WITNESSETH:

WHEREAS, Developer is the owner of that certain tract of real property totaling approximately 16.8 acres and located at 3104 Holland Road Apex, NC 27502 as depicted on the map entitled The Summit MSP Recombination Plat (the "**Developer Map**"), recorded in Book of Maps 2024, Page 1254 at the Wake County Register of Deeds (the "**Developer Property**") and plans to develop a residential subdivision commonly known as "The Summit" on the Developer Property; and

WHEREAS, the Town is the owner of that certain tract of real property totaling approximately 92.19 acres and located between Pleasant Plains Road to the west, Kings View Trail to the north, and NC 540 Highway to the east as depicted on the map entitled Survey for Progressive Farms, LLC & Hazel J. Pleasant (the "**Town Map**"), recorded in Book of Maps 2014, Page 1539 at the Wake County Register of Deeds (the "**Town Property**") and plans to develop a public park known as "Pleasant Park" on the Town Property; and

WHEREAS, Town has committed, as part of the Pleasant Park Phase 3A Site Plan, to provide (1) 150 feet of storage length for the westbound left turn lane on Old US Highway 1 at Friendship Road, and (2) 100 feet of storage length for the northbound left turn lane on Friendship Road at Old US Highway 1 ("**Town Improvements**"); and

WHEREAS, Developer has committed, as part of rezoning # 21CZ14 and its associated traffic impact analysis, to provide (1) an eastbound left turn lane on Old US Highway 1 at Holland Road, (2) an additional 50 feet of storage length for the northbound turn lane on Friendship Road at Old US Highway 1, ("**Developer Improvements**"); and

WHEREAS, as a condition of rezoning #21CZ14, developer is required to install a traffic signal at the intersection of Old US Highway 1 at Holland Road or pay fee in lieu for the anticipated signal design and construction costs based upon an engineer's estimate for the same ("**Traffic Signal A**"); and

WHEREAS, as a condition of installation of Traffic Signal A, NCDOT requires a traffic signal be installed contemporaneously at the intersection of Old US Hwy 1 and Friendship Road (“**Traffic Signal B**”); and

WHEREAS, Old US Highway 1, Holland Road, and Friendship Road are busy thoroughfares within the corporate limits and extra-territorial jurisdiction of the Town and the Town and Developer desire to coordinate construction of the Town Improvements and Developer Improvements (collectively, the “**Improvements**”) with Developer acting as the contracting and managing party with third parties hired to construct the Improvements; and

WHEREAS, pursuant to North Carolina General Statute § 160A-309, the Town is authorized to contract with a developer for public intersection and roadway improvements that are adjacent of ancillary to a private land development project; and

WHEREAS, the Town finds that the expenditure of public funds will not exceed \$250,000 and the coordination of separately constructed public intersection or roadway improvements would be impracticable.

NOW, THEREFORE, IT IS HEREBY AGREED between the Town and the Developer:

1. Recitals. The foregoing recitals shall constitute an integral part of this Agreement, and this Agreement shall be construed in light thereof.

2. Construction of Improvements. The Developer shall, at its own expense, construct the Improvements, which are more particularly describing in **Exhibit A** attached hereto and incorporated herein by reference (“**Plans**”). The Developer shall design, construct and install the Improvements (i) in a good and workmanlike manner, (ii) in compliance with this Agreement, Town Specifications, and all applicable Federal, State, and local laws, statutes, ordinances, rules, regulations, policies, and specifications, and (iii) in accordance with the Plans.

The Developer shall administer the construction contract without cost or expense to the Town except as provided for in this Agreement, and the Town may require the Developer to file reports of its administration with the Town’s Engineer.

3. Certification, Inspection, and Acceptance of Facilities. Upon completion of construction of the Improvements, Developer shall provide the Town with written certification and as-built drawings from Developer’s designated consulting engineering firm that the Improvements are complete and have been constructed and installed in compliance with this Agreement and within appropriate easements or fee simple parcels. Fee simple interest is required for street rights-of-way. The Improvements shall be offered for public dedication to the North Carolina Department of Transportation (“**NCDOT**”) upon completion of construction and shall be subject to inspection and

acceptance by the NCDOT. Upon the inspection and acceptance of the Improvements, Developer shall take any steps necessary to transfer title to and possession of the Improvements, and all related easements and fee simple parcels to the NCDOT. Thereafter, the NCDOT shall own the Improvements and have exclusive possession and control of the Improvements. In the event that any defect or breach of warranty claim becomes known after acceptance and dedication of the Improvements, Developer agrees either to pursue its rights and claims against the contractor or other party responsible for the defect or breach of warranty and pay over any recoveries to NCDOT or to assign such rights and claims to NCDOT as directed by NCDOT.

4. Approved Project Costs. The “**Approved Project Costs**” are those costs attributed to Town Improvements, as shown in the estimate provided by the Developer’s Engineer and attached hereto as **Exhibit B**. The Town agrees that within thirty (30) days after inspection and acceptance of the Improvements by NCDOT, the Town shall pay to Developer an amount equal to forty percent (40%) of the costs attributed to the construction of the westbound left turn lane, not to exceed \$111,000.00, and thirty-four percent (34%) of the costs attributed to the construction of the northbound left turn lane, not to exceed \$78,000.00, within the scope of the Improvements as shown in Exhibit B as may be modified as provided herein.

Costs that are not certified by the Developer’s Engineer and approved by the Town’s Engineer shall not be included in the Approved Project Costs. Approved Project Costs shall not include any costs for designing, bidding, and managing services.

The Town shall not participate in or be responsible to pay or reimburse any change order increasing the costs of the Improvements unless agreed to by the Town and approved by the Town’s Engineer in writing prior to execution of the change order. In other words, the costs associated with a change order shall be excluded from the Approved Project Costs unless the change order is pre-approved by the Town’s Engineer, which approval will not be unreasonably withheld, conditioned or delayed. Developer shall immediately upon learning of a proposed change order provide the Town with all the documentation and information needed for the Town to evaluate the proposed change order. In addition, the Approved Project Costs incurred by Developer in constructing the Improvements shall reflect any cost savings that reduce the amount that the Developer actually pays to construct the Improvements.

Developer agrees to provide the Town with any additional information reasonably requested by the Town in connection with the Approved Project Costs, provided that the Town requests such additional information within ten (10) business days of receipt of the detailed invoices from Developer.

5. Satisfaction of Traffic Signal Condition. The completion of the Improvements and payment of Approved Project Costs shall satisfy Condition E of the Holland Road Assembly Planned Unit Development zoning conditions which is associated with the approved rezoning # 21CZ14. Developer shall have no further responsibility for signal warrant analysis, installation of traffic signal,

or payment of fee-in-lieu for a traffic signal at the intersection of Holland Road and Old US Highway 1.

6. Notices. Any notice given pursuant to this Agreement shall be deemed given if (a) delivered by hand, or (b) faxed to the addressee and then deposited in the United States Mail to the addressee, postage paid certified mail, return receipt requested and addressed as follows:

If to the Town: Town of Apex
 Post Office Box 250
 Apex, NC 27502-0250
 Attention: Russell Dalton, Traffic Engineering Manager
 Email: russell.dalton@apexnc.org

If to Developer: Beazer Homes LLC
 801 Corporate Center Dr
 Raleigh, NC 27607
 Attn: Daniel Zinner
 Email: daniel.zinner@beazer.com

7. Termination for Failure to Complete. If Developer does not complete construction of the Improvements on or before the fifth anniversary of the full execution of this Agreement absent force majeure delays (as defined below), the Town may terminate this Agreement and have no further obligations to Developer.

8. Delay Beyond the Control of the Parties. Neither Developer nor Town, having taken commercially reasonable precautions, shall be in default of the provisions of this Agreement for delays in performance due to forces beyond the control of the parties. "Forces beyond the control of the parties" shall mean, but is not limited to, delay caused by natural disaster, fire, flood, earthquakes, storms, lightning, epidemic, pandemic, war, riot, civil disobedience, or other event reasonably outside of the parties' control. Due to the ever-changing circumstances surrounding the COVID-19 pandemic, situations may arise during the performance of this Agreement that affect availability of resources and staff of Developer or Developer's contractors or the Town. There could be changes in anticipated performance times and service costs. Developer will exercise reasonable efforts to overcome the challenges presented by current circumstances. In the event of changes in performance times or service costs caused by the COVID-19 pandemic the Town reserves the right to terminate this Agreement in accordance with its terms. The Parties agree that they shall not be liable to each other for any delays, expenses, losses, or damages of any kind arising out of the impact of the COVID-19 pandemic.

9. Indemnification. To the extent permitted by law, the Developer agrees to defend, pay on behalf of, indemnify, and hold-harmless the Town of Apex, its elected and appointed officials, employees, agents, and volunteers against any and all claims, demands, suits or losses, including all costs connected therewith, for any damages which may be asserted, claimed or recovered against or from the Town of Apex, its elected or appointed officials, employees, agents, and volunteers by reason of personal injury, including bodily injury or death and/or property damage, including loss of use thereof resulting from the negligence of the Developer or Developer's contractors.

10. Anti-Human Trafficking. The Developer warrants and agrees that no labor supplied by the Developer or the Developer's subcontractors in the performance of this Agreement shall be obtained by means of deception, coercion, intimidation or force, or otherwise in violation of North Carolina law, specifically Article 10A, Subchapter 3 of Chapter 14 of the North Carolina General Statutes, Human Trafficking.

11. Insurance. The Developer shall maintain valid general liability insurance in the minimum amount of \$1,000,000, commercial automobile liability insurance in the minimum amount of \$2,000,000, and provide certificates of such insurance naming the Town of Apex as an additional insured by endorsement to the policies. If the policy has a blanket additional insured provision, the contractor's insurance shall be primary and non-contributory to other insurance. Additionally, the Developer shall require all of the Developer's subcontractors to maintain and show proof of workers' compensation and employer's liability insurance in the minimum amount of \$1,000,000. The Developer shall provide notice of cancellation, non-renewal or material change in coverage to the Town of Apex within 10 days of their receipt of notice from the insurance company. All required certificates of insurance, endorsements, and blanket additional insured policy provisions are attached and considered part of this document. Notwithstanding the foregoing, neither the requirement of Developer to have sufficient insurance nor the requirement that Town is named as an additional insured, shall constitute waiver of the Town's governmental immunity in any respect, under North Carolina law.

12. Nondiscrimination. Pursuant to Section 3-2 of the Town of Apex Code of Ordinances, Developer hereby warrants and agrees that Developer will not discriminate against a protected class in employment, subcontracting practices, or the solicitation or hiring of vendors, suppliers, or commercial customers in connection with this Agreement. For the purposes of this Agreement "protected class" includes age, race, religious belief or non-belief, ethnicity, color, national origin, creed, sex, sexual orientation, gender identity, marital status, natural hair style, genetic information, pregnancy, familial status, disability, veteran or military status, or disabled veteran status.

13. E-Verify Compliance. The Developer shall comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes (E-Verify). Developer shall require all of the Developer's subcontractors to comply with the requirements of Article 2 of Chapter 64 of the North

Carolina General Statutes (E-Verify). Town shall comply with North Carolina General Statute § 160A-169.1 (E-Verify).

14. Complete Agreement, Modifications, Waiver and Assignment. This Agreement constitutes the entire agreement between the parties hereto and it is understood and agreed that all undertakings, negotiations, representations, promises, inducements and agreements heretofore had between these parties are merged herein. This Agreement may not be changed, modified, or amended orally, but only by an agreement in writing signed by both the Town and the Developer. No waiver of any of the provisions to this Agreement shall be valid unless in writing and signed by the party against whom it is sought to be enforced. This Agreement is not assignable without the written consent of all parties to this Agreement. There are no third-party beneficiaries of this Agreement.

15. No Agency, Joint Venturer Relationship. The Town and the Developer agree to exercise good faith in dealing with each other. The Town and the Developer are not agents, partners, or joint venturers of any kind, and the Town shall have no relationship via this Agreement with any third party with whom the Developer contracts in furtherance of this Agreement.

16. Choice of Law, Jurisdiction, and Venue. This Agreement shall be governed, interpreted and construed under the laws of the State of North Carolina without regard to principals of conflicts of laws. The parties agree that any dispute or other matter concerning this Agreement shall be decided by state or federal courts sitting in Wake County, North Carolina. The parties irrevocably submit to the sole and exclusive jurisdiction of such courts and waive all objections and defenses based on jurisdiction and/or improper or inconvenient venue. The parties agree that this Agreement may be enforced by specific performance.

17. Electronic Signature. Pursuant to Article 40 of Chapter 66 of the North Carolina General Statutes (the Uniform Electronic Transactions Act) this Agreement and all documents related hereto containing an electronic or digitized signature are legally binding in the same manner as are hard copy documents executed by hand signature. The Parties hereby consent to use electronic or digitized signatures in accordance with the Town's Electronic Signature Policy and intend to be bound by the Agreement and any related documents. If electronic signatures are used the Agreement shall be delivered in an electronic record capable of retention by the recipient at the time of receipt.

[REMAINDER OF PAGE INTENTIONALLY BLANK – SIGNATURES FOLLOW]

IN WITNESS WHEREOF, the Town and the Developer have duly executed this Agreement under seal as of the day and year first above written.

TOWN OF APEX

BY: Randal E. Vosburg (SEAL)
Randal E. Vosburg, Town Manager

ATTEST:

Allen Coleman
Allen Coleman, Town Clerk



STATE OF NORTH CAROLINA)
WAKE COUNTY)

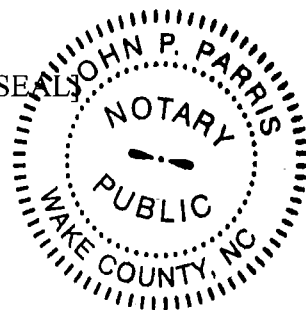
I, a Notary Public of the County and State aforesaid, certify that Allen Coleman, personally came before me this day and acknowledged that he is Town Clerk of the Town of Apex, a North Carolina Municipal Corporation, and that by authority duly given and as the act of the corporation, the foregoing instrument was signed in its name by its Town Manager, sealed with its corporate seal and attested by her as its Town Clerk.

Witness my hand and official stamp or seal, this the 4th day of November, 2021.

John P. Parris
[Signature of Notary Public] John P. Parris

[AFFIX NOTARIAL STAMP SEAL]

My Commission Expires: 03/29/28



This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act

By: Antwan Morrison
Antwan Morrison, Finance Director
Town of Apex

BEAZER HOMES, LLC

BY: *Matt Christensen*

Print Name: Matt Christensen

Title: President Divisional - Raleigh

STATE OF North Carolina
COUNTY OF Wake

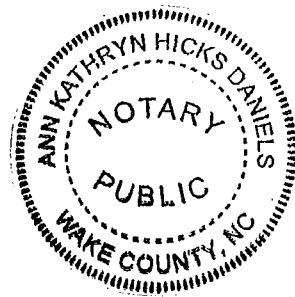
I, a Notary Public of the County and State aforesaid, do hereby certify that Matt Christensen, President Divisional - Raleigh of Beazer Homes, LLC a North Carolina limited liability company, personally appeared before me this day and acknowledged due execution of the foregoing instrument on behalf of Beazer Homes, limited liability company.

Witness my hand and official stamp or seal, this the 21 day of October, 2024

Ann Kathryn Hicks Daniels
[Signature of Notary Public]

[AFFIX NOTARIAL STAMP SEAL]

My Commission Expires: 2.8.2029



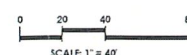
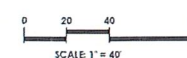
1	July 2, 2023	TOWNSHIP OF APOC = CD Review No. 1	✓
2	September 15, 2023	TOWNSHIP OF APOC = CD Review No. 2	✓
3	November 1, 2023	TOWNSHIP OF APOC = CD Review No. 3	✓
4	February 2, 2024	TOWNSHIP OF APOC = CD Review No. 4	✓
5	July 2024	TOWNSHIP OF APOC = CD Review No. 5	✓

OLD US1 HWY
SIGNAGE &
STRIPING
PLAN

200304

sheet:

(CONSTRUCTION DRAWINGS)



GREEN Hatch: Friendship Road widening improvements. Cost sharing agreement for Friendship Road is 67% (Town of Apex) and 33% (The Summit builder). See following sheets for total improvements.

- (A) THERMOPLASTIC (4" WHITE, 90 MILS) EGDENLE
- (B) THERMOPLASTIC (4" WHITE, 120 MILS) 4"X10" SKIP
- (C) THERMOPLASTIC (12" WHITE, 120 MILS) 12"X3" WITH 3" MINI-SKIP
- (D) THERMOPLASTIC (4" WHITE, 120 MILS) 4"X2" WITH 6" MINI-SKIP
- (E) THERMOPLASTIC (4" WHITE, 120 MILS) 4"X3" WITH 9" MINI-SKIP
- (F) THERMOPLASTIC (4" WHITE, 120 MILS) SOLID LANE LINE
- (G) THERMOPLASTIC (12" WHITE, 90 MILS) DIAGONAL LINE
- (H) THERMOPLASTIC (24" WHITE, 120 MILS) STOP BAR
- (I) THERMOPLASTIC (4" YELLOW, 120 MILS) EGDENLE
- (J) THERMOPLASTIC (4" YELLOW, 120 MILS) 4"X10" SKIP LINE
- (K) THERMOPLASTIC (4" YELLOW, 120 MILS) SINGLE CENTER LINE
- (L) THERMOPLASTIC (4" YELLOW, 120 MILS) DOUBLE CENTER LINE
- (M) THERMOPLASTIC (12" YELLOW, 90 MILS) DIAGONAL LINE 2H:1V SLOPE (REFER TO NCDOT STANDARD DRAWING 1205.09)
- (N) THERMOPLASTIC (WHITE, 120 MILS) DIRECTIONAL ARROW-STRAIGHT
- (W1) THERMOPLASTIC (WHITE, 120 MILS) DIRECTIONAL ARROW-STRAIGHT AND RIGHT
- (D) THERMOPLASTIC (WHITE, 120 MILS) DIRECTIONAL ARROW-RIGHT
- (P) THERMOPLASTIC (WHITE, 120 MILS) DIRECTIONAL ARROW-LEFT
- (Q) 4:1 TAPER
- (R) THERMOPLASTIC (8" WHITE, 120 MILS) PEDESTRIAN CROSSWALK LINE
- (S7) MUTCD R4-7 (KEEP RIGHT)
- (S9) MUTCD OM1-3 (TYPE 1 OBJECT MARKER)
- (S9) MUTCD R3-4 (NO U-TURN)
- (S10) MUTCD R6-1R (ONE WAY ONLY)
- (S11) MUTCD R3-7R (RIGHT TURN ONLY)
- (S12) MUTCD R1-1 (STOP SIGN)
- (S13) MUTCD R3-5R (RIGHT TURN ONLY)
- (T) THERMOPLASTIC (4" WHITE, 120 MILS) SOLID "ONLY" TEXT LINE
- (W) REFER TO DETAIL 1205.01 SHEET C707 FOR WIDE STRIP REVERENCES

The signatures affixed below certify that this sheet has been reviewed and approved solely per the certifications signed on the cover sheet of these construction plans.

Electric _____

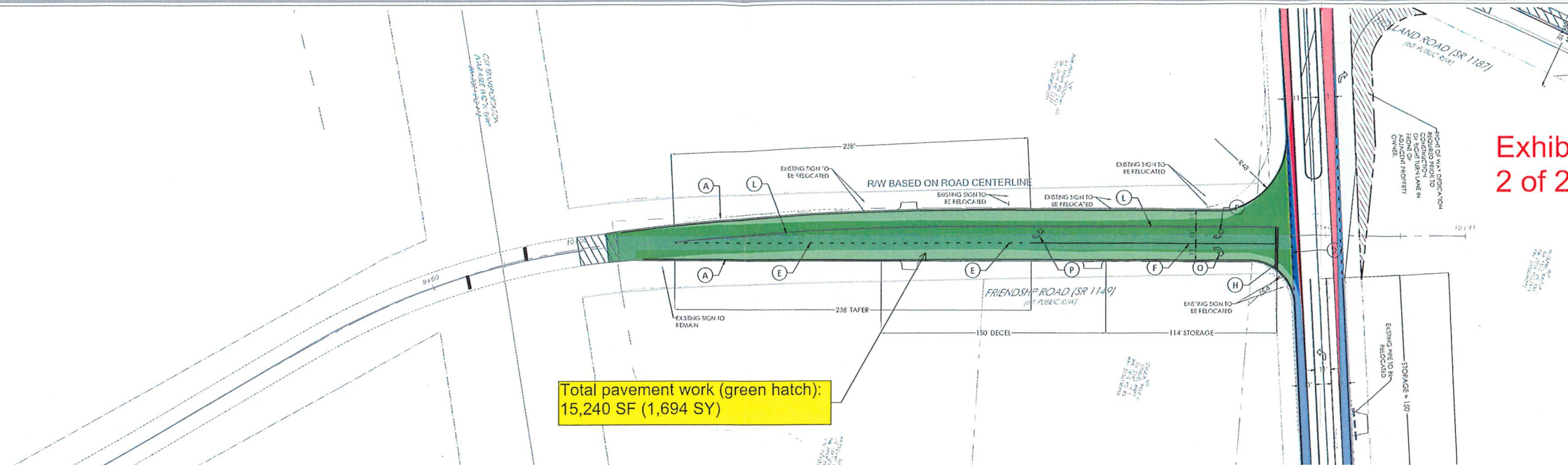


Exhibit A
2 of 2

1
C510 **FRIENDSHIP ROAD SIGNAGE & STRIPING PLAN**
SCALE: 1"=40'

GREEN Hatch: Friendship Road improvements required per discussions with Town of Apex. Summit zoning required 50' full storage left turn lane while Town of Apex Pleasant Park Phase 2 required 150' full storage.
Overall Friendship Road cost would be split commensurate with required improvements for each project:
- 66.67% (2/3) to Town of Apex
- 33.33% (1/3) to The Summit

Improvement summary provided within the Construction Estimate provided to the Town of Apex for reimbursement agreement.

- (A) THERMOPLASTIC (4" WHITE, 90 MILS) EDGELINE
- (B) THERMOPLASTIC (4" WHITE, 120 MILS) 4"x10' SKIP
- (C) THERMOPLASTIC (12" WHITE, 120 MILS) 12"x3' WITH 3' MINI-SKIP
- (D) THERMOPLASTIC (4" WHITE, 120 MILS) 4"x2' WITH 6' MINI-SKIP
- (E) THERMOPLASTIC (4" WHITE, 120 MILS) 4"x3' WITH 9' MINI-SKIP
- (F) THERMOPLASTIC (4" WHITE, 120 MILS) SOLID LANE LINE
- (G) THERMOPLASTIC (12" WHITE, 90 MILS) DIAGONAL LINE
- (H) THERMOPLASTIC (24" WHITE, 120 MILS) STOP BAR
- (I) THERMOPLASTIC (4" YELLOW, 120 MILS) EDGELINE
- (J) THERMOPLASTIC (4" YELLOW, 120 MILS) 4"x10' SKIP LINE
- (K) THERMOPLASTIC (4" YELLOW, 120 MILS) SINGLE CENTER LINE
- (L) THERMOPLASTIC (4" YELLOW, 120 MILS) DOUBLE CENTER LINE
- (M) THERMOPLASTIC (12" YELLOW, 90 MILS) DIAGONAL LINE 2H:1V SLOPE (REFER TO NCDOT STANDARD DRAWING 1205.09)
- (N) THERMOPLASTIC (WHITE, 120 MILS) DIRECTIONAL ARROW-STRAIGHT
- (N1) THERMOPLASTIC (WHITE, 120 MILS) DIRECTIONAL ARROW-STRAIGHT AND RIGHT
- (O) THERMOPLASTIC (WHITE, 120 MILS) DIRECTIONAL ARROW-RIGHT
- (P) THERMOPLASTIC (WHITE, 120 MILS) DIRECTIONAL ARROW-LEFT
- (Q) 4:1 TAPER
- (R) THERMOPLASTIC (8" WHITE, 120 MILS) PEDESTRIAN CROSSWALK LINE
- (S) MUTCD R4-7 (KEEP RIGHT)
- (S1) MUTCD OM1-3 (TYPE 1 OBJECT MARKER)
- (S2) MUTCD R3-4 (NO U-TURN)
- (S3) MUTCD R6-1R (ONE WAY ONLY)
- (S4) MUTCD R3-7R (RIGHT TURN ONLY)
- (S5) MUTCD R1-1 (STOP SIGN)
- (S6) MUTCD R3-SR (RIGHT TURN ONLY)
- (T) THERMOPLASTIC (4" WHITE, 120 MILS) SOLID "ONLY" TEXT LINE
- (W) REFER TO DETAIL 1205.01 SHEET C707 FOR WIDE STRIP REFERENCES

The signatures affixed below certify that this sheet has been reviewed and approved solely per the certifications signed on the cover sheet of these construction plans.	
Transportation Engineering	Planning
Building Inspections	Planning - Transportation
Water Resources - Utility Engineering	Fire
Water Resources - Stormwater & S&EC	Parks, Recreation & Cultural Resources
Electric	

NC License #P-0673

Project: (FKA: HOLLAND ROAD MIXED USE)
THE SUMMIT
2236 OLD US 1 HIGHWAY
BUCKHORN TOWNSHIP
APEX, NORTH CAROLINA 27502



NO.	DATE	REVISION
1	May 7, 2023	TOWN OF APEX - CD Permit No. 1
2	September 15, 2023	TOWN OF APEX - CD Permit No. 2
3	October 10, 2023	TOWN OF APEX - CD Permit No. 3
4	February 2, 2024	TOWN OF APEX - CD Permit No. 4

Title:
FRIENDSHIP ROAD SIGNAGE & STRIPING PLAN

proj #:
200304
date:
APRIL 3, 2023
dwg by: chkd by:
FS JR
scale:
As Noted
sheet:

C510
(CONSTRUCTION DRAWINGS)

The Summit - Old US 1 Highway (south-west bound) Left Turn Lane Construction Estimate June 1, 2024 Revision

Peak Engineering									
Overall Project Cost				Town of Apex Reimbursement					
Item	Quantity	Unit	Unit Price	Total	Quantity	%	Reimbursement	Quantity	Unit Price
Paving Mobilization	1.00	LS	\$5,000.00	\$5,000.00	1.00	0.71	\$5,000.00	1.00	\$5,000.00
Clear, Grub & Haul Off	1.00	LS	\$12,000.00	\$12,000.00	1.00	0.71	\$12,000.00	1.00	\$12,000.00
Utility Location	1.00	LF	\$3,900.00	\$3,900.00	1.00	0.71	\$3,900.00	1.00	\$3,900.00
Traffic Control	1.00	LS	\$40,000.00	\$40,000.00	1.00	0.71	\$40,000.00	1.00	\$40,000.00
Silt Fence/Tree Fence/Limits Dist.	1100.00	LF	\$3.50	\$3,850.00	1100.00	0.71	\$3,850.00	1100.00	\$3,850.00
Seeding - Permanent	0.75	ACRE	\$2,450.00	\$1,837.50	0.75	0.71	\$2,450.00	0.75	\$2,450.00
Milling (ex. Pmnt section only)	1728.00	SY	\$3.25	\$5,616.00	1728.00	0.71	\$5,616.00	1728.00	\$5,616.00
1.5" Mill & Butt Joints (tie ins) (Cardinal)	200.00	SY	\$6,000.00	\$6,000.00	200.00	0.50	\$6,000.00	200.00	\$6,000.00
Butt Joint Milling (Southern Cross)	1.00	LS	\$15.00	\$15.00	1.00	0.50	\$15.00	1.00	\$15.00
Pavement 1.5" Overlay (entire road overlay)	2641.00	SY	\$12,765.00	\$33,915.00	2641.00	0.71	\$33,915.00	2641.00	\$33,915.00
Pavement 1.5" (1st Lift)	851.00	SY	\$15.00	\$12,765.00	851.00	0.71	\$12,765.00	851.00	\$12,765.00
Pavement 3" S9.5C	0.00	SY	\$0.00	\$0.00	0.00	0.71	\$0.00	0.00	\$0.00
Pavement 4" I19.0	851.00	SY	\$35.00	\$29,785.00	851.00	0.71	\$29,785.00	851.00	\$29,785.00
Pavement 10" ABC	240.00	TON	\$48.00	\$11,520.00	240.00	0.71	\$11,520.00	240.00	\$11,520.00
Pavement 5" B25.0	425.00	SY	\$60.00	\$25,500.00	425.00	0.71	\$25,500.00	425.00	\$25,500.00
Pavement - Wedge (ALLOWANCE)	30.00	TON	\$250.00	\$7,500.00	30.00	0.71	\$7,500.00	30.00	\$7,500.00
6" Concrete Driveway (1 driveways)	30.00	SY	\$100.00	\$3,000.00	30.00	0.67	\$3,000.00	30.00	\$3,000.00
Pavement Markings - Thermo	1.00	LS	\$30,000.00	\$30,000.00	1.00	0.71	\$30,000.00	1.00	\$30,000.00
Pavement Markings - 12"-24" Thermo	0.00	LF	\$14.35	\$0.00	0.00	0.71	\$14.35	0.00	\$14.35
Pavement Markings - 4" Thermo	0.00	LF	\$3.50	\$0.00	0.00	0.71	\$3.50	0.00	\$3.50
Pavement Markings - Symbols	0.00	EA	\$215.00	\$0.00	0.00	0.71	\$215.00	0.00	\$215.00
Road Signs	6.00	EA	\$500.00	\$3,000.00	6.00	0.71	\$3,000.00	6.00	\$3,000.00
Earthwork & grading	1.00	LS	\$18,500.00	\$18,500.00	1.00	0.50	\$18,500.00	1.00	\$18,500.00
30" Curb and Gutter	0.00	LF	\$18.70	\$0.00	0.00	0.00	\$18.70	0.00	\$0.00
Curb Ramps	0.00	EA	\$2,000.00	\$0.00	0.00	0.00	\$2,000.00	0.00	\$0.00
Drainage Structures	0.00	EA	\$2,500.00	\$0.00	0.00	0.00	\$2,500.00	0.00	\$0.00
18" Storm Pipe	0.00	LF	\$81.00	\$0.00	0.00	0.00	\$81.00	0.00	\$0.00
15" RCP Class IV Storm Pipe	40.00	LF	\$70.00	\$2,800.00	40.00	0.67	\$2,800.00	40.00	\$2,800.00
Storm Pipe Bedding	40.00	LF	\$20.00	\$800.00	40.00	0.67	\$800.00	40.00	\$800.00
15" FES	0.00	EA	\$950.00	\$0.00	0.00	0.00	\$950.00	0.00	\$0.00
Rip-Rap	10.00	TN	\$72.00	\$720.00	10.00	0.67	\$720.00	10.00	\$720.00
Dry Utility Relocation ALLOWANCE	1.00	LS	\$14,000.00	\$14,000.00	1.00	0.50	\$14,000.00	1.00	\$14,000.00
Total				\$277,708.50					\$185,560.14
Overhead and Profit				\$0.00					\$0.00
Final Construction Cost Estimate				\$277,708.50					\$185,560.14



The Summit - Friendship Road (northbound) Turn Lane Construction Estimate

June 1, 2024 Revision

Peak Engineering									
Item	Quantity	Unit	Overall Project Cost			Town of Apex Reimbursement			
			Unit Price	Total		Quantity	% Reimbursement	Unit Price	Total
Paving Mobilization	1.00	LS	\$5,000.00			1.00	0.67	\$5,000.00	\$3,350.00
Clear, Grub & Haul Off	1.00	LS	\$12,000.00			1.00	0.67	\$12,000.00	\$8,040.00
Utility Location	1.00	LS	\$3,500.00			1.00	0.67	\$3,500.00	\$2,345.00
Traffic Control	1.00	LS	\$28,450.00			1.00	0.67	\$28,450.00	\$19,061.50
Silt Fence/Tree Fence/Limits Dist.	600.00	LF	\$3.50			600.00	0.67	\$3.50	\$1,407.00
Seeding - Permanent	0.20	ACRE	\$2,450.00			0.20	0.67	\$2,450.00	\$328.30
Milling (ex. Pymt section only)	959.00	SY	\$3,116.75			959.00	0.67	\$3,116.75	\$2,088.22
1.5" Mill & Butt Joints (tie ins) (Cardinal)	150.00	SY	\$0.00			150.00	0.67	\$0.00	\$0.00
Butt Joint Milling (Southern Cross)	1.00	LS	\$6,000.00			1.00	0.67	\$6,000.00	\$4,020.00
Pavement 1.5" Overlay (entire road overlay)	1694.00	SY	\$25,410.00			1694.00	0.67	\$25,410.00	\$17,024.70
Pavement 1.5" (1st Lift)	735.00	SY	\$11,025.00			735.00	0.67	\$11,025.00	\$9,045.00
Pavement 3" S9.5C	0.00	SY	\$0.00			0.00	0.67	\$0.00	\$0.00
Pavement 4" 119.0	765.00	SY	\$35.00			765.00	0.67	\$35.00	\$21,105.00
Pavement 10" ABC	382.00	TON	\$48.00			382.00	0.67	\$48.00	\$12,285.12
Pavement 5" B25.0	355.00	SY	\$60.00			355.00	0.67	\$60.00	\$14,271.00
Pavement - Wedge (ALLOWANCE)	0.00	TON	\$250.00			0.00	0.67	\$250.00	\$0.00
6" Concrete Driveway (1 driveways)	0.00	SY	\$100.00			0.00	0.67	\$100.00	\$0.00
Pavement Markings - Thermo	1.00	LS	\$30,000.00			1.00	0.67	\$30,000.00	\$20,100.00
Pavement Markings - 12"-24" Thermo	0.00	LF	\$14.35			0.00	0.67	\$14.35	\$0.00
Pavement Markings - 4" Thermo	0.00	LF	\$3.50			0.00	0.67	\$3.50	\$0.00
Pavement Markings - Symbols	0.00	EA	\$215.00			0.00	0.67	\$215.00	\$0.00
Road Signs	5.00	EA	\$500.00			5.00	0.67	\$500.00	\$1,675.00
Earthwork & grading	1.00	LS	\$18,500.00			1.00	0.67	\$18,500.00	\$12,395.00
30" Curb and Gutter	0.00	LF	\$18.70			0.00	0.67	\$18.70	\$0.00
Curb Ramps	0.00	EA	\$2,000.00			0.00	0.67	\$2,000.00	\$0.00
Drainage Structures	0.00	EA	\$2,500.00			0.00	0.67	\$2,500.00	\$0.00
18" Storm Pipe	0.00	LF	\$81.00			0.00	0.67	\$81.00	\$0.00
15" RCP Class IV Storm Pipe	55.00	LF	\$3,850.00			55.00	0.67	\$3,850.00	\$2,579.50
Storm Pipe Bedding	55.00	LF	\$1,100.00			55.00	0.67	\$1,100.00	\$737.00
15" FES	0.00	EA	\$950.00			0.00	0.67	\$950.00	\$0.00
Rip-Rap	0.00	TN	\$72.00			0.00	0.67	\$72.00	\$0.00
Dry Utility Relocation ALLOWANCE	1.00	LS	\$10,000.00			1.00	0.67	\$10,000.00	\$6,700.00
Total			\$229,452.75						\$158,557.34
Overhead and Profit			\$0.00						\$0.00
Final Construction Cost Estimate			\$229,452.75						\$158,557.34



Total Town of Apex Reimbursement for Friendship Road Widening (67.7% of total cost) \$153,044.98



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

10/30/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Burnham Risk & Insurance Solutions 15901 Red Hill Ave, Ste 100 Tustin CA 92780 License#: 0F69771 BEAZHOM-03	CONTACT NAME:	FAX (A/C, No): 714-573-1770	
	PHONE (A/C, No, Ext): 714-505-7000	E-MAIL ADDRESS: info@wgbib.com	
INSURED Beazer Homes USA, Inc. 2002 Summit Blvd NE, 15th Floor Atlanta, GA 30319	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A: National Fire & Marine Insuran		20079
	INSURER B: Starr Indemnity and Liability		38318
	INSURER C: Starr Specialty Insurance Comp		16109
	INSURER D: Landmark American Insurance Co		33138
	INSURER E:		
INSURER F:			

COVERAGES**CERTIFICATE NUMBER:** 1450521565**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:	Y	N	42-HBL-150430-02	6/1/2023	6/1/2025	EACH OCCURRENCE \$ 20,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ Included PERSONAL & ADV INJURY \$ 20,000,000 GENERAL AGGREGATE \$ 30,000,000 PRODUCTS - COMP/OP AGG \$ 30,000,000 \$
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY	Y	N	1000672953241	4/1/2024	4/1/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
D	<input type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$	N	N	LHA107268	4/1/2024	4/1/2025	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000 \$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y/N <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A	N	N	100 0004944	4/1/2024	4/1/2025	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.I. EACH ACCIDENT \$ 1,000,000 E.I. DISEASE - EA EMPLOYEE \$ 1,000,000 E.I. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Excess Liability Policy #LHA101583 is Excess of the underlying Auto and Employer's Liability policies evidenced above.

RE: The Summit

Town of Apex is included as Additional Insured with respect to General Liability and Auto Liability if required by written contract and subject to terms, conditions and exclusions of the policy.

Coverage is provided on a Primary & Non-Contributory basis on the General Liability and Auto Liability if required by written contract and subject to terms, conditions and exclusions of the policy.

CERTIFICATE HOLDER**CANCELLATION**Town of Apex
PO Box 250
Apex NC 27502

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
 2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.
- B.** With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:
- This insurance does not apply to "bodily injury" or "property damage" occurring after:
1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or

2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.
- C.** With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance**:
- If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:
1. Required by the contract or agreement; or
 2. Available under the applicable Limits of Insurance shown in the Declarations;
- whichever is less.
- This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

All other terms and conditions of this policy remain unchanged.

B. With respect to the insurance afforded to these additional insureds, the following is added to

Section III – Limits Of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or

2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

All other terms and conditions of this policy remain unchanged.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – AUTOMATIC STATUS
AMENDATORY ENDORSEMENT**

Policy Number: 1000672953241

Effective Date: 04/01/2024

Named Insured: Beazer Homes USA, Inc.

This endorsement modifies the insurance coverage form(s) listed below that have been purchased by you and evidenced as such on the Declarations page. Please read the endorsement and respective policy(ies) carefully.

AUTO DEALERS COVERAGE FORM
BUSINESS AUTO COVERAGE FORM
MOTOR CARRIER COVERAGE FORM

It is hereby agreed that **SECTION II – COVERED AUTOS LIABILITY COVERAGE, A. COVERAGE, 1. Who Is An Insured** of the Business Auto Coverage Form and Motor Carrier Coverage Form, and **SECTION I – COVERED AUTOS COVERAGES, D. Covered Autos Liability Coverage, 2. Who Is An Insured** of the Auto Dealers Coverage Form are amended to include the following:

Any person or organization whom you become obligated to include as an additional insured under this policy, as a result of any written contract or written agreement you enter into which requires you to furnish insurance to that person or organization of the type provided by this policy, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by your use of a covered "auto". However, the insurance afforded only applies to the extent permitted by law, and will not exceed the lesser of:

- (1) The coverage and/or limits of this policy, or
- (2) The coverage and/or limits required by such written contract or written agreement.

All other terms and conditions of this Policy remain unchanged.

Ship To

TOWN OF APEX
PUBLIC WORKS ADMINISTRATION
105-B UPCHURCH ST.
Apex, NC 27502

Bill To

TOWN OF APEX
ACCOUNTS PAYABLE
PO BOX 250
APEX, NC 27502

Purchase Order
No. 2025-00000553

DATE 10/30/2024

VENDOR NO. 6433

Vendor

BEAZER HOMES LLC
801 CORPORATE CENTER DR
RALEIGH, NC 27607



PURCHASE ORDER NUMBER MUST APPEAR ON
ALL INVOICES, SHIPPERS, BILL OF LADING AND
CORRESPONDENCE

DELIVER BY
FREIGHT TERMS FOB APEX
PAGE 1 of 1
ORIGINATOR: Steve Maynard

REFERENCE

QTY	UNIT	DESCRIPTION	VENDOR PART #	UNIT COST	TOTAL COST
189,000.00	Each	Capital Project - Reimburse of construction cost at Old US 1/Friendship Rd 63-9250-1126-47300 - Capital Outlay - Improvements 189,000.00		1.0000	\$189,000.00

Purchase Order terms and conditions: <http://www.apexnc.org/terms>.

SUBTOTAL \$189,000.00

SALES TAX \$0.00

TOTAL DUE \$189,000.00

Andrew Harrison
Finance Director

Steve Maynard
Purchasing Manager

Special Instructions

THIS INSTRUMENT HAS BEEN PREAUDITED IN THE MANNER REQUIRED BY THE LOCAL GOVERNMENT
BUDGET AND FISCAL CONTROL ACT.

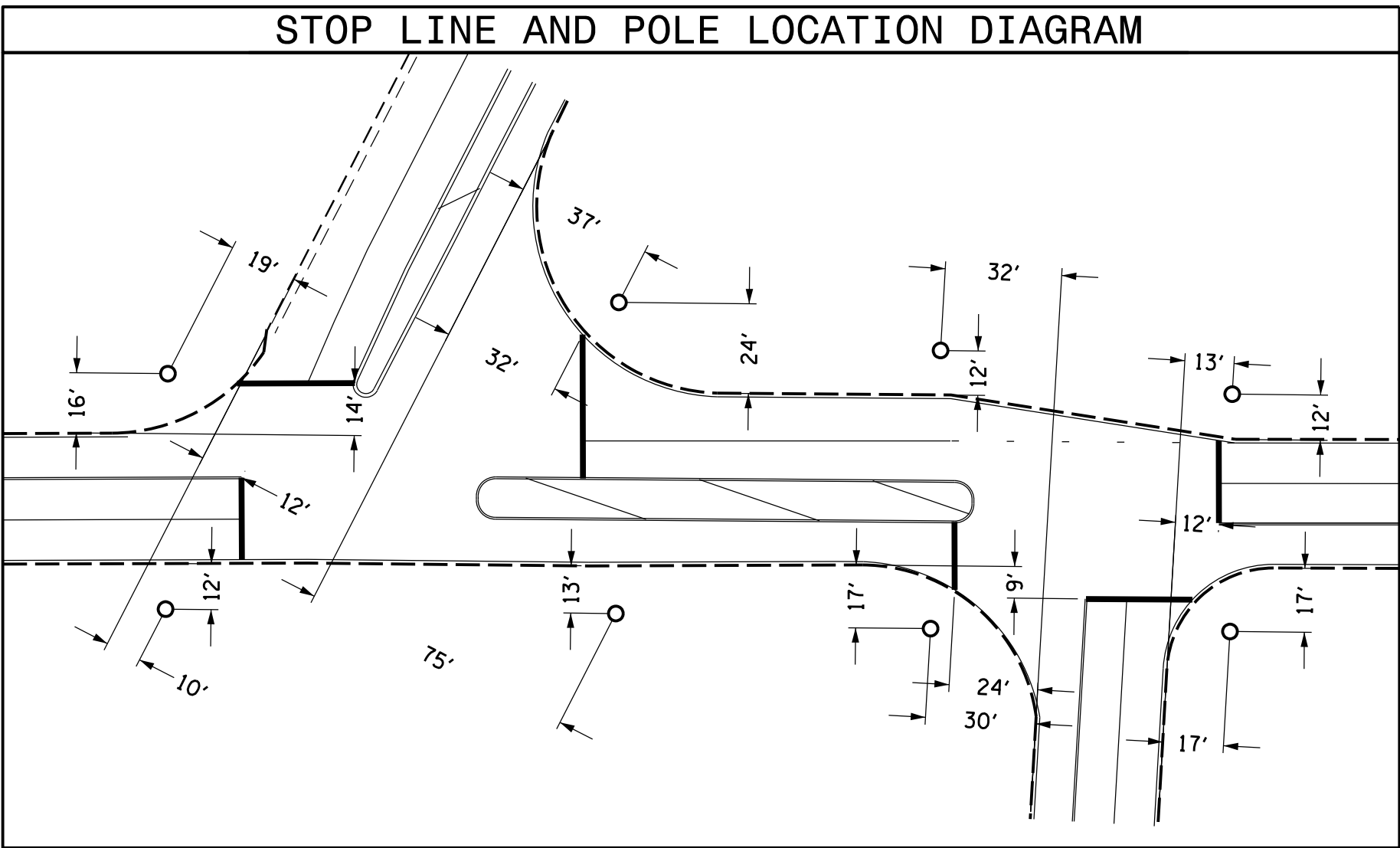
PROJECT REFERENCE NO.	SHEET NO.
36249.4987	Sig-1.0

Exhibit B - 6 pages

6 Phase
Fully Actuated
W/ EV Preemption
SR 1011 (Old US 1) CLS
Signal System #: D05-47_Apex

NOTES

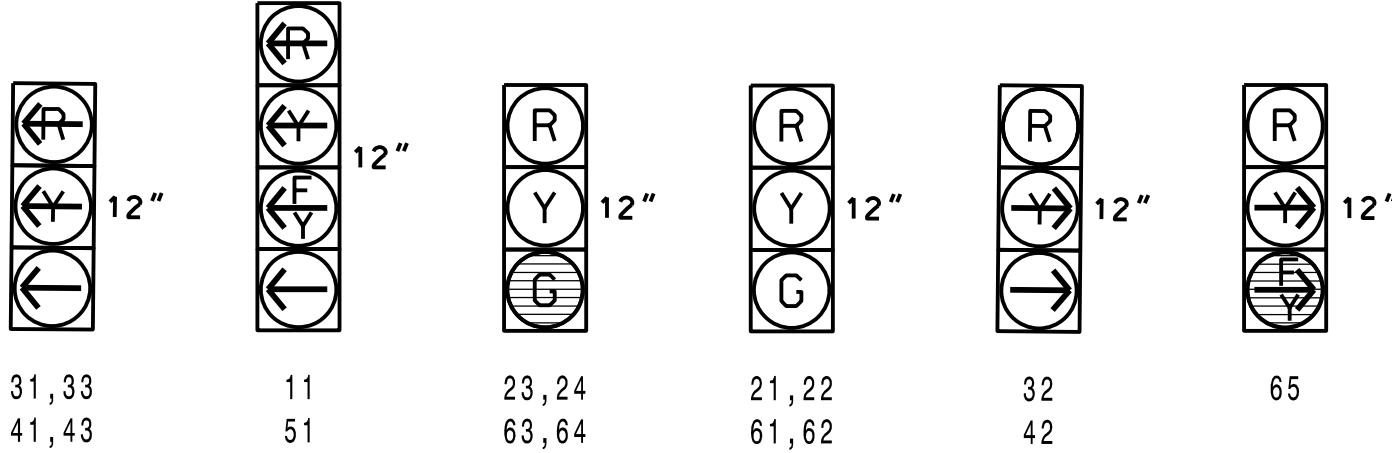
- Refer to "Roadway Standard Drawings NCDOT" dated January 2024, "Standard Specifications for Roads and Structures" dated January 2024, and all applicable sections of the latest version of the generic Project Special Provisions. The PSP can be accessed at the following website: <https://connect.ncdot.gov/resources/safety/Pages/ITS-DesignResources.aspx>
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Tether signal heads numbered 23, 24, 63, 64, and 65.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- This intersection features a GPS preemption system.
- The Division Traffic Engineer will determine the hours of use for each phasing plan.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



SIGNAL FACE I.D.

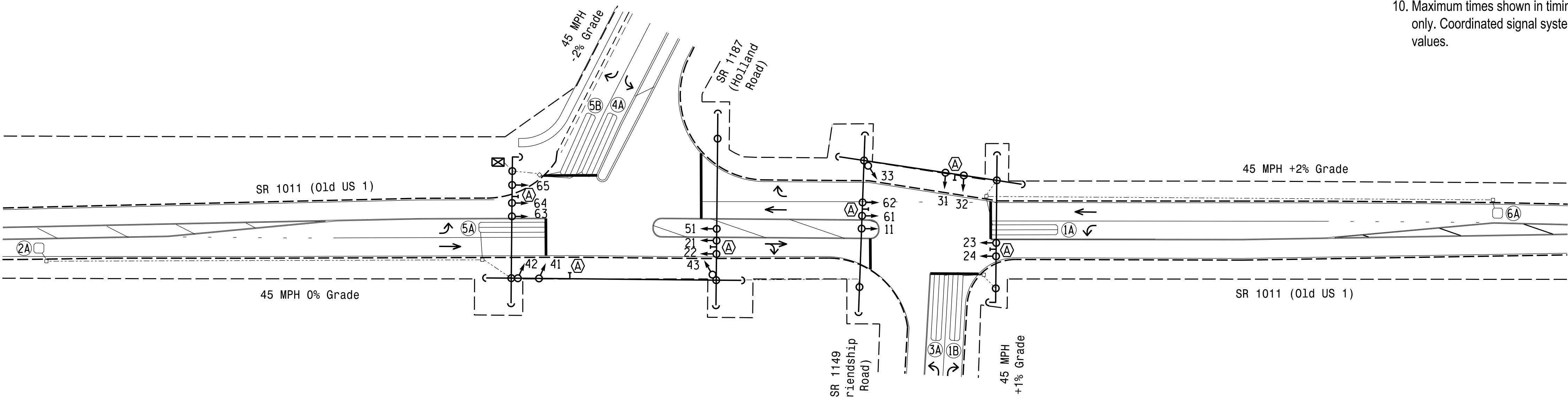
All Heads L.E.D.

Denotes Louvered Section



MAXTIME DETECTOR INSTALLATION CHART										
DETECTOR					PROGRAMMING					
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL DURING GREEN
1A	6X40	0	2-4-2	X	1	15.0*	-	X	-	X
1B	6X40	0	2-4-2	X	6 #	3.0	-	X	-	X
2A	6X6	300	5	X	2	-	-	X	X	X
3A	6X40	0	2-4-2	X	3	3.0	-	X	-	X
4A	6X40	0	2-4-2	X	4	3.0	-	X	-	X
5A	6X40	0	2-4-2	X	5	15.0*	-	X	-	X
5B	6X40	0	2-4-2	X	2 #	3.0	-	X	-	X
6A	6X6	300	5	X	6	-	-	X	X	X

* Disable Delay during Alternate Phasing operation.
Disable Phase Call during Alternate Phasing operation.



LEGEND

PROPOSED	EXISTING

MAXTIME TIMING CHART										
FEATURE	PHASE									
	1	2	3	4	5	6	TOL 1	TOL 2	TOL 3	TOL 4
Walk *	-	-	-	-	-	-				
Ped Clear *	-	-	-	-	-	-				
Min Green *	7	12	7	7	7	12	5	5	5	5
Passage *	2.0	6.0	2.0	2.0	2.0	6.0				
Max 1 *	25	90	30	30	25	90				
Yellow Change	3.0	4.5	3.0	3.0	3.0	4.5	3.0	4.3	3.0	4.5
Red Clear	1.6	1.0	1.4	2.1	1.6	1.0	1.6	1.6	1.6	1.0
Added Initial *	-	2.5	-	-	-	2.5				
Maximum Initial *	-	34	-	-	-	34				
Time Before Reduction *	-	15	-	-	-	15				
Time To Reduce *	-	45	-	-	-	45				
Minimum Gap	-	3.0	-	-	-	3.0				
Advance Walk	-	-	-	-	-	-				
Non Lock Detector	X	-	X	X	X	-				
Vehicle Recall	-	MIN RECALL	-	-	-	MIN RECALL				
Dual Entry	-	-	-	-	-	-				

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

MAXTIME PREEMPTION CHART

FUNCTION	PRE 3	PRE 5
Type	EMERG VEH	EMERG VEH
Exit Phases	2, 6	2, 6
Delay	0	0
Call Extend Time	2.0	2.0
Max Presence	120	120
Enter Min Green	1	1
Enter Walk	0	0
Enter Ped Clear	255 *	255 *
Enter Yellow Change	25.5 *	25.5 *
Enter Red Clear	25.5 *	25.5 *
Dwell Green	7	7
Exit Min Green	255 *	255 *
Exit Yellow Change	25.5 *	25.5 *
Exit Red Clear	25.5 *	25.5 *
Exit Type	EXIT PHASES	EXIT PHASES
Ped Clear Through Yellow	-	-
Require All Red Entry	-	-

* Directs controller to use default phase timing.

NC Dept of Transportation
Division of Highways

Final Drawing Date: 09/03/2025

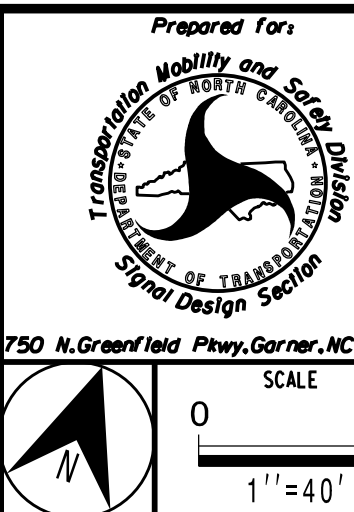
Signed by:
Robert J. Siemba
NCDOT APPROVED

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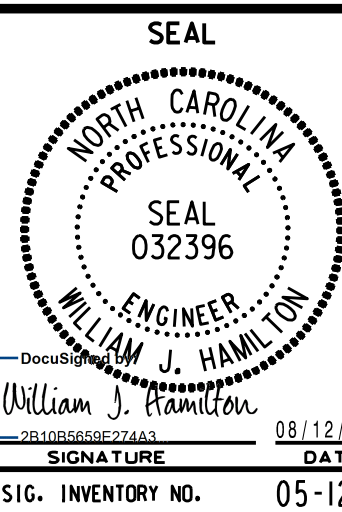
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New Installation - Sheet 1 of 2

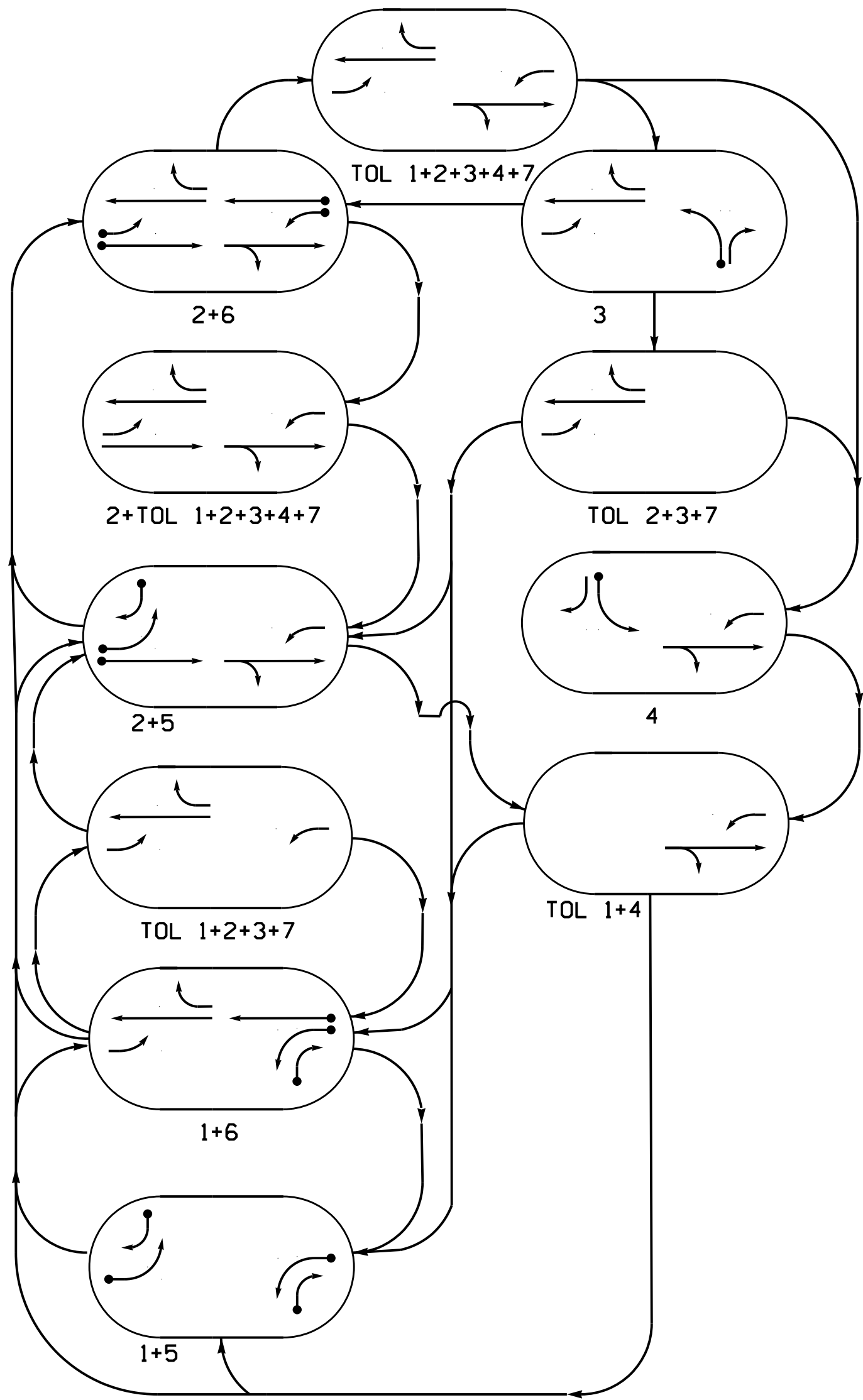


SR 1011 (Old US 1) at SR 1187 (Holland Road) / SR 1149 (Friendship Road)	
Division 5	Wake County Apex
PLAN DATE: August 2025	REVIEWED BY: WJ Hamilton
PREPARED BY: JA Wendt	REVIEWED BY:
REVISIONS	INIT. DATE

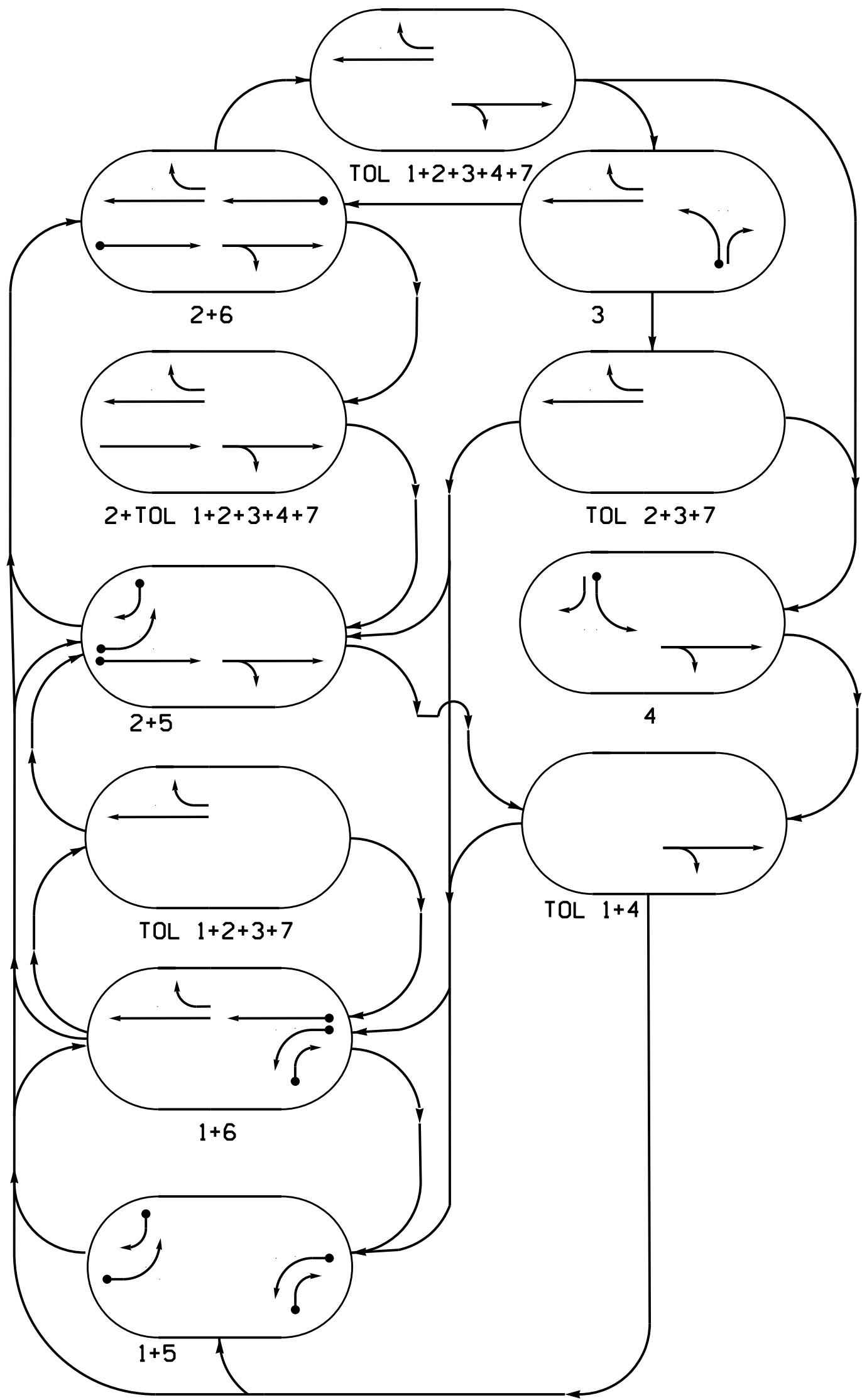
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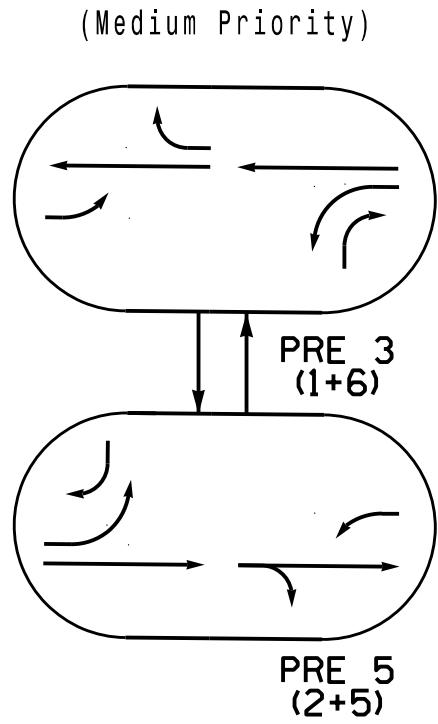
DEFAULT PHASING DIAGRAM



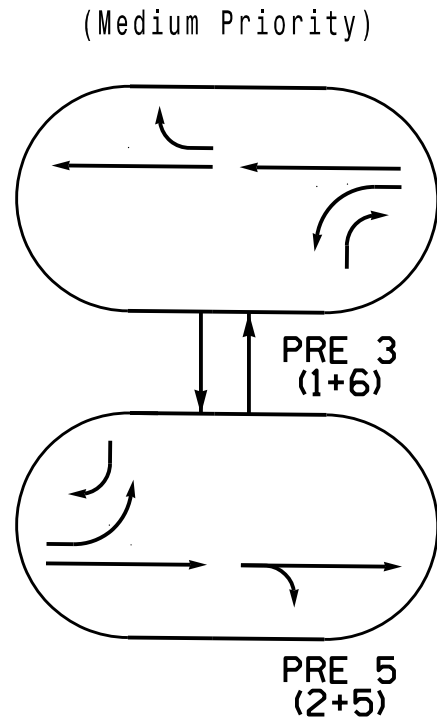
ALTERNATE PHASING DIAGRAM



EV PREEMPT PHASES
FOR DEFAULT PHASING



EV PREEMPT PHASES
FOR ALTERNATE PHASING



6 Phase
Fully Actuated
W/ EV Preemption
SR 1011 (Old US 1) CLS
Signal System #: D05-47_Apex

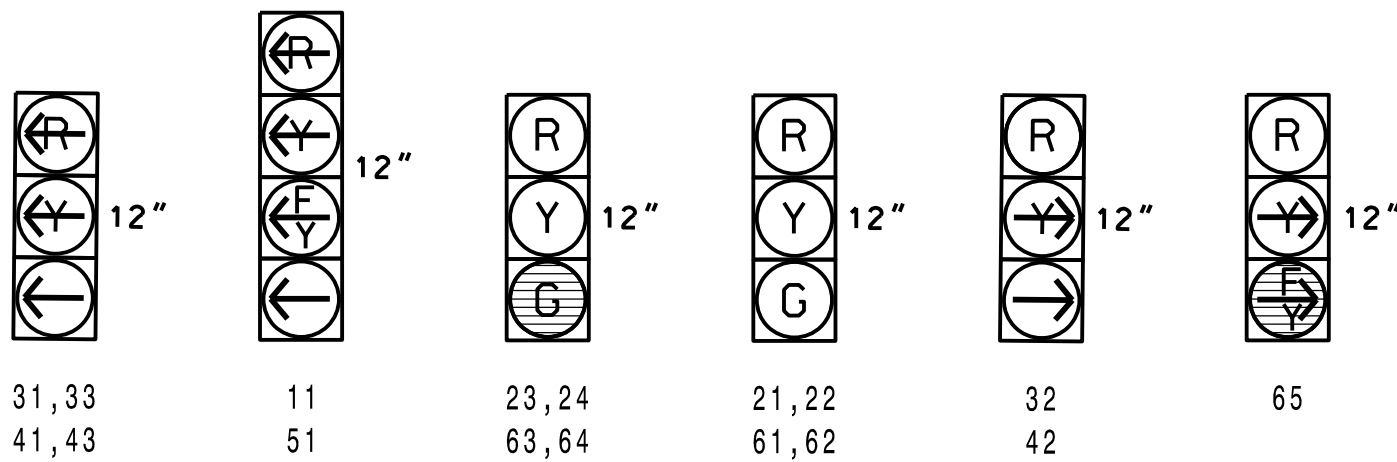
NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024, "Standard Specifications for Roads and Structures" dated January 2024, and all applicable sections of the latest version of the generic Project Special Provisions. The PSP can be accessed at the following website: <https://connect.ncdot.gov/resources/safety/Pages/ITS-DesignResources.aspx>
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. The order of phase 3 and phase 4 may be reversed.
5. Tether signal heads numbered 23, 24, 63, 64, and 65.
6. Set all detector units to presence mode.
7. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
8. This intersection features a GPS preemption system.
9. The Division Traffic Engineer will determine the hours of use for each phasing plan.
10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

SIGNAL FACE I.D.

All Heads L.E.D.

Denotes Louvered Section



DEFAULT PHASING
TABLE OF OPERATION

SIGNAL FACE	PHASE															
	1 + 5	1 + 6	1 + 2 + 3 + 7	2 + 5	2 + 6	2 + 3 + 7	3	4	1 + 2 + 3 + 7	1 + 4	2 + 5	2 + 6	3	4	1 + 2 + 3 + 7	1 + 4
11	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
21,22	R	R	R	G	G	G	R	R	R	R	R	R	R	R	G	R
23,24	R	R	R	G	G	G	R	R	R	R	R	R	R	R	G	R
31,33	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
32	→	→	R	R	R	R	→	R	R	R	→	R	R	→	R	R
41,43	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
42	→	R	R	→	R	R	R	R	→	R	R	→	R	R	→	R
51	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
61,62	R	G	R	R	R	G	R	R	R	R	R	R	G	R	R	R
63,64	R	G	R	R	R	G	R	R	R	R	R	R	G	R	R	R
65	R	→	→	R	→	→	→	→	→	→	→	→	→	→	→	R

ALTERNATE PHASING
TABLE OF OPERATION

SIGNAL FACE	PHASE															
	1 + 5	1 + 6	1 + 2 + 3 + 7	2 + 5	2 + 6	2 + 3 + 7	3	4	1 + 2 + 3 + 7	1 + 4	2 + 5	2 + 6	3	4	1 + 2 + 3 + 7	1 + 4
11	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
21,22	R	R	R	G	G	G	R	R	R	R	R	R	R	R	G	R
23,24	R	R	R	G	G	G	R	R	R	R	R	R	R	R	G	R
31,33	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
32	→	→	R	R	R	R	→	R	R	R	→	R	R	→	R	R
41,43	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
42	→	R	R	→	R	R	R	R	→	R	R	→	R	R	→	R
51	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
61,62	R	G	R	R	R	G	R	R	R	R	R	R	G	R	R	R
63,64	R	G	R	R	R	G	R	R	R	R	R	R	G	R	R	R
65	R	→	→	R	→	→	→	→	→	→	→	→	→	→	→	R

NC Dept of Transportation
Division of Highways

Final Drawing Date: 09/03/2025

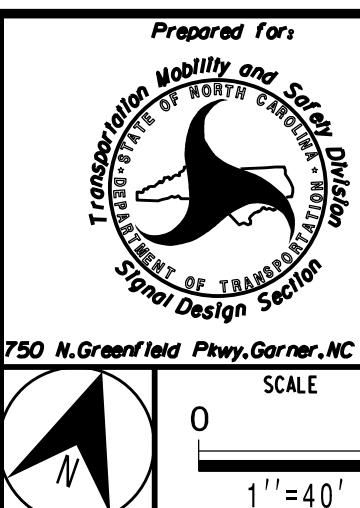
Signed by: Robert J. Ziemba
NCDOT Approval

New Installation - Sheet 2 of 2



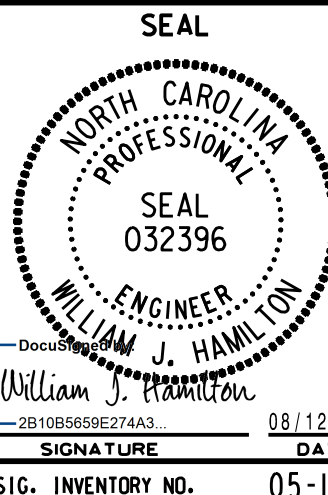
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SR 1011 (Old US 1) at SR 1187 (Holland Road) / SR 1149 (Friendship Road) Division 5 Wake County Apex	
PLAN DATE: August 2025	REVIEWED BY: WJ Hamilton
PREPARED BY: JA Wendt	REVIEWED BY:
REVISIONS	INIT. DATE

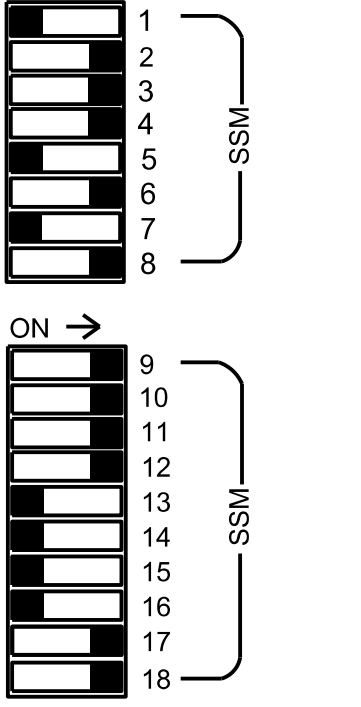
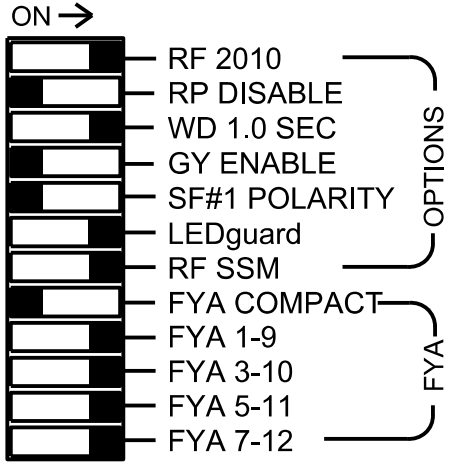
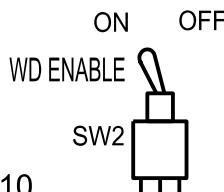
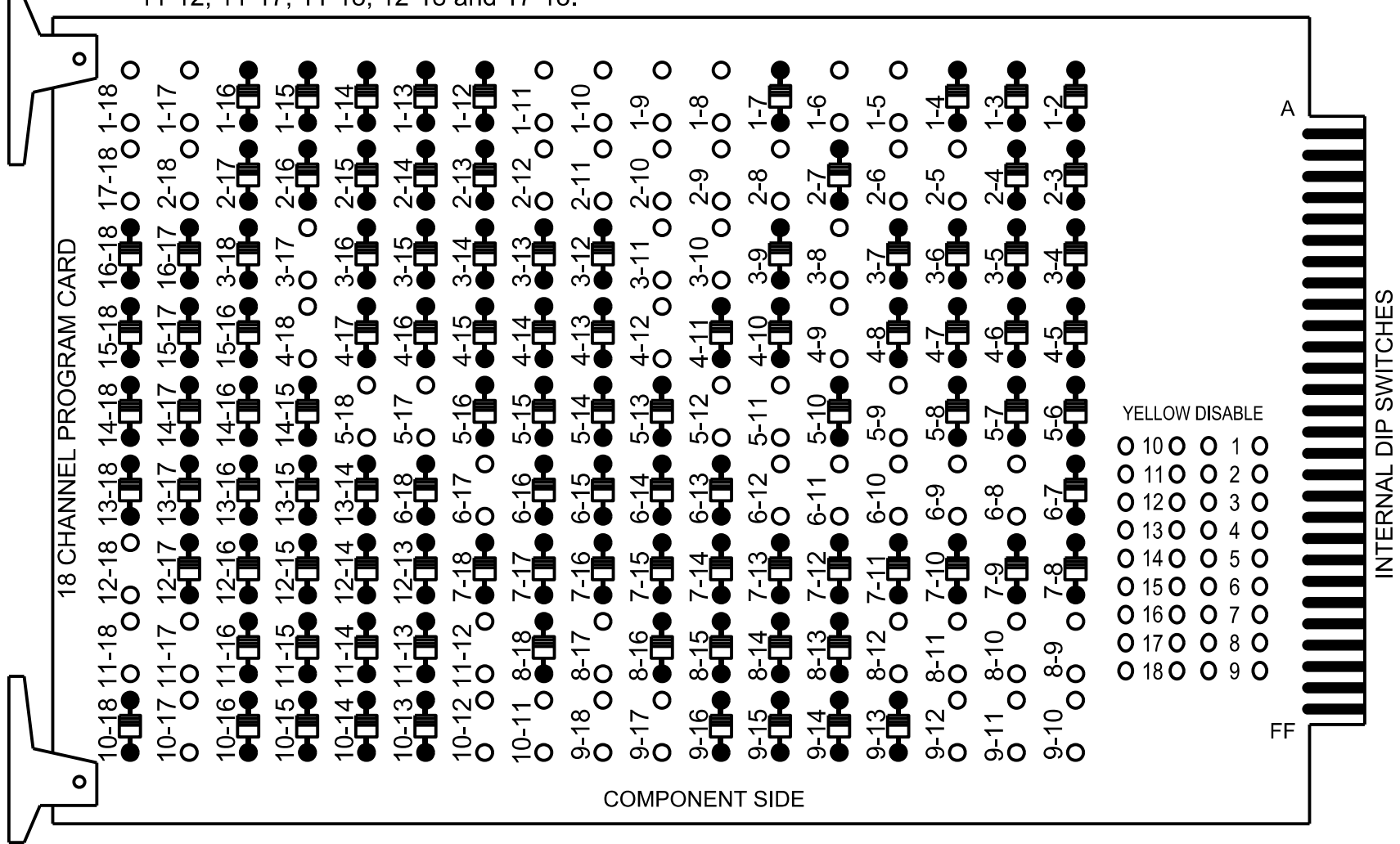
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SIGNATURES COMPLETED



18 CHANNEL CONFLICT MONITOR
PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-5, 1-6, 1-8, 1-9, 1-10, 1-11, 1-17, 1-18, 2-5, 2-6, 2-8, 2-9, 2-10, 2-11, 2-12, 2-18, 3-8, 3-10, 3-11, 3-17, 4-9, 4-12, 4-18, 5-9, 5-11, 5-12, 5-17, 5-18, 6-8, 6-9, 6-10, 6-11, 6-12, 6-17, 8-9, 8-10, 8-11, 8-12, 8-17, 9-10, 9-11, 9-12, 9-17, 9-18, 10-11, 10-12, 10-17, 11-12, 11-17, 11-18, 12-18 and 17-18.



■ = DENOTES POSITION OF SWITCH

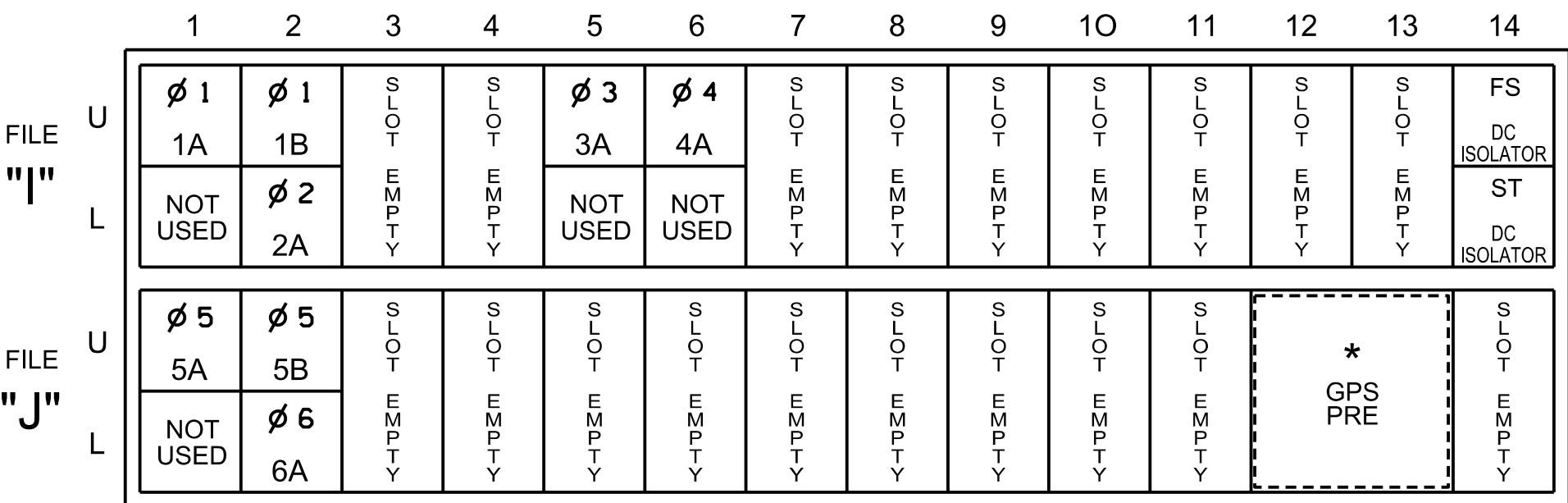
REMOVE JUMPERS AS SHOWN

NOTES:

- Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
- Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
- Ensure that the Red Enable is active at all times during normal operation.
- Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

INPUT FILE POSITION LAYOUT

(front view)



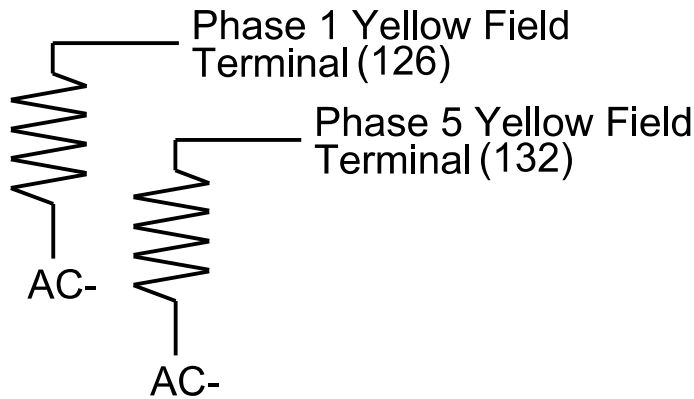
EX. : 1A, 2A, ETC. = LOOP NO.'S
FS = FLASH SENSE
ST = STOP TIME

CONNECT PHASE SELECTOR TO FIELD ETHERNET SWITCH

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)

ACCEPTABLE VALUES	
Value (ohms)	Wattage
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)



NOTES

- To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
- Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
- The cabinet and controller are part of the D05-47_Apex Signal System.

EQUIPMENT INFORMATION

Controller.....2070LX
Cabinet.....332 w/ Aux
Software.....Q-Free MAXTIME
Cabinet Mount.....Base
Output File Positions.....18 With Aux. Output File
Load Switches Used.....S1, S2, S4, S5, S7, S8, S11, AUX S1, AUX S2, AUX S3, AUX S4, AUX S5, AUX S6

Phases Used.....1, 2, 3, 4, 5, 6
Overlap "1".....*
Overlap "2".....*
Overlap "3".....*
Overlap "4".....*
Overlap "5".....*
Overlap "6".....*
Overlap "7".....*

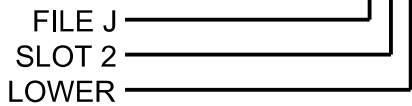
*See overlap programming detail on sheet 2

INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
1A	TB1-1,2	I1U	56	18	1	★	1	15.0			X	
1B	TB2-5,6	I2U	39	1	2	★	1	3.0			X	
2A	TB2-7,8	I2L	43	5	3	2				X	X	X
3A	TB4-5,6	I5U	58	20	7	3				X	X	
4A	TB4-9,10	I6U	41	3	8	4				X	X	
5A	TB3-1,2	J1U	55	17	15	★	5	15.0			X	
5B	TB3-5,6	J2U	40	2	16	5				X	X	X
6A	TB3-7,8	J2L	44	6	17	6				X	X	

★ For the detectors to work as shown on the signal plan see the Detector Programming Detail for Alternate Phasing on Sheet 2 of this plan.

INPUT FILE POSITION LEGEND: J2L



SPECIAL DETECTOR NOTES

Install a GPS preemption system. Perform installation according to manufacturer's directions and NCDOT engineer approved mounting location to accomplish the preemption schemes shown on the Signal Design Plans.

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6				
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18				
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	OL7	8 PED	OL1	OL2	OL5	OL3	OL4	OL6				
SIGNAL HEAD NO.	11	★	21,22	NU	31,33	41,43	NU	51	★	61,62	NU	NU	65	★	11	★	63,64	32	51	★	23,24	42
RED			128							134			107				A124	A111		A101	A104	
YELLOW	★		129					★		135							A125			A102		
GREEN			130							136							A126			A103		
RED ARROW					116	101									A121				A114			
YELLOW ARROW					117	102							108		A122		A112	A115			A105	
FLASHING YELLOW ARROW													109		A123				A116			
GREEN ARROW	127				118	103		133									A113				A106	

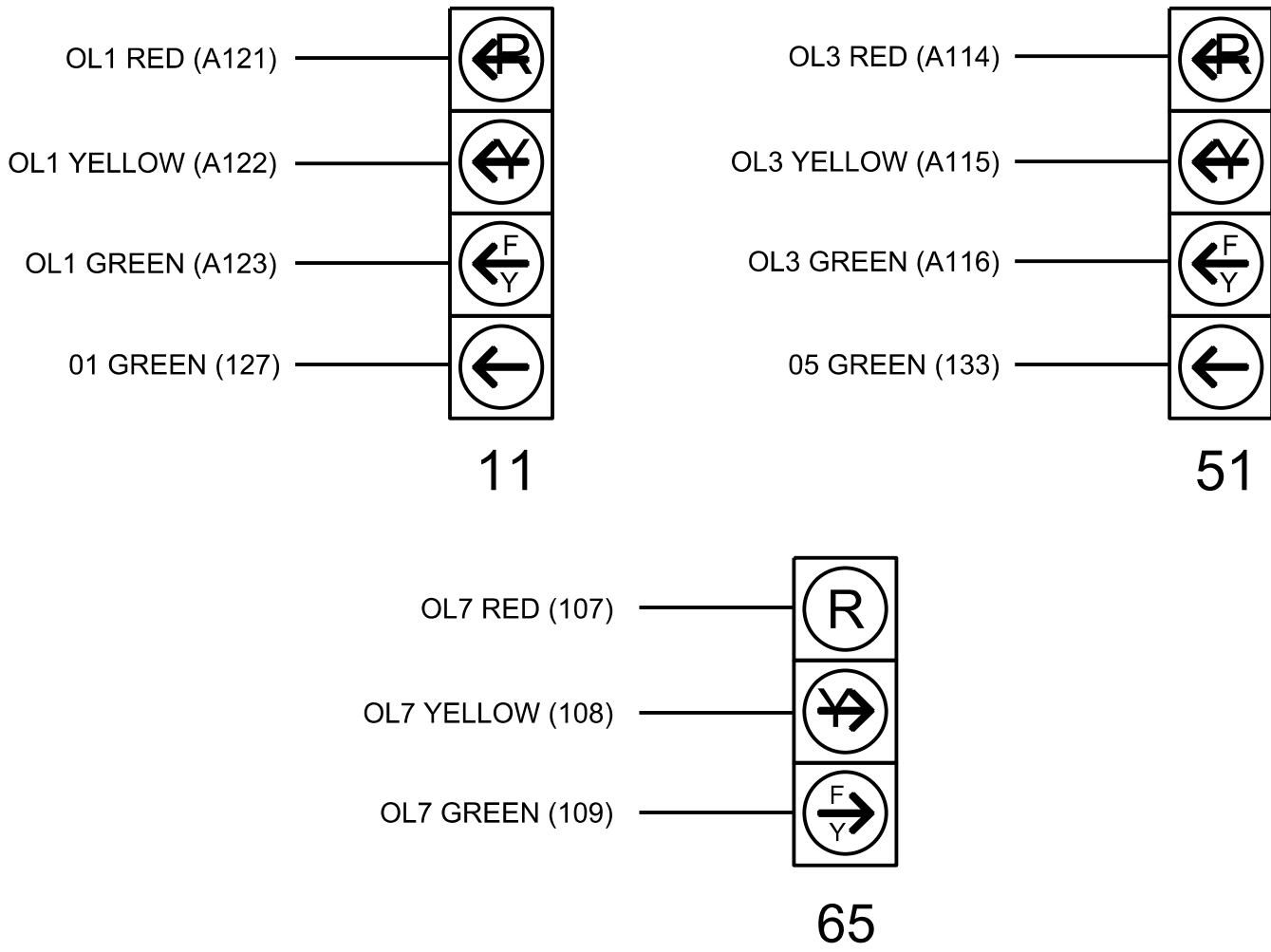
NU = Not Used

★ Denotes install load resistor. See load resistor installation detail this sheet.

★ See pictorial of head wiring in detail this sheet.

FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



NC Dept of Transportation
Division of Highways
Final Drawing Date: 09/03/2025
Signed by: Robert J. Ziemba
NCDOT Approval: 2810B5659E274A3

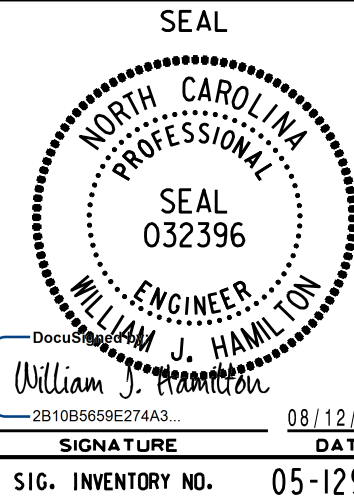
THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 05-1295
DESIGNED: Aug 2025
SEALED: 08/12/2025
REVISED: N/A

Electrical Detail - Sheet 1 of 3



SR 1011 (Old US 1) at SR 1187 (Holland Road) / SR 1149 (Friendship Road) Division 5 Wake County Apex	
PLAN DATE: August 2025	REVIEWED BY: WJ Hamilton
PREPARED BY: JA Wendt	REVIEWED BY:
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SIGNATURE DATE
SIC. INVENTORY NO. 05-1295

MAXTIME OVERLAP PROGRAMMING DETAIL
FOR ALTERNATE PHASING

Front Panel
Main Menu >Controller >Overlap >Overlap Parameters/Overlap Timings

Web Interface
Home >Controller >Overlap Configuration >Overlaps

In the table view of the web interface, right click on "Overlap" in the top left corner of the table. Copy the entire contents of Overlap Plan 1. Paste Overlap Plan 1 into Overlap Plan 2. Modify Overlap Plan 2 as shown below and save changes.

Overlap Plan 2

Overlap	1	2	3	4	5	6	7
Type	FYA 4 - Section	Normal	FYA 4 - Section	Normal	Normal	Normal	FYA 4 - Section
Included Phases	-	3,6	-	2,4	1,3	4,5	3,6
Modifier Phases	1	-	5	-	-	-	-
Modifier Overlaps	-	-	-	-	-	-	-
Trail Green	5	5	5	5	0	0	5
Add Trail Green	0:0	0:0	0:0	0:0	0:0	0:0	0:0
Trail Yellow	3:0	4:3	3:0	4:5	0:0	0:0	4:3
Trail Red	1:6	1:6	1:6	1:0	0:0	0:0	1:6

← NOTICE INCLUDED PHASE

MAXTIME DETECTOR PROGRAMMING DETAIL
FOR ALTERNATE PHASING LOOPS 1A & 5A

Front Panel
Main Menu >Controller >Detector >Veh Det Plans

Web Interface
Home >Controller >Detector Configuration >Vehicle Detectors

In the table view of web interface right click on "Detector" in the top left corner of the table. Copy the entire contents of Detector Plan 1. Paste Detector Plan 1 into Detector Plan 2. Modify Detector Plan 2 as shown below and save changes.

Plan 2		
Detector	Call Phase	Delay
1	1	0:0
29	0	3:0

Detector	Call Phase	Delay
15	5	0:0
31	0	3:0

PREEMPTION PROGRAMMING

Front Panel
Main Menu >Controller >Preemption >Preempt Phasing/Preempt Parameters

Web Interface
Home >Controller >Preempt Configuration >Preempts

Preempt Configuration

Preempt	3	5
Enabled	Enabled	Enabled
Type	Emergency Veh	Emergency Veh
Track Phases	-	-
Track Overlaps	-	-
Dwell Phases	1, 6	2, 5
Dwell Overlaps	1, 2, 3, 5, 7	1, 3, 4, 6
Cycling Phases	-	-
Cycling Overlaps	-	-
Exit Phases	2, 6	2, 6
Exit Overlaps	1,2,3,4,7	1,2,3,4,7
Delay	0	0
Call Ext Time	2:0	2:0
Max Presence	120	120
Max Pres Act	Terminate	Terminate
Enter Min Green	1	1
Enter Walk	0	0
Enter Ped Clear	255	255
Enter Yellow Change	25.5	25.5
Enter Red Clear	25.5	25.5
Track Green	-	-
Track Yellow Clr	25.5	25.5
Track Red Clear	25.5	25.5
Dwell Green	7	7
Exit Min Green	255	255
Exit Yellow Change	25.5	25.5
Exit Red Clear	25.5	25.5
Dwell Ext Time	2:0	2:0
Exit Type	Exit Phases	Exit Phases
Non Locking Memory	X	X
Not Ovr Flash	X	X
Not Ovr Nxt Pre	X	X
Track Clear Ovr	X	X
Ped Clear During Yellow	-	-
Require All Red Entry	-	-

MAXTIME STARTUP AND SOFTWARE FLASH
PROGRAMMING DETAIL

Front Panel
Main Menu >Controller >Unit

Web Interface
Home >Controller >Unit

Modify parameters as shown below and save changes.

Start Up Parameters	Unit Flash Parameters
StartUp Clearance Hold	All Red Flash Exit Time
6	6

MAXTIME ALTERNATE PHASING PATTERN
PROGRAMMING DETAIL

Front Panel
Main Menu >Controller >Coordination >Patterns

Web Interface
Home >Controller >Coordination >Patterns

Pattern	Veh Det Plan	Overlap Plan
*	2	2

* The Pattern number(s) are to be determined by the Division Traffic Engineer.

FLASHER CIRCUIT MODIFICATION DETAIL

IN ORDER TO INSURE THAT SIGNALS FLASH CONCURRENTLY ON THE SAME APPROACH, MAKE THE FOLLOWING FLASHER CIRCUIT CHANGES:

- ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-4 AND TERMINATE ON T2-2.
- ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-5 AND TERMINATE ON T2-3.
- REMOVE FLASHER UNIT 2.

THE CHANGES LISTED ABOVE TIES ALL PHASES AND OVERLAPS TO FLASHER UNIT 1.

MAXTIME OVERLAP PROGRAMMING DETAIL
FOR DEFAULT PHASING

Front Panel
Main Menu >Controller >Overlap >Overlap Parameters/Overlap Timings

Web Interface
Home >Controller >Overlap Configuration >Overlaps

Overlap Plan 1

Overlap	1	2	3	4	5	6	7
Type	FYA 4 - Section	Normal	FYA 4 - Section	Normal	Normal	Normal	FYA 4 - Section
Included Phases	2,4	3,6	3,6	2,4	1,3	4,5	3,6
Modifier Phases	1	-	5	-	-	-	-
Modifier Overlaps	-	-	-	-	-	-	-
Trail Green	5	5	5	5	0	0	5
Add Trail Green	0:0	0:0	0:0	0:0	0:0	0:0	0:0
Trail Yellow	3:0	4:3	3:0	4:5	0:0	0:0	4:3
Trail Red	1:6	1:6	1:6	1:0	0:0	0:0	1:6

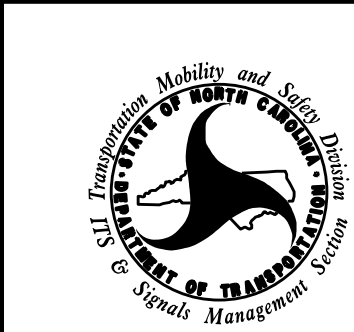


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Electrical Detail - Sheet 2 of 3

ELECTRICAL AND PROGRAMMING
DETAILS FOR:



SR 1011 (Old US 1) at SR 1187 (Holland Road) / SR 1149 (Friendship Road) Division 5 Wake County Apex	
PLAN DATE: August 2025	REVIEWED BY: WJ Hamilton
PREPARED BY: JA Wendt	REVIEWED BY:
REVISIONS	INIT. DATE

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SEAL
NORTH CAROLINA PROFESSIONAL SEAL 032396 ENGINEER WILLIAM J. HAMILTON
08/12/2025
SIGNATURE DATE
SIG. INVENTORY NO. 05-1295

PROJECT REFERENCE NO.	SHEET NO.
36249.4987	Sig-1.4

OUTPUT CHANNEL CONFIGURATION

Front Panel
Main Menu >Controller >More>Channels>Channels Config

Web Interface
Home >Controller >Advanced IO>Channels>Channels Configuration

Channel Configuration

Channel	Control Type	Control Source	Flash Yellow	Flash Red	Flash Alt	MMU Channel
1	Phase Vehicle	1		X	X	1
2	Phase Vehicle	2		X		2
3	Phase Vehicle	3		X	X	3
4	Phase Vehicle	4		X		4
5	Phase Vehicle	5		X		5
6	Phase Vehicle	6		X	X	6
7	Phase Vehicle	7		X		7
8	Overlap	7		X	X	8
9	Overlap	1		X	X	9
10	Overlap	2		X	X	10
11	Overlap	3		X		11
12	Overlap	4		X		12
13	Phase Ped	2				13
14	Phase Ped	4				14
15	Phase Ped	6				15
16	Phase Ped	8				16
17	Overlap	5		X	X	17
18	Overlap	6		X		18

NOTICE
OL7

MAXTIME ALTERNATE PHASING ACTIVATION DETAIL

To run alternate phasing, select a Pattern that is programmed to run Overlap Plan 2 and Detector Plan 2.
A Pattern can be selected through the scheduler or manually by changing the Operational Mode.

PHASING	OVERLAP PLAN	VEH DET PLAN
ACTIVE PLAN REQUIRED TO RUN DEFAULT PHASING	1	1
ACTIVE PLAN REQUIRED TO RUN ALTERNATE PHASING	2	2

ALTERNATE PHASING CHANGE SUMMARY

THE FOLLOWING IS A SUMMARY OF WHAT TAKES PLACE WHEN OVERLAP PLAN 2 AND VEHICLE DETECTOR PLAN 2 ACTIVATE TO CALL THE "ALTERNATE PHASING":

OVERLAP PLAN 2: Modifies overlap included phases for headS 11 and 51 to run protected turns only.

VEH DET PLAN 2: Disables phase 6 call on loop 1A and disables delay for phase 1 call on loop 1A.



Disables phase 2 call on loop 5A and disables delay for phase 5 call on loop 5A.

NC Dept of Transportation
Division of Highways
Final Drawing Date: 09/03/2025
Signed by: Robert O. Ziemba
NCDOT Approval: 0808274494

THIS ELECTRICAL DETAIL IS FOR
THE SIGNAL DESIGN: 05-1295
DESIGNED: Aug 2025
SEALED: 08/12/2025
REVISED: N/A


Electrical Detail - Sheet 3 of 3


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ELECTRICAL AND PROGRAMMING DETAILS FOR:		SR 1011 (Old US 1) at SR 1187 (Holland Road) / SR 1149 (Friendship Road) Division 5 Wake County Apex		SEAL	
 750 N. Greenfield Pkwy, Garner, NC 27529	PLAN DATE: August 2025		REVIEWED BY: WJ Hamilton		 William J. Hamilton 08/12/2025
	PREPARED BY: JA Wendt		REVIEWED BY:		
	REVISIONS		INIT. DATE		
	NC License #C-4445		203 W. Millbrook Rd., Ste 200 Raleigh, NC 27609 984.500.5426 www.exultengineering.com		SIG. INVENTORY NO. 05-1295

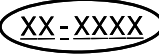
PROJECT REFERENCE NO.	SHEET NO.
36249.4987	SCP-1


LEGEND


YAGI ANTENNA (DOUBLE) FOR REPEATER OPERATION

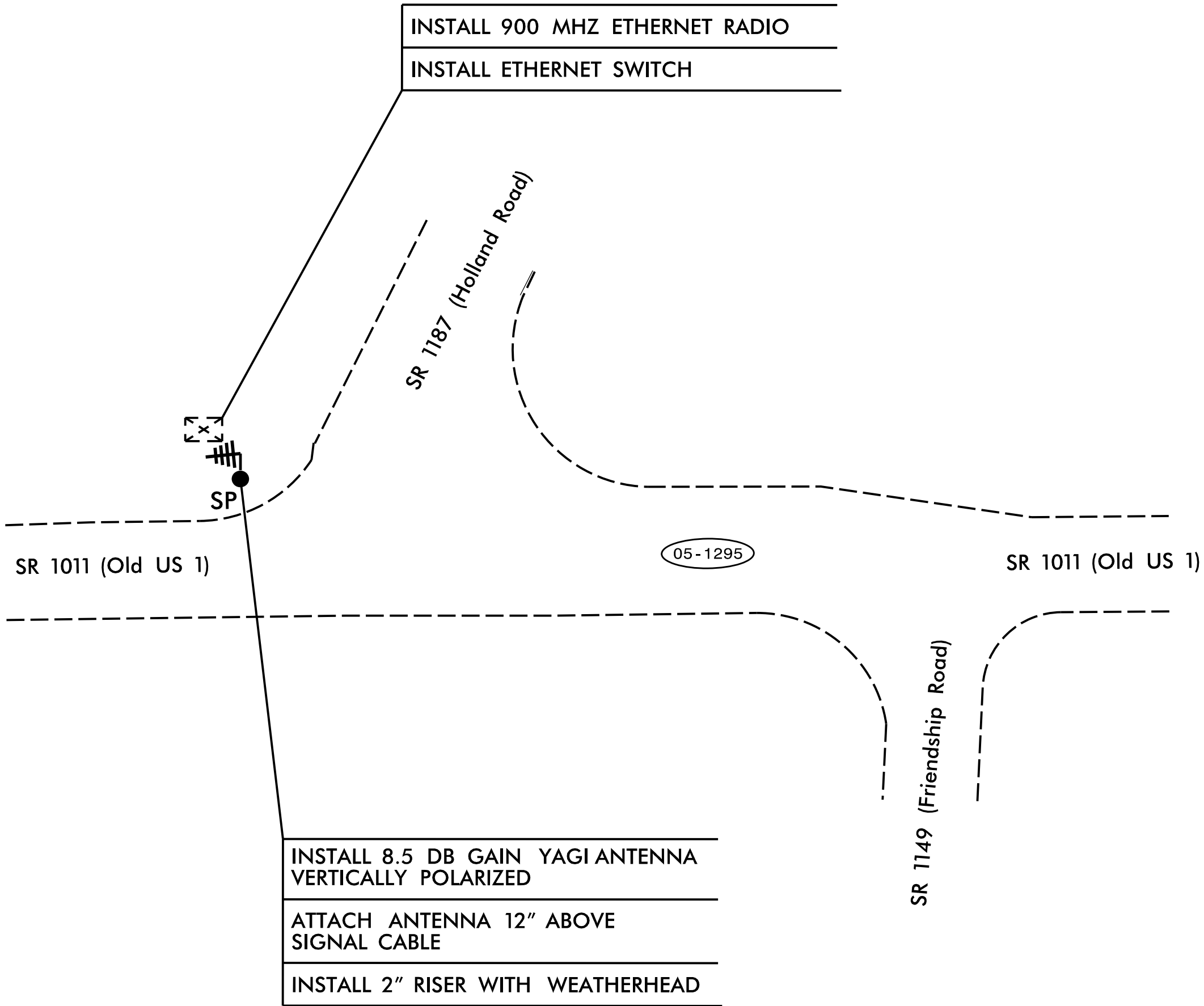
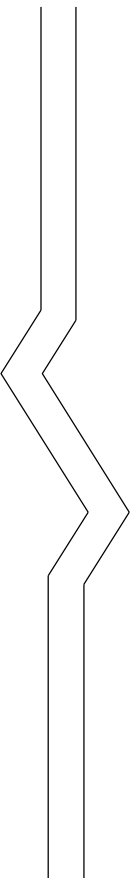
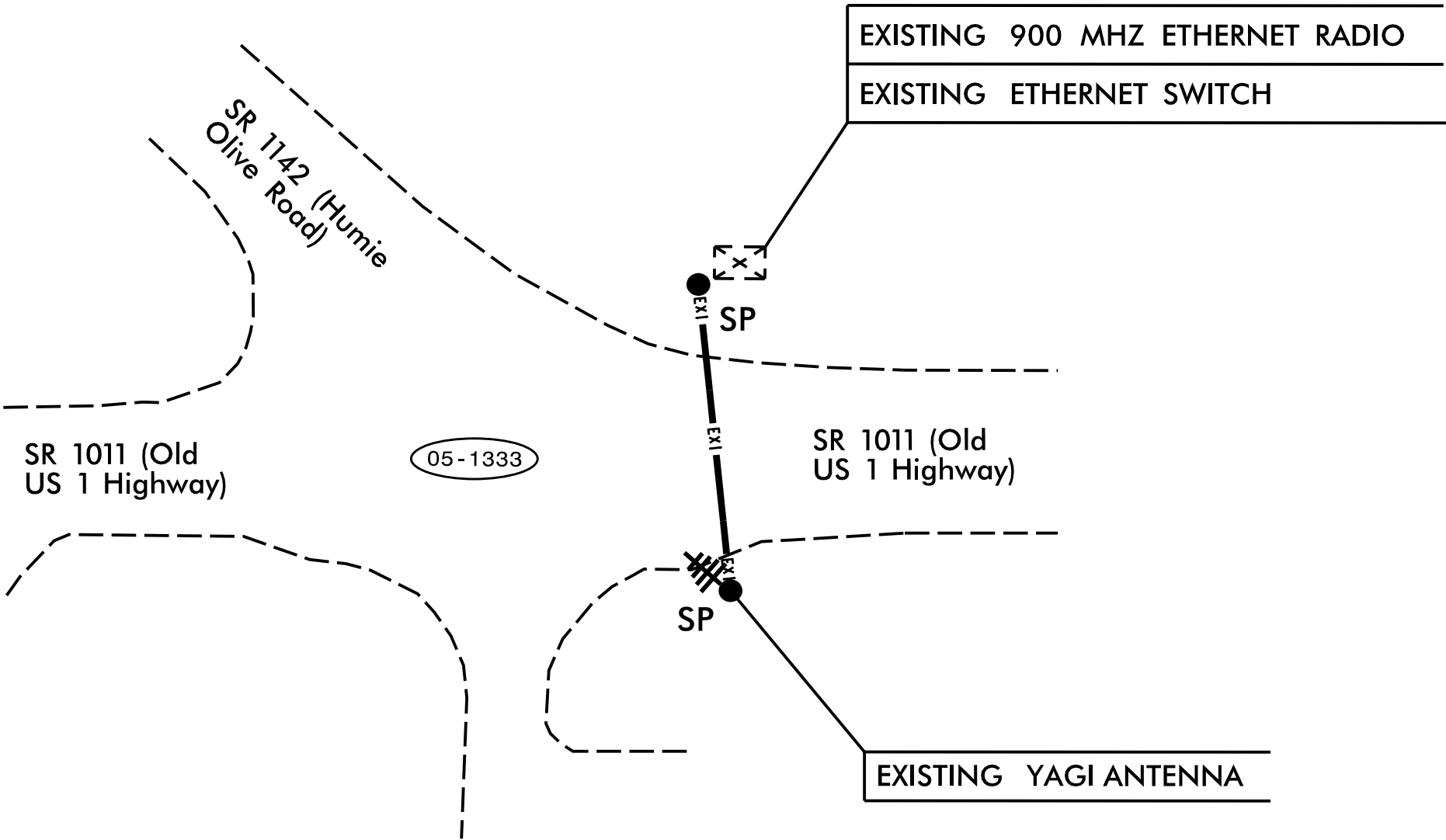
YAGI ANTENNA (SINGLE)

EXISTING CONTROLLER AND CABINET

SIGNAL INVENTORY NUMBER

EXISTING WOOD POLE

SIGNAL POLE



NOTES FOR WIRELESS COMMUNICATIONS:

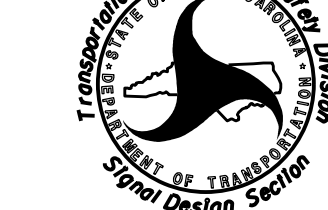
- FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE DIVISION 5 TRAFFIC ENGINNER AT (919) 536-4000. NOTIFY THE DIVISION ENGINNER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL WIRELESS CIRCUITS ARE FUNCTIONING PROPERLY. WORK IS NOT WORK IS NOT COMPLETE UNTIL ALL SIGNALS ARE COMMUNICATING WITH THE CENTRAL SYSTEM.
- INSTALL COAXIAL CABLE:
 - ON WOOD POLES, REQUIRING A NEW RIGID GALVANIZED STEEL RISER, INSTALL A 2" RISER WITH WEATHERHEAD AND ROUTE THE COAXIAL CABLE TO THE ANTENNA.
 - ON METAL POLES WITH MAST ARMS, RUN COAXIAL CABLE UP THROUGH THE POLE AND OUT THE MAST ARM; FIELD DRILL A 1/2" HOLE UP THROUGH THE BOTTOM OF MAST ARM FOR INSTALLATION OF THE COAXIAL CABLE TO THE ANTENNA.
 - ON METAL STRAIN POLES, RUN COAXIAL CABLE UP THROUGH THE POLE AND OUT THE WEATHERHEAD AND ROUTE THE COAXIAL CABLE TO THE ANTENNA
 - BETWEEN THE POINT OF EXITING THE RISER, METAL POLE OR MAST ARM AND THE ANTENNA, SECURE THE COAXIAL CABLE TO THE STRUCTURE USING 3/4" STAINLESS STEEL STRAPS EVERY 12".
- IF AN EXISTING 2" SPARE RIGID GALVANIZED STEEL RISER IS AVAILABLE, INSTALL THE COAXIAL CABLE IN THE SPARE RISER WITH 2" WEATHERHEAD.
- INSTALL WIRELESS ANTENNA ON POLE WITH RF WARNING SIGN.
(NOTE: RF WARNING SIGN NOT REQUIRED WHEN ANTENNA IS INSTALLED ON AN NCDOT-OWNED POLE.)
- MAINTAIN PROPER CLEARANCE FROM ALL UTILITIES PER THE NATIONAL ELECTRICAL SAFETY CODE.
- REFERENCE SPREAD SPECTRUM RADIO ROADWAY STANDARD DRAWINGS 1736.01.
- CELL MODEMS TO BE SUPPLIED BY THE DEPARTMENT. CONTACT THE DIVISION 5 DEPUTY ENGINEER AT (919) 536-4000 TO REQUEST THE CELL MODEM. ALLOW 8 WEEKS LEAD TIME BEFORE ANTICIPATED DEPLOYMENT.

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ENGINEERING

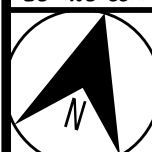
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NC License
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Prepared For



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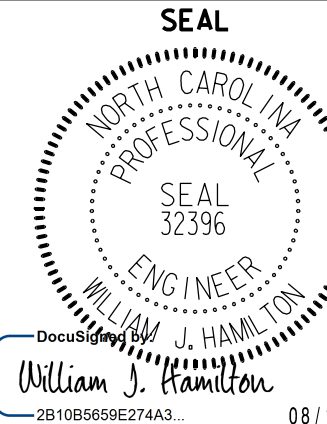
SR 1011 (OLD US 1) CLS
SIGNAL SYSTEM D05-47 APEX
WIRELESS COMMUNICATION PLAN

Division 5Wake CountyApex

PLAN DATE: August 2025REVIEWED BY: WJ Hamilton

PREPARED BY: JA WendtREVIEWED BY:

REVISIONS	INIT.	DATE



William J. Hamilton

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08/12/2025

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED