AMENDED AGENDA
REGULAR MEETING
CITY COUNCIL, CITY OF ASHEBORO
THURSDAY, JANUARY 11, 2024, 7:00 PM

1. Call to order.

2. Silent prayer and pledge of allegiance.

3. Presentation of a "Key to the City" to retiring County Manager Hal Johnson in recognition of his 48 years of service to the citizens of Asheboro and Randolph County.

4. Downtown Asheboro Inc. Executive Director Addie Corder will request authorization for city staff to research options for the expansion of the social district to include Hoover Hatchet House.

5. **Old Business - Legislative Hearing for Case No. RZ-23-14**: An application to rezone property on the west side of Zoo Parkway and the south side of Newbern Avenue from R40 Low-Density Residential, R15 Low-Density Single-Family Residential, and R10 Medium-Density Residential to R7.5 (CZ) Medium-Density Residential Conditional Zoning for a residential planned unit development.

6. Public comment period.

7. Consent Agenda:

   (a) Approval of the meeting minutes for the regular city council meeting held on December 7, 2023.

   (b) Approval of ordinances to amend the General Fund and the Airport Improvements Fund to account for federal grant funding for airport improvements that were discussed during the December 2023 city council meeting.

   (c) Approval of the community development division's request to schedule for the regular February 2024 city council meeting, and to advertise, a legislative hearing on an application to rezone parcels at 1419 and 1425 Old Liberty Road (Randolph County Parcel Identification Numbers 7763939476 and 7763933912) from B1 and R10 zoning to R10 (CZ) zoning to modify lot width standards.

   (d) Acknowledgement of the receipt of a report detailing major subdivisions administratively approved since December 7, 2023.

8. Recreation Services Director Jonathan Sermon will present the following Zoo City Sportsplex items:

   (a) Proposed facility use agreement with the Randolph-Asheboro YMCA; and

   (b) Update on MLS NEXT PRO team Carolina Core "TRY OUTS" event.

9. Recreation Services Director Jonathan Sermon will request authorization to publish legal notice of a proposed lease agreement with ZooKeepers Baseball, LLC.

10. **Legislative Hearing (Case No. RZ-23-21)**: Community Development Director Trevor Nuttall will provide the initial testimony pertaining to an application to rezone property at 115 South Fayetteville Street and 142 Worth Street (a portion of Randolph County Parcel Identification Number 7751823582 and all of Randolph County Parcel Identification Number 7751825638) from OA6 to B3 zoning.

11. Community Development Director Trevor Nuttall will provide status reports on the following projects:

    (a) Trade and North Street Infrastructure Project; and

    (b) David and Pauline Jarrell Garden Project.

12. Finance Director Deborah Reaves will request approval of ordinances to amend the General Fund and a project fund to provide funding for the garden project expenditures described by the community development director.

13. Water Resources Director Michael Rhoney, PE will request approval for the next step in the Wolfspeed Water Main Extension Project.

14. A discussion of upcoming events and items not on the agenda.

15. Adjournment.

RZ-23-14: Request to rezone property located along the west side of Zoo Parkway and the south side of Newbern Avenue from R40 Low-Density Residential, R15 Low-Density Single-Family Residential, and R10 Medium-Density Residential to R7.5 (CZ) Medium-Density Residential Conditional Zoning for a Residential Planned Unit Development

Staff Report

Continued from October 5, November 9, and December 7 City Council meetings.

Planning Board Recommendation & Comments to City Council

NOTE: Have applicant Certify to Council mailings to all adjoining property owners.

Case # **RZ-23-14**

Date 1-8-2024

Applicant Ridge Road Partners, LLC c/o Drew Boggs

Legal Description

The property of Hillcrest Farm Estates, LLC, located on the west side of Zoo Parkway, between 2358 and 2476 Zoo Parkway, and the south side of Newbern Avenue, between 294 and 360 Newbern Avenue, totaling approximately 94.27 acres +/- of 104.27 acres +/- and more specifically identified by a portion of Randolph County Parcel Identification Number 7760008593 and Parcel ID 7760013008.

Requested Action Rezone from R40 Low-Density Residential, R15 Low-Density Single-Family Residential, and R10 Medium-Density Residential to R7.5 (CZ) Medium-Density Residential Conditional Zoning for a Residential Planned Unit Development

Existing Zone R40, R15, and R10

Land Development Plan See rezoning staff report.

Planning Board Recommendation

The Planning Board continued this case at its September, October and November December meetings. During the Board's meeting on the request on January 8, 2024, the Planning Board recommended approval, subject to conditions presented by staff.

Reason for Recommendation

The Planning Board had continued the case several times in order to give the applicant the opportunity to obtain and present information from a Traffic Impact Analysis related to the proposed development. The Planning Board's recommendation on January 8, 2024 concurred with staff reasoning.

Planning Board Comments

Rezoning Staff Report

RZ Case # **RZ-23-14**

Date January 11, 2024 (continued at prior three City Council meetings)

General Information

Applicant Ridge Road Partners, LLC (c/o Drew Boggs)

Address PO Box 1609

City Monroe NC 28111

Phone 980-722-1010

Location Zoo Parkway and Newbern Avenue

Requested Action Rezone from R40 Low-Density Residential, R15 Low-Density Single-Family Residential, and R10 Medium-Density Residential to R7.5 (CZ) Medium-Density Residential Conditional Zoning for a Residential Planned Unit Development

Existing Zone R40/R15/R10 **Existing Land Use** Undeveloped

Size 94.27 acres +/- of 104.27 acres +/-

Pin # 7760008593 (portion) and 7760013008

Applicant's Reasons as stated on application

To construct 400 new residences to help supply the growing residential needs of this area. Residential growth using the clustering of homes in area most suitable for development. This development balances the need for residential growth in areas that are supported by the NC Zoo and City Sportsplex. Coming growth from nearby industrial facilities. Promoted neighborhood setting with nearby Sportsplex and NC Zoo. *Staff Note: The latest site plan presented by the applicant shows 350 dwellings.*

Surrounding Land Use

North Medium-Density Residential & Teachey School **East** Medium-Density Residential

South Low-Density Residential & Undeveloped **West** Medium-Density Residential

Zoning History N/A

Legal Description

The property of Hillcrest Farm Estates, LLC, located on the west side of Zoo Parkway, between 2358 and 2476 Zoo Parkway, and the south side of Newbern Avenue, between 294 and 360 Newbern Avenue, totaling approximately 94.27 acres +/- of 104.27 acres +/- and more specifically identified by a portion of Randolph County Parcel Identification Number 7760008593 and Parcel ID 7760013008.

Analysis

See attachment 1

Attachment 1: RZ-23-14 (Hillcrest Farms rezoning request): Staff analysis as of 1-4-24

1. The property is currently outside of the city limits. Annexation, in accordance with city policy, is required to connect to city-maintained utilities.
2. The request is for a residential Planned Unit Development. The latest plan shows a total of 350 dwellings on 350 lots (an increase of 4 dwellings from what was shown on the previous draft of the plan). 286 of these units are detached single-family residences. 64 units are attached townhome style dwellings, clustered in groups of 5 to 7 attached dwellings.
3. Development plans show several common areas with each including amenities such as pickle ball, dog parks, garden areas, and a trail network. Some of the common area is designated specifically as conservation area. The plans note that "the exact amenity provided at each location will be determined at a later date" but the expectation will be that final decisions related to amenities will generally be consistent with what is submitted. Proportional amounts of community amenities would need to be built and available with each phase. Notes also indicate that passive open space with planted grass will comprise the remainder of each area. All common areas will have a minimum of 2 understory trees and 6 shrubs, with "landscaping to have defined boundaries and complement amenity entrance points."
4. Zoo Parkway is a state-maintained major thoroughfare. New Bern Avenue is a state-maintained collector road. The development proposes two access points, one from each roadway and also shows several potential locations where the internal street network could be extended into adjacent property should future development be proposed. Connectivity between Zoo Parkway and New Bern Avenue is shown via a stream crossing to be built by the developer. Following an initial presentation of the case to the Planning Board in September, the case was continued multiple times, giving the applicant time to continue working on preparation of a traffic study. A Traffic Impact Analysis (TIA) was completed by a traffic engineering firm in November and NCDOT completed its review in December. While the TIA found only improvements to be warranted on Zoo Parkway at the development's entrance (addition of right and left turn lanes), NCDOT is recommending and could require additional improvements. These include a right turn lane on Zoo Parkway at Newbern Avenue, approximately 1/3 mile north of the subject property, and a right turn lane on Zoo Connector at Wildlife Way, approximately 1.75 miles south of the subject property. No other improvements were recommended by the traffic engineer or NCDOT, including to New Bern Avenue near Teachey Elementary.
5. A portion of the property is in a Special Hazard Flood Area. There is one roadway crossing shown traversing the floodway.
6. The plans identify certain areas for tree preservation, primarily within flood-prone areas of the property. There also is some landscape buffering shown to be provided between the development and adjacent property, with a minimum 15 ft. natural buffer to be retained adjacent to the townhomes. Each development entrance will be landscaped with at least 4 understory trees and 12 shrubs, and street trees will be installed at a rate of 1 understory tree per 25 residential units.
7. Staff had suggested additional fencing be provided adjacent to two additional residential properties (Parcel Identification Numbers 7760013216 and 7760014240) along Newbern Avenue. In response, the applicant revised the site plan to add common elements on both sides of the street entering the development from Newbern Avenue (Orchid View Drive). This revision increases separation between new lots and existing homes. The applicant's current plan also proposes a 6' high wooden privacy fence adjacent to the property closest to the development's entrance on Newbern Avenue (PIN 7760013219).
8. Sidewalks customarily are required for a Residential Planned Unit Development and typically is expected to connect all lots and amenities to existing streets. The site plan shows a sidewalk network only on one side of the new streets which is not adequate under the code when lots are proposed to be on both sides. Staff has identified this deviation and, in response, the applicant has added a trail that would provide additional pedestrian access for many of the lots. The latest plan makes additional adjustments to the trail's location to improve the access of this trail to lots within the development. Several lots, however, remain unconnected to a pedestrian feature (Lots 2, Lots 11-16 and Lots 103-132), and the common area south of the intersection of Wagon Creek Road and Rusty Willow Road. Staff has proposed a condition requiring that all lots and amenities be directly connected to a pedestrian element.

9. The zoning ordinance does allow an applicant to propose a conditional zoning district that deviates from the zoning ordinance's pre-determined requirements. The aforementioned pedestrian network is the primary deviation identified on the site plan.
10. The zoning ordinance describes the intent of the R7.5 Medium-Density Residential district as "to provide regulations which will produce a moderate intensity of residential uses, usually single family and no more than two family in character and served by central water supply and sewage disposal systems, plus the necessary governmental and other support facilities to service such urban intensity living."
11. The neighborhood residential designation of the property is described by the Land Development Plan's Land Category Description as intended "to accommodate existing medium-density, single family residential neighborhoods, while encouraging new neighborhoods of similar density to provide a greater sense of community." This classification is also described as having a "pedestrian-friendly neighborhood, with convenient access to surrounding neighborhoods, parks and walking trails, and designated neighborhood commercial centers."
12. This property is considered a Secondary Growth Area by the LDP's growth strategy classification. This is described as "Areas with prime access to an existing city gravity sewer interceptor and/or an existing or potential future thoroughfare, and located outside of, but adjacent to existing city limits. Suitable development sites within SGAs should be given a moderately high level of encouragement and incentives for mid-range development."
13. The overall density of the development is approximately 4.4 dwellings per acre (when excluding public right-of-way as stipulated by the code). The plans indicate that lot sizes range from 3,000 to 4,000 SF, with minimum unit sizes of 1,150 SF of conditioned area for the attached townhomes. The plans indicate lot sizes ranging from 4,100 to 5,100 SF for the detached single-family dwellings, with minimum unit size of 1,200 SF of conditioned area for each detached dwelling. The average lot size for the development as a whole, after deducting public right-of-way, is 9,928 s.f.
14. As noted during the regular December Planning Board and City Council meetings, this case was readvertised and the applicant participated in the cost of readvertisement, occurring on December 28, 2023 and January 4, 2024. Neighboring property owners were also mailed an additional notice on December 19, 2023, regarding the January Planning Board and City Council meeting dates.

Rezoning Staff Report

RZ Case # **RZ-23-14**

Consistency with the 2020 LDP Growth Strategy designations

In reviewing this request, careful consideration is given to each Goal and Policy as outlined in the Land Development Plan. Some Goals and Policies will either support or will not support the request, while others will be neutral or will not apply. Only those Goals and Policies that support or do not support the request will be shown.

Proposed Land Use Map Designation	Neighborhood Residential
Small Area Plan	Central
Growth Strategy Map Designation	Secondary Growth

LDP Goals/Policies Which Support Request

Checklist Item 1: Rezoning is compliant with the Proposed Land Use Map. (regarding the residential land use, pedestrian connections, and the provision of some recreational amenities)

Checklist Item 5: Complies with Growth Strategy Map

LDP Design Principles (PRINCIPLE #4): Move from "Conventional Development" toward "Cluster Development"

Rezoning Staff Report

RZ Case # **RZ-23-14**

LDP Goals/Policies Which Do Not Support Request

Checklist Item 1: Rezoning is not compliant with the Proposed Land Use Map. (regarding density similar to surrounding neighborhoods and convenient access to neighborhood commercial center).

Checklist Items 13 and 14: 13.) The property is located within of Special Hazard Flood Area. 14.) Rezoning is located on steep slopes of greater than 20%.

Staff's Final Analysis Concerning Consistency with Adopted Comprehensive Plans, Reasonableness and Public Interest

The Land Development Plan has anticipated medium-density residential development on this property since plan adoption. The application includes several design characteristics advocated by the plan, including mixed housing options, open space and sensitive lands preservation. The development also includes recreational amenities, a street network that provides internal connectivity as well as options for external connections, and pedestrian infrastructure that generally is viewed as necessary for the number of homes proposed.

The applicant has provided a Traffic Impact Analysis (TIA) that has been reviewed by NCDOT; both the TIA and NCDOT have recommended roadway improvements to mitigate traffic impacts should the project be approved. Ultimately, NCDOT will dictate requirements for access to Zoo Parkway and New Bern Avenue and will utilize the TIA to determine necessary improvements.

While the requested zoning district does seek densities at the upper limit of the city's medium-density residential designation and approval would authorize development more dense than nearby neighborhoods, the development is designed in a manner that buffers provides separation between those neighborhoods, increasing the project's compatibility with surrounding land uses.

Recommendation Considering the aformentioned analysis, staff believes that the proposed zoning map amendment is reasonable and in the public interest, subject to the acceptance of the staff-suggested conditions or council's approval of modified conditions.

Rezoning Staff Report

Suggested Conditions for Conditional Zoning applications (subject to change prior to final report)

See Attachment 2.

Attachment 2: RZ-23-14 Hillcrest Farms: Proposed conditions as of January 4, 2024
(Subject to change following comprehensive review of latest plan submitted)

(A) The use approved shall be a Residential Planned Unit Development with no more than 350 dwelling units on 350 lots and development shall be per the approved site plan and materials submitted in support of the application.
(B) All parties involved in this request, including the owner, successors, heirs, and assigns, agree to the conditions and approved site plan.
(C) Enclosure of concrete pads or other additions to the rear of dwellings within Phase 1 of the development shall not be considered a modification requiring City Council review provided such additions are located on a recorded lot.
(D) Maintenance of all recreation areas, any utilities not publicly maintained, and roadways and drainage facilities that are not specifically labeled on the approved as public or not within public-right-of-way shall be the responsibility of the property owner and any successors in interest.
(E) Any utility infrastructure indicated by the city as required to be publicly maintained shall be located within a City of Asheboro utility easement. Surveying of any required easements shall be the responsibility of the property owner.
(F) Solid waste disposal for the project shall be consistent with city policies and codes.
(G) Landscaping, including street trees, front yard landscaping, tree preservation, perimeter buffering, and fencing shall be installed or retained consistent with the details and specifications shown on the site plan and as modified by these conditions.
(H) Prior to the recording of Memorandum of Land Use Restrictions outlined in (CC), the site plan shall be revised with the following information and resubmitted to the Planning Department for review of code compliance and inclusion in the file without further review by the Council:
(i) Labeling of recreation area on plan sheets.
(ii) Labeling of adjacent property zoning within 50’ of subject property.
(iii) Labeling of all lot dimensions.
(iv) Sidewalk width and grass strip dimension in accordance with the Asheboro Subdivision Ordinance: sidewalks to be maintained by the city shall be 5’ wide with a 2.5’ grassed strip.
(v) Clarification on site plan that stormwater management is the responsibility of the property owner and/or homeowners’ association outside of the public right-of-way. Cover Sheet Note 19 shall be updated to reflect City of Asheboro stormwater maintenance responsibilities only exist within public right-of-ways.
(vi) Extending sidewalks to roadway intersections and between phases if gap exists.
(I) Prior to the issuance of a Zoning Compliance Permit for the proposed land use, the applicant shall submit documentation detailing the following approvals or providing:
(i) Driveway permit(s) from NCDOT
(ii) Permitting from NC Department of Environmental Quality
(iii) Subdivision Sketch Design and Preliminary Plat
(iv) A sealed survey plat by a Professional Land Surveyor for recording identifying the boundaries of the approved Conditional Zoning District.
(J) Prior to the preliminary plat approval, plans concerning water, including provisions for fire hydrants, street lights, and sanitary sewage that comply with city policies, shall be submitted and approved.
(K) All dwellings shall be located on a subdivided lot, with sufficient buildable area in compliance with Zoning Ordinance Section 3.01(C), and recorded in the public registry in accordance with the city's land development requirements.
(L) Front yard averaging provisions shall not be applicable within any phase of the development.

(M) Open space shall be created and recorded consistent with the conditional zoning district site plan.
(N) Recreational elements proposed within each phase shall be constructed and available for use prior to the recording of subdivision plats resulting in the creation of more than 75% of the lots approved for that phase as ultimately shown on the preliminary plats to be presented.
(O) Outdoor recreational vehicle (RV) parking shall be prohibited throughout the development by the homeowners' association documents.
(P) A trail and sidewalks meeting ADA standards shall be provided to connect all units and lots, parking areas, recreation facilities, trash facilities, and community mailboxes Sidewalks shall extend to intersections with existing streets and along existing public streets where new curb and gutter is added; a trail network shall be built as shown on the final approved zoning district site plan. Where existing and proposed streets exceed five percent (5%) grade and sidewalks area added along those streets, sidewalks shall meet ADA standards at the intersection(s).
(Q) Stormwater control measures, designed by a licensed professional in accordance with the current North Carolina Department of Environmental Quality Stormwater BMP Manual (Manual), shall be provided, unless the city is provided and accepts a professional engineer's report determining and demonstrating that such measures would be contrary to the public interest. Such report shall include, but not be limited to, a determination that the Manual's stormwater measures, if built, would increase peak flood impacts on downstream properties. The report shall also recommend design elements that can be implemented to minimize adverse stormwater impacts. In the absence of such a report, stormwater control measures shall be built to control the ten-year post-development peak discharge rates to pre-development peak flow rates. Prior to a Certificate of Occupancy, a licensed professional shall provide certification that the storm water control structures, if built, were constructed according to the plans. Any open water retention or drainage areas shall be managed to control mosquitos. The maintenance of all stormwater control measures shall be the responsibility of the property owner.
(R) All terminations of public streets, whether permanent or temporary, shall comply with city ordinances and policies pertaining to turnaround and maneuvering area.
(S) Each dwelling unit constructed shall, at a minimum, possess a garage capable of holding one passenger vehicle and at least one additional off-street parking space.
(T) Final roadway names shall be subject to city and Randolph County approval.
(U) Floodplain development permits shall be issued by the city prior to any construction within regulated floodplain areas.
(V) Annexation shall be required prior to extension of city water and sewer.
(W) Evaluation of changes necessitated by NCDOT permitting requirements resulting from the development's traffic impact analysis shall be reviewed consistent with Section 4.05(C)(13).
(X) If the postal service requires a cluster box unit (CBU) for mail delivery, such a change will not be considered a modification of the conditional zoning district requiring council action. If required within the public right-of-way, an area shall be provided that, at a minimum, is adequate for one drop-off space for a motor vehicle, including any maneuvering area. Any drop-off area shall be designed in accordance with commonly accepted traffic engineering practices. Construction of this area shall be the responsibility of the developer and is subject to approval of the City of Asheboro Public Works Division and/or Engineering Department. Alternatively, should the developer choose to construct the community mailbox and any associated vehicular areas in a location completely on private property, this activity shall not be considered a modification, subject to Section 4.05 of the Asheboro Zoning Ordinance.

(Y) Prior to recording a final plat for any phase of the development, homeowners' association documents, which contain provisions consistent with this order, shall be recorded in the office of the Randolph County Register of Deeds. Such homeowners' documents shall include provisions required by city ordinance and prohibit the parking of recreational vehicles (boats, campers, travel trailers, etc.) outdoors.

(Z) The connection between Phases 1 and 3 that is provided by Wagon Creek Road shall be built, accessible, and offered for public dedication prior to the platting of any lot(s) within Phases 3 and/or 4 of the development. No lots within Phase 4 shall be platted prior to Phase 1 and 3 roadways being built, accessible, and offered for public dedication to such an extent that continuous uninterrupted public access is assured between Zoo Parkway and New Bern Avenue through the development. If Phase 3 or 4 development occurs before Phase 1 or 2, Wagon Creek Road shall be built, accessible, and offered for public dedication to connect Phase 3 with Phase 1 prior to the platting of any lot(s) within Phases 1 or 2. No lots within Phase 2 shall be platted prior to Phase 1 and 3 roadways being built, accessible, and offered for public dedication to such an extent that continuous uninterrupted public access is assured between Zoo Parkway and New Bern Avenue through the development.

(AA) At least one public street stub enabling a future public road extension into the Donna Ruth Brown Heirs property, identified as Randolph County Parcel Number 7669292429, shall be built. The location and design of the street stub shall be reviewed and approved with the preliminary plat and engineering plans and in consultation with NCDOT.

(BB) At least one additional public street stub enabling a future public road extension into the Christopher Boyd Hayes property, identified by Randolph County Parcel Identification Number 7669170872, shall be built. The location and design of the street stub shall be reviewed and approved with the preliminary plat and engineering plans and in consultation with NCDOT.

(CC) Prior to the issuance of a Zoning Compliance Permit for the proposed land use, the owner(s) of the Zoning Lot shall properly execute and deliver to the Zoning Administrator for recordation in the office of the Randolph County Register of Deeds a Memorandum of Land Use Restrictions prepared by the City Attorney for the purpose of placing notice of the conditions attached to this Conditional Zoning in the chain of title for the Zoning Lot.

NEWBERN AVE.

NEWBERN AVE

DR PATRICIA SIMMONS PIN:7760132249 DB 2412 Pg. 939

CHARLES C CHANDLER PIN:7760114040 DB 2261 Pg. 895

GARY KIRBY PIN:7760013035 DB 1242 Pg. 1

CHARLES C CHANDLER PIN:7760011 DB 22

INTERACT CORPORATION PIN:7760111278 DB 2251 Pg. 914

HALIFAX ST.

INTERACT CORP PIN:7760113926 DB 1138 Pg. 912

INTERACT CORP PIN:7760114042 DB 1138 Pg. 912

INTERACT CORP PIN:7760116011 DB 1138 Pg. 912

JOSEPH FRANKLIN HOLT PIN:7760117191 DB 1143 Pg. 516

BROWNMIRE DR.

GREGORY ALAN SULLIVAN PIN:7760109028 DB 2519 Pg. 369

BRETT A PARSONS PIN:7760109846 DB 2561 Pg. 1462

REGINALD C MCCAIN PIN:7760200726 DB 2727 Pg. 1008

PATRICIA C BLAKE PIN:7760200657 DB 1181 Pg. 259

HOLLY DR

SAMUEL EDWARD BASS PIN:7760204632 DB 1083 Pg. 353

KATHY CAVINESS TOWERY PIN:7760207714 DB 2474 Pg. 1446

WADE THROUGH MINNIE GREENS PROPERTIES LLC PIN:7760306624 DB 1368 Pg. 473

YATES, JEREMY GRAYSON PIN:7760302440 DB 11E Pg. 561

JODY WAYNE JONES PIN:7760202454 DB 2288 Pg. 1038

AMY C LUCAS PIN:7760205205 DB 2088 Pg. 1357

DARREN LUCAS PIN:7760205599 DB 2128 Pg. 1256

YATES, JEREMY GRAYSON PIN:7760302440 DB 11E Pg. 561

RANDOLPH COUNTY PIN:7759906839 DB 1967 Pg. 862

40' EXISTING OVERHEAD POWER LINE EASEMENT

COMMON AREA

COMMON AREA

COMMON AREA

COMMON AREA

COMMON AREA

COMMON AREA

COMMON AREA

OHP

ZOO PARKWAY

PINE LAKE PARTNERS LLC PIN:7760302091 DB 1775 Pg. 2730

15' SCREEN BUFFERYARD

DONNA RUTH HEIRS BROWN PIN:7669292429 DB 14E Pg. 367

WALLACE CHANDLER PIN:7659996155 DB 2041 Pg. 420

CHRISTOPHER BOYD HAYES PIN:7669170872 DB 2677 Pg. 1246

15' SCREEN BUFFERYARD

RICHARD H CHANDLER PIN: 7659977282 DB 2006Pg. 216

0' 150' 300' 450'

DRAWING SCALE

NAD 83 GRID NORTH

DRAWING LEGEND

- TOWNHOMES
- 51 FT SINGLE FAMILY
- 41 FT SINGLE FAMILY
- COMMON OPEN SPACE
- VEGETATIVE BUFFER AREA
- CONSERVATION / WOODED AREA
- STREAM

VICINITY MAP
N.T.S.

Summey Engineering Associates, PLLC
Engineering - Consulting - Surveying

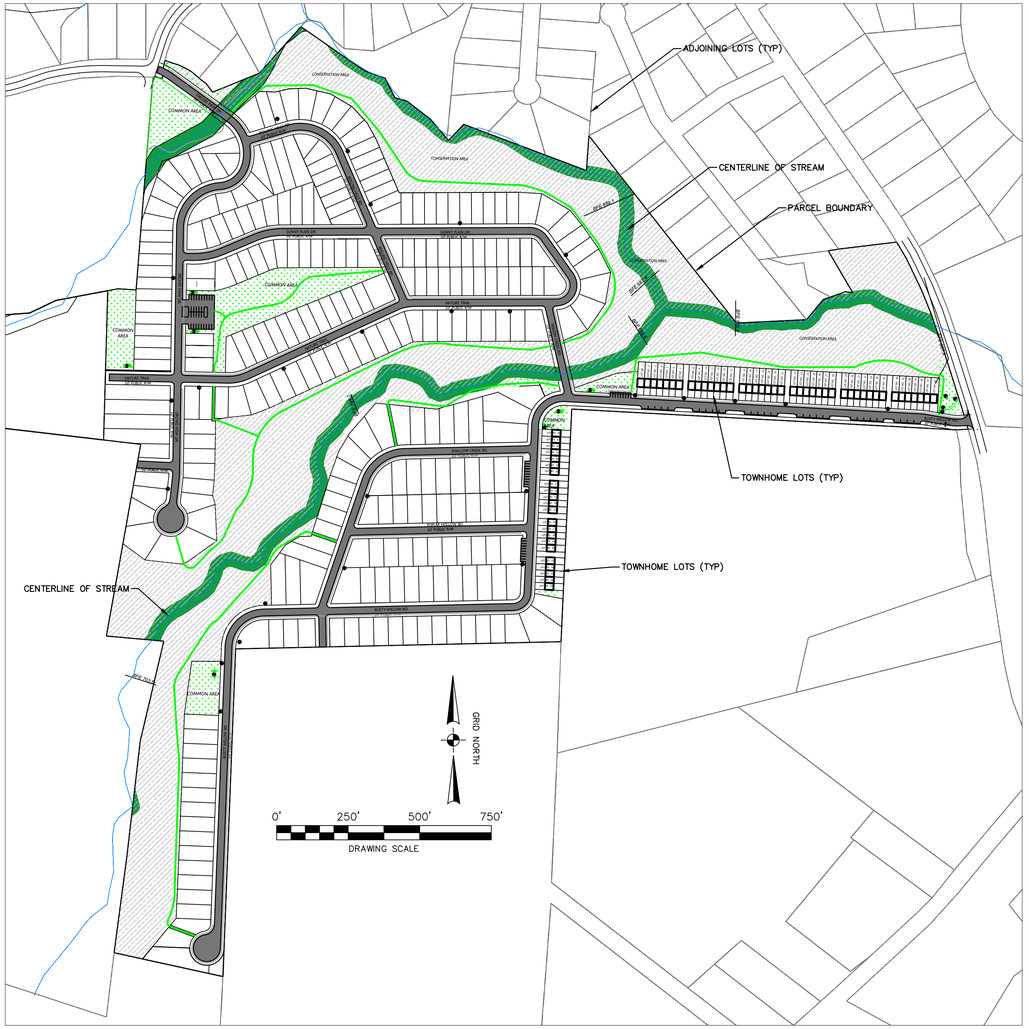
CONCEPTUAL REZONING PLAN
HILLCREST FARM SUBDIVISION
RANDOLPH COUNTY, ASHEBORO, NC
JAN. 2024

NOTE: NOT FOR CONSTRUCTION. CONCEPTUAL PLANS ONLY LAYOUT AND LOT YIELD SUBJECT TO CHANGE.

PRELIMINARY SITE SKETCH PLANS

HILLCREST FARM SUBDIVISION

ZOO PARKWAY
RANDOLPH COUNTY - ASHEBORO - NC
PROJECT NO.: E-8561
JAN. 2024



VICINITY MAP
N.T.S.

SITE DATA

1.	TOTAL PARCEL AREA:	94.27 AC.
2.	TOTAL AREA IN ROW:	14.50 AC
	PARCEL AREA MINUS ROW:	79.77 AC
3.	TOTAL AREA IN TREE CONSERVATION:	29.5 AC
4.	TOTAL AREA IN LOTS:	44.88 AC
5.	TOTAL NUMBER OF RESIDENCES:	350
	TOTAL NUMBER OF TOWNHOMES: TOTAL NUMBER OF SFR:	64 UNITS 286
6.	TOTAL OPEN SPACE AREA:	64.27 AC (68.17%)
7.	TOTAL REC SPACE:	4.8 AC (5.09%)
8.	LOTS PER ACRE:	3.7
9.	LINEAR FEET IN PROPOSED STREETS:	12,560 LF
10.	DEED REFERENCE:	DB 2214 PG 1281, DB 2251 PG 896
11.	PARCEL NO.	7760008593, 7760013008
12.	EXISTING ZONING -	R15 / R10 / R40
13.	PROPOSED ZONING -	CZ R7.5
14.	NCFIRM PANEL NO.:	371077600J

15. THE PROPOSED DEVELOPMENT WILL COMPLY WITH THE CITY OF ASHEBORO SIGN REGULATIONS
16. THE PROPOSED PROJECT WILL COMPLY WITH THE CITY OF ASHEBOROS LIGHTING REGULATIONS
17. TOPOGRAPHY IS SHOWN PER NC ONE MAP DATA
18. WATER AND WASTEWATER SERVICES PROVIDED BY CITY OF ASHEBORO
19. PROPOSED STREETS, WATER, SEWER, AND STORMWATER TO BE MAINTAINED BY THE CITY OF ASHEBORO
20. PERMITS TO BE OBTAINED INCLUDE:

- NCDOT DRIVEWAY PERMIT
- CITY OF ASHEBORO PLANING AND ENGINEERING APPROVALS
- NCDEQ EROSION CONTROL PERMIT
- NCDEQ PUBLIC WATER AND SEWER EXTENSIONS
- USACE AND NCDEQ 401/404 STREAM CROSSING PERMIT

18. DETAILED CONSTRUCTION AND CIVIL ENGINEERING PLANS TO INCLUDE:

- SITE GRADING, EROSION CONTROL, AND STORM DRAINAGE
- STREET AND UTILITY PLAN AND PROFILES
- ALL SUPPORTING PLANS, DETAILS, AND SPECIFICATIONS

PROJECT DATA

CURRENT OWNER:	HILLCREST FARM ESTATES, LLC
SUBDIVISION NAME:	HILLCREST FARM SUBDIVISION
DEVELOPER:	RIDGE ROAD PARTNERS, LLC
APPLICANT:	RIDGE ROAD PARTNERS, LLC
CIVIL ENGINEERING:	SUMMEY ENGINEERING ASSOCIATES, PLLC

AMENITIES NOTES:

1. ALL COMMON AREA LOCATIONS TO BE CONSTRUCTED AND RECORDED WITH PLAT. HOA TO MANAGE AMENITIES AND SITE LANDSCAPING
2. THE PROPOSED COMMON SPACE AREAS ARE TO INCLUDE AMENITIES SUCH AS PICKLE BALL, DOG PARKS, AND GARDEN AREAS. ALL COMMON OPEN SPACE WILL HAVE ACCESSIBILITY AND ACCESS FROM PUBLIC R/W AND BE MAINTAINED BY THE HOA. THE EXACT AMENITY PROVIDED AT EACH LOCATION WILL BE DETERMINED AT A LATER DATE
3. HOA TO MAINTAIN ALL COMMON AREAS AND ENTRY SIGNAGE
4. ALL AREAS NOT IN ROW, LOT AREAS, OR CONSERVATION AREA ARE TO BE CONSIDERED OPEN SPACE. IT IS THE RESPONSIBILITY OF THE HOA TO PRESERVE ALL COMMON SPACE AND MAINTAIN THEM FOR THE BENEFIT OF THE RESIDENTS

LANDSCAPE NOTES:

1. STREET YARD LANDSCAPING TO BE INSTALLED AT A RATE OF 1 UNDERSTORY TREE PER 25 RESIDENTIAL UNITS.
2. DEVELOPMENT ENTRANCES TO BE LANDSCAPED WITH A MIN. OF 4 UNDERSTORY TREES AND 12 SHRUBS.
3. ALL COMMON AREAS TO BE PROVIDED WITH A MIN. OF 2 UNDERSTORY TREES AND 6 SHRUBS. LANDSCAPING TO HAVE DEFINED BOUNDARIES AND COMPLEMENT AMENITY ENTRANCE POINTS.
4. ALL TREES AND SHRUBS ARE TO BE SELECTED FROM THE CITY OF ASHEBORO APPROVED PLANTING LIST IN THE COA LAND DEVELOPMENT ORDINANCE

SHEET INDEX

#	
C-0	COVER SHEET
C-1	OVERALL SITE MAP
C-2	PHASE 1 SITE AREA
C-3	PHASE 2 SITE AREA
C-4	PHASE 3 SITE AREA
C-5	PHASE 4 SITE AREA
C-6	TYPICAL DETAILS

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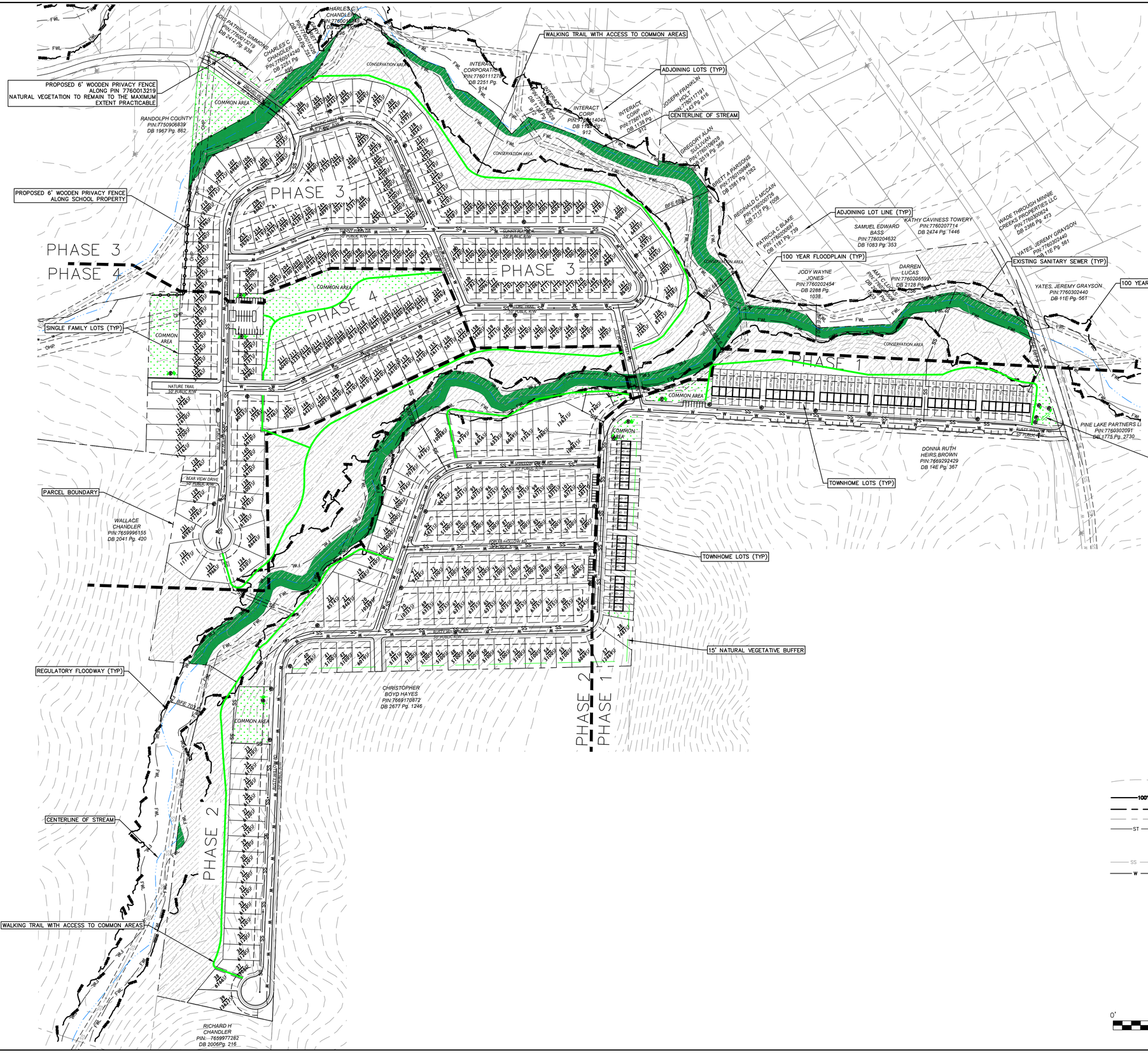

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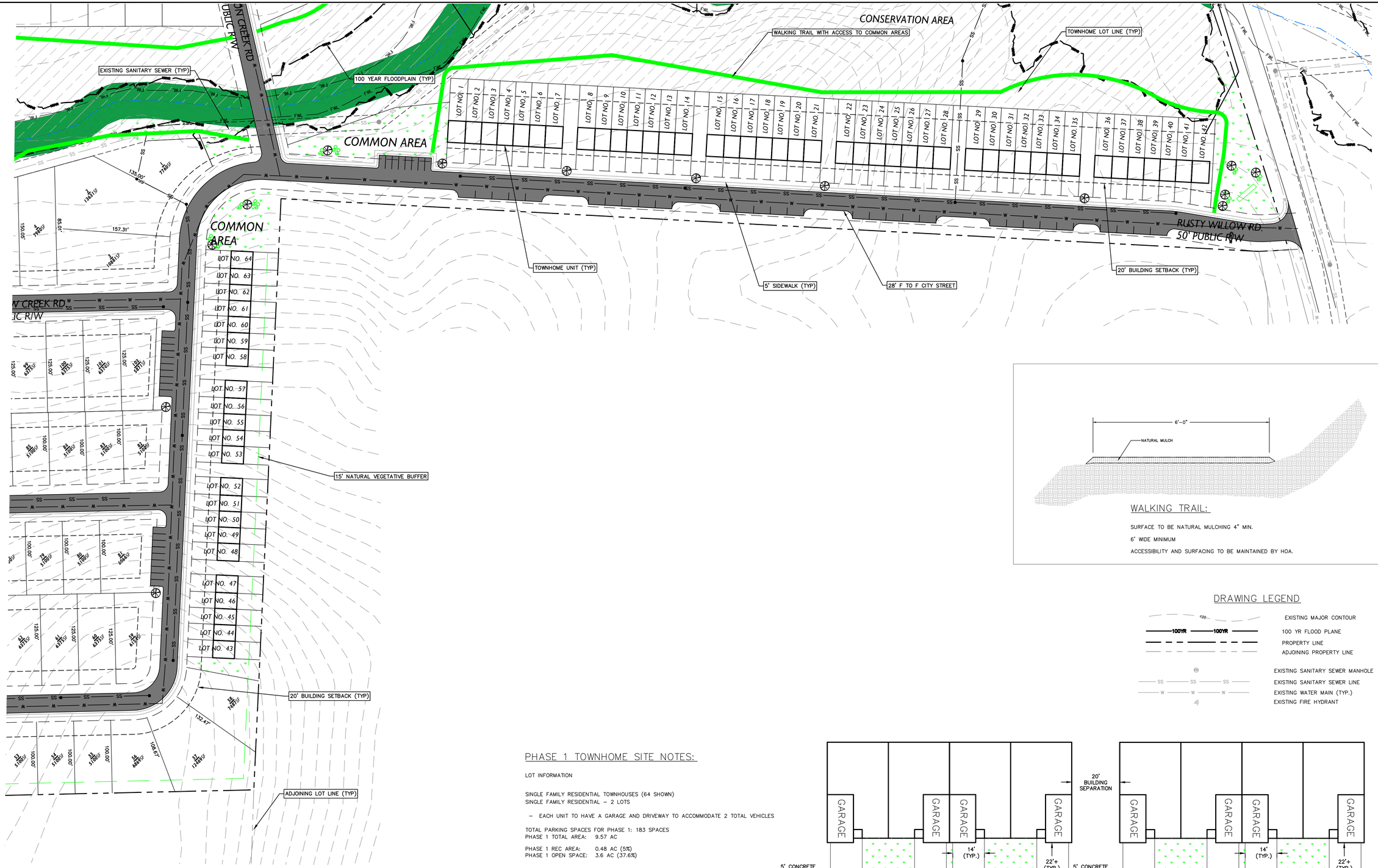
No.:	Date:	Description:	By:

OVERALL SITE MAP

HILLCREST FARM SUBDIVISION

ZOO PARKWAY - NEWBERN AVE
RANDOLPH COUNTY - ASHEBORO - NC

Scale:	
Date:	JAN. 2024
Drawn By:	DJB
Checked By:	HMSJ
Job No.:	E-8561
Sheet No.	C-1



WALKING TRAIL:

SURFACE TO BE NATURAL MULCHING 4" MIN.

6' WIDE MINIMUM

ACCESSIBILITY AND SURFACING TO BE MAINTAINED BY HOA.

DRAWING LEGEND

- EXISTING MAJOR CONTOUR
- 100 YR FLOOD PLANE
- PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING SANITARY SEWER LINE
- EXISTING WATER MAIN (TYP.)
- EXISTING FIRE HYDRANT

PHASE 1 TOWNHOME SITE NOTES:

LOT INFORMATION

SINGLE FAMILY RESIDENTIAL TOWNHOUSES (64 SHOWN)
SINGLE FAMILY RESIDENTIAL – 2 LOTS

– EACH UNIT TO HAVE A GARAGE AND DRIVEWAY TO ACCOMMODATE 2 TOTAL VEHICLES

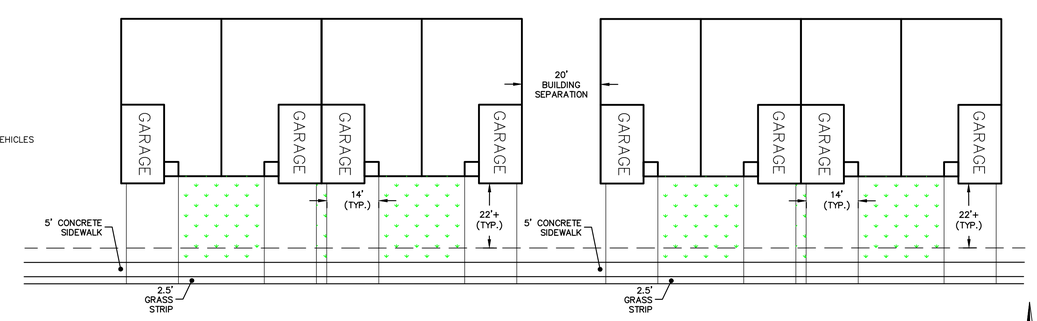
TOTAL PARKING SPACES FOR PHASE 1: 183 SPACES
PHASE 1 TOTAL AREA: 9.57 AC

PHASE 1 REC AREA: 0.48 AC (5%)
PHASE 1 OPEN SPACE: 3.6 AC (37.6%)

– SETBACKS:
FRONT= 20 FT
SIDE= 0 FT
REAR= 20 FT

– MIN. LOT SIZE 3,000 SF
– AVG. LOT SIZE 4,000 SF

MIN. HEATED SF = 1,150 SF



TYPICAL TOWNHOME LAYOUT

NTS

0' 60' 120' 180'
DRAWING SCALE

NAD 83
GRID NORTH

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PHASE I SITE AREA

HILLCREST FARM SUBDIVISION
ZOO PARKWAY - NEWBERN AVE
RANDOLPH COUNTY - ASHEBORO - NC

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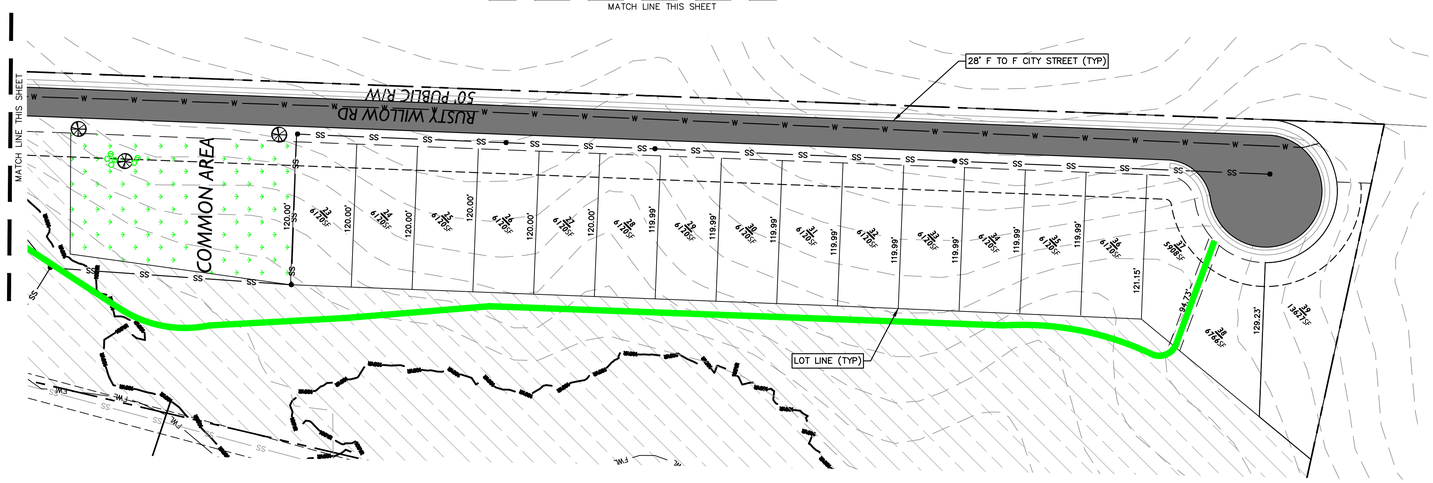

PHASE 2 SINGLE FAMILY RESIDENTIAL SITE NOTES:

LOT INFORMATION

SINGLE FAMILY RESIDENTIAL – 100 LOTS

– EACH UNIT TO HAVE A GARAGE AND DRIVEWAY TO ACCOMMODATE 2 TOTAL VEHICLES

TOTAL PARKING SPACES FOR PHASE 2: 200 SPACES

PHASE 2 TOTAL AREA: 35.11 AC

PHASE 2 REC AREA: 0.6 AC (1.7%)
PHASE 2 OPEN SPACE: 25.17 AC (71.68%)

– SETBACKS:
FRONT= 20 FT
SIDE= 5 FT
REAR= 20 FT

– MIN. LOT SIZE 5,100 SF
– MIN. LOT WIDTH 51'

MIN. HEATED SF: 1,200 SF

DRAWING LEGEND

- EXISTING MAJOR CONTOUR
- 100YR 100YR — 100 YR FLOOD PLANE
- PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING SANITARY SEWER MANHOLE
- SS — EXISTING SANITARY SEWER LINE
- W — EXISTING WATER MAIN (TYP.)
- EXISTING FIRE HYDRANT

0' 60' 120' 180'
DRAWING SCALE

NAD 83
GRID NORTH

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PHASE 2 SITE AREA

HILLCREST FARM SUBDIVISION

ZOO PARKWAY - NEWBERN AVE
RANDOLPH COUNTY - ASHEBORO - NC

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PHASE 3 SINGLE FAMILY RESIDENTIAL SITE NOTES:

LOT INFORMATION

SINGLE FAMILY RESIDENTIAL – 126 LOTS

– EACH UNIT TO HAVE A GARAGE AND DRIVEWAY TO ACCOMMODATE 2 TOTAL VEHICLES

TOTAL PARKING SPACES FOR PHASE 3: 254 SPACES

PHASE 3 TOTAL AREA: 32.27 AC

PHASE 3 REC AREA: 0.85 AC (3.1%)
PHASE 3 OPEN SPACE: 23.65 AC (73.28%)

– SETBACKS:
FRONT= 20 FT
SIDE= 5 FT
REAR= 20 FT

– MIN. LOT SIZE 4,100 SF
– MIN. LOT WIDTH 41'

MIN. HEATED SF: 1,200 SF

DRAWING LEGEND

EXISTING MAJOR CONTOUR
100 YR FLOOD PLANE
PROPERTY LINE
ADJOINING PROPERTY LINE
EXISTING SANITARY SEWER MANHOLE
EXISTING SANITARY SEWER LINE
EXISTING WATER MAIN (TYP.)
EXISTING FIRE HYDRANT

0' 60' 120' 180'
DRAWING SCALE

NAD 83 GRID NORTH

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PHASE 3 SITE AREA

HILLCREST FARM SUBDIVISION

ZOO PARKWAY - NEWBERN AVE
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Job No.:	E-8561
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PHASE 4 SINGLE FAMILY RESIDENTIAL SITE NOTES:

LOT INFORMATION

SINGLE FAMILY RESIDENTIAL – 58 LOTS

- EACH UNIT TO HAVE A GARAGE AND DRIVEWAY TO ACCOMMODATE 2 TOTAL VEHICLES
- 36 ADDITIONAL SPACES PROVIDED IN PHASE 4

TOTAL PARKING SPACES FOR PHASE 4: 148 SPACES

PHASE 4 TOTAL AREA: 16.75 AC

PHASE 4 REC AREA: 2.74 AC (16.35%)
PHASE 4 OPEN SPACE: 4.75 AC (28.35%)

- SETBACKS:
  FRONT= 20 FT
  SIDE= 5 FT
  REAR= 20 FT

- MIN. LOT SIZE 4,100 SF
- MIN. LOT WIDTH 41'

MIN. HEATED SF: 1,200 SF

DRAWING LEGEND

- EXISTING MAJOR CONTOUR
- 100 YR FLOOD PLANE
- PROPERTY LINE
- ADJOINING PROPERTY LINE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING SANITARY SEWER LINE
- EXISTING WATER MAIN (TYP.)
- EXISTING FIRE HYDRANT

0' 60' 120' 180'
DRAWING SCALE

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PHASE 4 SITE AREA

HILLCREST FARM SUBDIVISION

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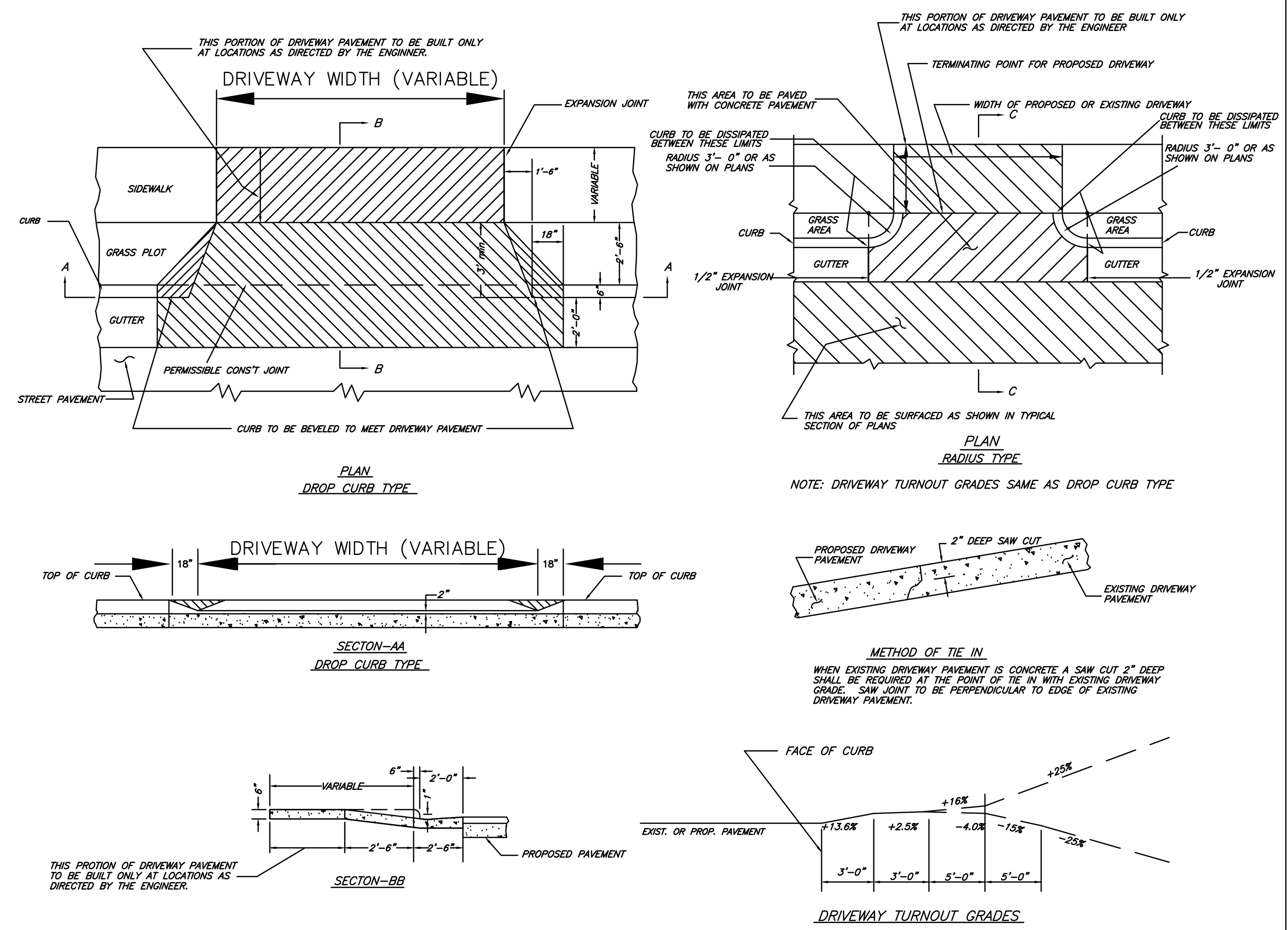
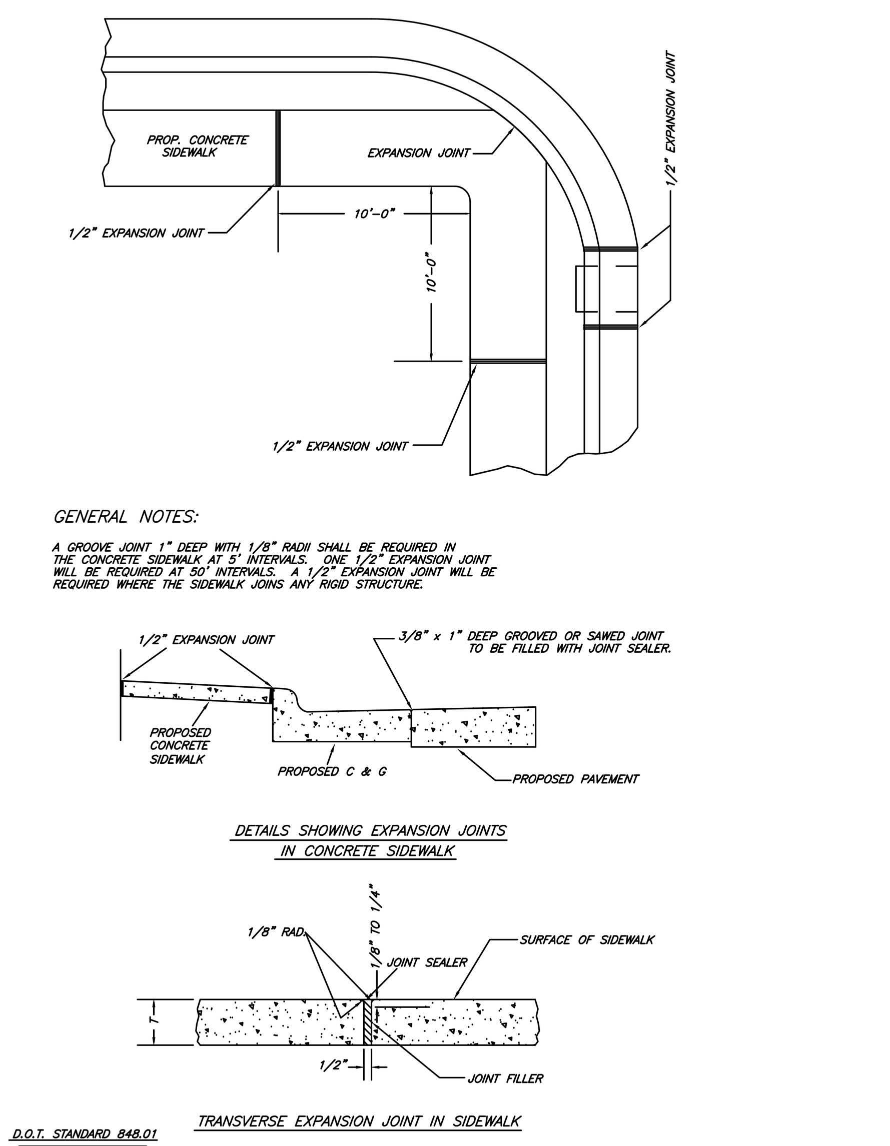


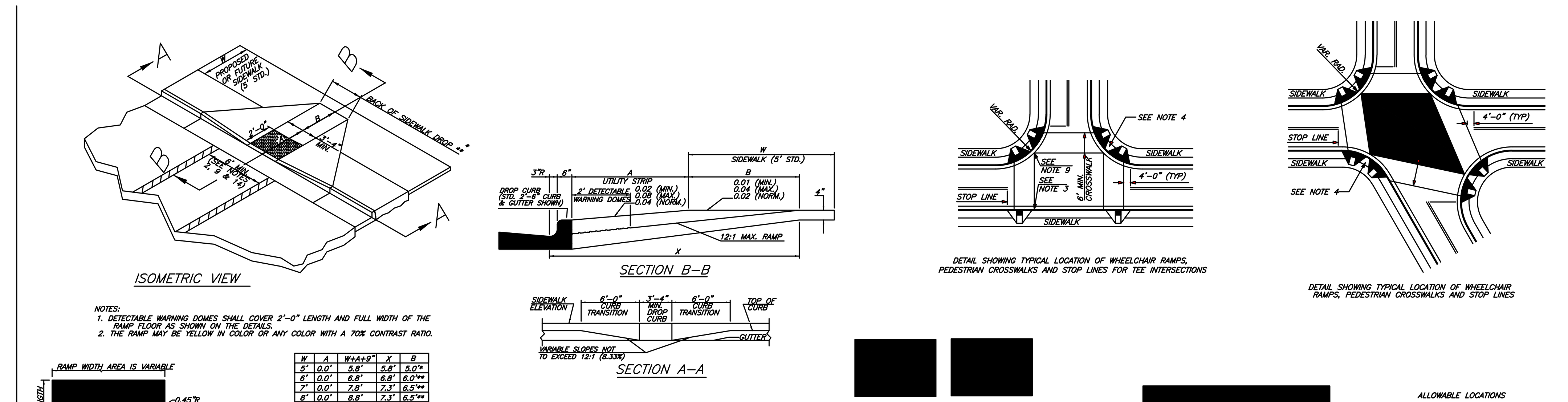
STANDARD DRIVEWAY TURNOUT



GENERAL NOTES:

A GROOVE JOINT 1" DEEP WITH 1/8" RADII SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 50' INTERVALS. A 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.

STANDARD CONCRETE SIDEWALK



NOTES:
1. DETECTABLE WARNING DOMES SHALL COVER 2'–0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.
2. THE RAMP MAY BE YELLOW IN COLOR OR ANY COLOR WITH A 70% CONTRAST RATIO.

W	A	W+A+9"	X	B
5'	0.0'	5.8'	5.8'	5.0'*
6'	0.0'	6.8'	6.8'	6.0'**
7'	0.0'	7.8'	7.3'	6.5'**
8'	0.0'	8.8'	7.3'	6.5'**
5'	2.0'	7.8'	7.8'	5.0'
5'	2.5'	8.3'	8.1'	4.8'
5'	3.0'	8.8'	8.3'	4.4'
5'	3.5'	9.3'	8.4'	4.1'
5'	4.0'	9.8'	8.6'	3.8'
5'	4.5'	10.3'	8.7'	3.4'
5'	5.0'	10.8'	8.9'	3.1'

B = X–(A+9")
B = DISTANCE FROM FRONT EDGE OF SIDEWALK TO BACK POINT OF 12:1 (8.33%) SLOPE.
* BACK OF SIDEWALK DROP REQUIRED FOR ALL SIDEWALK SLOPES.
** BACK OF SIDEWALK DROP REQUIRED FOR SIDEWALK SLOPES 0.04.

[redacted] [redacted] [redacted]

ALLOWABLE LOCATIONS
DUAL RAMP RADII..........ANY

NOTES:
1. CONSTRUCT THE WALKING SURFACE WITH SLIP RESISTANCE AND A 70% CONTRASTING COLOR TO THE SIDEWALK.
2. CROSSWALK WIDTHS AND CONFIGURATION VARY BUT MUST CONFORM TO TRAFFIC DESIGN STANDARDS.
3. NORTH CAROLINA GENERAL STATUTE 136–44.14 REQUIRES THAT ALL STREET CURBS BEING CONSTRUCTED OR RECONSTRUCTED FOR MAINTENANCE PROCEDURES, TRAFFIC OPERATIONS, REPAIRS, CORRECTION OF UTILITIES OR ALTERED FOR ANY REASON AFTER SEPTEMBER 1, 1973 SHALL PROVIDE WHEELCHAIR RAMPS FOR THE PHYSICALLY DISABLED AT ALL INTERSECTIONS WHERE BOTH CURB AND GUTTER AND SIDEWALKS ARE PROVIDED AND AT OTHER POINTS OF PEDESTRIAN FLOW.

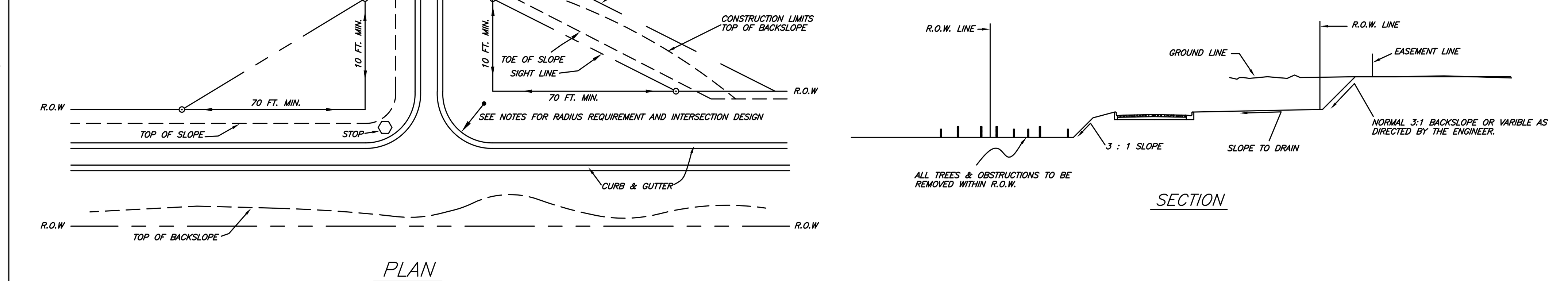
   IN ADDITION, SECTION 228 OF THE 1973 FEDERAL AID HIGHWAY SAFETY ACT REQUIRES PROVISION OF CURB RAMPS ON ANY CURB CONSTRUCTION AFTER JULY 1,1976 WHETHER A SIDEWALK IS PROPOSED INITIALLY OR IS PLANNED FOR A FUTURE DATE.

   THE AMERICANS WITH DISABILITIES ACT (ADA) OF 1990 EXTENDS TO INDIVIDUALS WITH DISABILITIES. COMPREHENSIVE CIVIL RIGHTS PROTECTIONS SIMILIAR TO THOSE PROVIDED TO PERSONS ON THE BASIS OF RACE, SEX, NATIONAL ORIGIN AND RELIGION UNDER THE CIVIL RIGHTS ACT OF 1964. THESE CURB RAMPS HAVE BEEN DESIGNED TO COMPLY WITH THE CURRENT ADA STANDARDS.
4. PROVIDE WHEELCHAIR RAMPS AT LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. LOCATE WHEELCHAIR RAMPS AS DIRECTED BY THE ENGINEER WHERE EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. AFFECT PLACEMENT. WHERE TWO RAMPS ARE INSTALLED PLACE NOT LESS THAN 2 FEET OF FULL HEIGHT CURB BETWEEN THE RAMPS. PLACE DUAL RAMPS AS NEAR PERPENDICULAR TO THE TRAVEL LANE BEING CROSSED AS POSSIBLE.
5. DO NOT EXCEED 0.08 (12:1) SLOPE ON THE WHEELCHAIR RAMP IN RELATIONSHIP TO THE GRADE OF THE STREET.
6. CONSTRUCT WHEELCHAIR RAMPS 40" (3'–4") OR GREATER FOR DUAL RAMPS.
7. USE CLASS "B" CONCRETE WITH A SIDEWALK FINISH IN ORDER TO OBTAIN A ROUGH NON–SKID TYPE SURFACE.
8. PLACE A 1/2" EXPANSION JOINT WHERE THE CONCRETE WHEELCHAIR RAMP JOINS THE CURB AND AS SHOWN ON STD. DWG. 848.01.
9. PLACE THE INSIDE PEDESTRIAN CROSSWALK LINES NO CLOSER IN THE INTERSECTION BY BISECTING THE INTERSECTION RADII, WITH ALLOWANCE OF A 4' CLEAR ZONE IN THE VEHICULAR TRAVELWAY WHEN ONE RAMP IS INSTALLED. (SEE NOTE 17)
10. COORDINATE THE CURB CUT AND THE PEDESTRIAN CROSSWALK LINES SO THE FLOOR OF THE WHEELCHAIR RAMP WILL FALL WITHIN THE PEDESTRIAN CROSSWALK LINES. PLACE DIAGONAL RAMPS WITH FLARED SIDES SO 24" OF FULL HEIGHT CURB FALLS WITHIN THE CROSSWALK MARKINGS ON EACH SIDE OF THE FLARES.
11. CONSTRUCT THE PEDESTRIAN CROSSWALK A MINIMUM OF 6 FEET. A CROSSWALK WIDTH OF 10 FEET OR GREATER IS DESIRABLE.
12. USE STOP LINES, NORMALLY PERPENDICULAR TO THE LANE LINES, WHERE IT IS IMPORTANT TO INDICATE THE POINT BEHIND WHICH VEHICLES ARE REQUIRED TO STOP IN COMPLIANCE WITH A TRAFFIC SIGNAL, STOP SIGN OR OTHER LEGAL REQUIREMENT. AN UNUSUAL APPROACH SKEW MAY REQUIRE THE PLACEMENT OF THE STOP LINE TO BE PARALLEL TO THE INTERSECTING ROADWAY.
13. TERMINATE PARKING A MINIMUM OF 20 FEET BACK OF PEDESTRIAN CROSSWALK.
14. PLACE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION AND THE NORTH CAROLINA SUPPLEMENT TO THE MUTCD.

WHEELCHAIR RAMP DETAIL

NOTES:
INTERSECTION DESIGN OF PROPOSED STREETS CONNECTING TO EXISTING STATE MAINTAINED ROADS SHALL COMPLY WITH THE LATEST EDITION OF THE NCDOT MINIMUM CONSTRUCTION STANDARDS FOR SUBDIVISION ROADS.

ALL OTHER INTERSECTIONS SHALL HAVE MINIMUM 25' RADII MEASURED TO FACE OF CURB ON STANDARD CURB SECTIONS OR TO THE VALLEY ON VALLEY CURB SECTIONS.



STANDARD METHODS OF GRADING SIGHT DISTANCE AT INTERSECTIONS

NOTE:
ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS & STRUCTURES LATEST EDITION.

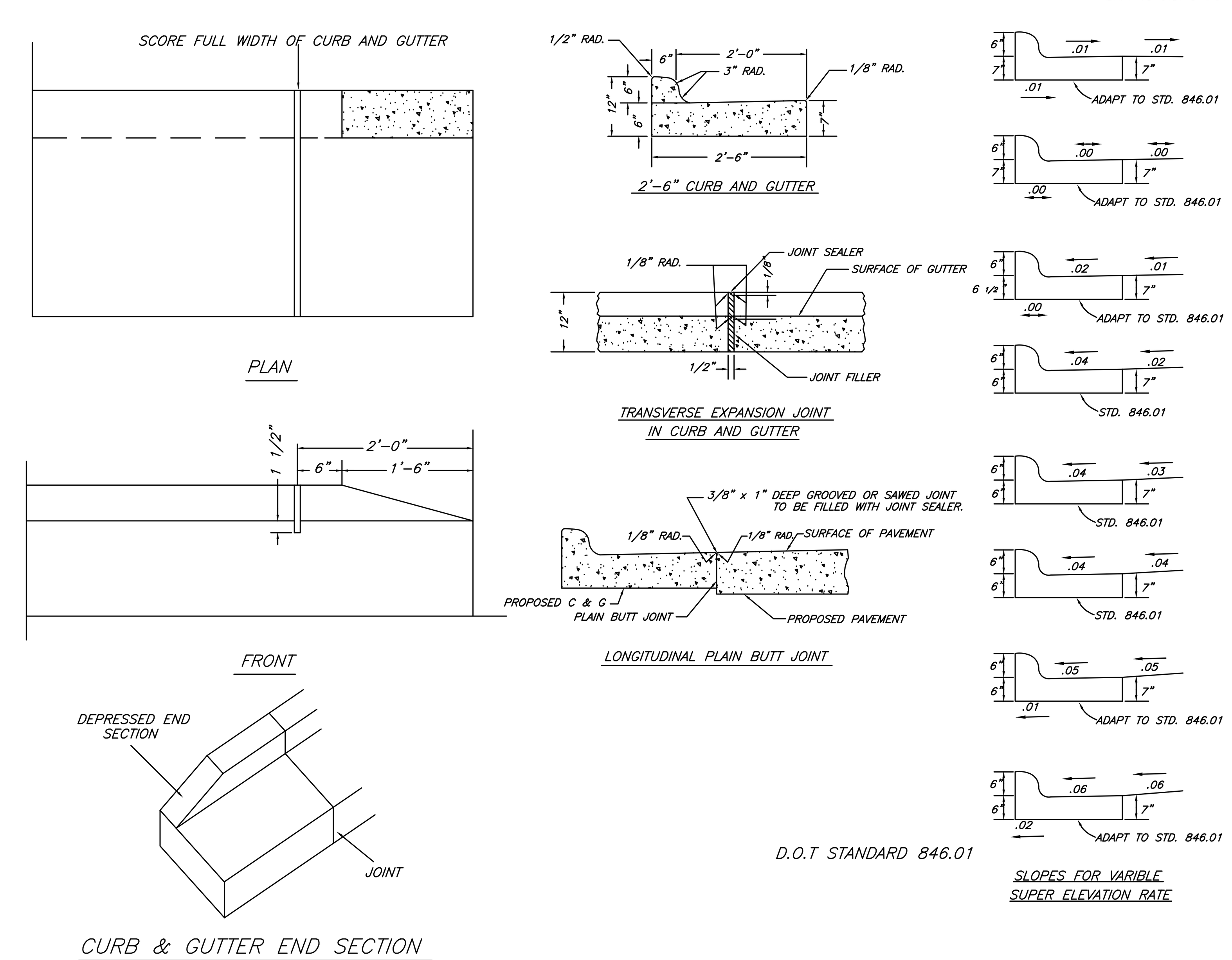
GENERAL NOTES:

CONTRACTION JOINTS SHALL BE SPACED AT 10 FOOT INTERVALS, EXCEPT THAT A 15 FOOT SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10 FOOT INTERVALS. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING.

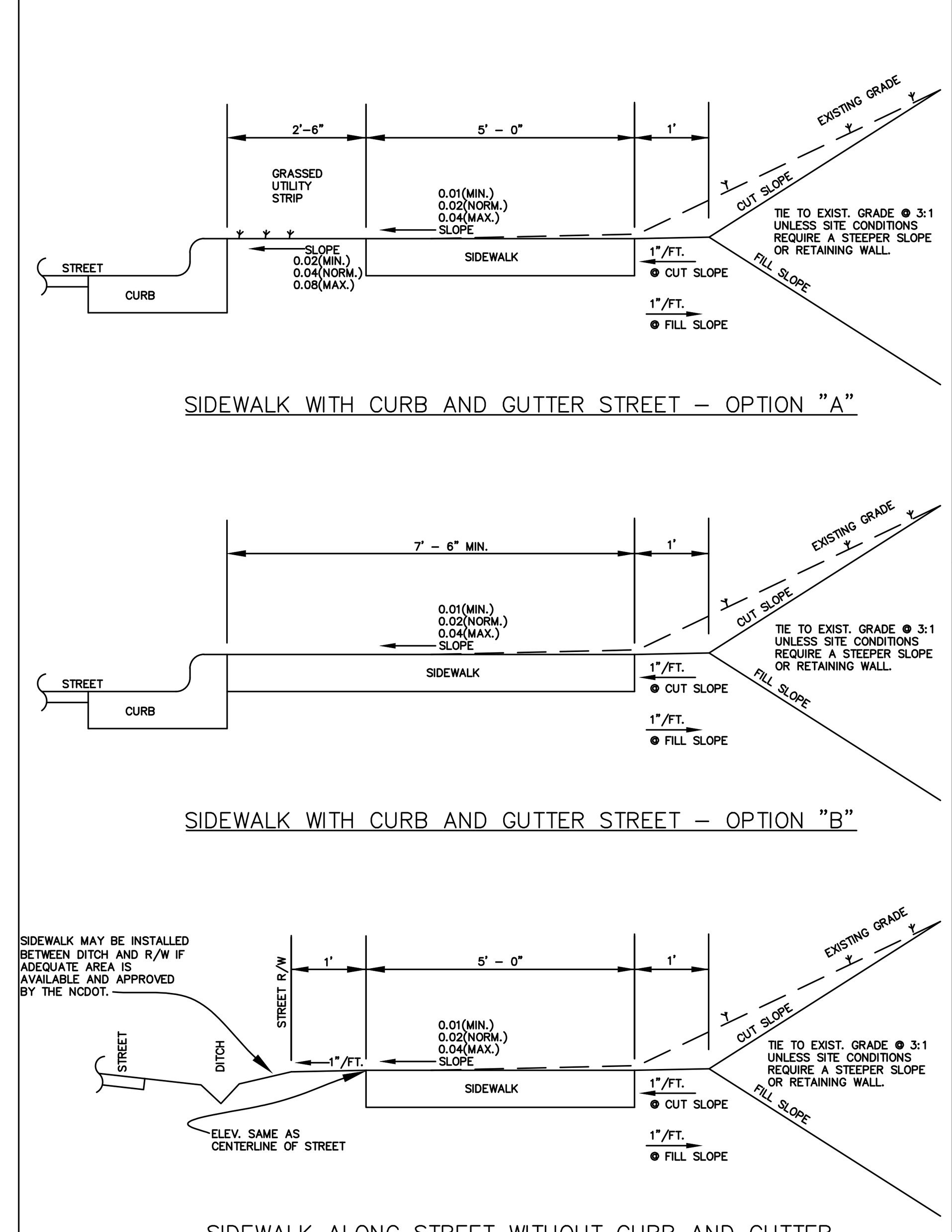
CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES A MINIMUM DEPTH OF 1 1/2" SHALL BE OBTAINED.

ALL CONTRACTION JOINTS EXCEPT IN 8"x6" MEDIAN CURB SHALL BE FILLED WITH JOINT SEALER.

EXPANSION JOINTS SHALL BE SPACED AT 80 FOOT INTERVALS AND ADJACENT TO ALL RIGID OBJECTS.

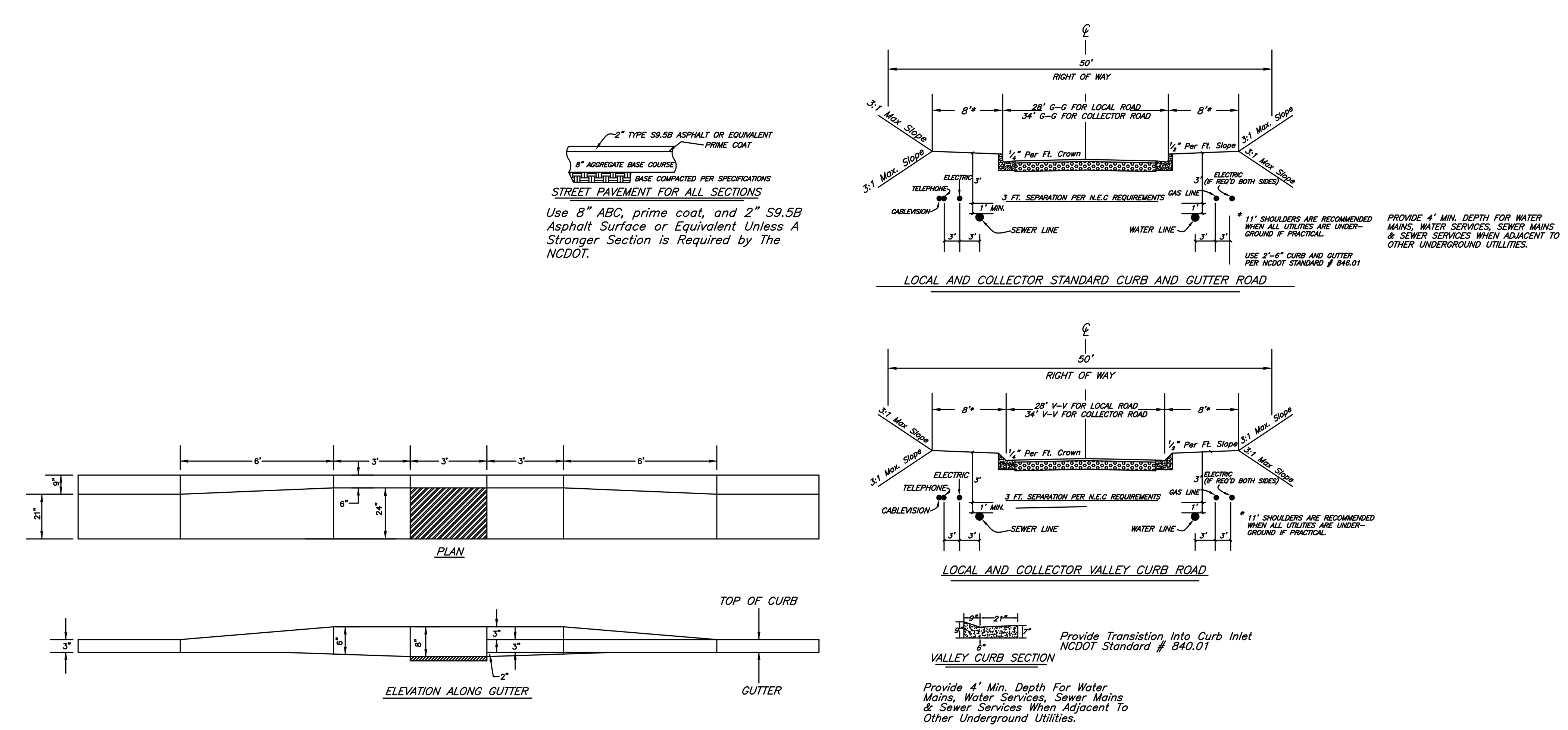


STANDARD CONCRETE CURB AND CURB & GUTTER



NOTES
- THE NCDOT WILL NOT ALLOW SIDEWALK ON THE SHOULDER OF A STREET WITHOUT CURB AND GUTTER.
- OPTION "A" OR OPTION "B" MAY BE USED ALONG STREETS WITH CURB AND GUTTER, AS NEEDED TO BE COMPATIBLE WITH THE CHARACTER OF THE AREA BEING DEVELOPED AND THE LOCATION OF EXISTING UTILITY POLES.
- DIMENSIONS MAY VARY IF REQUIRED BY THE NCDOT.
- USE 4" THICK SIDEWALK ALONG STANDARD CURB AND GUTTER.
- USE 6" THICK SIDEWALK ACROSS DRIVEWAYS AND ALONG VALLEY CURB.

SIDEWALK STANDARDS



Use 8" ABC, prime coat, and 2" S9.5B Asphalt Surface or Equivalent Unless A Stronger Section is Required by The NCDOT.

Provide 4' Min. Depth For Water Mains, Water Services, Sewer Mains & Sewer Services When Adjacent To Other Underground Utilities.

TYPICAL STREET SECTIONS

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STANDARD STREET DETAILS

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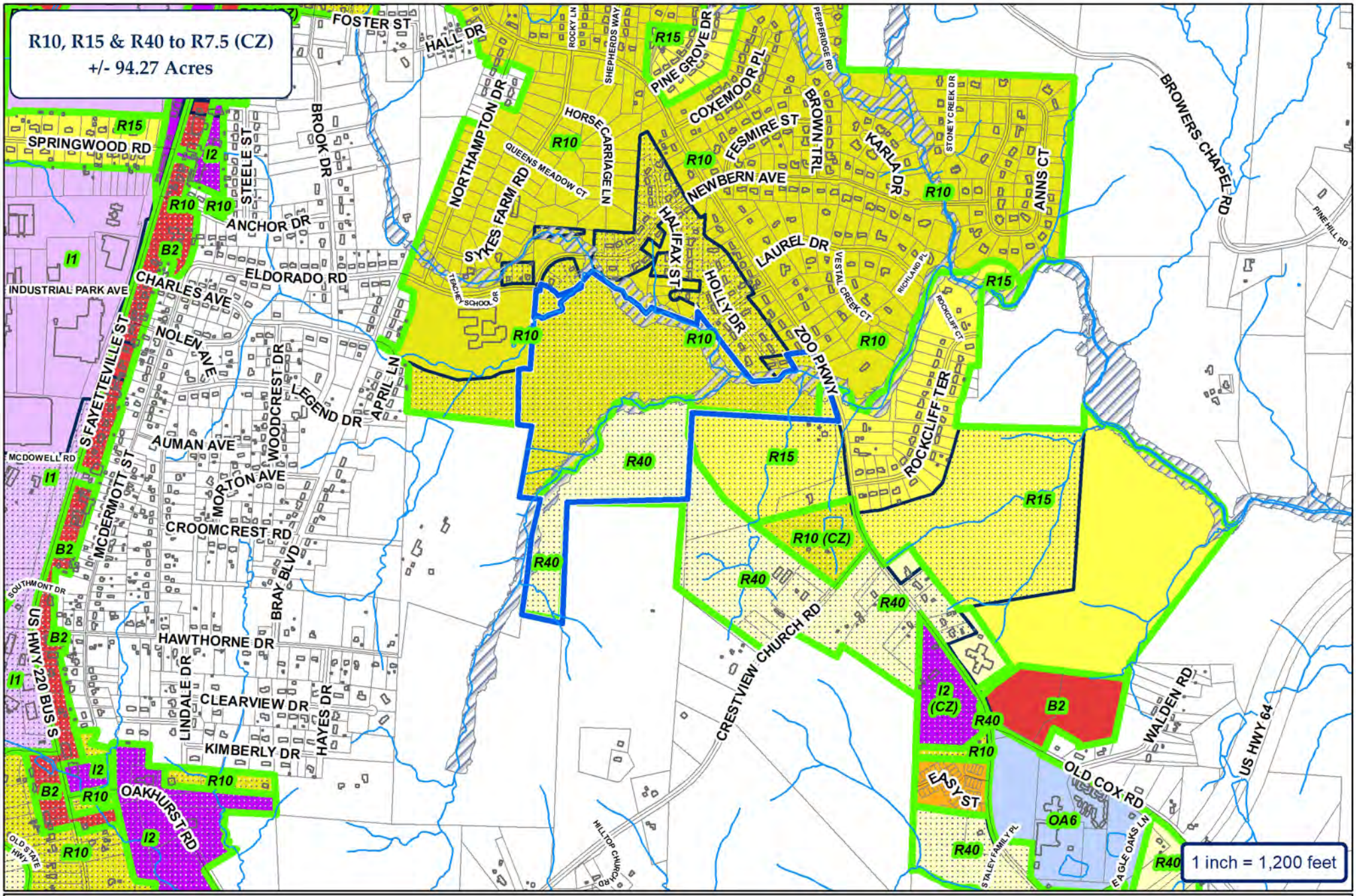

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NORTH CAROLINA
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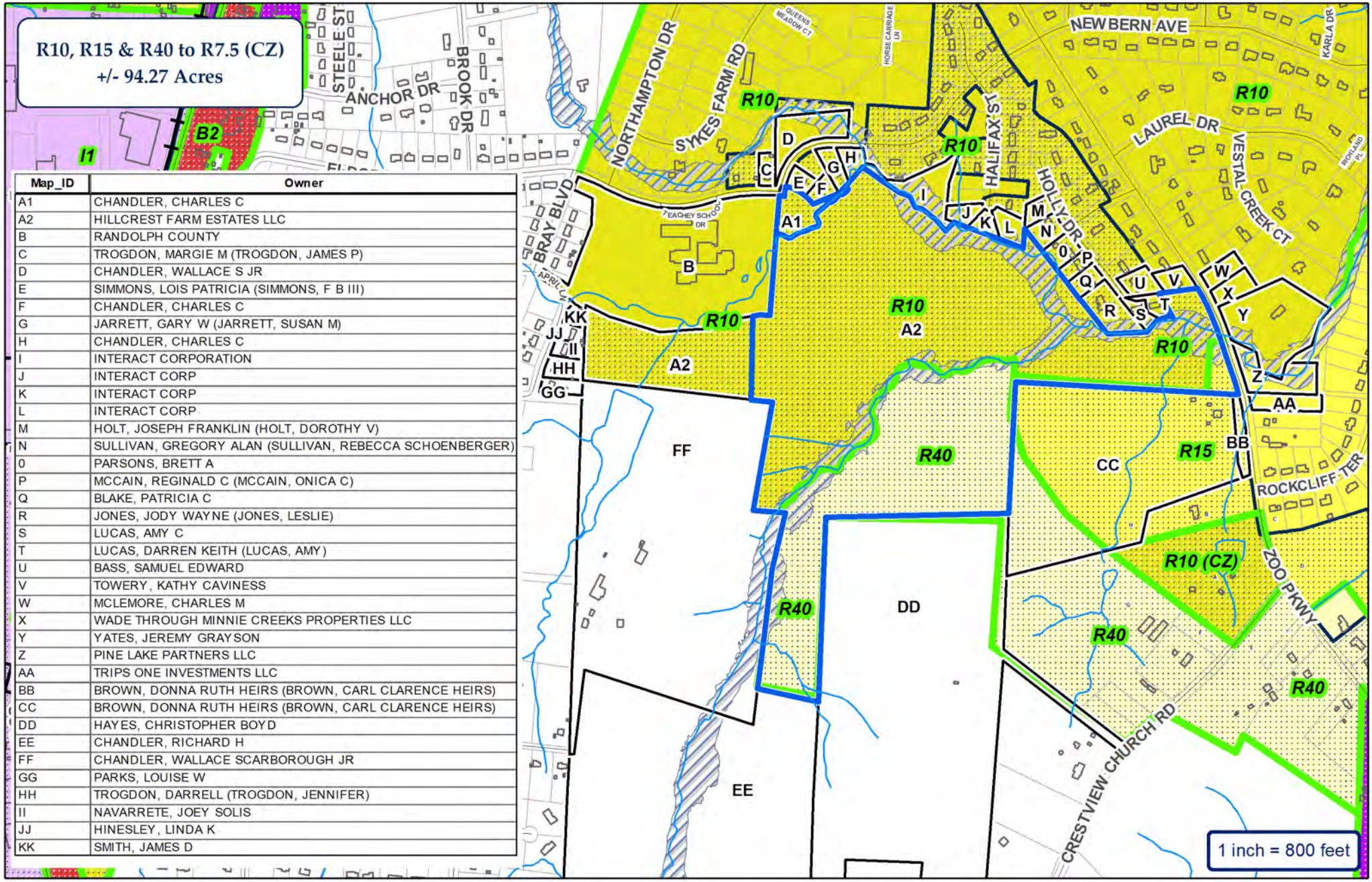
City of Asheboro Planning & Zoning Department

Rezoning Case: RZ-23-14

Parcels: 7760008593 & 7760013008

Subject Property
Zoning



Map_ID	Owner
A1	CHANDLER, CHARLES C
A2	HILLCREST FARM ESTATES LLC
B	RANDOLPH COUNTY
C	TROGDON, MARGIE M (TROGDON, JAMES P)
D	CHANDLER, WALLACE S JR
E	SIMMONS, LOIS PATRICIA (SIMMONS, F B III)
F	CHANDLER, CHARLES C
G	JARRETT, GARY W (JARRETT, SUSAN M)
H	CHANDLER, CHARLES C
I	INTERACT CORPORATION
J	INTERACT CORP
K	INTERACT CORP
L	INTERACT CORP
M	HOLT, JOSEPH FRANKLIN (HOLT, DOROTHY V)
N	SULLIVAN, GREGORY ALAN (SULLIVAN, REBECCA SCHOENBERGER)
0	PARSONS, BRETT A
P	MCCAIN, REGINALD C (MCCAIN, ONICA C)
Q	BLAKE, PATRICIA C
R	JONES, JODY WAYNE (JONES, LESLIE)
S	LUCAS, AMY C
T	LUCAS, DARREN KEITH (LUCAS, AMY)
U	BASS, SAMUEL EDWARD
V	TOWERY, KATHY CAVINESS
W	MCLEMORE, CHARLES M
X	WADE THROUGH MINNIE CREEKS PROPERTIES LLC
Y	YATES, JEREMY GRAYSON
Z	PINE LAKE PARTNERS LLC
AA	TRIPS ONE INVESTMENTS LLC
BB	BROWN, DONNA RUTH HEIRS (BROWN, CARL CLARENCE HEIRS)
CC	BROWN, DONNA RUTH HEIRS (BROWN, CARL CLARENCE HEIRS)
DD	HAYES, CHRISTOPHER BOYD
EE	CHANDLER, RICHARD H
FF	CHANDLER, WALLACE SCARBOROUGH JR
GG	PARKS, LOUISE W
HH	TROGDON, DARRELL (TROGDON, JENNIFER)
II	NAVARRETE, JOEY SOLIS
JJ	HINESLEY, LINDA K
KK	SMITH, JAMES D

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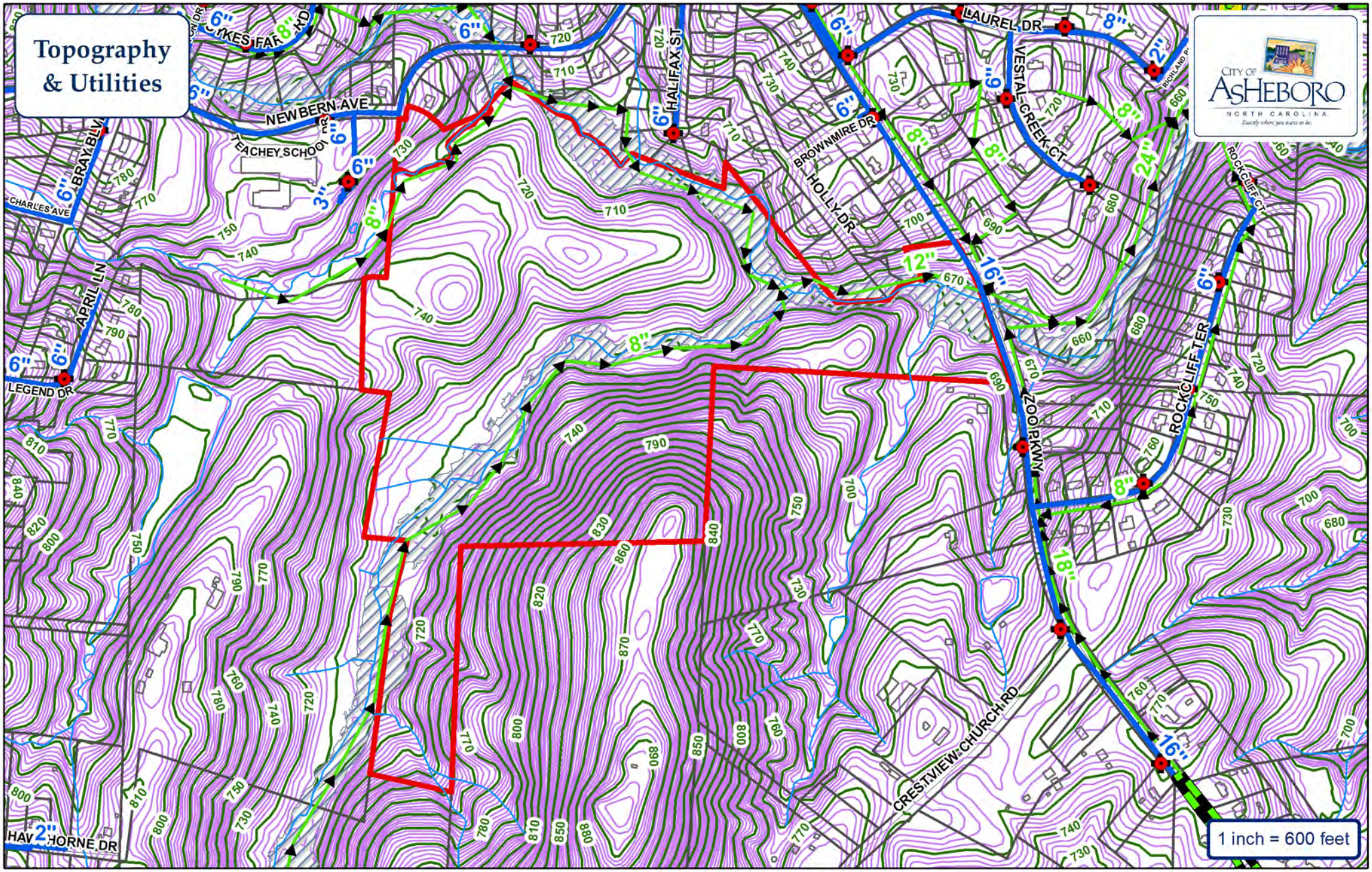
Subject Property
Adjoining Properties
City Zoning

N
W
E
S



Water Main

Sewer Main

Force Main

Fire Hydrant

Pump Station

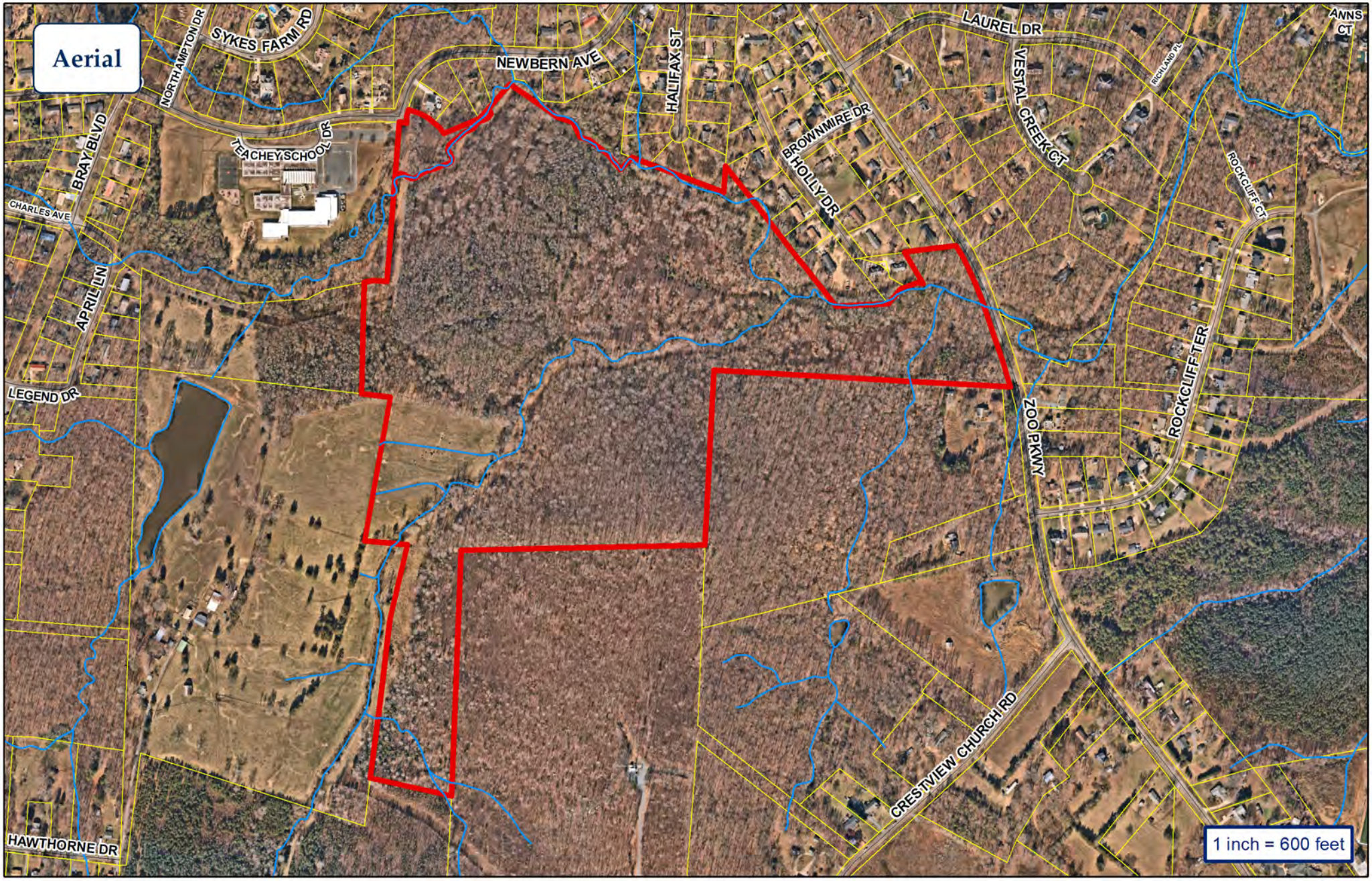
Watershed

City of Asheboro Planning & Zoning Department

Rezoning Case: RZ-23-14

Parcels: 7760008593 & 7760013008

Subject Property



City of Asheboro Planning & Zoning Department

Rezoning Case: RZ-23-14

Parcels: 7760008593 & 7760013008

Subject Property

RZ-23-14: Request to rezone property located along the west side of Zoo Parkway and the south side of Newbern Avenue from R40 Low-Density Residential, R15 Low-Density Single-Family Residential, and R10 Medium-Density Residential to R7.5 (CZ) Medium-Density Residential Conditional Zoning for a Residential Planned Unit Development

Traffic Impact Analysis and NCDOT Review

Note: All TIA appendices are included in the electronic copy of this staff report.

Hillcrest Farm

Asheboro, NC

PREPARED FOR: FitzComm Commercial Realty

November 6, 2023

PROJECT # 230054

TRANSPORTATION IMPACT ANALYSIS

Celebrating 20 YEARS

DAVENPORT

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Transportation Impact Analysis

Hillcrest Farm
Asheboro, NC

Prepared for
FitzComm Commercial Realty

November 6, 2023

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 054666 ENGINEER ANGELO A ANASTOPOULO

November 6, 2023

Analysis and Graphics by: Amrit Williams

Reviewed and Sealed by: AJ Anastopoulo, PE

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EXECUTIVE SUMMARY

The proposed Hillcrest Farm development is located west of Zoo Parkway and south of Newbern Avenue in Asheboro, NC. It will consist of 282 single family homes and 64 townhomes. Two full movement access points are proposed, one on Zoo Parkway and one that will become the fourth leg to the intersection at Newbern Avenue and Teachey Elementary School parking lot. The expected build-out year for this development is 2031. Information regarding the property was provided by FitzComm Commercial Realty and Summey Engineering.

DAVENPORT was retained to determine the potential traffic impacts of this development and to identify transportation improvements that may be required to accommodate the impacts of the new development traffic.

The Transportation Impact Analysis (TIA) was performed based on the scope agreed upon with NCDOT. This site has a trip generation potential of 3,056 daily trips, 219 trips in the AM peak hour, and 297 trips in the PM peak hour.

In conclusion, this study has determined the potential traffic impacts of this development and recommendations have been given where necessary to mitigate the impacts of future traffic. The analysis indicates that with the recommended improvements in place, the proposed site is not expected to have a detrimental effect on transportation capacity and mobility in the study area. The recommendations summarized in Figure A and in Table A should be constructed to comply with applicable NCDOT *Policy on Street and Driveway Access to North Carolina Highways* and local standards.

Table A – Recommended Improvements	
INTERSECTION	**RECOMMENDATIONS**
Zoo Parkway and Newbern Avenue	• No improvements recommended.
Newbern Avenue and Teachey Elementary School parking lot/ Future Site Access 2	• Design site drive according to NCDOT and/or local standards.
US 220 Business and Charles Avenue	• No improvements are recommended.
Wildlife Way and Zoo Connector	• No improvements recommended.
Zoo Parkway and Site Access 1	• Install a northbound left-turn lane with 100 feet of storage plus appropriate deceleration and taper. • Design site drive according to applicable NCDOT and/or local standards.

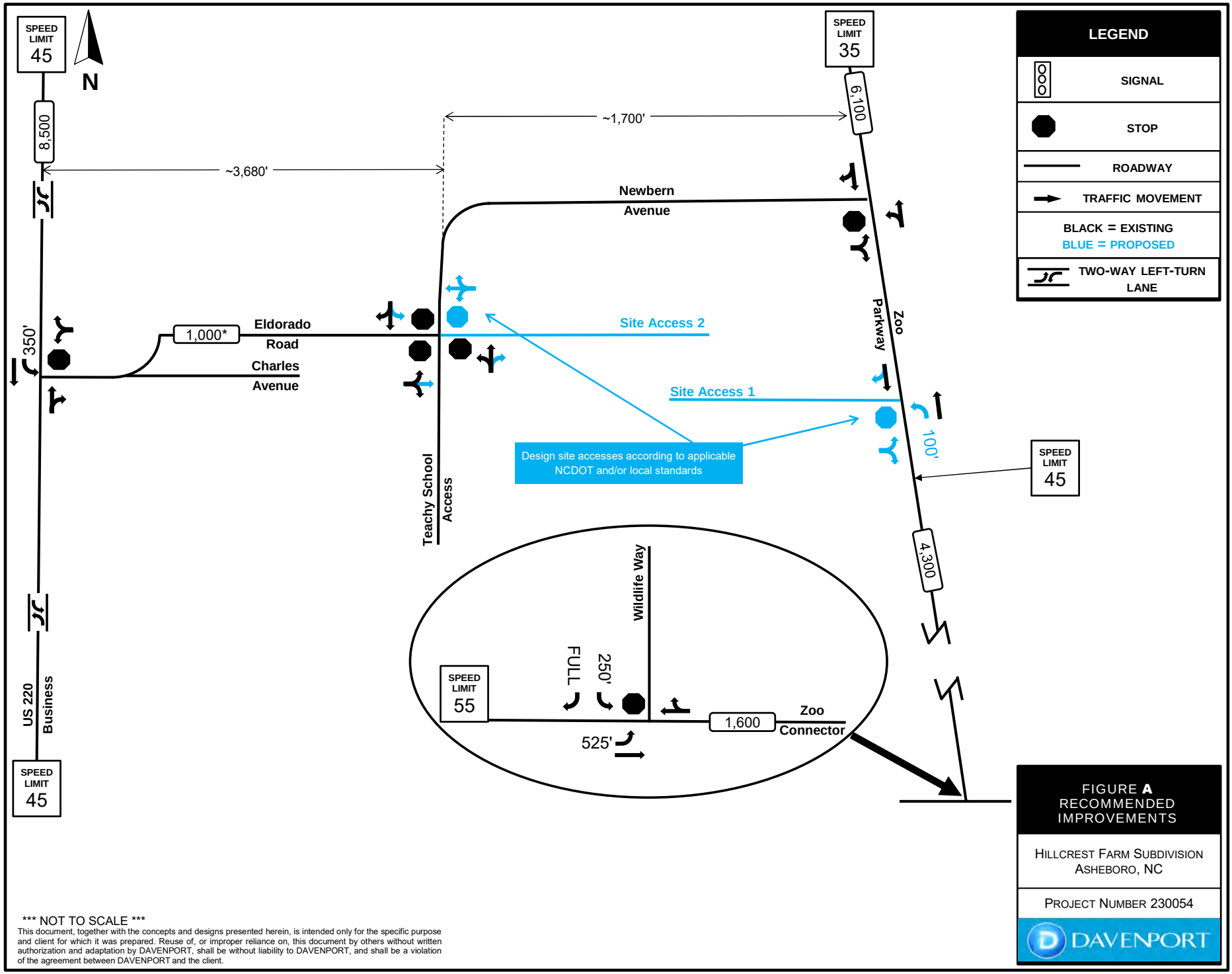

FIGURE **A**
RECOMMENDED IMPROVEMENTS

HILLCREST FARM SUBDIVISION
ASHEBORO, NC

PROJECT NUMBER 230054

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1.0 Introduction

The proposed Hillcrest Farm development is located west of Zoo Parkway and south of Newbern Avenue in Asheboro, NC. It will consist of 282 single family homes and 64 townhomes. Two full movement access points are proposed, one on Zoo Parkway and one that will become the fourth leg to the intersection at Newbern Avenue and the Teachey Elementary School parking lot. The expected build-out year for this development is 2031. Information regarding the property was provided by FitzComm Commercial Realty and Summey Engineering.

A conceptual site plan is shown in Figure 1, and a site location map and a vicinity map are provided in Figures 2A and 2B, respectively.

DAVENPORT was retained to determine the potential traffic impacts of this development and to identify transportation improvements that may be required to accommodate the impacts of the new development traffic. The following intersections are included in the study:

1. Zoo Parkway at Newbern Avenue (unsignalized)
2. Newbern Avenue at Teachey School parking lot/Site Access 2 (unsignalized)
3. US 220 Business at Charles Avenue (unsignalized)
4. Zoo Parkway at Zoo Connector (unsignalized)
5. Zoo Parkway and Site Access 1 (unsignalized)

These intersections were analyzed during the AM and PM peaks for the following conditions:

- 2023 Existing Conditions
- 2031 Future No Build Conditions
- 2031 Future Build Conditions
- 2031 Future Build Conditions + Improvements

The Transportation Impact Analysis (TIA) was performed based on the scope agreed upon with the North Carolina Department of Transportation (NCDOT). It was conducted according to the standards and best practices of the transportation engineering profession.

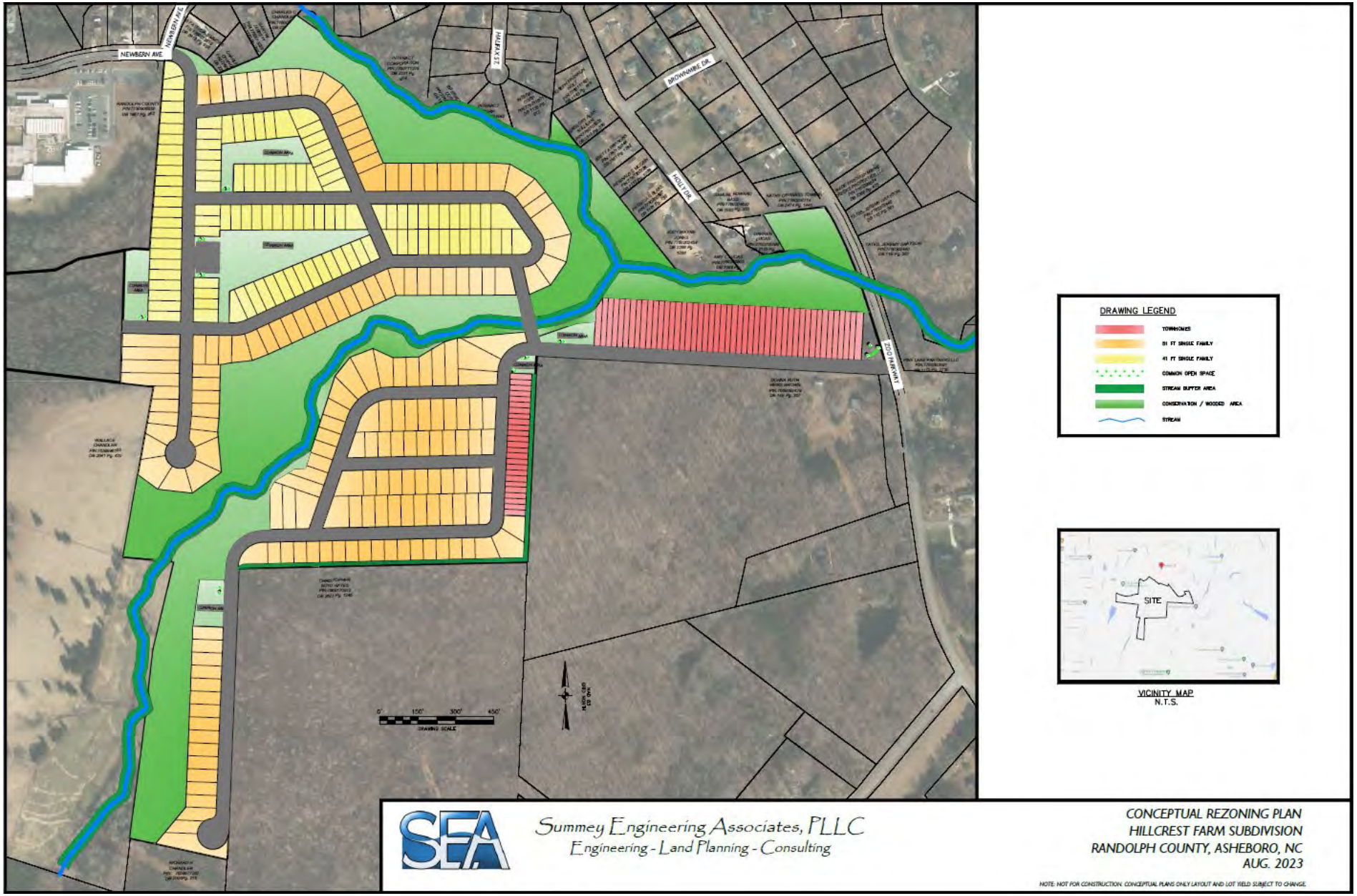

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FIGURE 1
CONCEPTUAL SITE PLAN

Hillcrest Subdivision
Project Number 230054

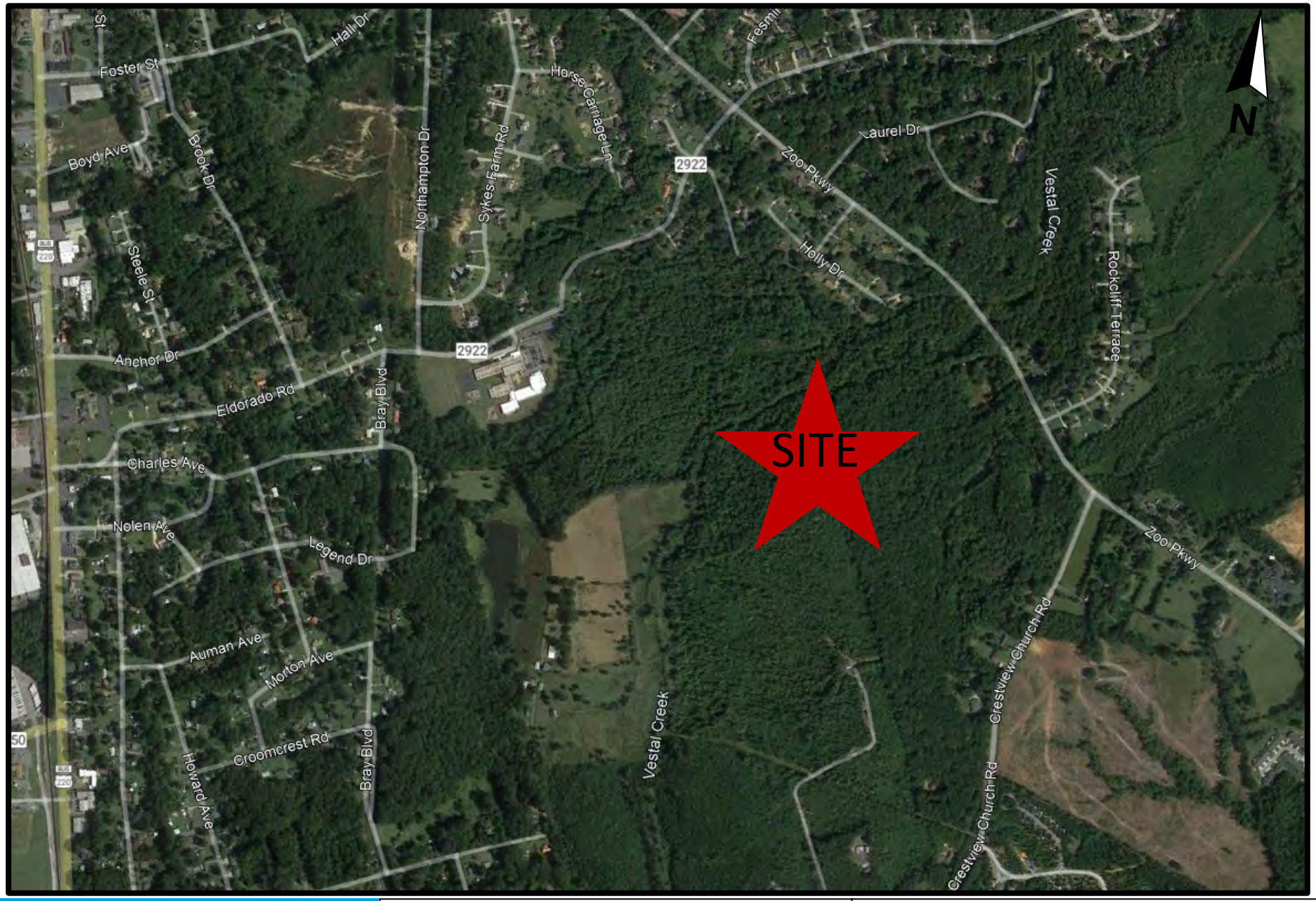

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FIGURE 2A
SITE LOCATION MAP

SITE INDICATOR

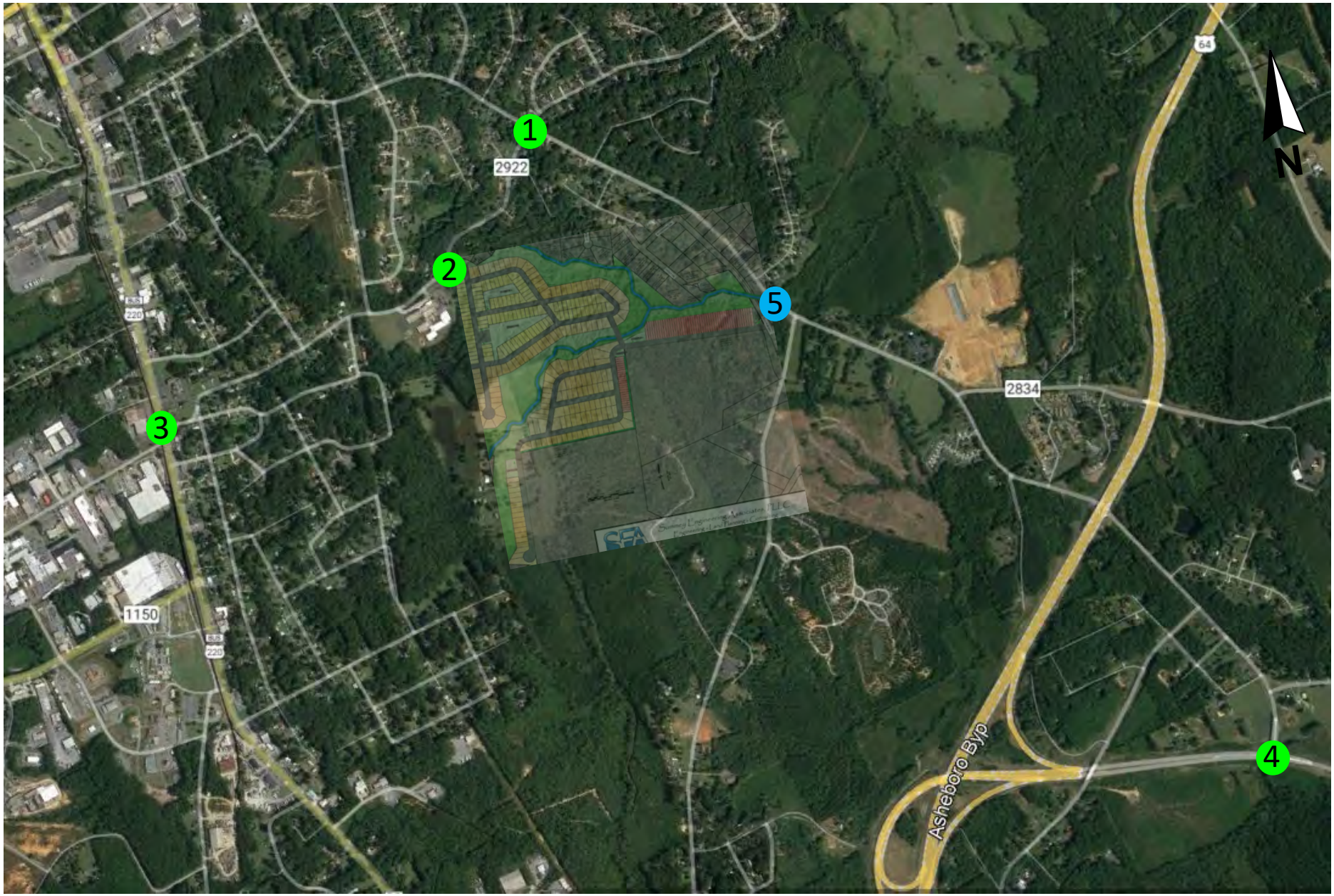

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FIGURE 2B
VICINITY MAP

STUDY INTERSECTIONS
EXISTING
PROPOSED

2.0 Existing Conditions

2.1 Inventory

Table 2.1 presents a summary of the study area roadway conditions. Figure 3 shows the existing lane geometry.

Table 2.1 - Street Inventory

Facility Name	Route #	2021 AADT (vpd)	Typical Cross Section	Pavement Width	Speed Limit (MPH)	Maintained By
Zoo Parkway	NC 159	6,100	2-lane undivided	11-foot lanes	55/45/35	NCDOT
Newbern Avenue/Eldorado Road	SR 2922	1,000[1]	2-lane undivided	10-foot lanes	35	NCDOT
US 220 Business	US 220 BUS	8,500	2-lane w/ TWLTL	12-foot lanes	45	NCDOT
Zoo Connector	NC 159 SPUR	1,600	2-lane undivided	12-foot lanes	55	NCDOT

[1] Based on NCDOT traffic counts taken in 2018

2.2 Existing Traffic Volumes

Turning movement counts for this project were collected by DAVENPORT staff when schools were in session. Table 2.2 contains the location, dates, and times these counts were conducted. The traffic volumes were not balanced between the study intersections since the existing driveways and land uses account for the imbalance. Additionally, a minimum of four vehicles per hour were assigned to all movements, per NCDOT Congestion Management standards. The existing AM and PM peak hour volumes are shown in Figure 4. Traffic count data are provided in the Appendix.

Table 2.2 - Traffic Volume Data

Count Location	Date Taken	Hours
Zoo Parkway at Newbern Avenue (unsignalized)	Wednesday, September 27, 2023	7-9 AM, 4-6 PM
Newbern Avenue at Teachey School parking lot/Site Access 2 (unsignalized)	Wednesday, September 27, 2023	7-9 AM, 4-6 PM
US 220 Business at Charles Avenue	Wednesday, September 27, 2023	7-9 AM, 4-6 PM
Zoo Parkway at Zoo Connector	Wednesday, September 27, 2023	7-9 AM, 4-6 PM

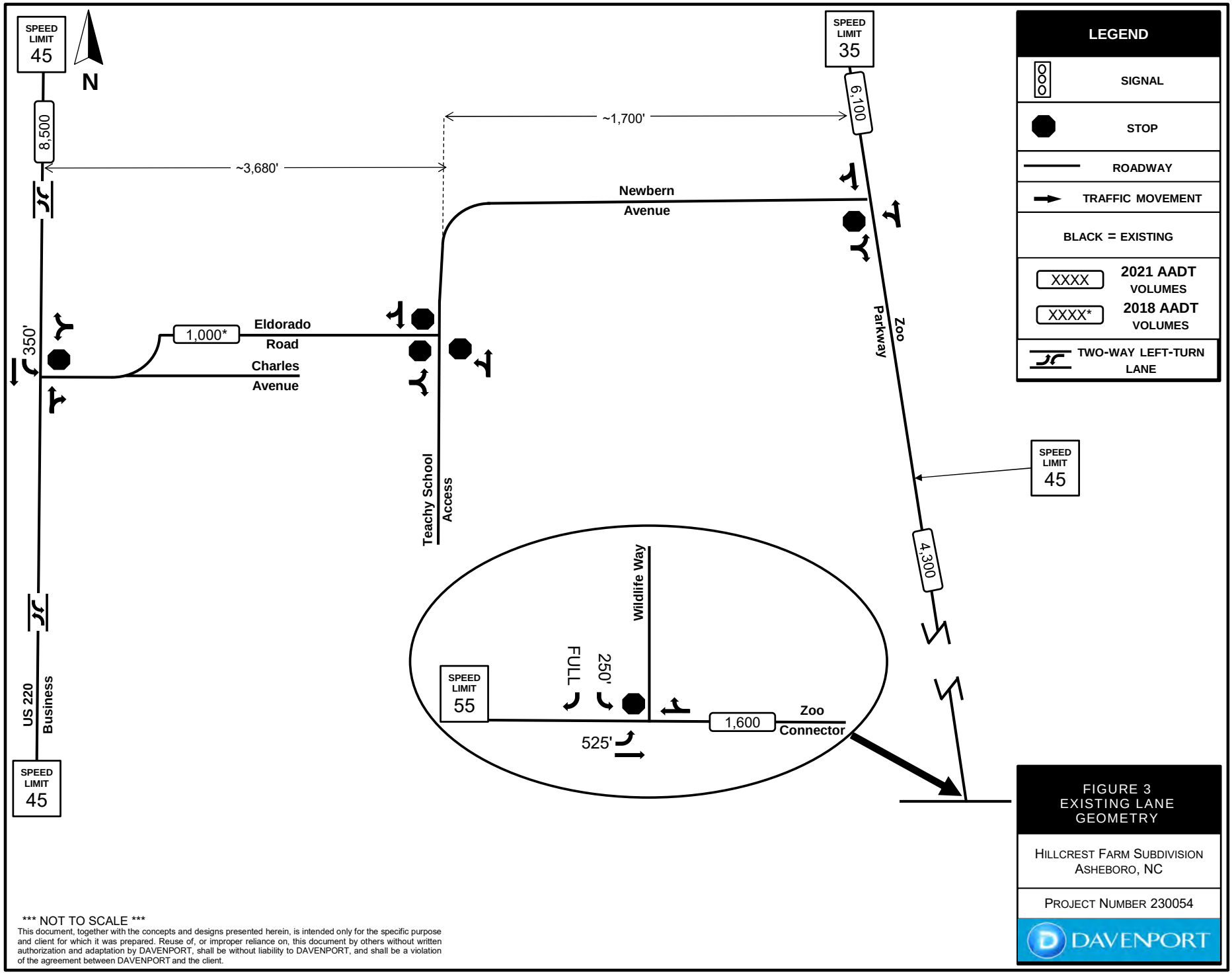

FIGURE 3
EXISTING LANE GEOMETRY

HILLCREST FARM SUBDIVISION
ASHEBORO, NC

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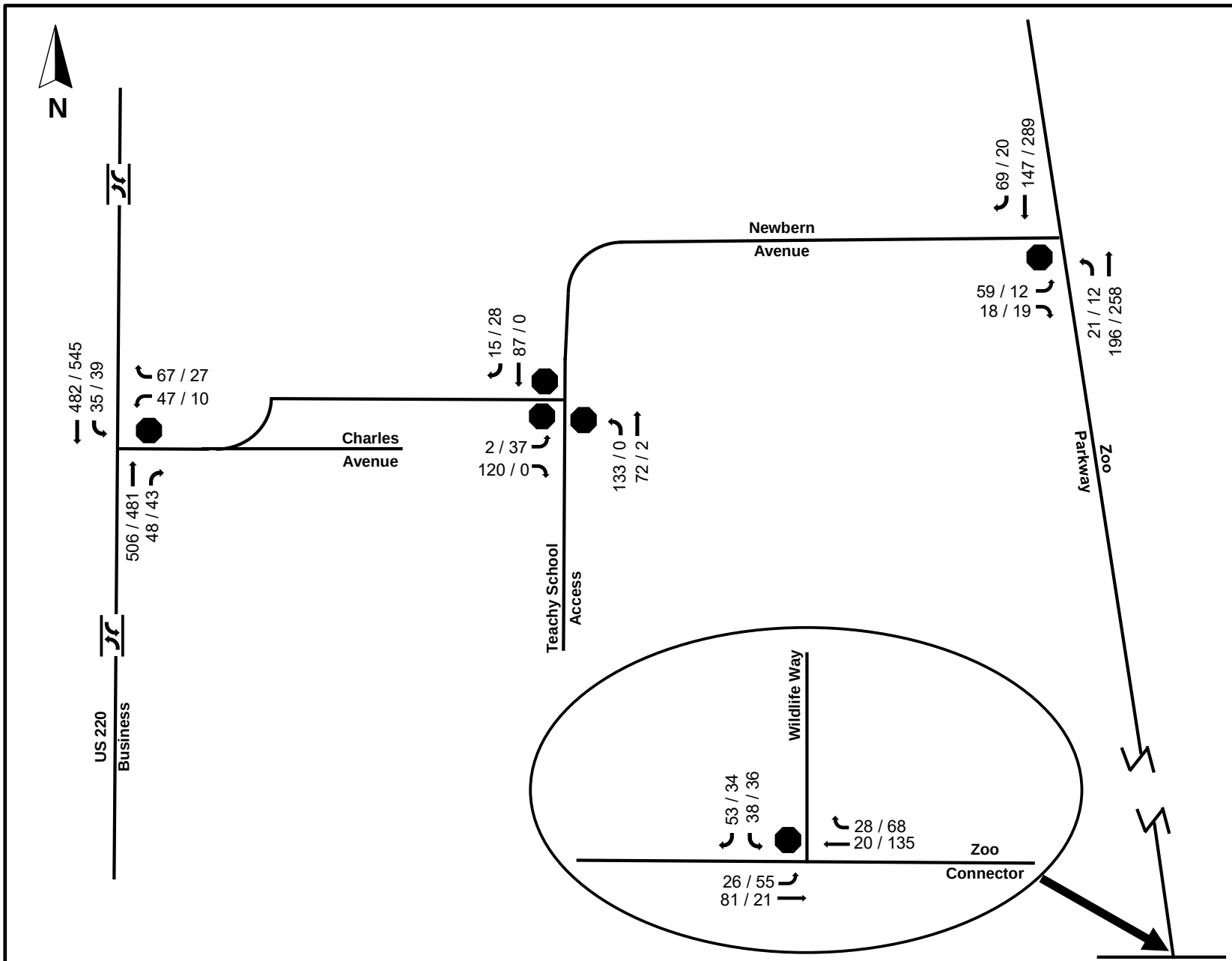

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FIGURE 4
2023 EXISTING
TRAFFIC VOLUMES

HILLCREST FARM SUBDIVISION
ASHEBORO, NC

PROJECT NUMBER 230054

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3.0 Approved Development and Committed Improvements

3.1 Approved Developments

Approved developments are developments that have been recently approved in the area but are not yet constructed. Per the approved scoping, the Zoo City Sportsplex development is included as an approved development. This development proposes a soccer complex with nine (9) soccer fields located east of Zoo Parkway and north of Old Cox Road. Relevant information, including Figure B which shows the approved development volumes, can be found in the Appendix.

3.2 Committed Improvements

Committed improvements are improvements that are planned by NCDOT, the County, or City, or that are associated with a prior approved development in the area but are not yet constructed. Per the approved scoping document, there are no committed improvements to be included in this study.

4.0 Methodology

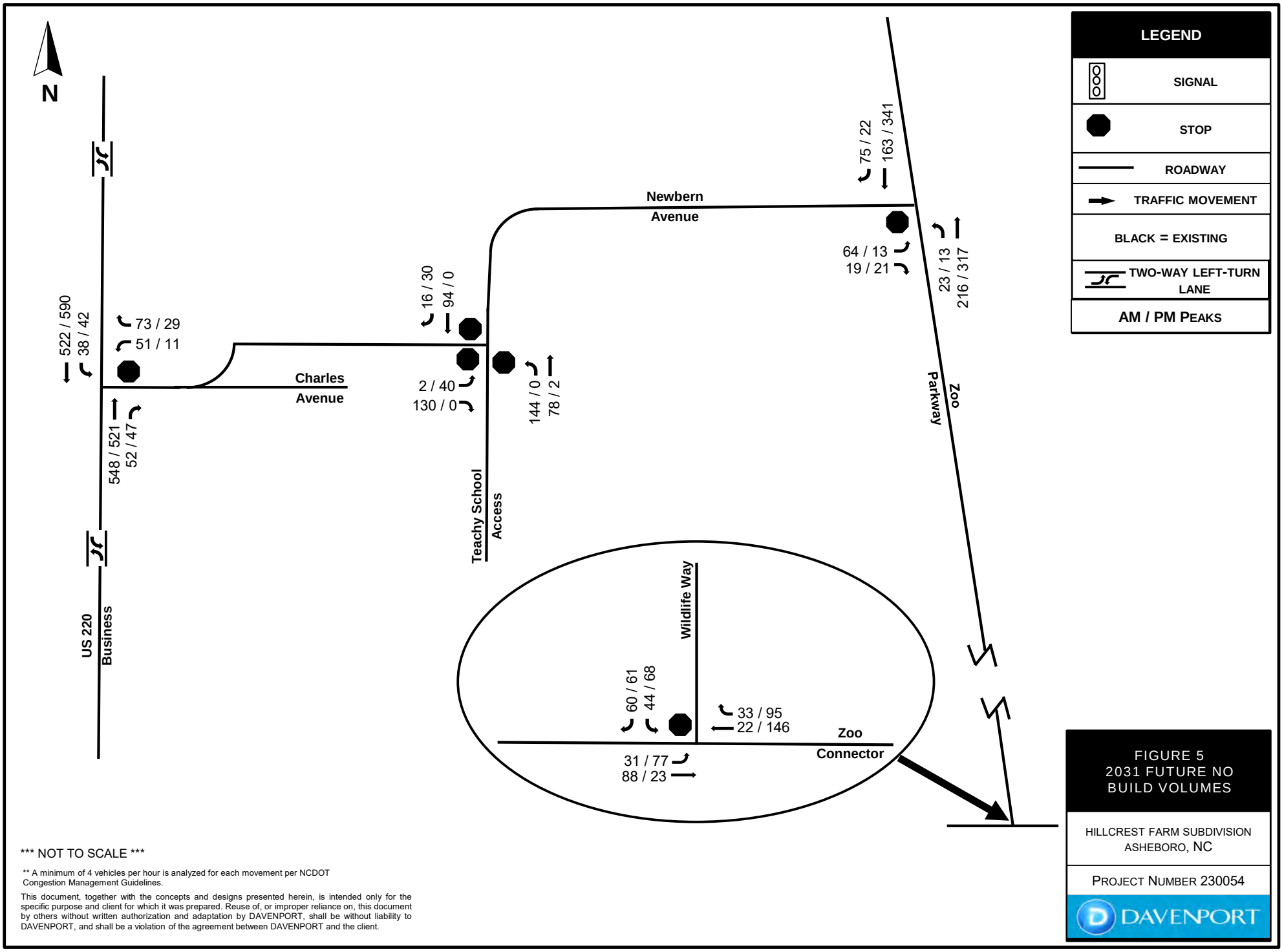
4.1 Base Assumptions and Standards

In general, the analysis for this project was conducted utilizing commonly accepted NCDOT standards. Table 4.1 contains a summary of the base assumptions.

Table 4.1 - Assumptions	
Annual Growth Rate	1%
Analysis Software	Synchro/SimTraffic
Lane Widths	12 feet
Peak Hour Factor	0.90
Truck Percentage	2%

4.2 Future No Build Volumes

The 2031 future no build traffic volumes were computed by applying a one percent (1%) compounded annual growth rate to the 2023 existing traffic volumes and adding approved development trips. Figure 5 shows 2031 future no build traffic volumes for AM and PM peaks.



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4.3 Trip Generation

The proposed development will contain 282 detached single-family homes and 64 townhomes. The trip generation potential of this site was projected based on the 11th Edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual* and guidance from NCDOT Congestion Management on the selection of appropriate variables. Table 4.2 presents the results.

Table 4.2 - ITE 11th Edition Trip Generation

Average Weekday Driveway Volumes					24-Hour Two-Way	AM Peak Hour			PM Peak Hour		
Land Use	ITE Land Use Code	Size		Data Source	Volume	Enter	Exit	Total	Enter	Exit	Total
Single-Family Detached Housing	210	282	Dwelling Units	Adjacent-Equation	2619	48	143	191	166	97	263
Single-Family Attached Housing	215	64	Dwelling Units	Adjacent-Equation	437	7	21	28	20	14	34
Total Trips					**3,056**	**55**	**164**	**219**	**186**	**111**	**297**

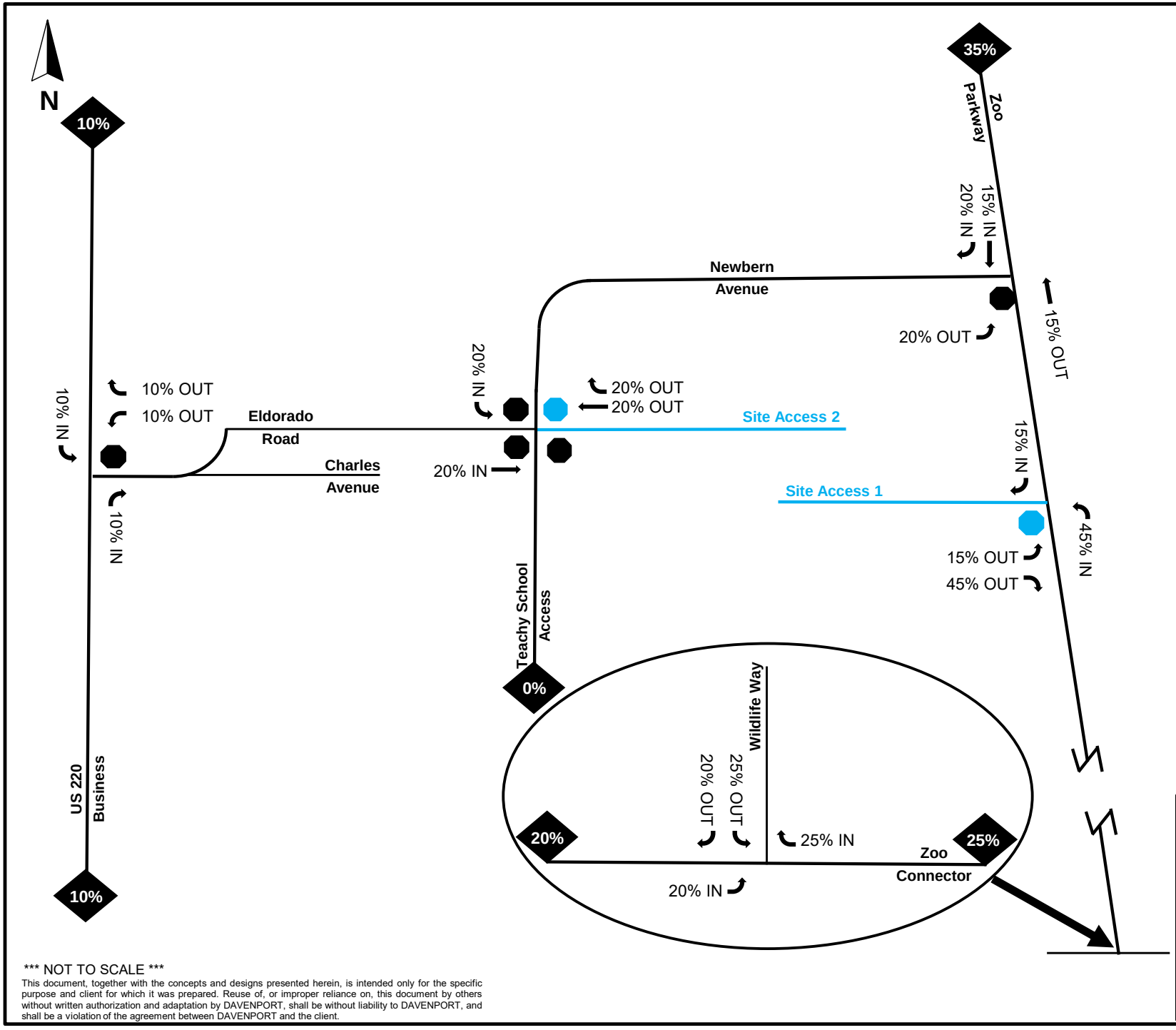
4.4 Trip Distribution and Assignment

Site trips for this proposed development were distributed based on the existing traffic patterns and engineering judgment. The trip distribution model is shown in Figure 6. The directional distribution for site trips is:

- 10% to/from the south on US 220 Business via Eldorado Road/Newbern Avenue
- 10% to/from the north on US 220 Business via Eldorado Road/Newbern Avenue
- 20% to/from the north on Zoo Parkway via Newbern Avenue
- 15% to/from the north on Zoo Parkway
- 45% to/from the south on Zoo Parkway
- 25% to/from the east on Zoo Connector via Zoo Parkway
- 20% to/from the west on Zoo Connector via Zoo Parkway

4.5 Future Build Volumes

Site trip volumes were added to the future no build volumes to compute the 2031 Future Build volumes. Site trips are shown in Figure 7 and Future Build volumes are shown in Figure 8.



LEGEND

	SIGNAL
	STOP
	ROADWAY
	TRAFFIC MOVEMENT
	BLACK = EXISTING BLUE = PROPOSED
	IN = ENTERING OUT = EXITING
	TWO-WAY LEFT-TURN LANE
%	ORIGIN/DESTINATION NODE

FIGURE 6
TRIP DISTRIBUTION

HILLCREST SUBDIVISION
ASHEBORO, NC

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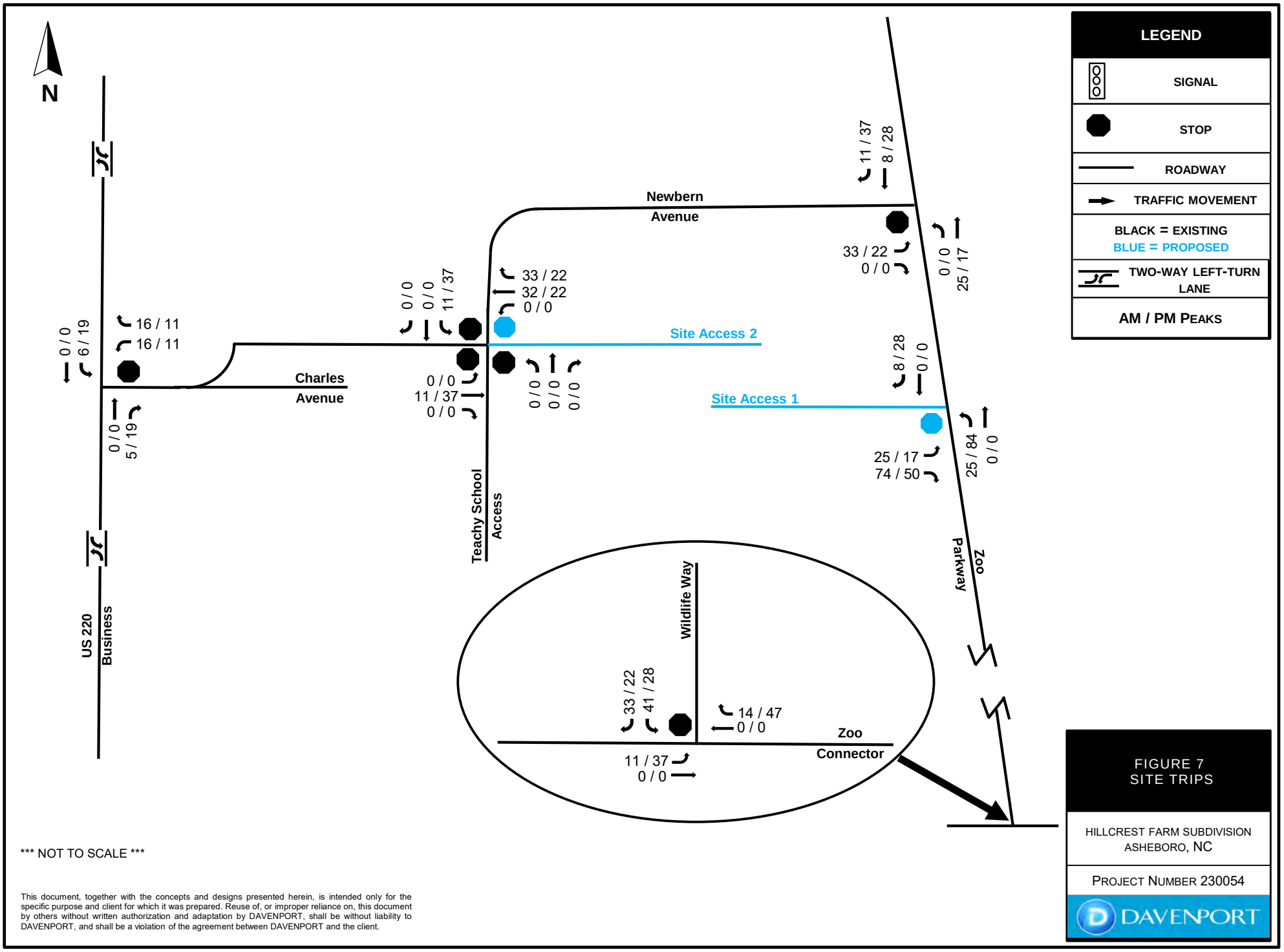

FIGURE 7
SITE TRIPS

HILLCREST FARM SUBDIVISION
ASHEBORO, NC

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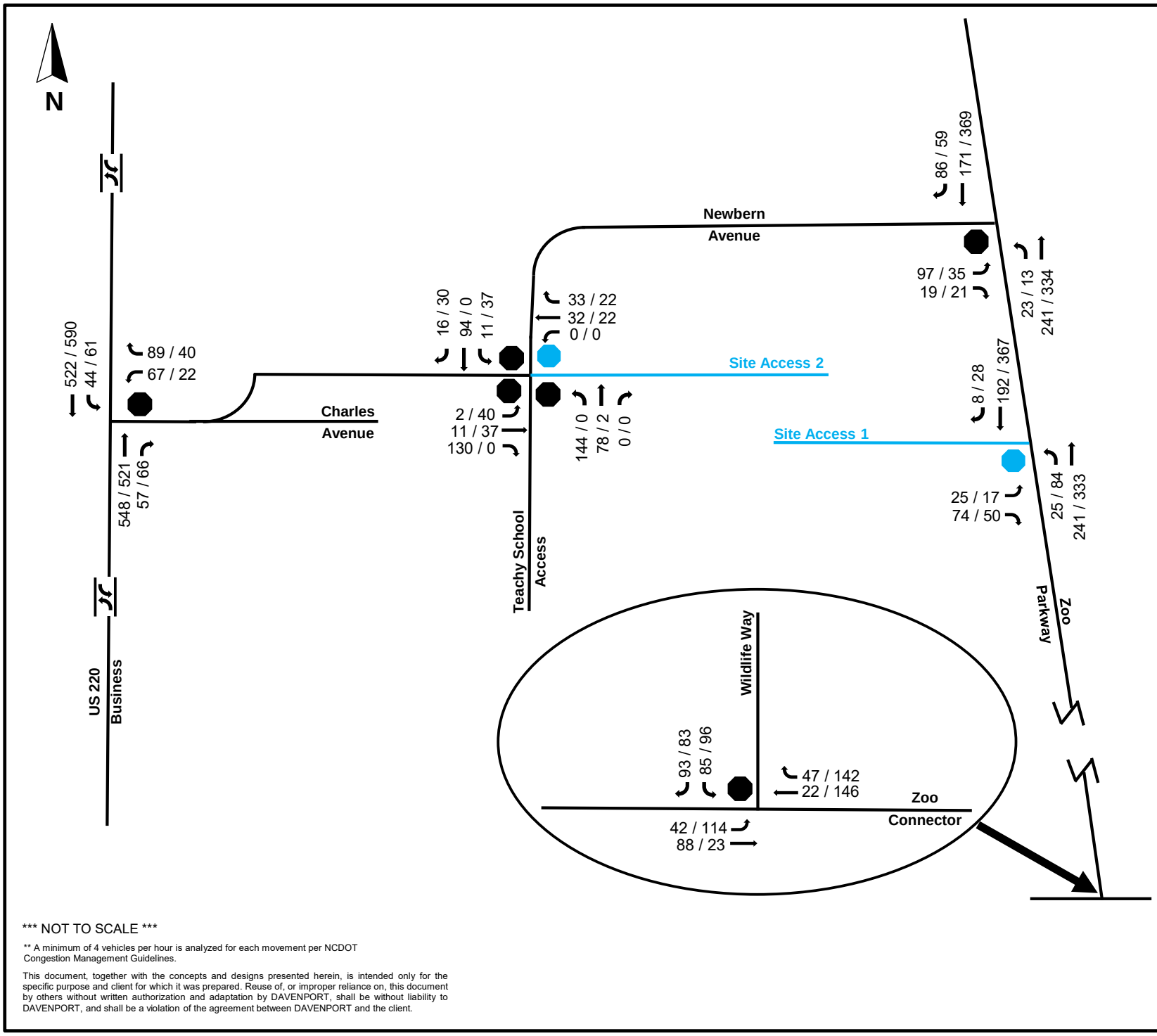

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FIGURE 8 2031 FUTURE BUILD VOLUMES

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5.0 Capacity Analysis

5.1 Level of Service Evaluation Criteria

The Transportation Research Board's *Highway Capacity Manual* (HCM) utilizes a term "level of service" (LOS) to measure how traffic operates in intersections and on roadway segments. There are six levels of service ranging from A to F as shown in Table 5.1. Level of service "A" represents low-volume traffic operations and level of service "F" represents high-volume, oversaturated traffic operations. Synchro traffic modeling software is used to determine the LOS and delay for study intersections. Synchro analysis worksheet reports are provided in the Appendix.

Table 5.1 – Highway Capacity Manual			
Levels of Service and Control Delay Criteria			
Signalized Intersection		**Unsignalized Intersection**	
Level of Service	Control Delay Per vehicle (seconds)	Level of Service	Delay Range (seconds)
A	≤ 10	A	≤ 10
B	> 10 and ≤ 20	B	> 10 and ≤ 15
C	> 20 and ≤ 35	C	> 15 and ≤ 25
D	> 35 and ≤ 55	D	> 25 and ≤ 35
E	> 55 and ≤ 80	E	> 35 and ≤ 50
F	> 80	F	> 50

5.2 Queueing Evaluation

A queueing analysis was performed using Synchro and SimTraffic simulation, based on a minimum 10-minute seeding, a 60-minute recording period, and 10 runs. The maximum SimTraffic queues and 95th-percentile Synchro queues are provided, along with the turn lane lengths. Synchro and SimTraffic queue reports are provided in the Appendix.

5.3 Level of Service and Queueing Results

The results of the capacity and queue analyses are discussed by intersection in the following paragraphs. The LOS, delay, and queue results are summarized in Tables 5.2 to 5.6.

Zoo Parkway and Newbern Avenue (unsignalized)

The worst LOS of the approaches is the eastbound approach. In the AM and PM peak hours, this approach operates at LOS B in existing conditions. In the future no build and future build scenarios, this approach operates at LOS C in both peak hours. No improvements are recommended.

Table 5.2 - LOS and Queueing Analysis for Zoo Parkway at Newbern Avenue

Scenario	Overall LOS	Level of Service (Delay) per Movement & by Approach (Delay in seconds/vehicle)			
		Eastbound	Westbound	Northbound	Southbound
AM Peak Hour					
2023 Existing	B (14.1) EB Approach	LTR	LTR	LTR	LTR
		B (14.1)	B (10.8)	A (0.7)	A (0.3)
	Available Storage (ft)	FULL	FULL	FULL	FULL
	95th% Queue (ft)	18	8	3	0
	Max Queue (ft)	64	60	88	19
2031 NoBuild	C (15.3) EB Approach	LTR	LTR	LTR	LTR
		C (15.3)	B (11.1)	A (0.7)	A (0.3)
	Available Storage (ft)	FULL	FULL	FULL	FULL
	95th% Queue (ft)	20	8	3	0
	Max Queue (ft)	68	60	70	95
2031 Build	C (18.3) EB Approach	LTR	LTR	LTR	LTR
		C (18.3)	B (11.5)	A (0.7)	A (0.3)
	Available Storage (ft)	FULL	FULL	FULL	FULL
	95th% Queue (ft)	35	8	3	0
	Max Queue (ft)	73	81	50	114
PM Peak Hour					
2023 Existing	B (13.7) EB Approach	LTR	LTR	LTR	LTR
		B (13.7)	B (12.0)	A (0.4)	A (0.7)
	Available Storage (ft)	FULL	FULL	FULL	FULL
	95th% Queue (ft)	8	5	0	3
	Max Queue (ft)	48	15	26	49
2031 NoBuild	C (15.5) EB Approach	LTR	LTR	LTR	LTR
		C (15.5)	B (13.0)	A (0.3)	A (0.6)
	Available Storage (ft)	FULL	FULL	FULL	FULL
	95th% Queue (ft)	10	8	0	3
	Max Queue (ft)	66	37	26	68
2031 Build	C (20.9) EB Approach	LTR	LTR	LTR	LTR
		C (20.9)	B (13.6)	A (0.3)	A (0.5)
	Available Storage (ft)	FULL	FULL	FULL	FULL
	95th% Queue (ft)	23	8	0	3
	Max Queue (ft)	54	81	48	76

Newbern Avenue and Teachey School Access/Site Access 2 (all-way stop)

In the AM peak hour, the worst LOS of the approaches is the northbound approach. This approach operates at LOS B in existing conditions and LOS C under future no build conditions and build conditions. In the PM peak hour, the worst LOS of the approaches is the eastbound approach which operates at LOS A under all conditions. The analysis shows the intersection operates acceptably, and there will be minimal queueing in both peak hours.

Neighborhood residents along Newbern Avenue have indicated there is significant queueing along Newbern Avenue during school drop-off and pick-up times. Since the analysis does not show significant queueing along any approach, this complaint indicates that queueing is due to on-campus stacking issues backing through this intersection. The traffic volumes are modeled as three-way (existing and future no build) and four-way (future build) stop controlled intersections. The model does not account for on-campus operations, which appear to be the cause of the queueing reported by the neighborhood. Since the issue appears to be due to on-campus stacking, physical improvements at this intersection would not improve the queueing concerns reported by the neighborhood. <u>It is recommended that the school revisit the existing traffic management plan and explore additional options for on-campus stacking.</u>

The proposed Hillcrest Farm development connects Zoo Parkway to this intersection, thus providing an opportunity for vehicles coming from Zoo Parkway to bypass Newbern Avenue, potentially decreasing queues on Newbern Avenue. The site access should be designed in accordance with applicable NCDOT standards. No other improvements are recommended.

Table 5.3 - LOS and Queueing Analysis for Newbern Avenue at Teachey School Access/Site Access 2

AM Peak Hour					
Scenario	**Overall LOS**	**Level of Service (Delay) per Movement & by Approach (Delay in seconds/vehicle)**			
		Eastbound	**Westbound**	**Northbound**	**Southbound**
2023 Existing	B (14.0) NB Approach	LR		LT	TR
		B (10.2)		B (14.0)	A (9.6)
	Available Storage (ft)	FULL		FULL	FULL
	95th% Queue (ft)	35		88	28
	Max Queue (ft)	53		89	72
2031 NoBuild	C (16.2) NB Approach	LR		LT	TR
		B (10.9)		C (16.2)	B (10.4)
	Available Storage (ft)	FULL		FULL	FULL
	95th% Queue (ft)	43		110	33
	Max Queue (ft)	74		99	78
2031 Build	C (19.6) NB Approach	LTR	LTR	LTR	LTR
		B (12.3)	B (10.2)	C (19.6)	B (11.7)
	Available Storage (ft)	FULL	FULL	FULL	FULL
	95th% Queue (ft)	53	13	135	38
	Max Queue (ft)	72	52	74	79

Table 5.3 (continued) - LOS and Queueing Analysis for Newbern Avenue at Teachey School Access/Site Access 2					
PM Peak Hour					
Scenario	Overall LOS	Level of Service (Delay) per Movement & by Approach (Delay in seconds/vehicle)			
		Eastbound	Westbound	Northbound	Southbound
2023 Existing	A (7.5) EB Approach	LR		LT	TR
		A (7.5)		A (7.3)	A (6.7)
	Available Storage (ft)	FULL		FULL	FULL
	95th% Queue (ft)	5		3	3
	Max Queue (ft)	50		31	46
2031 NoBuild	A (7.5) EB Approach	LR		LT	TR
		A (7.5)		A (7.3)	A (6.7)
	Available Storage (ft)	FULL		FULL	FULL
	95th% Queue (ft)	5		3	3
	Max Queue (ft)	47		30	48
2031 Build	A (7.9) EB Approach	LTR	LTR	LTR	LTR
		A (7.9)	A (7.3)	A (7.4)	A (7.6)
	Available Storage (ft)	FULL	FULL	FULL	FULL
	95th% Queue (ft)	10	5	3	8
	Max Queue (ft)	53	53	27	31

US 220 Business at Charles Avenue (unsignalized)

The worst LOS of the approaches is the westbound approach. In the AM and PM peak hours, this approach operates at LOS C in existing conditions. In the PM peak hour, this approach continues to operate at LOS C in future no build and future build conditions. In the AM peak hour, this approach operates at LOS D under future no build conditions and LOS E under future build conditions with less than one minute delay per vehicle in both peak hours. These delays are common for minor street approaches at a major roadway such as US 220 Business during peak hours and are not anticipated during typical off-peak times. There is an existing two-way left-turn lane along US 220 Business which serves the southbound left-turn movement. No improvements are recommended.

Table 5.4 - LOS and Queueing Analysis for US 220 Business at Charles Avenue						
AM Peak Hour						
Scenario	**Overall LOS**	**Level of Service (Delay) per Movement & by Approach (Delay in seconds/vehicle)**				
		Westbound		**Northbound**	**Southbound**	
2023 Existing	C (24.7) WB Approach	LR		TR	L	T
		C (24.7)		A (0.0)	A (0.6)	
	Available Storage (ft)	FULL		FULL	350	FULL
	95th% Queue (ft)	48		0	3	0
	Max Queue (ft)	139		0	28	0
2031 NoBuild	D (30.9) WB Approach	LR		TR	L	T
		D (30.9)		A (0.0)	A (0.6)	
	Available Storage (ft)	FULL		FULL	350	FULL
	95th% Queue (ft)	65		0	3	0
	Max Queue (ft)	122		0	53	0
2031 Build	E (42.0) WB Approach	LR		TR	L	T
		E (42.0)		A (0.0)	A (0.7)	
	Available Storage (ft)	FULL		FULL	350	FULL
	95th% Queue (ft)	105		0	5	0
	Max Queue (ft)	115		0	53	0
PM Peak Hour						
2023 Existing	C (16.7) WB Approach	LR		TR	L	T
		C (16.7)		A (0.0)	A (0.6)	
	Available Storage (ft)	FULL		FULL	350	FULL
	95th% Queue (ft)	10		0	3	0
	Max Queue (ft)	53		0	53	0
2031 NoBuild	C (18.4) WB Approach	LR		TR	L	T
		C (18.4)		A (0.0)	A (0.6)	
	Available Storage (ft)	FULL		FULL	350	FULL
	95th% Queue (ft)	13		0	5	0
	Max Queue (ft)	73		0	53	0
2031 Build	C (23.6) WB Approach	LR		TR	L	T
		C (23.6)		A (0.0)	A (0.9)	
	Available Storage (ft)	FULL		FULL	350	FULL
	95th% Queue (ft)	25		0	5	0
	Max Queue (ft)	95		22	55	0

Wildlife Way at Zoo Connecter (unsignalized)

The worst LOS of the approaches is the southbound approach. In the AM peak hour, this approach operates at LOS A in existing, future no build, and future build conditions. In the PM peak hour, this approach operates at LOS B in all conditions. There are exclusive southbound left- and right-turn lanes and an existing eastbound left-turn lane. No improvements are recommended.

Table 5.5 - LOS and Queueing Analysis for Wildlife Way at Zoo Connector						
AM Peak Hour						
Scenario	**Overall LOS**	**Level of Service (Delay) per Movement & by Approach (Delay in seconds/vehicle)**				
		Eastbound		**Westbound**	**Southbound**	
2023 Existing	A (9.2) SB Approach	L	T	TR	L	R
		A (1.8)		A (0.0)	A (9.2)	
	Available Storage (ft)	525	FULL	FULL	250	FULL
	95th% Queue (ft)	3	0	0	5	5
	Max Queue (ft)	24	0	0	22	56
2031 NoBuild	A (9.3) SB Approach	L	T	TR	L	R
		A (1.9)		A (0.0)	A (9.3)	
	Available Storage (ft)	525	FULL	FULL	250	FULL
	95th% Queue (ft)	3	0	0	5	5
	Max Queue (ft)	24	0	0	20	56
2031 Build	A (9.8) SB Approach	L	T	TR	L	R
		A (2.4)		A (0.0)	A (9.8)	
	Available Storage (ft)	525	FULL	FULL	250	FULL
	95th% Queue (ft)	3	0	0	10	8
	Max Queue (ft)	29	0	0	38	37
PM Peak Hour						
2023 Existing	B (10.3) SB Approach	L	T	TR	L	R
		A (5.7)		A (0.0)	B (10.3)	
	Available Storage (ft)	525	FULL	FULL	250	FULL
	95th% Queue (ft)	3	0	0	5	3
	Max Queue (ft)	29	0	0	34	38
2031 NoBuild	B (11.2) SB Approach	L	T	TR	L	R
		A (6.1)		A (0.0)	B (11.2)	
	Available Storage (ft)	525	FULL	FULL	250	FULL
	95th% Queue (ft)	5	0	0	13	8
	Max Queue (ft)	53	0	22	45	28
2031 Build	B (12.8) SB Approach	L	T	TR	L	R
		A (6.9)		A (0.0)	B (12.8)	
	Available Storage (ft)	525	FULL	FULL	250	FULL
	95th% Queue (ft)	8	0	0	23	10
	Max Queue (ft)	53	0	41	44	56

Zoo Parkway at Site Access 1 (unsignalized)

Under future build conditions, the minor-street approach is expected to operate at LOS B in the AM and PM peak hours. The need for left- and right-turn lanes was reviewed based on the NCDOT *Policy on Street and Driveway Access to North Carolina Highways*. Based on projected volumes, a northbound left-turn lane with 100 feet of storage with appropriate deceleration and taper is warranted. The site access should be designed in accordance with applicable NCDOT standards.

Table 5.6 - LOS and Queueing Analysis for Zoo Parkway at Site Access 1

Scenario	Overall LOS	Level of Service (Delay) per Movement & by Approach (Delay in seconds/vehicle)			
		Eastbound	Northbound		Southbound
AM Peak Hour					
2031 Build	B (11.1) EB Approach	LR	[redacted]	LT	TR
		B (11.1)		A (0.7)	A (0.0)
	Available Storage (ft)	FULL		FULL	FULL
	95th% Queue (ft)	15		3	0
	Max Queue (ft)	73		54	0
2031 Build IMP with NBL	B (11.1) EB Approach	LR	L	T	TR
		B (11.1)		A (0.7)	A (0.0)
	Available Storage (ft)	FULL	100	FULL	FULL
	95th% Queue (ft)	15	3	0	0
	Max Queue (ft)	62	32	0	2
PM Peak Hour					
2031 Build	B (14.5) EB Approach	LR	[redacted]	LT	TR
		B (14.5)		A (1.7)	A (0.0)
	Available Storage (ft)	FULL		FULL	FULL
	95th% Queue (ft)	15		8	0
	Max Queue (ft)	68		90	0
2031 Build IMP with NBL	B (14.4) EB Approach	LR	L	T	TR
		B (14.4)		A (1.7)	A (0.0)
	Available Storage (ft)	FULL	100	FULL	FULL
	95th% Queue (ft)	15	8	0	0
	Max Queue (ft)	70	55	0	0

6.0 Sight Distance

A field investigation was conducted to evaluate the horizontal and vertical alignment and determine if the available sight distance in each direction from the proposed site access on Zoo Parkway meets the minimum requirements. Site Access 2 is a proposed connection that creates a four-way stop, so, sight distance was not reviewed at this location. Sight distance requirements are based on the AASHTO *Policy on Geometric Design of Highways and Streets* and NCDOT *Policy on Street and Driveway Access to North Carolina Highways* standards. Zoo Parkway has a posted speed limit of 45 mph near the proposed site access. A design speed of 50 mph (speed limit plus 5 mph) was used to determine the stopping sight distance (SSD) and intersection sight distance (ISD). Table 6 summarizes the measured and required sight distance at the given speeds.

Based on the proposed driveway location on Zoo Parkway, the required stopping sight distance is met in both directions. The required intersection sight distance is met from the site access approach looking south. The intersection sight distance is not met looking north. The speed limit transitions from 35 mph to 45 mph, just north of the proposed site access location. There is potential that southbound vehicles may be traveling slower than the 45 mph speed limit approaching the site access due to this speed limit transition. The speed limit transition occurs south of Brownmire Drive, where the majority of residential development is currently located along Zoo Parkway, to 45 mph south of Brownmire Drive. The Hillcrest Farm development will extend the location of residential homes south along Zoo Parkway. NCDOT could consider shifting the 35 to 45 mph speed limit transition further south on Zoo Parkway to encompass the proposed site access. The required intersection sight distance for a 35 mph speed zone is 335 feet, with the design intersection sight distance (speed limit plus 5 mph) being 445 feet, which would allow intersection sight distance to the north to be met. Both site accesses should also be designed to ensure adequate sight distance and freedom from obstructions along the line of sight.

Table 6 – Sight Distance Review

Direction	Measured SSD*	AASHTO Required SSD	Measured ISD*	AASHTO Required ISD at 50 mph	AASHTO Required ISD at 40 mph
Zoo Parkway and Site Access 1					
NB Zoo Parkway Approach	655 feet	425 feet	--	--	
SB Zoo Parkway Approach	455 feet	425 feet	--	--	
EB Site Approach Looking North (Right Turn)	--	--	455 feet	480 feet	385 feet
EB Site Approach Looking South (Left Turn)	--	--	655 feet	555 feet	445 feet

**SSD: Stopping Sight Distance*
ISD: Intersection Sight Distance

7.0 Summary and Conclusion

The proposed Hillcrest Farm development is located west of Zoo Parkway and south of Newbern Avenue in Asheboro, NC. It will consist of 282 single family homes and 64 townhomes. Two full movement access points are proposed, one on Zoo Parkway and one that will become the fourth leg to the intersection at Newbern Avenue/Eldorado Road and the Teachey Elementary School parking lot. The expected build-out year for this development is 2031. Information regarding the property was provided by FitzComm Commercial Realty and Summey Engineering.

The Transportation Impact Analysis (TIA) was performed based on the scope agreed upon with NCDOT. This site has a trip generation potential of 3,056 daily trips, 219 trips in the AM peak hour, and 297 trips in the PM peak hour.

In conclusion, this study has determined the potential traffic impacts of this development. Improvements are recommended to accommodate the impacts of new development traffic. Table 7.1 summarizes the recommended improvements, which are also reflected in Figure 9. With the recommended improvements in place, the anticipated transportation impacts of the proposed development can be accommodated.

Table 7.1 – Summary of Recommended Improvements

INTERSECTION	RECOMMENDATIONS
Zoo Parkway and Newbern Avenue	• No improvements recommended.
Newbern Avenue and Teachey Elementary School parking lot and Future Site Access 2	• No improvements recommended.
US 220 Business and Charles Avenue	• No improvements recommended.
Wildlife Way and Zoo Connector	• No improvements recommended.
Zoo Parkway and Site Access 1	• Install a northbound left-turn lane with 100 feet of storage plus appropriate deceleration and taper. • Design site drive according to applicable NCDOT and/or local standards.

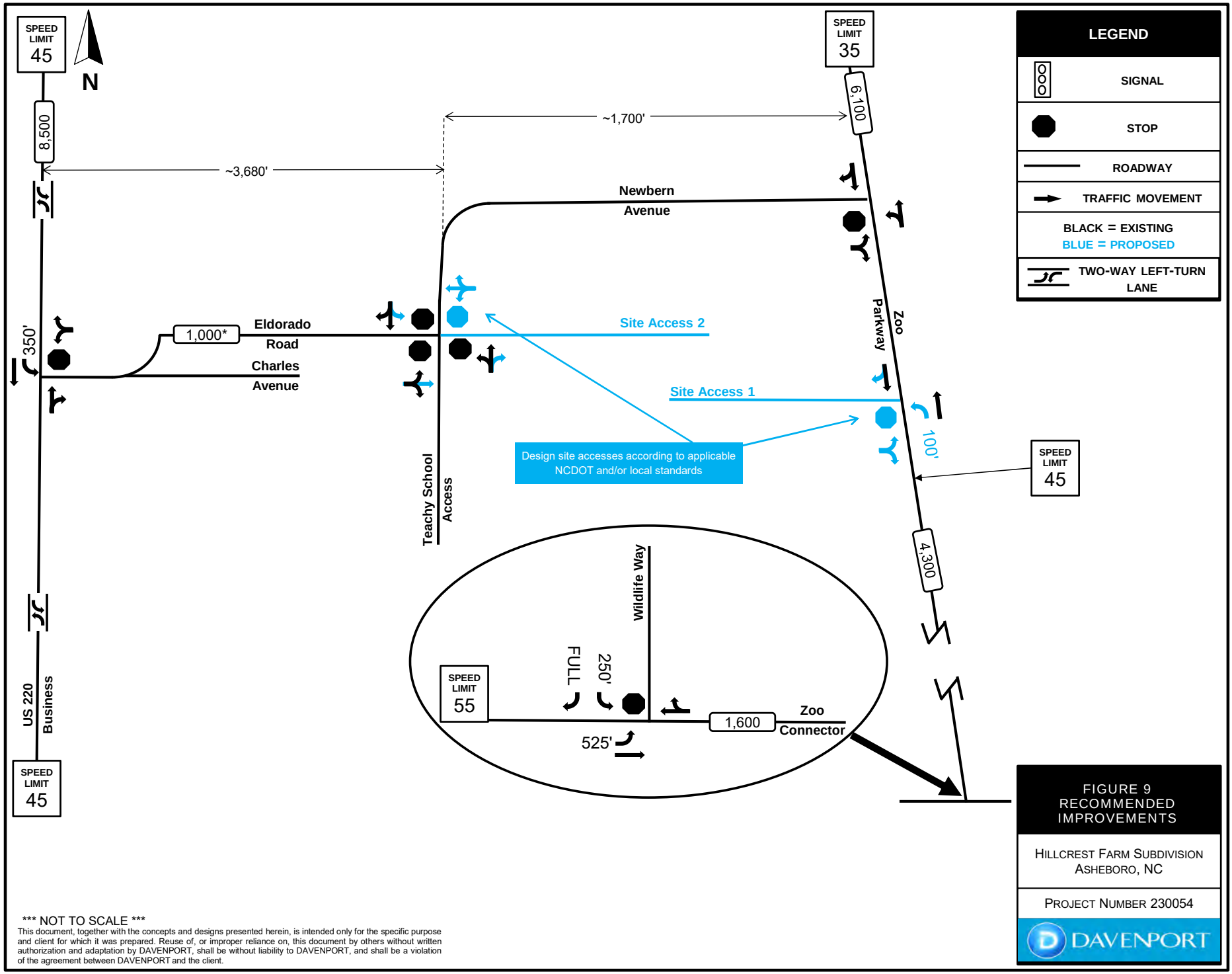

FIGURE 9
RECOMMENDED IMPROVEMENTS

HILLCREST FARM SUBDIVISION
ASHEBORO, NC

PROJECT NUMBER 230054

DAVENPORT

*** NOT TO SCALE ***

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of, or improper reliance on, this document by others without written authorization and adaptation by DAVENPORT, shall be without liability to DAVENPORT, and shall be a violation of the agreement between DAVENPORT and the client.

Appendix

Approved Scoping Documents

From:	Kimes, Tyler J
To:	AJ Anastopoulo
Cc:	Monroe, Roosevelt J; Britt, Jennifer L
Subject:	RE: [External] RE: Hillcrest Farm TIA Scoping Packet
Date:	Tuesday, September 19, 2023 11:58:31 AM
Attachments:	image001.png image002.png image003.png image004.png image005.png Zoo City Sportsplex Trip Generation.pdf

---

AJ,

Yes that intersection is correct.

Thank you for mentioning that, we did notice that no future developments are being considered in the study. We believe the 1% growth rate over the next 8 years should cover that added traffic generated from some smaller projects we have approved in the area (ex. 264 trips per day development on Crestview Church Rd roughly 400' from the intersection with Zoo Parkway). However, we do have a TIA for the City's sports complex on Zoo Parkway we would like for you to add on top of the 1% growth rate (I have attached it above). That is the only TIA we have approved in the area so far.

Thanks!

Tyler Kimes
Transportation Engineering Associate
NCDOT Highway Division 8
District 1 - District Office

336-318-4000
Tjkimes@ncdot.gov

300 DOT Drive
Asheboro, NC 27205

From: AJ Anastopoulo <AAnastopoulo@davenportworld.com>
Sent: Tuesday, September 19, 2023 11:19 AM
To: Kimes, Tyler J <tjkimes@ncdot.gov>
Cc: Monroe, Roosevelt J <rjmonroe@ncdot.gov>; Britt, Jennifer L <jlbritt@ncdot.gov>
Subject: RE: [External] RE: Hillcrest Farm TIA Scoping Packet

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Thank you for the response. I just want to confirm the intersection Zoo Parkway and Zoo Connector is the intersection shown below:

It appears to be referred to as Wildlife Way at Zoo Connector in Google Earth. Just want to confirm we look at the correct intersections.

As noted in the scoping packet, we do not have any approved developments considered in the study. We will get prepared to take our traffic counts and get into the analysis with the additional intersections included.

Thank you,

AJ Anastopoulo, P.E. | Project Manager
DAVENPORT
d (910) 338-0743
www.davenportworld.com

— Celebrating 20 years | est. 2002 —

From: Kimes, Tyler J <tjkimes@ncdot.gov>
Sent: Tuesday, September 19, 2023 9:29 AM
To: AJ Anastopoulo <AAnastopoulo@davenportworld.com>
Cc: Monroe, Roosevelt J <rjmonroe@ncdot.gov>; Britt, Jennifer L <jlbritt@ncdot.gov>
Subject: RE: [External] RE: Hillcrest Farm TIA Scoping Packet

Good morning AJ,

We have reviewed the above subject and have the following comments:

- We believe the distribution leaving the site onto Newbern Rd will be more along the line of 20% using Charles Ave and 20% taking Zoo Parkway
- We project more traffic coming from the south on Zoo Parkway rather than the North (45% from South, 35% from North), utilizing 64 bypass to get home
- Since we believe the majority of vehicles will be coming from the South, we would like to have the intersection at Zoo Parkway and Zoo Connector analyzed
- Please also analyze the intersection at Charles Ave and US 220 Bus. as well.

If you have any questions or concerns, please do no hesitate to ask. We are more than welcome to set up a call to discuss if needed.

Thanks!

Tyler Kimes
Transportation Engineering Associate
NCDOT Highway Division 8
District 1 - District Office

336-318-4000
Tjkimes@ncdot.gov

300 DOT Drive
Asheboro, NC 27205

From: AJ Anastopoulo <AAnastopoulo@davenportworld.com>
Sent: Monday, September 18, 2023 9:11 AM
To: Monroe, Roosevelt J <rjmonroe@ncdot.gov>
Cc: Kimes, Tyler J <tjkimes@ncdot.gov>; Britt, Jennifer L <jlbritt@ncdot.gov>
Subject: [External] RE: Hillcrest Farm TIA Scoping Packet

CAUTION: External email. Do not click links or open attachments unless verified. Report suspicious emails with the Report Message button located on your Outlook menu bar on the Home tab.

Good morning Jeron,

I wanted to follow up on the TIA scoping package for this proposed development. Please let me know if there are any questions or comments on the scoping package. Once we receive approval on the scoping package, we

will release our traffic counts. Thank you.

AJ Anastopoulo, P.E. | Project Manager
DAVENPORT
d (910) 338-0743
www.davenportworld.com

Celebrating 20 years | est. 2002

From: AJ Anastopoulo
Sent: Friday, September 8, 2023 3:37 PM
To: Monroe, Roosevelt J <rjmonroe@ncdot.gov>
Cc: tjkimes@ncdot.gov; Britt, Jennifer L <jlbritt@ncdot.gov>
Subject: FW: Hillcrest Farm TIA Scoping Packet

Good afternoon Jeron,

It looks like I sent to the wrong email address when trying to get this to you yesterday. Attached is the NCDOT TIA checklist along with the relevant scoping packet for a proposed residential development in Asheboro. Please let me know if you all have any questions or comments on the scoping packet. If necessary, we could set up a call to discuss. Please let me know.

Thank you,

AJ Anastopoulo, P.E. | Project Manager
DAVENPORT
d (910) 338-0743
www.davenportworld.com

Celebrating 20 years | est. 2002

From: AJ Anastopoulo
Sent: Thursday, September 7, 2023 3:29 PM
To: rjmonroe@ncdot.org
Cc: 'tjkimes@ncdot.gov' <tjkimes@ncdot.gov>; Britt, Jennifer L <jlbritt@ncdot.gov>
Subject: Hillcrest Farm TIA Scoping Packet

Good afternoon Jeron,

Attached is the NCDOT TIA checklist along with the relevant scoping packet for a proposed residential development in Asheboro. Please let me know if you all have any questions or comments on the scoping packet. If necessary, we could set up a call to discuss. Please let me know.

Thank you,

AJ Anastopoulo, P.E. | Project Manager
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NCDOT Traffic Impact Analysis Need Screening / Scoping Request

TIA Need Screening → TIA Scoping → TIA Submittal

A Traffic Impact Analysis (TIA) may be required for developments based on the site trip generation estimates, site context, or at the discretion of the NCDOT District Engineer. The Applicant or the TIA Consultant shall submit this form along with the site plan to the District Engineer to determine the TIA need and, if a TIA is required, initiate the TIA scoping process. Without an approved scope, the TIA is incomplete and will be rejected until the study is revised to conform to NCDOT's TIA requirements.

Project Name: Hillcrest Farm Subdivision **Previous Name:** If Applicable

Location: Asheboro, NC **County:** Randolph **Municipality:** Asheboro

Project Description: Residential development south of Newbern Avenue and west of Zoo Parkway

Project Contact:	Applicant	TIA Consultant
Company Name	FitzComm Commercial Realty	DAVENPORT
Contact Person	Jerry Fitzgerald	AJ Anastopoulo
Phone Number	980-722-1010	910-338-0743
Email	jerry@fitzcomm.net	aanastopoulo@davenportworld.com
Mailing Address	P.O. Box 3111	119 Brookstown Avenue Suite PH-1
	Matthews, NC 28106	Winston-Salem, NC 27101

Site Plan Prepared By: Summey Engineering **Site Plan Date:** August 2023

See site plan/vicinity map requirements on page 2.

Parcel Size: 94.27 Acre(s) **Anticipated Build-Out Year:** 2031

Weekday Site Trip Generation - Do NOT adjust for mode split, pass-by, internal capture, or diverted trips.

ITE LUC	Proposed Land Use	Size	Unit	Daily Trips	Peak Hour Type	AM Peak Hour Trips			PM Peak Hour Trips			Data Source
						Enter	Exit	Total	Enter	Exit	Total	
210	Single-Family Det	282	DU	2619	Adj. Street	48	143	191	166	97	263	ITE Equation
215	Single-Family Attac	64	DU	437	Adj. Street	7	21	28	20	14	34	ITE Equation
Total		346		3056		55	164	219	186	111	297	

Refer to the current *NCDOT Congestion Management Capacity Analysis Guidelines* for acceptable trip calculation methods and data sources.

**Explain local or other data sources, if used:

☒ The estimated site trips meet NCDOT's TIA trip threshold of 3,000 daily trips.

☐ The estimated site trips meet the municipal TIA trip threshold of

☐ This project is located in a known STIP and/ or local CIP project #

☐ This project includes a rezoning request.

☐ The proposed site access is located within 1,000 feet of an interchange.

☐ The Applicant requests for a new or modified control-of-access break.

☐ The Applicant requests for a new or modified median break.

Applicant's Signature	Print Name	Date

Site Plan/Vicinity Map Requirement for TIA Need Screening: 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, proposed buildings/parcels with their anticipated uses and sizes at full build-out and, if applicable, any nearby interstate, US, NC or Secondary Roads (SR).

Project Name: Hillcrest Farm Subdivision **Project Reference Number:** 230054

☐ **A TIA is Required by the Local Government.** In addition, the study area is expected to include NCDOT maintained transportation facilities.

☒ **A TIA is Required by NCDOT,** per the *Policy on Street and Driveway Access to North Carolina Highways*.

If either or both of the boxes above are checked, the Applicant/TIA Consultant is hereby requested to fill out as much as possible of the following TIA scoping checklist, and return it along with the supporting documents to NCDOT prior to the scoping meeting.

☐ **A TIA is NOT required**. This decision is based on the development information presented above. Changes in the development plan will require re-evaluation of the TIA need, and may necessitate a TIA. The Applicant should inform the District Engineer of any significant changes in a timely fashion to avoid delays or rejections of the driveway permit / encroachment agreement applications.

Additional Comments:

The TIA need decision is made by the NCDOT Division __8__ District__1__ on _____.

_____ _____

NCDOT District Representative's Signature Print Name

Email concurrence may be used in lieu of the signature.

NCDOT TIA Scoping Checklist

TIA Need Screening → TIA Scoping → TIA Submittal

Project Name: Hillcrest Farm Subdivision **TIA Scoping Date:** 9/6/23

☒ **TIA Need Screening Forms are Attached.** Project Reference #: 230054 Decision Date: _____

☒ **Site Plan and Access**

☒ Provide a site plan illustrating site access, internal and external roadways, buildings and land uses.

Refer to NCDOT's *Policy on Street and Driveway Access to North Carolina Highways* pages 14 and 15 for site plan requirements.

☒ Identify site access.

New Access	On Road	Access Type		Driveway Spacing		
	Road Name	Permitted Movements	Traffic Control	Distance (ft)	Direction	Nearest Intersection / Access
Access A	Newbern Avenue	Conventional Full-Mvmt	All-Way Stop	380	East	Teachey School Dr
Access B	Zoo Parkway	Conventional Full-Mvmt	2-Way Stop	900	North	Rockcliff Terrace
Access C						
Access D						
Access E						
Access F						
Access G						
Access H						

Existing Access	Existing Intersection of		Access Modification	Proposed Interconnectivity (If Applicable)		
	Road A	Road B		Connector #	Road Connected	Adjacent Development
Access 1			Please Select	Connector 1		
Access 2				Connector 2		
Access 3				Connector 3		
Access 4				Connector 4		

☐ Additional access clarifications and provisions (e.g., proposed control-of-access or median breaks, modifications of existing access, loading/unloading area access, bike/pedestrian accommodation).

☐

Proposed K-12 School Site

☐ NCDOT MSTA School Traffic Calculator for Select School Type shall be used.

☐ Peak Hour Factors (PHFs) shall be adjusted/weighted for new school trips (0.5 PHF by default).

☐ Internal school circulation analysis is required, and should be submitted in advance or concurrent with the TIA submittal.

☐ Clarify traffic operation plans (e.g. traffic circulation pattern, pedestrian access, drop-off/pick-up zone location and configuration, queue storage area and, if applicable, staggered start times).

☒ Trip Generation

The TIA Consultant shall prepare trip generation estimates following the current *NCDOT Congestion Management Capacity Analysis Guidelines*, and submit the calculation sheets and supporting information to the District Engineer for approval prior to capacity analysis.

ITE LUC	Proposed Land Use	Size	Unit	Daily Trips	Peak Hour Type	AM Peak Hour Trips			PM Peak Hour Trips			Data Source
						Enter	Exit	Total	Enter	Exit	Total	
210	SF Detached	282	DU	2619	Adj. Street	48	143	191	166	97	263	ITE Equation
215	SF Attached	64	DU	437	Adj. Street	7	21	28	20	14	34	ITE Equation
Unadjusted Site Trips				3056		55	164	219	186	111	297	
Internal Capture Trips (Attach Calculation Sheets)												Please Select
Internal Capture % of Unadjusted Site Trips				%		%			%			
LUC	Proposed Land Use	Any Internal Trips?		Pass-By % of External Trips								
		Please Select		%		%			%			Please Select
				%		%			%			
				%		%			%			
				%		%			%			
				%		%			%			
Pass-By Trips (Attach Calculation Sheets)												
Adjacent Street Volumes												Please Select
Non-Pass-By Primary Trips												
Diverted Trips, if Applicable and Justifiable												Please Select

**Explain local or other data sources, if used:

☐ Existing Site Trip Information for Redevelopment Projects (Attach separate sheets as needed)

ITE LUC	Existing Land Use	Size	Unit	Daily Trips	Peak Hour Type	AM Peak Hour Trips			PM Peak Hour Trips			Data Source
						Enter	Exit	Total	Enter	Exit	Total	
					Please Select							Please Select
Total Existing Site Trips												

☒ **Trip Distribution**

☒ Trip distribution diagrams are submitted concurrently with this document (attach separate sheets).

☐ Trip distribution diagrams will be submitted separately, along with supporting information, to the District Engineer for review and approval prior to capacity analysis. The trip distribution shall be based on the current and anticipated traffic patterns, as well as instructions noted below.

If required by the District Engineer, the following additional diagrams shall also be submitted:

☐ Mixed-Use Developments (separate diagrams for residential, commercial, and office trips)

☐ Inter-Development Trips (if 'internal" trips cross public streets)

☐ Pass-By Trips

☐ Diverted Trips

☐ Each Analysis Period

☐ **Mode Split**

☐ Provide Data Source and Justification

Mode / Period	Auto		
AM Peak	%	%	%
PM Peak	%	%	%
Daily	%	%	%
	%	%	%

☐ Identify proper infrastructure and accommodation for other modes of travel.

☒ **Analysis Peak Periods:**

☒ Weekday AM Peak _____

☒ Weekday PM Peak _____

☐ Weekday Midday Peak _____

☐ Weekday PM School Peak _____

☐ Weekend _____ Peak _____

☐ Other _____

☒ Study Area Intersections and Data Collection

The study area shall include the site access intersections (both new and existing) identified under "Site Plan and Access" on page 1, as well as the following external and, if applicable, internal intersections.

External Intersection	Intersection of		Traffic Control	Intersection Turning Movement Counts			Notes
	Road A	Road B		New / Existing	Date of Counts	Growth Adjustment	
#1	Zoo Parkway	Newbern Avenue	2-Way Stop	Require New Counts	TBD		
#2	Newbern Ave	Teachey School	All-Way Stop	Require New Counts	TBD		Future Access2
#3	Zoo Parkway	Site Access 1	2-Way Stop				Future Access1
#4							
#5							
#6							
#7							
#8							
#9							
#10							
#11							
#12							

Internal Intersection	Intersection of		Access Type		Intersection Spacing		
	Road A	Road B	Traffic Control	Permitted Movements	Distance (ft)	Direction	Nearest Intersection
#101			Please Select	Please Select		Please Select	
#102							
#103							
#104							
#105							

The following data will be collected:

☒ New traffic turning movement counts in ☐ 15-min intervals ☒ 5-min intervals (near schools)

Unless otherwise noted above, new traffic counts shall be collected at the existing study intersections during the analysis periods. Weekday counts shall avoid Mondays, Fridays, holidays, school breaks, road closures, and major weather events.

☐ To account for the impact of existing and/or proposed school traffic, PHFs will be adjusted for:

intersections numbered: _____

and access points numbered: _____

☐ Traffic Forecast Data for TIP: _____

☒ Roadway/Intersection Configuration & Traffic Control

☐ Traffic Signal Phasing & Timing Data

☐ Crash Data: _____ Period: _____

☐ Other:

☒ **Future Year Conditions**

☒ Project Build-Out Year: 2031

☒ Future Analysis Year(s): 2031

☐ Identify below any funded/committed future transportation improvements, as well as any approved but incomplete developments near the site.

Funded STIP / Local CIP Project	Project Description	Year Complete
N/A Please Advise		

Nearby Approved Development	Location	Future Land Use (exclude any completed phases)	Committed Improvements
N/A Please Advise			

☒ Annual Growth Factor: 1 %

Justification/Data Source: HistoricAADTs(attached)show negative growth.1% proposed to be conservative

☐ **Local Comprehensive Transportation Plan Compliance**

☐ Identify Applicable Local Transportation Planning Documents

☒ Identify Applicable Roadways inside the Study Area

Road Name	Classification	Speed Limit	Proposed Cross-Section	Proposed Right-of-Way	Compliance Requirements	Affect Study Intersection #
Zoo Parkway	NC 159	55	2 Lane			
Newbern Ave	Secondary 2919	35	2 Lane			

☒ Study Method

The traffic analysis shall follow the current *NCDOT Congestion Management Capacity Analysis Guidelines*, *Policy on Street and Driveway Access to North Carolina Highways*, and use the current approved version of analysis software (e.g. Synchro/SimTraffic, HCS, Sidra Intersection, TransModeler).

The study shall include the following analysis scenarios for each analysis period.

1. Existing Conditions
2. Future No-Build Conditions (existing + background growth + approved developments + committed or funded improvements)
3. Future Build Conditions (future no-build + site trips)
4. Future Build with Improvements Conditions (future build traffic with improvements to mitigate the proposed development's impacts) and, if applicable:

☐ 5. TIP Design Year Analysis _____

☐ 6. Alternative Access Scenario (without proposed control-of-access or median break / modification)

The following additional analysis/outputs should be provided as warranted:

- ☐ Signal Warrant Analysis for accesses/intersections _____
- ☐ Multi-Modal Level of Service Analysis
- ☐ School Loading Zone Traffic Simulation
- ☐ Phasing Analysis (scope separately as needed)
- ☐ Safety/Crash Analysis
- ☐ Control-of-Access Modification Justification
- ☐ Median Break / Modification Justification
- ☐ Other _____

☒ Submittals

In addition to the hardcopies required below, the TIA Consultant shall provide the District Engineer and, if required, the local government an electronic copy of the study documents, including the latest site plan, figures and appendices, in searchable PDF files and the original traffic analysis files (e.g., Synchro, HCS). To expedite review, the NCDOT electronic submittals shall also be delivered concurrently to:

☐ Div. Traffic Engr ☐ Regional Traffic Engr ☐ Congestion Management ☐ Other _____

Submittals	NCDOT		Local Government	
	Electronic	Hardcopy	Electronic	Hardcopy
Trip Generation & Distribution	Required		Please Select	
Draft TIA Report	Required			
Final Sealed TIA Report	Required			

☐ **Additional Comments (**municipal TIA requirements, approved variations from NCDOT guidelines)

Agreement by All Parties

The undersigned agree to the contents and methodology described above for completing the required traffic impact analysis for the proposed development identified herein. Any changes to the above methodology contemplated by the Applicant or the TIA Consultant must be submitted to the District Engineer in writing. If approved by NCDOT, then such changes may be accepted for the TIA report. Subsequent revisions to the development plan (e.g. land use, density, site access, or schedule) may require additional scoping and analysis, and may modify the TIA requirements.

This agreement shall become effective on the date approved by NCDOT, and shall expire____ months after the effective date or upon significant changes to the roadway network and/or development assumptions, whichever occurs first. Once expired, renewal or re-scoping will be required for subsequent TIA submittals.

APPLICANT

_____	_____	_____
Signature	Print Name	Date

TIA CONSULTANT

_____	AJ Anastopoulo	9/6/23
Signature	Print Name	Date

LOCAL GOVERNMENT REPRESENTATIVE (If Applicable)

_____	_____	_____
Signature	Print Name	Date

Email concurrence may be used in lieu of the signature.

NCDOT DISTRICT REPRESENTATIVE

Reviewed and approved by the NCDOT Division ____District____ on _____.

_____	_____
Signature	Print Name

Email concurrence may be used in lieu of the signature.

NCDOT TIA Submittal Checklist

TIA Need Screening → TIA Scoping → TIA Submittal

Submittal: Trip Generation & Distribution Document Date: 9/6/23

Project Name: Hillcrest Subdivision Previous Name: If Applicable

NCDOT Division: 8 District: 1 County: Randolph Municipality: Asheboro

TIA Consultant: Davenport Submitted By: AJ Anastopoulo

Phone Number: 910-338-0743 Email: Aanastopoulo@Davenportworld.Com

TIA Scoping Checklist Approval Date: _____ Unadjusted Daily Site Trips: _____

☒ The approved TIA Scoping Checklist is included in this submittal.

☒ LOS D or better is expected at all study intersections after proposed mitigations.

☒ The study report is sealed by a NC Professional Engineer with expertise in traffic engineering.

☒ This study has identified all known deficiencies with and without the proposed development.

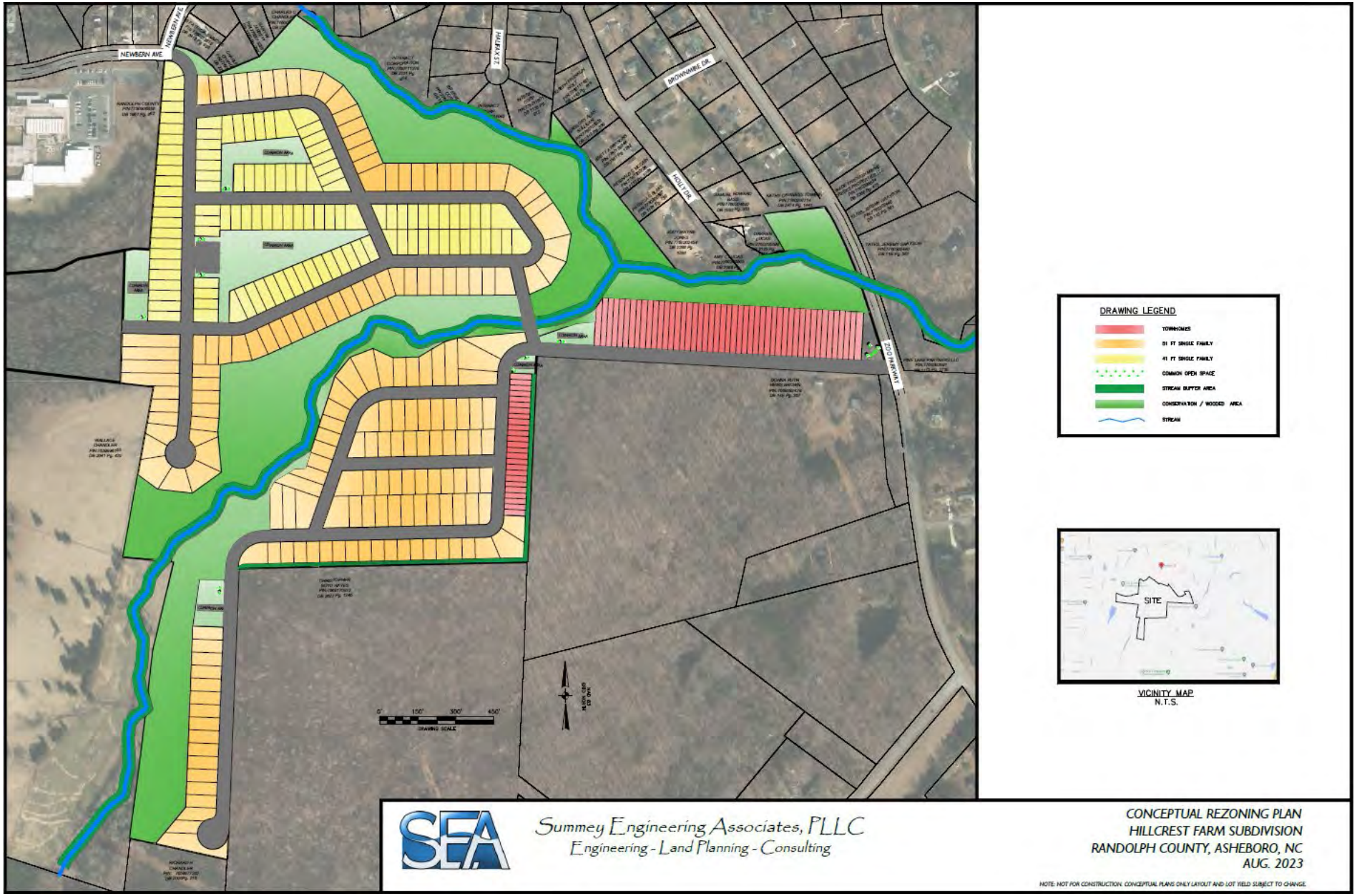
☒ This study has identified mitigation measures to adequately accommodate the site trips.

Explain here if any of the boxes above are unchecked:

The undersigned affirms that, except for the deviations noted below, the TIA submittal conforms to the current *NCDOT Congestion Management Capacity Analysis Guidelines*, *Policy on Street and Driveway Access to North Carolina Highways*, and the TIA Scoping Checklist approved by the NCDOT District Office. The undersigned also acknowledges that the TIA will be rejected if the deviations and justifications are not properly documented and approved by NCDOT.

Deviations and Justifications (e.g., changes in site plan, development schedule, site trip and off-site trip estimates, study area, data collection, analysis period and method. Attached separate sheets if needed.)

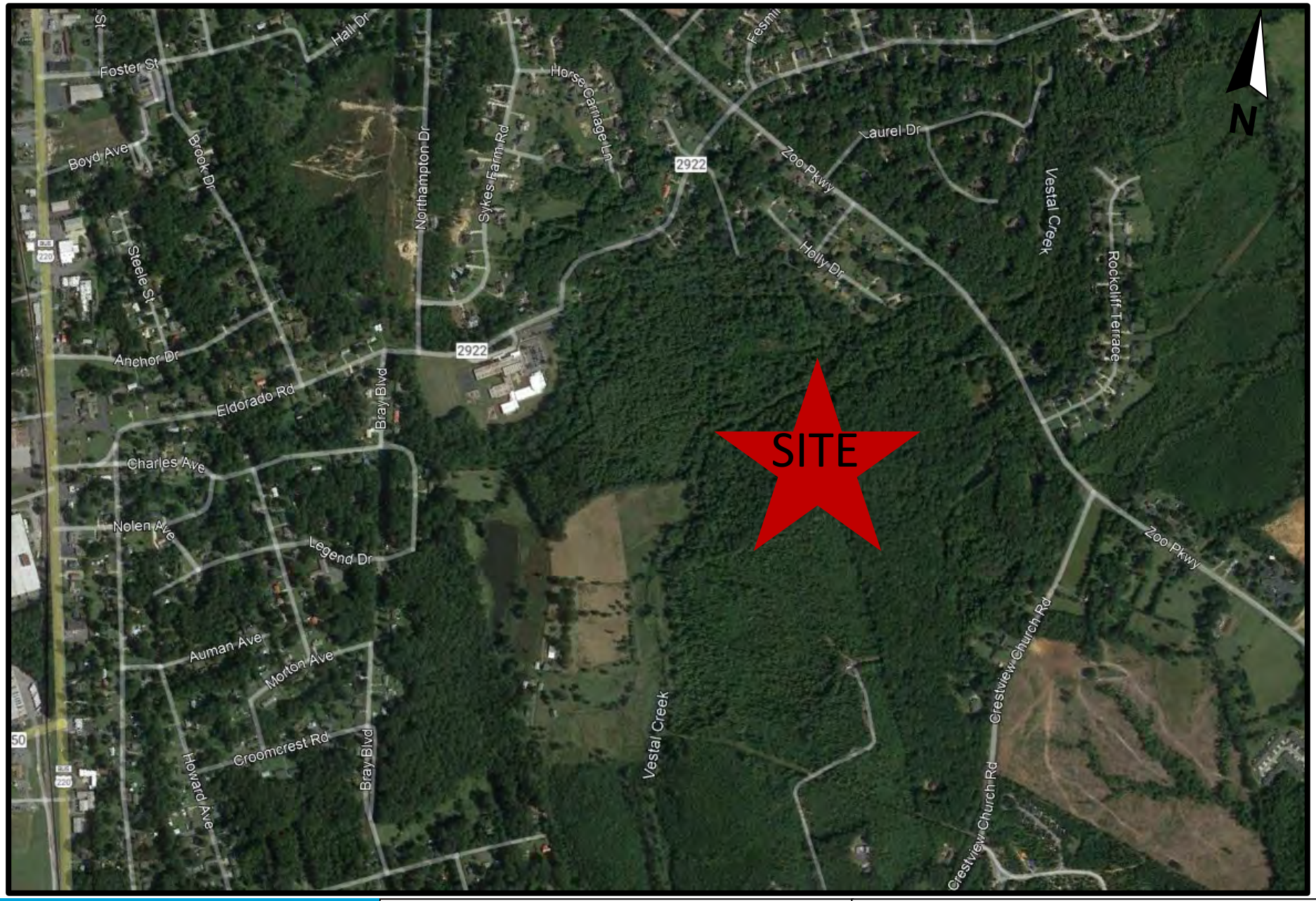
TIA Consultant's Signature (Professional Engineer of TIA Record)	Print Name	Date



DAVENPORT

FIGURE 1
CONCEPTUAL SITE PLAN

Hillcrest Subdivision
Project Number 230054



DAVENPORT

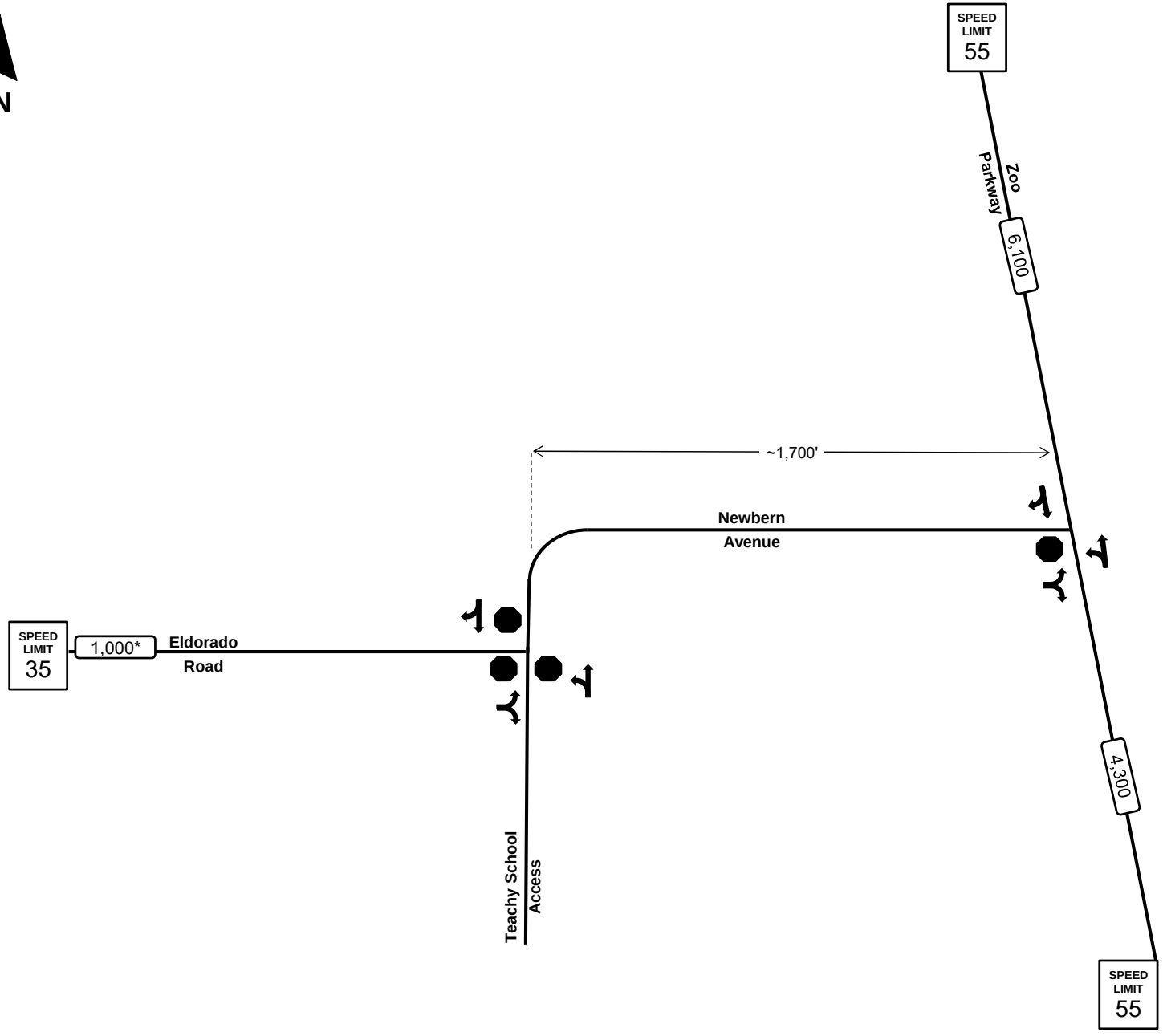
FIGURE 2A
SITE LOCATION MAP

SITE INDICATOR

DAVENPORT

FIGURE 2B
PROPOSED STUDY
INTERSECTIONS

STUDY INTERSECTIONS
EXISTING
PROPOSED



LEGEND

	SIGNAL
	STOP
	ROADWAY
	TRAFFIC MOVEMENT
BLACK = EXISTING	
XXXX	2021 AADT VOLUMES
XXXX*	2018 AADT VOLUMES

FIGURE 3
EXISTING LANE GEOMETRY

HILLCREST FARM SUBDIVISION
ASHEBORO, NC

PROJECT NUMBER 230054

DAVENPORT

*** NOT TO SCALE ***

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of, or improper reliance on, this document by others without written authorization and adaptation by DAVENPORT, shall be without liability to DAVENPORT, and shall be a violation of the agreement between DAVENPORT and the client.

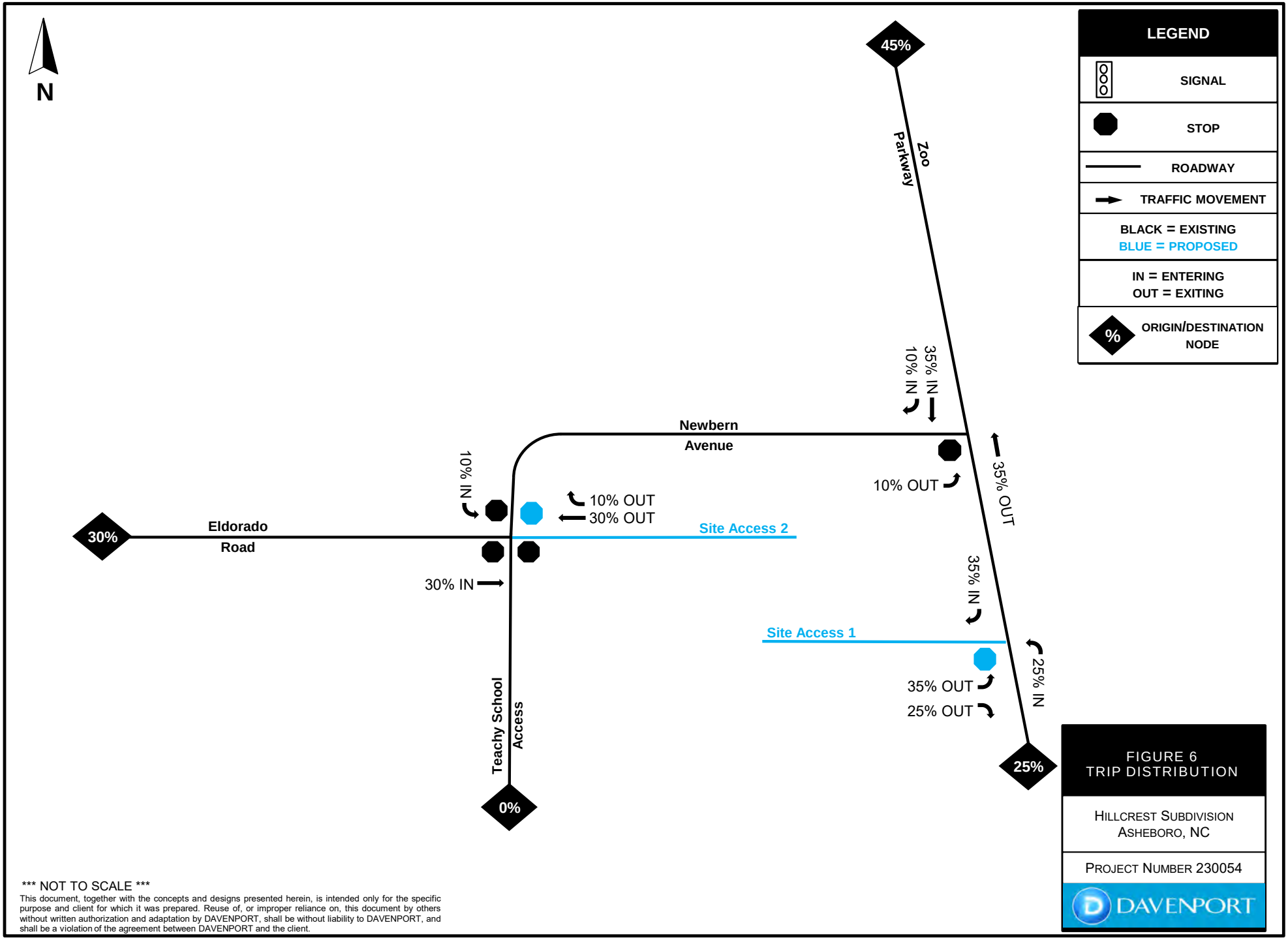


FIGURE 6
TRIP DISTRIBUTION

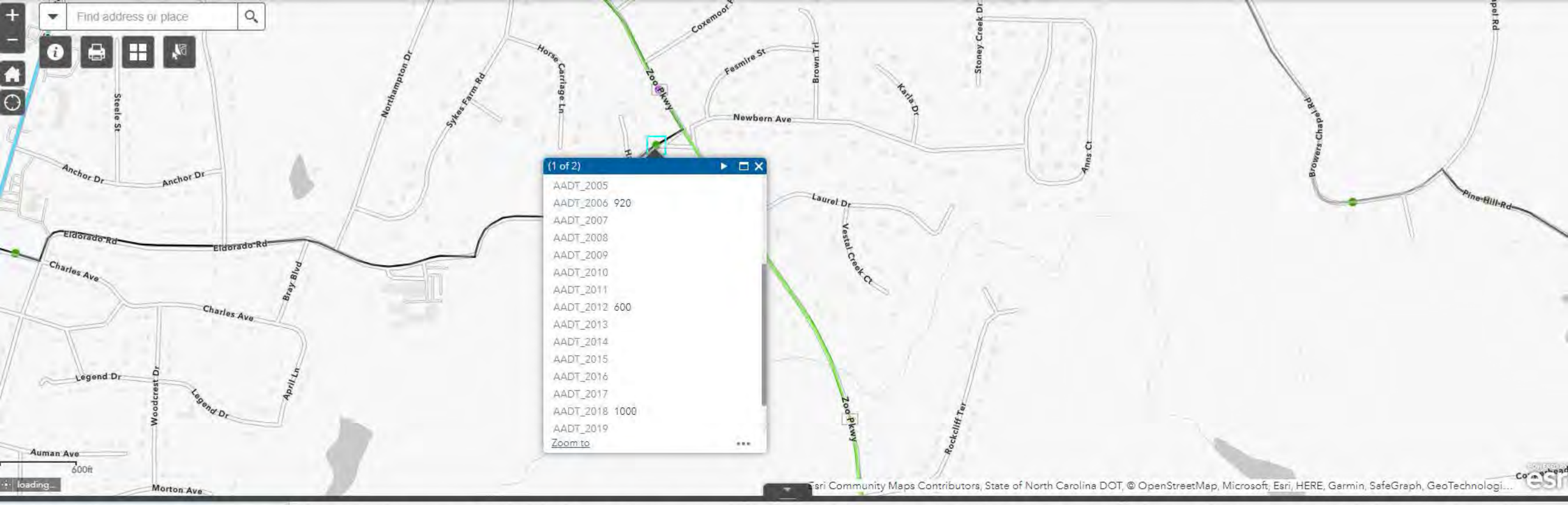
HILLCREST SUBDIVISION
ASHEBORO, NC

PROJECT NUMBER 230054

DAVENPORT

*** NOT TO SCALE ***

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of, or improper reliance on, this document by others without written authorization and adaptation by DAVENPORT, shall be without liability to DAVENPORT, and shall be a violation of the agreement between DAVENPORT and the client.

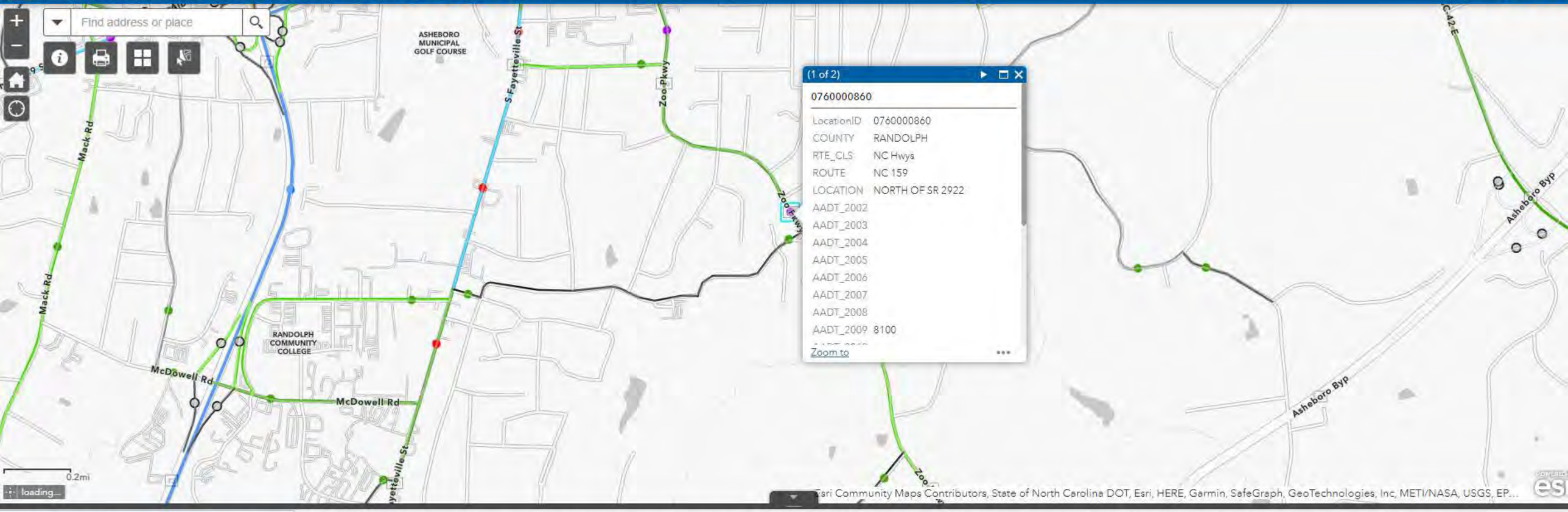


NCDOT_AADT_Traffic_Segmentation - NCDOT_AADT_Stations | NCDOT_AADT_Traffic_Segmentation - NCDOT_AADT_Traffic_Segments_Secondary_Non-System | NCDOT_AADT_Traffic_Segmentation - NCDOT_AADT_Traffic_Segments_Primaries | NCDOT_AADT_Traffic_Segmentation - NCDOT_AADT_Traffic_Segments_Interstates

Options | Filter by map extent | Zoom to | Clear selection | Refresh

AADT_2003	AADT_2004	AADT_2005	AADT_2006	AADT_2007	AADT_2008	AADT_2009	AADT_2010	AADT_2011	AADT_2012	AADT_2013	AADT_2014	AADT_2015	AADT_2016	AADT_2017	AADT_2018	AADT_2019	AADT_2020	AADT_2021
	710		920						600						1000			

NCDOT Annual Average Daily Traffic (AADT) Mapping Application



(1 of 2)

0760000860

LocationID	0760000860
COUNTY	RANDOLPH
RTE_CLS	NC Hwys
ROUTE	NC 159
LOCATION	NORTH OF SR 2922
AADT_2002	
AADT_2003	
AADT_2004	
AADT_2005	
AADT_2006	
AADT_2007	
AADT_2008	
AADT_2009	8100

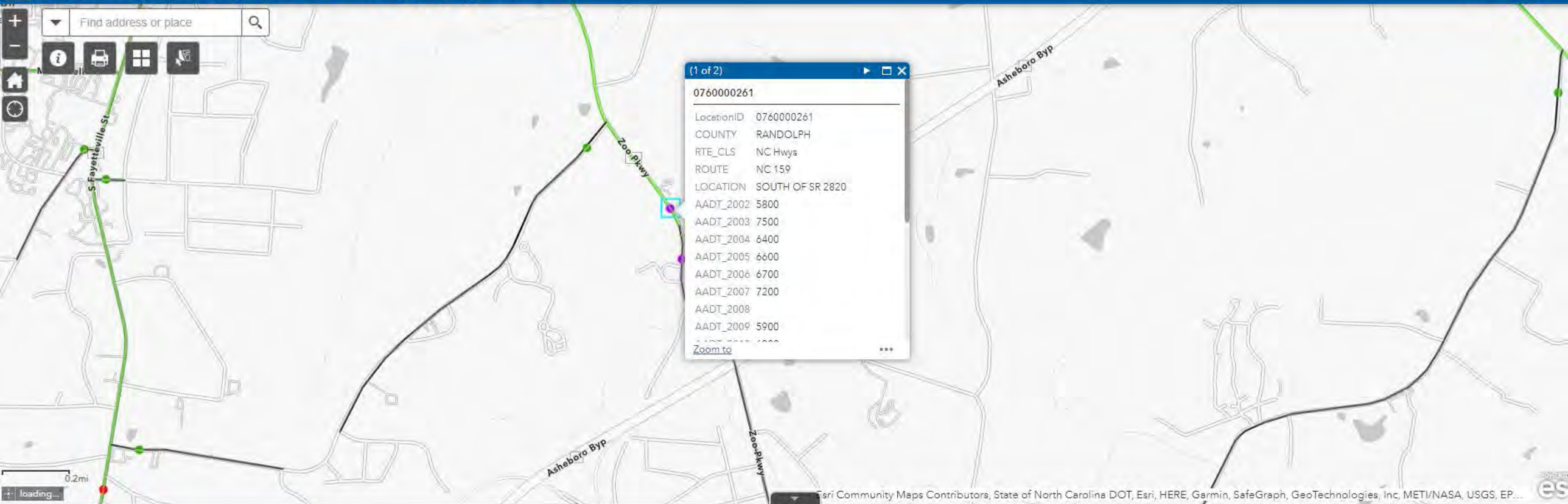
Zoom to

NCDOT_AADT_Traffic_Segmentation - NCDOT_AADT_Stations | NCDOT_AADT_Traffic_Segmentation - NCDOT_AADT_Traffic_Segments_Secondary_Non-System | NCDOT_AADT_Traffic_Segmentation - NCDOT_AADT_Traffic_Segments_Primaries | NCDOT_AADT_Traffic_Segmentation - NCDOT_AADT_Traffic_Segments_Interstates

Options | Filter by map extent | Zoom to | Clear selection | Refresh

AADT_2003	AADT_2004	AADT_2005	AADT_2006	AADT_2007	AADT_2008	AADT_2009	AADT_2010	AADT_2011	AADT_2012	AADT_2013	AADT_2014	AADT_2015	AADT_2016	AADT_2017	AADT_2018	AADT_2019	AADT_2020	AADT_2021
						8100				7300	7300		6500			7800	6700	6100

NCDOT Annual Average Daily Traffic (AADT) Mapping Application



NCDOT_AADT_Traffic_Segmentation - NCDOT_AADT_Stations | NCDOT_AADT_Traffic_Segmentation - NCDOT_AADT_Traffic_Segments_Secondary_Non-System | NCDOT_AADT_Traffic_Segmentation - NCDOT_AADT_Traffic_Segments_Primaries | NCDOT_AADT_Traffic_Segmentation - NCDOT_AADT_Traffic_Segments_Interstates

Options | Filter by map extent | Zoom to | Clear selection | Refresh

AADT_2003	AADT_2004	AADT_2005	AADT_2006	AADT_2007	AADT_2008	AADT_2009	AADT_2010	AADT_2011	AADT_2012	AADT_2013	AADT_2014	AADT_2015	AADT_2016	AADT_2017	AADT_2018	AADT_2019	AADT_2020	AADT_2021
7500	6400	6600	6700	7200		5900	6300	6100	8400	6000		6500	5900	6900		5800		4300

Table 4.2 - ITE 11th Edition Trip Generation											
Average Weekday Driveway Volumes					24-Hour Two-Way	AM Peak Hour			PM Peak Hour		
Land Use	ITE Land Use Code	Size		Data Source	Volume	Enter	Exit	Total	Enter	Exit	Total
Single-Family Detached Housing	210	282	Dwelling Units	Adjacent-Equation	2619	48	143	191	166	97	263
Single-Family Attached Housing	215	64	Dwelling Units	Adjacent-Equation	437	7	21	28	20	14	34
Total Trips					**3,056**	**55**	**164**	**219**	**186**	**111**	**297**

Query | Filter

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
210

LAND USE GROUP:
(200-299) Residential

LAND USE :
210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

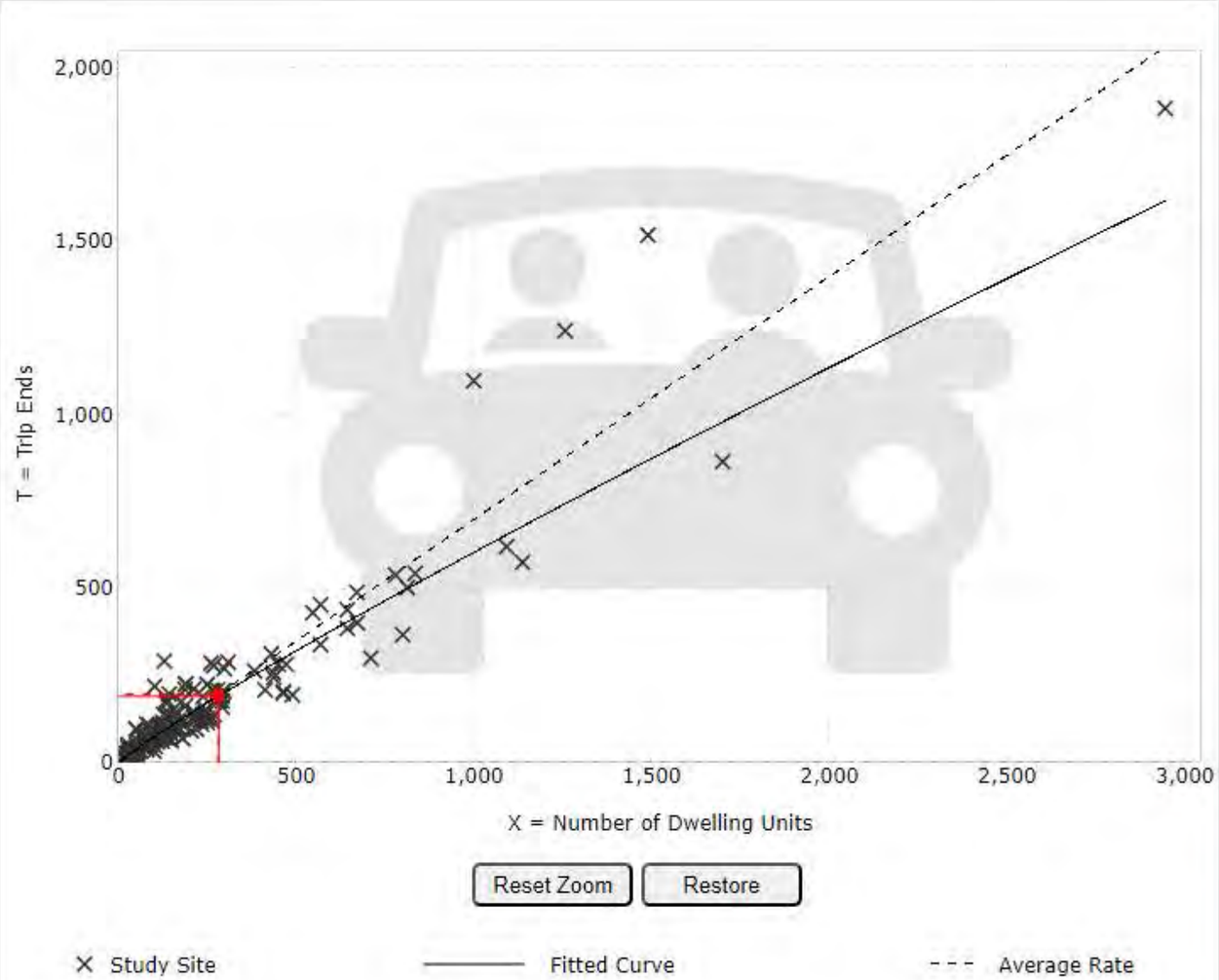
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
282 Calculate

Data Plot and Equation



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:
Single-Family Detached Housing (210) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
192

Avg. Num. of Dwelling Units:
226

Average Rate:
0.70

Range of Rates:
0.27 - 2.27

Standard Deviation:
0.24

Fitted Curve Equation:
$Ln(T) = 0.91\ Ln(X) + 0.12$

R^2:
0.90

Directional Distribution:
25% entering, 75% exiting

Calculated Trip Ends:
Average Rate: 197 (Total), 49 (Entry), 148 (Exit)
Fitted Curve: 191 (Total), 48 (Entry), 143 (Exit)

Query Filter

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
210

LAND USE GROUP:
(200-299) Residential

LAND USE :
210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

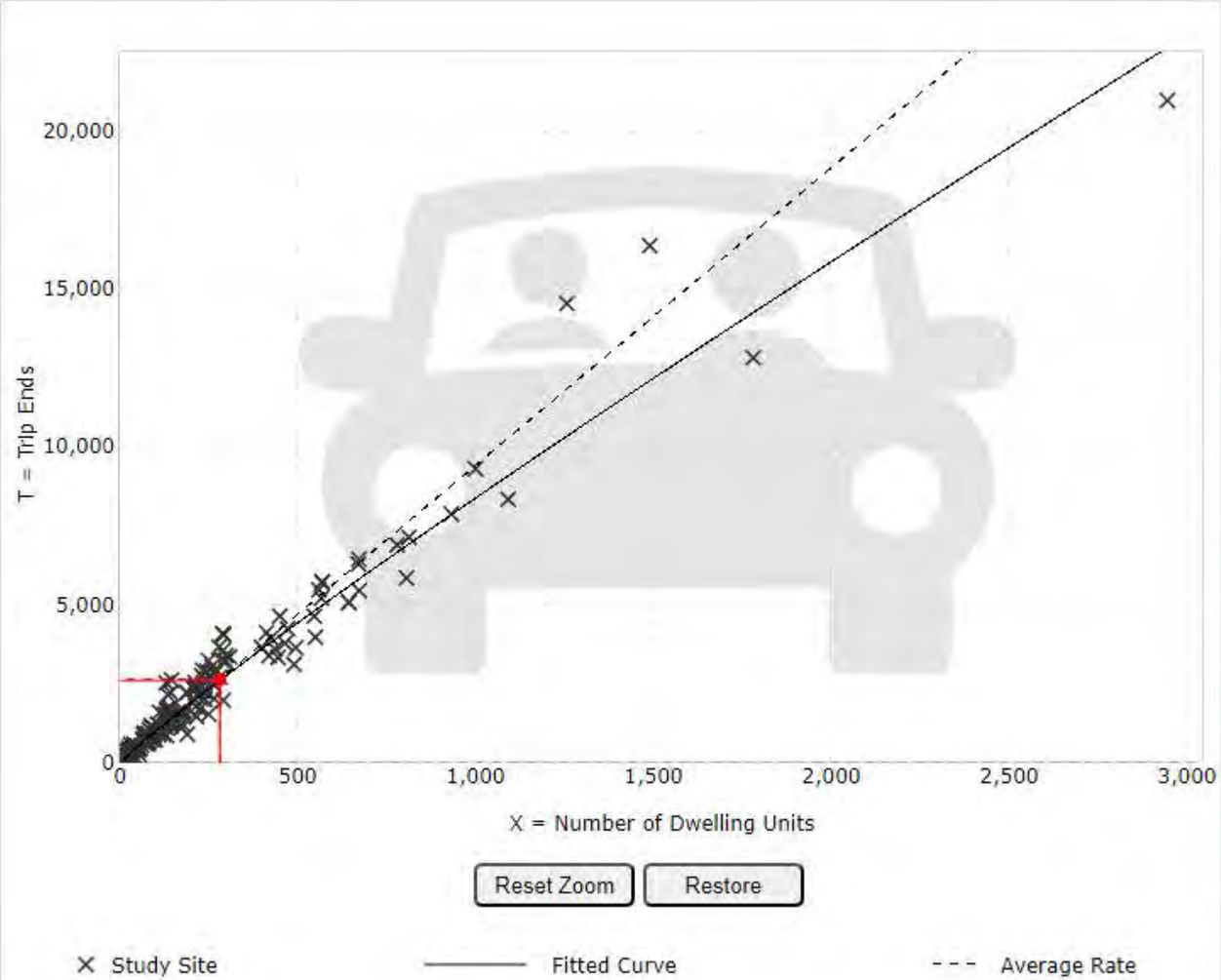
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
282 Calculate

Data Plot and Equation



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:
Single-Family Detached Housing (210) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
174

Avg. Num. of Dwelling Units:
246

Average Rate:
9.43

Range of Rates:
4.45 - 22.61

Standard Deviation:
2.13

Fitted Curve Equation:
$Ln(T) = 0.92\ Ln(X) + 2.68$

R^2:
0.95

Directional Distribution:
50% entering, 50% exiting

Calculated Trip Ends:
Average Rate: 2659 (Total), 1330 (Entry), 1329 (Exit)
Fitted Curve: 2619 (Total), 1310 (Entry), 1309 (Exit)

Query | Filter

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
210

LAND USE GROUP:
(200-299) Residential

LAND USE :
210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

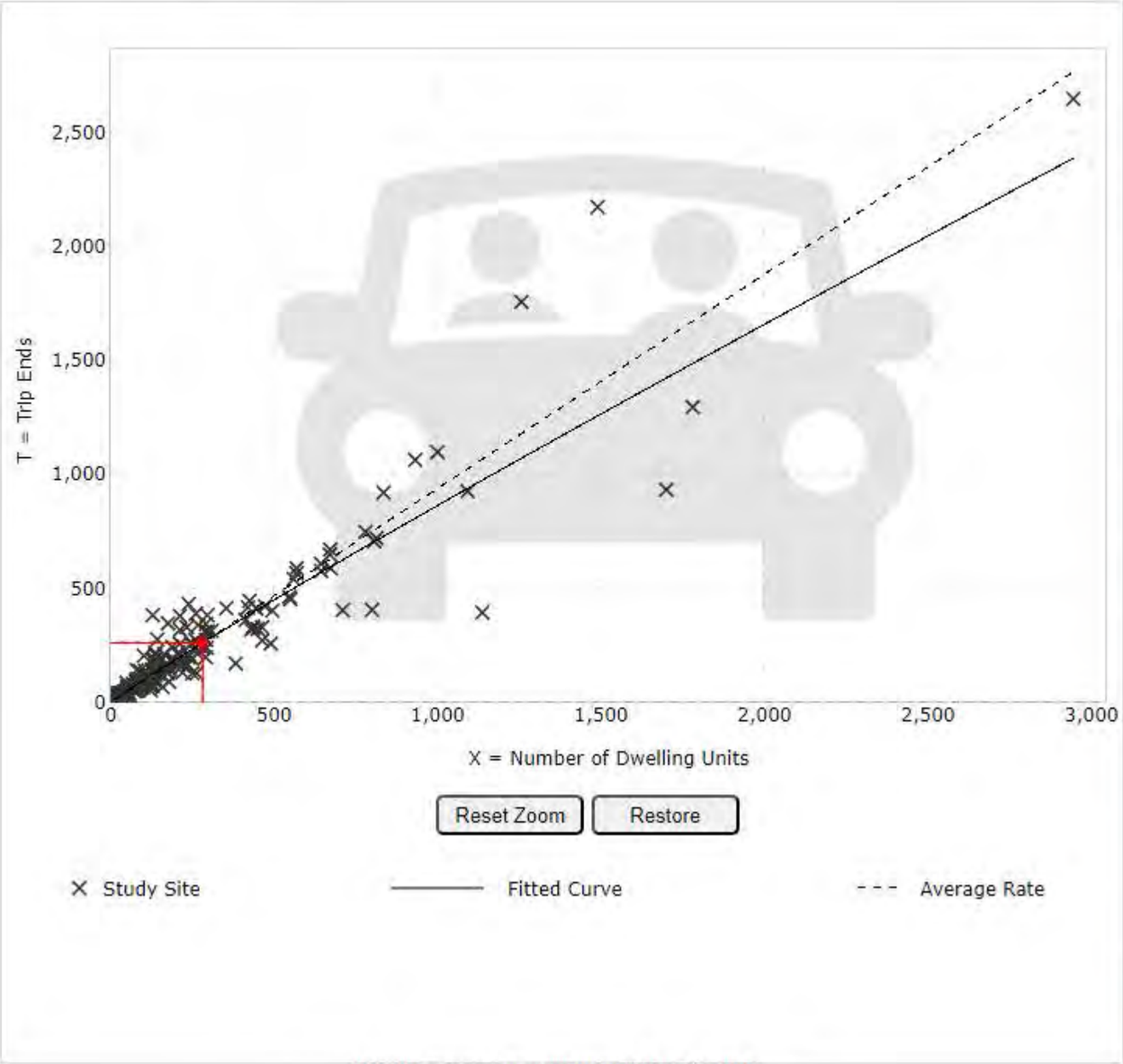
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
282 Calculate

Data Plot and Equation



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:
Single-Family Detached Housing (210) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
208

Avg. Num. of Dwelling Units:
248

Average Rate:
0.94

Range of Rates:
0.35 - 2.98

Standard Deviation:
0.31

Fitted Curve Equation:
$Ln(T) = 0.94\ Ln(X) + 0.27$

R^2:
0.92

Directional Distribution:
63% entering, 37% exiting

Calculated Trip Ends:
Average Rate: 265 (Total), 167 (Entry), 98 (Exit)
Fitted Curve: 263 (Total), 166 (Entry), 97 (Exit)

Query Filter

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
215

LAND USE GROUP:
(200-299) Residential

LAND USE :
215 - Single-Family Attached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

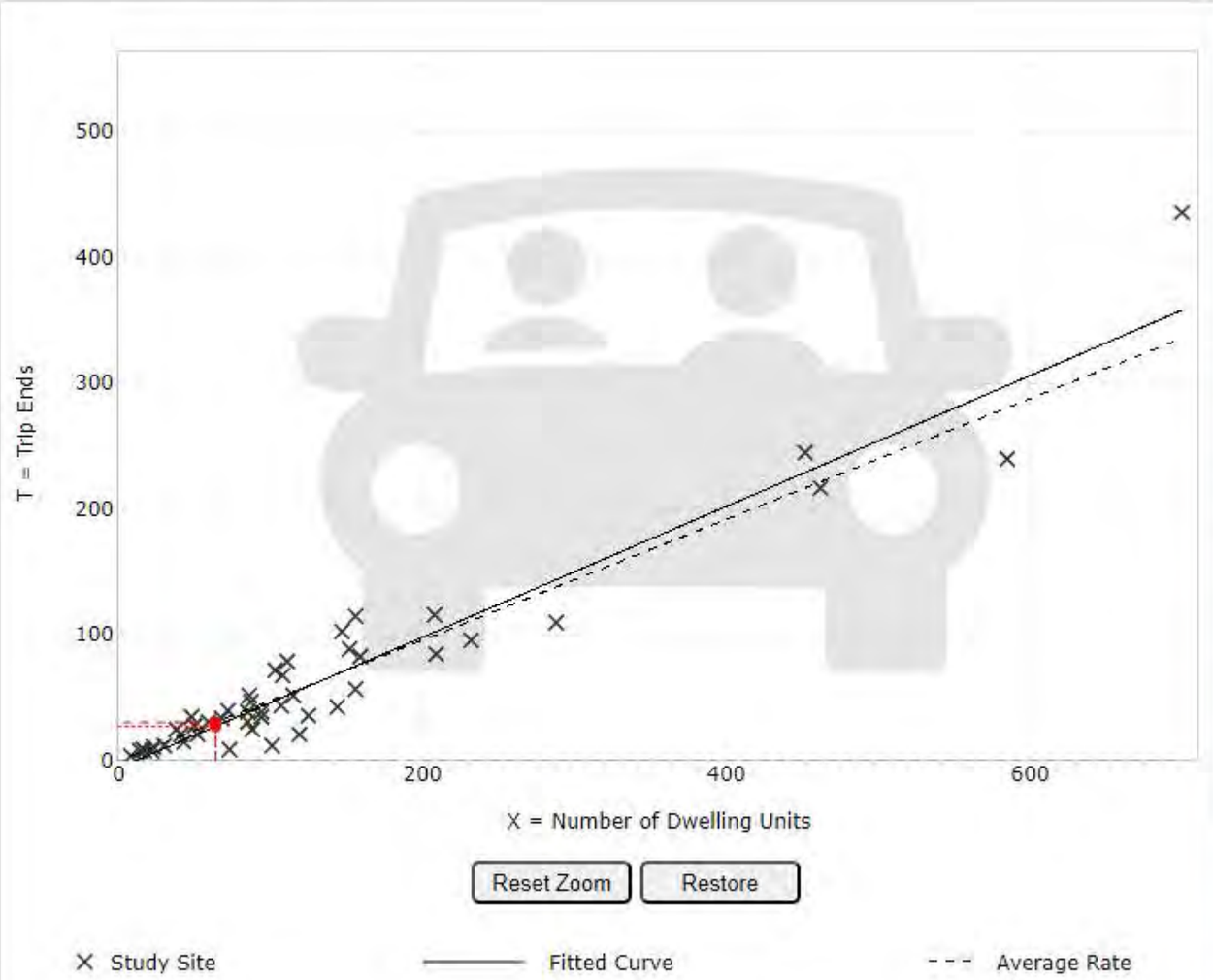
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
64 Calculate

Data Plot and Equation



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:
Single-Family Attached Housing (215) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
46

Avg. Num. of Dwelling Units:
135

Average Rate:
0.48

Range of Rates:
0.12 - 0.74

Standard Deviation:
0.14

Fitted Curve Equation:
T = 0.52(X) - 5.70

R^2:
0.92

Directional Distribution:
25% entering, 75% exiting

Calculated Trip Ends:
Average Rate: 31 (Total), 8 (Entry), 23 (Exit)
Fitted Curve: 28 (Total), 7 (Entry), 21 (Exit)

Query | Filter

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
215

LAND USE GROUP:
(200-299) Residential

LAND USE :
215 - Single-Family Attached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

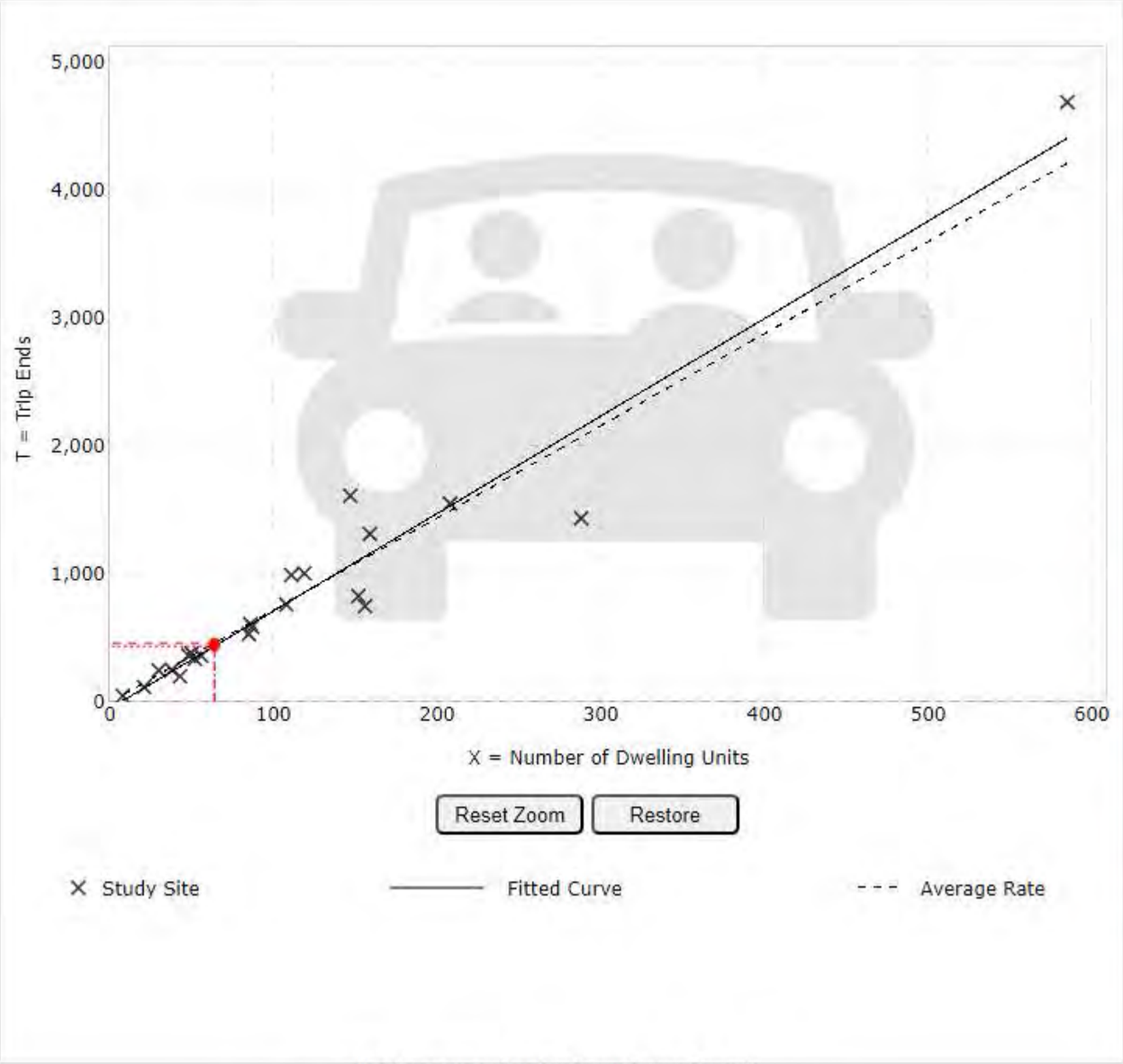
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
64 Calculate

Data Plot and Equation



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:
Single-Family Attached Housing (215) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
22

Avg. Num. of Dwelling Units:
120

Average Rate:
7.20

Range of Rates:
4.70 - 10.97

Standard Deviation:
1.61

Fitted Curve Equation:
T = 7.62(X) - 50.48

R^2:
0.94

Directional Distribution:
50% entering, 50% exiting

Calculated Trip Ends:
Average Rate: 461 (Total), 230 (Entry), 231 (Exit)
Fitted Curve: 437 (Total), 219 (Entry), 218 (Exit)

Query | Filter

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
215

LAND USE GROUP:
(200-299) Residential

LAND USE :
215 - Single-Family Attached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

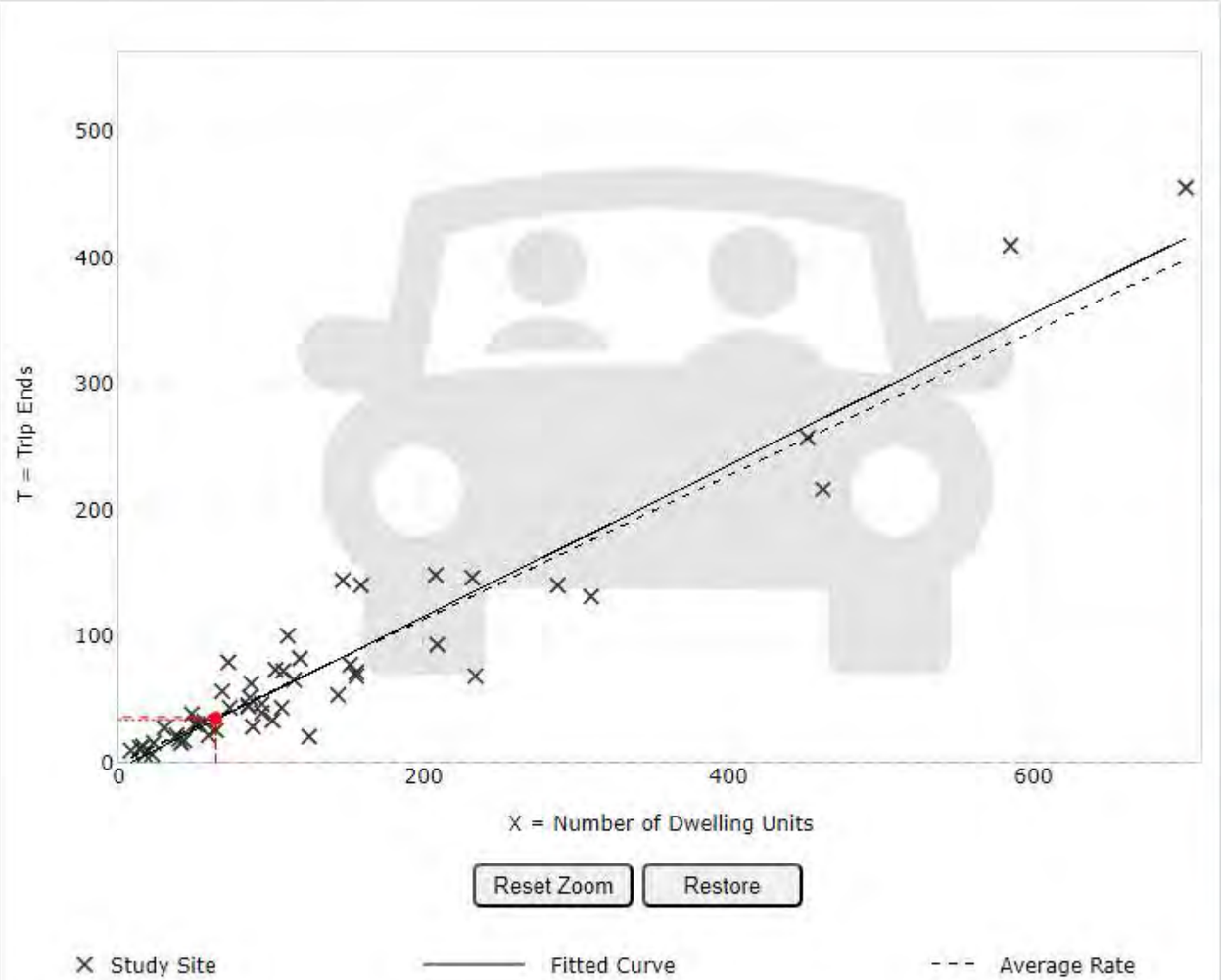
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
64 Calculate

Data Plot and Equation



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:
Single-Family Attached Housing (215) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
51

Avg. Num. of Dwelling Units:
136

Average Rate:
0.57

Range of Rates:
0.17 - 1.25

Standard Deviation:
0.18

Fitted Curve Equation:
T = 0.60(X) - 3.93

R^2:
0.91

Directional Distribution:
59% entering, 41% exiting

Calculated Trip Ends:
Average Rate: 36 (Total), 22 (Entry), 14 (Exit)
Fitted Curve: 34 (Total), 20 (Entry), 14 (Exit)

Capacity Analysis
Synchro Worksheets

230054 Hillcrest Farm

Existing Conditions

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	59	4	18	9	4	41	21	196	4	10	147	69
Future Vol, veh/h	59	4	18	9	4	41	21	196	4	10	147	69
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	66	4	20	10	4	46	23	218	4	11	163	77

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	515	492	202	502	528	220	240	0	0	222	0	0
Stage 1	224	224	-	266	266	-	-	-	-	-	-	-
Stage 2	291	268	-	236	262	-	-	-	-	-	-	-
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	470	478	839	480	456	820	1327	-	-	1347	-	-
Stage 1	779	718	-	739	689	-	-	-	-	-	-	-
Stage 2	717	687	-	767	691	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	431	464	839	455	442	820	1327	-	-	1347	-	-
Mov Cap-2 Maneuver	431	464	-	455	442	-	-	-	-	-	-	-
Stage 1	763	711	-	724	675	-	-	-	-	-	-	-
Stage 2	659	673	-	737	684	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.1	10.8	0.7	0.3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1327	-	-	485	685	1347	-	-
HCM Lane V/C Ratio	0.018	-	-	0.186	0.088	0.008	-	-
HCM Control Delay (s)	7.8	0	-	14.1	10.8	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	0.3	0	-	-

Intersection	
Intersection Delay, s/veh	11.9
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	120	133	72	87	15
Future Vol, veh/h	4	120	133	72	87	15
Peak Hour Factor	0.75	0.50	0.50	0.50	0.50	0.75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	240	266	144	174	20
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	10.2	14	9.8
HCM LOS	B	B	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	65%	3%	0%
Vol Thru, %	35%	0%	85%
Vol Right, %	0%	97%	15%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	205	124	102
LT Vol	133	4	0
Through Vol	72	0	87
RT Vol	0	120	15
Lane Flow Rate	410	245	194
Geometry Grp	1	1	1
Degree of Util (X)	0.557	0.326	0.266
Departure Headway (Hd)	4.89	4.784	4.939
Convergence, Y/N	Yes	Yes	Yes
Cap	730	743	718
Service Time	2.967	2.859	3.029
HCM Lane V/C Ratio	0.562	0.33	0.27
HCM Control Delay	14	10.2	9.8
HCM Lane LOS	B	B	A
HCM 95th-tile Q	3.5	1.4	1.1

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	47	67	506	48	35	482
Future Vol, veh/h	47	67	506	48	35	482
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	350	-
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	52	74	562	53	39	536

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1203	589	0	0	615	0
Stage 1	589	-	-	-	-	-
Stage 2	614	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	204	508	-	-	965	-
Stage 1	554	-	-	-	-	-
Stage 2	540	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	196	508	-	-	965	-
Mov Cap-2 Maneuver	196	-	-	-	-	-
Stage 1	554	-	-	-	-	-
Stage 2	518	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.7	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	307	965	-
HCM Lane V/C Ratio	-	-	0.413	0.04	-
HCM Control Delay (s)	-	-	24.7	8.9	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.9	0.1	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	26	81	20	28	38	53
Future Vol, veh/h	26	81	20	28	38	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	525	-	-	-	0	250
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	29	90	22	31	42	59

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	53	0	-	0	186	38
Stage 1	-	-	-	-	38	-
Stage 2	-	-	-	-	148	-
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	1553	-	-	-	803	1034
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	880	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1553	-	-	-	788	1034
Mov Cap-2 Maneuver	-	-	-	-	788	-
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	880	-

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1553	-	-	-	788	1034
HCM Lane V/C Ratio	0.019	-	-	-	0.054	0.057
HCM Control Delay (s)	7.4	-	-	-	9.8	8.7
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	0.2

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	5	19	5	4	24	12	258	2	28	289	20
Future Vol, veh/h	12	5	19	5	4	24	12	258	2	28	289	20
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	13	6	21	6	4	27	13	287	2	31	321	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	724	709	332	722	719	288	343	0	0	289	0	0
Stage 1	394	394	-	314	314	-	-	-	-	-	-	-
Stage 2	330	315	-	408	405	-	-	-	-	-	-	-
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	341	359	710	342	354	751	1216	-	-	1273	-	-
Stage 1	631	605	-	697	656	-	-	-	-	-	-	-
Stage 2	683	656	-	620	598	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	315	344	710	317	339	751	1216	-	-	1273	-	-
Mov Cap-2 Maneuver	315	344	-	317	339	-	-	-	-	-	-	-
Stage 1	623	587	-	688	647	-	-	-	-	-	-	-
Stage 2	646	647	-	578	580	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.7	12	0.4	0.7
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1216	-	-	453	554	1273	-	-
HCM Lane V/C Ratio	0.011	-	-	0.088	0.066	0.024	-	-
HCM Control Delay (s)	8	0	-	13.7	12	7.9	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	37	4	4	4	4	28
Future Vol, veh/h	37	4	4	4	4	28
Peak Hour Factor	0.75	0.50	0.50	0.50	0.50	0.75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	8	8	8	8	37
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.5	7.3	6.7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	50%	90%	0%
Vol Thru, %	50%	0%	12%
Vol Right, %	0%	10%	88%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	8	41	32
LT Vol	4	37	0
Through Vol	4	0	4
RT Vol	0	4	28
Lane Flow Rate	16	57	45
Geometry Grp	1	1	1
Degree of Util (X)	0.019	0.066	0.044
Departure Headway (Hd)	4.169	4.161	3.521
Convergence, Y/N	Yes	Yes	Yes
Cap	857	862	1013
Service Time	2.202	2.179	1.555
HCM Lane V/C Ratio	0.019	0.066	0.044
HCM Control Delay	7.3	7.5	6.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	27	481	43	39	545
Future Vol, veh/h	10	27	481	43	39	545
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	350	-
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	11	30	534	48	43	606

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1250	558	0	0	582	0
Stage 1	558	-	-	-	-	-
Stage 2	692	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	191	529	-	-	992	-
Stage 1	573	-	-	-	-	-
Stage 2	497	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	183	529	-	-	992	-
Mov Cap-2 Maneuver	183	-	-	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	476	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.7	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	350	992	-
HCM Lane V/C Ratio	-	-	0.117	0.044	-
HCM Control Delay (s)	-	-	16.7	8.8	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	55	21	135	68	36	34
Future Vol, veh/h	55	21	135	68	36	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	525	-	-	-	0	250
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	61	23	150	76	40	38

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	226	0	-	0	333	188
Stage 1	-	-	-	-	188	-
Stage 2	-	-	-	-	145	-
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	1342	-	-	-	662	854
Stage 1	-	-	-	-	844	-
Stage 2	-	-	-	-	882	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1342	-	-	-	632	854
Mov Cap-2 Maneuver	-	-	-	-	632	-
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	882	-

Approach	EB	WB	SB
HCM Control Delay, s	5.7	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1342	-	-	-	632	854
HCM Lane V/C Ratio	0.046	-	-	-	0.063	0.044
HCM Control Delay (s)	7.8	-	-	-	11.1	9.4
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	0.1

Future No Build Conditions

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	4	19	10	4	44	23	216	4	11	163	75
Future Vol, veh/h	64	4	19	10	4	44	23	216	4	11	163	75
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	71	4	21	11	4	49	26	240	4	12	181	83

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	568	543	223	553	582	242	264	0	0	244	0	0
Stage 1	247	247	-	294	294	-	-	-	-	-	-	-
Stage 2	321	296	-	259	288	-	-	-	-	-	-	-
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	434	447	817	444	425	797	1300	-	-	1322	-	-
Stage 1	757	702	-	714	670	-	-	-	-	-	-	-
Stage 2	691	668	-	746	674	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	394	432	817	418	411	797	1300	-	-	1322	-	-
Mov Cap-2 Maneuver	394	432	-	418	411	-	-	-	-	-	-	-
Stage 1	740	694	-	698	655	-	-	-	-	-	-	-
Stage 2	629	653	-	714	667	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.3	11.1	0.7	0.3
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1300	-	-	446	653	1322	-	-
HCM Lane V/C Ratio	0.02	-	-	0.217	0.099	0.009	-	-
HCM Control Delay (s)	7.8	0	-	15.3	11.1	7.7	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.8	0.3	0	-	-

Intersection	
Intersection Delay, s/veh	13.3
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	130	144	78	94	16
Future Vol, veh/h	4	130	144	78	94	16
Peak Hour Factor	0.75	0.50	0.50	0.50	0.50	0.75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	260	288	156	188	21
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	10.9	16.2	10.4
HCM LOS	B	C	B

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	65%	3%	0%
Vol Thru, %	35%	0%	85%
Vol Right, %	0%	97%	15%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	222	134	110
LT Vol	144	4	0
Through Vol	78	0	94
RT Vol	0	130	16
Lane Flow Rate	444	265	209
Geometry Grp	1	1	1
Degree of Util (X)	0.626	0.369	0.3
Departure Headway (Hd)	5.075	5.009	5.166
Convergence, Y/N	Yes	Yes	Yes
Cap	715	719	697
Service Time	3.09	3.03	3.193
HCM Lane V/C Ratio	0.621	0.369	0.3
HCM Control Delay	16.2	10.9	10.4
HCM Lane LOS	C	B	B
HCM 95th-tile Q	4.4	1.7	1.3

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	51	73	548	52	38	522
Future Vol, veh/h	51	73	548	52	38	522
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	350	-
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	57	81	609	58	42	580

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1302	638	0	0	667	0
Stage 1	638	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	177	477	-	-	923	-
Stage 1	526	-	-	-	-	-
Stage 2	512	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	169	477	-	-	923	-
Mov Cap-2 Maneuver	169	-	-	-	-	-
Stage 1	526	-	-	-	-	-
Stage 2	488	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	30.9	0	0.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	273	923	-
HCM Lane V/C Ratio	-	-	0.505	0.046	-
HCM Control Delay (s)	-	-	30.9	9.1	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	2.6	0.1	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	88	22	33	44	60
Future Vol, veh/h	31	88	22	33	44	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	525	-	-	-	0	250
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	34	98	24	37	49	67

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	61	0	-	0	209	43
Stage 1	-	-	-	-	43	-
Stage 2	-	-	-	-	166	-
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	1542	-	-	-	779	1027
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	863	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1542	-	-	-	762	1027
Mov Cap-2 Maneuver	-	-	-	-	762	-
Stage 1	-	-	-	-	957	-
Stage 2	-	-	-	-	863	-

Approach	EB	WB	SB
HCM Control Delay, s	1.9	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1542	-	-	-	762	1027
HCM Lane V/C Ratio	0.022	-	-	-	0.064	0.065
HCM Control Delay (s)	7.4	-	-	-	10	8.7
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	0.2

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	5	21	5	4	26	13	317	4	30	341	22
Future Vol, veh/h	13	5	21	5	4	26	13	317	4	30	341	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	14	6	23	6	4	29	14	352	4	33	379	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	856	841	391	854	851	354	403	0	0	356	0	0
Stage 1	457	457	-	382	382	-	-	-	-	-	-	-
Stage 2	399	384	-	472	469	-	-	-	-	-	-	-
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	278	301	658	279	297	690	1156	-	-	1203	-	-
Stage 1	583	568	-	640	613	-	-	-	-	-	-	-
Stage 2	627	611	-	573	561	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	253	286	658	255	282	690	1156	-	-	1203	-	-
Mov Cap-2 Maneuver	253	286	-	255	282	-	-	-	-	-	-	-
Stage 1	574	548	-	630	604	-	-	-	-	-	-	-
Stage 2	587	602	-	528	541	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.5	13	0.3	0.6
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1156	-	-	387	490	1203	-	-
HCM Lane V/C Ratio	0.012	-	-	0.112	0.079	0.028	-	-
HCM Control Delay (s)	8.2	0	-	15.5	13	8.1	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.3	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	4	4	4	4	30
Future Vol, veh/h	40	4	4	4	4	30
Peak Hour Factor	0.75	0.50	0.50	0.50	0.50	0.75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	53	8	8	8	8	40
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.5	7.3	6.7
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	50%	91%	0%
Vol Thru, %	50%	0%	12%
Vol Right, %	0%	9%	88%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	8	44	34
LT Vol	4	40	0
Through Vol	4	0	4
RT Vol	0	4	30
Lane Flow Rate	16	61	48
Geometry Grp	1	1	1
Degree of Util (X)	0.019	0.071	0.047
Departure Headway (Hd)	4.179	4.172	3.524
Convergence, Y/N	Yes	Yes	Yes
Cap	854	860	1012
Service Time	2.215	2.19	1.56
HCM Lane V/C Ratio	0.019	0.071	0.047
HCM Control Delay	7.3	7.5	6.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	29	521	47	42	590
Future Vol, veh/h	11	29	521	47	42	590
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	350	-
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	12	32	579	52	47	656

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1355	605	0	0	631	0
Stage 1	605	-	-	-	-	-
Stage 2	750	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	165	498	-	-	951	-
Stage 1	545	-	-	-	-	-
Stage 2	467	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	157	498	-	-	951	-
Mov Cap-2 Maneuver	157	-	-	-	-	-
Stage 1	545	-	-	-	-	-
Stage 2	444	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.4	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	312	951	-
HCM Lane V/C Ratio	-	-	0.142	0.049	-
HCM Control Delay (s)	-	-	18.4	9	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.2	-

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	77	23	146	95	68	61
Future Vol, veh/h	77	23	146	95	68	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	525	-	-	-	0	250
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	86	26	162	106	76	68

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	268	0	-	0	413	215
Stage 1	-	-	-	-	215	-
Stage 2	-	-	-	-	198	-
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	1296	-	-	-	595	825
Stage 1	-	-	-	-	821	-
Stage 2	-	-	-	-	835	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1296	-	-	-	556	825
Mov Cap-2 Maneuver	-	-	-	-	556	-
Stage 1	-	-	-	-	767	-
Stage 2	-	-	-	-	835	-

Approach	EB	WB	SB
HCM Control Delay, s	6.1	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1296	-	-	-	556	825
HCM Lane V/C Ratio	0.066	-	-	-	0.136	0.082
HCM Control Delay (s)	8	-	-	-	12.5	9.8
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.5	0.3

Future Build Conditions

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	97	4	19	10	4	44	23	241	4	11	171	86
Future Vol, veh/h	97	4	19	10	4	44	23	241	4	11	171	86
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	108	4	21	11	4	49	26	268	4	12	190	96

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	611	586	238	597	632	270	286	0	0	272	0	0
Stage 1	262	262	-	322	322	-	-	-	-	-	-	-
Stage 2	349	324	-	275	310	-	-	-	-	-	-	-
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	406	422	801	415	398	769	1276	-	-	1291	-	-
Stage 1	743	691	-	690	651	-	-	-	-	-	-	-
Stage 2	667	650	-	731	659	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	367	407	801	390	384	769	1276	-	-	1291	-	-
Mov Cap-2 Maneuver	367	407	-	390	384	-	-	-	-	-	-	-
Stage 1	725	683	-	673	635	-	-	-	-	-	-	-
Stage 2	605	634	-	699	652	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.3	11.5	0.7	0.3
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1276	-	-	403	622	1291	-	-
HCM Lane V/C Ratio	0.02	-	-	0.331	0.104	0.009	-	-
HCM Control Delay (s)	7.9	0	-	18.3	11.5	7.8	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.4	0.3	0	-	-

Intersection	
Intersection Delay, s/veh	15.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	11	130	4	32	33	144	78	4	11	94	16
Future Vol, veh/h	4	11	130	4	32	33	144	78	4	11	94	16
Peak Hour Factor	0.75	0.90	0.50	0.50	0.75	0.90	0.50	0.50	0.50	0.90	0.50	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	12	260	8	43	37	288	156	8	12	188	21
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	12.3	10.2	19.6	11.7
HCM LOS	B	B	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	64%	3%	6%	9%
Vol Thru, %	35%	8%	46%	78%
Vol Right, %	2%	90%	48%	13%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	226	145	69	121
LT Vol	144	4	4	11
Through Vol	78	11	32	94
RT Vol	4	130	33	16
Lane Flow Rate	452	278	87	222
Geometry Grp	1	1	1	1
Degree of Util (X)	0.685	0.417	0.147	0.347
Departure Headway (Hd)	5.457	5.406	6.055	5.646
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	660	661	588	634
Service Time	3.511	3.473	4.142	3.715
HCM Lane V/C Ratio	0.685	0.421	0.148	0.35
HCM Control Delay	19.6	12.3	10.2	11.7
HCM Lane LOS	C	B	B	B
HCM 95th-tile Q	5.4	2.1	0.5	1.5

Intersection	
Int Delay, s/veh	5.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	89	548	57	44	522
Future Vol, veh/h	67	89	548	57	44	522
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	350	-
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	74	99	609	63	49	580

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1319	641	0	0	672	0
Stage 1	641	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	173	475	-	-	919	-
Stage 1	525	-	-	-	-	-
Stage 2	504	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	164	475	-	-	919	-
Mov Cap-2 Maneuver	164	-	-	-	-	-
Stage 1	525	-	-	-	-	-
Stage 2	477	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	42	0	0.7
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	262	919	-
HCM Lane V/C Ratio	-	-	0.662	0.053	-
HCM Control Delay (s)	-	-	42	9.1	-
HCM Lane LOS	-	-	E	A	-
HCM 95th %tile Q(veh)	-	-	4.2	0.2	-

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	42	88	22	47	85	93
Future Vol, veh/h	42	88	22	47	85	93
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	525	-	-	-	0	250
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	47	98	24	52	94	103

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	76	0	-	0	242	50
Stage 1	-	-	-	-	50	-
Stage 2	-	-	-	-	192	-
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	1523	-	-	-	746	1018
Stage 1	-	-	-	-	972	-
Stage 2	-	-	-	-	841	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1523	-	-	-	723	1018
Mov Cap-2 Maneuver	-	-	-	-	723	-
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	841	-

Approach	EB	WB	SB
HCM Control Delay, s	2.4	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1523	-	-	-	723	1018
HCM Lane V/C Ratio	0.031	-	-	-	0.131	0.102
HCM Control Delay (s)	7.4	-	-	-	10.7	8.9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	0.3

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	74	25	241	192	8
Future Vol, veh/h	25	74	25	241	192	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	82	28	268	213	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	542	218	222	0	-	0
Stage 1	218	-	-	-	-	-
Stage 2	324	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	501	822	1347	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	733	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	489	822	1347	-	-	-
Mov Cap-2 Maneuver	489	-	-	-	-	-
Stage 1	798	-	-	-	-	-
Stage 2	733	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1347	-	701	-	-
HCM Lane V/C Ratio	0.021	-	0.157	-	-
HCM Control Delay (s)	7.7	0	11.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

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	35	5	21	5	4	26	13	334	4	30	369	59
Future Vol, veh/h	35	5	21	5	4	26	13	334	4	30	369	59
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	39	6	23	6	4	29	14	371	4	33	410	66

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	927	912	443	925	943	373	476	0	0	375	0	0
Stage 1	509	509	-	401	401	-	-	-	-	-	-	-
Stage 2	418	403	-	524	542	-	-	-	-	-	-	-
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	249	274	615	250	263	673	1086	-	-	1183	-	-
Stage 1	547	538	-	626	601	-	-	-	-	-	-	-
Stage 2	612	600	-	537	520	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	226	259	615	227	249	673	1086	-	-	1183	-	-
Mov Cap-2 Maneuver	226	259	-	227	249	-	-	-	-	-	-	-
Stage 1	538	518	-	616	591	-	-	-	-	-	-	-
Stage 2	572	590	-	492	500	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.9	13.6	0.3	0.5
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1086	-	-	293	456	1183	-	-
HCM Lane V/C Ratio	0.013	-	-	0.231	0.085	0.028	-	-
HCM Control Delay (s)	8.4	0	-	20.9	13.6	8.1	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.9	0.3	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	37	4	4	22	22	4	4	4	37	4	30
Future Vol, veh/h	40	37	4	4	22	22	4	4	4	37	4	30
Peak Hour Factor	0.75	0.90	0.50	0.50	0.75	0.90	0.50	0.50	0.50	0.90	0.50	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	53	41	8	8	29	24	8	8	8	41	8	40
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	7.3	7.4	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	33%	49%	8%	52%
Vol Thru, %	33%	46%	46%	6%
Vol Right, %	33%	5%	46%	42%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	12	81	48	71
LT Vol	4	40	4	37
Through Vol	4	37	22	4
RT Vol	4	4	22	30
Lane Flow Rate	24	102	62	89
Geometry Grp	1	1	1	1
Degree of Util (X)	0.028	0.121	0.068	0.101
Departure Headway (Hd)	4.258	4.246	3.95	4.086
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	846	836	893	863
Service Time	2.258	2.315	2.034	2.175
HCM Lane V/C Ratio	0.028	0.122	0.069	0.103
HCM Control Delay	7.4	7.9	7.3	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.4	0.2	0.3

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	40	521	66	61	590
Future Vol, veh/h	22	40	521	66	61	590
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	350	-
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	24	44	579	73	68	656

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1408	616	0	0	652	0
Stage 1	616	-	-	-	-	-
Stage 2	792	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	153	491	-	-	935	-
Stage 1	539	-	-	-	-	-
Stage 2	446	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	142	491	-	-	935	-
Mov Cap-2 Maneuver	142	-	-	-	-	-
Stage 1	539	-	-	-	-	-
Stage 2	413	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.6	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	262	935	-
HCM Lane V/C Ratio	-	-	0.263	0.072	-
HCM Control Delay (s)	-	-	23.6	9.2	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1	0.2	-

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	114	23	146	142	96	83
Future Vol, veh/h	114	23	146	142	96	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	525	-	-	-	0	250
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	127	26	162	158	107	92

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	320	0	-	0	521	241
Stage 1	-	-	-	-	241	-
Stage 2	-	-	-	-	280	-
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	1240	-	-	-	516	798
Stage 1	-	-	-	-	799	-
Stage 2	-	-	-	-	767	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1240	-	-	-	463	798
Mov Cap-2 Maneuver	-	-	-	-	463	-
Stage 1	-	-	-	-	718	-
Stage 2	-	-	-	-	767	-

Approach	EB	WB	SB
HCM Control Delay, s	6.9	0	12.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1240	-	-	-	463	798
HCM Lane V/C Ratio	0.102	-	-	-	0.23	0.116
HCM Control Delay (s)	8.2	-	-	-	15.1	10.1
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.9	0.4

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	50	84	333	367	28
Future Vol, veh/h	17	50	84	333	367	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	56	93	370	408	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	980	424	439	0	-	0
Stage 1	424	-	-	-	-	-
Stage 2	556	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	277	630	1121	-	-	-
Stage 1	660	-	-	-	-	-
Stage 2	574	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	248	630	1121	-	-	-
Mov Cap-2 Maneuver	248	-	-	-	-	-
Stage 1	591	-	-	-	-	-
Stage 2	574	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.5	1.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1121	-	453	-	-
HCM Lane V/C Ratio	0.083	-	0.164	-	-
HCM Control Delay (s)	8.5	0	14.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.6	-	-

Future Build Conditions with Improvements

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	74	25	241	192	8
Future Vol, veh/h	25	74	25	241	192	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
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	28	82	28	268	213	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	542	218	222	0	-	0
Stage 1	218	-	-	-	-	-
Stage 2	324	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	501	822	1347	-	-	-
Stage 1	818	-	-	-	-	-
Stage 2	733	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	490	822	1347	-	-	-
Mov Cap-2 Maneuver	490	-	-	-	-	-
Stage 1	801	-	-	-	-	-
Stage 2	733	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1347	-	702	-	-
HCM Lane V/C Ratio	0.021	-	0.157	-	-
HCM Control Delay (s)	7.7	-	11.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	50	84	333	367	28
Future Vol, veh/h	17	50	84	333	367	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
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	19	56	93	370	408	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	980	424	439	0	-	0
Stage 1	424	-	-	-	-	-
Stage 2	556	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	277	630	1121	-	-	-
Stage 1	660	-	-	-	-	-
Stage 2	574	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	254	630	1121	-	-	-
Mov Cap-2 Maneuver	254	-	-	-	-	-
Stage 1	605	-	-	-	-	-
Stage 2	574	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.4	1.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1121	-	458	-	-
HCM Lane V/C Ratio	0.083	-	0.163	-	-
HCM Control Delay (s)	8.5	-	14.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.6	-	-

Queueing Analysis
SimTraffic Worksheets

230054 Hillcrest Farm

Intersection: 100: Zoo Parkway & Newbern Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	64	60	88	19
Average Queue (ft)	29	17	9	1
95th Queue (ft)	50	37	39	6
Link Distance (ft)	718	2253	1830	973
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 200: Tracey School Access/Newbern Avenue & Eldorado Road

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	53	89	72
Average Queue (ft)	32	48	36
95th Queue (ft)	47	72	59
Link Distance (ft)	890	1521	796
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 300: US 220 Business & Charles Avenue

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	139	28
Average Queue (ft)	51	9
95th Queue (ft)	93	29
Link Distance (ft)	227	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		350
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 400: Zoo Connector & Wildlife Way

Movement	EB	SB	SB
Directions Served	L	L	R
Maximum Queue (ft)	24	22	56
Average Queue (ft)	1	11	10
95th Queue (ft)	8	24	29
Link Distance (ft)		2837	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	525		250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

Intersection: 100: Zoo Parkway & Newbern Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	48	15	26	49
Average Queue (ft)	16	8	3	5
95th Queue (ft)	36	17	17	26
Link Distance (ft)	718	2253	1830	973
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 200: Tracey School Access/Newbern Avenue & Eldorado Road

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	50	31	46
Average Queue (ft)	20	5	22
95th Queue (ft)	44	24	44
Link Distance (ft)	890	1521	796
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 300: US 220 Business & Charles Avenue

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	53	53
Average Queue (ft)	24	9
95th Queue (ft)	48	33
Link Distance (ft)	227	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		350
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 400: Zoo Connector & Wildlife Way

Movement	EB	SB	SB
Directions Served	L	L	R
Maximum Queue (ft)	29	34	38
Average Queue (ft)	6	11	9
95th Queue (ft)	24	25	26
Link Distance (ft)		2837	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	525		250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

Intersection: 100: Zoo Parkway & Newbern Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	68	60	70	95
Average Queue (ft)	27	16	14	8
95th Queue (ft)	47	39	47	41
Link Distance (ft)	718	2253	1830	973
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 200: Tracey School Access/Newbern Avenue & Eldorado Road

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	74	99	78
Average Queue (ft)	34	53	44
95th Queue (ft)	54	78	69
Link Distance (ft)	890	1521	796
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 300: US 220 Business & Eldorado Road

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	122	53
Average Queue (ft)	52	15
95th Queue (ft)	90	40
Link Distance (ft)	227	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		350
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 400: Zoo Connector & Wildlife Way

Movement	EB	SB	SB
Directions Served	L	L	R
Maximum Queue (ft)	24	20	56
Average Queue (ft)	1	11	12
95th Queue (ft)	8	23	30
Link Distance (ft)		2837	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	525		250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

Intersection: 100: Zoo Parkway & Newbern Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	66	37	26	68
Average Queue (ft)	23	9	3	8
95th Queue (ft)	42	23	17	35
Link Distance (ft)	718	2253	1830	973
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 200: Tracey School Access/Newbern Avenue & Eldorado Road

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	47	30	48
Average Queue (ft)	26	7	23
95th Queue (ft)	41	27	46
Link Distance (ft)	890	1521	796
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 300: US 220 Business & Charles Avenue

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	73	53
Average Queue (ft)	23	19
95th Queue (ft)	56	42
Link Distance (ft)	227	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		350
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 400: Zoo Connector & Wildlife Way

Movement	EB	WB	SB	SB
Directions Served	L	TR	L	R
Maximum Queue (ft)	53	22	45	28
Average Queue (ft)	10	1	16	10
95th Queue (ft)	34	7	33	20
Link Distance (ft)		1739	2837	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	525			250
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 0

Intersection: 100: Zoo Parkway & Newbern Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	73	81	50	114
Average Queue (ft)	42	16	8	7
95th Queue (ft)	66	43	32	44
Link Distance (ft)	1565	2249	2175	982
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 200: Teachy School Access/Newbern Avenue & Eldorado Road/Site Access 2

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	72	52	74	79
Average Queue (ft)	35	28	48	38
95th Queue (ft)	54	52	72	58
Link Distance (ft)	2882	1103	1511	1565
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 300: US 220 Business & Charles Avenue

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	115	53
Average Queue (ft)	60	21
95th Queue (ft)	102	47
Link Distance (ft)	302	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		350
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 400: Zoo Connector & Wildlife Way

Movement	EB	SB	SB
Directions Served	L	L	R
Maximum Queue (ft)	29	38	37
Average Queue (ft)	3	18	15
95th Queue (ft)	16	29	30
Link Distance (ft)		2837	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	525		250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 500: Zoo Parkway & Site Access 1

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	73	54
Average Queue (ft)	36	4
95th Queue (ft)	61	27
Link Distance (ft)	1451	973
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Intersection: 100: Zoo Parkway & Newbern Avenue

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	54	81	48	76
Average Queue (ft)	29	11	7	22
95th Queue (ft)	51	36	33	65
Link Distance (ft)	1565	2249	2175	982
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 200: Tracey School Access/Newbern Avenue & Eldorado Road/Site Access 2

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	53	53	27	31
Average Queue (ft)	30	23	8	28
95th Queue (ft)	52	44	28	37
Link Distance (ft)	2882	1103	1511	1565
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 300: US 220 Business & Charles Avenue

Movement	WB	NB	SB
Directions Served	LR	TR	L
Maximum Queue (ft)	95	22	55
Average Queue (ft)	36	2	20
95th Queue (ft)	78	13	47
Link Distance (ft)	302	1812	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			350
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 400: Zoo Connector & Wildlife Way

Movement	EB	WB	SB	SB
Directions Served	L	TR	L	R
Maximum Queue (ft)	53	41	44	56
Average Queue (ft)	22	3	22	17
95th Queue (ft)	50	17	41	36
Link Distance (ft)		1739	2837	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	525			250
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 500: Zoo Parkway & Site Access 1

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	68	90
Average Queue (ft)	27	20
95th Queue (ft)	50	61
Link Distance (ft)	1451	973
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Intersection: 500: Zoo Parkway & Site Access 1

Movement	EB	NB	SB
Directions Served	LR	L	TR
Maximum Queue (ft)	62	32	2
Average Queue (ft)	31	4	0
95th Queue (ft)	54	21	2
Link Distance (ft)	1444		2174
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		100	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

Intersection: 500: Zoo Parkway & Site Access 1

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	70	55
Average Queue (ft)	29	18
95th Queue (ft)	54	44
Link Distance (ft)	1444	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Turning Movement Counts

230054 Hillcrest Farm

DAVENPORT

119 Brookstown Ave., Suite PH1,
Winston Salem NC, 27101
Ph: (336)744-1636

File Name : Newbern_Avenue_and_Teachey_School_Entrance_5MIN
Site Code : 2300541
Start Date : 9/27/2023
Page No : 1

Groups Printed- Cars - Buses - Trucks

	Newbern Avenue Southbound					T-Intersection Westbound					Teachey School Entrance Northbound					Newbern Avenue and Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
07:00 AM	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	4
07:05 AM	0	2	1	0	3	0	0	0	0	0	1	0	0	0	1	0	0	2	0	2	6
07:10 AM	0	4	2	0	6	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	9
07:15 AM	0	4	2	0	6	0	0	0	0	0	0	0	0	0	0	1	0	6	0	7	13
07:20 AM	0	12	0	0	12	0	0	0	0	0	12	5	0	0	17	0	0	12	0	12	41
07:25 AM	0	10	0	0	10	0	0	0	0	0	28	13	0	0	41	0	0	15	0	15	66
07:30 AM	0	19	1	0	20	0	0	0	0	0	15	14	0	0	29	0	0	25	0	25	74
07:35 AM	0	21	1	0	22	0	0	0	0	0	23	19	0	0	42	0	0	26	0	26	90
07:40 AM	0	13	0	0	13	0	0	0	0	0	32	15	0	0	47	0	0	25	0	25	85
07:45 AM	0	1	0	0	1	0	0	0	0	0	18	5	0	0	23	0	0	0	0	0	24
07:50 AM	0	1	1	0	2	0	0	0	0	0	3	0	0	0	3	0	0	3	0	3	8
07:55 AM	0	0	4	0	4	0	0	0	0	0	1	1	0	0	2	1	0	1	0	2	8
Total	0	89	13	0	102	0	0	0	0	0	133	72	0	0	205	3	0	118	0	121	428
08:00 AM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	5
08:05 AM	0	2	1	0	3	0	0	0	0	0	2	0	0	0	2	0	0	1	0	1	6
08:10 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	4
08:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:20 AM	0	1	3	0	4	0	0	0	0	0	0	0	0	0	0	1	0	2	0	3	7
08:25 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	4
08:30 AM	0	0	1	0	1	0	0	0	0	0	1	1	0	0	2	0	0	2	0	2	5
08:35 AM	0	0	2	0	2	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	4
08:40 AM	0	1	0	0	1	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	4
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:50 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
08:55 AM	0	0	2	0	2	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	4
Total	0	6	13	0	19	0	0	0	0	0	8	8	0	0	16	3	0	9	0	12	47
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DAVENPORT

119 Brookstown Ave., Suite PH1,
Winston Salem NC, 27101
Ph: (336)744-1636

File Name : Newbern_Avenue_and_Teachey_School_Entrance_5MIN
Site Code : 2300541
Start Date : 9/27/2023
Page No : 2

Groups Printed- Cars - Buses - Trucks

	Newbern Avenue Southbound					T-Intersection Westbound					Teachey School Entrance Northbound					Newbern Avenue and Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
09:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:55 AM	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
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:55 AM	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
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:55 AM	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
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DAVENPORT

119 Brookstown Ave., Suite PH1,
Winston Salem NC, 27101
Ph: (336)744-1636

File Name : Newbern_Avenue_and_Teachey_School_Entrance_5MIN
Site Code : 2300541
Start Date : 9/27/2023
Page No : 3

Groups Printed- Cars - Buses - Trucks

	Newbern Avenue Southbound					T-Intersection Westbound					Teachey School Entrance Northbound					Newbern Avenue and Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
12:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:55 PM	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
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:55 PM	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
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:55 PM	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
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DAVENPORT

119 Brookstown Ave., Suite PH1,
Winston Salem NC, 27101
Ph: (336)744-1636

File Name : Newbern_Avenue_and_Teachey_School_Entrance_5MIN
Site Code : 2300541
Start Date : 9/27/2023
Page No : 4

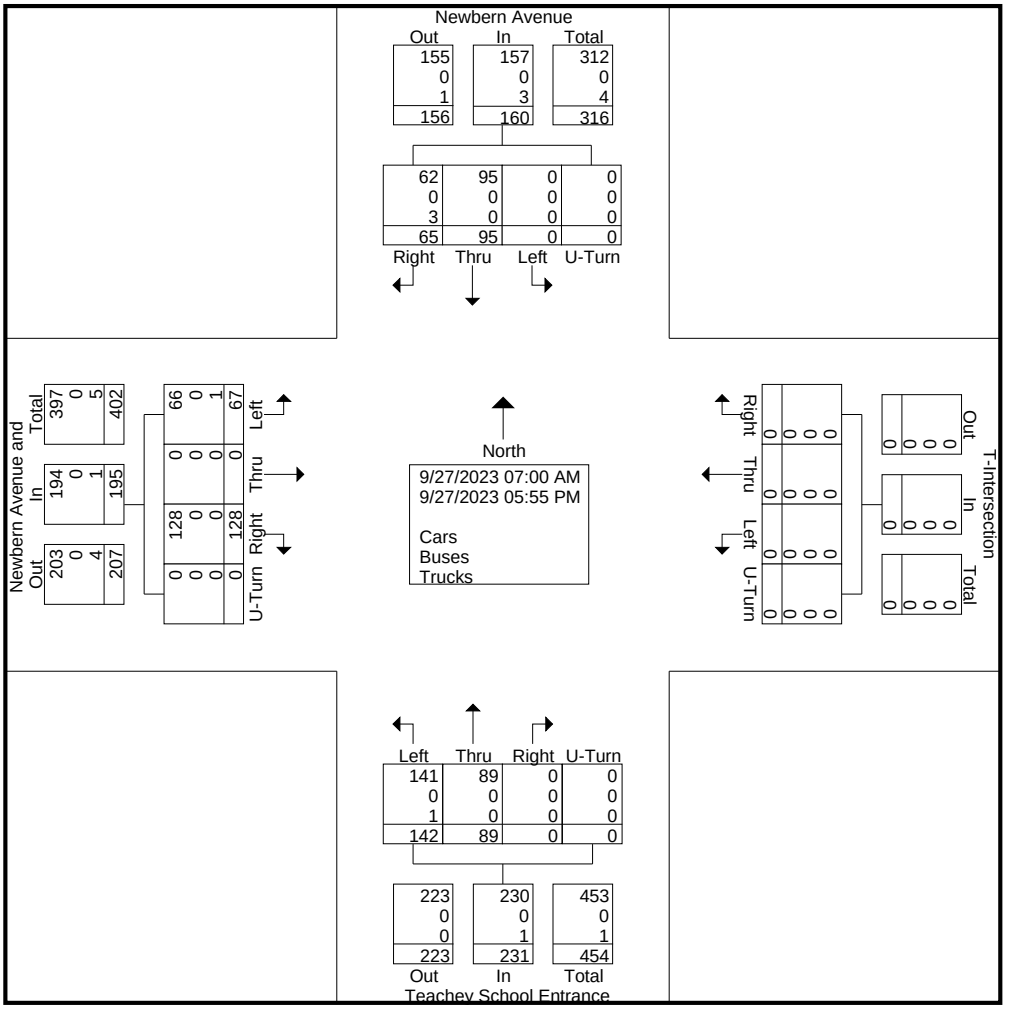
Groups Printed- Cars - Buses - Trucks

	Newbern Avenue Southbound					T-Intersection Westbound					Teachey School Entrance Northbound					Newbern Avenue and Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
03:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:55 PM	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
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
04:05 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2	0	0	0	2	4
04:10 PM	0	0	1	0	1	0	0	0	0	0	0	2	0	0	2	4	0	0	0	4	7
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:20 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	4
04:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
04:30 PM	0	0	3	0	3	0	0	0	0	0	0	1	0	0	1	4	0	0	0	4	8
04:35 PM	0	0	2	0	2	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	5
04:40 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	3
04:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3
04:55 PM	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	3	0	0	0	3	5
Total	0	0	10	0	10	0	0	0	0	0	1	8	0	0	9	26	0	1	0	27	46
05:00 PM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	6
05:05 PM	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	9	0	0	0	9	13
05:10 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	5
05:15 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	4
05:20 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:25 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	6
05:30 PM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	7
05:35 PM	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	7
05:40 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	4
05:45 PM	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
05:50 PM	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	7
05:55 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3
Total	0	0	29	0	29	0	0	0	0	0	0	1	0	0	1	35	0	0	0	35	65
Grand Total	0	95	65	0	160	0	0	0	0	0	142	89	0	0	231	67	0	128	0	195	586
Apprch %	0	59.4	40.6	0		0	0	0	0		61.5	38.5	0	0		34.4	0	65.6	0		
Total %	0	16.2	11.1	0	27.3	0	0	0	0	0	24.2	15.2	0	0	39.4	11.4	0	21.8	0	33.3	
Cars	0	95	62	0	157	0	0	0	0	0	141	89	0	0	230	66	0	128	0	194	581
% Cars	0	100	95.4	0	98.1	0	0	0	0	0	99.3	100	0	0	99.6	98.5	0	100	0	99.5	99.1
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trucks	0	0	3	0	3	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	5
% Trucks	0	0	4.6	0	1.9	0	0	0	0	0	0.7	0	0	0	0.4	1.5	0	0	0	0.5	0.9

DAVENPORT

119 Brookstown Ave., Suite PH1,
Winston Salem NC, 27101
Ph: (336)744-1636

File Name : Newbern_Avenue_and_Teachey_School_Entrance_5MIN
Site Code : 2300541
Start Date : 9/27/2023
Page No : 5



DAVENPORT

119 Brookstown Ave., Suite PH1,
Winston Salem NC, 27101
Ph: (336)744-1636

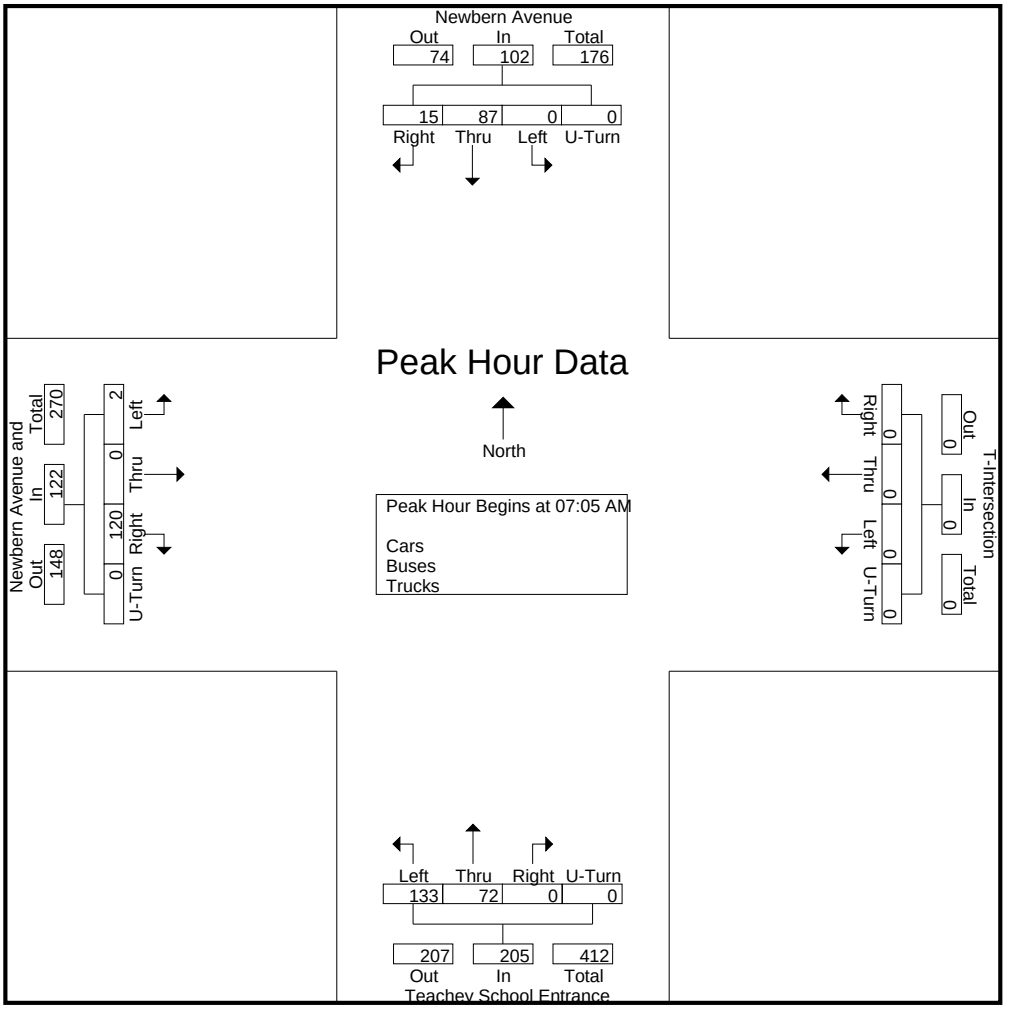
File Name : Newbern_Avenue_and_Teachey_School_Entrance_5MIN
Site Code : 2300541
Start Date : 9/27/2023
Page No : 6

	Newbern Avenue Southbound					T-Intersection Westbound					Teachey School Entrance Northbound					Newbern Avenue and Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:55 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:05 AM																					
07:05 AM	0	2	1	0	3	0	0	0	0	0	1	0	0	0	1	0	0	2	0	2	6
07:10 AM	0	4	2	0	6	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	9
07:15 AM	0	4	2	0	6	0	0	0	0	0	0	0	0	0	0	**1**	0	6	0	7	13
07:20 AM	0	12	0	0	12	0	0	0	0	0	12	5	0	0	17	0	0	12	0	12	41
07:25 AM	0	10	0	0	10	0	0	0	0	0	28	13	0	0	41	0	0	15	0	15	66
07:30 AM	0	19	1	0	20	0	0	0	0	0	15	14	0	0	29	0	0	25	0	25	74
07:35 AM	0	**21**	1	0	**22**	0	0	0	0	0	23	**19**	0	0	42	0	0	**26**	0	**26**	**90**
07:40 AM	0	13	0	0	13	0	0	0	0	0	**32**	15	0	0	**47**	0	0	25	0	25	85
07:45 AM	0	1	0	0	1	0	0	0	0	0	18	5	0	0	23	0	0	0	0	0	24
07:50 AM	0	1	1	0	2	0	0	0	0	0	3	0	0	0	3	0	0	3	0	3	8
07:55 AM	0	0	**4**	0	4	0	0	0	0	0	1	1	0	0	2	1	0	1	0	2	8
08:00 AM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	5
Total Volume	0	87	15	0	102	0	0	0	0	0	133	72	0	0	205	2	0	120	0	122	429
% App. Total	0	85.3	14.7	0		0	0	0	0		64.9	35.1	0	0		1.6	0	98.4	0		
PHF	.000	.345	.313	.000	.386	.000	.000	.000	.000	.000	.346	.316	.000	.000	.363	.167	.000	.385	.000	.391	.397

DAVENPORT

119 Brookstown Ave., Suite PH1,
Winston Salem NC, 27101
Ph: (336)744-1636

File Name : Newbern_Avenue_and_Teachey_School_Entrance_5MIN
Site Code : 2300541
Start Date : 9/27/2023
Page No : 7



DAVENPORT

119 Brookstown Ave., Suite PH1,
Winston Salem NC, 27101
Ph: (336)744-1636

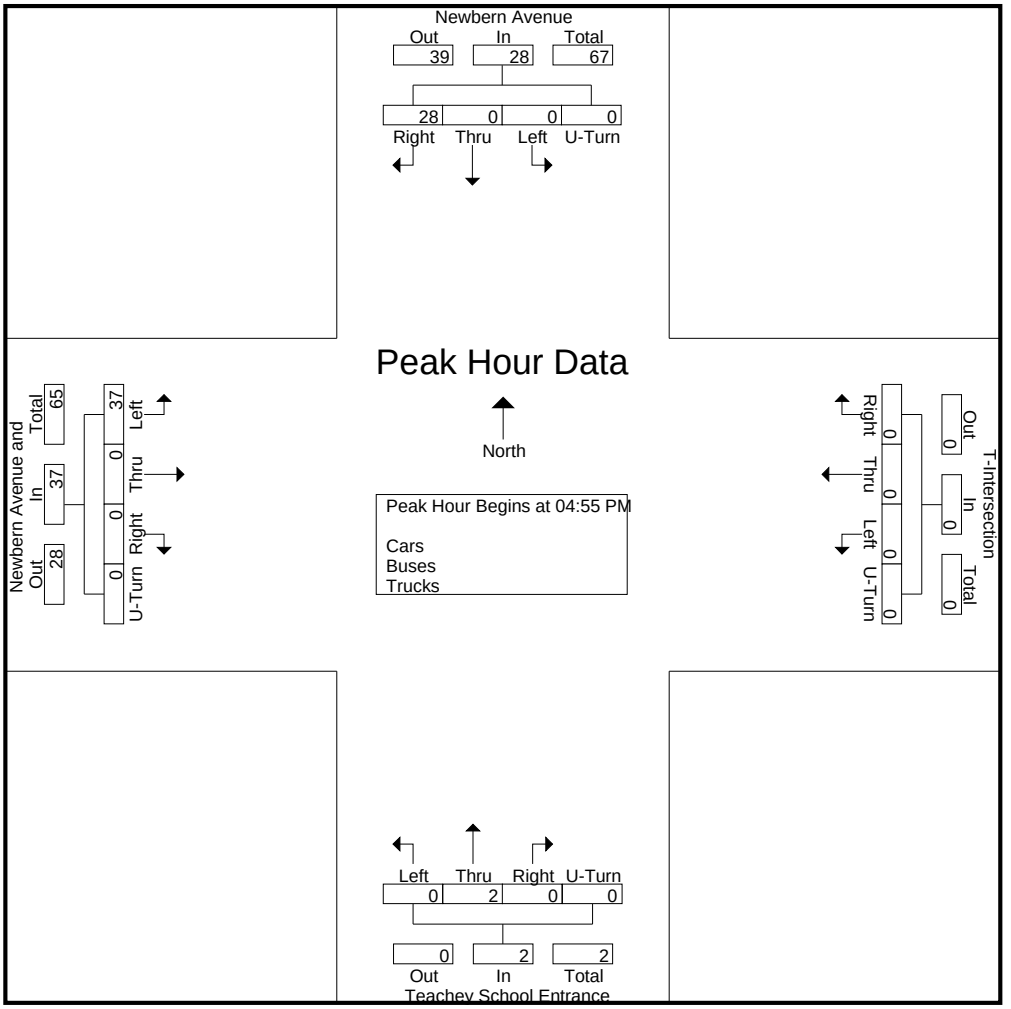
File Name : Newbern_Avenue_and_Teachey_School_Entrance_5MIN
Site Code : 2300541
Start Date : 9/27/2023
Page No : 8

	Newbern Avenue Southbound					T-Intersection Westbound					Teachey School Entrance Northbound					Newbern Avenue and Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:55 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:55 PM																					
04:55 PM	0	0	1	0	1	0	0	0	0	0	0	**1**	0	0	**1**	3	0	0	0	3	5
05:00 PM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	6
05:05 PM	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	**9**	0	0	0	**9**	**13**
05:10 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	5
05:15 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	4
05:20 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:25 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	6
05:30 PM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	7
05:35 PM	0	0	**5**	0	**5**	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	7
05:40 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	4
05:45 PM	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
05:50 PM	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	7
Total Volume	0	0	28	0	28	0	0	0	0	0	0	2	0	0	2	37	0	0	0	37	67
% App. Total	0	0	100	0		0	0	0	0		0	100	0	0		100	0	0	0		
PHF	.000	.000	.467	.000	.467	.000	.000	.000	.000	.000	.000	.167	.000	.000	.167	.343	.000	.000	.000	.343	.429

DAVENPORT

119 Brookstown Ave., Suite PH1,
Winston Salem NC, 27101
Ph: (336)744-1636

File Name : Newbern_Avenue_and_Teachey_School_Entrance_5MIN
Site Code : 2300541
Start Date : 9/27/2023
Page No : 9



DAVENPORT

119 Brookstown Ave., Suite PH1,
Winston Salem NC, 27101
Ph: (336)744-1636

File Name : US_220_and_Charles_Avenue
Site Code : 2300542
Start Date : 9/27/2023
Page No : 1

Groups Printed- Cars - Buses - Trucks

	US 220 Business Southbound					Charles Avenue Westbound					US 220 Business Northbound					T-Intersection Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
07:00 AM	9	79	0	0	88	6	0	3	0	9	0	51	13	0	64	0	0	0	0	0	161
07:15 AM	15	79	0	0	94	14	0	10	0	24	0	57	20	0	77	0	0	0	0	0	195
07:30 AM	23	103	0	0	126	15	0	32	0	47	0	90	33	0	123	0	0	0	0	0	296
07:45 AM	4	133	0	0	137	13	0	22	0	35	0	164	9	0	173	0	0	0	0	0	345
Total	51	394	0	0	445	48	0	67	0	115	0	362	75	0	437	0	0	0	0	0	997
08:00 AM	3	125	0	0	128	11	0	11	0	22	0	134	5	0	139	0	0	0	0	0	289
08:15 AM	5	121	0	0	126	8	0	2	0	10	0	118	1	0	119	0	0	0	0	0	255
08:30 AM	4	108	0	0	112	4	0	4	0	8	0	91	3	0	94	0	0	0	0	0	214
08:45 AM	1	119	0	0	120	2	0	6	0	8	0	103	1	0	104	0	0	0	0	0	232
Total	13	473	0	0	486	25	0	23	0	48	0	446	10	0	456	0	0	0	0	0	990
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	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
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	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
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	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
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	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
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM	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
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	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

DAVENPORT

119 Brookstown Ave., Suite PH1,
Winston Salem NC, 27101
Ph: (336)744-1636

File Name : US_220_and_Charles_Avenue
Site Code : 2300542
Start Date : 9/27/2023
Page No : 2

Groups Printed- Cars - Buses - Trucks

	US 220 Business Southbound					Charles Avenue Westbound					US 220 Business Northbound					T-Intersection Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	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
04:00 PM	12	143	0	0	155	5	0	4	0	9	0	140	9	0	149	0	0	0	0	0	313
04:15 PM	7	127	0	0	134	5	0	11	0	16	0	101	4	0	105	0	0	0	0	0	255
04:30 PM	13	126	0	0	139	5	0	7	0	12	0	130	2	0	132	0	0	0	0	0	283
04:45 PM	10	126	0	0	136	0	0	6	0	6	0	111	10	0	121	0	0	0	0	0	263
Total	42	522	0	0	564	15	0	28	0	43	0	482	25	0	507	0	0	0	0	0	1114
05:00 PM	10	127	0	0	137	2	0	2	0	4	0	152	15	0	167	0	0	0	0	0	308
05:15 PM	7	158	0	0	165	0	0	14	0	14	0	100	9	0	109	0	0	0	0	0	288
05:30 PM	12	134	0	0	146	8	0	5	0	13	0	118	9	0	127	0	0	0	0	0	286
05:45 PM	4	131	0	0	135	4	0	6	0	10	0	99	6	0	105	0	0	0	0	0	250
Total	33	550	0	0	583	14	0	27	0	41	0	469	39	0	508	0	0	0	0	0	1132
Grand Total	139	1939	0	0	2078	102	0	145	0	247	0	1759	149	0	1908	0	0	0	0	0	4233
Apprch %	6.7	93.3	0	0		41.3	0	58.7	0		0	92.2	7.8	0		0	0	0	0		
Total %	3.3	45.8	0	0	49.1	2.4	0	3.4	0	5.8	0	41.6	3.5	0	45.1	0	0	0	0	0	
Cars	139	1903										1724									
% Cars	100	98.1	0	0	98.3	97.1	0	97.2	0	97.2	0	98	96.6	0	97.9	0	0	0	0	0	98
Buses	0	9	0	0	9	2	0	4	0	6	0	10	2	0	12	0	0	0	0	0	27
% Buses	0	0.5	0	0	0.4	2	0	2.8	0	2.4	0	0.6	1.3	0	0.6	0	0	0	0	0	0.6
Trucks	0	27	0	0	27	1	0	0	0	1	0	25	3	0	28	0	0	0	0	0	56
% Trucks	0	1.4	0	0	1.3	1	0	0	0	0.4	0	1.4	2	0	1.5	0	0	0	0	0	1.3

DAVENPORT

119 Brookstown Ave., Suite PH1,
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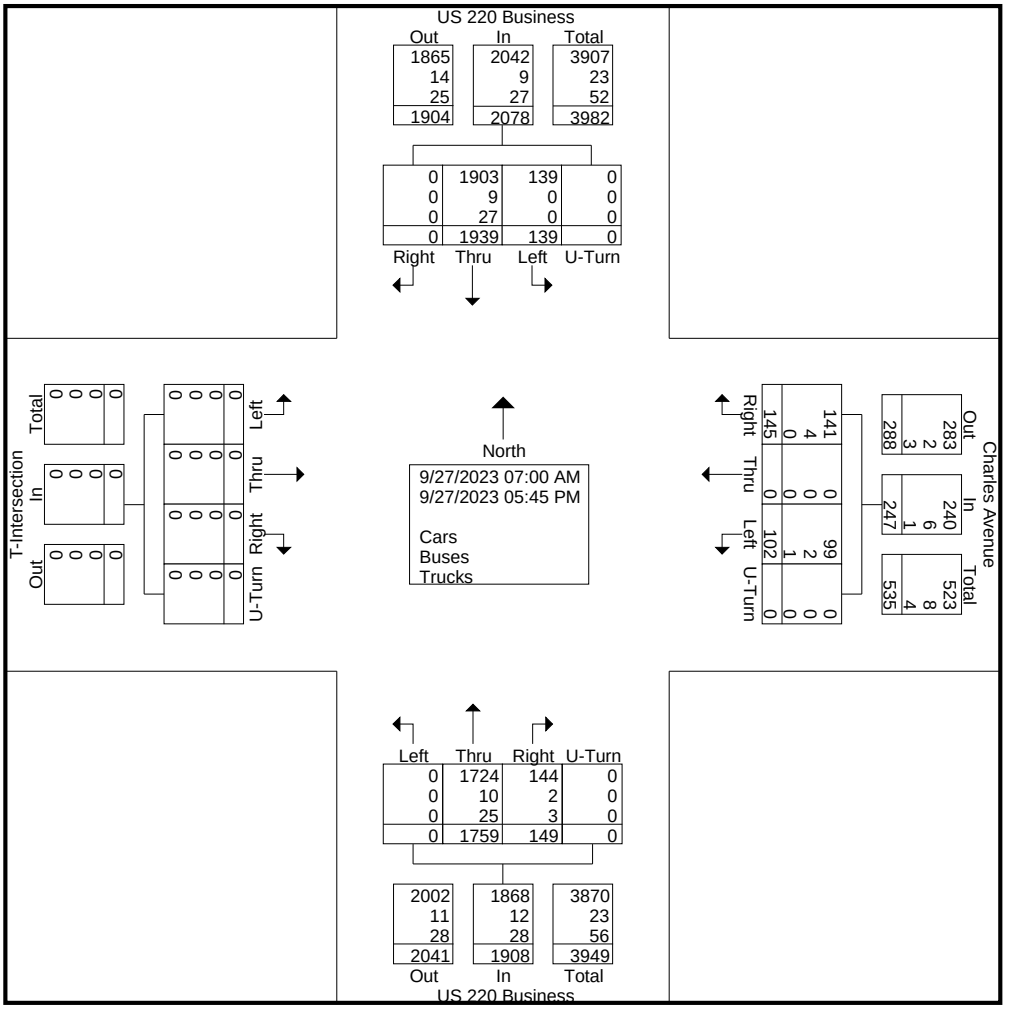
Ph: (336)744-1636

File Name : US_220_and_Charles_Avenue
Site Code : 2300542
Start Date : 9/27/2023
Page No : 3



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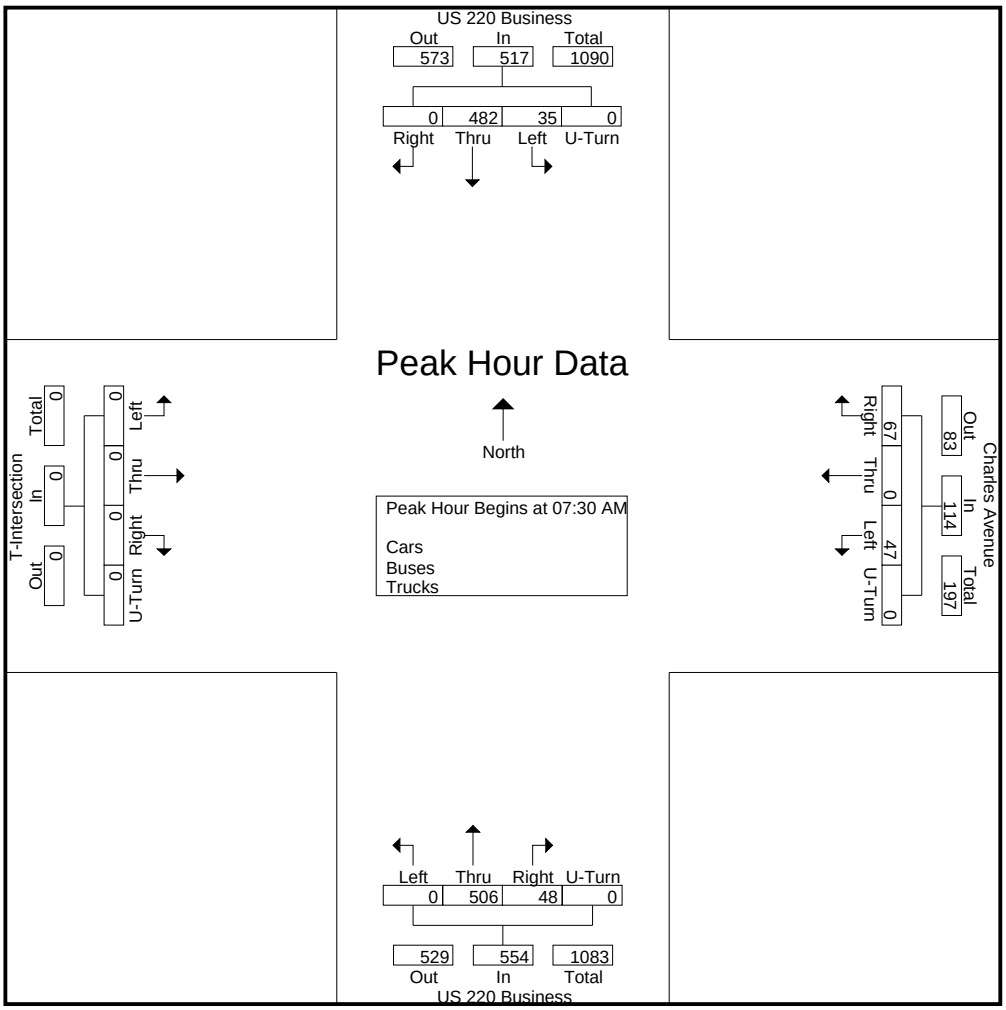
Ph: (336)744-1636

File Name : US_220_and_Charles_Avenue
Site Code : 2300542
Start Date : 9/27/2023
Page No : 4

	US 220 Business Southbound					Charles Avenue Westbound					US 220 Business Northbound					T-Intersection Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	**23**	103	0	0	126	**15**	0	**32**	0	**47**	0	90	**33**	0	123	0	0	0	0	0	296
07:45 AM	4	**133**	0	0	**137**	13	0	22	0	35	0	**164**	9	0	**173**	0	0	0	0	0	**345**
08:00 AM	3	125	0	0	128	11	0	11	0	22	0	134	5	0	139	0	0	0	0	0	289
08:15 AM	5	121	0	0	126	8	0	2	0	10	0	118	1	0	119	0	0	0	0	0	255
Total Volume	35	482	0	0	517	47	0	67	0	114	0	506	48	0	554	0	0	0	0	0	1185
% App. Total	6.8	93.2	0	0		41.2	0	58.8	0		0	91.3	8.7	0		0	0	0	0		
PHF	.380	.906	.000	.000	.943	.783	.000	.523	.000	.606	.000	.771	.364	.000	.801	.000	.000	.000	.000	.000	.859



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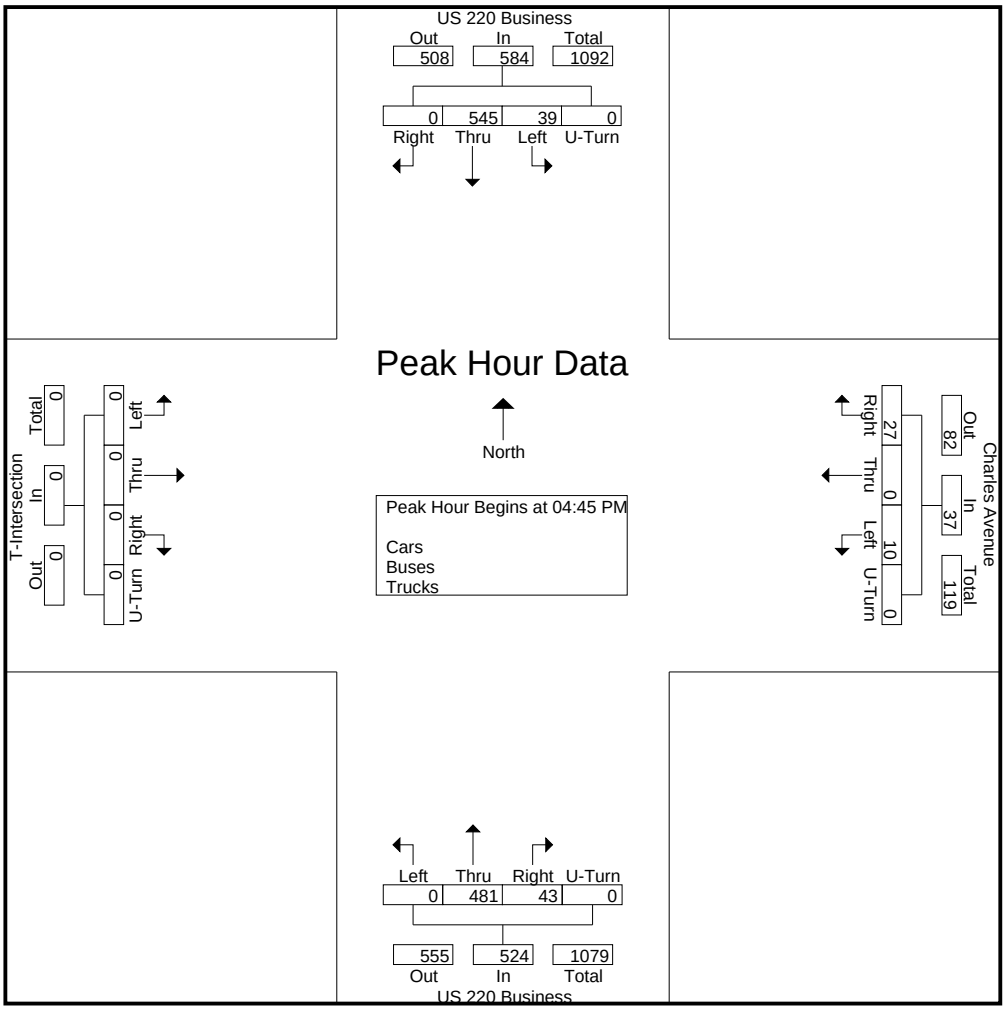
Ph: (336)744-1636

File Name : US_220_and_Charles_Avenue
Site Code : 2300542
Start Date : 9/27/2023
Page No : 5

	US 220 Business Southbound					Charles Avenue Westbound					US 220 Business Northbound					T-Intersection Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	10	126	0	0	136	0	0	6	0	6	0	111	10	0	121	0	0	0	0	0	263
05:00 PM	10	127	0	0	137	2	0	2	0	4	0	**152**	**15**	0	**167**	0	0	0	0	0	**308**
05:15 PM	7	**158**	0	0	**165**	0	0	**14**	0	**14**	0	100	9	0	109	0	0	0	0	0	288
05:30 PM	**12**	134	0	0	146	**8**	0	5	0	13	0	118	9	0	127	0	0	0	0	0	286
Total Volume	39	545	0	0	584	10	0	27	0	37	0	481	43	0	524	0	0	0	0	0	1145
% App. Total	6.7	93.3	0	0		27	0	73	0		0	91.8	8.2	0		0	0	0	0		
PHF	.813	.862	.000	.000	.885	.313	.000	.482	.000	.661	.000	.791	.717	.000	.784	.000	.000	.000	.000	.000	.929



DAVENPORT

119 Brookstown Ave., Suite PH1,
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Ph: (336)744-1636

File Name : Zoo_Connector_and_Wildlife_Way
Site Code : 2300543
Start Date : 9/27/2023
Page No : 1

Groups Printed- Cars - Buses - Trucks

	Wildlife Way Southbound					Zoo Connector Westbound					T-Intersection Northbound					Zoo Connector Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
07:00 AM	5	0	10	0	15	0	3	7	0	10	0	0	0	0	0	4	13	0	0	17	42
07:15 AM	7	0	20	0	27	0	4	2	0	6	0	0	0	0	0	5	29	0	0	34	67
07:30 AM	9	0	14	0	23	0	4	7	0	11	0	0	0	0	0	6	11	0	0	17	51
07:45 AM	17	0	10	0	27	0	6	9	0	15	0	0	0	0	0	10	17	0	0	27	69
Total	38	0	54	0	92	0	17	25	0	42	0	0	0	0	0	25	70	0	0	95	229
08:00 AM	5	0	9	0	14	0	6	10	0	16	0	0	0	0	0	5	24	0	0	29	59
08:15 AM	9	0	7	0	16	0	6	8	0	14	0	0	0	0	0	9	18	0	0	27	57
08:30 AM	16	0	8	0	24	0	0	4	0	4	0	0	0	0	0	3	16	0	0	19	47
08:45 AM	12	0	7	0	19	0	3	9	0	12	0	0	0	0	0	8	25	0	0	33	64
Total	42	0	31	0	73	0	15	31	0	46	0	0	0	0	0	25	83	0	0	108	227
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	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
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	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
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	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
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	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
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM	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
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	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

DAVENPORT

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File Name : Zoo_Connector_and_Wildlife_Way
Site Code : 2300543
Start Date : 9/27/2023
Page No : 2

Groups Printed- Cars - Buses - Trucks

	Wildlife Way Southbound					Zoo Connector Westbound					T-Intersection Northbound					Zoo Connector Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	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
04:00 PM	13	0	6	0	19	0	27	8	0	35	0	0	0	0	0	10	6	0	1	17	71
04:15 PM	11	0	7	0	18	0	15	19	0	34	0	0	0	0	0	9	8	0	1	18	70
04:30 PM	14	0	7	0	21	0	40	17	0	57	0	0	0	0	0	7	5	0	0	12	90
04:45 PM	9	0	6	0	15	0	28	15	0	43	0	0	0	0	0	12	3	0	0	15	73
Total	47	0	26	0	73	0	110	59	0	169	0	0	0	0	0	38	22	0	2	62	304
05:00 PM	7	0	11	0	18	0	33	21	0	54	0	0	0	0	0	18	5	0	1	24	96
05:15 PM	6	0	10	0	16	0	34	15	0	49	0	0	0	0	0	18	8	0	0	26	91
05:30 PM	5	0	8	0	13	0	24	10	0	34	0	0	0	0	0	12	4	0	0	16	63
05:45 PM	9	0	2	0	11	0	18	11	0	29	0	0	0	0	0	18	3	0	0	21	61
Total	27	0	31	0	58	0	109	57	0	166	0	0	0	0	0	66	20	0	1	87	311
Grand Total	154	0	142	0	296	0	251	172	0	423	0	0	0	0	0	154	195	0	3	352	1071
Apprch %	52	0	48	0		0	59.3	40.7	0		0	0	0	0		43.8	55.4	0	0.9		
Total %	14.4	0	13.3	0	27.6	0	23.4	16.1	0	39.5	0	0	0	0	0	14.4	18.2	0	0.3	32.9	
Cars	148	0	141	0	289	0	245	169	0	414	0	0	0	0	0	150	184	0	2	336	1039
% Cars	96.1	0	99.3	0	97.6	0	97.6	98.3	0	97.9	0	0	0	0	0	97.4	94.4	0	66.7	95.5	97
Buses	2	0	0	0	2	0	2	3	0	5	0	0	0	0	0	1	3	0	0	4	11
% Buses	1.3	0	0	0	0.7	0	0.8	1.7	0	1.2	0	0	0	0	0	0.6	1.5	0	0	1.1	1
Trucks	4	0	1	0	5	0	4	0	0	4	0	0	0	0	0	3	8	0	1	12	21
% Trucks	2.6	0	0.7	0	1.7	0	1.6	0	0	0.9	0	0	0	0	0	1.9	4.1	0	33.3	3.4	2

DAVENPORT

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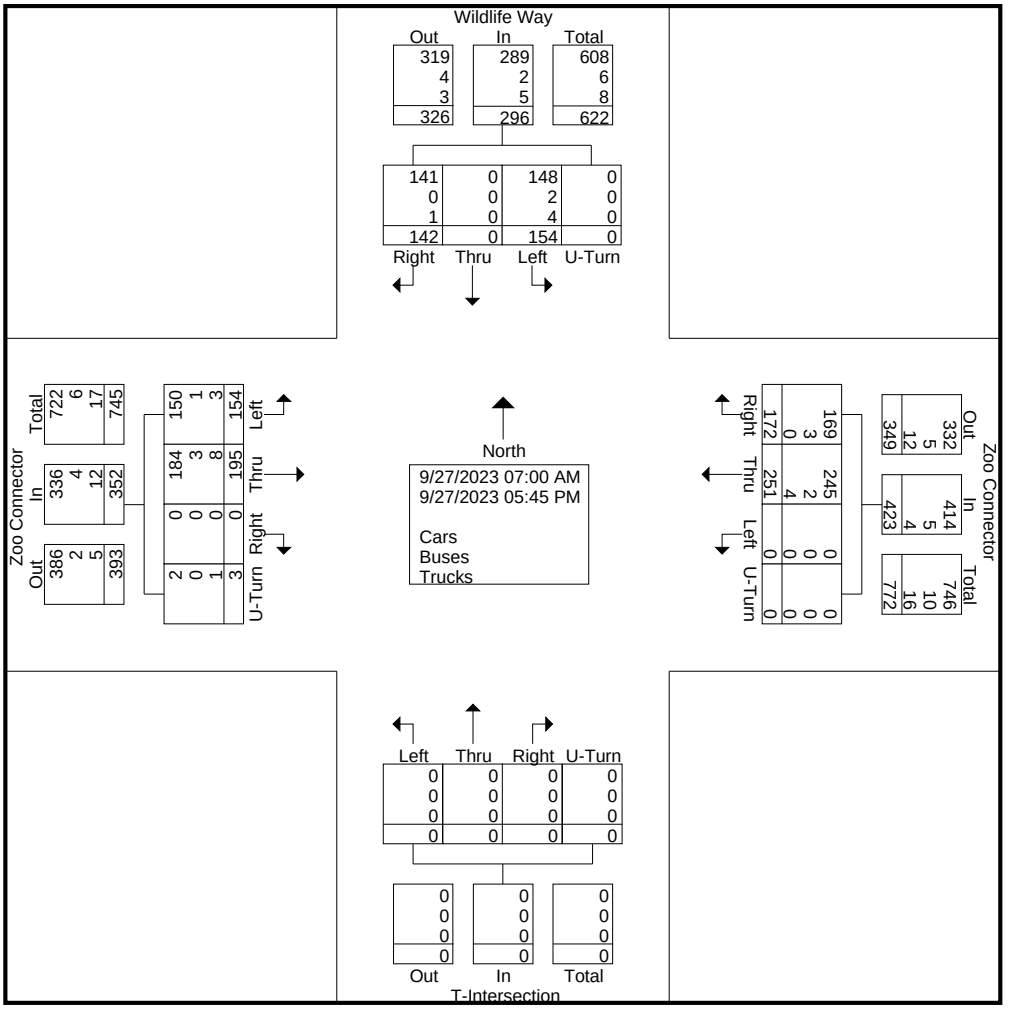
File Name : Zoo_Connector_and_Wildlife_Way
Site Code : 2300543
Start Date : 9/27/2023
Page No : 3



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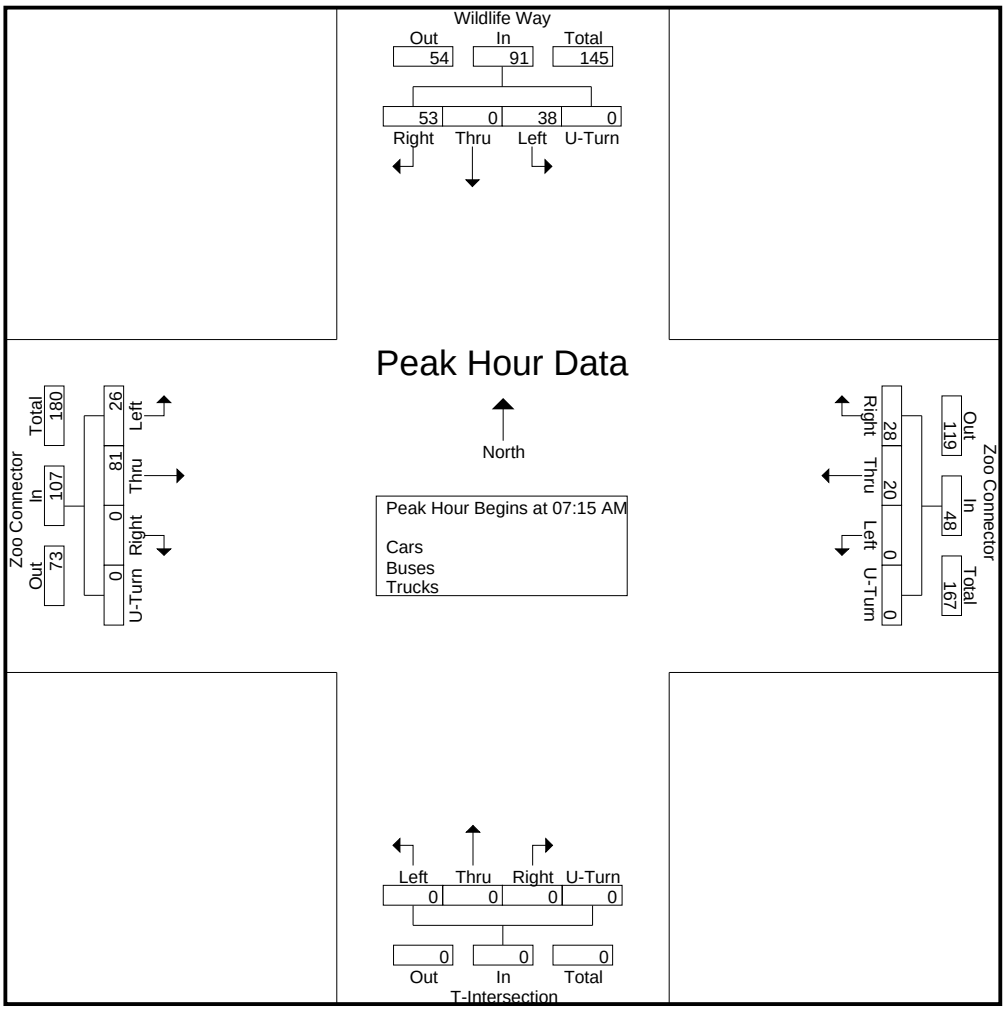
File Name : Zoo_Connector_and_Wildlife_Way
Site Code : 2300543
Start Date : 9/27/2023
Page No : 4

	Wildlife Way Southbound					Zoo Connector Westbound					T-Intersection Northbound					Zoo Connector Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	7	0	**20**	0	**27**	0	4	2	0	6	0	0	0	0	0	5	**29**	0	0	**34**	67
07:30 AM	9	0	14	0	23	0	4	7	0	11	0	0	0	0	0	6	11	0	0	17	51
07:45 AM	**17**	0	10	0	27	0	**6**	9	0	15	0	0	0	0	0	**10**	17	0	0	27	**69**
08:00 AM	5	0	9	0	14	0	6	**10**	0	**16**	0	0	0	0	0	5	24	0	0	29	59
Total Volume	38	0	53	0	91	0	20	28	0	48	0	0	0	0	0	26	81	0	0	107	246
% App. Total	41.8	0	58.2	0		0	41.7	58.3	0		0	0	0	0		24.3	75.7	0	0		
PHF	.559	.000	.663	.000	.843	.000	.833	.700	.000	.750	.000	.000	.000	.000	.000	.650	.698	.000	.000	.787	.891



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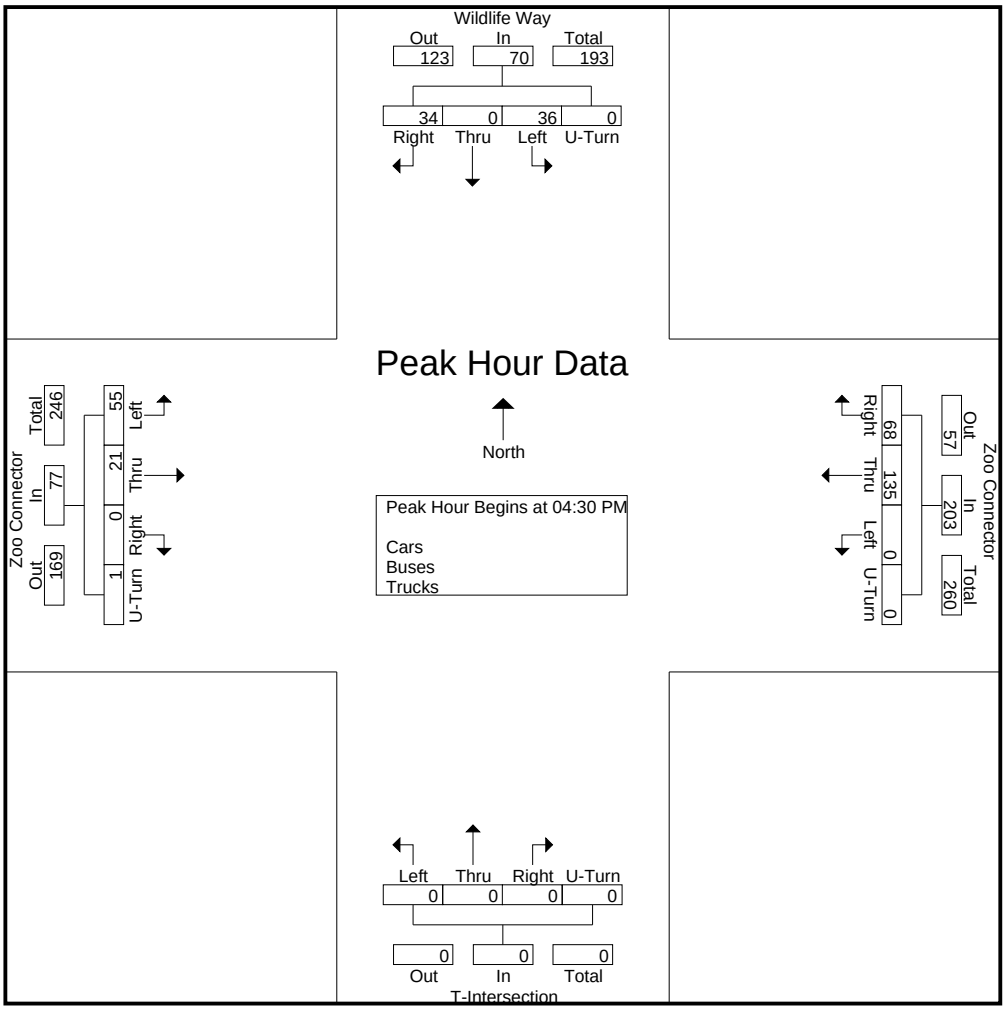
File Name : Zoo_Connector_and_Wildlife_Way
Site Code : 2300543
Start Date : 9/27/2023
Page No : 5

	Wildlife Way Southbound					Zoo Connector Westbound					T-Intersection Northbound					Zoo Connector Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	**14**	0	7	0	**21**	0	**40**	17	0	**57**	0	0	0	0	0	7	5	0	0	12	90
04:45 PM	9	0	6	0	15	0	28	15	0	43	0	0	0	0	0	12	3	0	0	15	73
05:00 PM	7	0	**11**	0	18	0	33	**21**	0	54	0	0	0	0	0	**18**	5	0	**1**	24	**96**
05:15 PM	6	0	10	0	16	0	34	15	0	49	0	0	0	0	0	18	**8**	0	0	**26**	91
Total Volume	36	0	34	0	70	0	135	68	0	203	0	0	0	0	0	55	21	0	1	77	350
% App. Total	51.4	0	48.6	0		0	66.5	33.5	0		0	0	0	0		71.4	27.3	0	1.3		
PHF	.643	.000	.773	.000	.833	.000	.844	.810	.000	.890	.000	.000	.000	.000	.000	.764	.656	.000	.250	.740	.911



DAVENPORT

119 Brookstown Ave., Suite PH1,
Winston Salem NC, 27101
Ph: (336)744-1636

File Name : Zoo_Parkway_and_Newbern_Avenue
Site Code : 2300544
Start Date : 9/27/2023
Page No : 1

Groups Printed- Cars - Buses - Trucks

	Zoo Parkway Southbound					Newbern Avenue Westbound					Zoo Parkway Northbound					Newbern Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
07:00 AM	0	31	7	0	38	0	0	7	0	7	2	39	0	0	41	2	0	0	0	2	88
07:15 AM	3	25	23	0	51	3	1	7	0	11	5	40	1	0	46	9	0	4	0	13	121
07:30 AM	1	36	40	0	77	3	2	12	0	17	11	54	0	0	65	36	1	9	0	46	205
07:45 AM	1	47	2	0	50	1	0	8	0	9	3	48	1	0	52	11	1	5	0	17	128
Total	5	139	72	0	216	7	3	34	0	44	21	181	2	0	204	58	2	18	0	78	542
08:00 AM	5	39	4	0	48	2	0	14	0	16	2	54	0	0	56	3	0	0	0	3	123
08:15 AM	4	27	2	0	33	0	3	9	0	12	1	52	1	0	54	4	0	2	0	6	105
08:30 AM	3	47	1	0	51	0	0	10	0	10	3	39	0	0	42	3	1	0	0	4	107
08:45 AM	2	32	1	0	35	0	1	9	0	10	1	47	0	0	48	1	0	0	0	1	94
Total	14	145	8	0	167	2	4	42	0	48	7	192	1	0	200	11	1	2	0	14	429
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45 AM	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
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	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
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	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
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	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
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45 PM	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
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	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

DAVENPORT

119 Brookstown Ave., Suite PH1,
Winston Salem NC, 27101
Ph: (336)744-1636

File Name : Zoo_Parkway_and_Newbern_Avenue
Site Code : 2300544
Start Date : 9/27/2023
Page No : 2

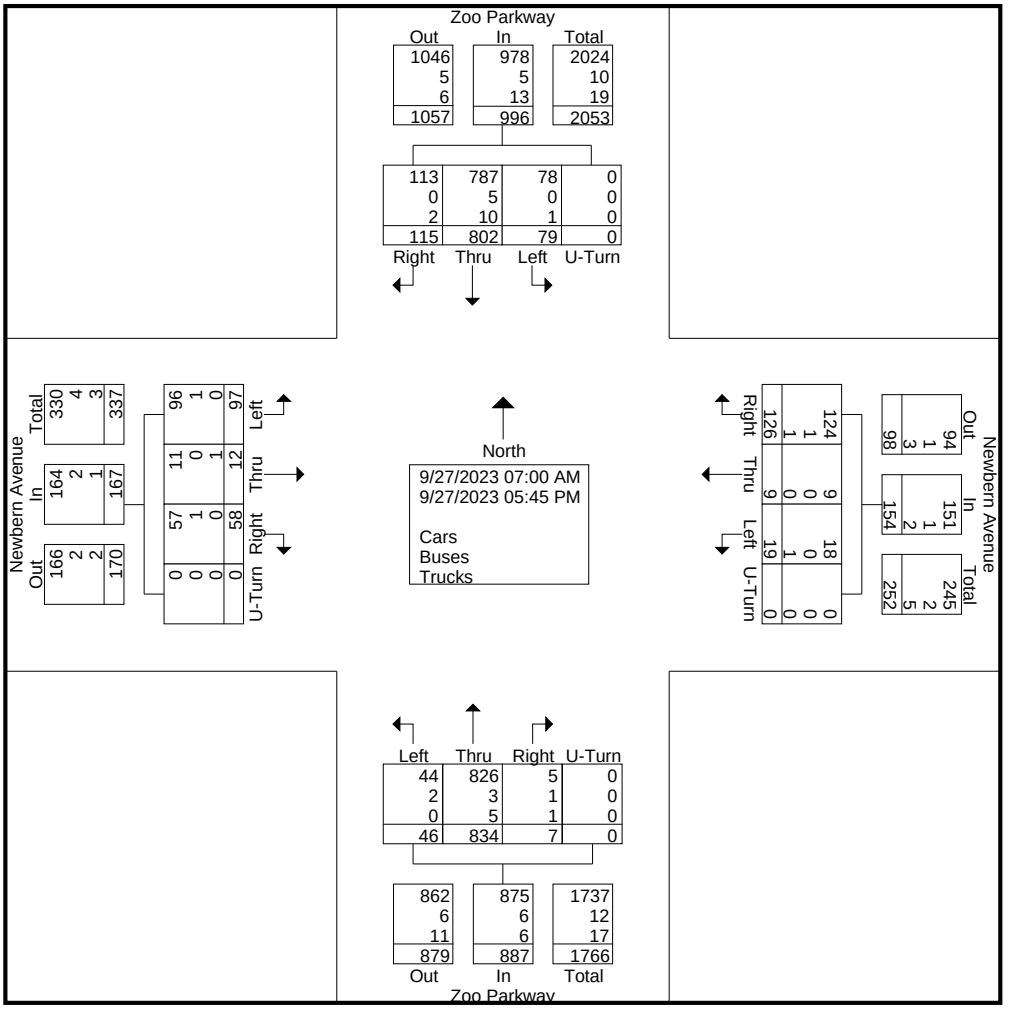
Groups Printed- Cars - Buses - Trucks

	Zoo Parkway Southbound					Newbern Avenue Westbound					Zoo Parkway Northbound					Newbern Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	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
04:00 PM	10	58	2	0	70	1	1	8	0	10	2	50	1	0	53	5	0	5	0	10	143
04:15 PM	11	59	6	0	76	1	0	6	0	7	2	51	1	0	54	1	0	4	0	5	142
04:30 PM	5	54	3	0	62	1	0	6	0	7	2	47	0	0	49	4	2	7	0	13	131
04:45 PM	6	58	4	0	68	2	0	6	0	8	0	55	0	0	55	6	2	3	0	11	142
Total	32	229	15	0	276	5	1	26	0	32	6	203	2	0	211	16	4	19	0	39	558
05:00 PM	7	58	8	0	73	2	0	2	0	4	3	71	1	0	75	2	3	8	0	13	165
05:15 PM	8	71	2	0	81	1	0	7	0	8	2	70	1	0	73	3	0	4	0	7	169
05:30 PM	8	81	5	0	94	1	1	8	0	10	3	59	0	0	62	1	2	4	0	7	173
05:45 PM	5	79	5	0	89	1	0	7	0	8	4	58	0	0	62	6	0	3	0	9	168
Total	28	289	20	0	337	5	1	24	0	30	12	258	2	0	272	12	5	19	0	36	675
Grand Total	79	802	115	0	996	19	9	126	0	154	46	834	7	0	887	97	12	58	0	167	2204
Apprch %	7.9	80.5	11.5	0		12.3	5.8	81.8	0		5.2	94	0.8	0		58.1	7.2	34.7	0		
Total %	3.6	36.4	5.2	0	45.2	0.9	0.4	5.7	0	7	2.1	37.8	0.3	0	40.2	4.4	0.5	2.6	0	7.6	
Cars	78	787	113	0	978	18	9	124	0	151	44	826	5	0	875	96	11	57	0	164	2168
% Cars	98.7	98.1	98.3	0	98.2	94.7	100	98.4	0	98.1	95.7	99	71.4	0	98.6	99	91.7	98.3	0	98.2	98.4
Buses	0	5	0	0	5	0	0	1	0	1	2	3	1	0	6	1	0	1	0	2	14
% Buses	0	0.6	0	0	0.5	0	0	0.8	0	0.6	4.3	0.4	14.3	0	0.7	1	0	1.7	0	1.2	0.6
Trucks	1	10	2	0	13	1	0	1	0	2	0	5	1	0	6	0	1	0	0	1	22
% Trucks	1.3	1.2	1.7	0	1.3	5.3	0	0.8	0	1.3	0	0.6	14.3	0	0.7	0	8.3	0	0	0.6	1

DAVENPORT

119 Brookstown Ave., Suite PH1,
Winston Salem NC, 27101
Ph: (336)744-1636

File Name : Zoo_Parkway_and_Newbern_Avenue
Site Code : 2300544
Start Date : 9/27/2023
Page No : 3



DAVENPORT

119 Brookstown Ave., Suite PH1,
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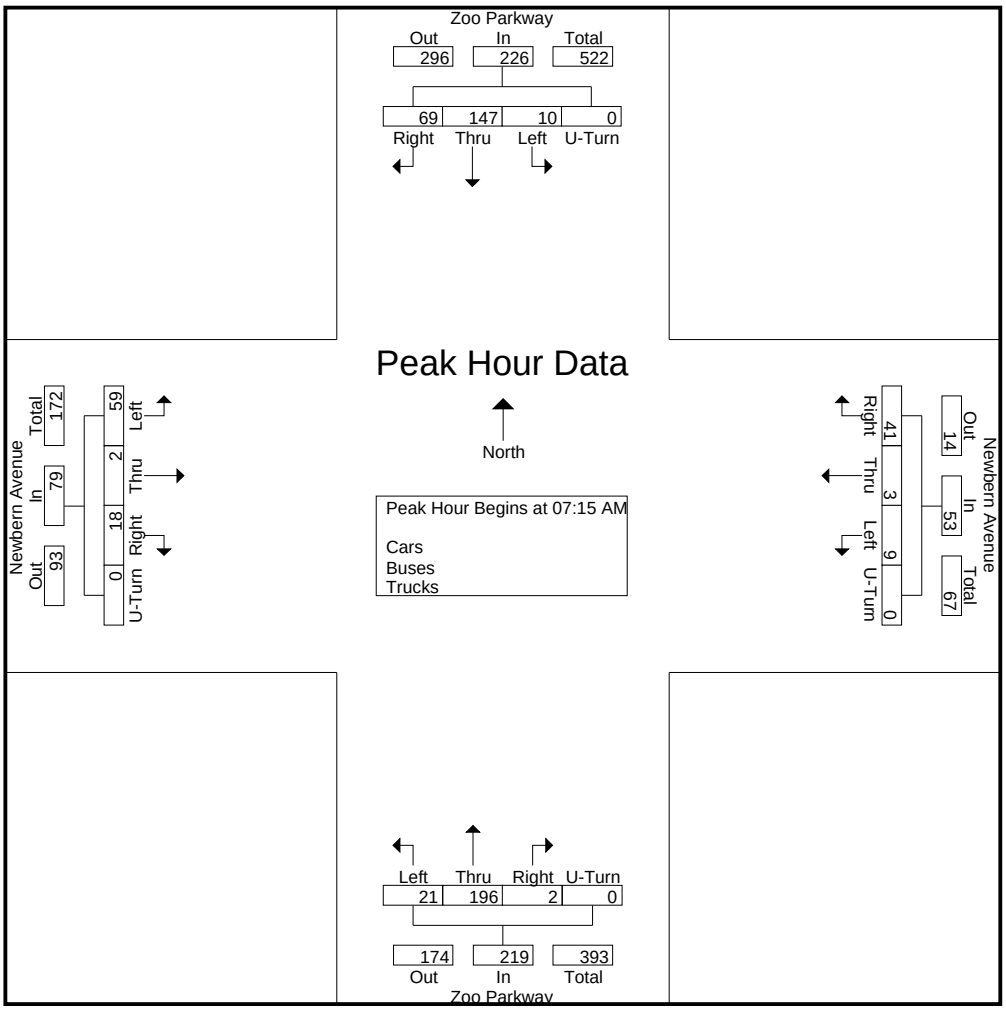
Ph: (336)744-1636

File Name : Zoo_Parkway_and_Newbern_Avenue
Site Code : 2300544
Start Date : 9/27/2023
Page No : 4

	Zoo Parkway Southbound					Newbern Avenue Westbound					Zoo Parkway Northbound					Newbern Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	3	25	23	0	51	**3**	1	7	0	11	5	40	**1**	0	46	9	0	4	0	13	121
07:30 AM	1	36	**40**	0	**77**	3	**2**	12	0	**17**	**11**	**54**	0	0	**65**	**36**	**1**	**9**	0	**46**	**205**
07:45 AM	1	**47**	2	0	50	1	0	8	0	9	3	48	1	0	52	11	1	5	0	17	128
08:00 AM	**5**	39	4	0	48	2	0	**14**	0	16	2	54	0	0	56	3	0	0	0	3	123
Total Volume	10	147	69	0	226	9	3	41	0	53	21	196	2	0	219	59	2	18	0	79	577
% App. Total	4.4	65	30.5	0		17	5.7	77.4	0		9.6	89.5	0.9	0		74.7	2.5	22.8	0		
PHF	.500	.782	.431	.000	.734	.750	.375	.732	.000	.779	.477	.907	.500	.000	.842	.410	.500	.500	.000	.429	.704



DAVENPORT

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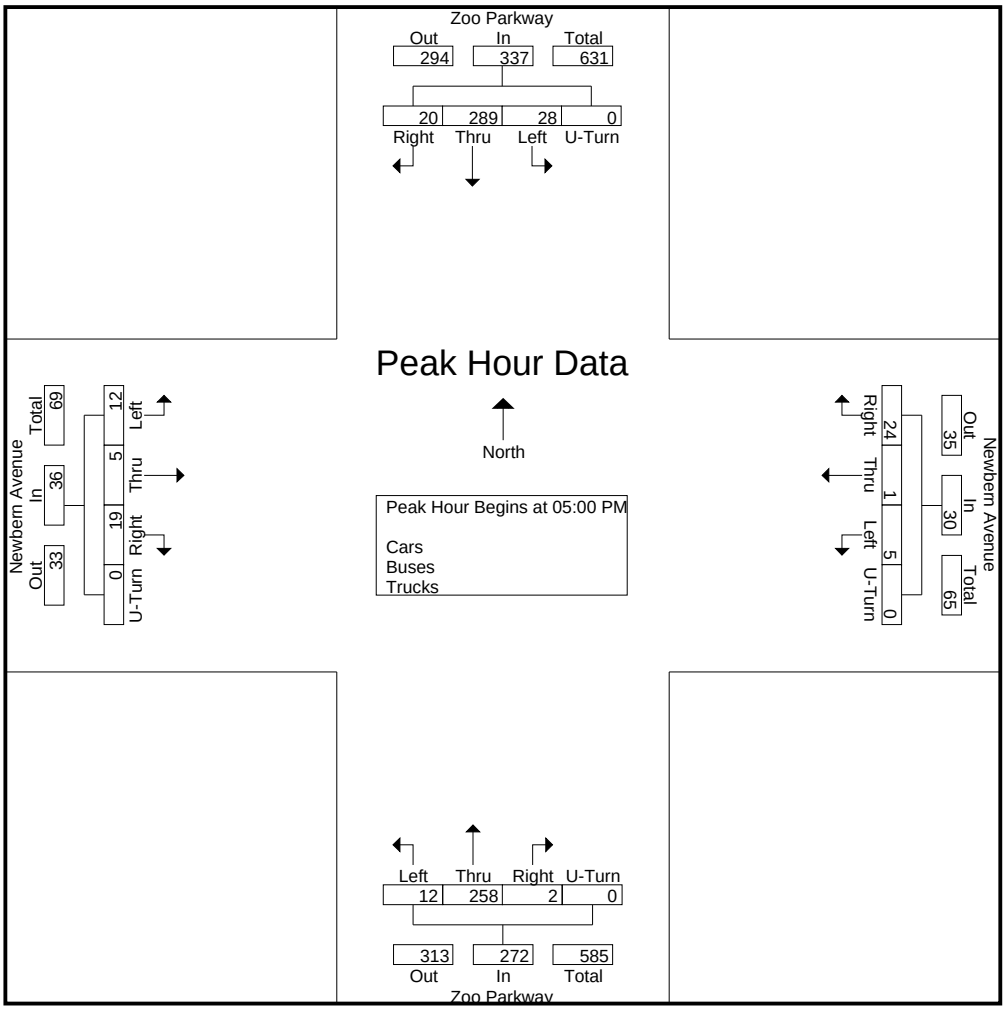
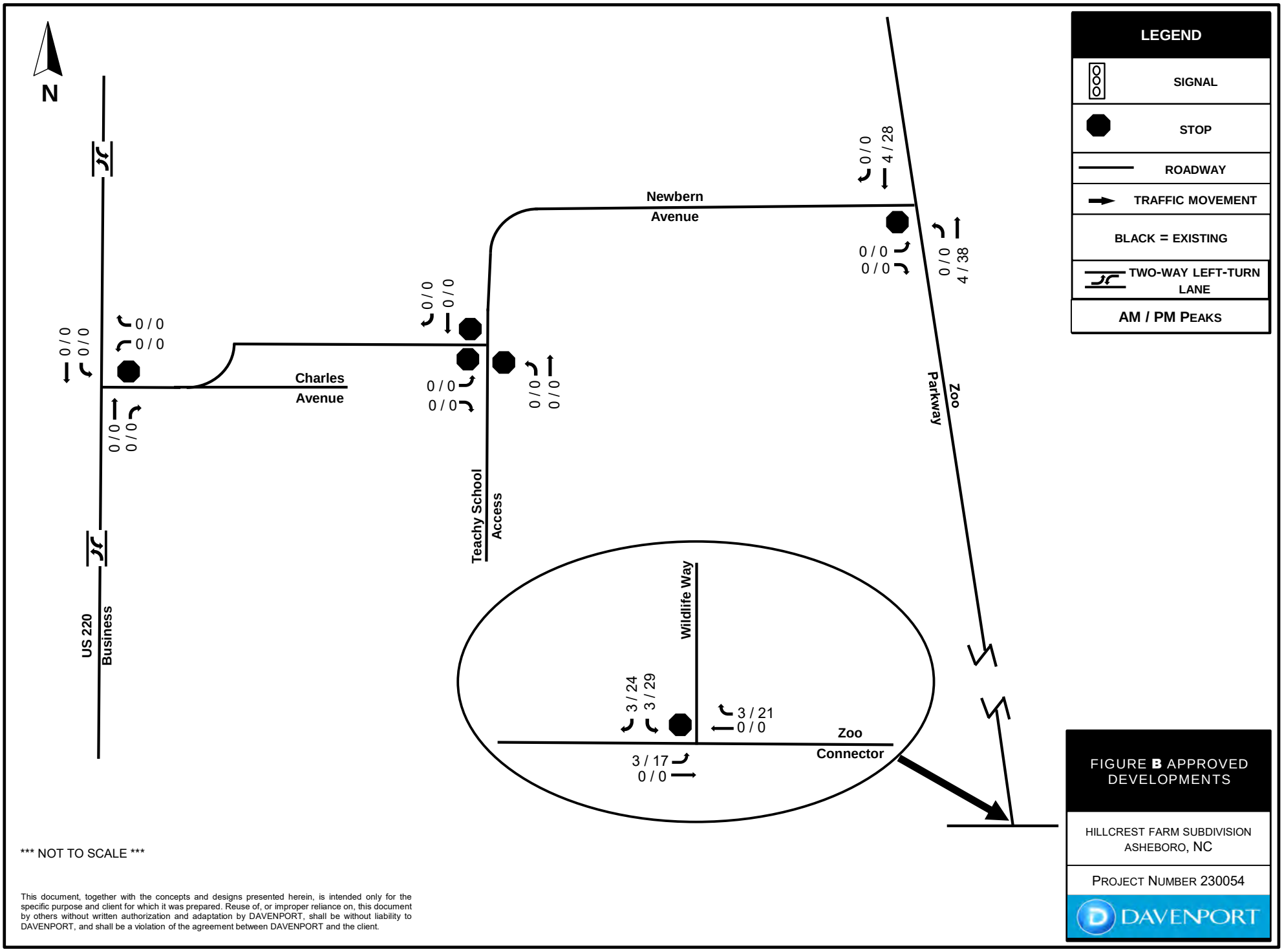
Ph: (336)744-1636

File Name : Zoo_Parkway_and_Newbern_Avenue
Site Code : 2300544
Start Date : 9/27/2023
Page No : 5

	Zoo Parkway Southbound					Newbern Avenue Westbound					Zoo Parkway Northbound					Newbern Avenue Eastbound					
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	7	58	**8**	0	73	**2**	0	2	0	4	3	**71**	**1**	0	**75**	2	**3**	**8**	0	**13**	165
05:15 PM	**8**	71	2	0	81	1	0	7	0	8	2	70	1	0	73	3	0	4	0	7	169
05:30 PM	8	**81**	5	0	**94**	1	**1**	**8**	0	**10**	3	59	0	0	62	1	2	4	0	7	**173**
05:45 PM	5	79	5	0	89	1	0	7	0	8	**4**	58	0	0	62	**6**	0	3	0	9	168
Total Volume	28	289	20	0	337	5	1	24	0	30	12	258	2	0	272	12	5	19	0	36	675
% App. Total	8.3	85.8	5.9	0		16.7	3.3	80	0		4.4	94.9	0.7	0		33.3	13.9	52.8	0		
PHF	.875	.892	.625	.000	.896	.625	.250	.750	.000	.750	.750	.908	.500	.000	.907	.500	.417	.594	.000	.692	.975



Supporting Documentation



*** NOT TO SCALE ***

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Table 3-1: Trip Generation Summary

ITE LUC	Proposed Land Use	Size	Units	Daily	Daily Entering	Daily Exiting	AM	AM Entering	AM Exiting	PM	PM Entering	PM Exiting
488	Soccer Complex	9	Fields	642	321	321	19	10	9	165	69	96
488	Soccer Complex	9	Fields	-	-	-	273*	131*	142*	-	-	-

*Represents peak hour of generator on Saturday.

TRIP DISTRIBUTION AND ASSIGNMENT

Based on the land use, existing traffic flow patterns, new traffic patterns due to the Asheboro Southern Bypass and surrounding roadway network, trip distribution was estimated for the proposed development. The trip distributions are illustrated in Figure 6. It is estimated that:

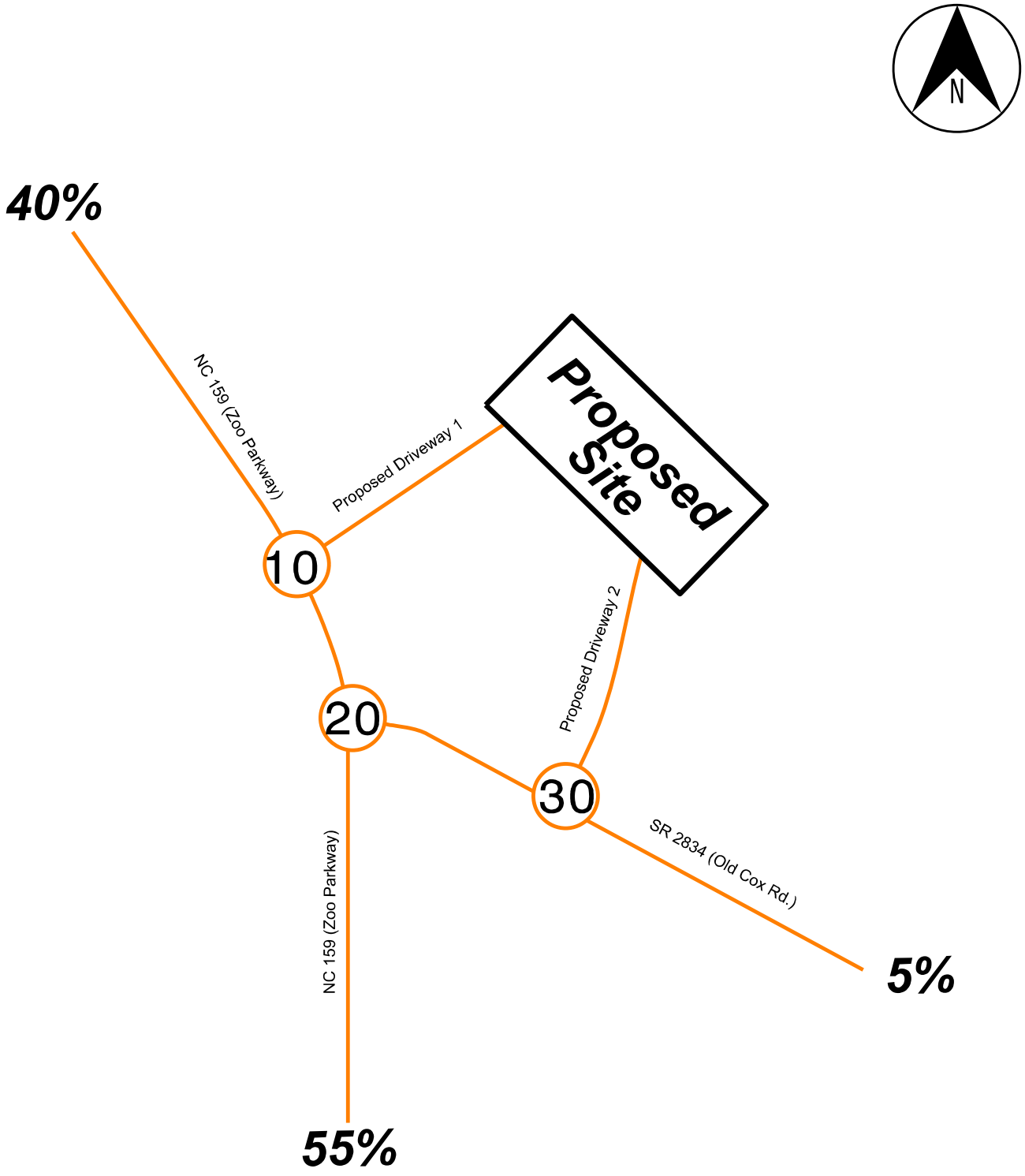
- 40% of trips generated will travel to/from the north on NC 159 (Zoo Parkway)
- 55% of trips generated will travel to/from the south on NC 159 (Zoo Parkway)
- 5% of trips generated will travel to/from the south on SR 2834 (Old Cox Rd.)

There are two points of entry/exit at this site. Based on the proximity of the site parking to the driveways and the overall trip distribution above, an overall distribution of the trips was determined. See table 3-2 below for base assumptions.

Table 3-2: Driveway Distribution

Destination	Proportion	Driveway 1	Driveway 2
North NC159 (to/from)	40.00%	75%	25%
South NC159 (to/from)	55.00%	50%	50%
Old Cox RD (to/from)	5.00%	0%	100%
TOTAL	100.00%	58.00%	42.00%

Based on the trip distribution and proximity of parking to the exits, it was determined that 58% of the traffic would utilize Driveway 1 onto NC 159 (Zoo Parkway) and 42% of traffic would utilize Driveway 2 onto SR 2834 (Old Cox Road).
The total traffic volumes for 2022 build conditions were determined by adding the 2022 background traffic to the site traffic. These traffic volumes can be seen in Figures 5 and 7, respectively. See Figure 8 for 2022 Build Traffic Volumes.



LEGEND

XX AM
(XX) (PM)
(XX) (SAT)

Stop-Controlled

Full Lane

Existing Turn Bay

XXX' Existing Storage Length

Proposed Turn Bay

XXX' Mitigated Storage Length

Plans Prepared By:

DRMP

DRMP, Inc.
8000 Regency Parkway, Suite 110
Cary, NC 27518
NC License No. C-2213 (919) 650-1038

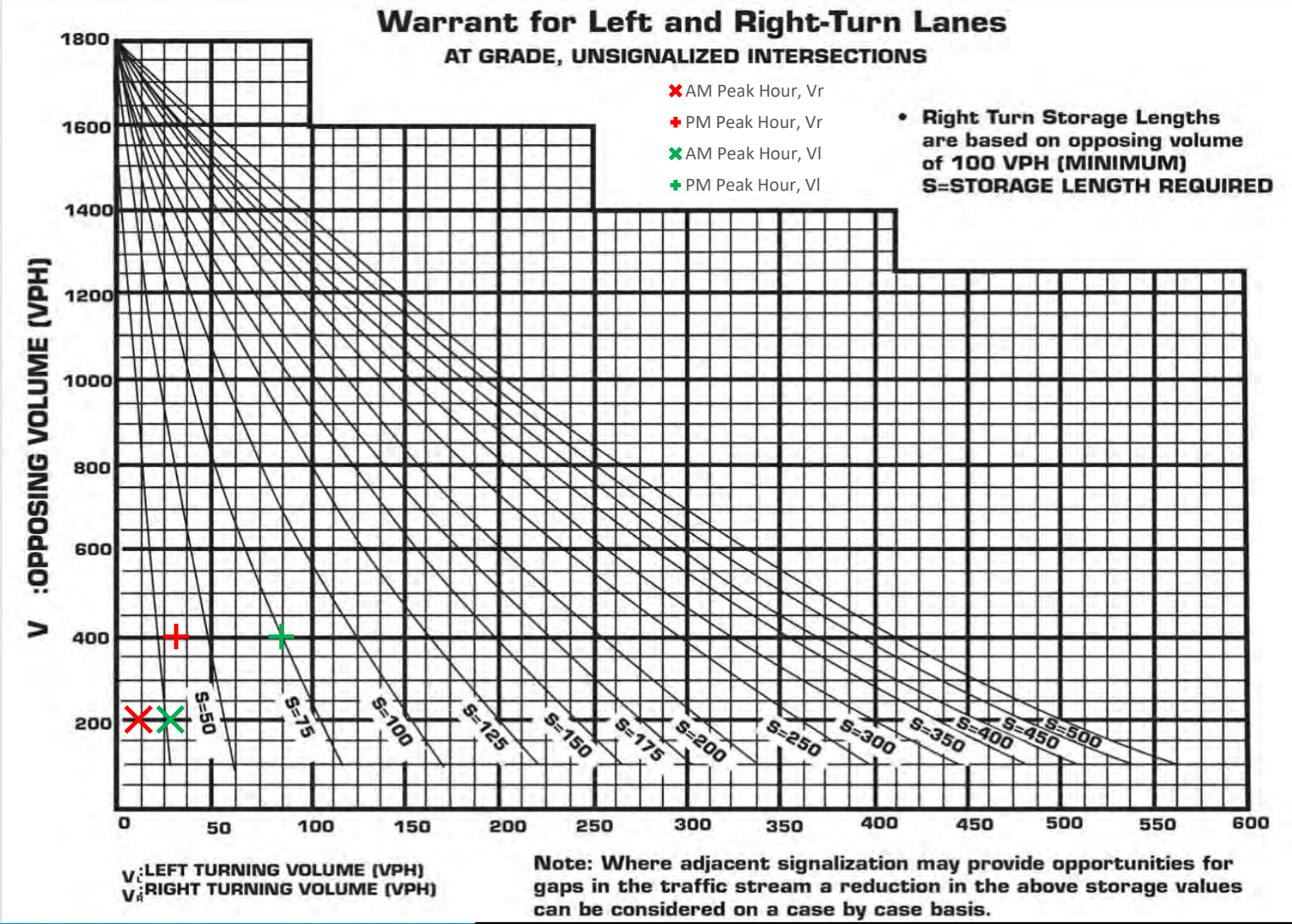
Zoo City Sportsplex
Asheboro, NC

Site Primary Trip Distribution Percentages

Scale: Not to Scale

Figure 6

Peak Hour	Volumes		Peak Hour	Volumes	
	Opposing	Lefts		Opposing	Rights
AM	200	25	AM	200	8
PM	395	84	PM	395	28



DAVENPORT

TURN LANE WARRANT SUMMARY

SITE ACCESS 1 AT ZOO PARKWAY

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

December 21, 2023

AJ Anastopoulo, P.E.
Davenport
119 Brookstown Ave, Suite PH1
Winston-Salem, NC 27101

SUBJECT: NCDOT Review of TIA to Assess Required Improvements Associated with Hillcrest Farm Subdivision

Dear Mr. Anastopoulo,

The NC Department of Transportation has reviewed the Traffic Impact Analysis (TIA) dated November 6, 2023, as submitted to this office for the Hillcrest Farm Subdivision in Asheboro, NC. The TIA studied the development's site driveway on NC 159 (Zoo Parkway) and SR 2919 (Newbern Ave), and other surrounding intersections. Based on comments from the District Engineer's office, Division Traffic Engineer's office, and the Congestion Management unit, the following stipulations and recommendations are offered:

1. Construct a right turn lane with 75' storage on NC 159 at Newbern Ave.

2. Construct a right turn lane with 50' storage on NC 159 at Site Drive 1.

3. Construct a left turn lane with 100' storage on NC 159 at Site Drive 1.

4. Construct a right turn lane with 100' storage on Zoo Connector at Wildlife Way.

Please see the attached drawing of the proposed improvements/incorporation of TIA recommendations for the subject site.

All work associated with the above-mentioned improvements shall be carried out through an approved Encroachment Agreement issued by the NCDOT Division 8 Engineer. In addition, any traffic signal timing modifications required (determined during driveway permitting process) will

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
DIVISION 8, DISTRICT 1
300 DOT DRIVE
ASHEBORO, NC 27205

Telephone: (336) 318-4000
Fax: (336) 318-4010
Customer Service: 1-877-368-4968

Website: www.ncdot.gov

Location:
300 DOT DRIVE
ASHEBORO, NC 27205

need to be coordinated through the Division Traffic Engineer's Office (Attn: David Willett, 150 DOT Drive, Carthage, NC, 28327) before work may commence.

If you have any further questions regarding this matter, please do not hesitate to call our office at (336) 318-4000.

Sincerely,

DocuSigned by:

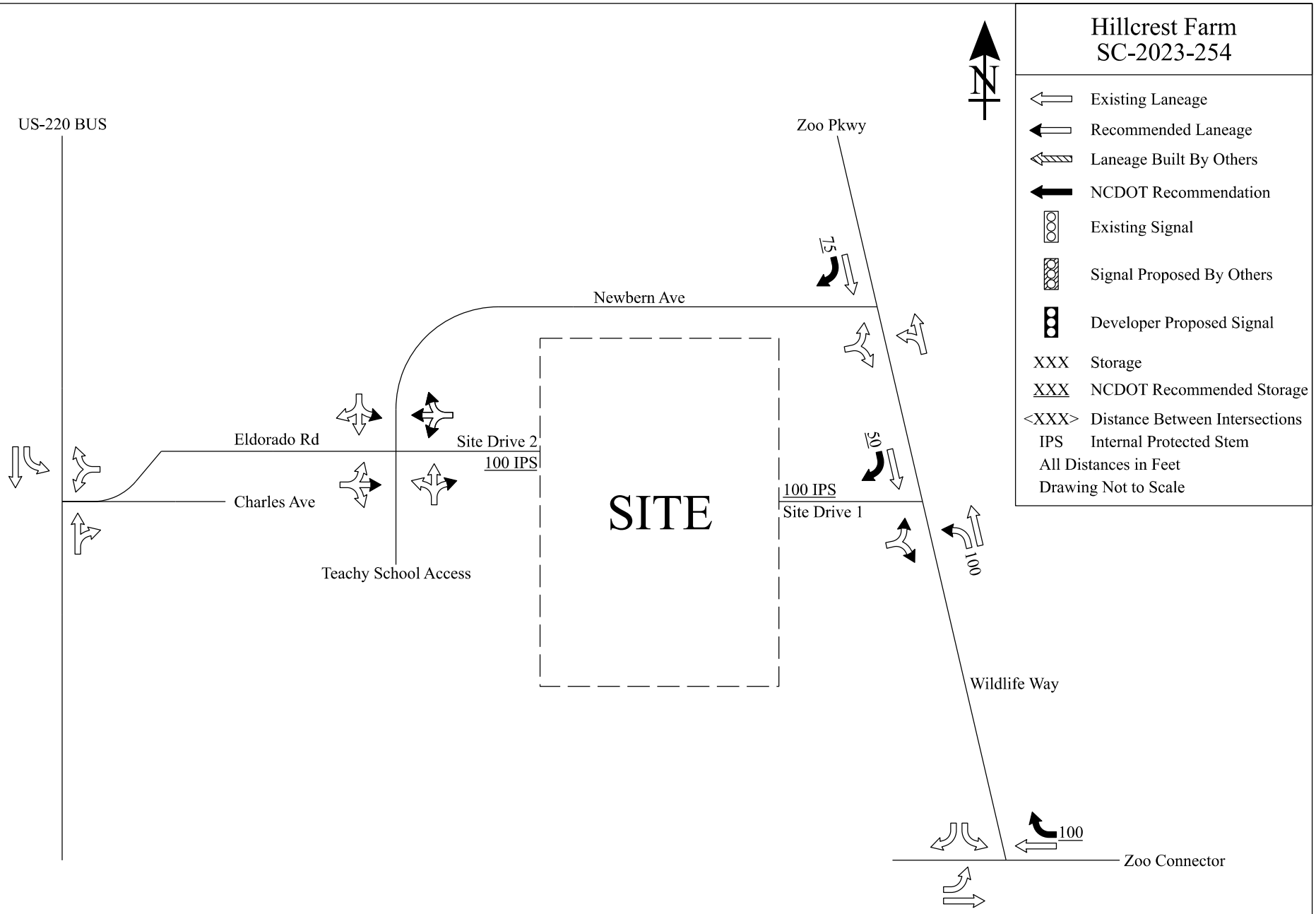
R. J. Monroe

746DFD671EFA474...

R. J Monroe
District Supervisor

Attachment

Cc: Mr. Reuben Blakley, PE, Division Engineer
Mr. David Willett, Division Traffic Engineer
Mr. Nicholas Lineberger, PE, Congestion Management Regional Engineer
File


Hillcrest Farm
SC-2023-254
Existing Laneage
Recommended Laneage
Laneage Built By Others
NCDOT Recommendation
Existing Signal
Signal Proposed By Others
Developer Proposed Signal
XXX Storage
XXX NCDOT Recommended Storage
<XXX> Distance Between Intersections
IPS Internal Protected Stem
All Distances in Feet
Drawing Not to Scale
N
US-220 BUS
Zoo Pkwy
Newbern Ave
Eldorado Rd
Charles Ave
Site Drive 2
100 IPS
Teachy School Access
SITE
100 IPS
Site Drive 1
Wildlife Way
Zoo Connector
75
50
100
100

RZ-23-14: Request to rezone property located along the west side of Zoo Parkway and the south side of Newbern Avenue from R40 Low-Density Residential, R15 Low-Density Single-Family Residential, and R10 Medium-Density Residential to R7.5 (CZ) Medium-Density Residential Conditional Zoning for a Residential Planned Unit Development

Building Renderings provided by applicant

Note: A full set of the building elevations are included in the electronic copy of this staff report.

TrueHomes

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THE HUNTLEY
MASTERS SET
ELEMENTS / TRADITIONS

TrueHomes
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2649 Brekonridge Centre Drive Suite 104
Monroe, North Carolina 28110
Phone: 704-238-1229 Fax: 704-238-1150

ELECTRICAL LEGEND

	EXT. CARRIAGE LIGHT
	OUTLET 220V
	OUTLET 110V
	OUTLET 110V WATER PROOF
	OUTLET 110V GFI
	SWITCHED RECEPTACLE
	PHONE
S C D O	SMOKE / CO DETECTOR
S D	SMOKE DETECTOR
	SWITCH
	3-WAY SWITCH
	4-WAY SWITCH
	SPEAKER SWITCH
	THERMOSTAT
	CABLE TV
	CEILING LIGHT
	COMPACT FLUORESCENT LIGHT GU24 SOCKET
	JUNCTION LIGHT
	SPEAKER
	EXHAUST FAN
	EXHAUST FAN / LIGHT
	FLOOD LIGHT
	UNDER CABINET LIGHT
	PUSH BUTTON
	ELECTRIC PANEL
	CAN LIGHT
	MINI-CAN LIGHT
	PENDANT LIGHT
	PREWIRE
	CEILING FAN PRE-WIRE

ELECTRICAL TO BE PLACED PER CODE IN THE FIELD.

GENERAL NOTES

1. PLANS PERMITTED IN NORTH CAROLINA ARE DESIGNED TO MEET THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE, AS ISSUED BY THE STATE OF NORTH CAROLINA, AND PLANS PERMITTED IN SOUTH CAROLINA DESIGNED TO MEET 2015 INTERNATIONAL RESIDENTIAL BUILDING CODE AS ISSUED BY THE STATE OF SOUTH CAROLINA, WITH MODIFICATIONS AS REQUIRED TO MEET LOCAL BUILDING CODES FOR EACH APPLICABLE JURISDICTION.
2. DO NOT SCALE DIMENSIONS FROM PRINTS. USE DIMENSIONS GIVEN OR CONSULT PRODUCTION CAD DEPARTMENT FOR FURTHER CLARIFICATION.
3. ALL DIMENSIONS ARE FROM WALL FRAMING, NO FINISHED DIMENSIONS ARE GIVEN.
4. PROVIDE 2 STUDS BETWEEN ALL WINDOWS.
5. ACCESS DOORS BETWEEN HOUSE AND GARAGE AREAS TO BE 20-MINUTE FIRE RATED.
6. ALL EXTERIOR WALLS & INTERIOR WALLS TO BE 2X4 STUDS 16" O.C. (U.N.O.). INTEGRITY COLLECTION INTERIOR NON-LOAD BEARING WALLS 24" O.C. (U.N.O.)
7. ALL STRUCTURAL FRAMING LUMBER EXPOSED DIRECTLY TO THE WEATHER OR BEARING DIRECTLY ON MASONRY OR CONCRETE SHALL BE TREATED. ALL WOOD IN CONTACT WITH THE GROUND MUST BE GROUND-CONTACT APPROVED. ALL WOOD EXPOSED DIRECTLY TO THE WEATHER SHALL BE PROTECTED TO PREVENT THE OCCURRENCE OF ROT.
8. ALL ANGLED WALLS ARE AT 45 DEGREES UNLESS NOTED OTHERWISE.
9. USE WINDOW NOMINAL SIZES FOR ROUGH OPENINGS (APPLIES TO TWIN AND TRIPLE WINDOWS). SEE ELEVATIONS FOR WINDOW HEADER HEIGHTS.
10. DIMENSIONS ARE FROM FACE OF STUDS.
11. PROVIDE BLOCKING ABOVE WINDOWS AND DOORS 16" O.C.
12. PROVIDE EXTRA STUDS AS INDICATED AT BEAM BEARING LOCATIONS.
13. WALLS TO BE FRAMED WITH STUDS AT 16" O.C. AT KITCHEN WALLS WITH CABINETS AND AT TUB/SHOWER LOCATIONS (PER MANUF.).
14. ALL COMMON CEILING BETWEEN GARAGE TO HOUSE PROVIDE 5/8" TYPE X GWB PER GARAGE SEPARATION REQUIREMENTS PER IRC. ALL JOINTS TO BE TAPED & MUDDED FOR FIRE SEPARATION. ALL STRUCTURES SUPPORTING FLOOR/CEILING ASSEMBLIES USED FOR SEPARATION REQUIRE NOT LESS THAN ½" GYP OR EQ. PER SECTION R302.6
15. SEPARATE GARAGE FROM ATTIC WITH 5/8" TYPE X GWB SCUTTLE MINIMUM AND 2X SCUTTLE FRAMING MATERIAL.
16. HEEL HEIGHTS: SEE ELEVATIONS SHEETS FOR TOP OF FASCIA DIMENSIONS TO GATHER PROPER HEEL HEIGHT REQUIREMENTS.
17. PROVIDE AND INSTALL LOCALLY CERTIFIED SMOKE DETECTORS AND CARBON MONOXIDE DETECTORS AS REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES AND PER MANUFACTURER SPECS.
18. STAIR TREAD DESIGN TO BE VERIFIED WITH SELECTIONS AND PO'S.
19. PROVIDE 1 ½" FLAT WALL FRAMING FOR ALL HVAC CHASES UNLESS NOTED OTHERWISE. SEE FRAMING SHEETS/CS2 FOR ADDITIONAL NOTES PER LOCAL CODES.
20. FOR TRADITIONS, ELEMENTS, INTEGRITY, AND TRIBUTE SERIES, DOORS SHOULD BE LOCATED 4" OFF ADJACENT WALLS OR CENTERED IN THE WALL UNLESS NOTED OTHERWISE. DESIGNER SERIES SHOULD BE LOCATED 6" OFF ADJACENT WALLS OR CENTERED IN THE WALL UNLESS NOTED OTHERWISE.
21. ALL HOMES TREATED WITH BORA-CARE TERMITE TREATMENT.
22. SMURF DOORS ARE 21 1/2" x 39" NOMINAL (R.O. 22 1/2" x 40").
23. SHEATH WALLS AND CEILINGS w/ OSB PER SPECS. IN FURN. ROOM LOCATIONS

INTERIOR HINGED DOOR SCHEDULE

DOOR WIDTH		DOOR HEIGHT R.O.		
PLAN I.D.	R.O. WIDTH	8FT CEILING	9FT CEILING	10FT CEILING
1/4	1'-6"	82-1/2" (6'-8" NOMINAL DOOR HEIGHT +2-1/2")	82-1/2" (6'-8" NOMINAL DOOR HEIGHT +2-1/2")	98-1/2" (8'-0" NOMINAL DOOR HEIGHT +2-1/2")
1/6	1'-8"			
1/8	1'-10"			
2/0	2'-2"			
2/4	2'-6"			
2/6	2'-8"			
2/8	2'-10"			
2/10	3'-0"			
3/0	3'-2"			
4/0	4'-2"			
5/0	5'-2"			
6/0	6'-2"			

◇ LOAD BEARING ◯ NON-LOAD BEARING

EXTERIOR HINGED DOOR SCHEDULE

DOOR WIDTH		DOOR HEIGHT R.O.		
PLAN I.D.	R.O. WIDTH	8FT CEILING	9FT CEILING	10FT CEILING
3/0	3'-2 1/2"	82-1/2"	82-1/2"	98-1/2"
2/8	2'-10 1/2"			
5/0	5'-3 5/8"			
5/4	5'-7 5/8"			
6/0	6'-3 5/8"			
SLIDING PATIO DOORS				
5/0	4'-11 1/2"	80"	80"	96"
6/0	5'-11 1/2"			

KING / JACK SCHEDULE

A	(2) JACK STUDS
B	(1) JACK STUD & (1) KING STUD
C	(1) JACK STUD & (2) KING STUDS
D	(1) JACK STUD & (3) KING STUDS
E	(2) JACK STUDS & (1) KING STUD
F	(2) JACK STUDS & (2) KING STUDS
G	(2) JACK STUDS & (3) KING STUDS
H	(3) JACK STUDS & (3) KING STUDS
I	(4) JACK STUDS & (4) KING STUDS

SQUARE FOOTAGE

KEY NOTES
ELEVATIONS

101	CORNER TRIM
103	FLUSH RAKE
105	HORIZONTAL SIDING
107	BOARD-N-BATTEN SIDING
108	SCALLOPED SIDING
109	SHAKE SIDING
111	COMPOSITE SHINGLES
112	METAL ROOFING
113	SHINGLED RETURN
114	SUBFASCIA
115	FLASHING
117	VINYL SHUTTER
119	TRIM BOARD AT OVERHEAD DOOR JAMB
120	BRICKMOLD TRIM
121	1X4 TRIM BOARD
123	1X6 TRIM BOARD
125	1X8 TRIM BOARD
126	SYNTHETIC CROSS HEAD
127	1X4 FRIEZE TRIM BOARD
129	1X6" FASCIA
131	1-1/2" THICK STONE CAP
133	5" FACE BRICK VENEER
135	ROWLOCK SILL
137	BRICK JACK ARCH
139	SOLDIER COURSE
141	PRECAST KEYSTONE
143	THIN-SET STONE VENEER

TABLE OF CONTENTS

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GSN	GENERAL STRUCTURAL NOTES
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A7	STAIR SECTIONS
E1	FIRST FLOOR ELECTRICAL PLANS
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D	DETAILS
C	CABINET PLANS

INTERIOR PASS THRU SCHEDULE

FRAMED OPENING DIMENSIONS		
WALL HEIGHT	R.O. WIDTH	R.O. HEIGHT
8'-1 1/8"	PLAN I.D. +2"	82-1/2"
9'-1 1/8"	PLAN I.D. +2"	94-1/2"
10'-1 1/8"	PLAN I.D. +2"	98-1/2"

ROUGH OPENING HEIGHTS ARE FOR DO, CO, & AO OPENINGS. SHIM HEIGHTS AS NEEDED TO MATCH INTERIOR HINGED DOOR CASING

INTERIOR DOORWAY OPENINGS:
DO = DRYWALL OPENING
CO = CASED OPENING
AO = ARCHED OPENING

HEADER SCHEDULE

ALL INTERIOR BEARING AND EXTERIOR WALLS

1. SPANS UP TO 3'-6"	--	(2) 2x8's
2. SPANS 3'-6" TO 6'-6"	--	(2) 2x10's
3. SPANS 6'-6" OR MORE	--	SEE PLAN

POST SCHEDULE

2x4 STUDS	2x6 STUDS
(2) EX: (2) 2X4	(2) EX: (2) 2X6

NUMBER INSIDE CALLOUT INDICATES TOTAL NUMBER OF STUDS.

4X4 POST	6X6 POST
(P)	(P)

LETTER 'P' INSIDE CALLOUT INDICATES A SOLID 4x4 or 6x6 POST

REVISION LOG

1.	DATE:	DRAWN BY:
2.	DATE:	DRAWN BY:
3.	DATE:	DRAWN BY:
4.	DATE:	DRAWN BY:

COVER SHEET
MASTER SET

THE HUNTLEY

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SHEET: CS
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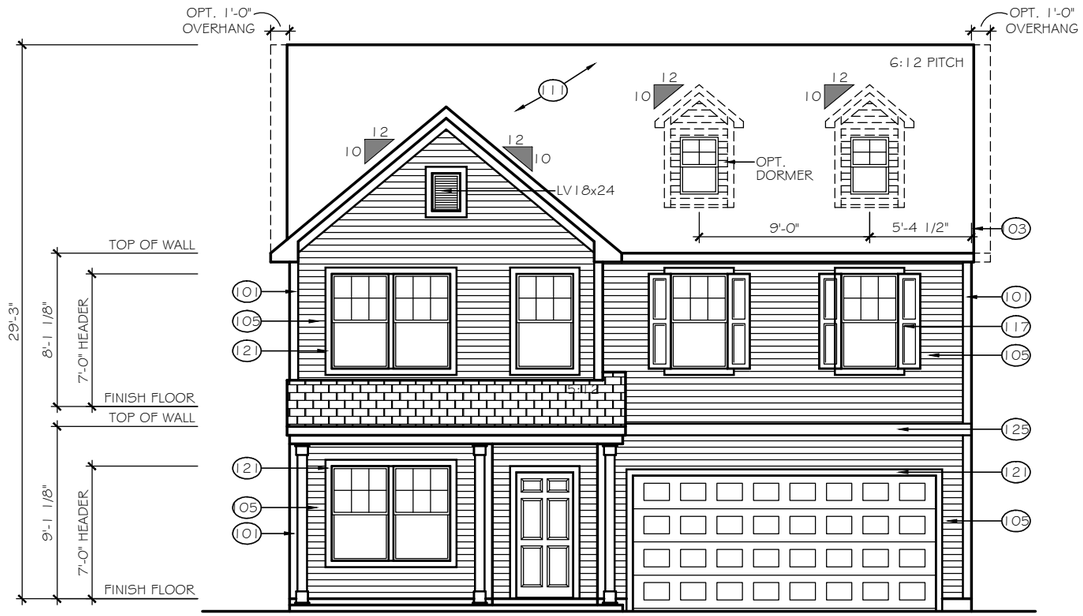
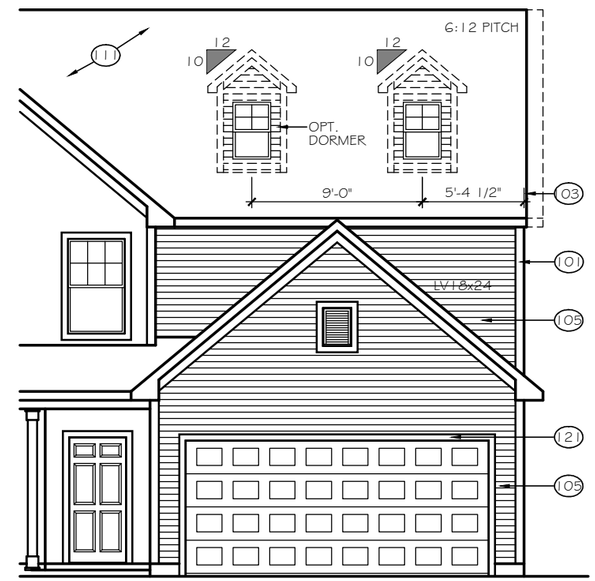


FRONT ELEVATION

ELEVATION E-A1

SCALE: 1/8" = 1'-0"



8' GARAGE BUMP OPTION

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FRONT ELEVATION
ELEVATION E-A1

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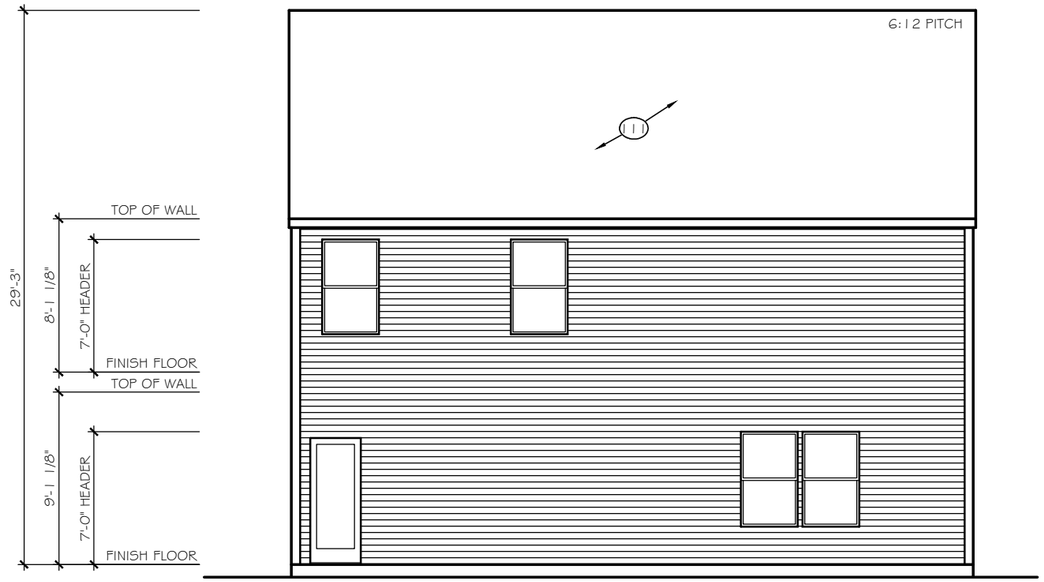
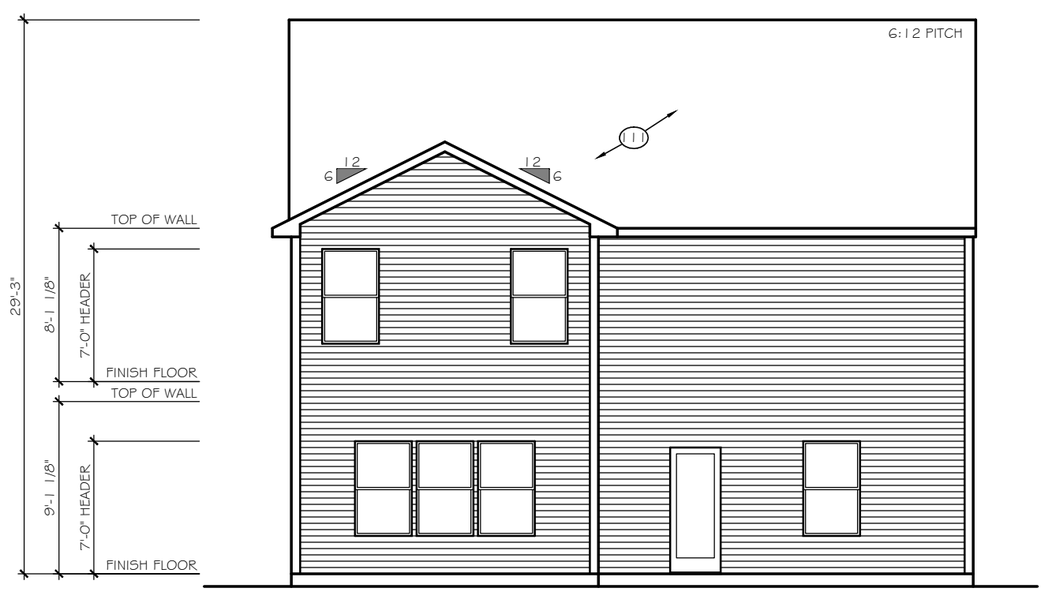


REAR ELEVATION — ALL ELEVATIONS (EXCEPT HIP ROOF)

SCALE: 1/8" = 1'-0" — 2620 OPEN



REAR ELEVATION — ALL ELEVATIONS (EXCEPT HIP ROOF)

SCALE: 1/8" = 1'-0" — 2628 TRANSITIONAL

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REAR ELEVATION
ALL ELEVATIONS (EXCEPT HIP ROOF)

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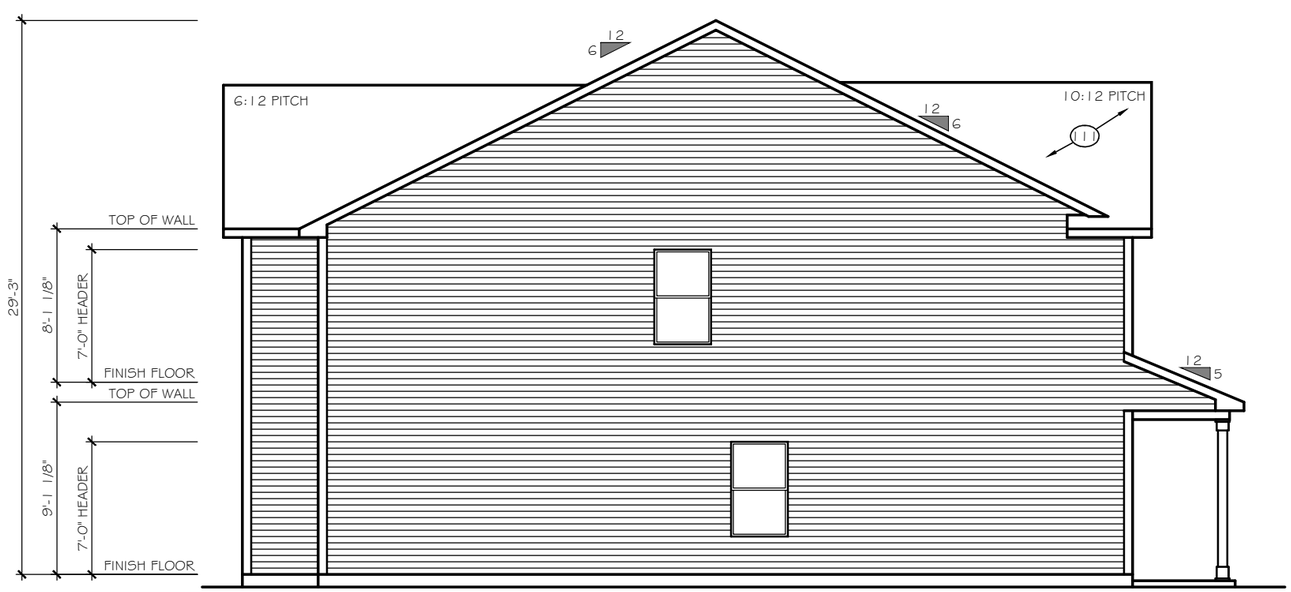
v1.2

RIGHT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATIONS E-A1 to E-A4, E-B1 to E-B4

2620 OPEN



RIGHT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATIONS E-A1 to E-A4, E-B1 to E-B4

2628 TRANSITIONAL

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RIGHT ELEVATION
ELEVATION E-A1 to E-A4, E-B1 to E-B4

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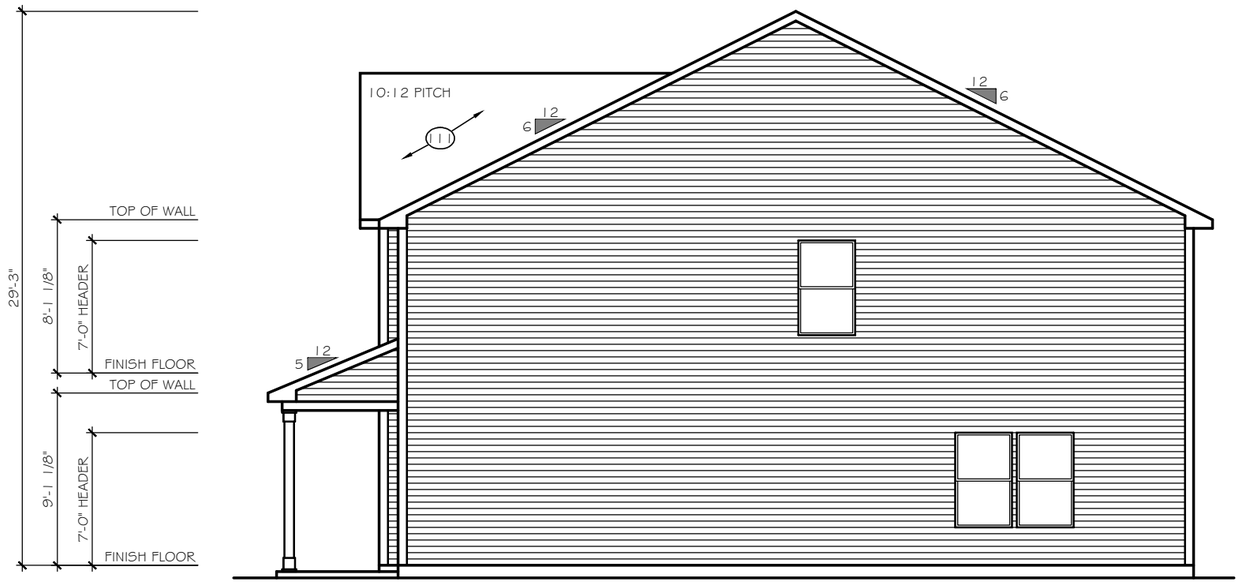
v1.2

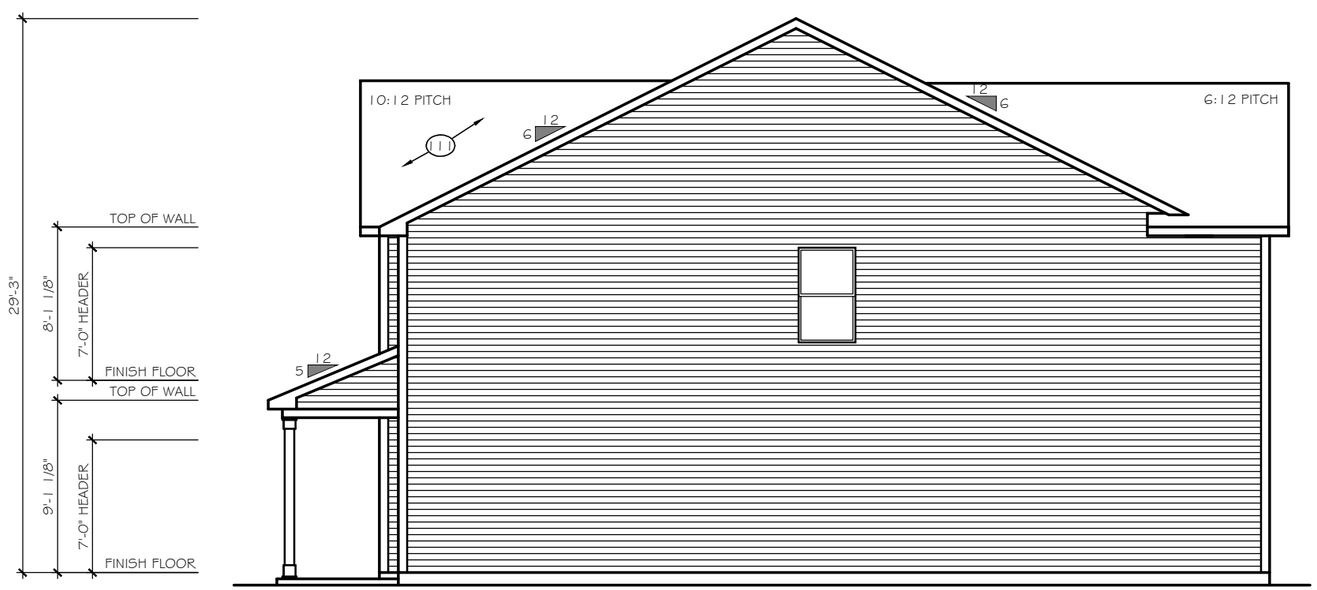


LEFT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATIONS E-A1 to E-A4, E-B1 to E-B4

2620 OPEN



LEFT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATIONS E-A1 to E-A4, E-B1 to E-B4

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LEFT ELEVATION
ELEVATION E-A1 to E-A4, E-B1 to E-B4

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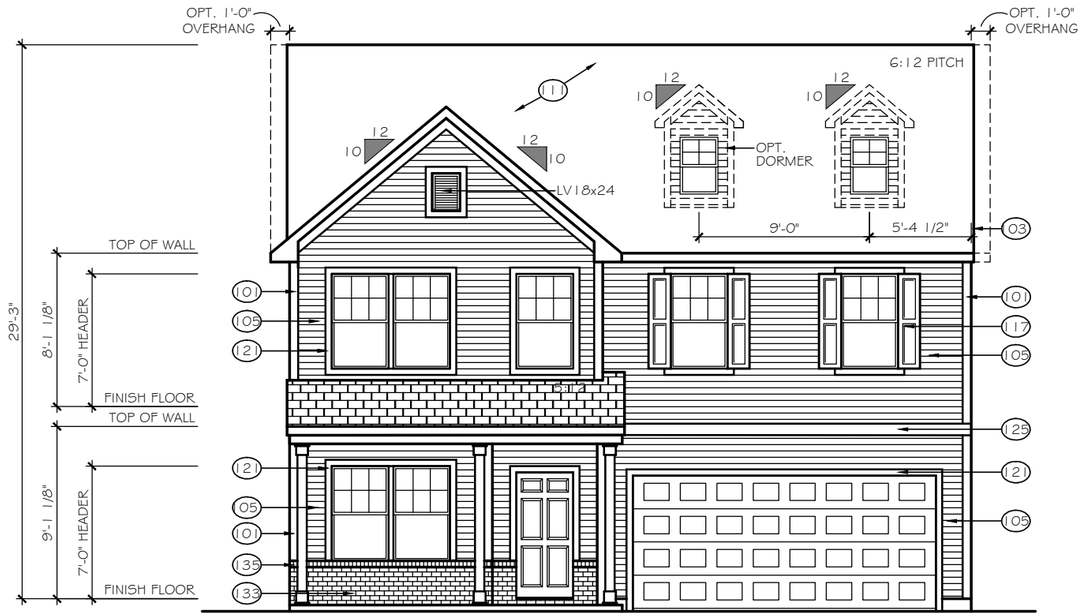
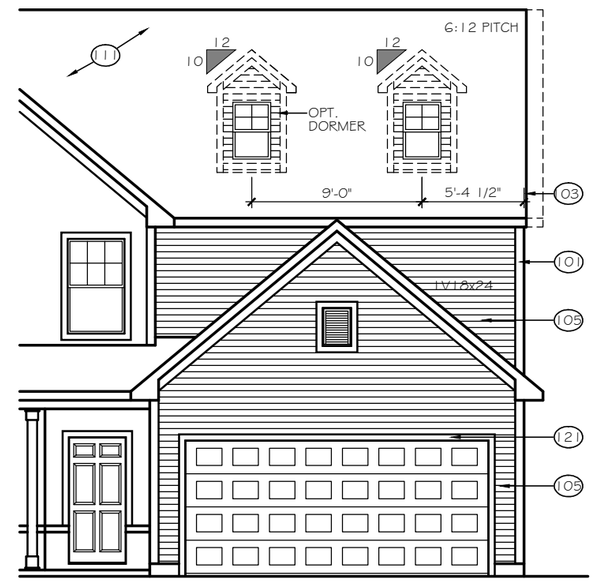
v1.2



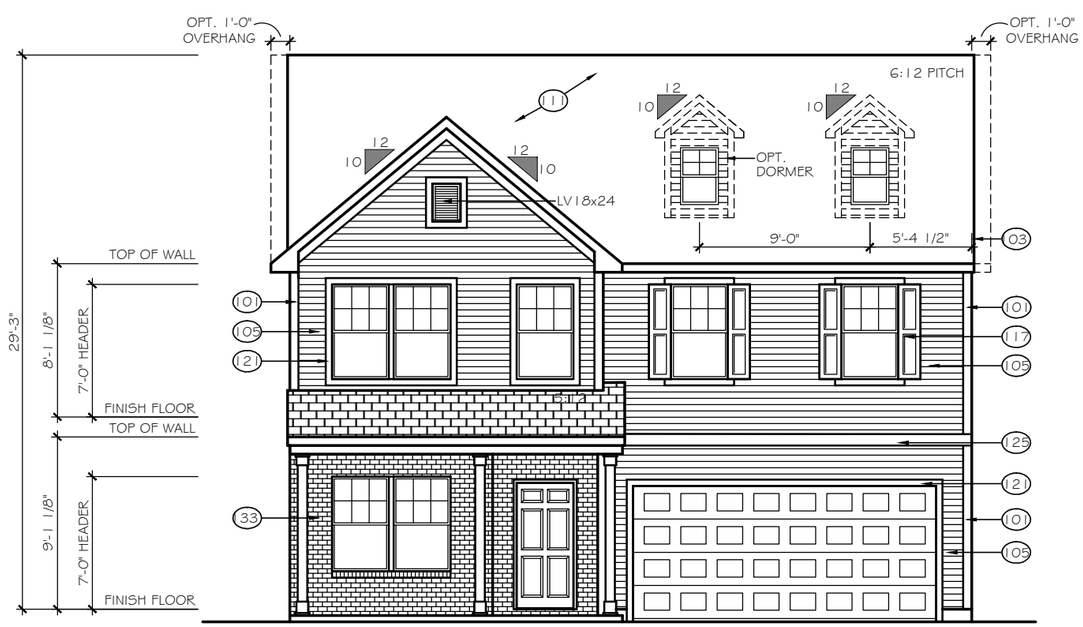
FRONT ELEVATION

ELEVATION E-A2

SCALE: 1/8" = 1'-0"



8' GARAGE BUMP OPTION



FRONT ELEVATION

ELEVATION E-A3

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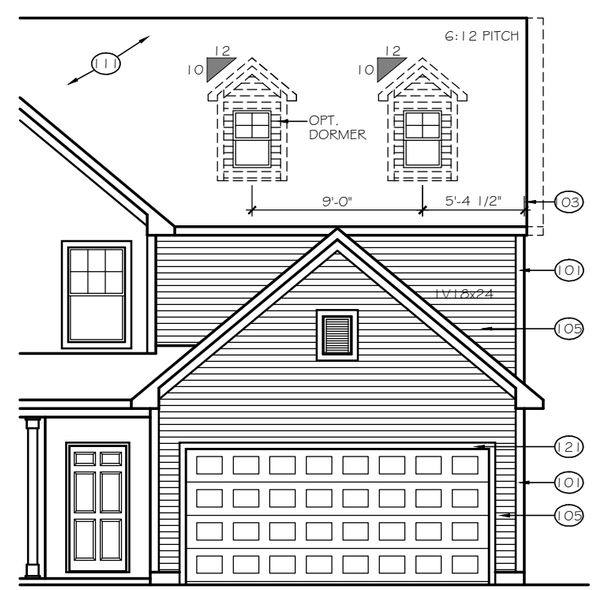

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FRONT ELEVATION
ELEVATION E-A2, E-A3

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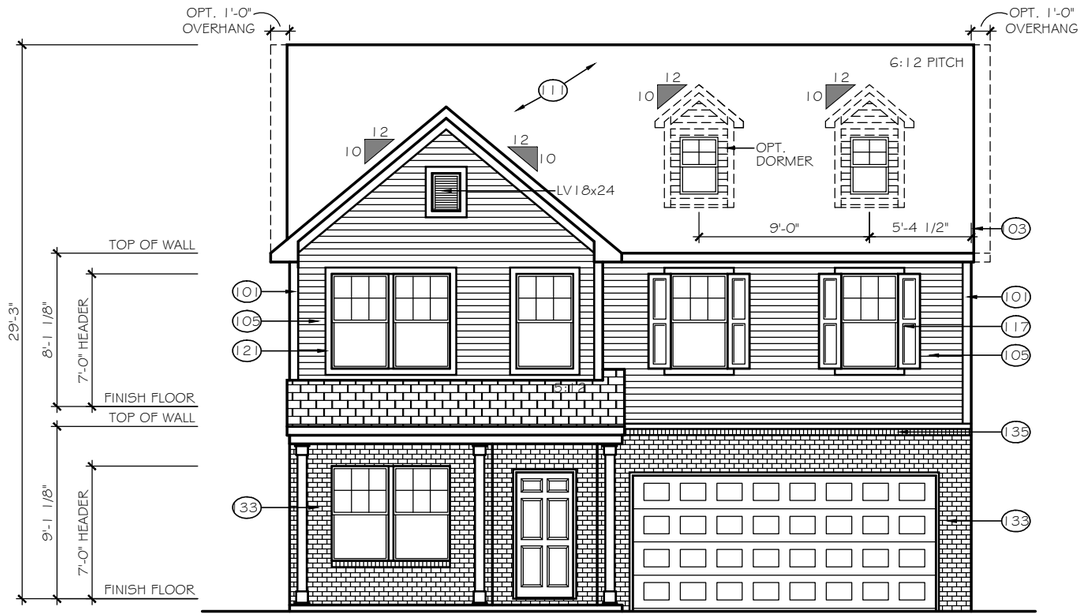

FRONT ELEVATION

ELEVATION E-A4

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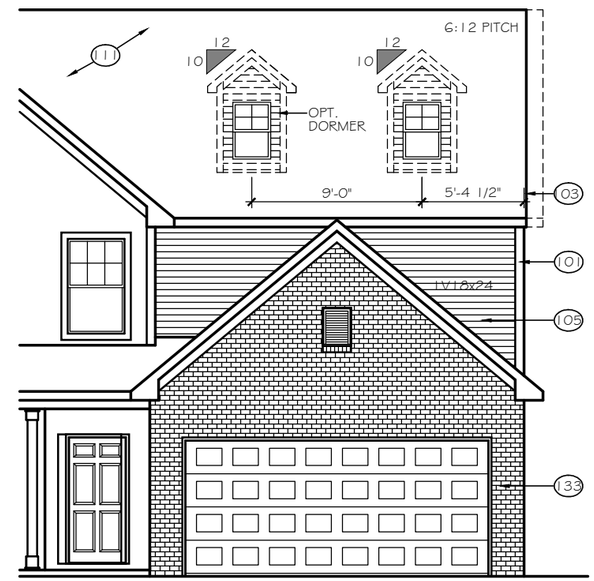

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FRONT ELEVATION
ELEVATION E-A4

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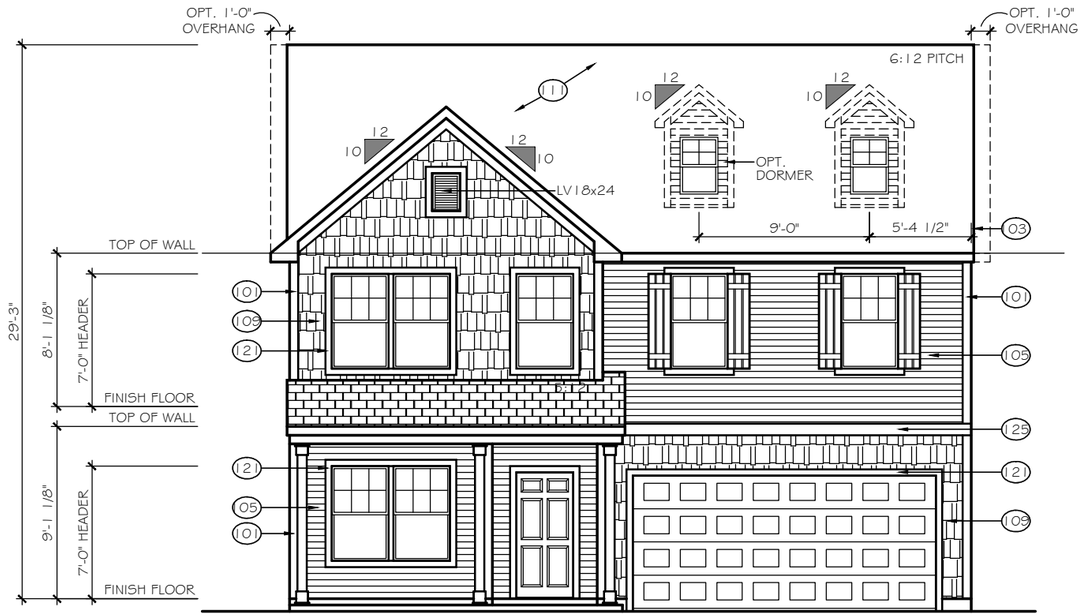

FRONT ELEVATION

ELEVATION E-B1

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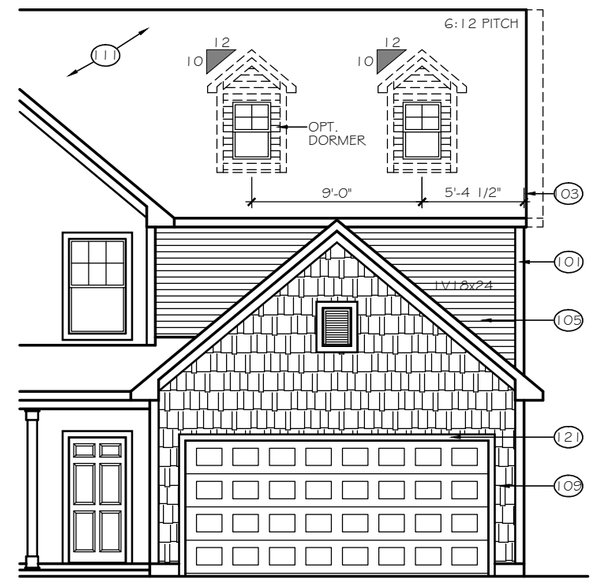

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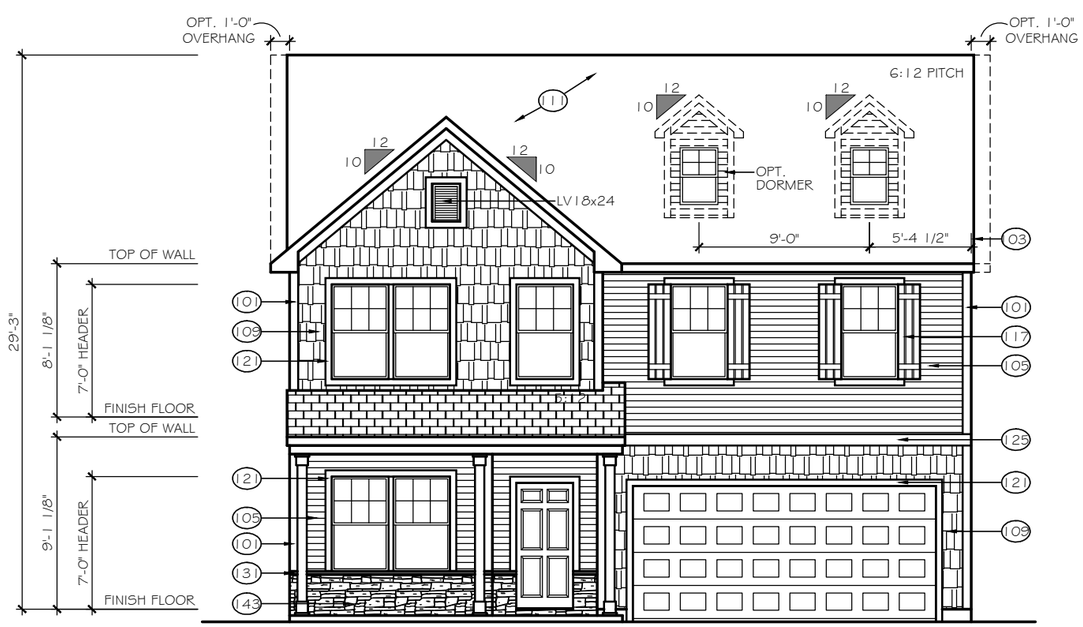

FRONT ELEVATION

ELEVATION E-B2

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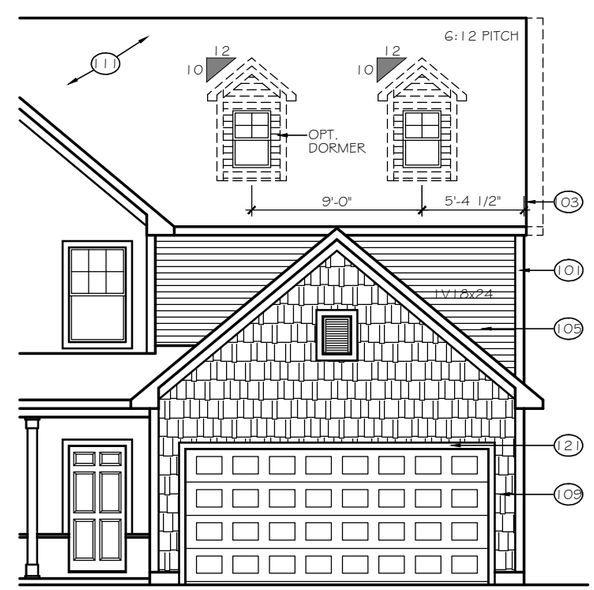

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FRONT ELEVATION
ELEVATIONS E-B1, E-B2

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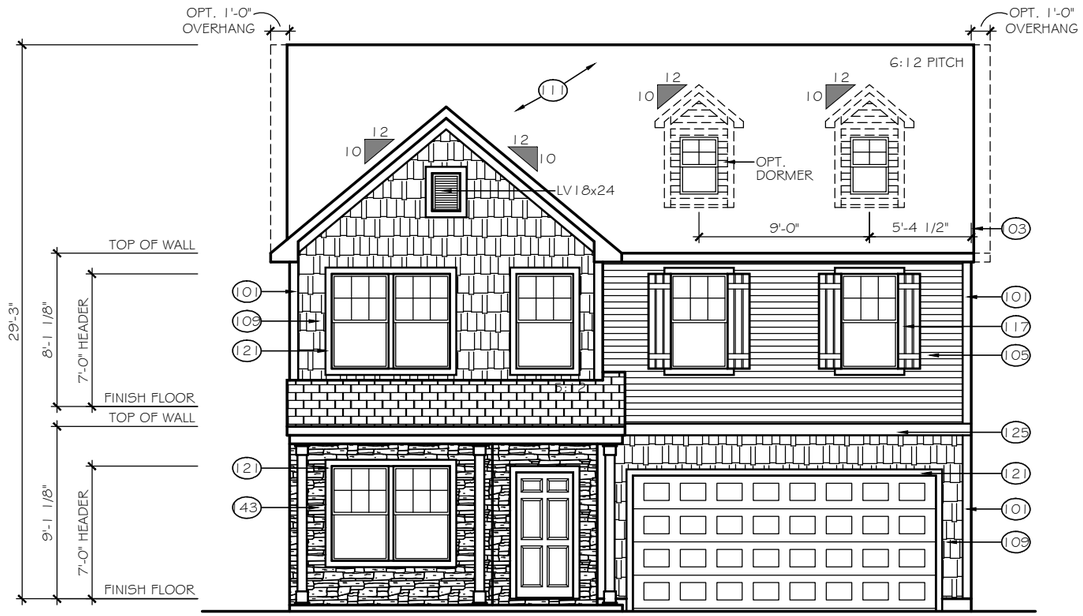

FRONT ELEVATION

ELEVATION E-B3

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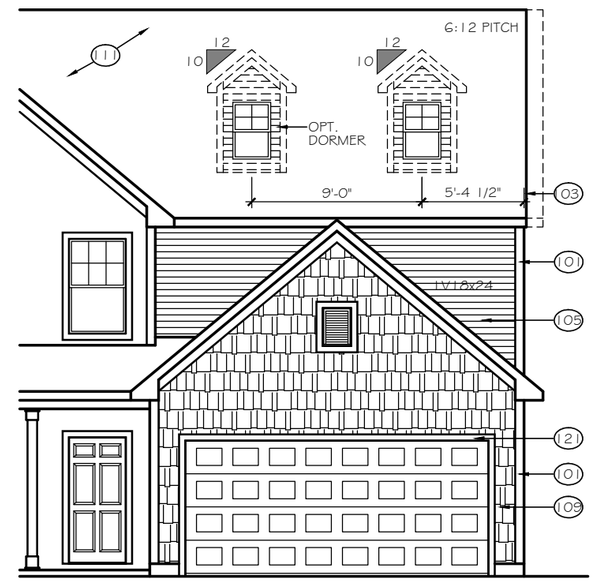
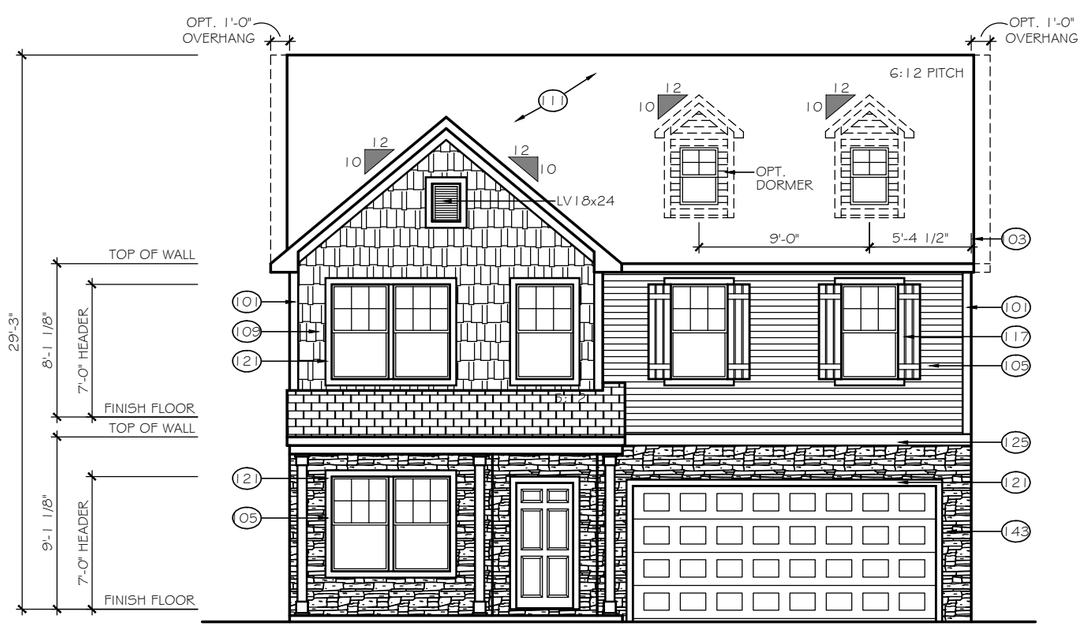


8' GARAGE BUMP OPTION



FRONT ELEVATION

ELEVATION E-B4

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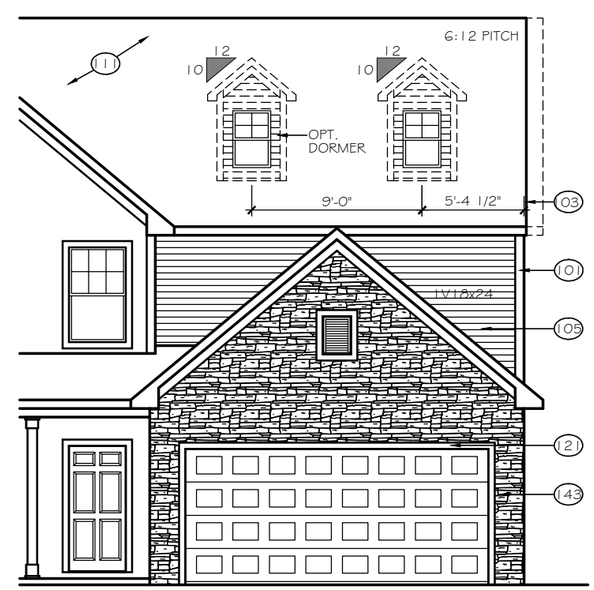

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FRONT ELEVATION
ELEVATIONS E-B3, E-B4

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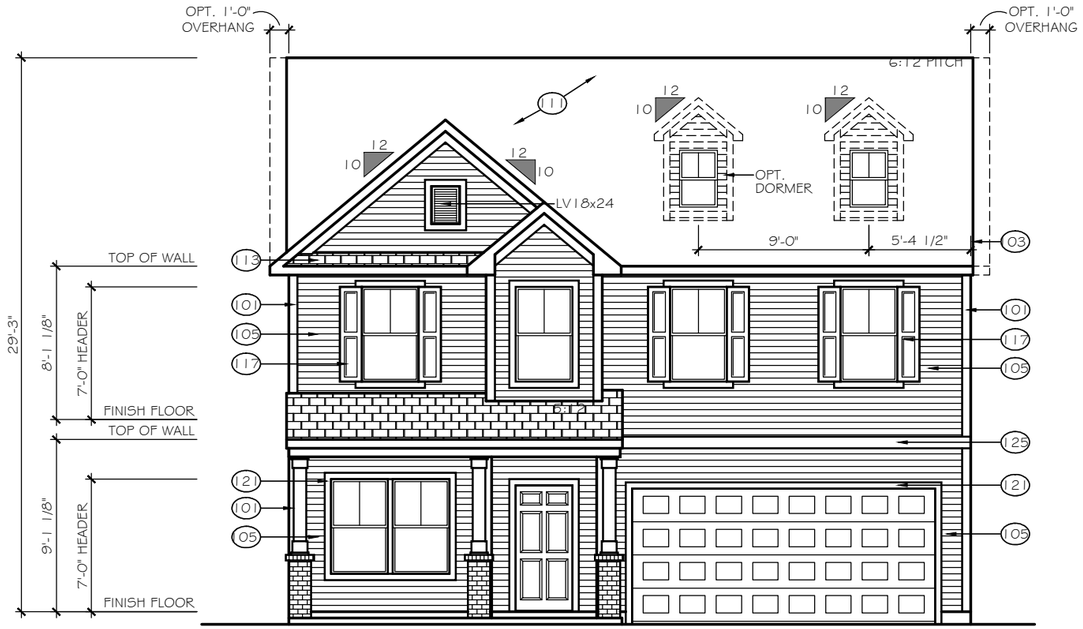
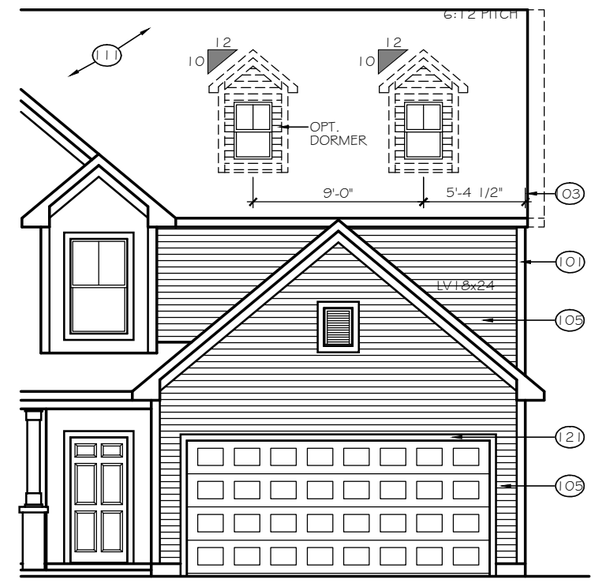


FRONT ELEVATION

ELEVATION E-C1

SCALE: 1/8" = 1'-0"



8' GARAGE BUMP OPTION

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FRONT ELEVATION
ELEVATION E-C1

THE HUNTLEY

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DATE: 11-29-18

SCALE: 1/8"=1'-0"

CHECKED BY: BPS / DJP

SHEET: A4.8

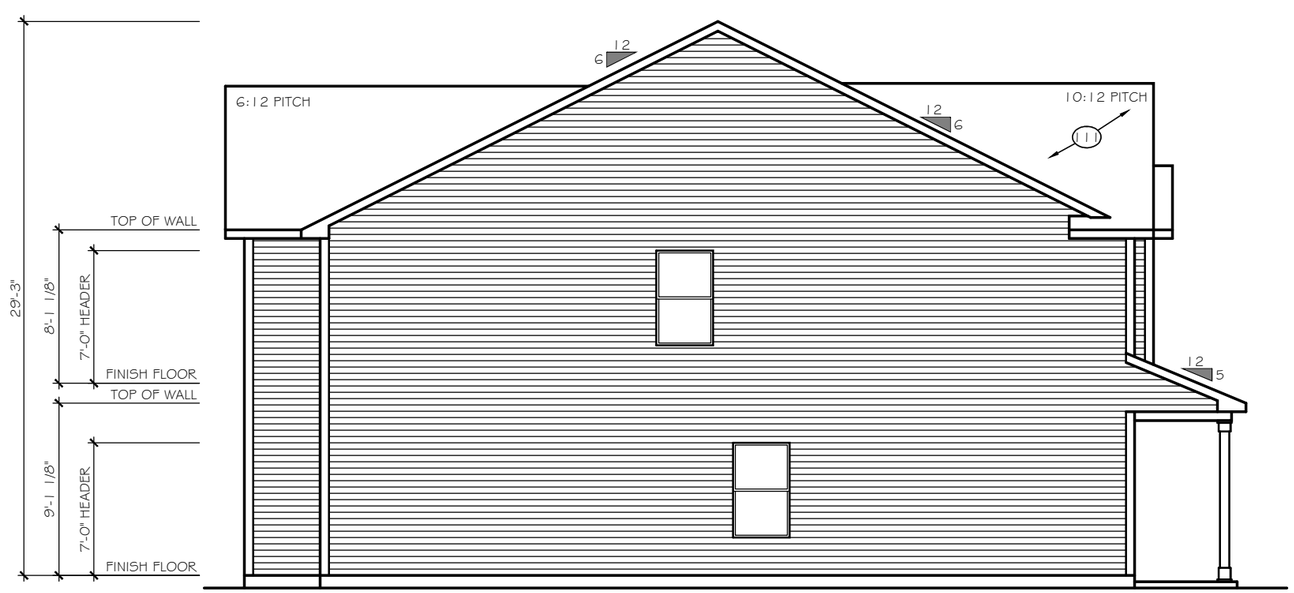
v1.2

RIGHT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATIONS E-EC1 to E-EC5, E-D1 to E-ED5

2620 OPEN



RIGHT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATIONS E-EC1 to E-EC5, E-D1 to E-ED5

2628 TRANSITIONAL

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RIGHT ELEVATION
ELEVATION E-C1 to E-C5, E-D1 to E-D5

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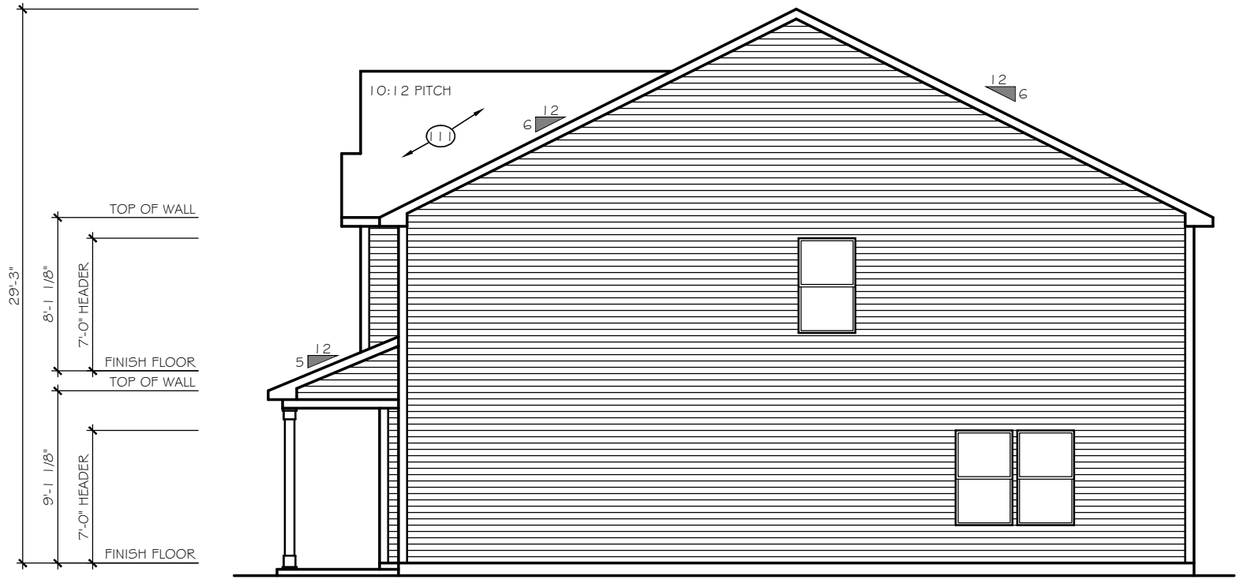
SCALE: 1/8"=1'-0"

CHECKED BY: BPS / DJP

SHEET: A4.9

v1.2

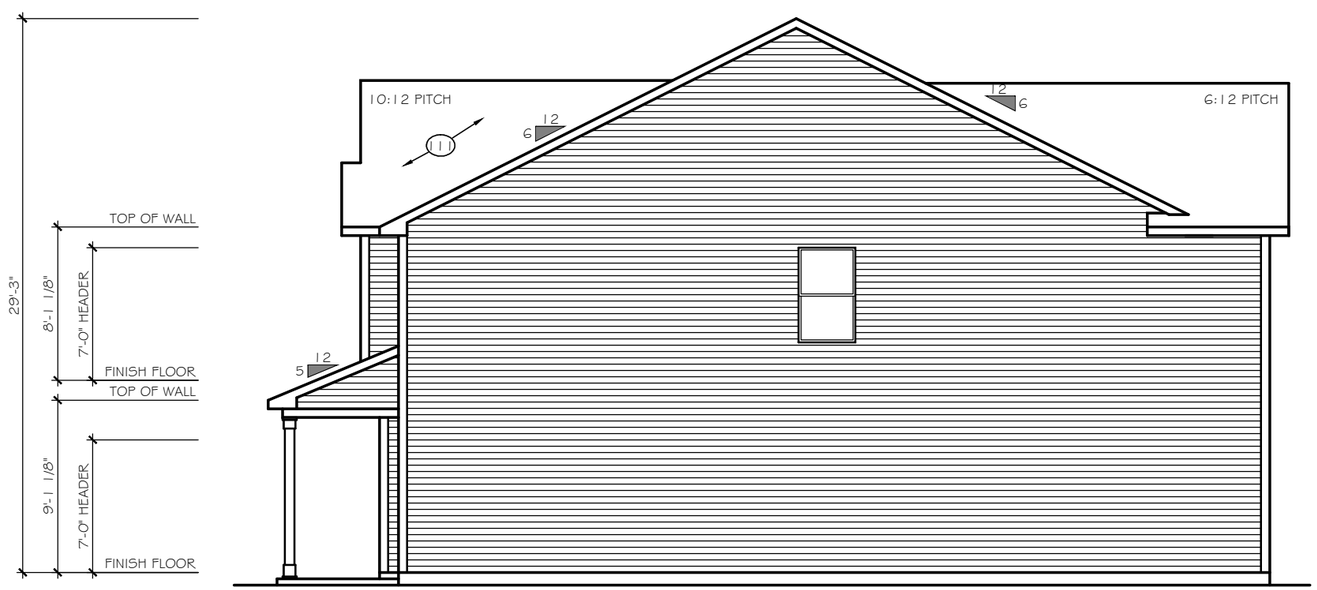


LEFT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATIONS E-EC1 to E-EC5, E-D1 to E-ED5

2620 OPEN



LEFT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATIONS E-EC1 to E-EC5, E-D1 to E-ED5

2628 TRANSITIONAL

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LEFT ELEVATION
ELEVATION E-C1 to E-C5, E-D1 to E-D5

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SCALE: 1/8"= 1'-0"

CHECKED BY: BPS / DJP

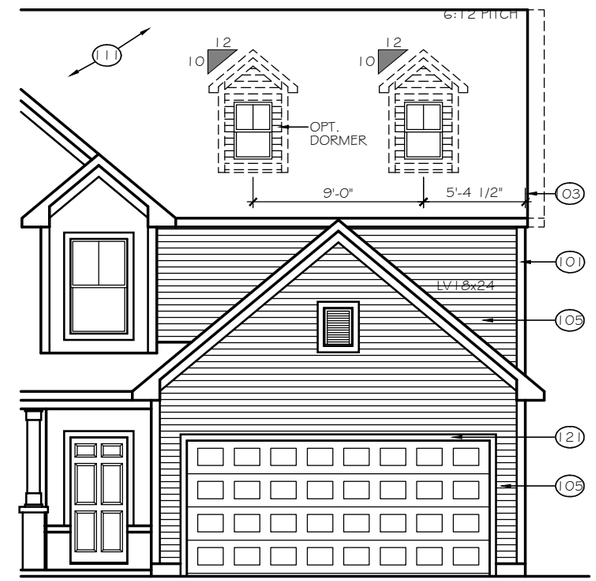
SHEET: A4.10

v1.2

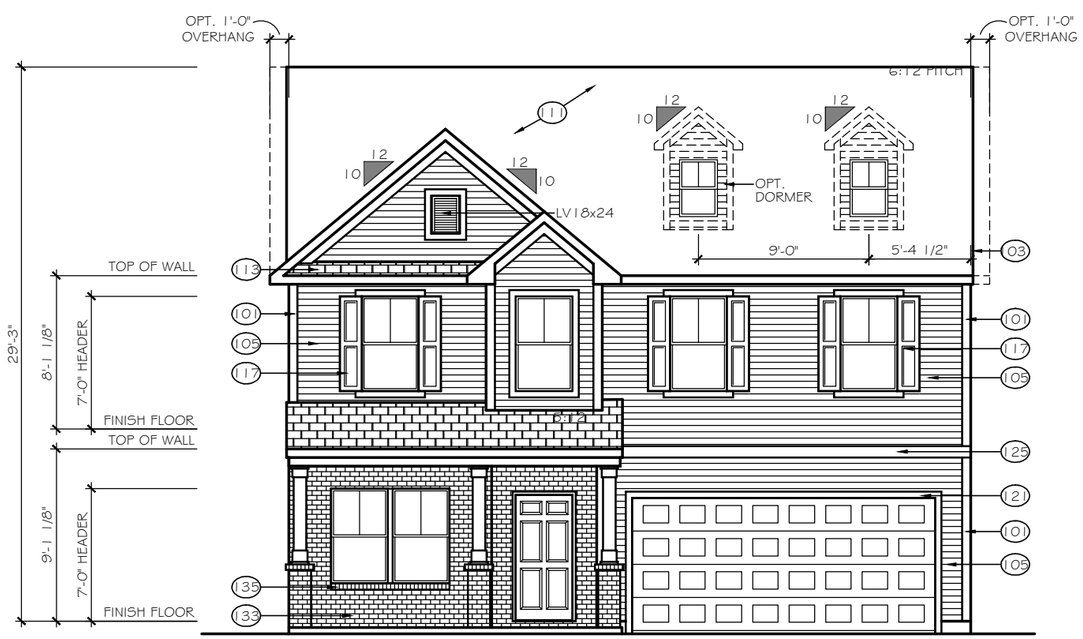
FRONT ELEVATION

ELEVATION E-C2

SCALE: 1/8" = 1'-0"



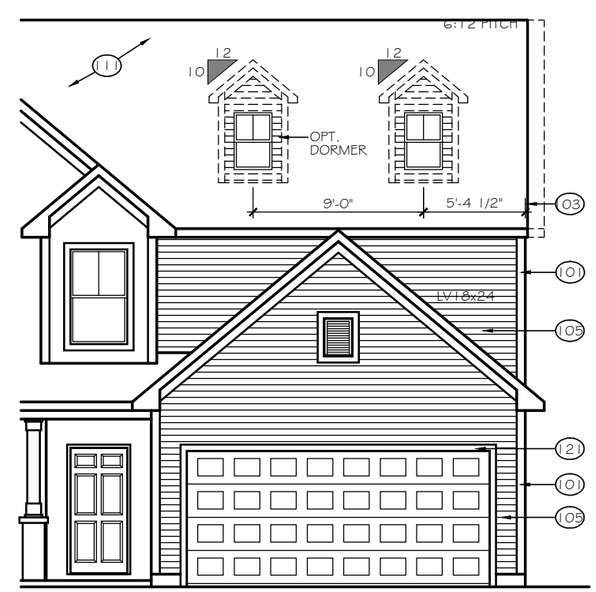
8' GARAGE BUMP OPTION



FRONT ELEVATION

ELEVATION E-C3

SCALE: 1/8" = 1'-0"



8' GARAGE BUMP OPTION

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FRONT ELEVATION
ELEVATION E-C2, E-C3

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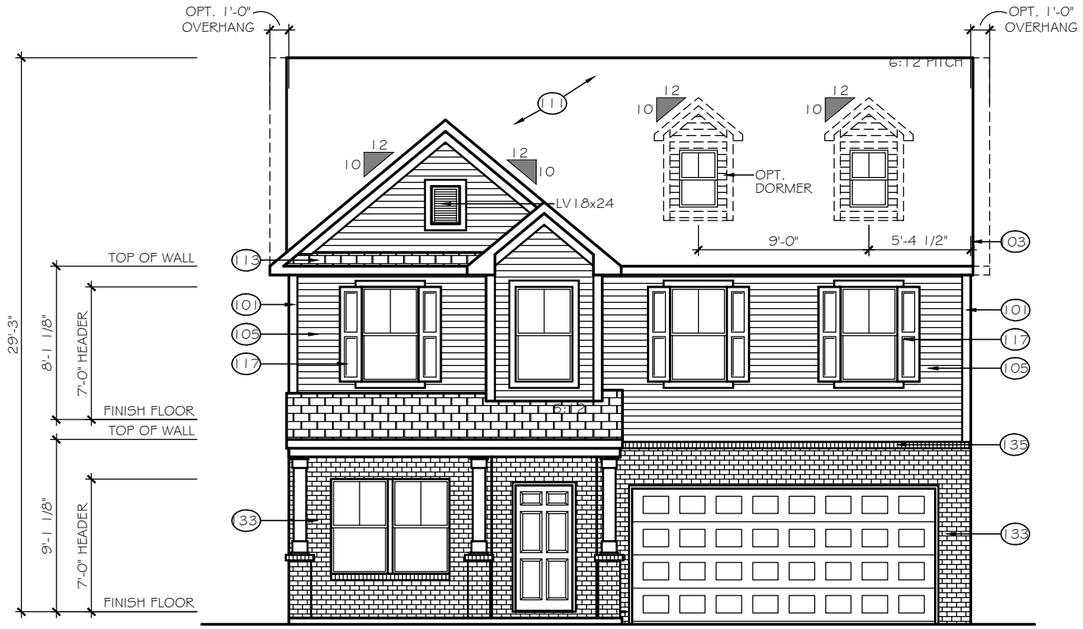
SCALE: 1/8"=1'-0"

CHECKED BY: BPS / DJP

SHEET: A4.11

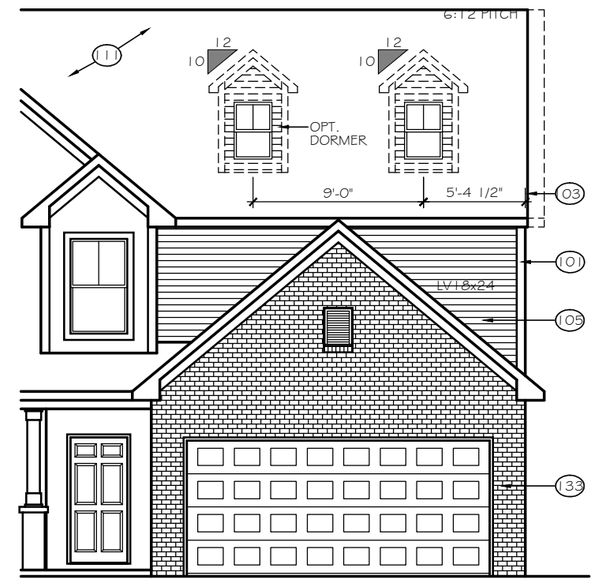
v1.2



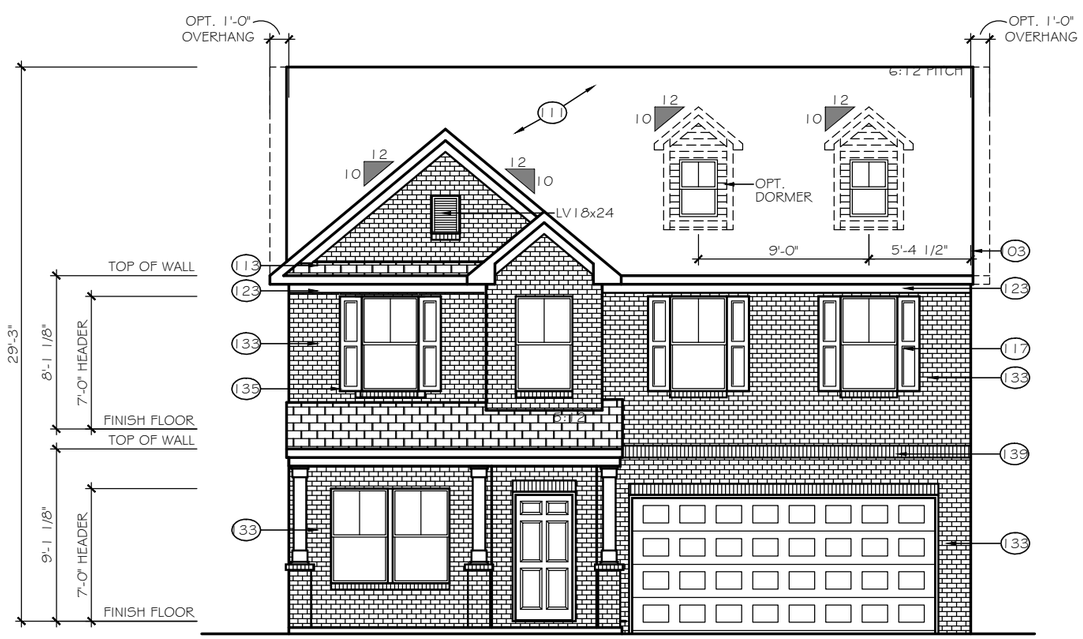
FRONT ELEVATION

ELEVATION E-C4

SCALE: 1/8" = 1'-0"



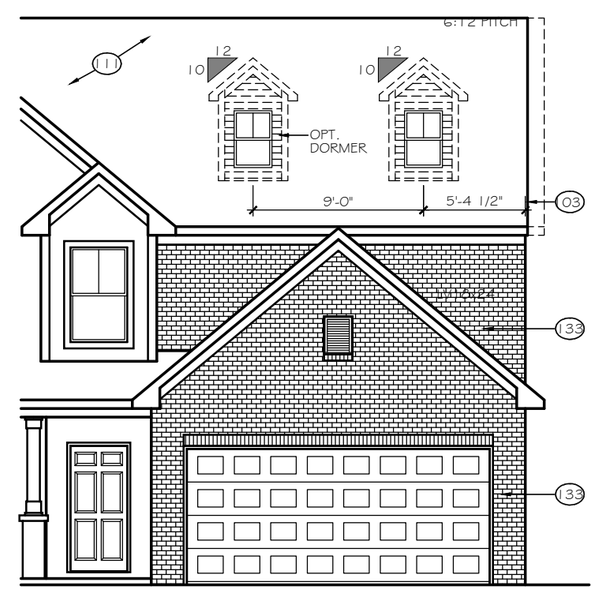
8' GARAGE BUMP OPTION



FRONT ELEVATION

ELEVATION E-C5

SCALE: 1/8" = 1'-0"



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FRONT ELEVATION
ELEVATION E-C4, E-C5

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SCALE: 1/8"=1'-0"

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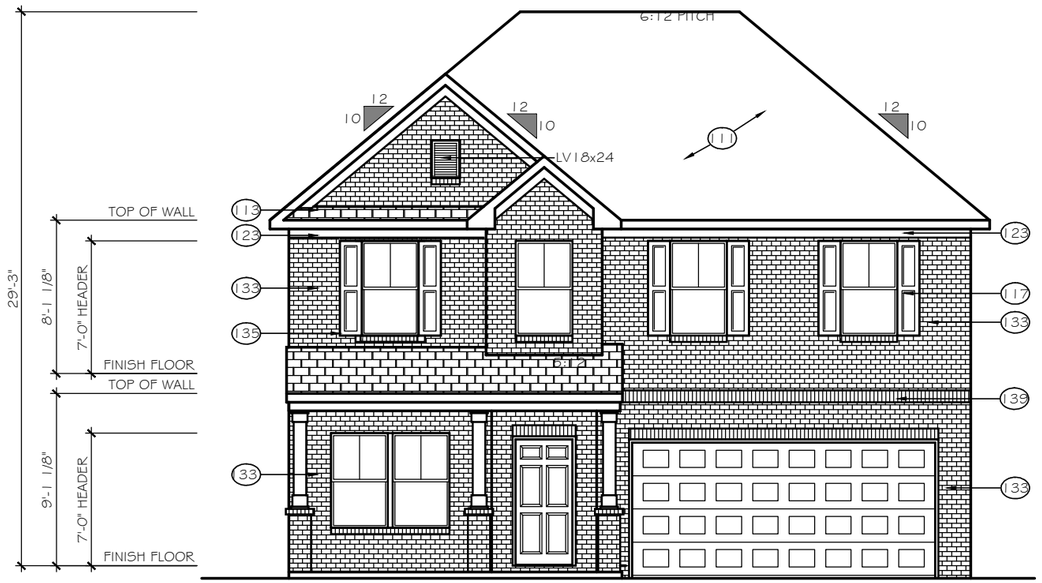
SHEET: A4.12

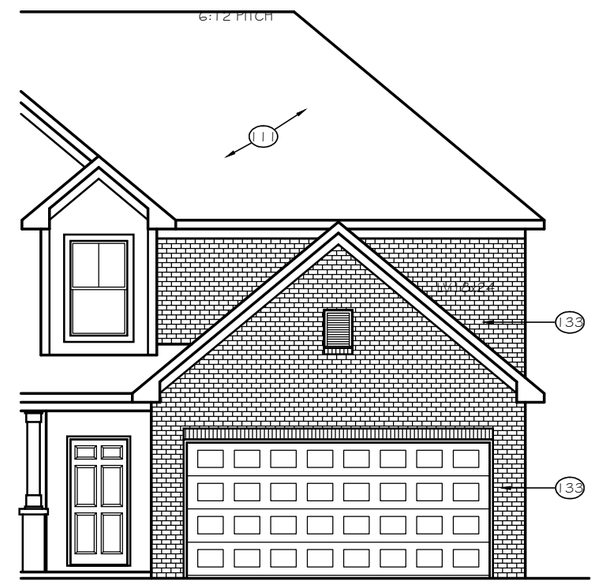
v1.2



FRONT ELEVATION

ELEVATION E-C6

SCALE: 1/8" = 1'-0"



8' GARAGE BUMP OPTION

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FRONT ELEVATION
ELEVATION E-C6

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SCALE: 1/8"=1'-0"

CHECKED BY: BPS / DJP

SHEET: A4.13

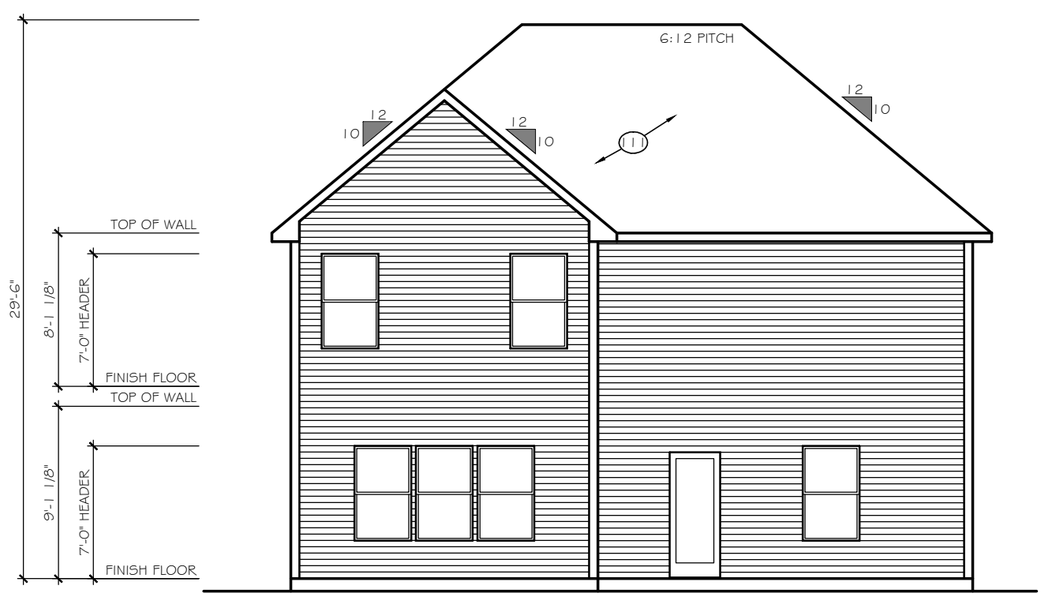
v1.2

REAR ELEVATION

SCALE: 1/8" = 1'-0"

ALL HIP ROOF ELEVATIONS

2620 OPEN



REAR ELEVATION

SCALE: 1/8" = 1'-0"

ALL HIP ROOF ELEVATIONS

2628 TRANSITIONAL

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REAR ELEVATION
ELEVATION E-C6, E-D6

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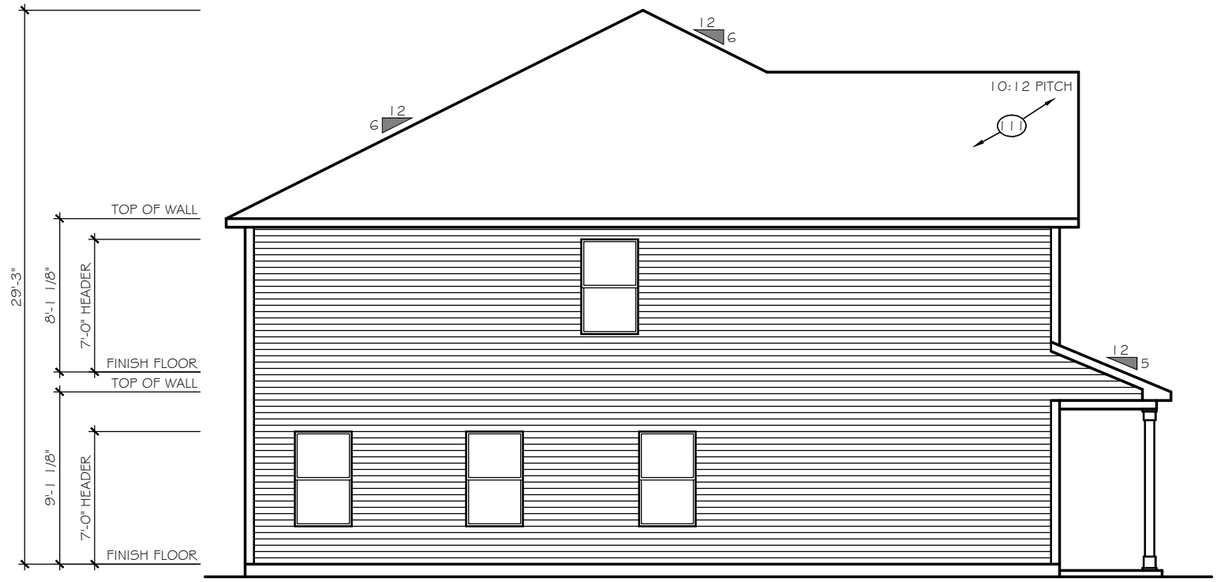
SCALE: 1/8"=1'-0"

CHECKED BY: BPS / DJP

SHEET: A4.14

v1.2

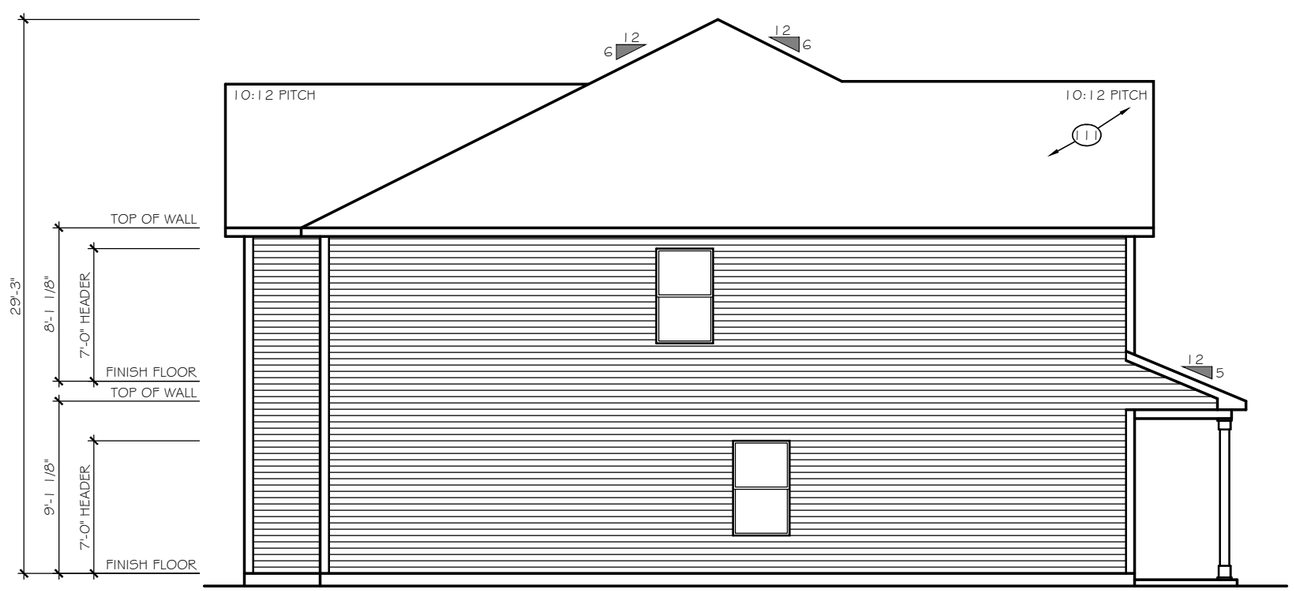


RIGHT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATIONS E-C6, E-D6

2620 OPEN



RIGHT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATIONS E-C6, E-D6

2628 TRANSITIONAL

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RIGHT ELEVATION
ELEVATION E-C6, E-D6

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SCALE: 1/8"=1'-0"

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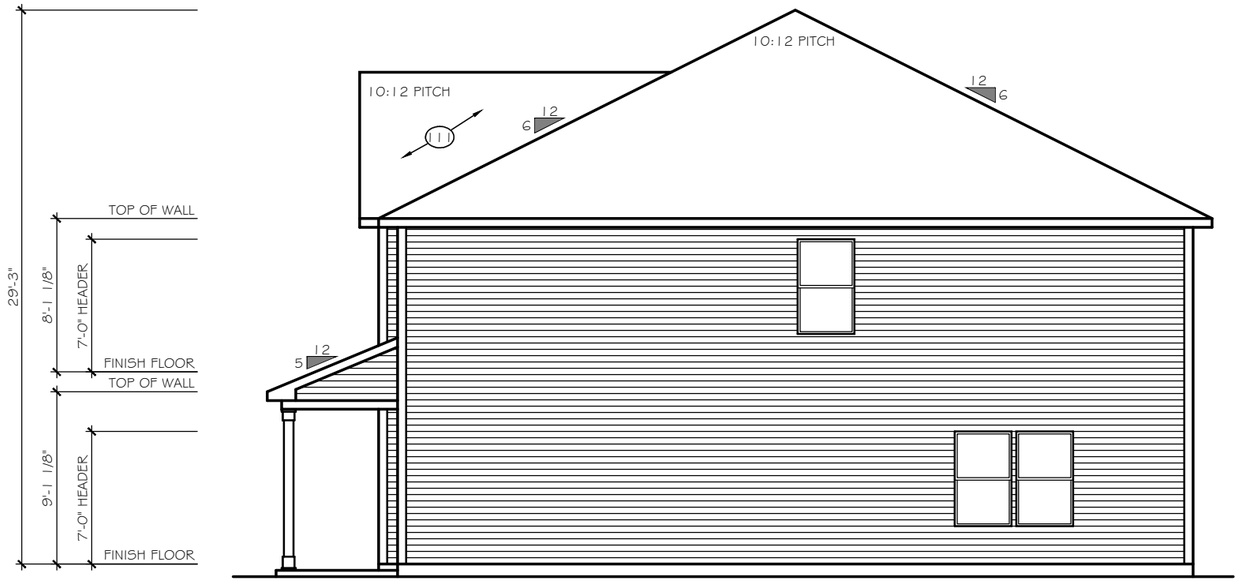
SHEET: A4.15

v1.2

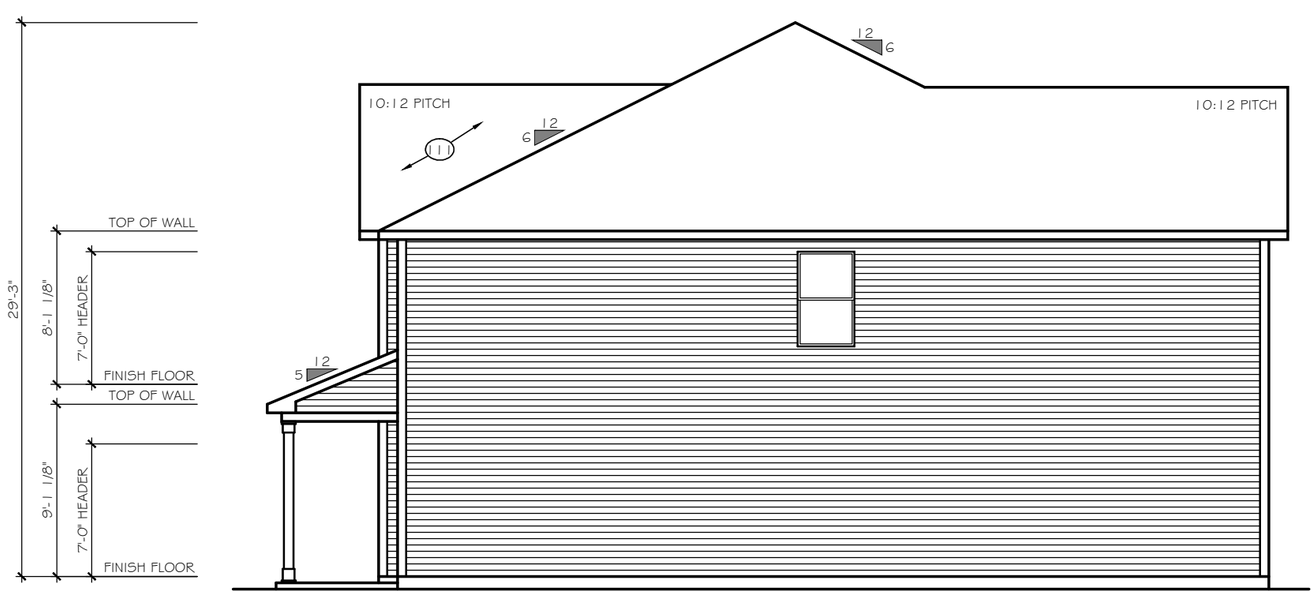


LEFT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATIONS E-C6, E-D6

2620 OPEN



LEFT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATIONS E-C6, E-D6

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LEFT ELEVATION
ELEVATION E-C6, E-D6

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SCALE: 1/8"=1'-0"

CHECKED BY: BPS / DJP

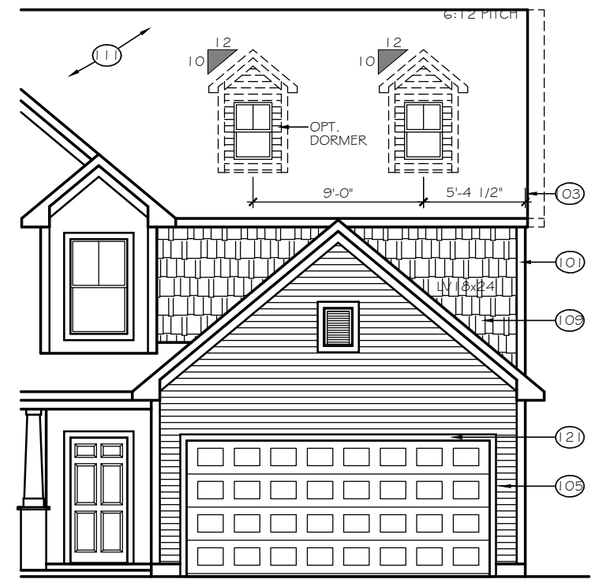
SHEET: A4.16

v1.2

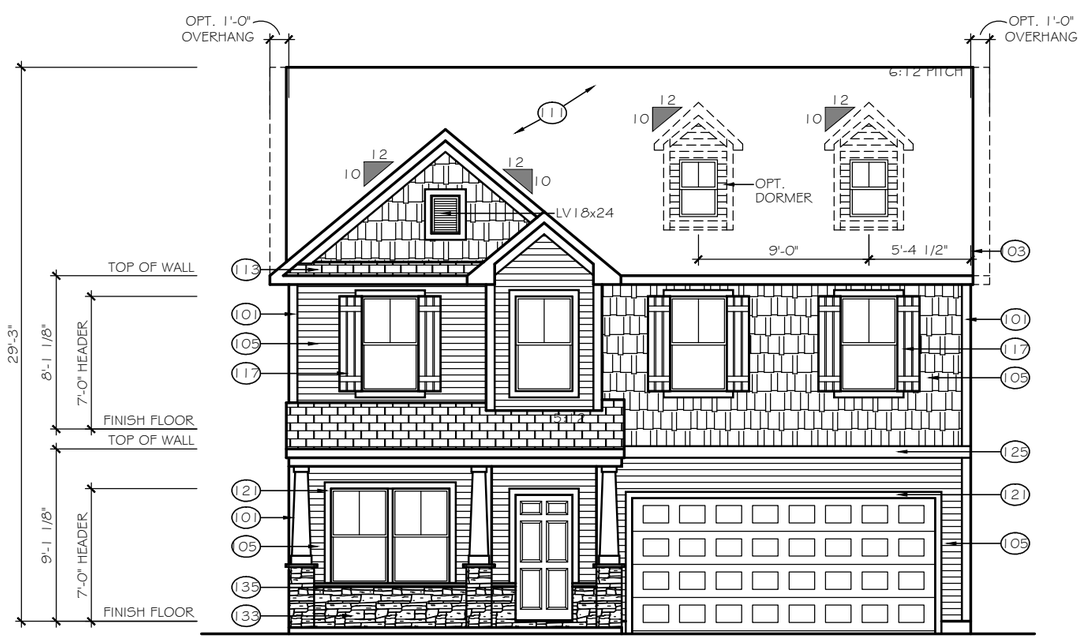
FRONT ELEVATION

ELEVATION E-D1

SCALE: 1/8" = 1'-0"



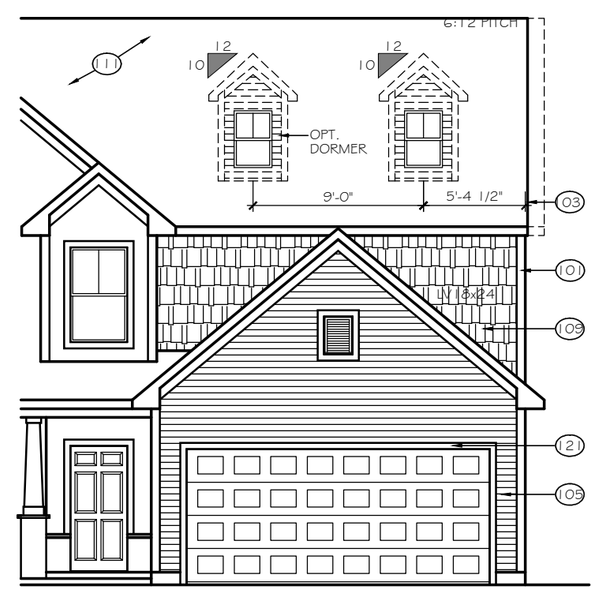
8' GARAGE BUMP OPTION



FRONT ELEVATION

ELEVATION E-D2

SCALE: 1/8" = 1'-0"



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FRONT ELEVATION
ELEVATION E-D1, E-D2

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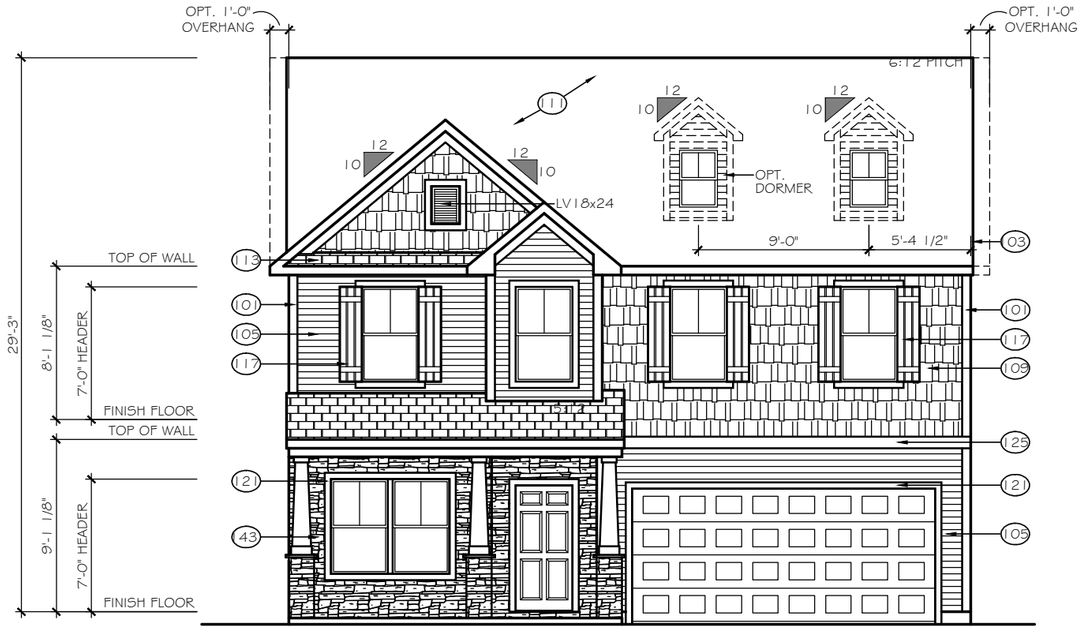
SCALE: 1/8"=1'-0"

CHECKED BY: BPS / DJP

SHEET: A4.17

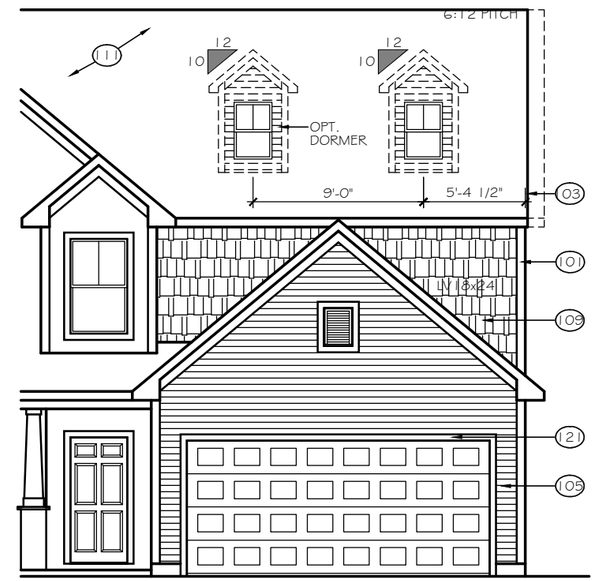
v1.2



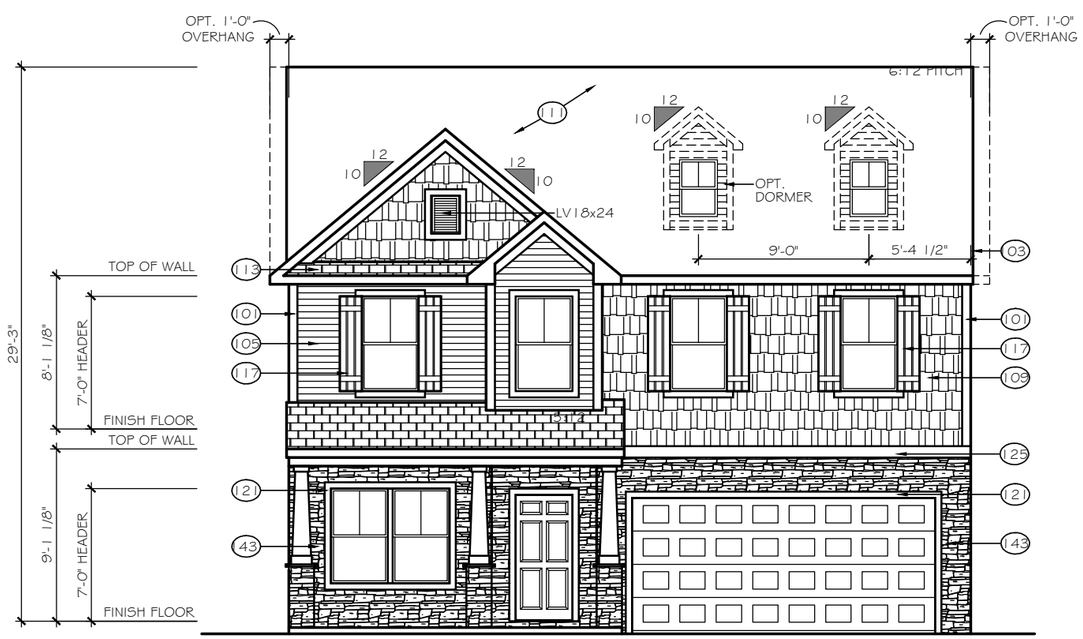
FRONT ELEVATION

ELEVATION E-D3

SCALE: 1/8" = 1'-0"



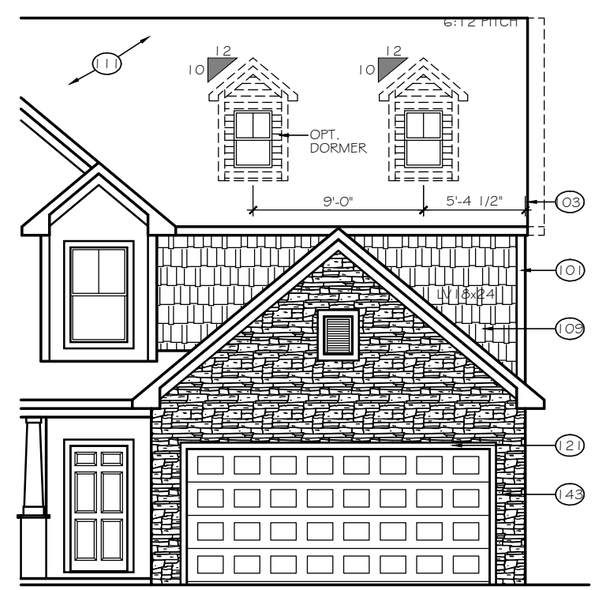
8' GARAGE BUMP OPTION



FRONT ELEVATION

ELEVATION E-D4

SCALE: 1/8" = 1'-0"



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FRONT ELEVATION
ELEVATION E-D3, E-D4

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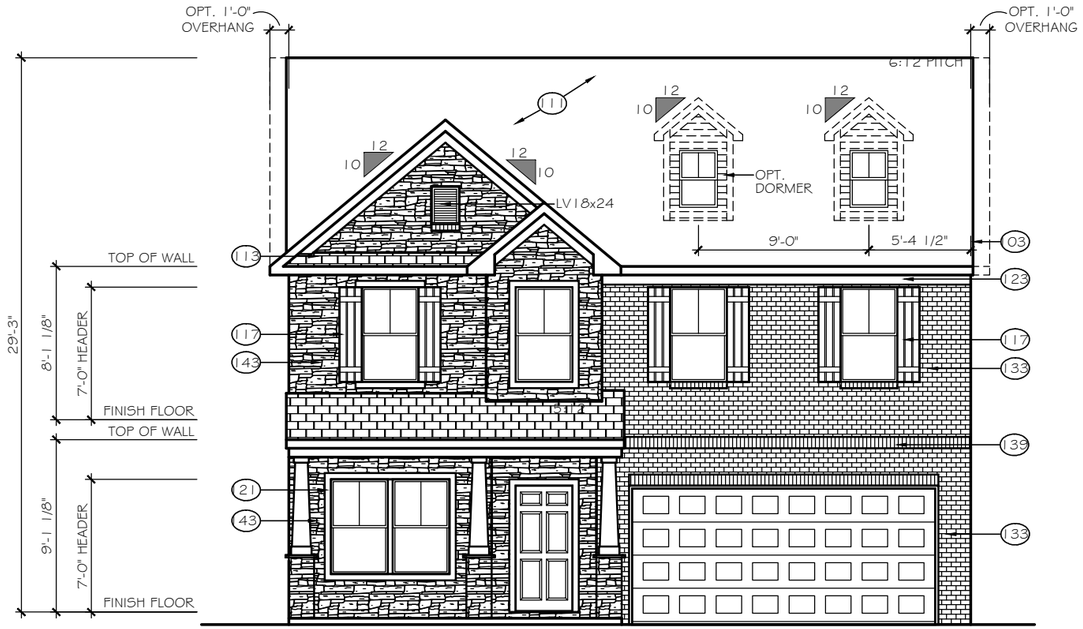
SCALE: 1/8"=1'-0"

CHECKED BY: BPS / DJP

SHEET: A4.18

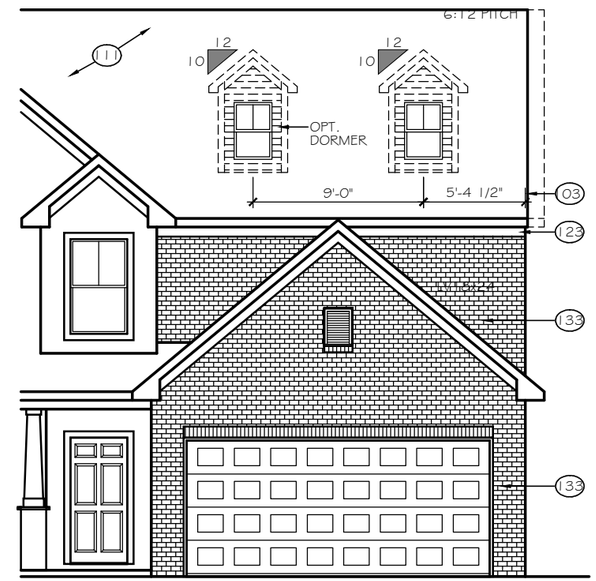
v1.2



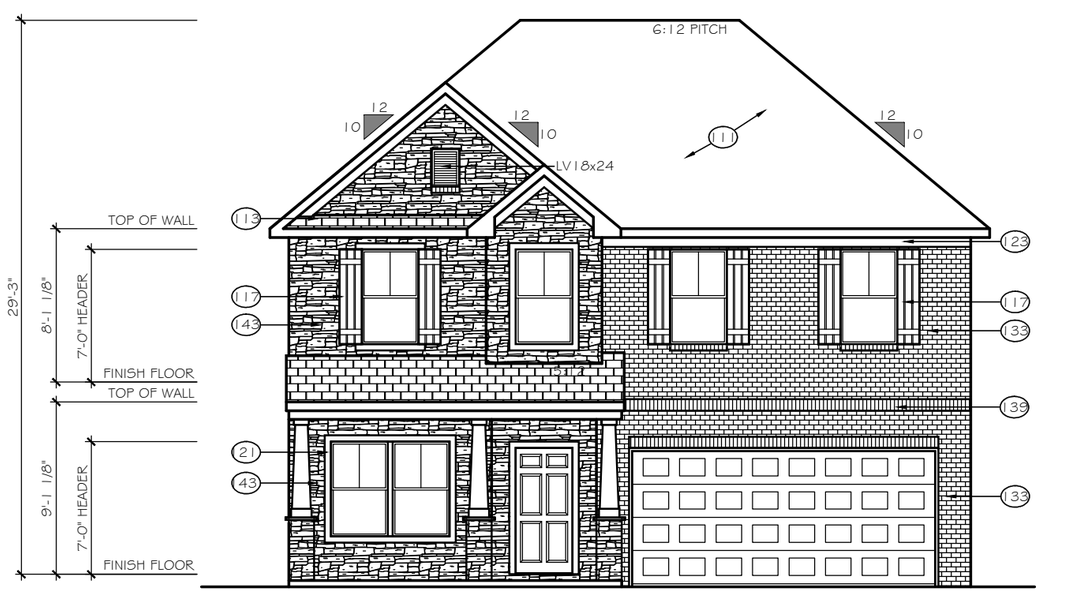
FRONT ELEVATION

ELEVATION E-D5

SCALE: 1/8" = 1'-0"



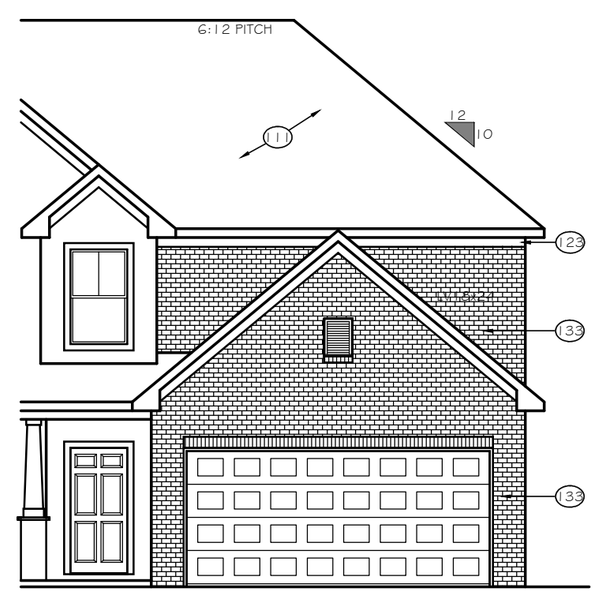
8' GARAGE BUMP OPTION



FRONT ELEVATION

ELEVATION E-D6

SCALE: 1/8" = 1'-0"



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FRONT ELEVATION
ELEVATION E-D5, E-D6

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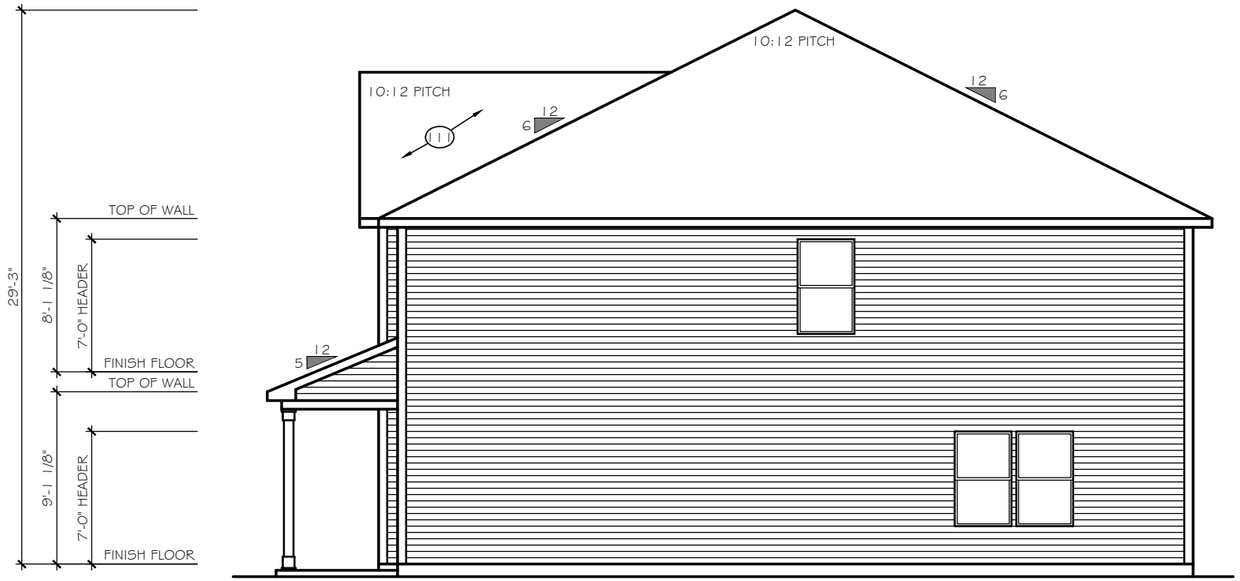
SCALE: 1/8"=1'-0"

CHECKED BY: BPS / DJP

SHEET: A4.19

v1.2

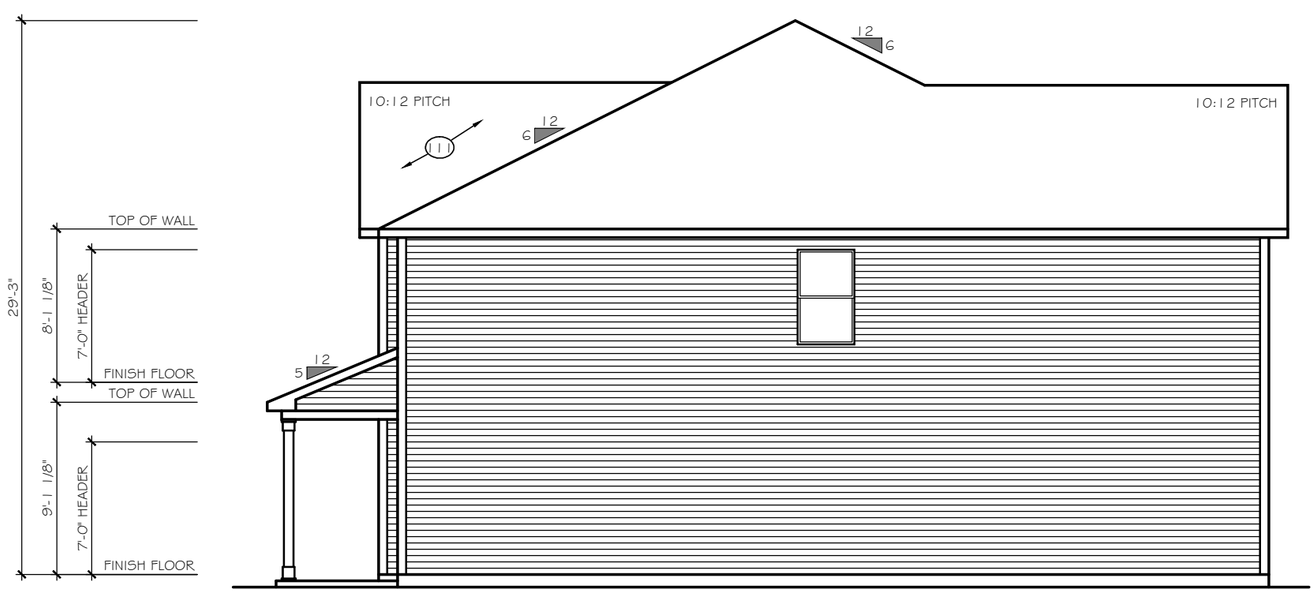


LEFT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATIONS E-C6, E-D6

2620 OPEN



LEFT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATIONS E-C6, E-D6

2628 TRANSITIONAL

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LEFT ELEVATION
ELEVATION E-E6, E-F6

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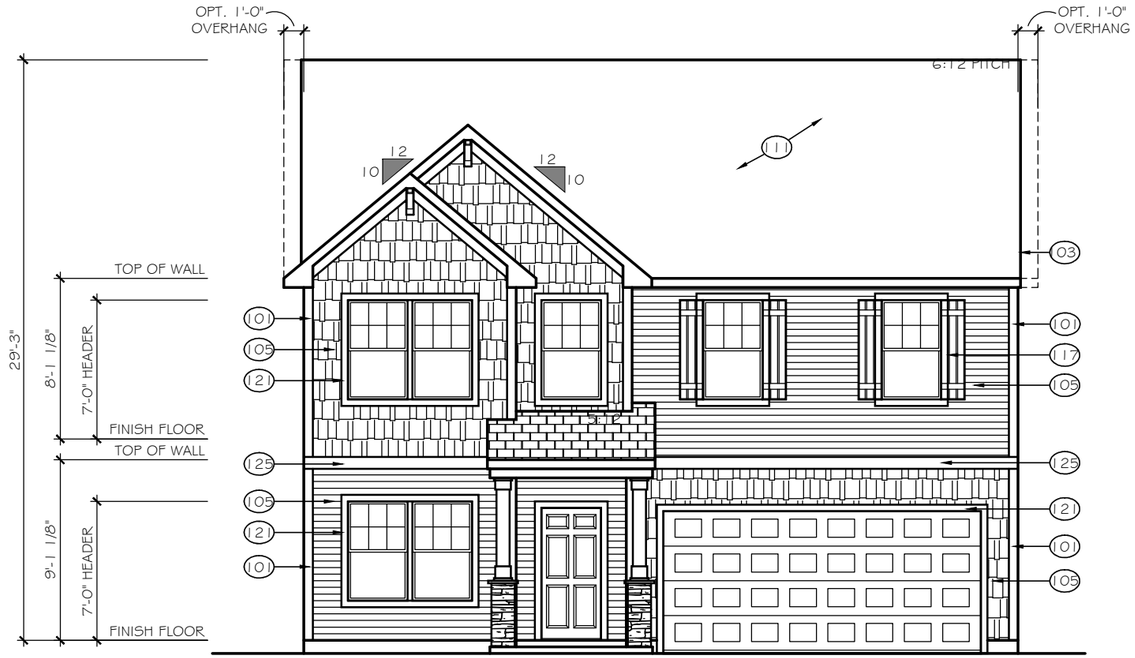
SCALE: 1/8"=1'-0"

CHECKED BY: BPS / DJP

SHEET: A4.29

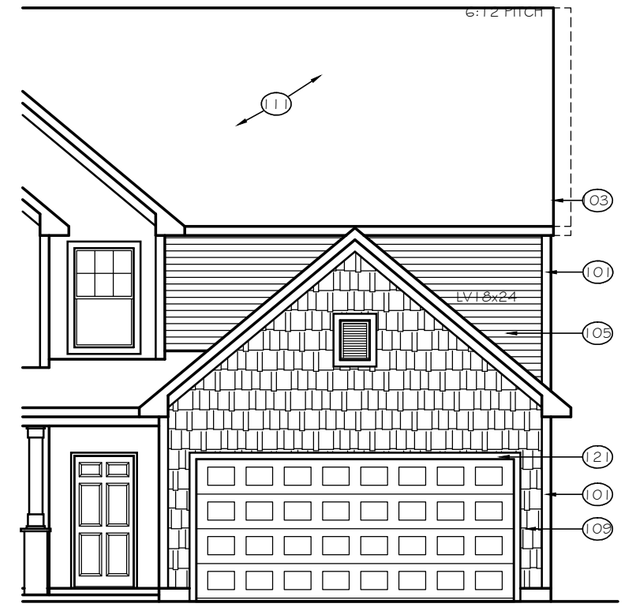
v1.2



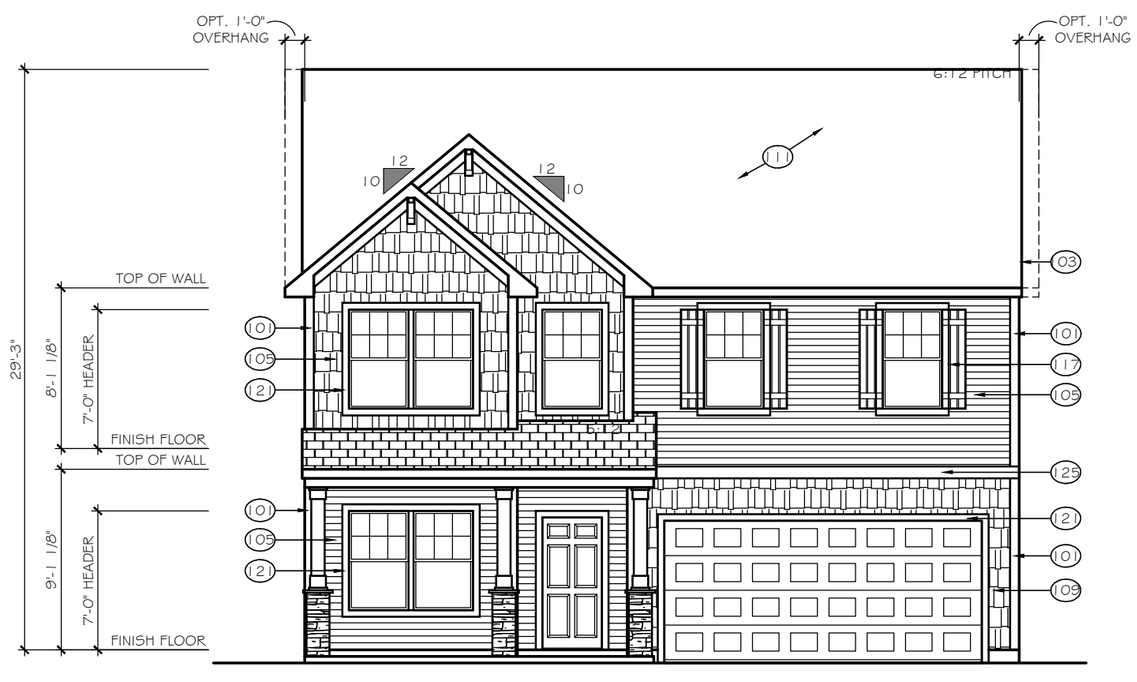
FRONT ELEVATION

ELEVATION E-F1

SCALE: 1/8" = 1'-0"



8' GARAGE BUMP OPTION



FRONT ELEVATION

ELEVATION E-F1P

SCALE: 1/8" = 1'-0"

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FRONT ELEVATION
ELEVATION E-F1

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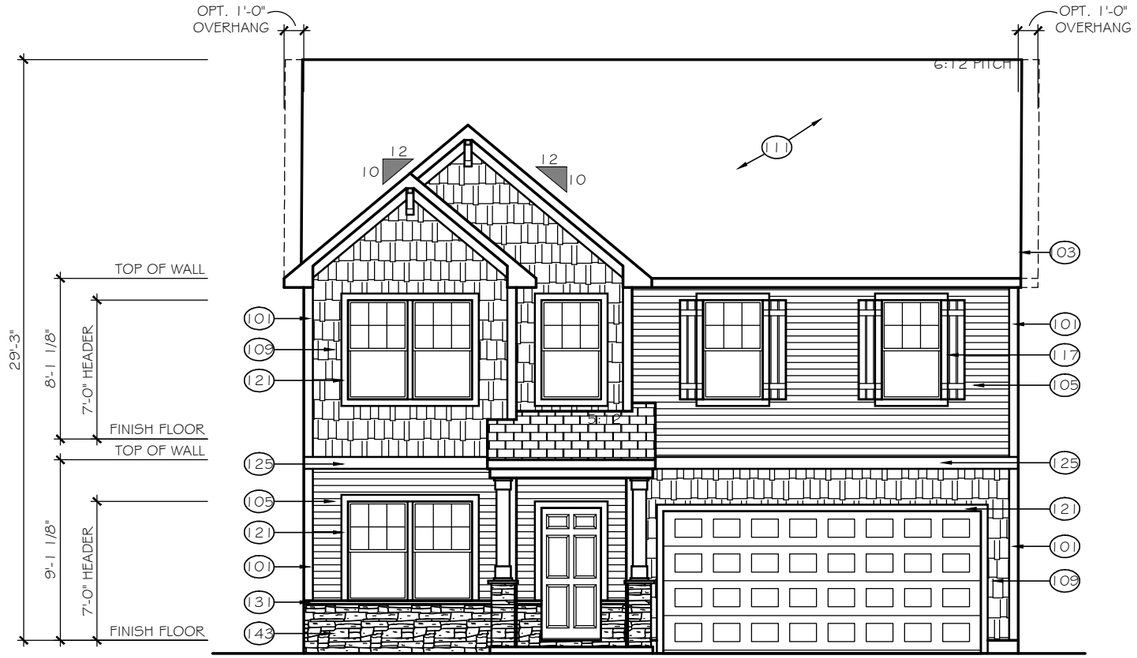
SCALE: 1/8"= 1'-0"

CHECKED BY: BPS / DJP

SHEET: A4.30

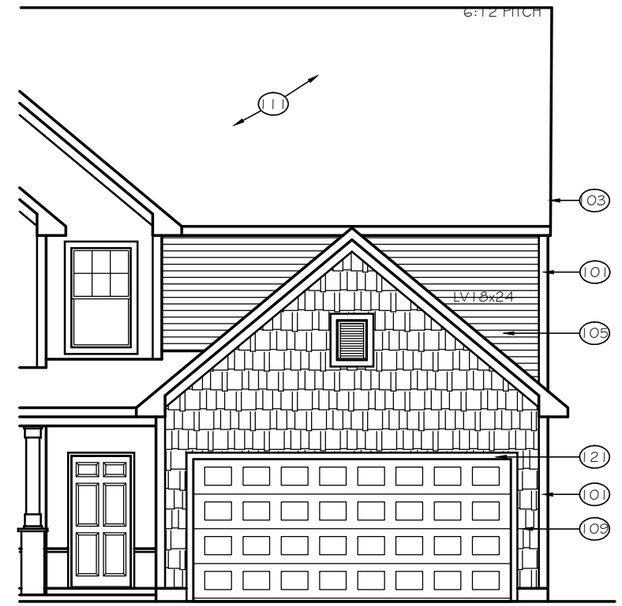
v1.2



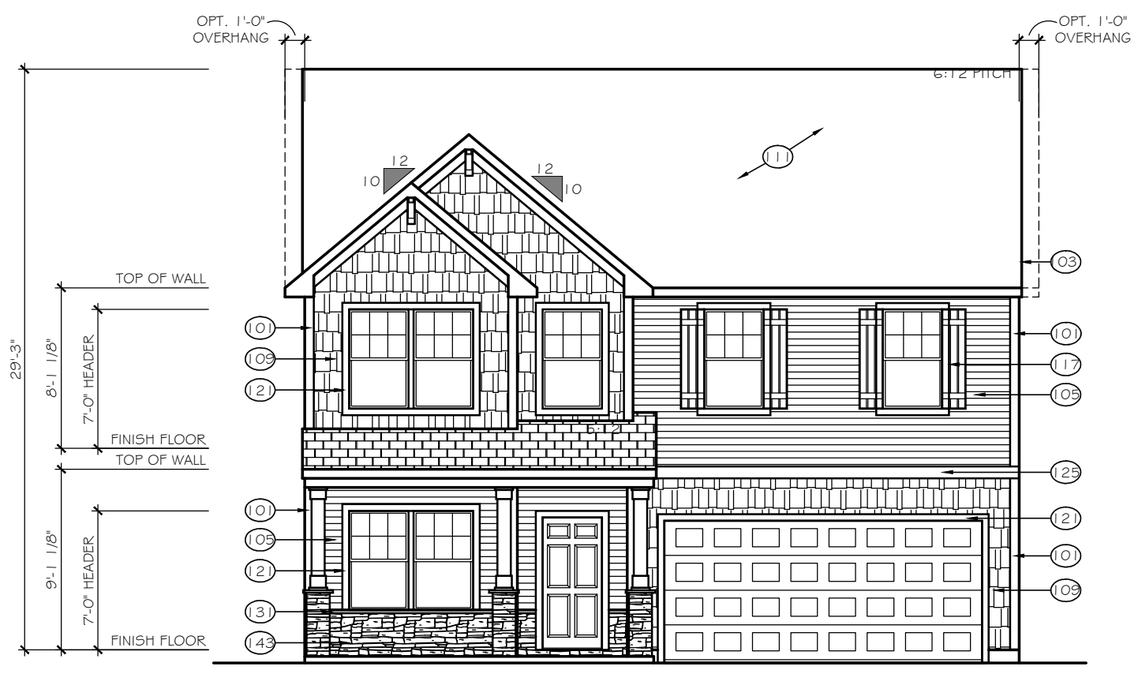
FRONT ELEVATION

ELEVATION E-F2

SCALE: 1/8" = 1'-0"



8' GARAGE BUMP OPTION



FRONT ELEVATION

ELEVATION E-F2P

SCALE: 1/8" = 1'-0"

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FRONT ELEVATION
ELEVATION E-F2

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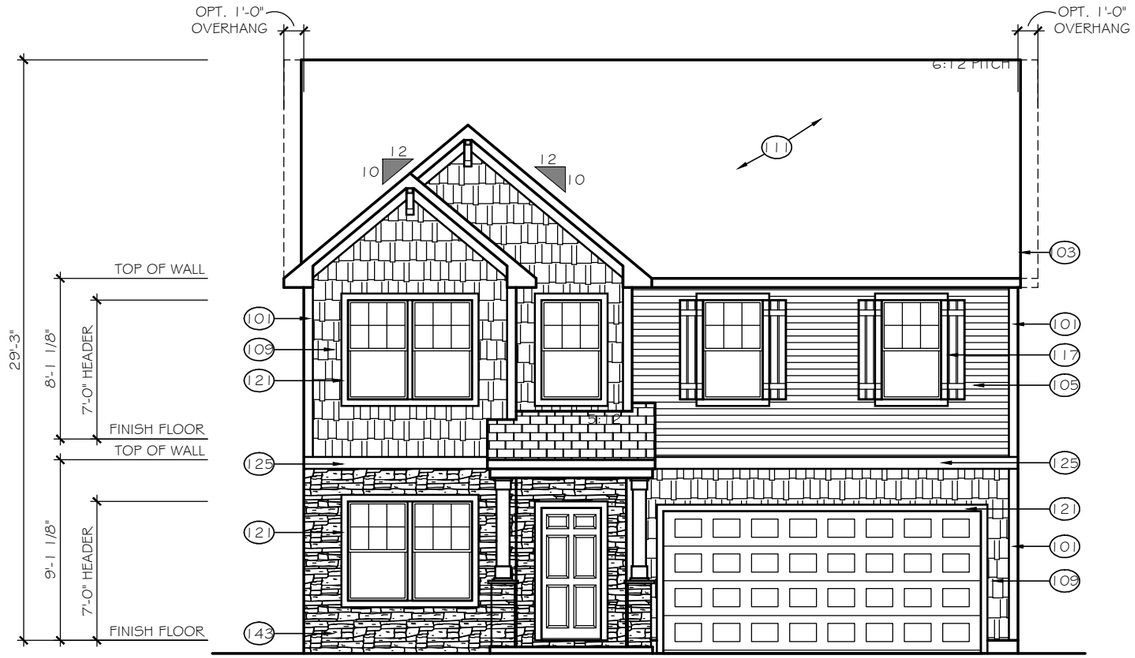
SCALE: 1/8"= 1'-0"

CHECKED BY: BPS / DJP

SHEET: A4.31

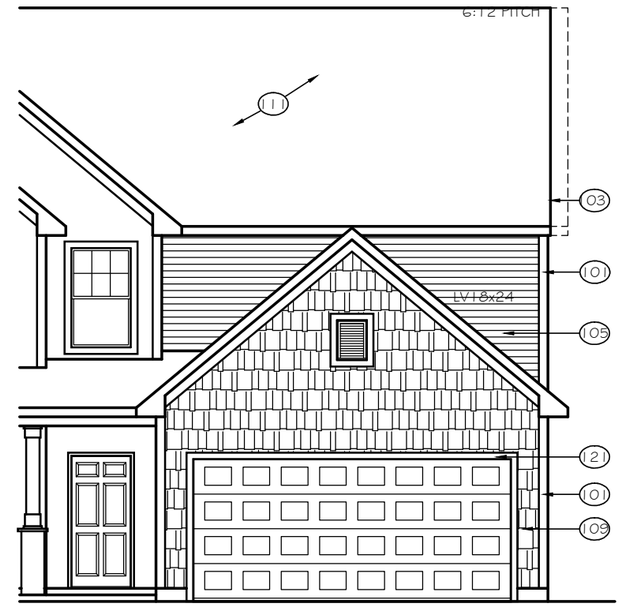
v1.2



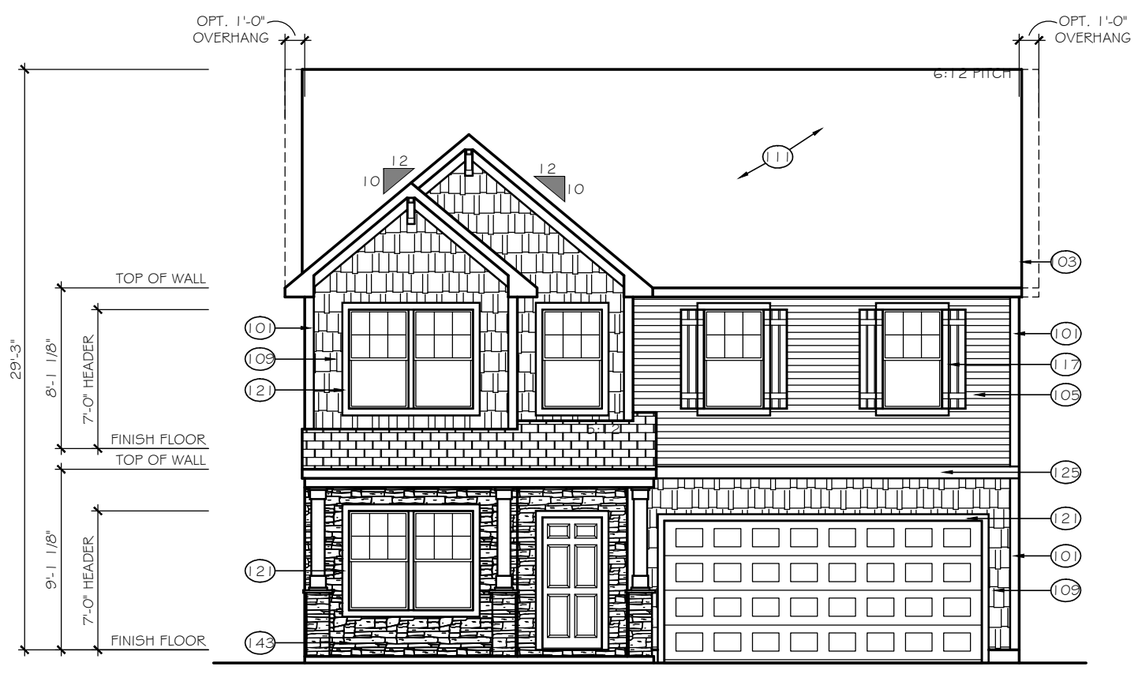
FRONT ELEVATION

ELEVATION E-F3

SCALE: 1/8" = 1'-0"



8' GARAGE BUMP OPTION



FRONT ELEVATION

ELEVATION E-F3P

SCALE: 1/8" = 1'-0"

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FRONT ELEVATION
ELEVATION E-F3

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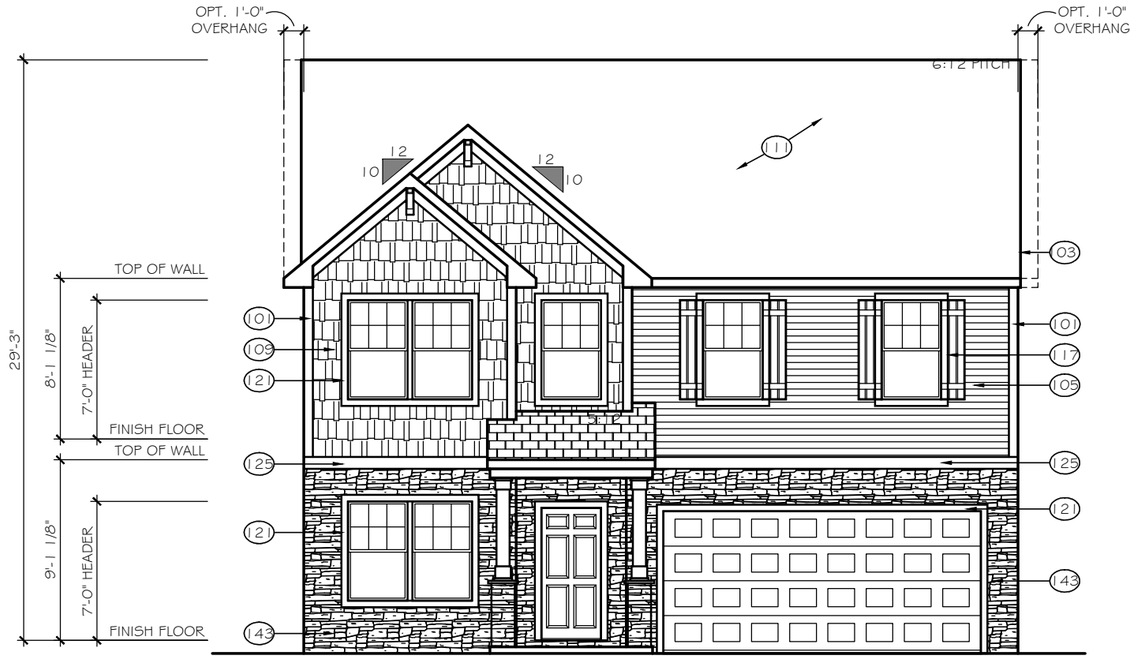
SCALE: 1/8"= 1'-0"

CHECKED BY: BPS / DJP

SHEET: A4.32

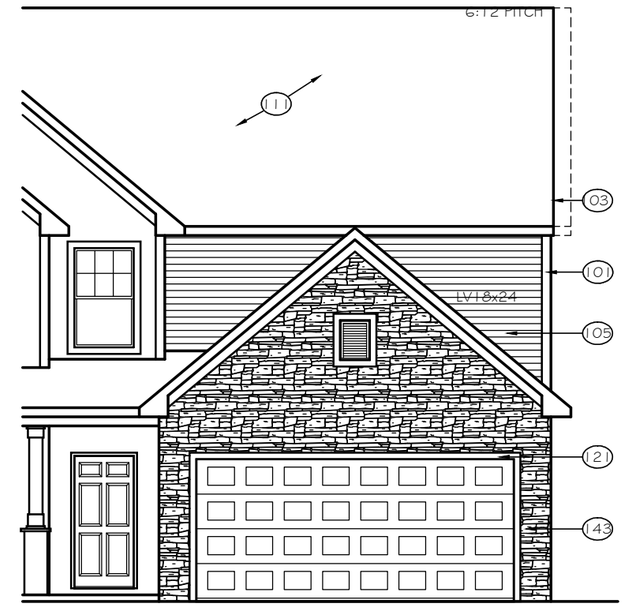
v1.2



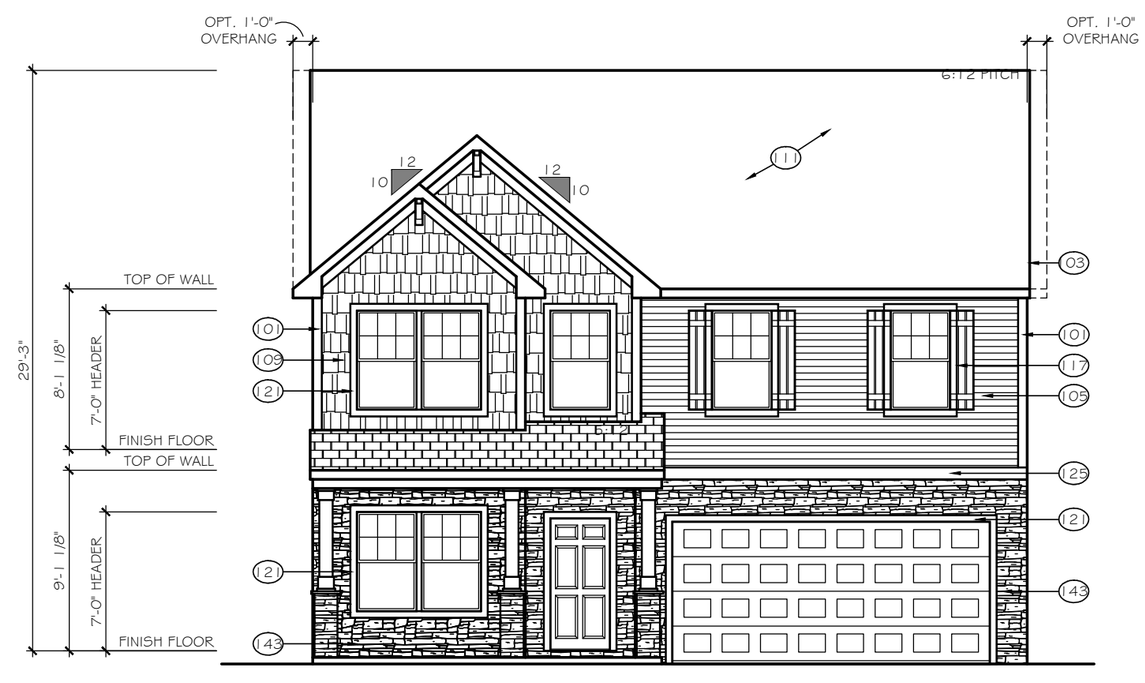
FRONT ELEVATION

ELEVATION E-F4

SCALE: 1/8" = 1'-0"



8' GARAGE BUMP OPTION



FRONT ELEVATION

ELEVATION E-F4P

SCALE: 1/8" = 1'-0"

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FRONT ELEVATION
ELEVATION E-F4

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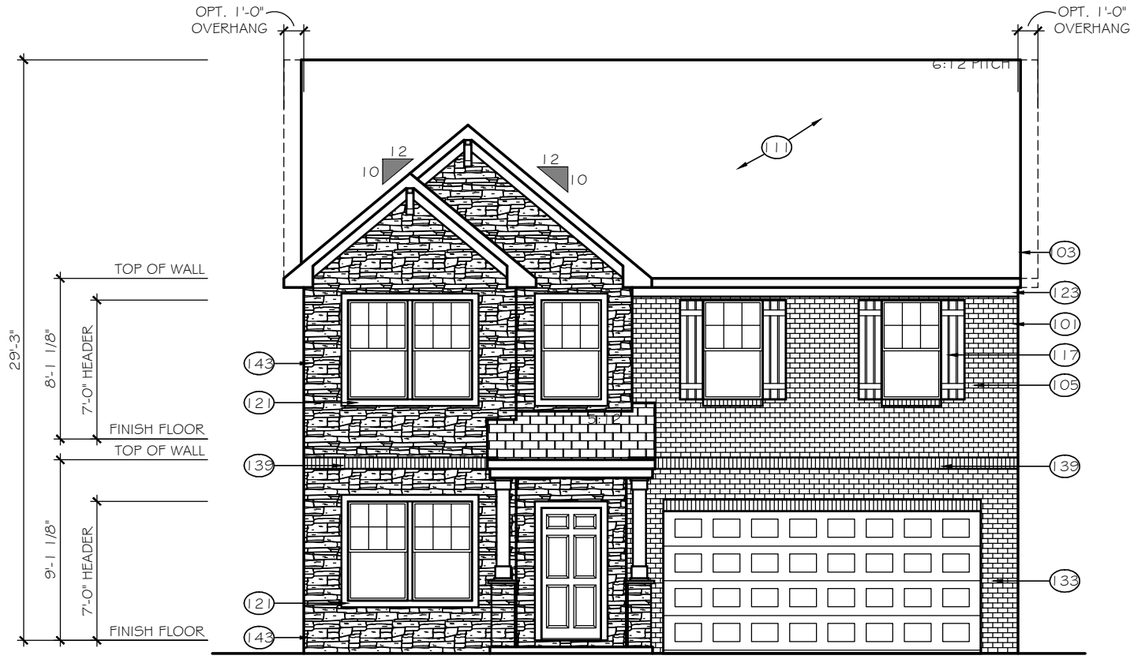
SCALE: 1/8"= 1'-0"

CHECKED BY: BPS / DJP

SHEET: A4.33

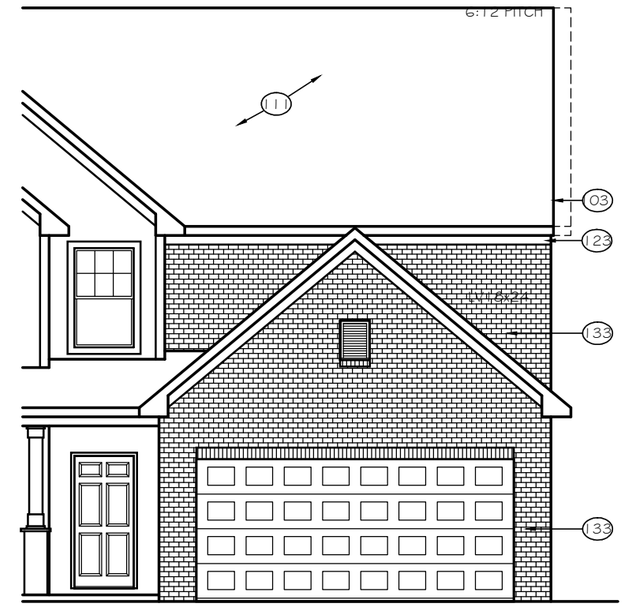
v1.2



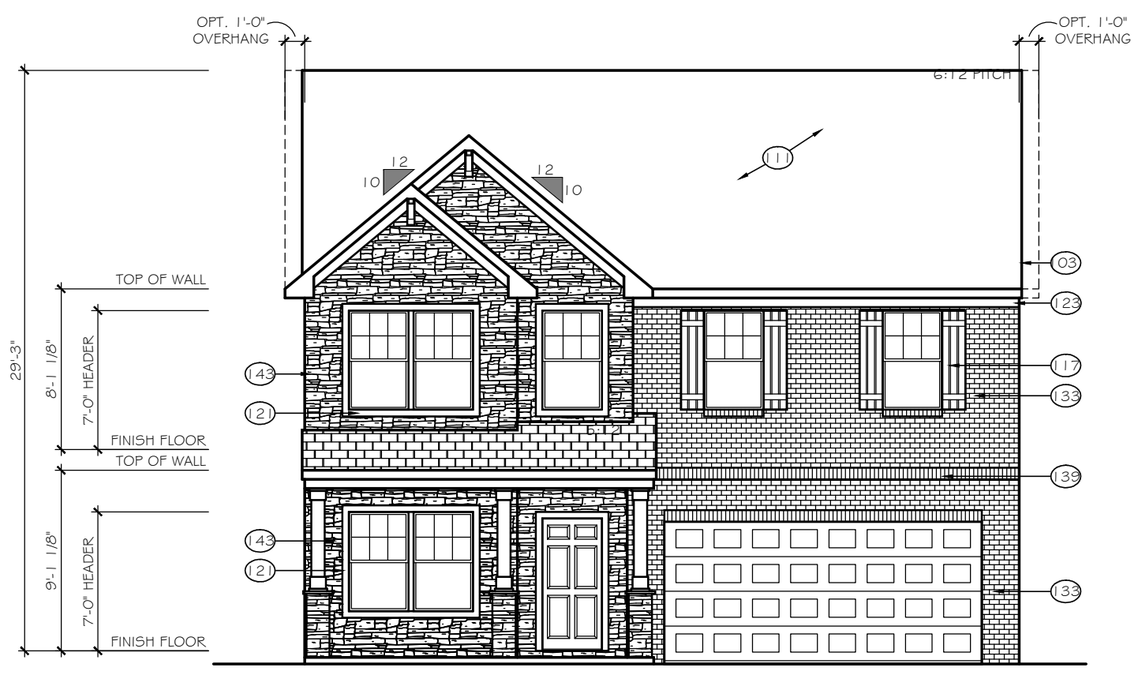
FRONT ELEVATION

ELEVATION E-F5

SCALE: 1/8" = 1'-0"



8' GARAGE BUMP OPTION



FRONT ELEVATION

ELEVATION E-F5P

SCALE: 1/8" = 1'-0"

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FRONT ELEVATION
ELEVATION E-F5

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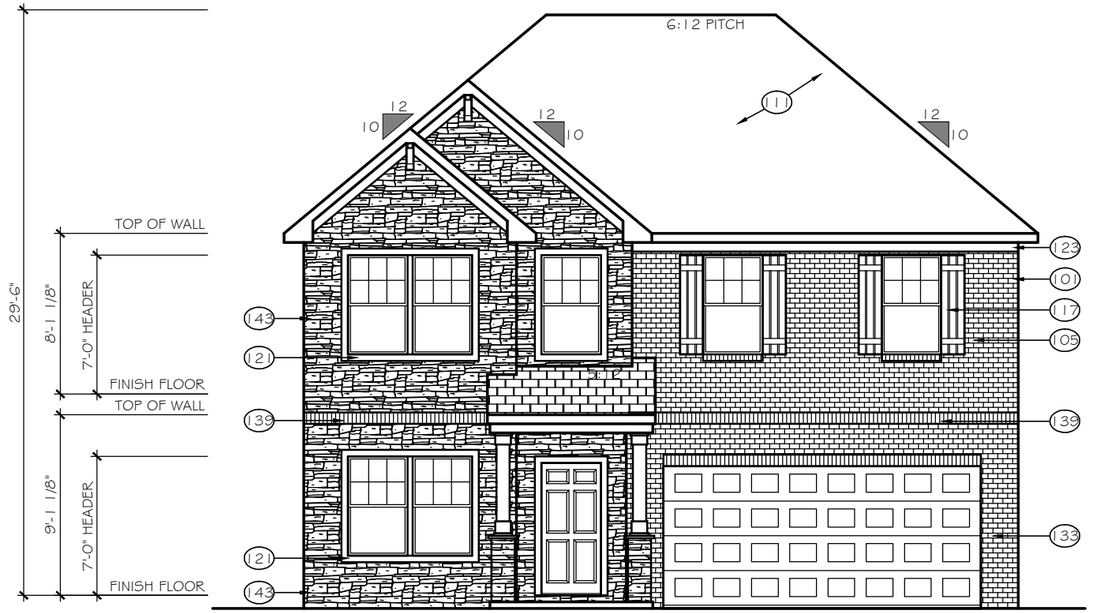
SCALE: 1/8"= 1'-0"

CHECKED BY: BPS / DJP

SHEET: A4.34

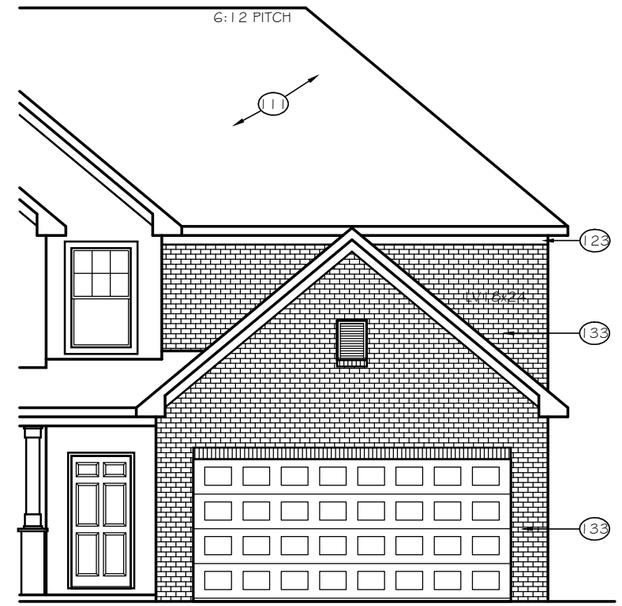
v1.2



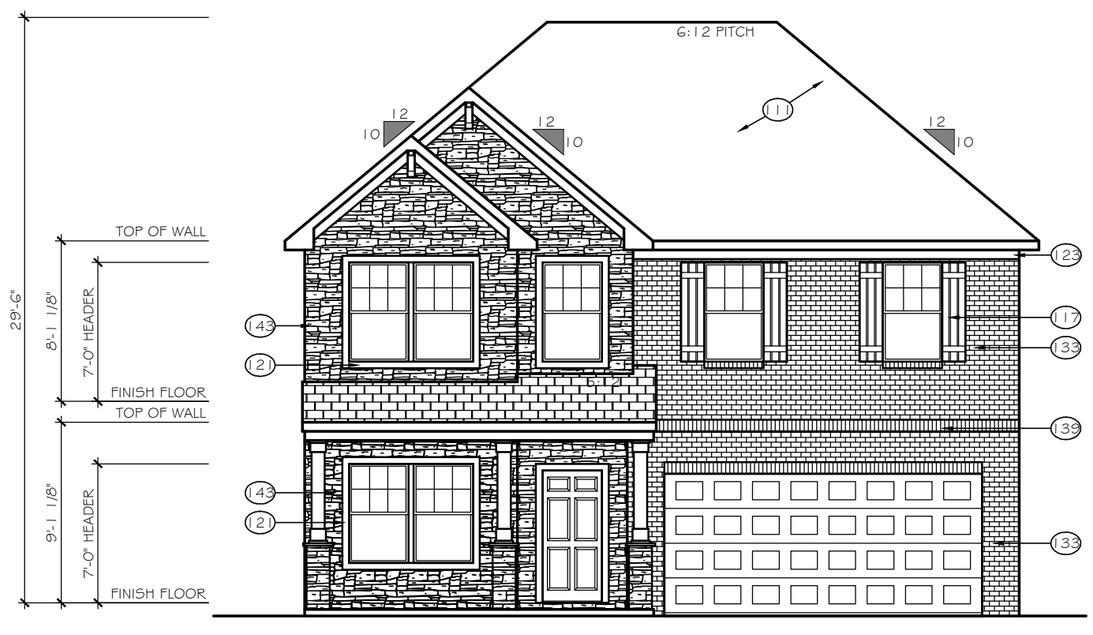
FRONT ELEVATION

ELEVATION E-F6

SCALE: 1/8" = 1'-0"



8' GARAGE BUMP OPTION



FRONT ELEVATION

ELEVATION E-F6P

SCALE: 1/8" = 1'-0"

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FRONT ELEVATION
ELEVATION E-F6

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SCALE: 1/8"= 1'-0"

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SHEET: A4.35

v1.2

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THE BAYSIDE
MASTER SET INTEGRITY / TRIBUTE/ELEMENTS

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ELECTRICAL LEGEND

	EXT. CARRIAGE LIGHT
	OUTLET 220V
	OUTLET 110V
	OUTLET 110V WATER PROOF
	OUTLET 110V GFI
	SWITCHED RECEPTACLE
	PHONE
S D C O	SMOKE / CO DETECTOR
S D	SMOKE DETECTOR
	SWITCH
	3-WAY SWITCH
	4-WAY SWITCH
	SPEAKER SWITCH
	THERMOSTAT
	CABLE TV
	CEILING LIGHT
	COMPACT FLUORESCENT LIGHT GU24 SOCKET
	JUNCTION LIGHT
	SPEAKER
	EXHAUST FAN
	EXHAUST FAN / LIGHT
	FLOOD LIGHT
	UNDER CABINET LIGHT
	PUSH BUTTON
	ELECTRIC PANEL
	CAN LIGHT
	MINI-CAN LIGHT
	PENDANT LIGHT
	PREWIRE
	CEILING FAN PRE-WIRE

ELECTRICAL TO BE PLACED PER CODE IN THE FIELD.

GENERAL NOTES

1. PLANS PERMITTED IN NORTH CAROLINA ARE DESIGNED TO MEET THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE, AS ISSUED BY THE STATE OF NORTH CAROLINA, AND PLANS PERMITTED IN SOUTH CAROLINA DESIGNED TO MEET 2015 INTERNATIONAL RESIDENTIAL BUILDING CODE AS ISSUED BY THE STATE OF SOUTH CAROLINA, WITH MODIFICATIONS AS REQUIRED TO MEET LOCAL BUILDING CODES FOR EACH APPLICABLE JURISDICTION.
2. DO NOT SCALE DIMENSIONS FROM PRINTS. USE DIMENSIONS GIVEN OR CONSULT PRODUCTION CAD DEPARTMENT FOR FURTHER CLARIFICATION.
3. ALL DIMENSIONS ARE FROM WALL FRAMING, NO FINISHED DIMENSIONS ARE GIVEN.
4. PROVIDE 2 STUDS BETWEEN ALL WINDOWS.
5. ACCESS DOORS BETWEEN HOUSE AND GARAGE AREAS TO BE 20-MINUTE FIRE RATED.
6. ALL EXTERIOR WALLS & INTERIOR WALLS TO BE 2X4 STUDS 16" O.C. (U.N.O.). INTEGRITY COLLECTION INTERIOR NON-LOAD BEARING WALLS 24" O.C. (U.N.O.)
7. ALL STRUCTURAL FRAMING LUMBER EXPOSED DIRECTLY TO THE WEATHER OR BEARING DIRECTLY ON MASONRY OR CONCRETE SHALL BE TREATED. ALL WOOD IN CONTACT WITH THE GROUND MUST BE GROUND-CONTACT APPROVED. ALL WOOD EXPOSED DIRECTLY TO THE WEATHER SHALL BE PROTECTED TO PREVENT THE OCCURRENCE OF ROT.
8. ALL ANGLED WALLS ARE AT 45 DEGREES UNLESS NOTED OTHERWISE.
9. USE WINDOW NOMINAL SIZES FOR ROUGH OPENINGS (APPLIES TO TWIN AND TRIPLE WINDOWS). SEE ELEVATIONS FOR WINDOW HEADER HEIGHTS.
10. DIMENSIONS ARE FROM FACE OF STUDS.
11. PROVIDE BLOCKING ABOVE WINDOWS AND DOORS 16" O.C.
12. PROVIDE EXTRA STUDS AS INDICATED AT BEAM BEARING LOCATIONS.
13. WALLS TO BE FRAMED WITH STUDS AT 16" O.C. AT KITCHEN WALLS WITH CABINETS AND AT TUB/SHOWER LOCATIONS (PER MANUF.).
14. ALL COMMON CEILING BETWEEN GARAGE TO HOUSE PROVIDE 5/8" TYPE X GWB PER GARAGE SEPARATION REQUIREMENTS PER IRC. ALL JOINTS TO BE TAPED & MUDDED FOR FIRE SEPARATION. ALL STRUCTURES SUPPORTING FLOOR/CEILING ASSEMBLIES USED FOR SEPARATION REQUIRE NOT LESS THAN ½" GYP OR EQ. PER SECTION R302.6
15. SEPARATE GARAGE FROM ATTIC WITH 5/8" TYPE X GWB SCUTTLE MINIMUM AND 2X SCUTTLE FRAMING MATERIAL.
16. HEEL HEIGHTS: SEE ELEVATIONS SHEETS FOR TOP OF FASCIA DIMENSIONS TO GATHER PROPER HEEL HEIGHT REQUIREMENTS.
17. PROVIDE AND INSTALL LOCALLY CERTIFIED SMOKE DETECTORS AND CARBON MONOXIDE DETECTORS AS REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION AND MEETING THE REQUIREMENTS OF ALL GOVERNING CODES AND PER MANUFACTURER SPECS.
18. STAIR TREAD DESIGN TO BE VERIFIED WITH SELECTIONS AND POS.
19. PROVIDE 1 ½" FLAT WALL FRAMING FOR ALL HVAC CHASES UNLESS NOTED OTHERWISE. SEE FRAMING SHEETS/CS2 FOR ADDITIONAL NOTES PER LOCAL CODES.
20. FOR TRADITIONS, ELEMENTS, INTEGRITY, AND TRIBUTE SERIES, DOORS SHOULD BE LOCATED 4" OFF ADJACENT WALLS OR CENTERED IN THE WALL UNLESS NOTED OTHERWISE. DESIGNER SERIES SHOULD BE LOCATED 6" OFF ADJACENT WALLS OR CENTERED IN THE WALL UNLESS NOTED OTHERWISE.
21. ALL HOMES TREATED WITH BORA-CARE TERMITE TREATMENT.
22. SMURF DOORS ARE 21 1/2" x 39" NOMINAL (R.O. 22 1/2" x 40").
23. SHEATH WALLS AND CEILINGS w/ OSB PER SPECS. IN FURN. ROOM LOCATIONS

INTERIOR HINGED DOOR SCHEDULE

DOOR WIDTH		DOOR HEIGHT R.O.		
PLAN I.D.	R.O. WIDTH	8FT CEILING	9FT CEILING	10FT CEILING
1/4	1'-6"	82-1/2" (6'-8" NOMINAL DOOR HEIGHT +2-1/2")	82-1/2" (6'-8" NOMINAL DOOR HEIGHT +2-1/2")	98-1/2" (8'-0" NOMINAL DOOR HEIGHT +2-1/2")
1/6	1'-8"			
1/8	1'-10"			
2/0	2'-2"			
2/4	2'-6"			
2/6	2'-8"			
2/8	2'-10"			
2/10	3'-0"			
3/0	3'-2"			
4/0	4'-2"			
5/0	5'-2"			
6/0	6'-2"			

◇ LOAD BEARING ◯ NON-LOAD BEARING

INTERIOR PASS THRU SCHEDULE

FRAMED OPENING DIMENSIONS		
WALL HEIGHT	R.O. WIDTH	R.O. HEIGHT
8'-1 1/8"	PLAN I.D. +2"	82-1/2"
9'-1 1/8"	PLAN I.D. +2"	94-1/2"
10'-1 1/8"	PLAN I.D. +2"	98-1/2"

ROUGH OPENING HEIGHTS ARE FOR DO, CO, & AO OPENINGS. SHIM HEIGHTS AS NEEDED TO MATCH INTERIOR HINGED DOOR CASING

INTERIOR DOORWAY OPENINGS:
DO = DRYWALL OPENING
CO = CASED OPENING
AO = ARCHED OPENING

EXTERIOR HINGED DOOR SCHEDULE

DOOR WIDTH		DOOR HEIGHT R.O.		
PLAN I.D.	R.O. WIDTH	8FT CEILING	9FT CEILING	10FT CEILING
3/0	3'-2 1/2"	82-1/2"	82-1/2"	98-1/2"
2/8	2'-10 1/2"			
5/0	5'-3 5/8"			
5/4	5'-7 5/8"			
6/0	6'-3 5/8"			
SLIDING PATIO DOORS				
5/0	4'-11 1/2"	80"	80"	96"
6/0	5'-11 1/2"			

HEADER SCHEDULE

ALL INTERIOR BEARING AND EXTERIOR WALLS
1. SPANS UP TO 3'-6" -- (2) 2x8's
2. SPANS 3'-6" TO 6'-6" -- (2) 2x10's
3. SPANS 6'-6" OR MORE -- SEE PLAN

POST SCHEDULE

2x4 STUDS	2x6 STUDS
EX: (2) 2X4	EX: (2) 2X6

NUMBER INSIDE CALLOUT INDICATES TOTAL NUMBER OF STUDS.

4X4 POST	6X6 POST

LETTER 'P' INSIDE CALLOUT INDICATES A SOLID 4x4 or 6x6 POST

KING / JACK SCHEDULE

A	(2) JACK STUDS
B	(1) JACK STUD & (1) KING STUD
C	(1) JACK STUD & (2) KING STUDS
D	(1) JACK STUD & (3) KING STUDS
E	(2) JACK STUDS & (1) KING STUD
F	(2) JACK STUDS & (2) KING STUDS
G	(2) JACK STUDS & (3) KING STUDS
H	(3) JACK STUDS & (3) KING STUDS
I	(4) JACK STUDS & (4) KING STUDS

SQUARE FOOTAGE

KEY NOTES
ELEVATIONS

101	CORNER TRIM
103	FLUSH RAKE
105	HORIZONTAL SIDING
107	BOARD-N-BATTEN SIDING
108	SCALLOPED SIDING
109	SHAKE SIDING
111	COMPOSITE SHINGLES
112	METAL ROOFING
113	SHINGLED RETURN
114	SUBFASCIA
115	FLASHING
117	VINYL SHUTTER
119	TRIM BOARD AT OVERHEAD DOOR JAMB
120	BRICKMOLD TRIM
121	1X4 TRIM BOARD
123	1X6 TRIM BOARD
125	1X8 TRIM BOARD
126	SYNTHETIC CROSS HEAD
127	1X4 FRIEZE TRIM BOARD
129	1X6" FASCIA
131	1-1/2" THICK STONE CAP
133	5" FACE BRICK VENEER
135	ROWLOCK SILL
137	BRICK JACK ARCH
139	SOLDIER COURSE
141	PRECAST KEYSTONE
143	THIN-SET STONE VENEER

REVISION LOG

1.	DATE:	DRAWN BY:
2.	DATE:	DRAWN BY:
3.	DATE:	DRAWN BY:
4.	DATE:	DRAWN BY:

TABLE OF CONTENTS

THIS SET CONTAINS ELEVATIONS FOR OPEN, TRADITIONAL & TRANSITIONAL

CS	COVER SHEET
A3	EXTERIOR ELEVATIONS & OPTIONS

COVER SHEET
MASTER SET

THE BAYSIDE

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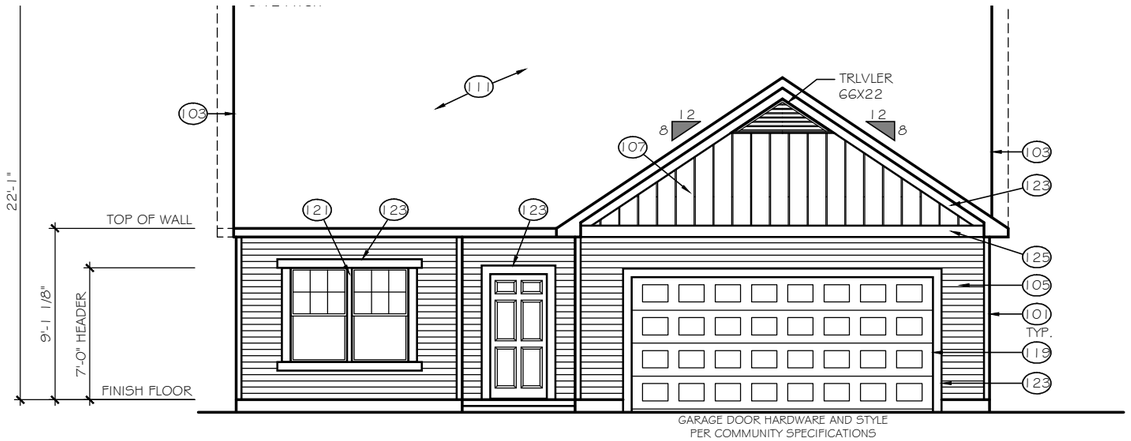
DRAWN BY: MLM
DATE: 04-22-19
SCALE: 1/8"=1'-0"
CHECKED BY: BPS

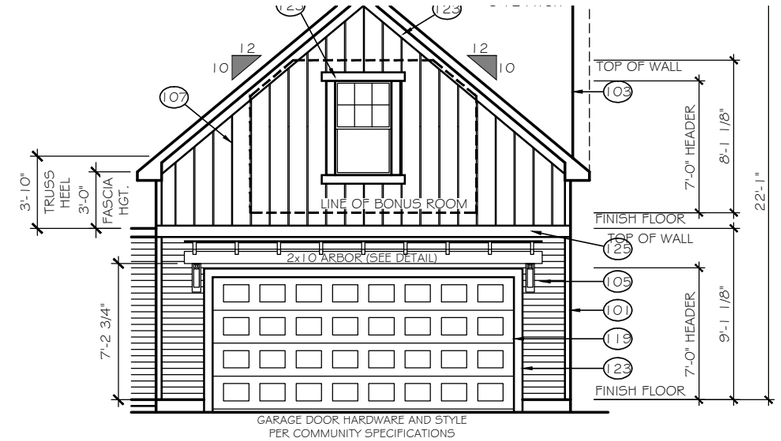
SHEET: CS
v1.19



FRONT ELEVATION

ELEVATION 'E-A1'

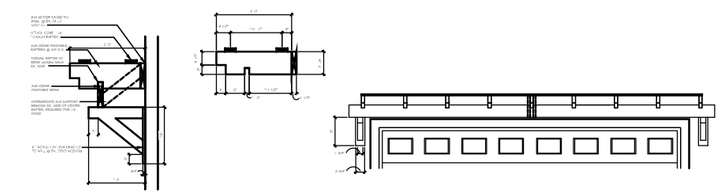
SCALE: 1/8" = 1'-0"



GARAGE BONUS ROOM

ELEVATION 'E-A1B'

SCALE: 1/8" = 1'-0"



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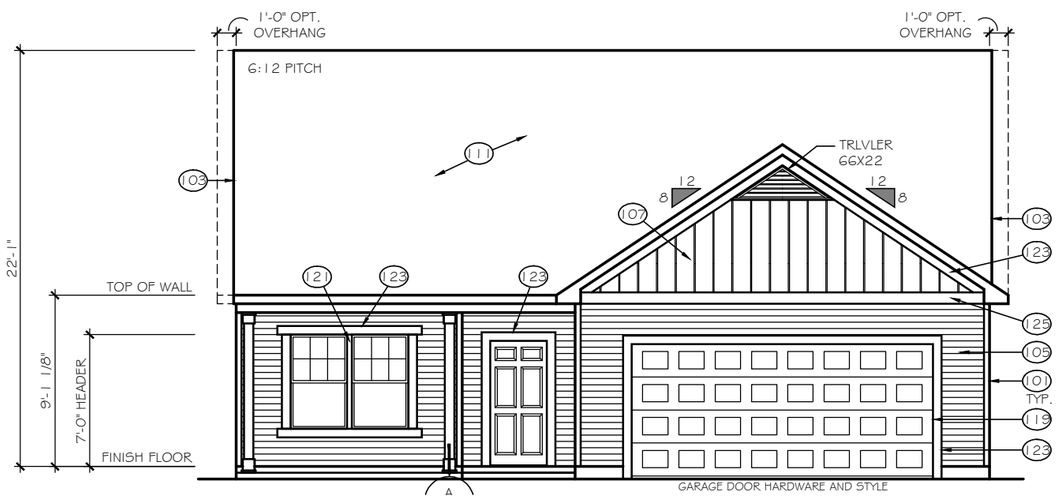

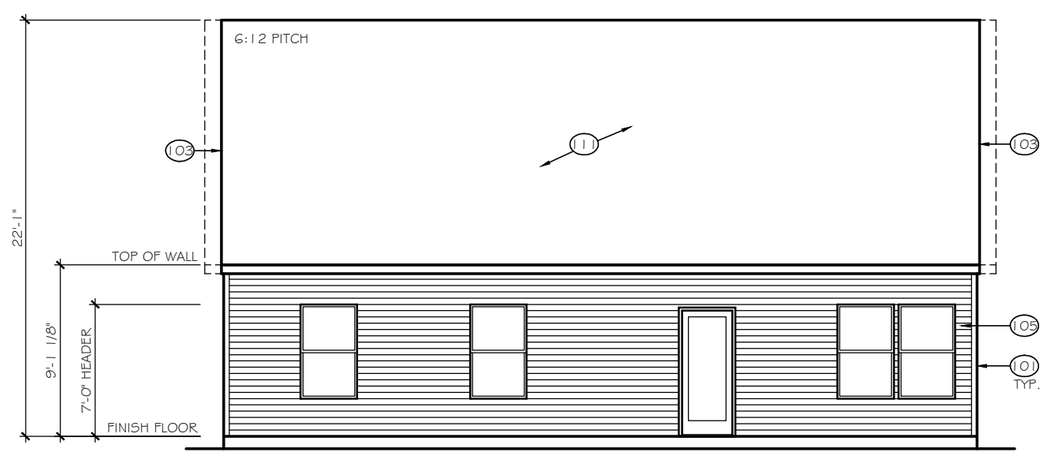

REAR ELEVATION

ELEVATION 'E-A1-A3'

SCALE: 1/8" = 1'-0"

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FRONT & REAR ELEVATIONS
ELEVATION E-A1

THE BAYSIDE

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DRAWN BY: MLM

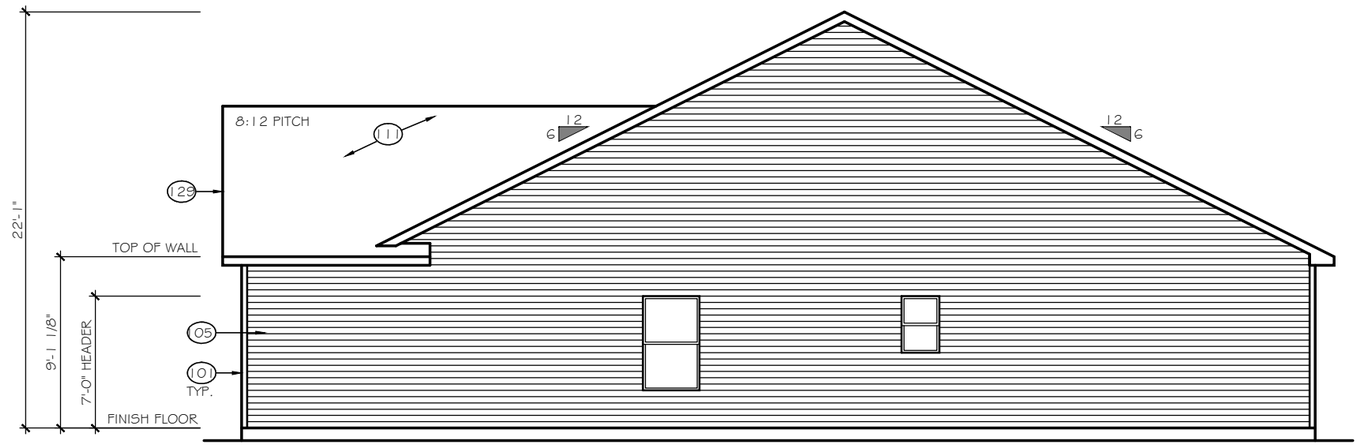
DATE: 04-22-19

SCALE: 1/8"=1'-0"

CHECKED BY: BPS

SHEET: A3.1

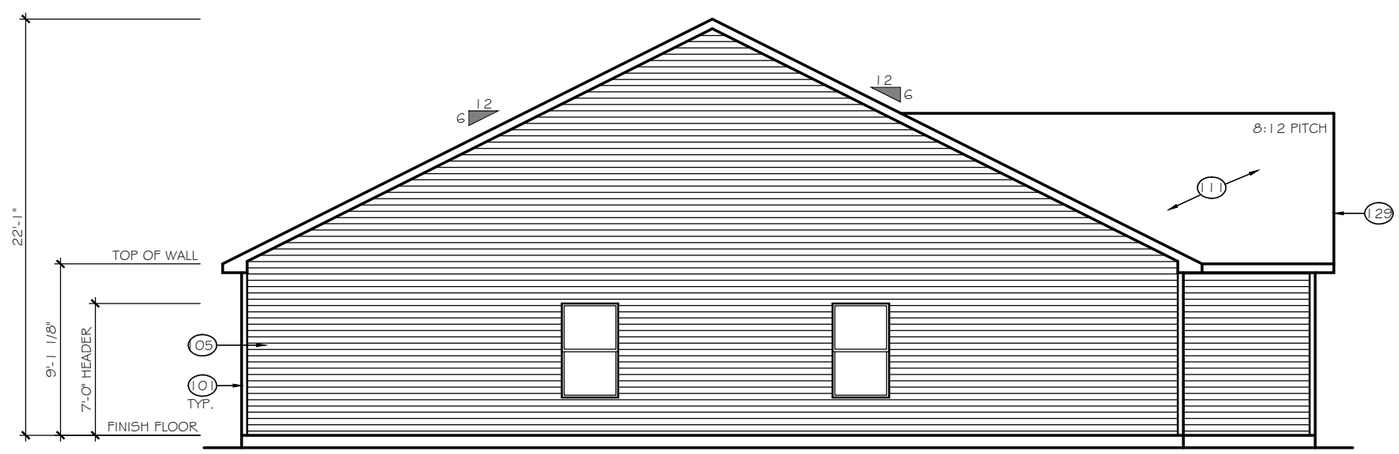
v1.19



RIGHT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-A1-A3'



LEFT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-A1-A3'

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LEFT & RIGHT ELEVATION
ELEVATION E-A1

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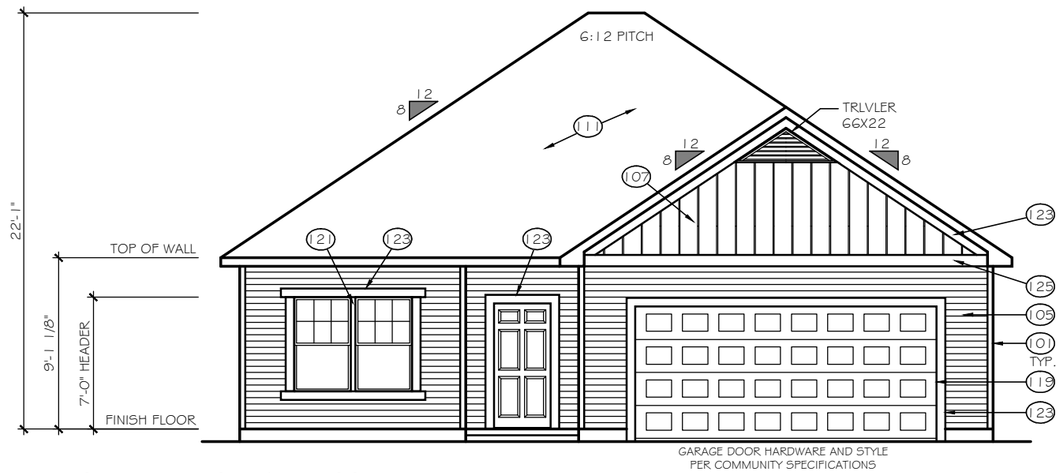
SCALE: 1/8"=1'-0"

CHECKED BY: BPS

SHEET: A3.2

v1.19

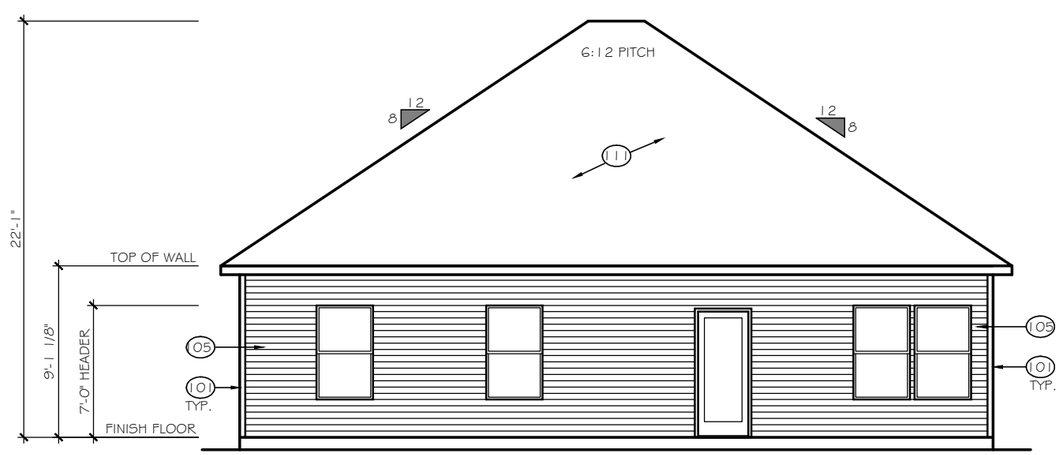


FRONT ELEVATION w/ HIP ROOF

SCALE: 1/8" = 1'-0"

ELEVATION 'E-A1H'

GARAGE BONUS ROOM NOT
AVAILABLE WITH HIP ROOFS



REAR ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-AH1'

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FRONT & REAR ELEVATIONS
ELEVATION E-AH1

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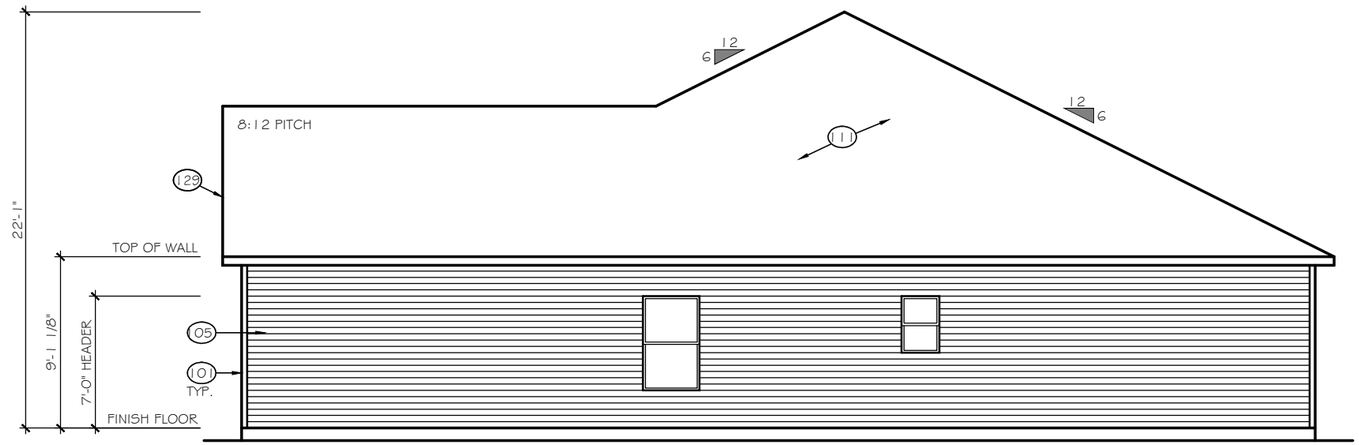
SCALE: 1/8"=1'-0"

CHECKED BY: BPS

SHEET: A3.3

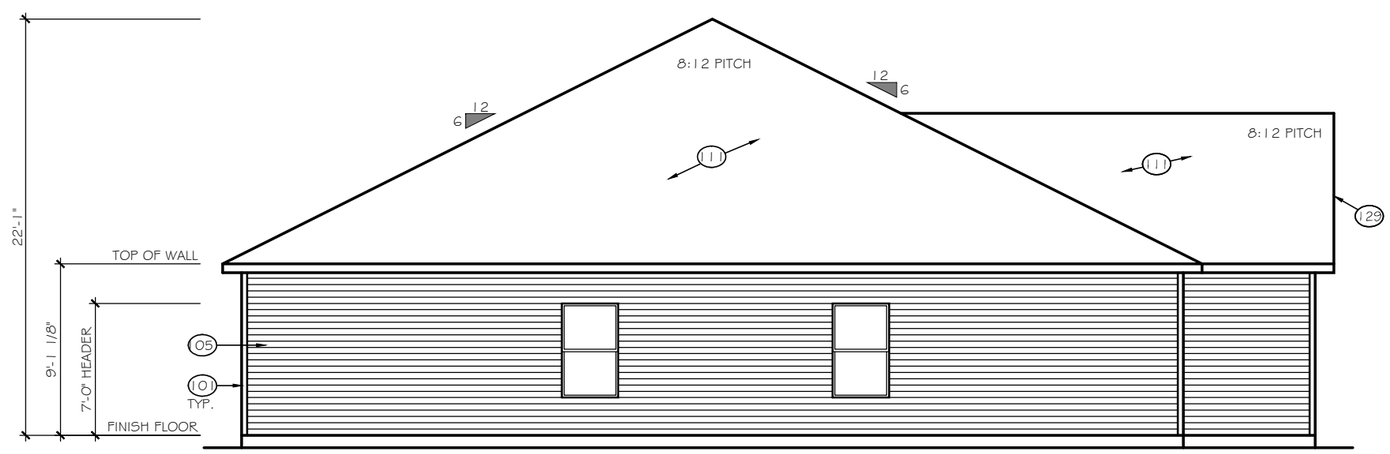
v1.19



RIGHT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-A1'



LEFT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-A1'

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RIGHT & LEFT ELEVATIONS
ELEVATION E-AH1

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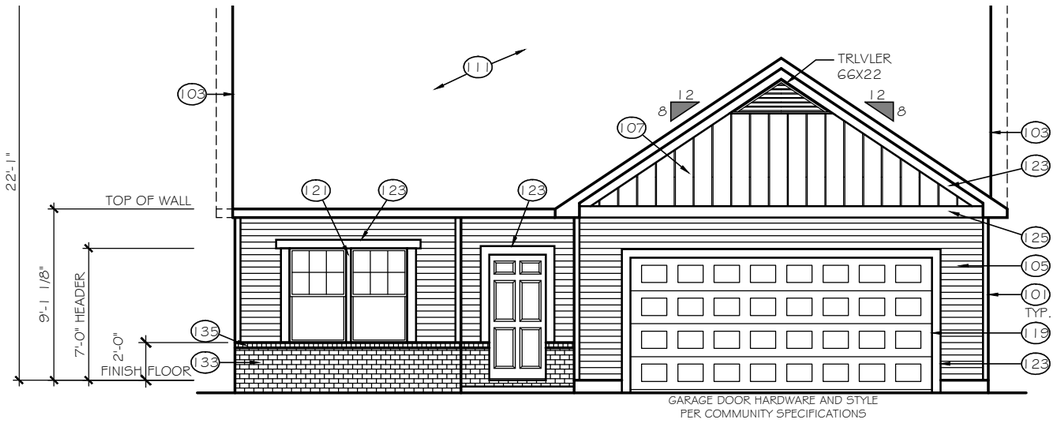
DATE: 04-22-19

SCALE: 1/8"=1'-0"

CHECKED BY: BPS

SHEET: A3.4

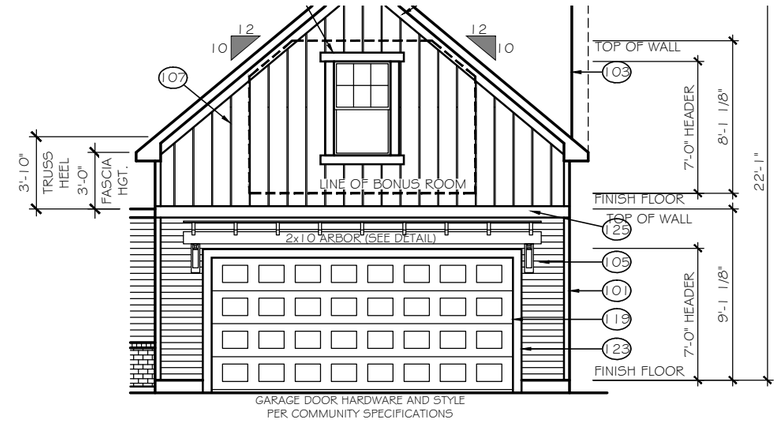
v1.19



FRONT ELEVATION

ELEVATION 'E-A2'

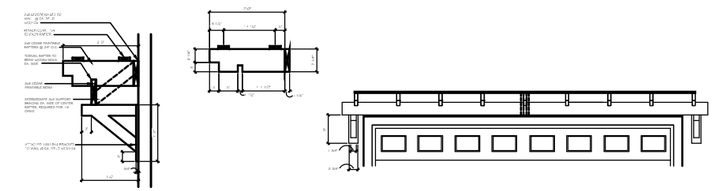
SCALE: 1/8" = 1'-0"



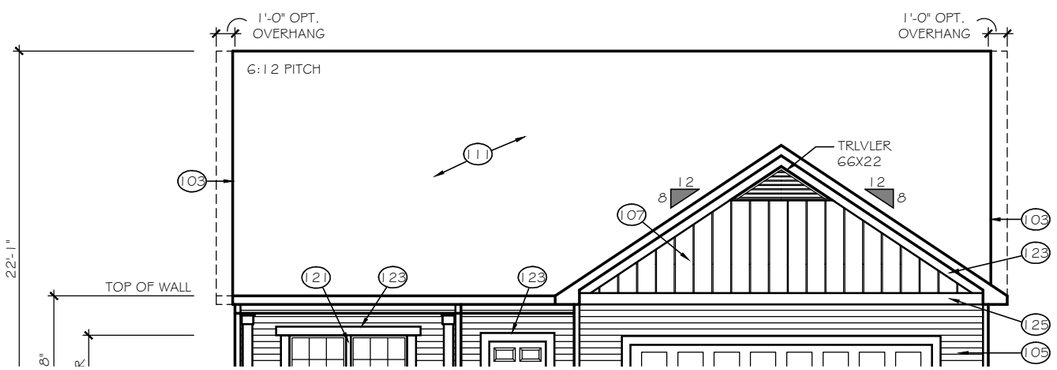
GARAGE BONUS ROOM

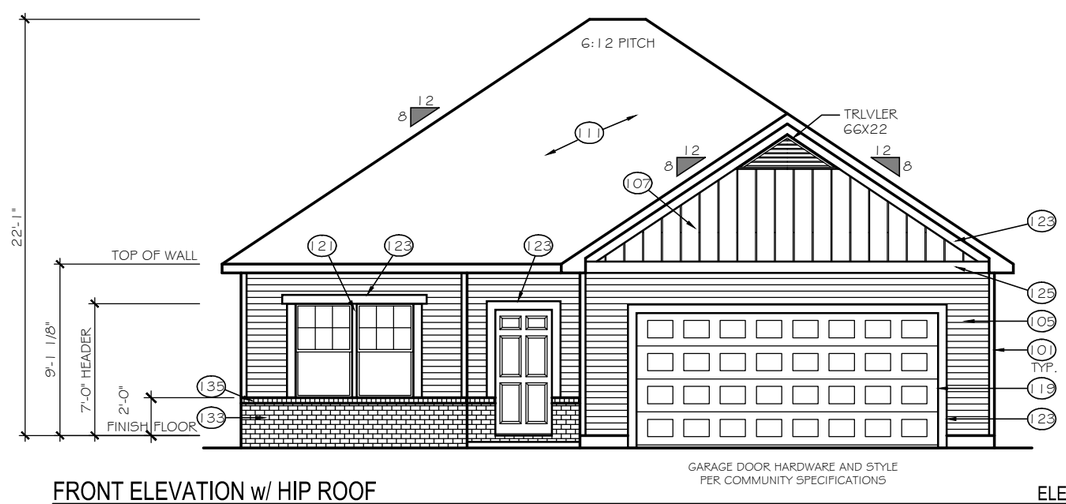
ELEVATION 'E-A2B'

SCALE: 1/8" = 1'-0"



ARBOR DETAIL





FRONT ELEVATION w/ HIP ROOF

ELEVATION 'E-A2H'

SCALE: 1/8" = 1'-0"

GARAGE BONUS ROOM NOT AVAILABLE WITH HIP ROOFS

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ELEVATION OPTIONS
ELEVATION E-A2

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SCALE: 1/8"=1'-0"

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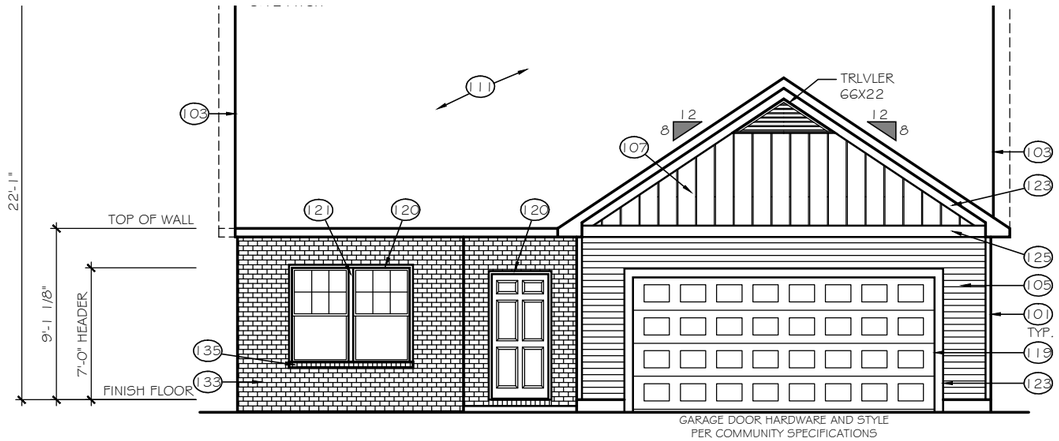
SHEET: A3.5

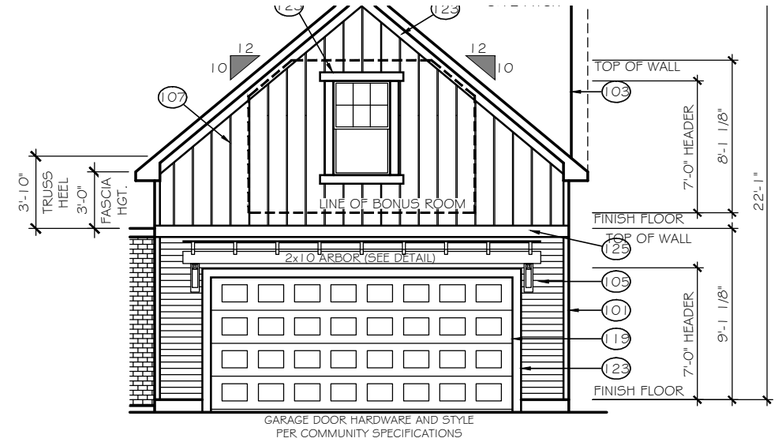
v1.19



FRONT ELEVATION

ELEVATION 'E-A3'

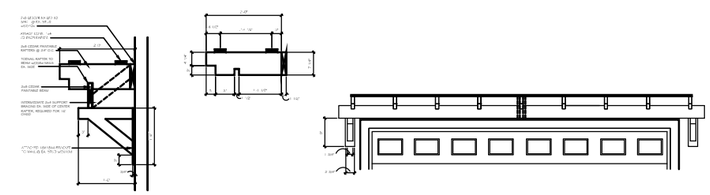
SCALE: 1/8" = 1'-0"



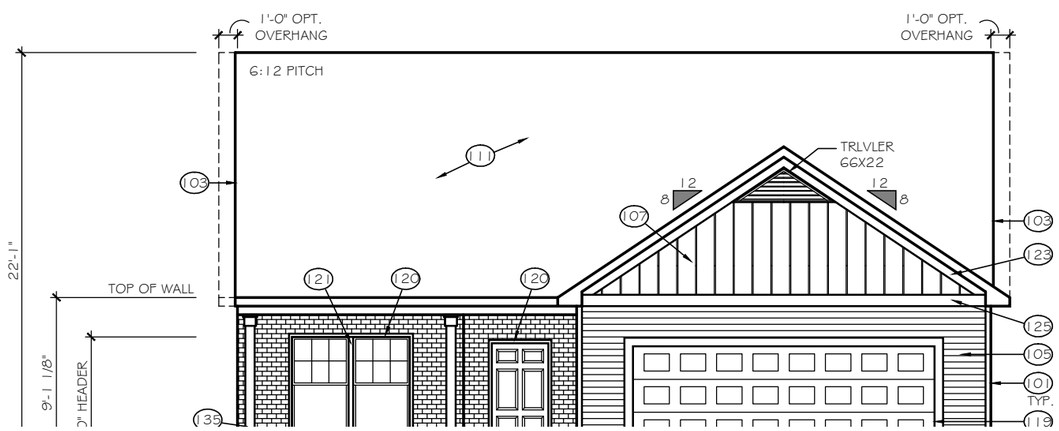
GARAGE BONUS ROOM

ELEVATION 'E-A3B'

SCALE: 1/8" = 1'-0"



ARBOR DETAIL



FRONT ELEVATION w/ HIP ROOF

ELEVATION 'E-A3H'

SCALE: 1/8" = 1'-0"

GARAGE BONUS ROOM NOT
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ELEVATION OPTIONS
ELEVATION E-A3

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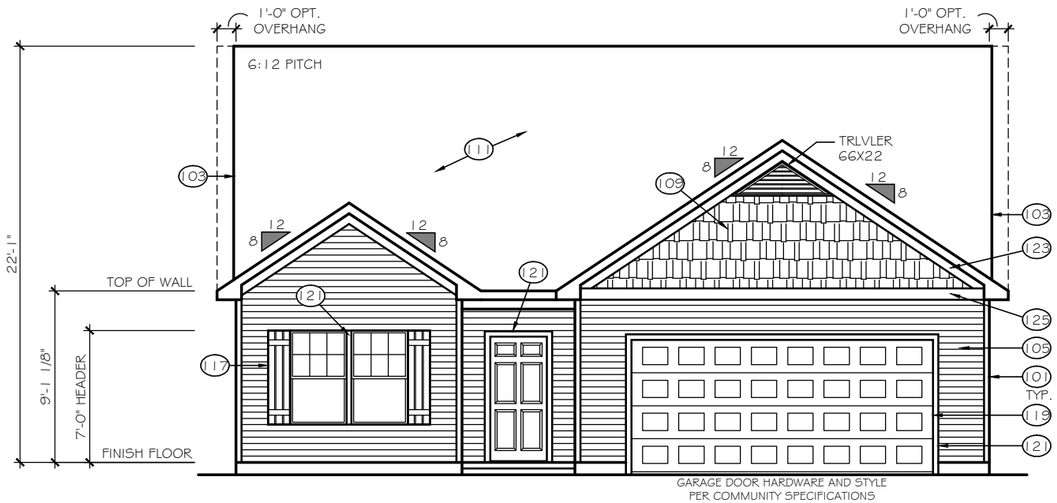
SCALE: 1/8"=1'-0"

CHECKED BY: BPS

SHEET: A3.6

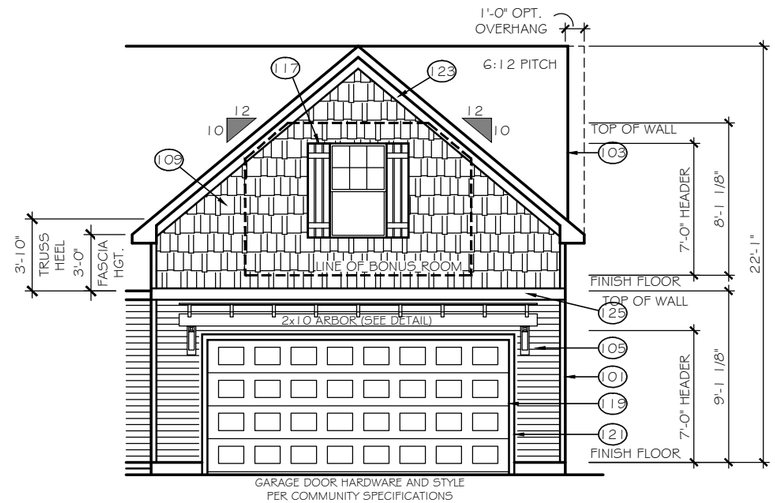
v1.19



FRONT ELEVATION

ELEVATION 'E-C1'

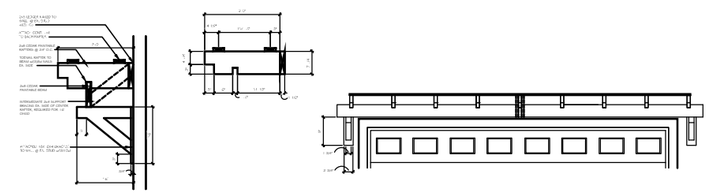
SCALE: 1/8" = 1'-0"



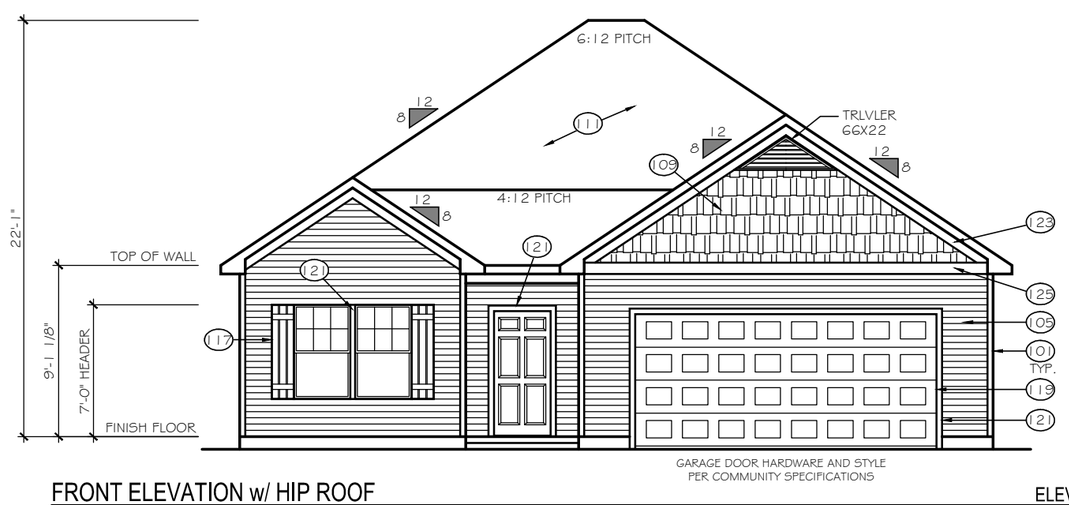
GARAGE BONUS ROOM

ELEVATION 'E-C1B'

SCALE: 1/8" = 1'-0"



ARBOR DETAIL



FRONT ELEVATION w/ HIP ROOF

ELEVATION 'E-C1H'

SCALE: 1/8" = 1'-0"

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ELEVATION OPTIONS
ELEVATION E-C1

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SCALE: 1/8"=1'-0"

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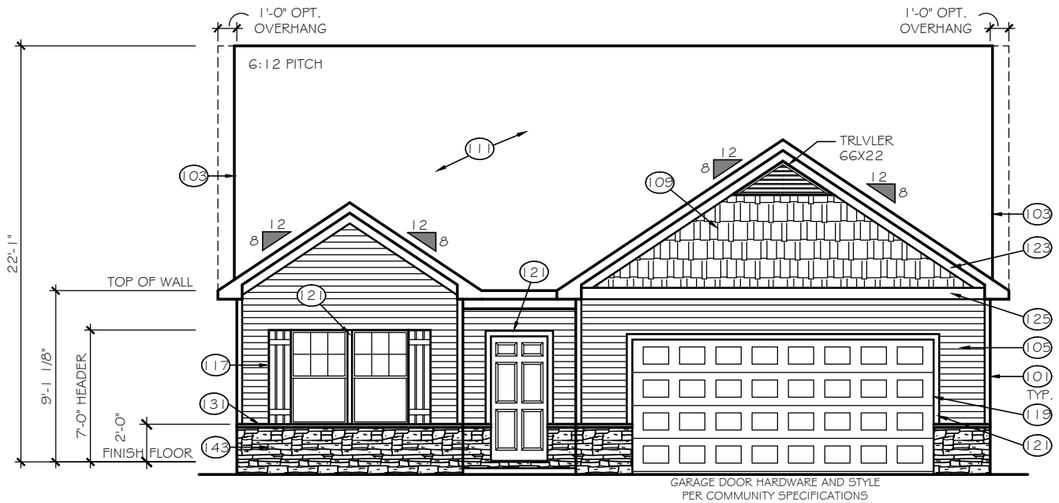
SHEET: A3.10

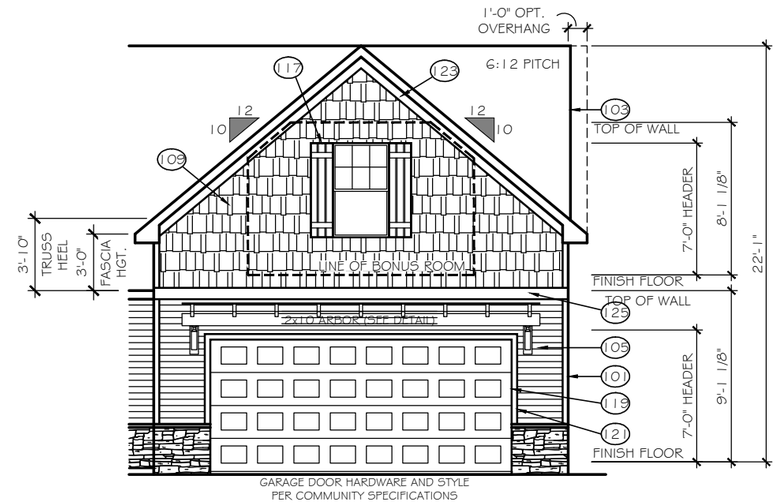
v1.19



FRONT ELEVATION

ELEVATION 'E-C2'

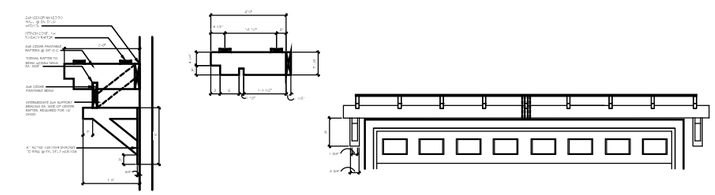
SCALE: 1/8" = 1'-0"



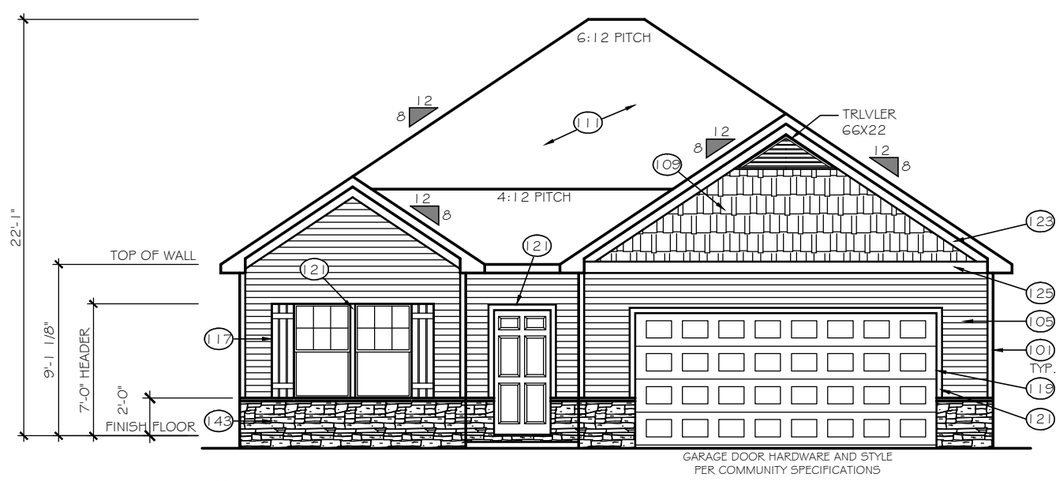
GARAGE BONUS ROOM

ELEVATION 'E-C2B'

SCALE: 1/8" = 1'-0"



ARBOR DETAIL



FRONT ELEVATION w/ HIP ROOF

ELEVATION 'E-C2H'

SCALE: 1/8" = 1'-0"

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ELEVATION OPTIONS
ELEVATION E-C2

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SCALE: 1/8"= 1'-0"

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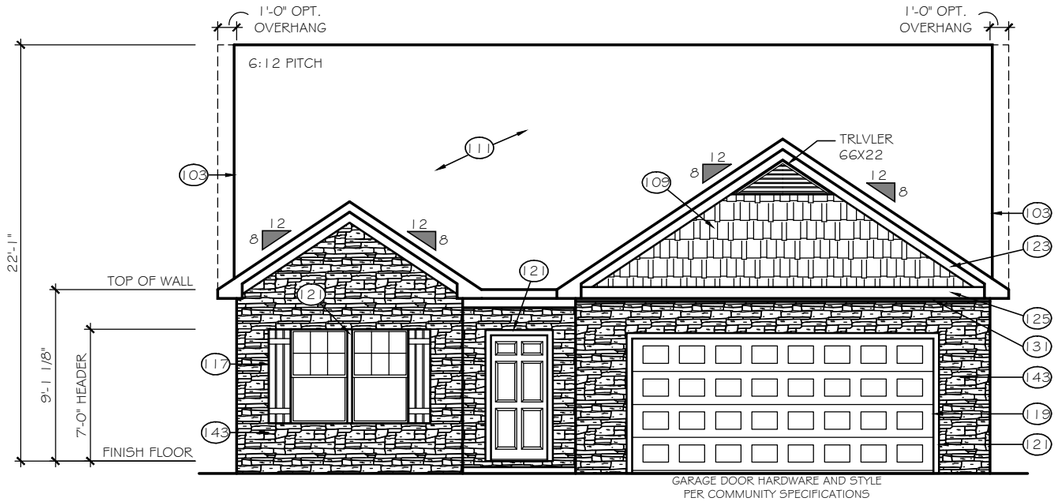
SHEET: A3.11

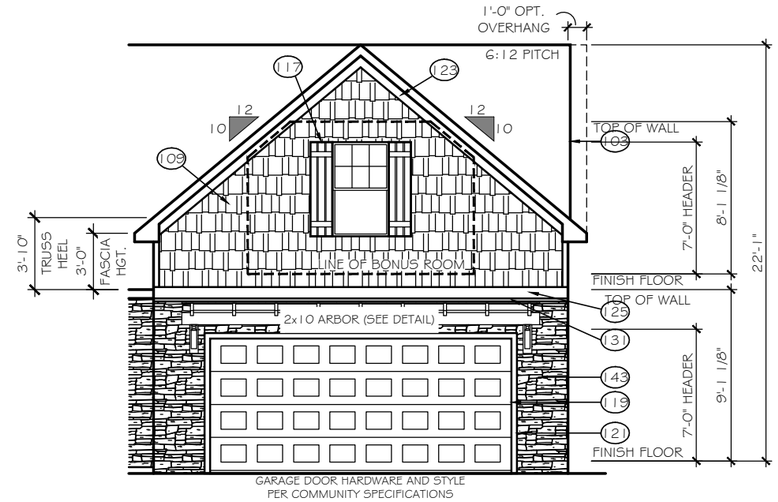
v1.19



FRONT ELEVATION

ELEVATION 'E-C3'

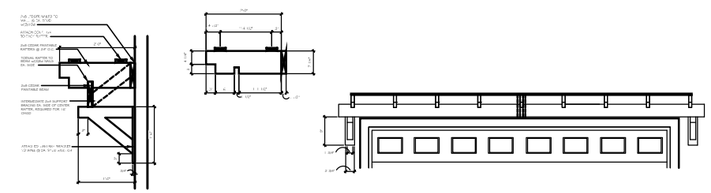
SCALE: 1/8" = 1'-0"



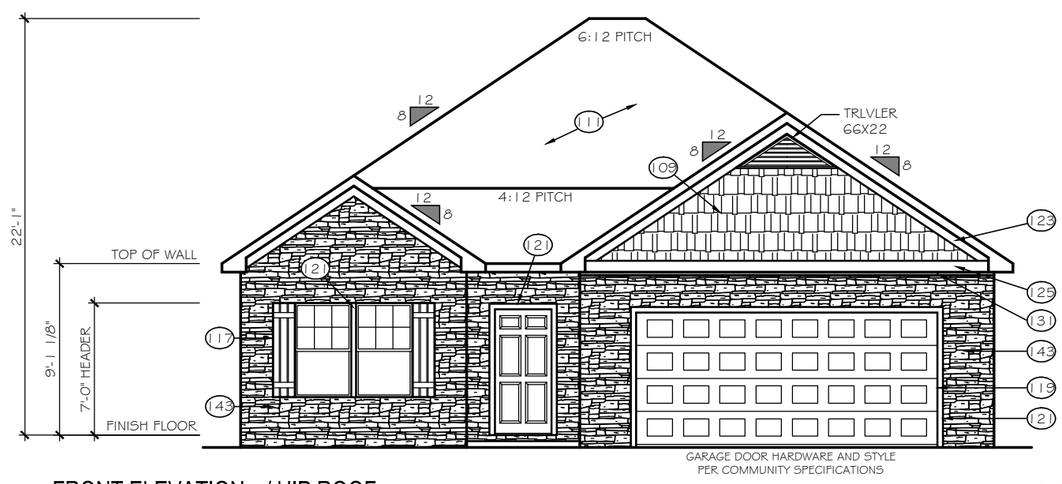
GARAGE BONUS ROOM

ELEVATION 'E-C3B'

SCALE: 1/8" = 1'-0"



ARBOR DETAIL



FRONT ELEVATION w/ HIP ROOF

ELEVATION 'E-C3H'

SCALE: 1/8" = 1'-0"

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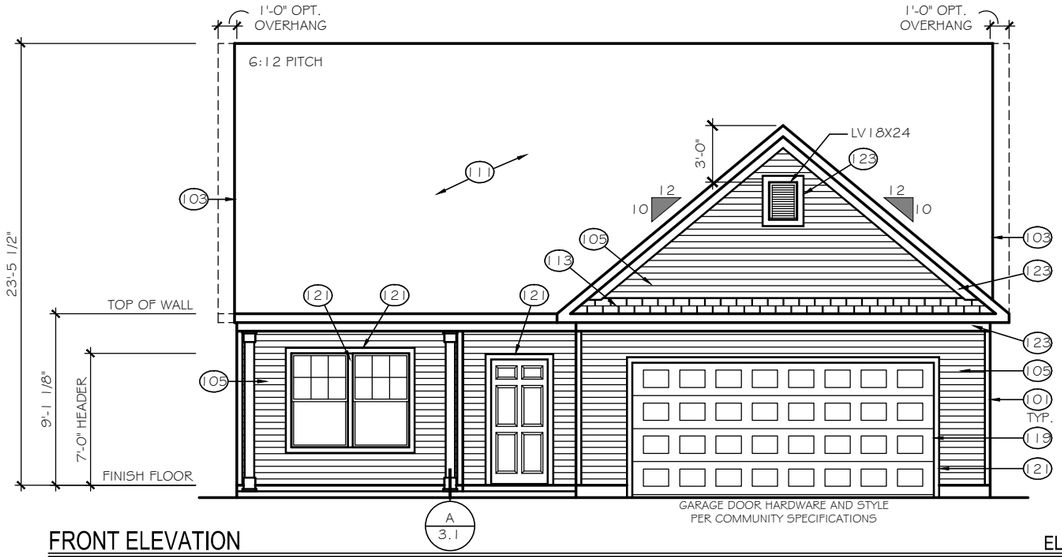
SCALE: 1/8"=1'-0"

CHECKED BY: BPS

SHEET: A3.12

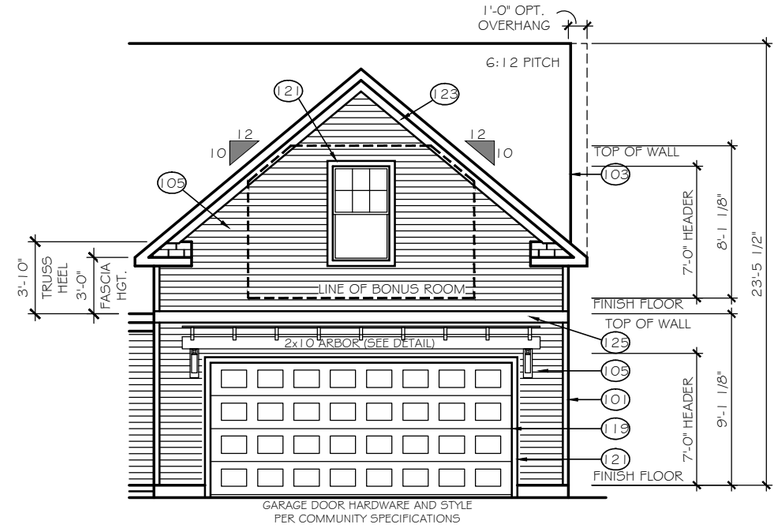
v1.19



FRONT ELEVATION

SCALE: 1/8" = 1'-0"

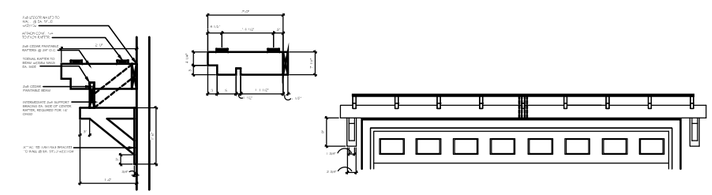
ELEVATION 'E-D1'



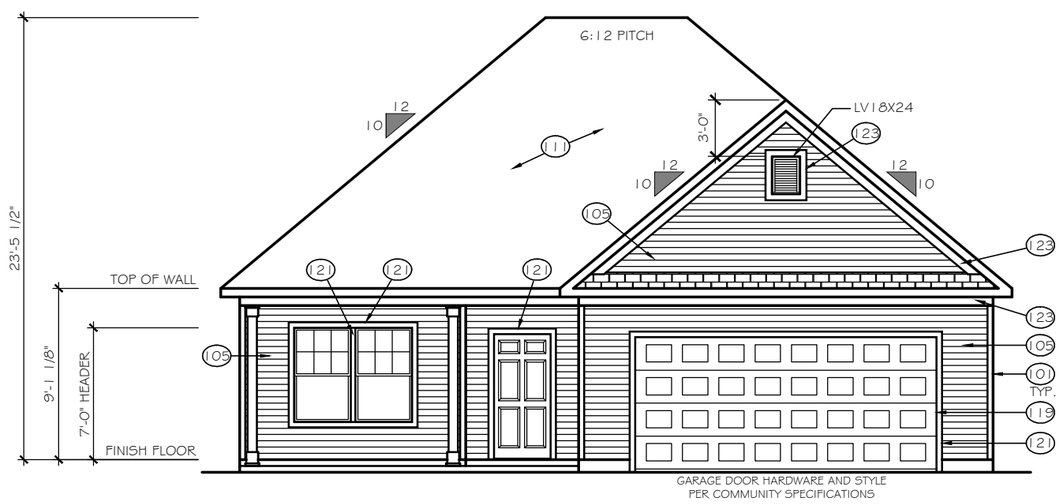
GARAGE BONUS ROOM

SCALE: 1/8" = 1'-0"

ELEVATION 'E-D1B'



ARBOR DETAIL



FRONT ELEVATION w/ HIP ROOF

SCALE: 1/8" = 1'-0"

ELEVATION 'E-D1H'

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ELEVATION OPTIONS
ELEVATION E-D1

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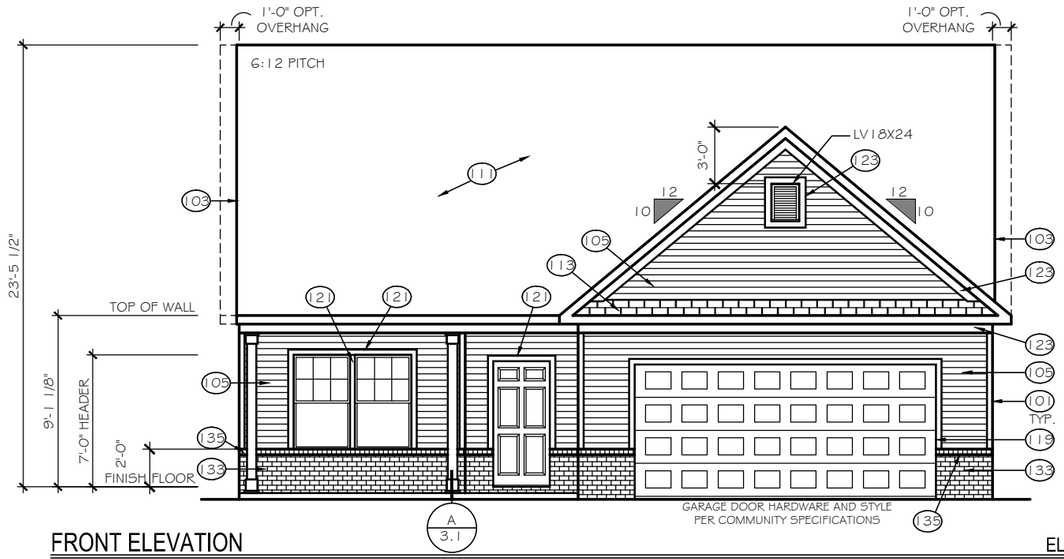
SCALE: 1/8"=1'-0"

CHECKED BY: BPS

SHEET: A3.13

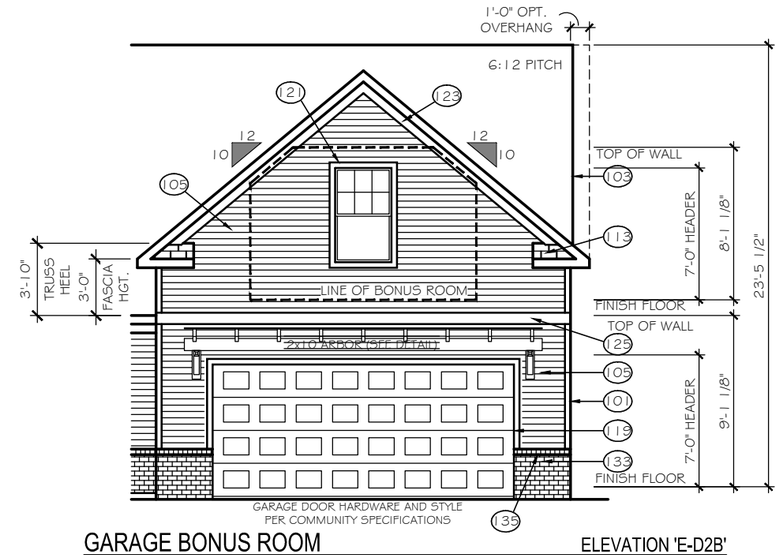
v1.19



FRONT ELEVATION

SCALE: 1/8" = 1'-0"

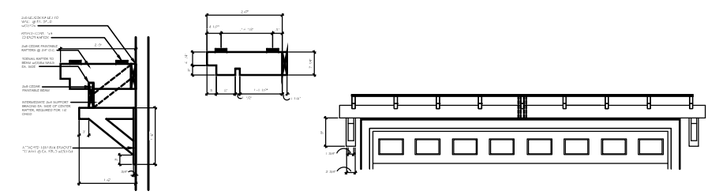
ELEVATION 'E-D2'



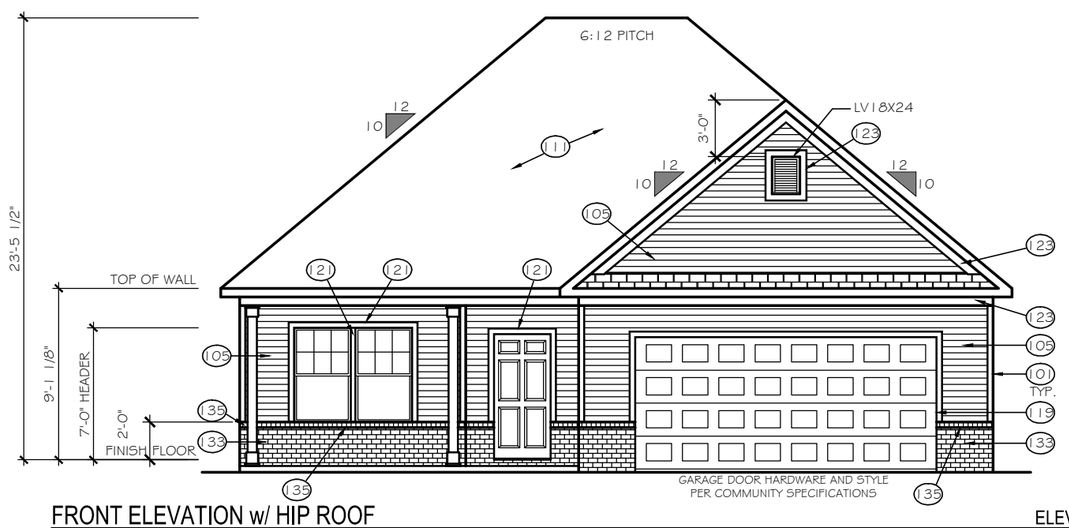
GARAGE BONUS ROOM

SCALE: 1/8" = 1'-0"

ELEVATION 'E-D2B'



ARBOR DETAIL



FRONT ELEVATION w/ HIP ROOF

SCALE: 1/8" = 1'-0"

ELEVATION 'E-D2H'

GARAGE BONUS ROOM NOT AVAILABLE WITH HIP ROOFS

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ELEVATION OPTIONS
ELEVATION E-D2

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SCALE: 1/8" = 1'-0"

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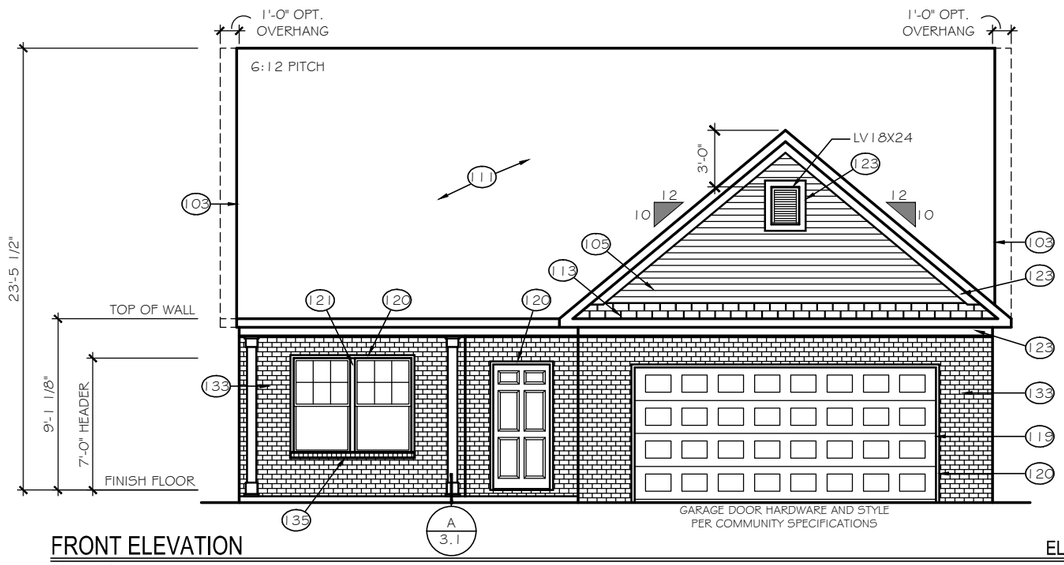
SHEET: A3.14

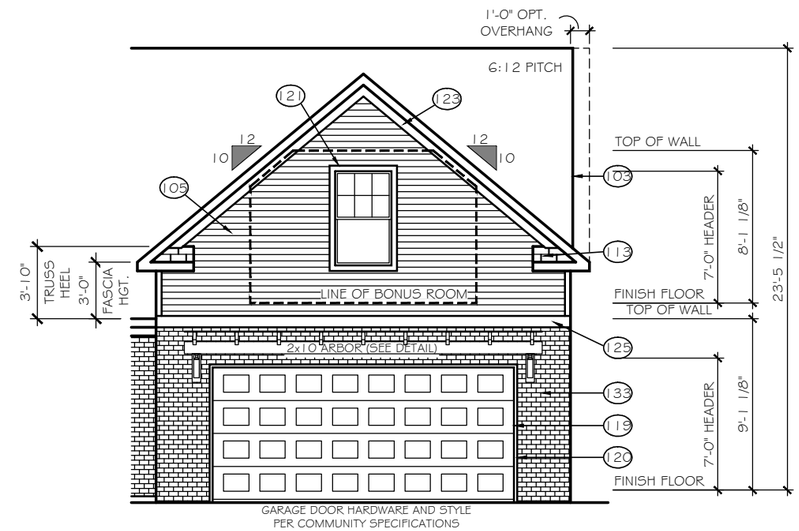
v1.19



FRONT ELEVATION

ELEVATION 'E-D3'

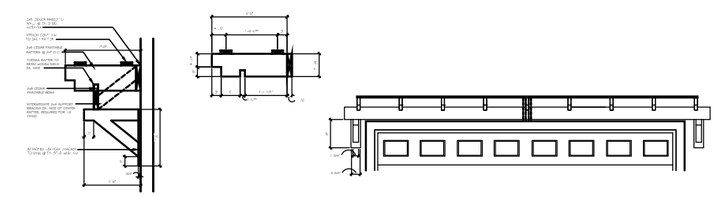
SCALE: 1/8" = 1'-0"



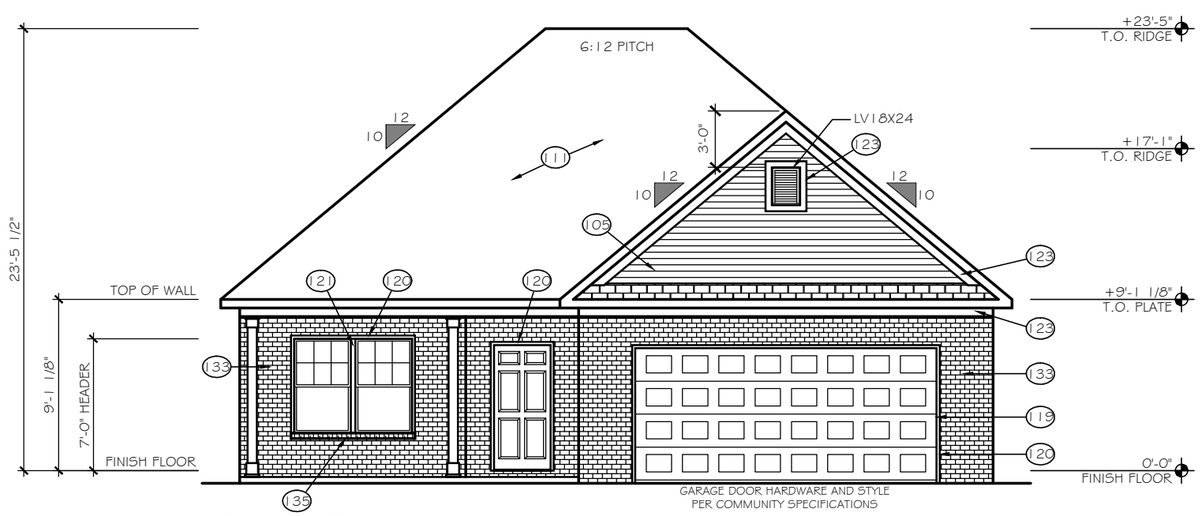
GARAGE BONUS ROOM

ELEVATION 'E-D3B'

SCALE: 1/8" = 1'-0"



ARBOR DETAIL



FRONT ELEVATION w/ HIP ROOF

ELEVATION 'E-D3H'

SCALE: 1/8" = 1'-0"

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ELEVATION OPTIONS
ELEVATION E-D3

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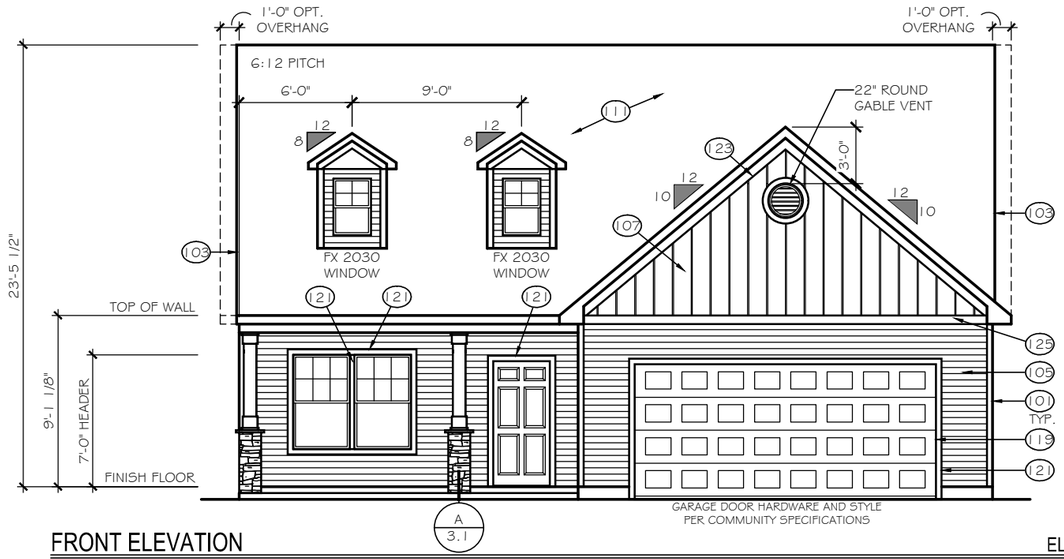
SCALE: 1/8"=1'-0"

CHECKED BY: BPS

SHEET: A3.15

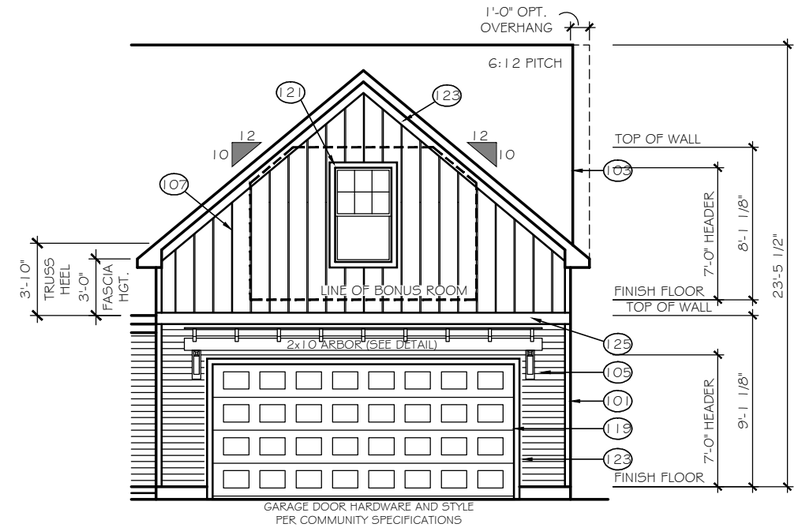
v1.19



FRONT ELEVATION

SCALE: 1/8" = 1'-0"

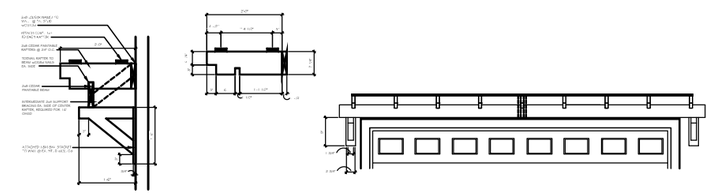
ELEVATION 'E-E1'



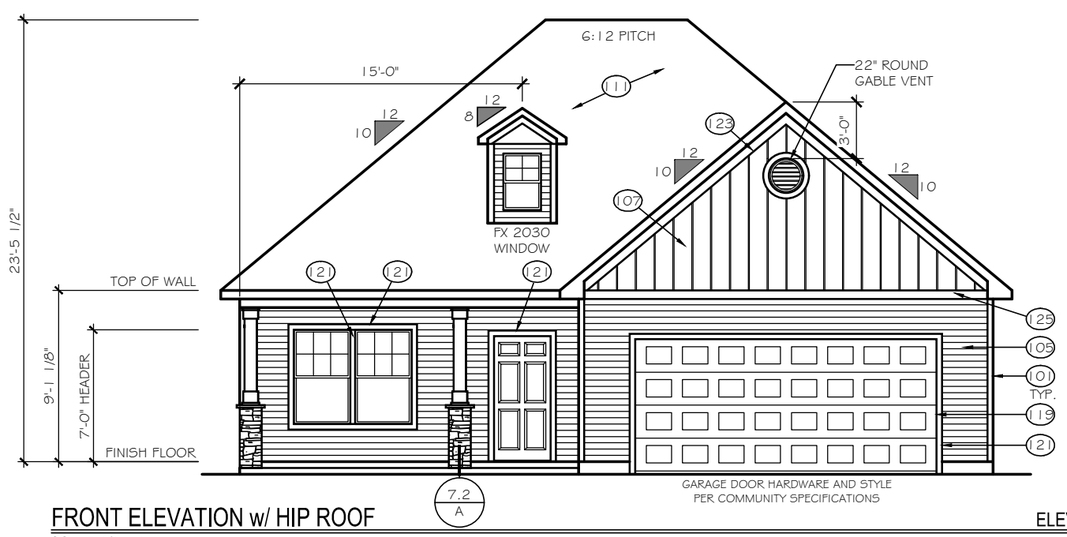
GARAGE BONUS ROOM

SCALE: 1/8" = 1'-0"

ELEVATION 'E-E1B'



ARBOR DETAIL



FRONT ELEVATION w/ HIP ROOF

SCALE: 1/8" = 1'-0"

ELEVATION 'E-E1H'

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ELEVATION OPTIONS
ELEVATION E-E1

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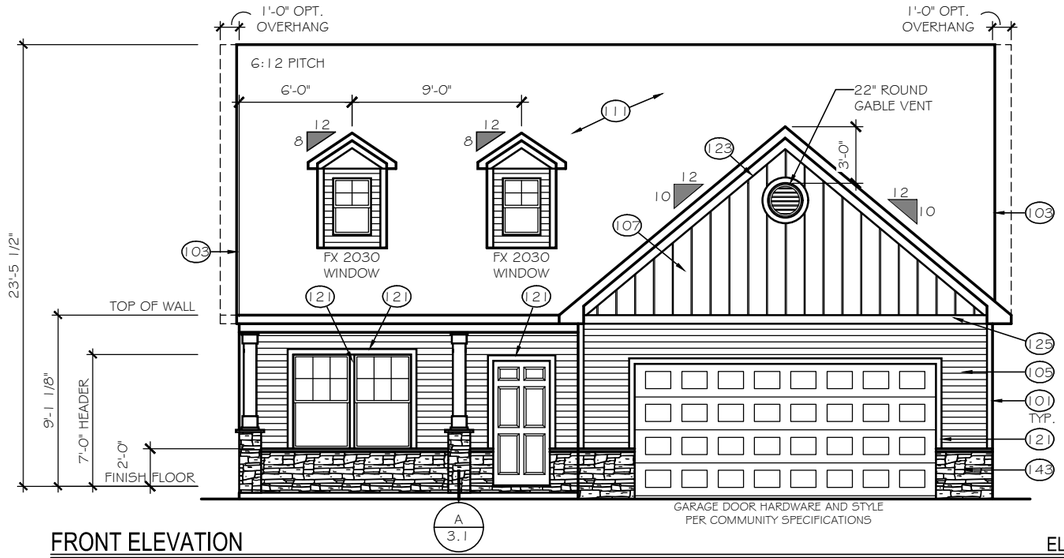
SCALE: 1/8"=1'-0"

CHECKED BY: BPS

SHEET: A3.16

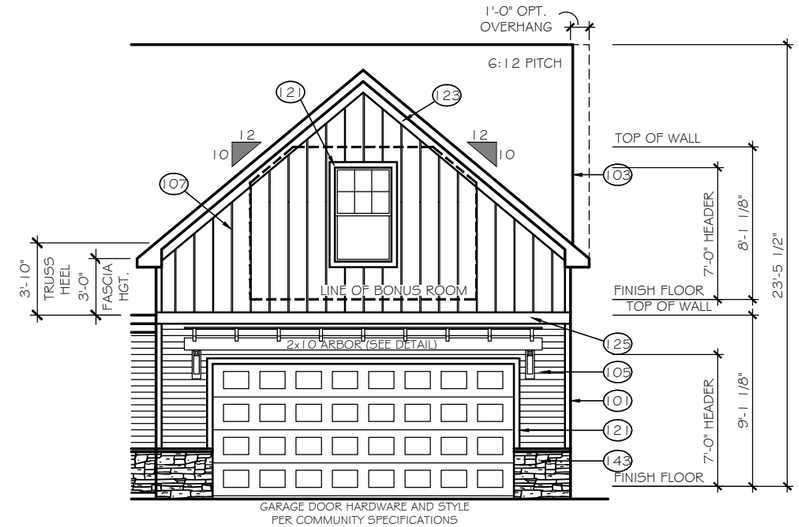
v1.19



FRONT ELEVATION

ELEVATION 'E-E2'

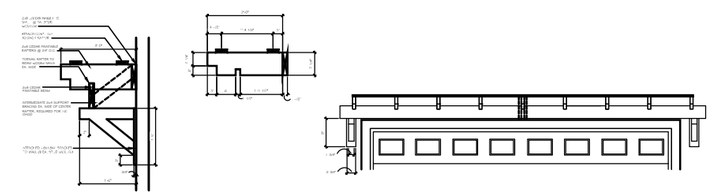
SCALE: 1/8" = 1'-0"



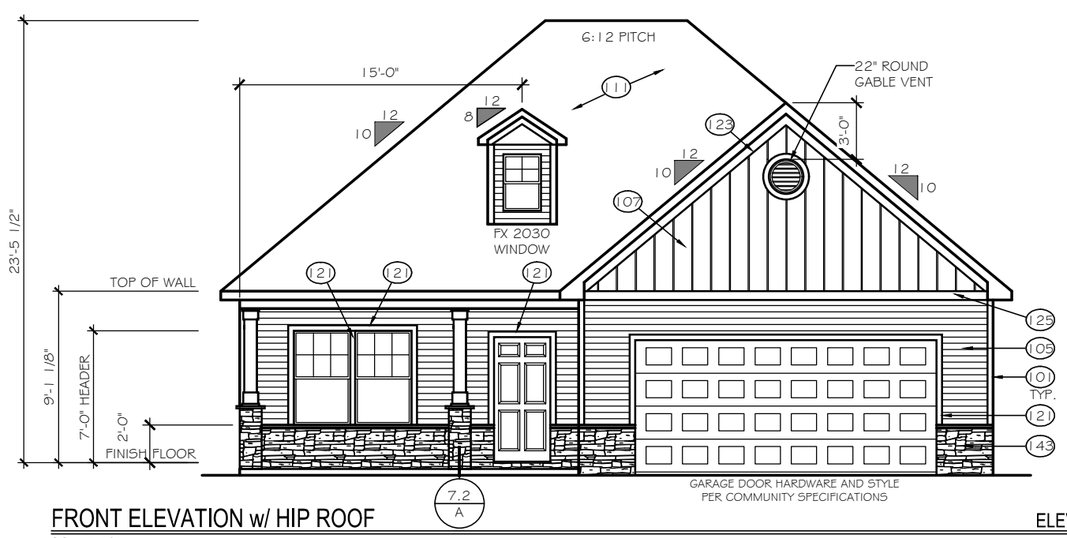
GARAGE BONUS ROOM

ELEVATION 'E-E2B'

SCALE: 1/8" = 1'-0"



ARBOR DETAIL



FRONT ELEVATION w/ HIP ROOF

ELEVATION 'E-E2H'

SCALE: 1/8" = 1'-0"

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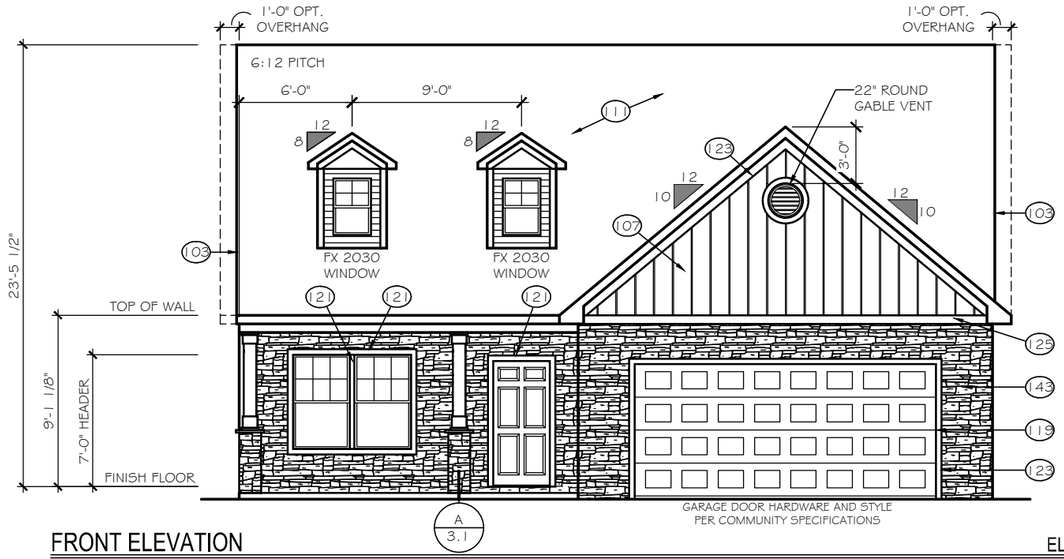
SCALE: 1/8"=1'-0"

CHECKED BY: BPS

SHEET: A3.17

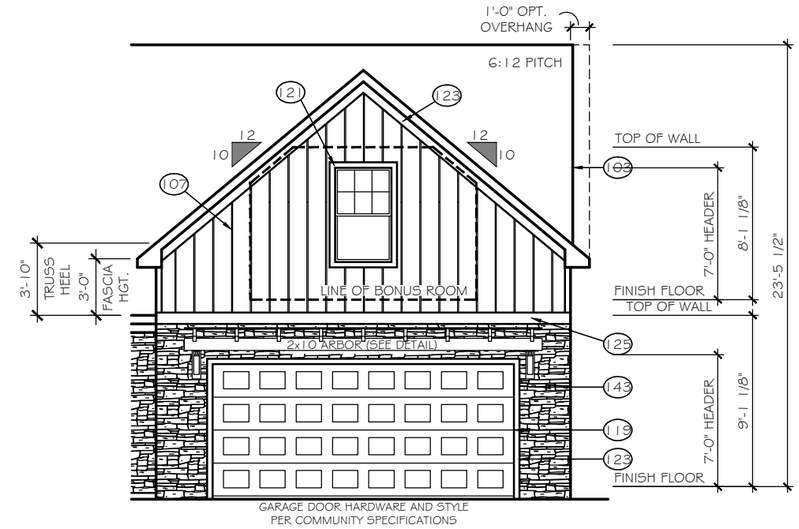
v1.19



FRONT ELEVATION

SCALE: 1/8" = 1'-0"

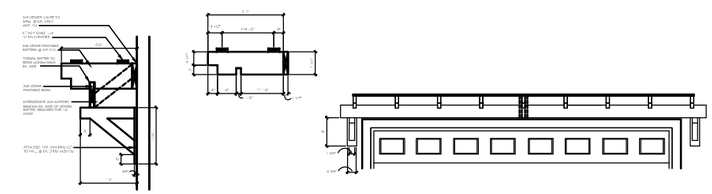
ELEVATION 'E-E3'



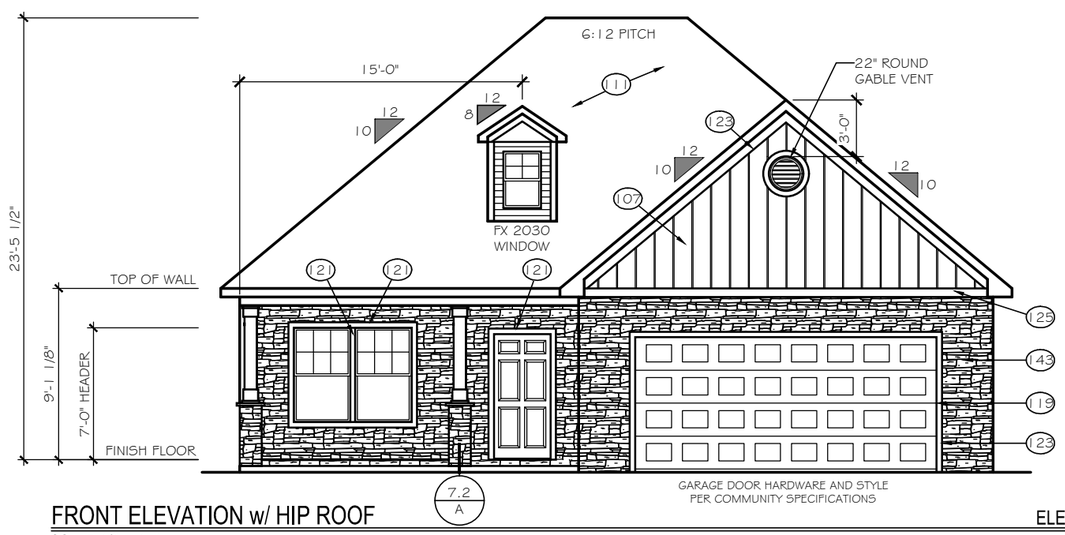
GARAGE BONUS ROOM

SCALE: 1/8" = 1'-0"

ELEVATION 'E-E3B'



ARBOR DETAIL



FRONT ELEVATION w/ HIP ROOF

SCALE: 1/8" = 1'-0"

ELEVATION 'E-E3H'

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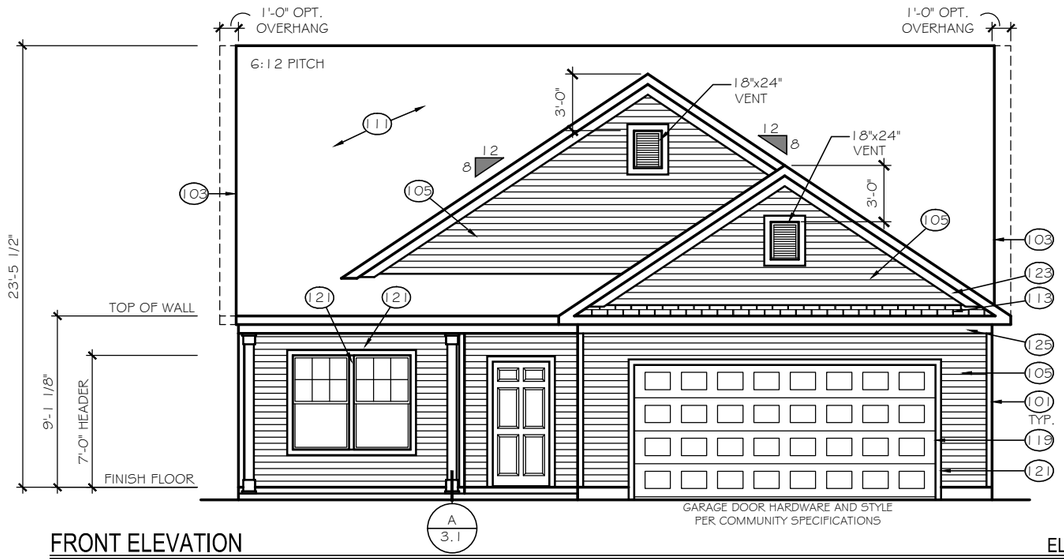
SCALE: 1/8"= 1'-0"

CHECKED BY: BPS

SHEET: A3.18

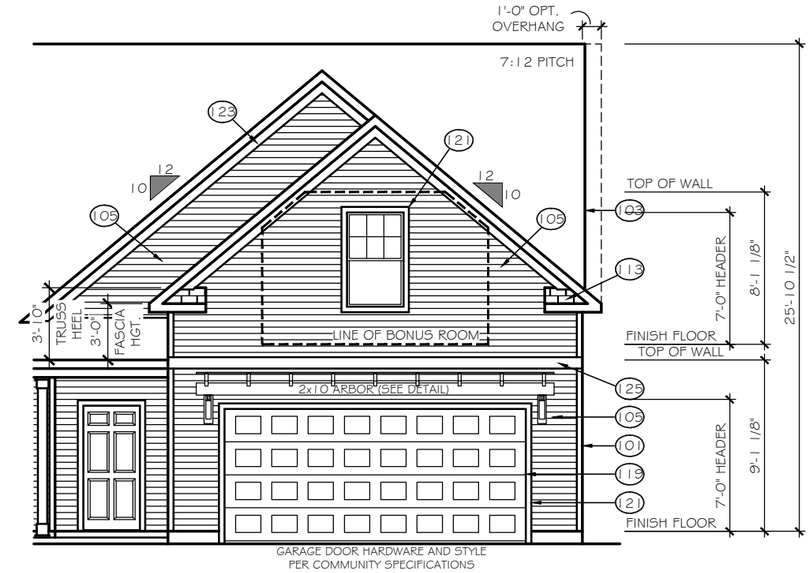
v1.19



FRONT ELEVATION

ELEVATION 'E-F1'

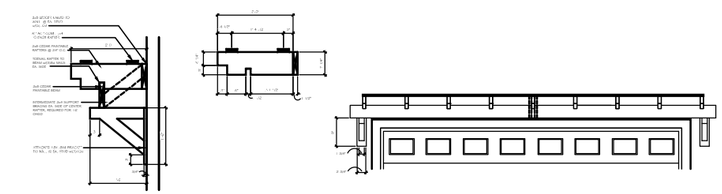
SCALE: 1/8" = 1'-0"



GARAGE BONUS ROOM

ELEVATION 'E-F1B'

SCALE: 1/8" = 1'-0"



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ELEVATION OPTIONS
ELEVATION E-F1

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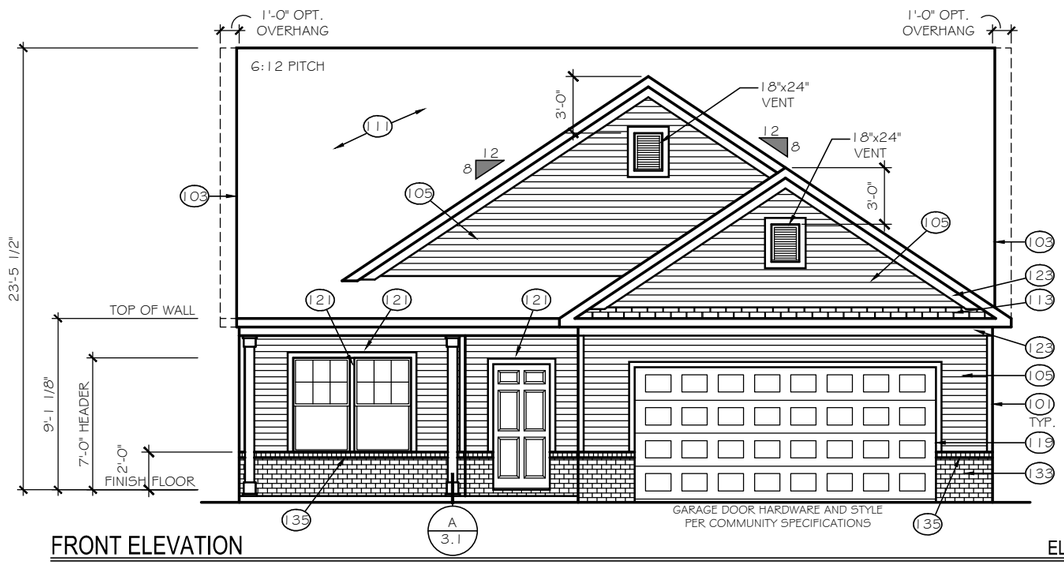
SCALE: 1/8"=1'-0"

CHECKED BY: BPS

SHEET: A3.19

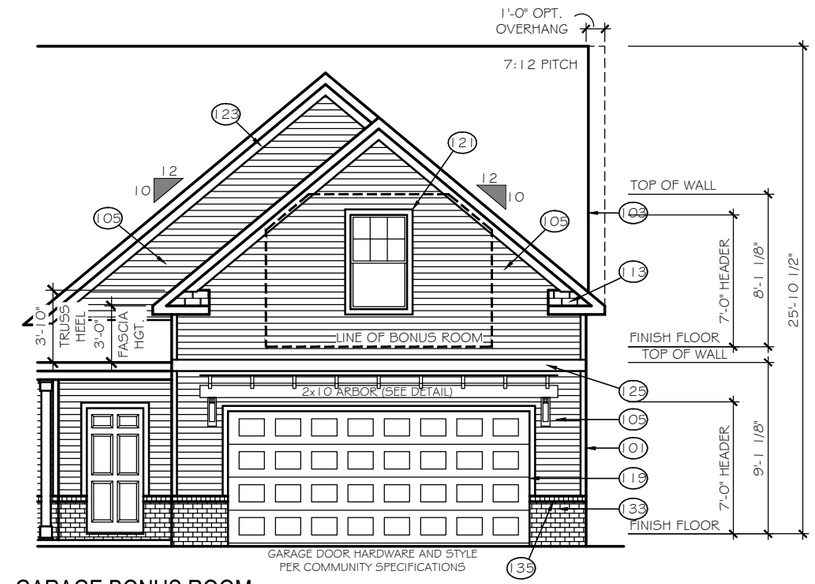
v1.19



FRONT ELEVATION

ELEVATION 'E-F2'

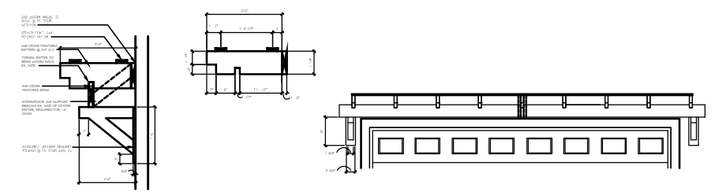
SCALE: 1/8" = 1'-0"



GARAGE BONUS ROOM

ELEVATION 'E-F2B'

SCALE: 1/8" = 1'-0"



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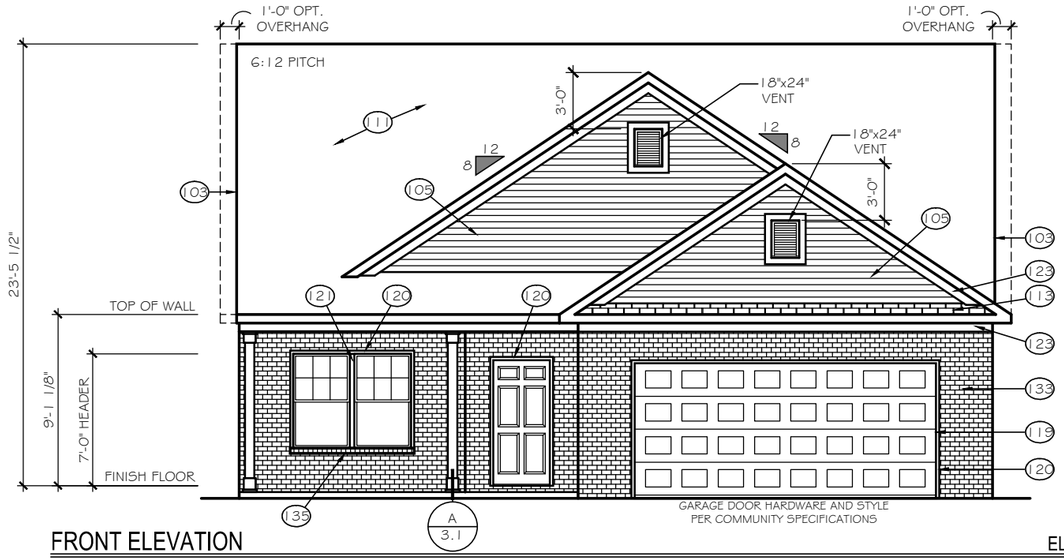
SCALE: 1/8"=1'-0"

CHECKED BY: BPS

SHEET: A3.20

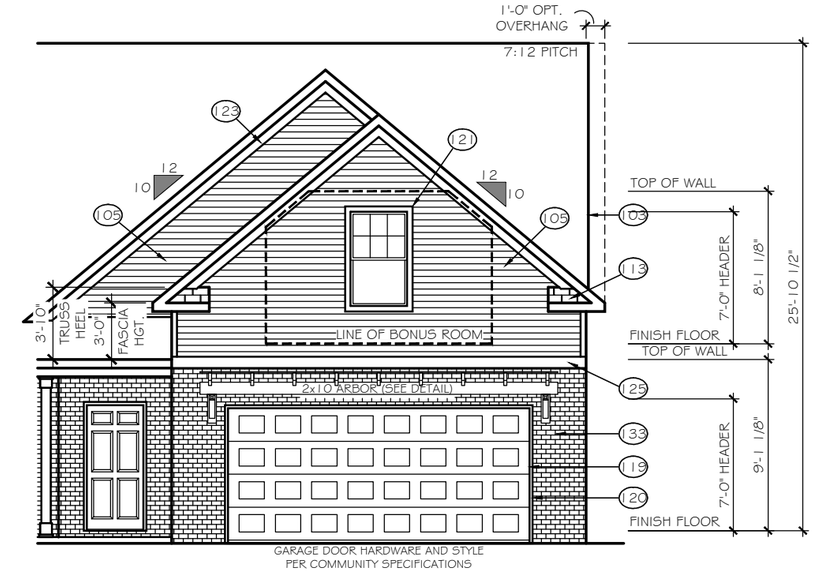
v1.19



FRONT ELEVATION

ELEVATION 'E-F3'

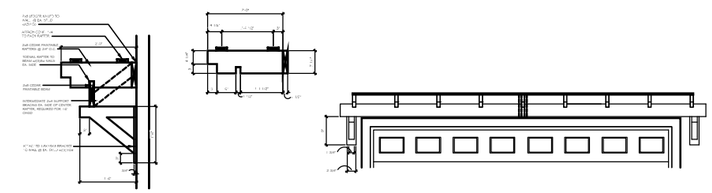
SCALE: 1/8" = 1'-0"



GARAGE BONUS ROOM

ELEVATION 'E-F3B'

SCALE: 1/8" = 1'-0"



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ELEVATION E-F3

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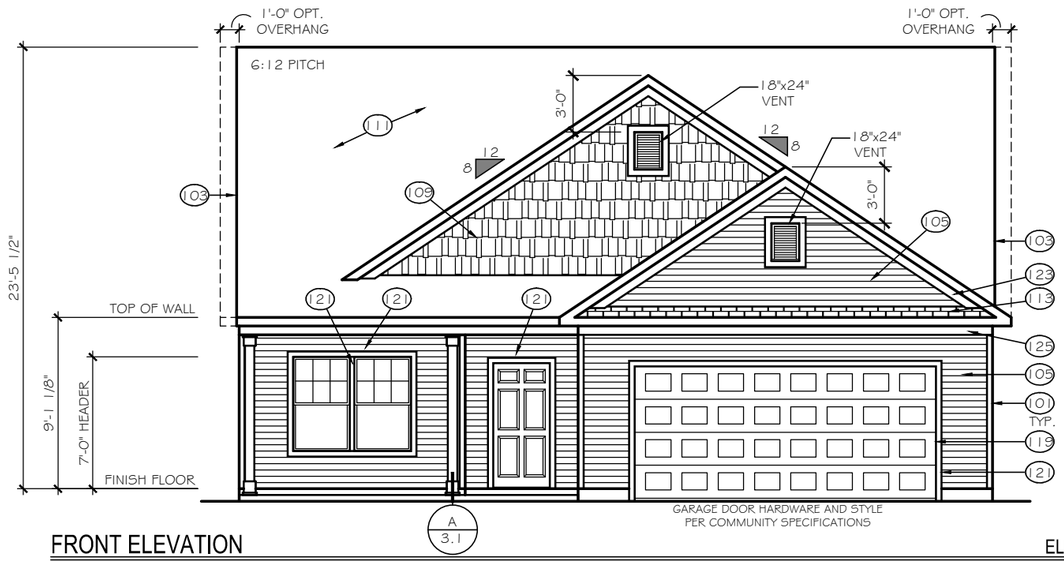
SCALE: 1/8"= 1'-0"

CHECKED BY: BPS

SHEET: A3.21

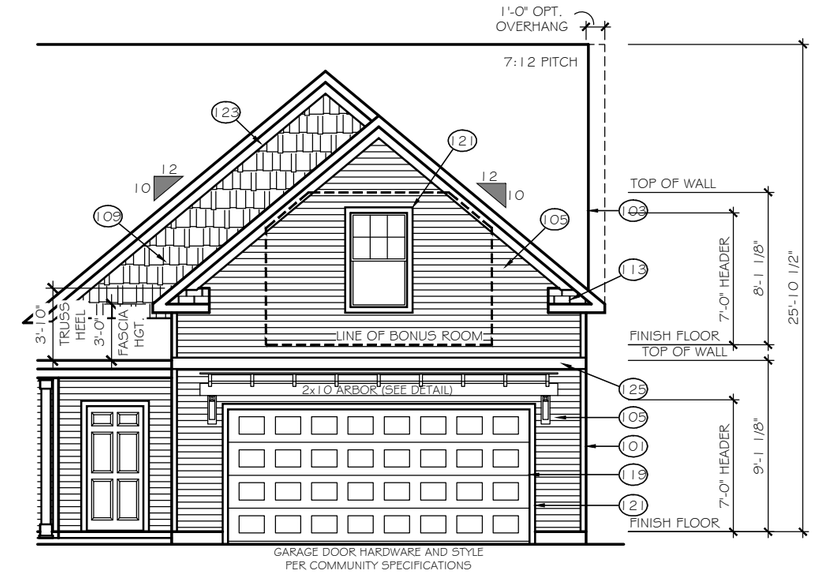
v1.19



FRONT ELEVATION

ELEVATION 'E-G1'

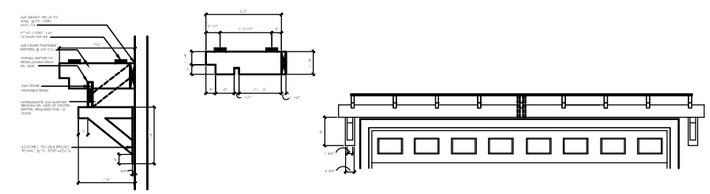
SCALE: 1/8" = 1'-0"



GARAGE BONUS ROOM

ELEVATION 'E-G1B'

SCALE: 1/8" = 1'-0"



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ELEVATION OPTIONS
ELEVATION E-G1

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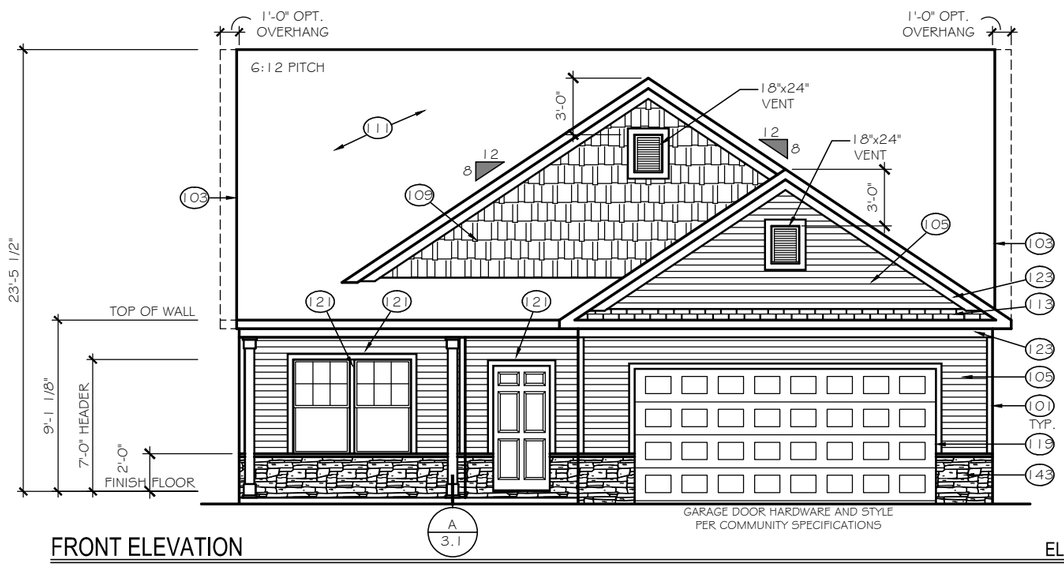
SCALE: 1/8"=1'-0"

CHECKED BY: BPS

SHEET: A3.22

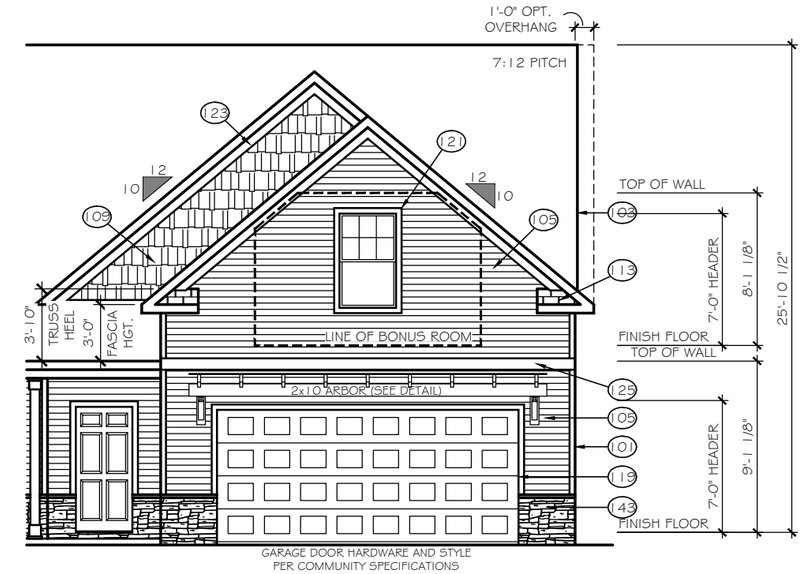
v1.19



FRONT ELEVATION

ELEVATION 'E-G2'

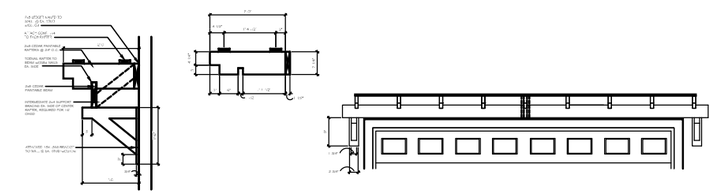
SCALE: 1/8" = 1'-0"



GARAGE BONUS ROOM

ELEVATION 'E-G2B'

SCALE: 1/8" = 1'-0"



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ELEVATION OPTIONS
ELEVATION E-G2

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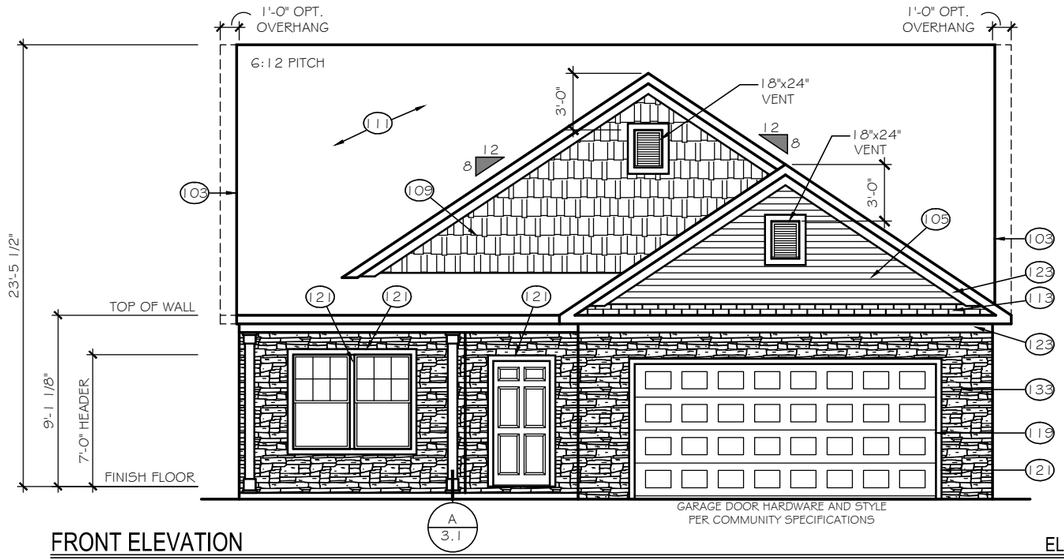
SCALE: 1/8"=1'-0"

CHECKED BY: BPS

SHEET: A3.23

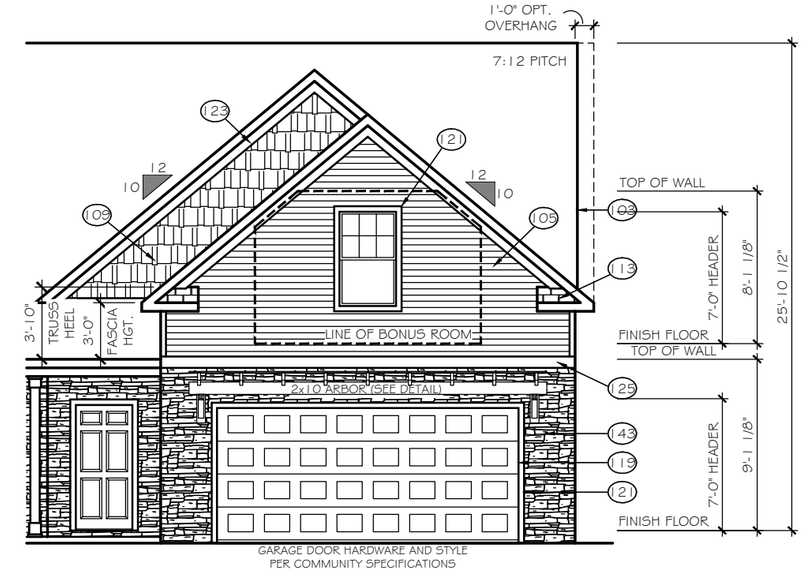
v1.19



FRONT ELEVATION

ELEVATION 'E-G3'

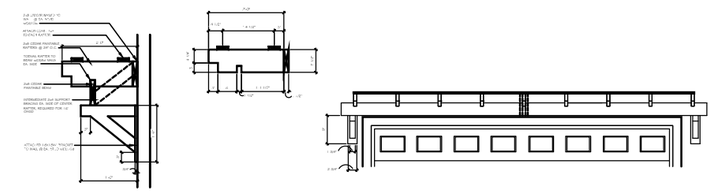
SCALE: 1/8" = 1'-0"



GARAGE BONUS ROOM

ELEVATION 'E-G3B'

SCALE: 1/8" = 1'-0"



ARBOR DETAIL

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ELEVATION OPTIONS
ELEVATION E-G3

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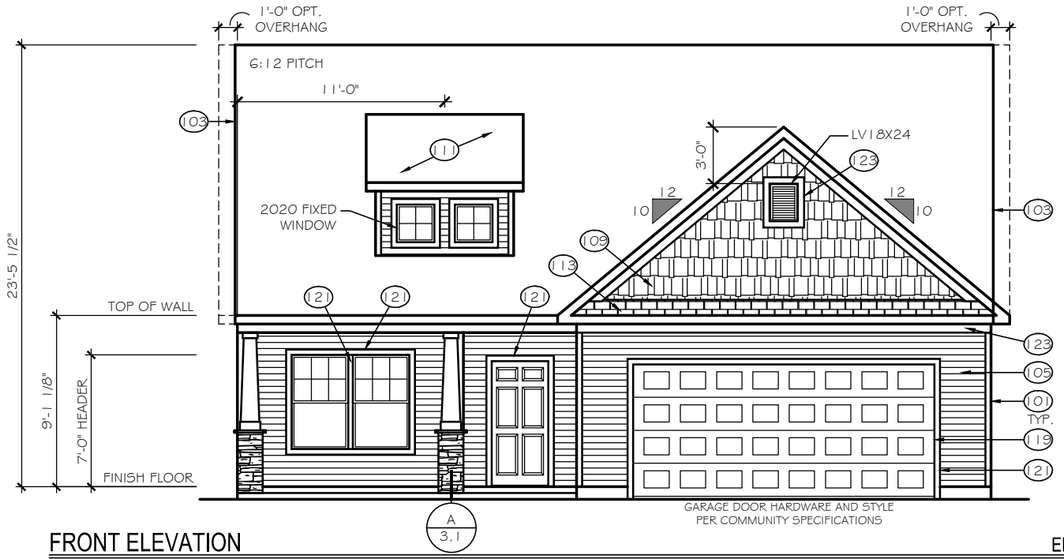
SCALE: 1/8"=1'-0"

CHECKED BY: BPS

SHEET: A3.24

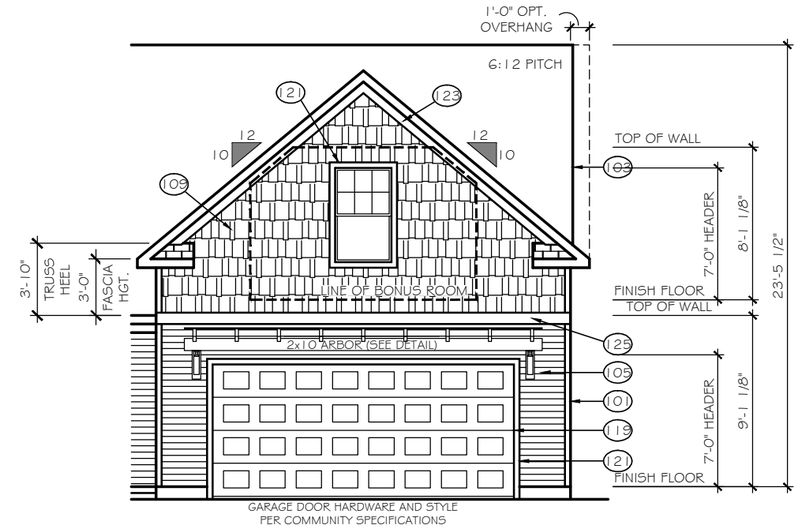
v1.19



FRONT ELEVATION

ELEVATION 'E-I1'

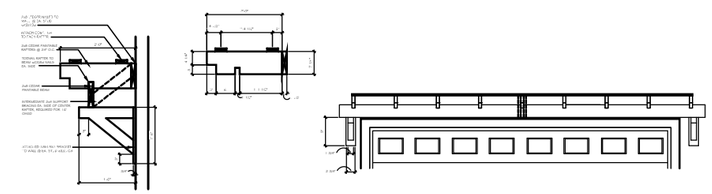
SCALE: 1/8" = 1'-0"



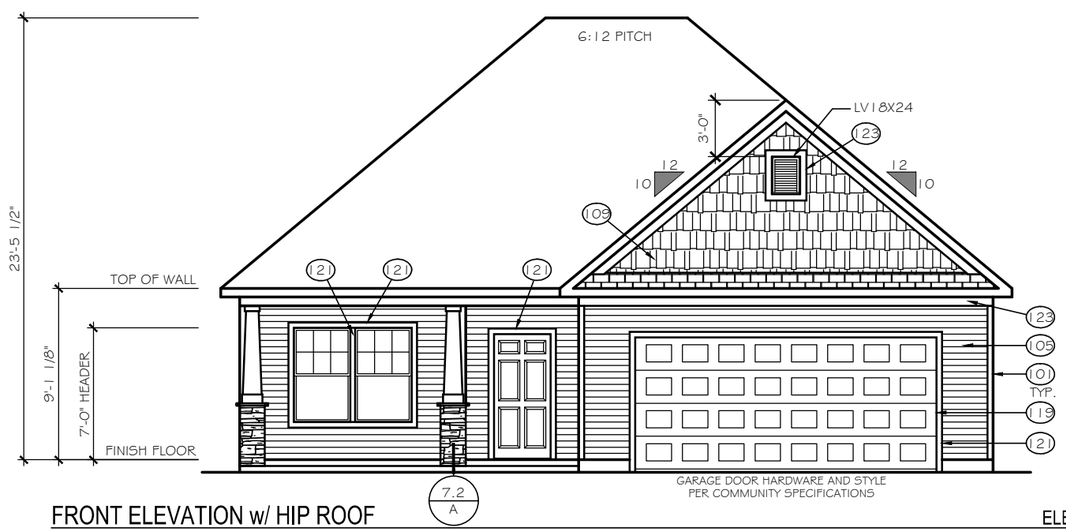
GARAGE BONUS ROOM

ELEVATION 'E-I1B'

SCALE: 1/8" = 1'-0"



ARBOR DETAIL



FRONT ELEVATION w/ HIP ROOF

ELEVATION 'E-I1H'

SCALE: 1/8" = 1'-0"

GARAGE BONUS ROOM NOT AVAILABLE WITH HIP ROOFS

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ELEVATION OPTIONS
ELEVATION E-I1

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SCALE: 1/8"= 1'-0"

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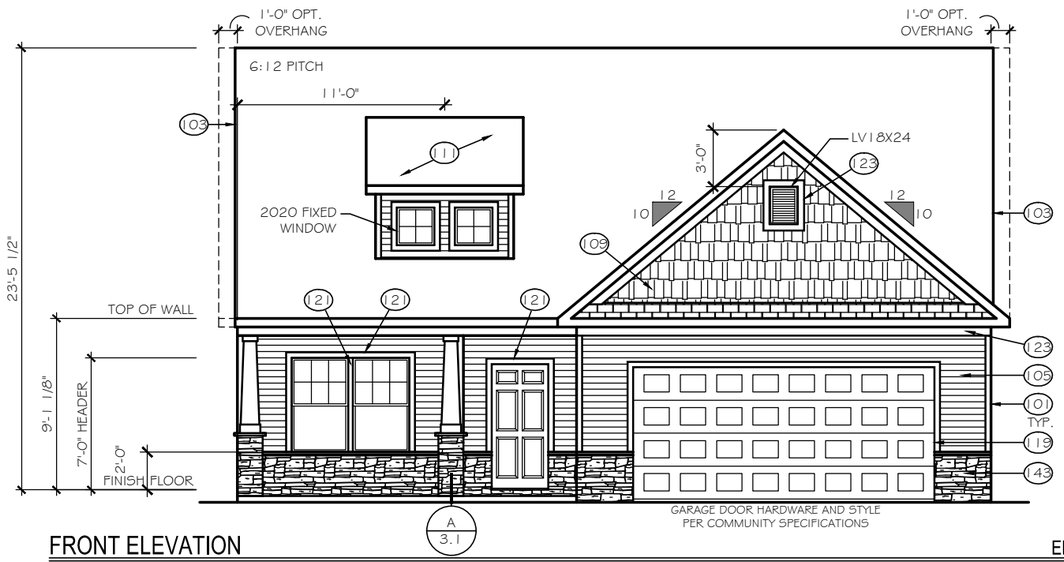
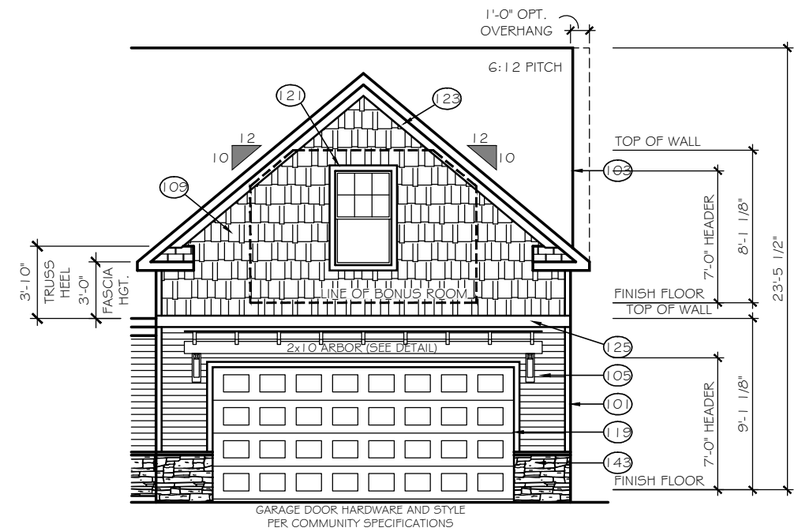


FRONT ELEVATION

SCALE: 1/8" = 1'-0"

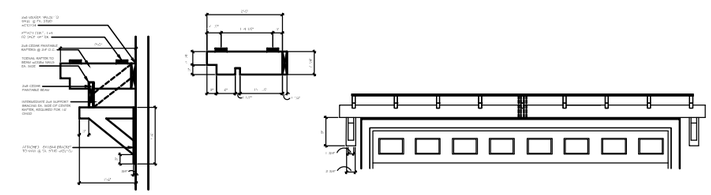
ELEVATION 'E-12'



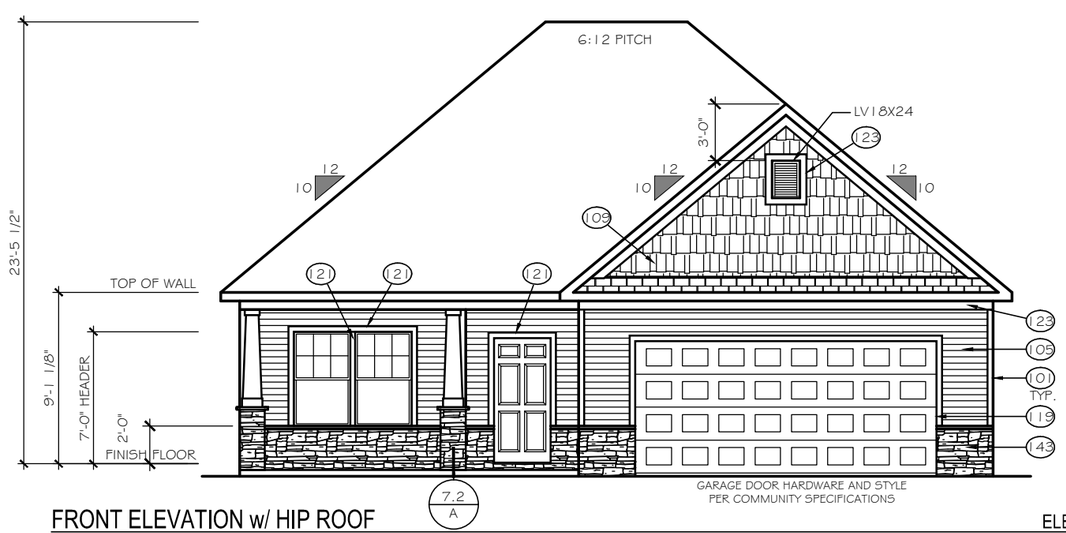
GARAGE BONUS ROOM

SCALE: 1/8" = 1'-0"

ELEVATION 'E-12B'



ARBOR DETAIL



FRONT ELEVATION w/ HIP ROOF

SCALE: 1/8" = 1'-0"

ELEVATION 'E-12H'

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ELEVATION OPTIONS
ELEVATION E-12

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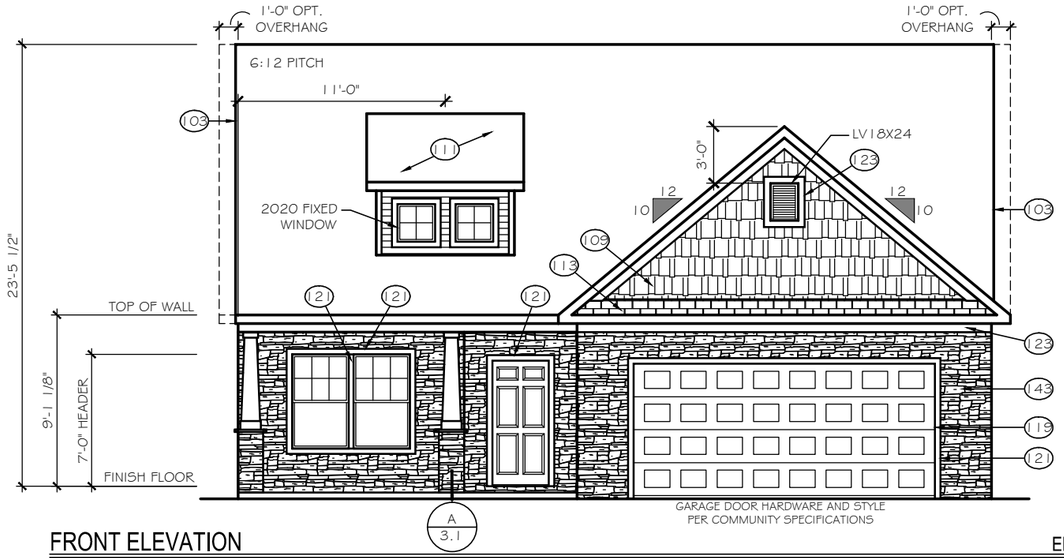
SHEET: A3.29

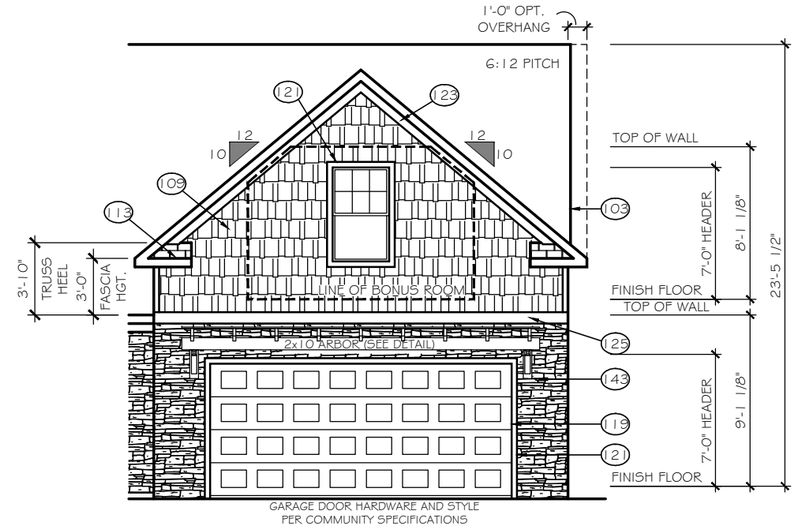
v1.19



FRONT ELEVATION

SCALE: 1/8" = 1'-0"

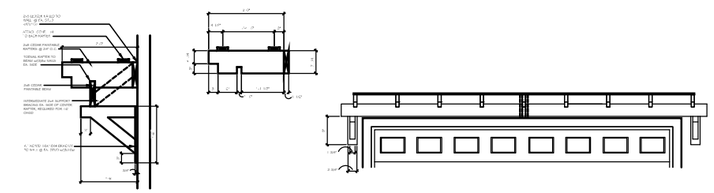
ELEVATION 'E-I3'



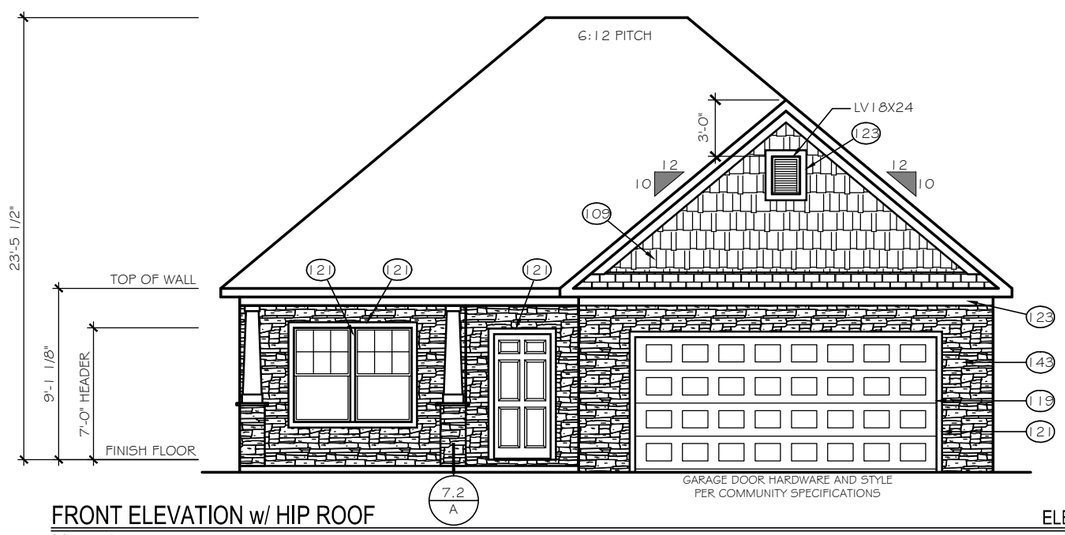
GARAGE BONUS ROOM

SCALE: 1/8" = 1'-0"

ELEVATION 'E-I3B'



ARBOR DETAIL



FRONT ELEVATION w/ HIP ROOF

SCALE: 1/8" = 1'-0"

ELEVATION 'E-I3H'

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ELEVATION OPTIONS
ELEVATION E-I3

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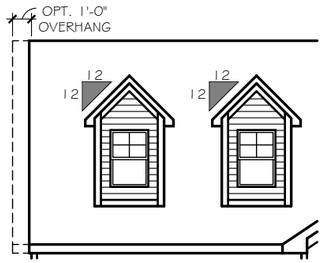
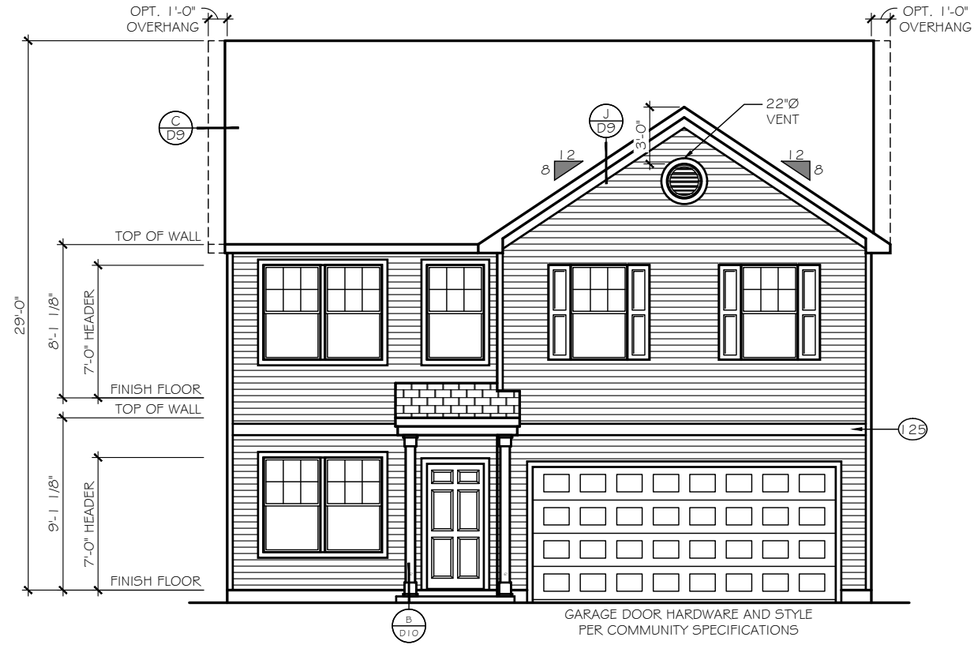
SHEET: A3.30

v1.19



OPT. DORMERS ELEV. E-A1 thru E-B4

SCALE: 1/8" = 1'-0"

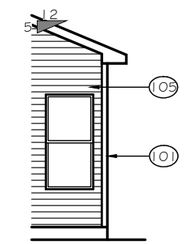


FRONT ELEVATION

ELEVATION 'E-01'

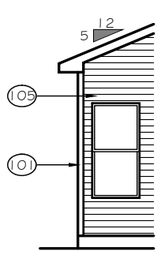
3'-5" DEEP PORCH

SCALE: 1/8" = 1'-0"



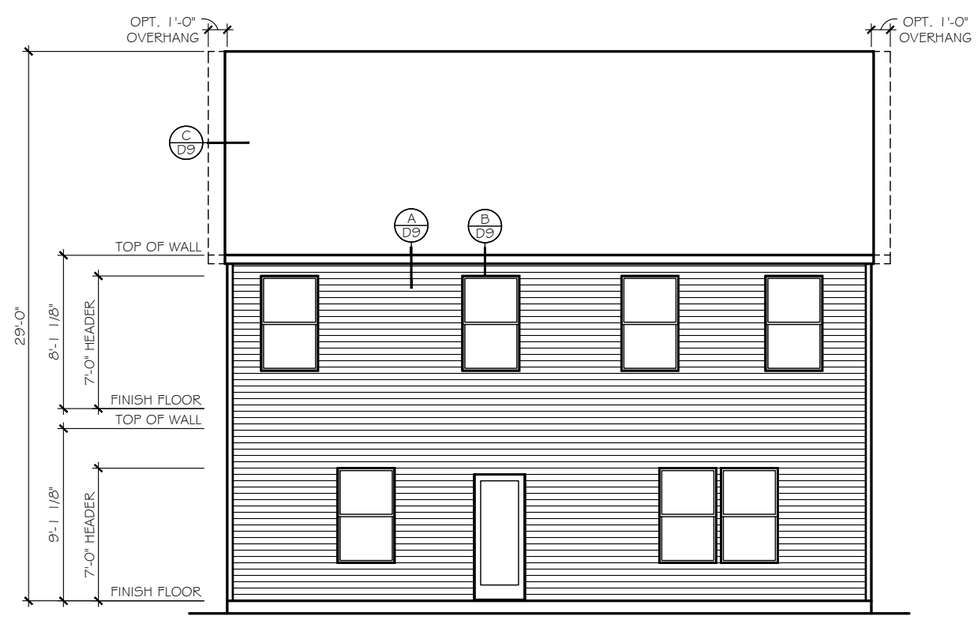
OPT. NOOK ALL ELEVATIONS

SCALE: 1/8" = 1'-0"



NOOK OPT. ALL ELEVATIONS

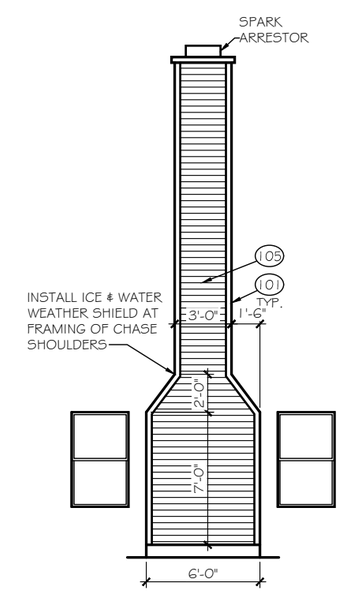
SCALE: 1/8" = 1'-0"



REAR ELEVATION

ELEVATION 'E-01 thru E-04'

SCALE: 1/8" = 1'-0"



OPT. WOOD FIREPLACE ALL ELEVATIONS

SCALE: 1/8" = 1'-0"

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FRONT & REAR ELEVATIONS
ELEVATION E-01

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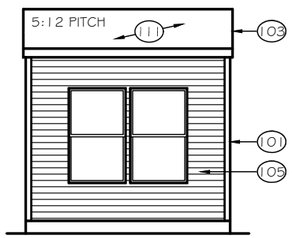
SCALE: 3/16"= 1'-0"

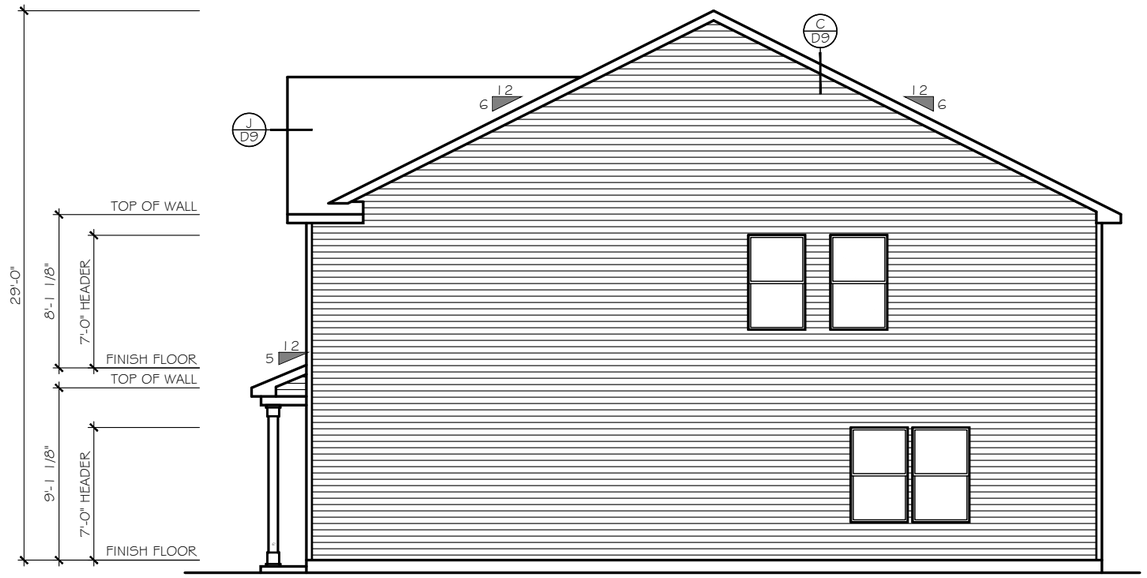
CHECKED BY: RS / BS

SHEET: A4.01

v. 5.4

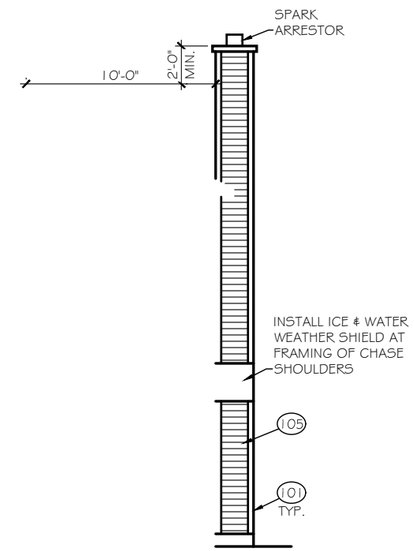


OPT. NOOK ALL ELEVATIONS
SCALE: 1/8" = 1'-0"

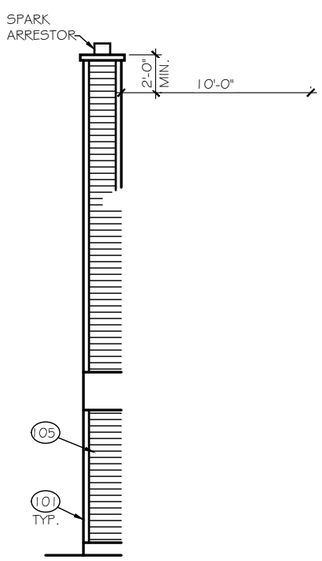


RIGHT ELEVATION
SCALE: 1/8" = 1'-0"

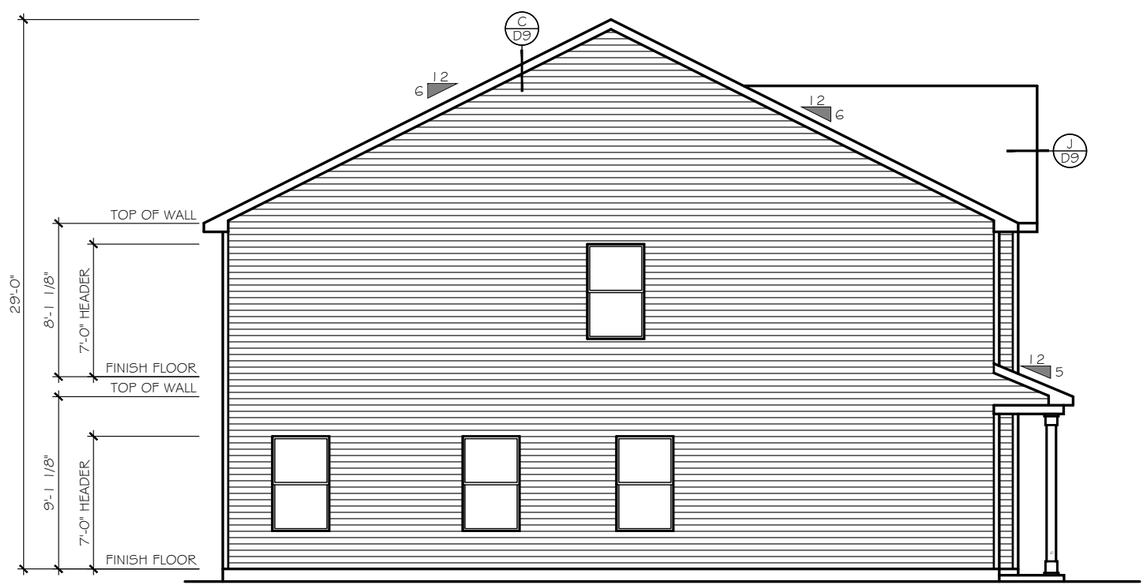
ELEVATION 'E-01 thru E-04'



OPT. WOOD FIREPLACE ALL ELEVATIONS
SCALE: 1/8" = 1'-0"

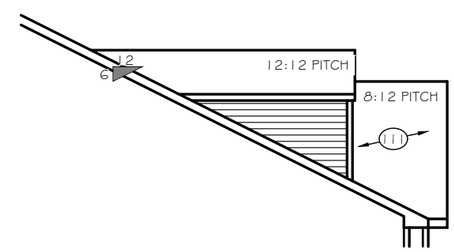


OPT. WOOD FIREPLACE ALL ELEVATIONS
SCALE: 1/8" = 1'-0"



LEFT ELEVATION
SCALE: 1/8" = 1'-0"

ELEVATION 'E-01 thru E-04'



OPT. DORMERS ELEV. E-A1 thru E-B4
SCALE: 1/8" = 1'-0"

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RIGHT & LEFT ELEVATIONS
ELEVATION E-01-04

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SHEET: A4.01a
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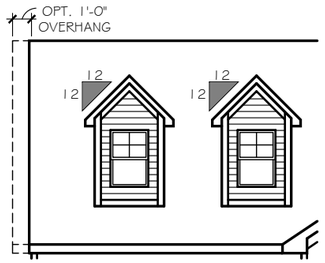
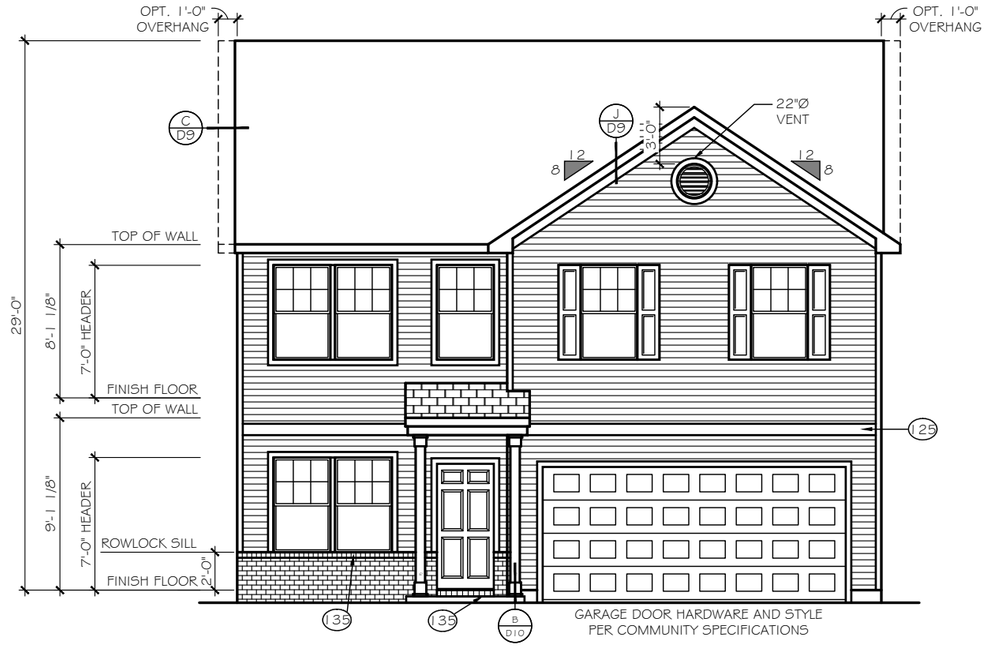


OPT. DORMERS ELEV. E-A1 thru E-B4

SCALE: 1/8" = 1'-0"

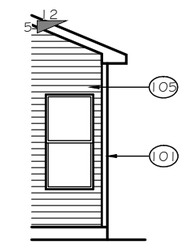


FRONT ELEVATION

ELEVATION 'E-02'

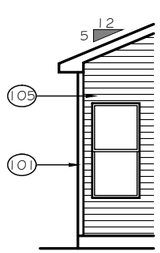
3'-5" DEEP PORCH

SCALE: 1/8" = 1'-0"



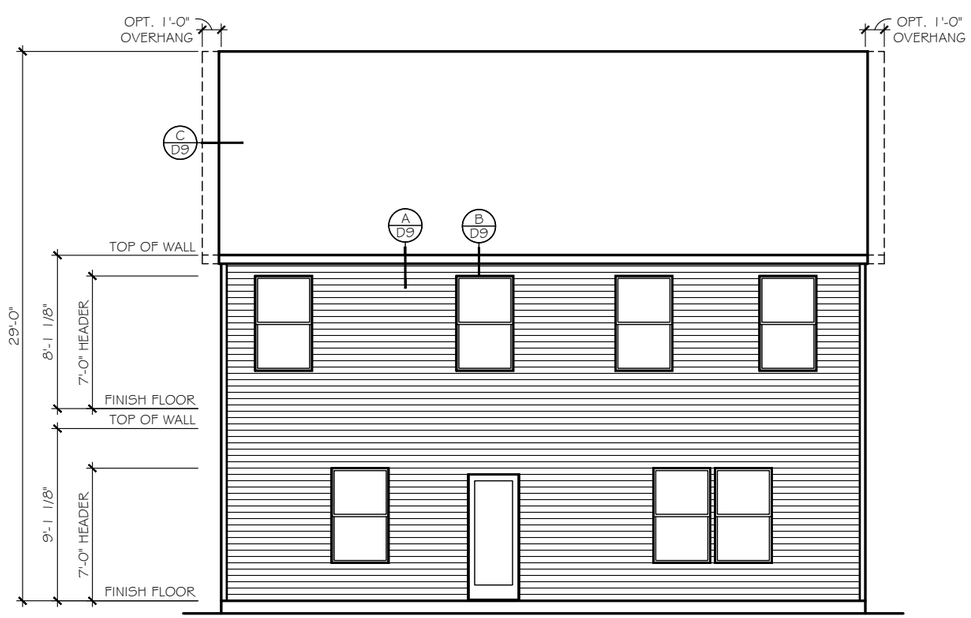
OPT. NOOK ALL ELEVATIONS

SCALE: 1/8" = 1'-0"



NOOK OPT. ALL ELEVATIONS

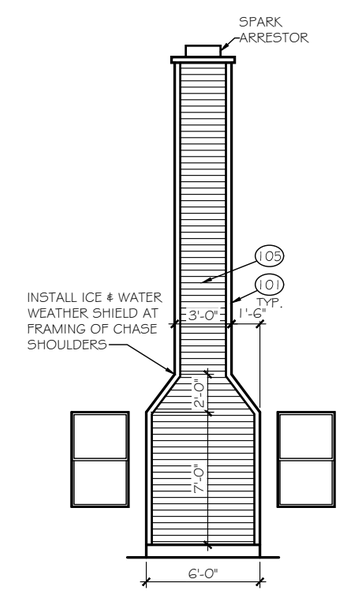
SCALE: 1/8" = 1'-0"



REAR ELEVATION

ELEVATION 'E-01 thru E-04'

SCALE: 1/8" = 1'-0"



OPT. WOOD FIREPLACE ALL ELEVATIONS

SCALE: 1/8" = 1'-0"

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FRONT & REAR ELEVATIONS
ELEVATION E-02

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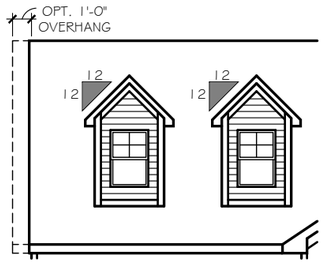
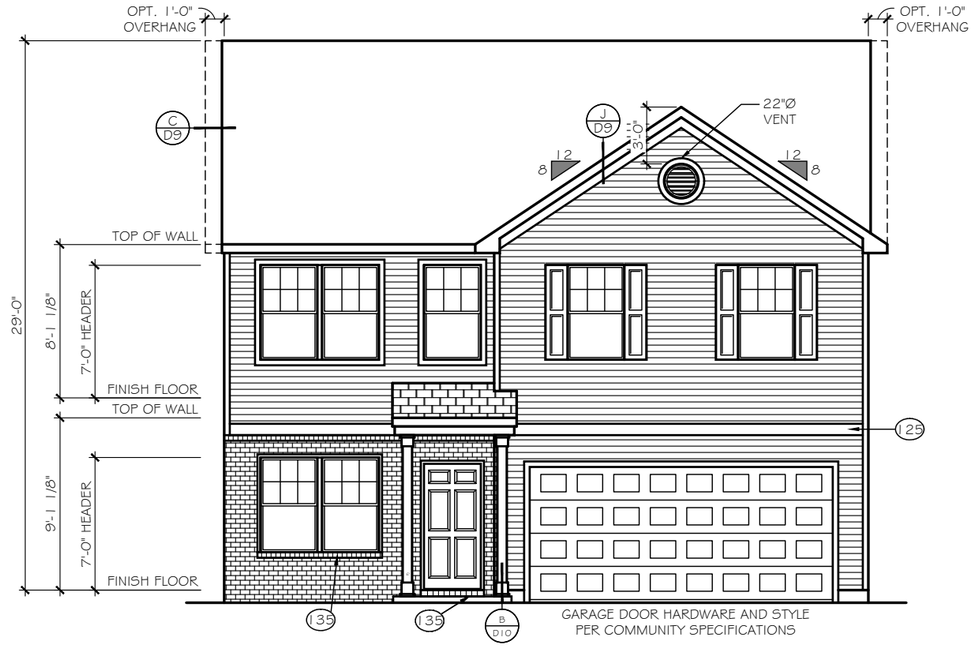
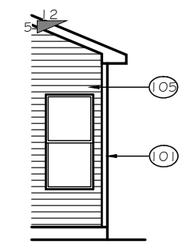


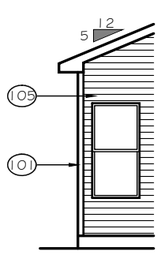
OPT. DORMERS ELEV. E-A1 thru E-B4
SCALE: 1/8" = 1'-0"



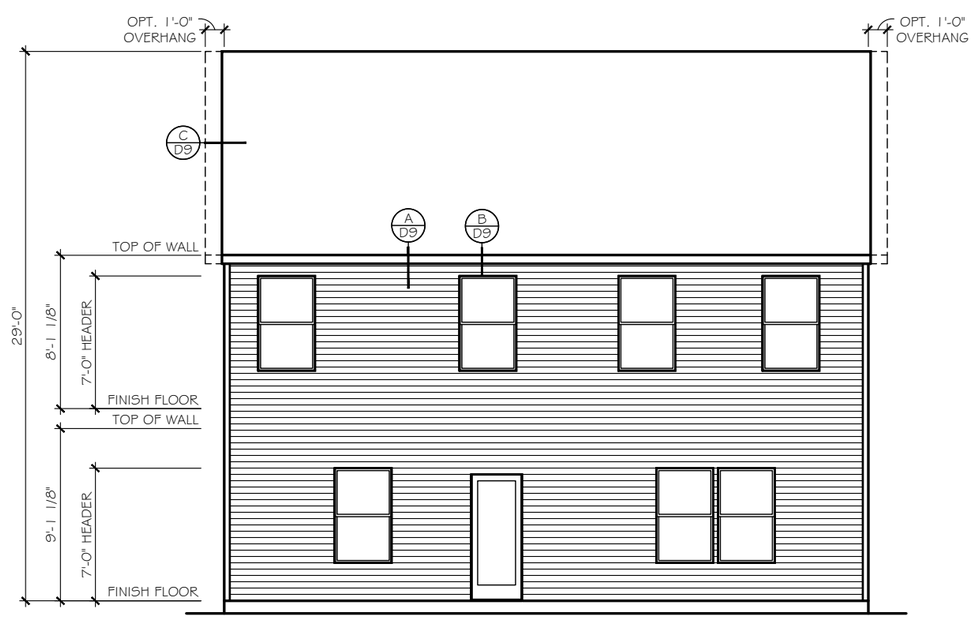
FRONT ELEVATION ELEVATION 'E-03'
SCALE: 1/8" = 1'-0" 3'-5" DEEP PORCH



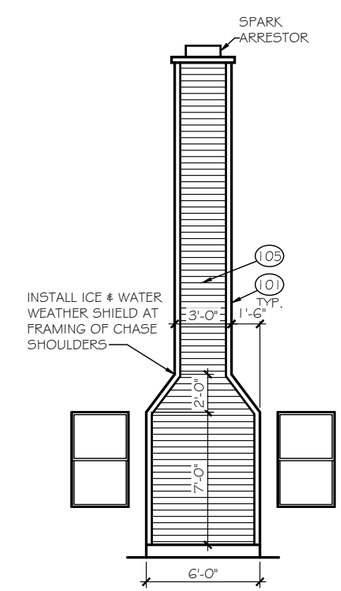
OPT. NOOK ALL ELEVATIONS
SCALE: 1/8" = 1'-0"



NOOK OPT. ALL ELEVATIONS
SCALE: 1/8" = 1'-0"



REAR ELEVATION ELEVATION 'E-01 thru E-04'
SCALE: 1/8" = 1'-0"



OPT. WOOD FIREPLACE ALL ELEVATIONS
SCALE: 1/8" = 1'-0"

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FRONT & REAR ELEVATIONS
ELEVATION E-03

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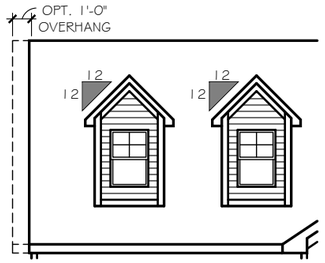
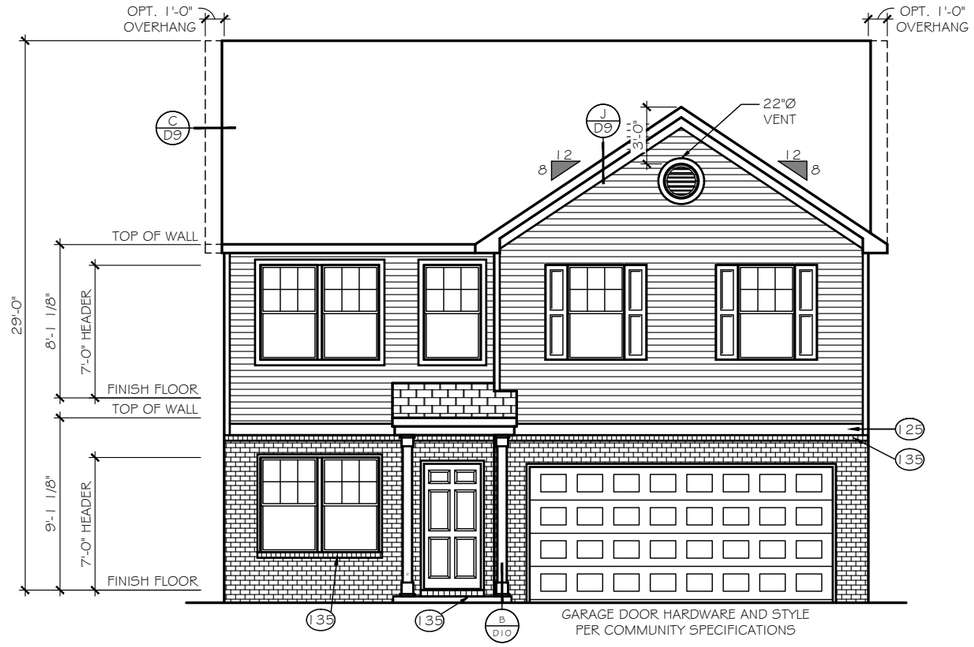
SHEET: A4.03
v. 5.4



OPT. DORMERS ELEV. E-A1 thru E-B4

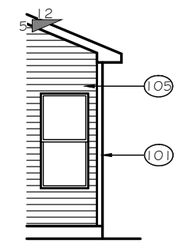
SCALE: 1/8" = 1'-0"



FRONT ELEVATION

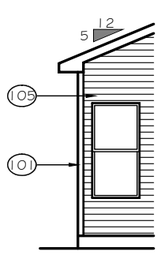
ELEVATION 'E-04'
3'-5" DEEP PORCH

SCALE: 1/8" = 1'-0"



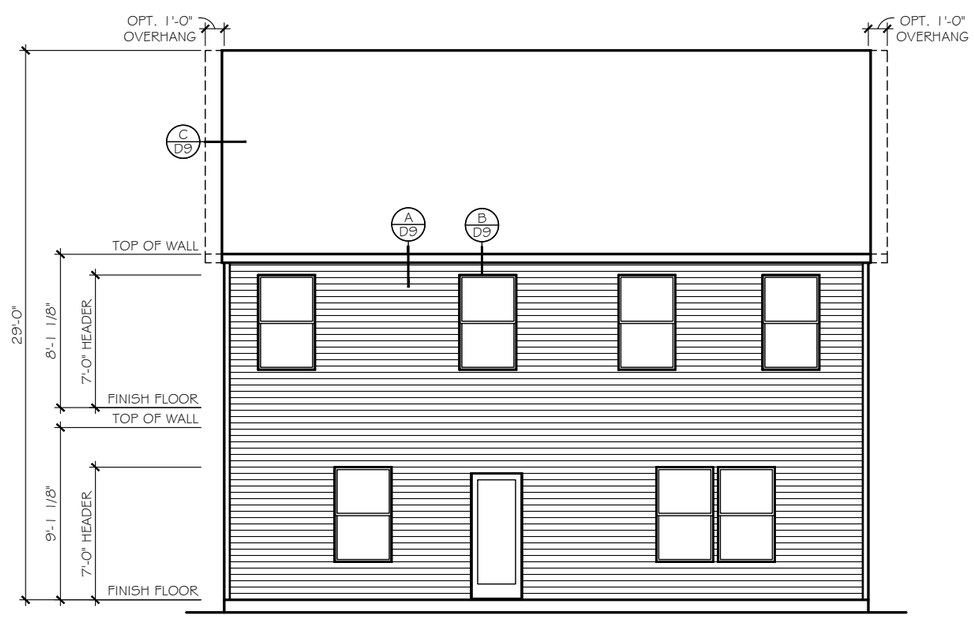
OPT. NOOK ALL ELEVATIONS

SCALE: 1/8" = 1'-0"



NOOK OPT. ALL ELEVATIONS

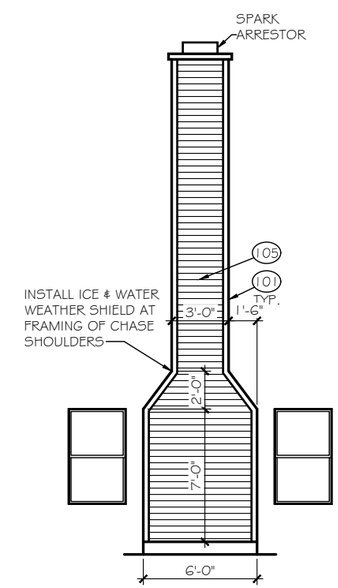
SCALE: 1/8" = 1'-0"



REAR ELEVATION

ELEVATION 'E-01 thru E-04'

SCALE: 1/8" = 1'-0"



OPT. WOOD FIREPLACE ALL ELEVATIONS

SCALE: 1/8" = 1'-0"

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FRONT & REAR ELEVATIONS
ELEVATION E-04

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SCALE: 3/16"= 1'-0"

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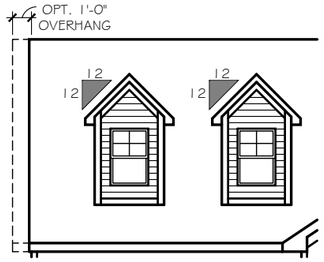
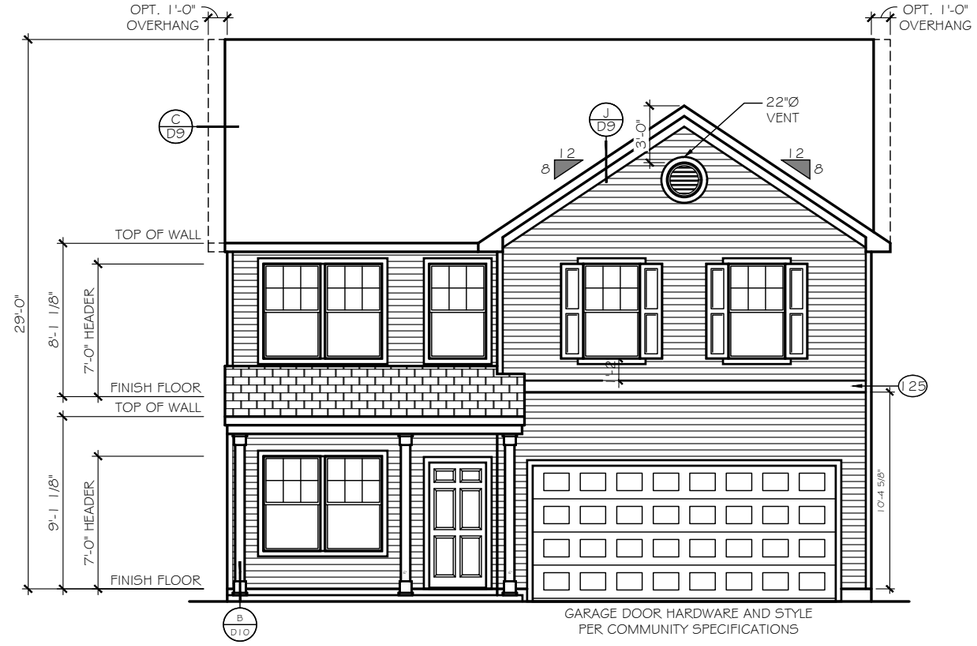
SHEET: A4.04

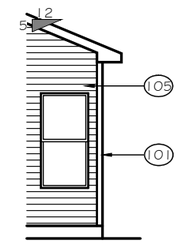
v. 5.4



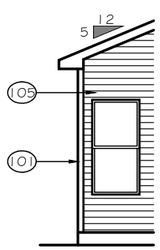
OPT. DORMERS ELEV. E-A1 thru E-B4
SCALE: 1/8" = 1'-0"



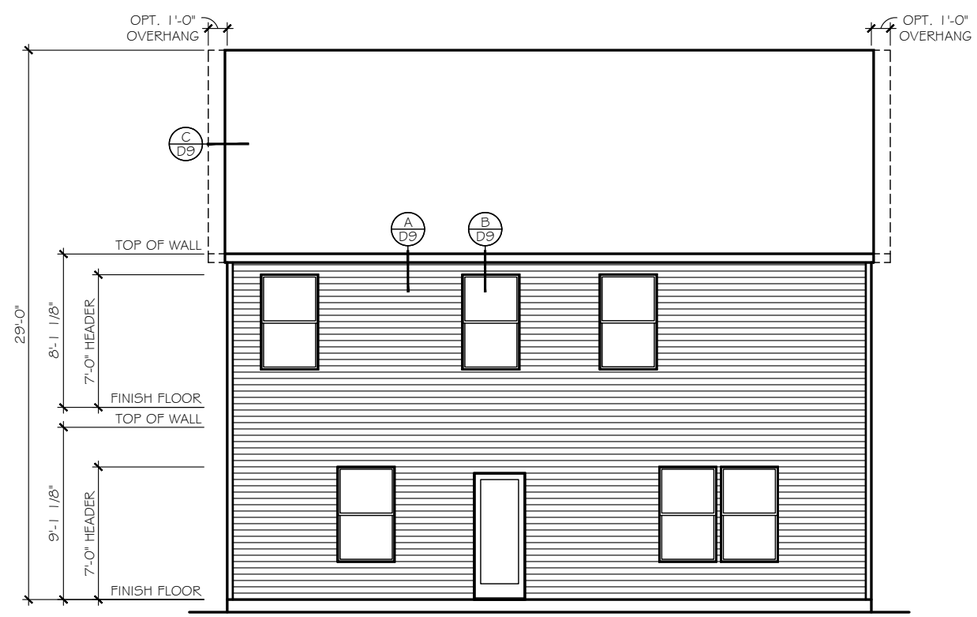
FRONT ELEVATION ELEVATION 'E-A1'
SCALE: 1/8" = 1'-0"



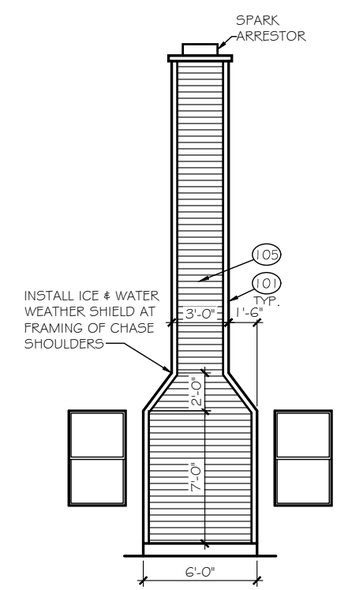
OPT. NOOK ALL ELEVATIONS
SCALE: 1/8" = 1'-0"



NOOK OPT. ALL ELEVATIONS
SCALE: 1/8" = 1'-0"



REAR ELEVATION ELEVATION 'E-A1 thru E-B4'
SCALE: 1/8" = 1'-0"



OPT. WOOD FIREPLACE ALL ELEVATIONS
SCALE: 1/8" = 1'-0"

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FRONT & REAR ELEVATIONS
ELEVATION E-A1

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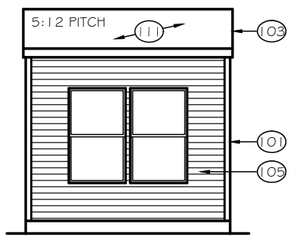
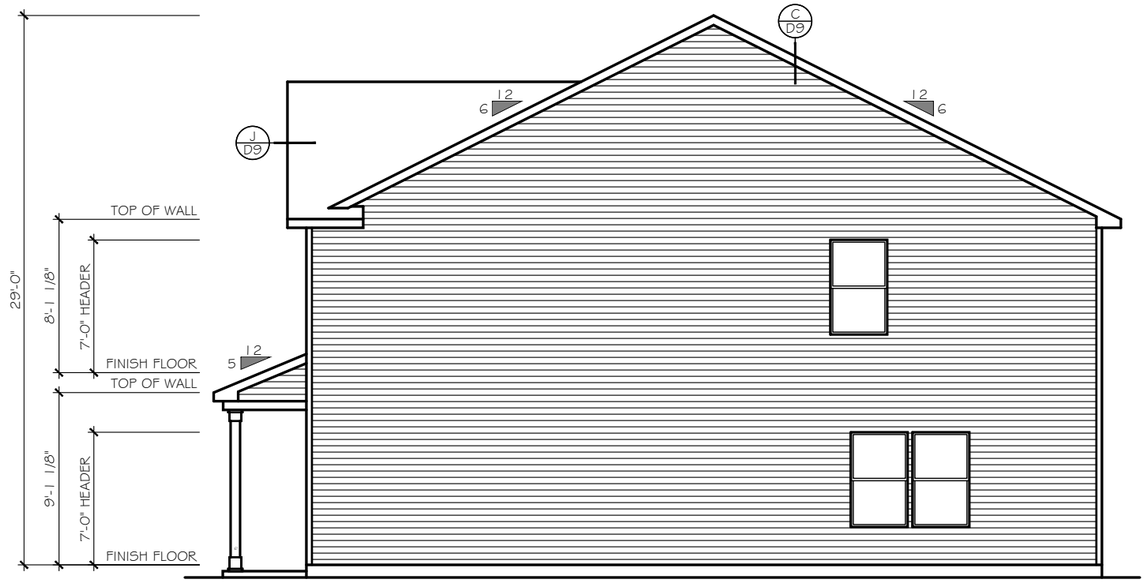
SHEET: A4.1
v. 5.4

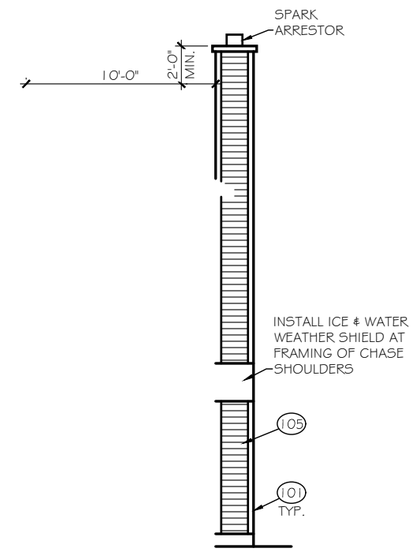


OPT. NOOK ALL ELEVATIONS
SCALE: 1/8" = 1'-0"

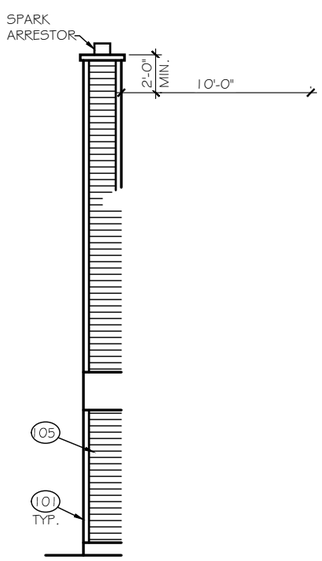


RIGHT ELEVATION
SCALE: 1/8" = 1'-0"

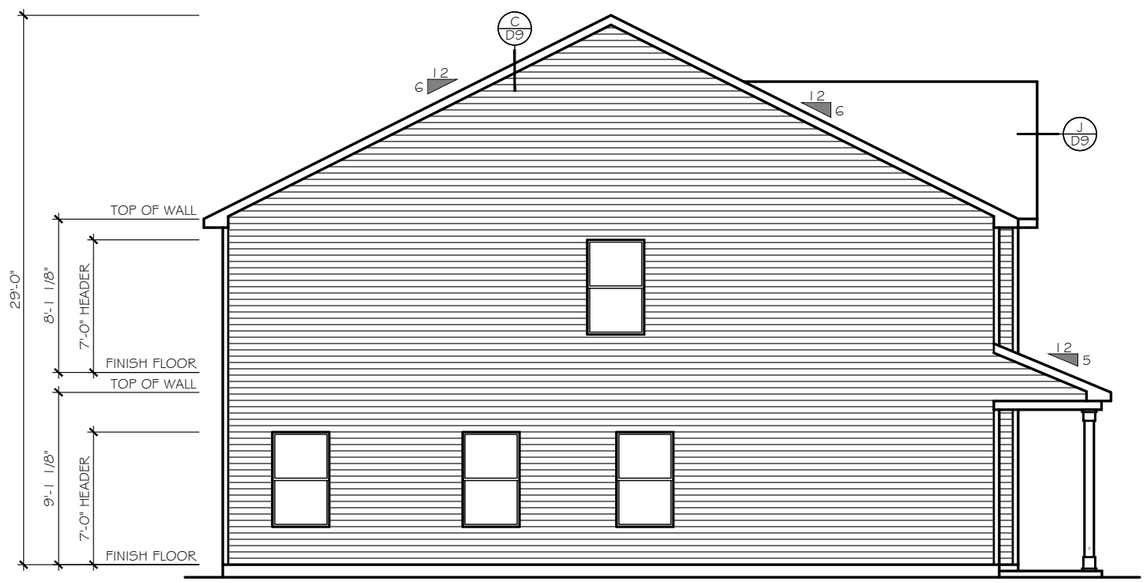
ELEVATION 'E-A1 thru E-B4'



OPT. WOOD FIREPLACE ALL ELEVATIONS
SCALE: 1/8" = 1'-0"

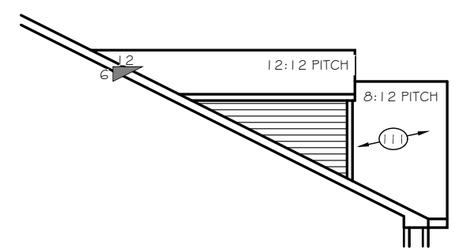


OPT. WOOD FIREPLACE ALL ELEVATIONS
SCALE: 1/8" = 1'-0"



LEFT ELEVATION
SCALE: 1/8" = 1'-0"

ELEVATION 'E-A1 thru E-B4'



OPT. DORMERS ELEV. E-A1 thru E-B4
SCALE: 1/8" = 1'-0"

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RIGHT & LEFT ELEVATIONS
ELEVATION E-A1

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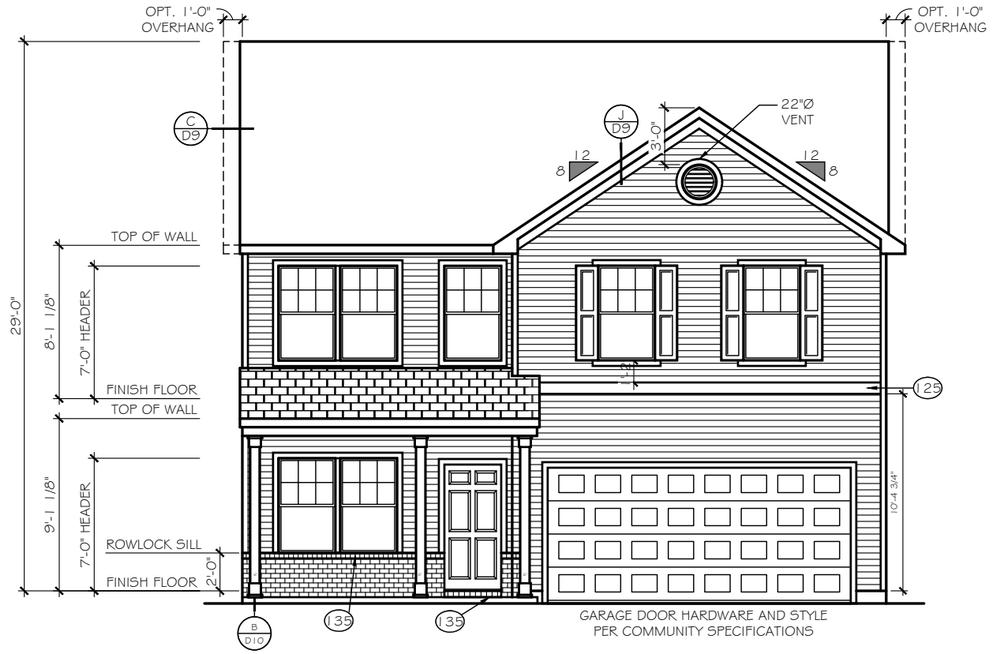
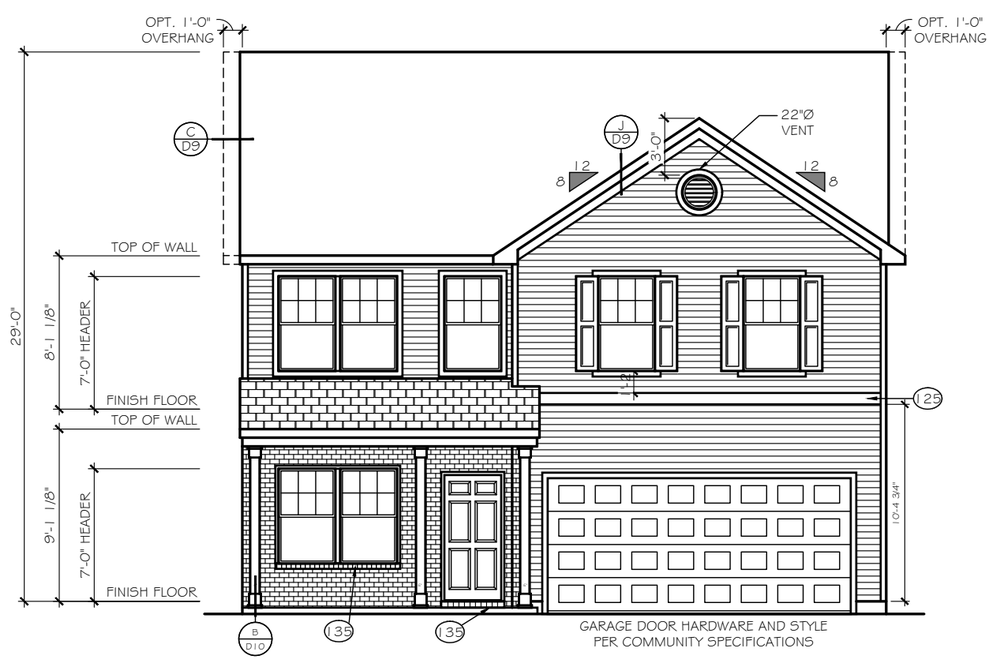
SHEET: A4.2
v. 5.4



FRONT ELEVATION

ELEVATION 'E-A2'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-A3'

SCALE: 1/8" = 1'-0"

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ELEVATION OPTIONS
FRONT ELEVATIONS

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SCALE: 3/16"= 1'-0"

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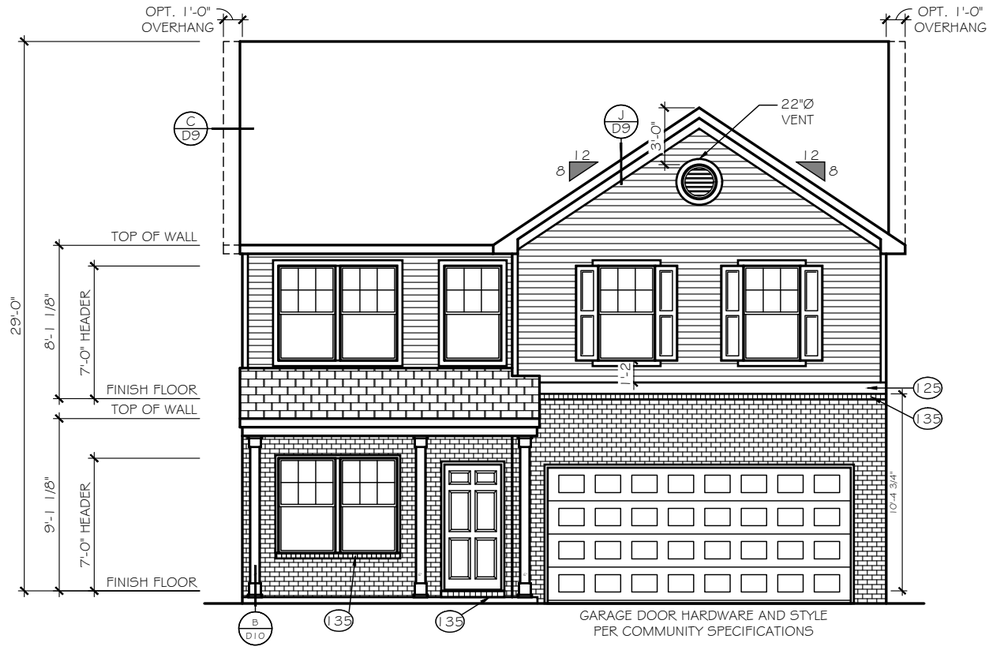
SHEET: A4.3

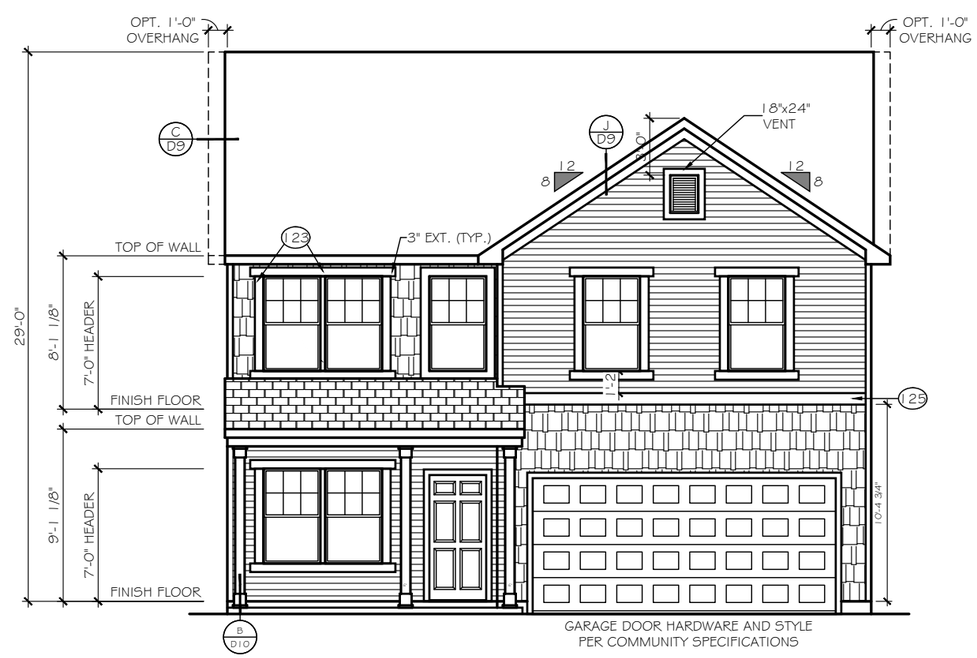
v. 5.4



FRONT ELEVATION

ELEVATION 'E-A4'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-B1'

SCALE: 1/8" = 1'-0"

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SCALE: 3/16"= 1'-0"

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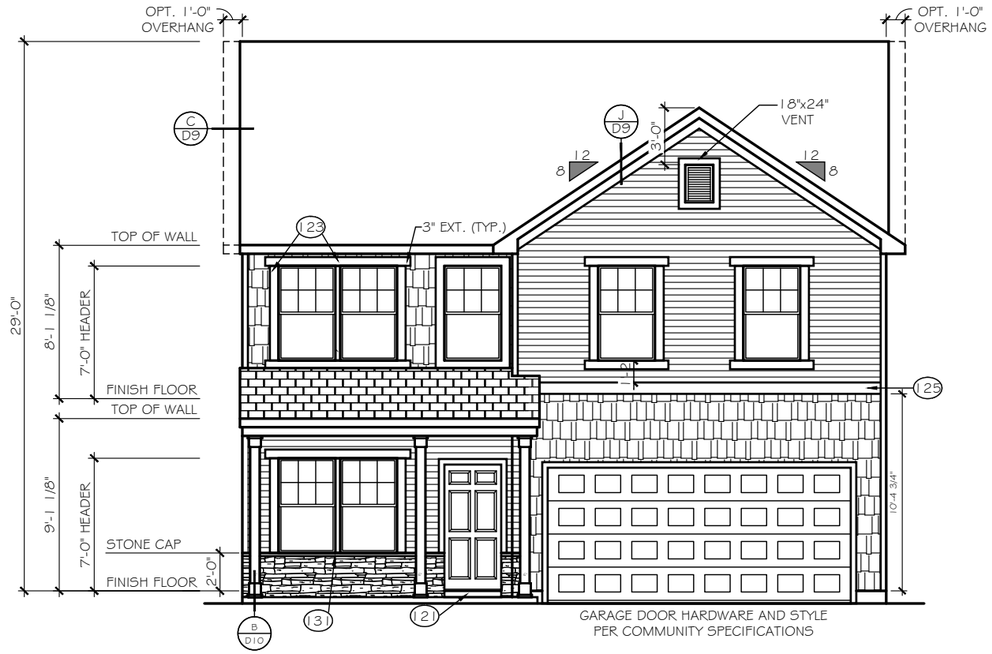
SHEET: A4.4

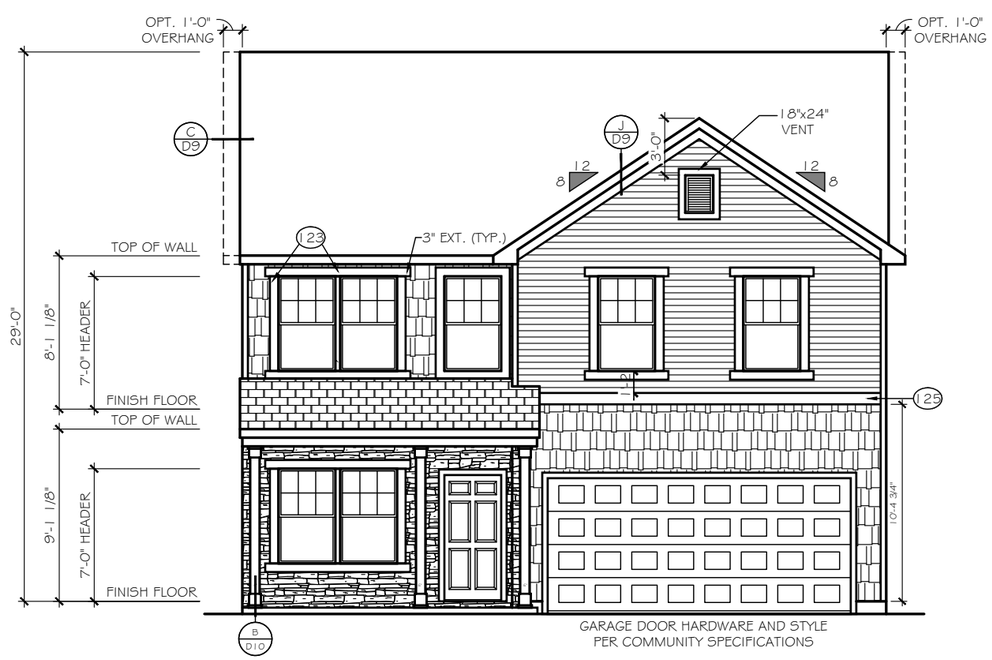
v. 5.4



FRONT ELEVATION

ELEVATION 'E-B2'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-B3'

SCALE: 1/8" = 1'-0"

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ELEVATION OPTIONS
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SCALE: 3/16"= 1'-0"

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SHEET: A4.5

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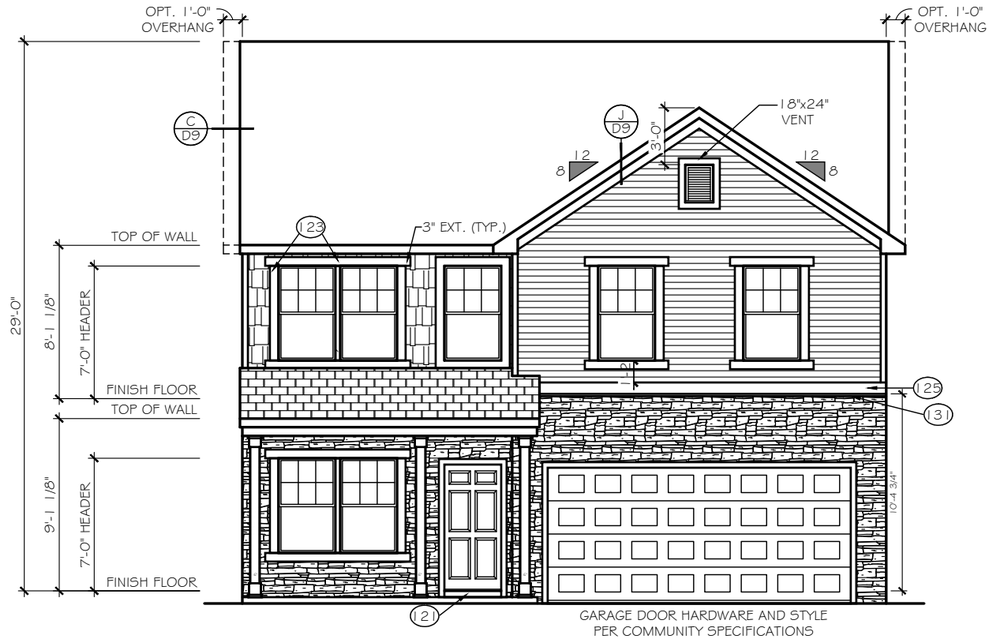
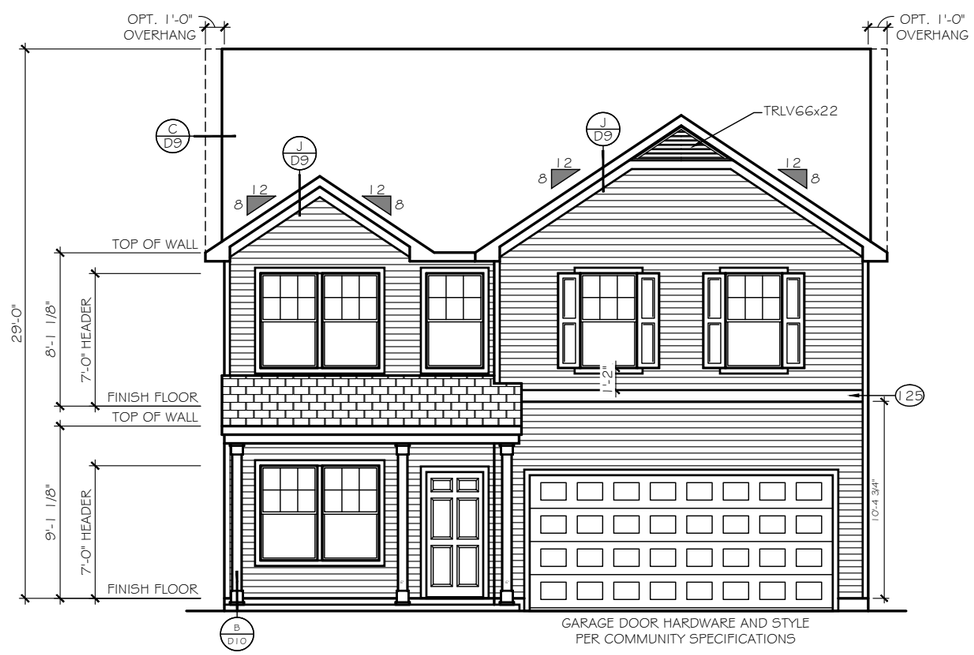


FRONT ELEVATION

ELEVATION 'E-B4'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-C1'

SCALE: 1/8" = 1'-0"

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SCALE: 3/16"= 1'-0"

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SHEET: A4.6

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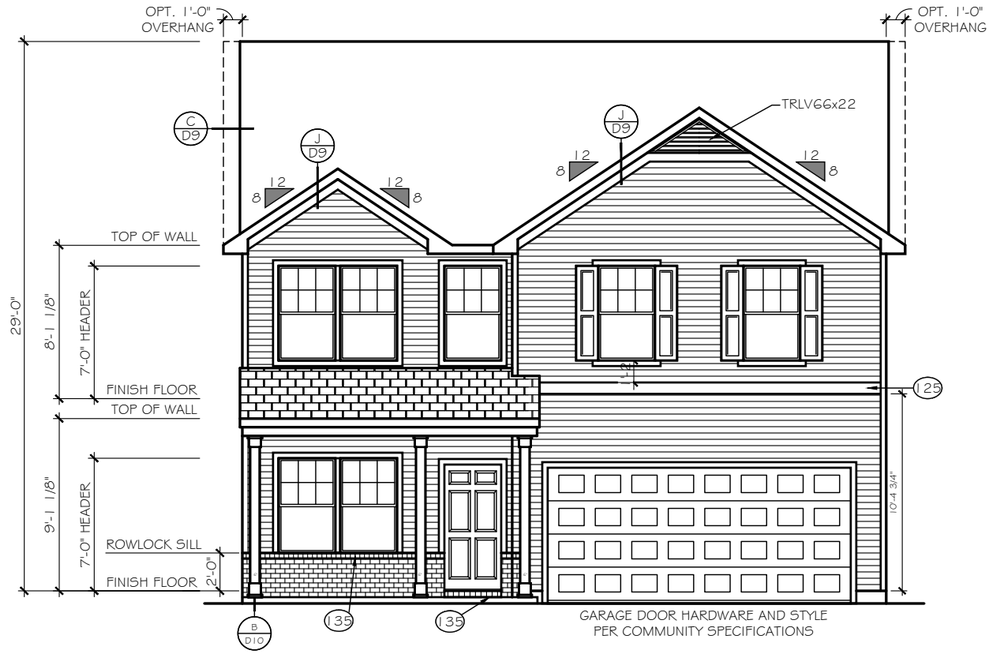
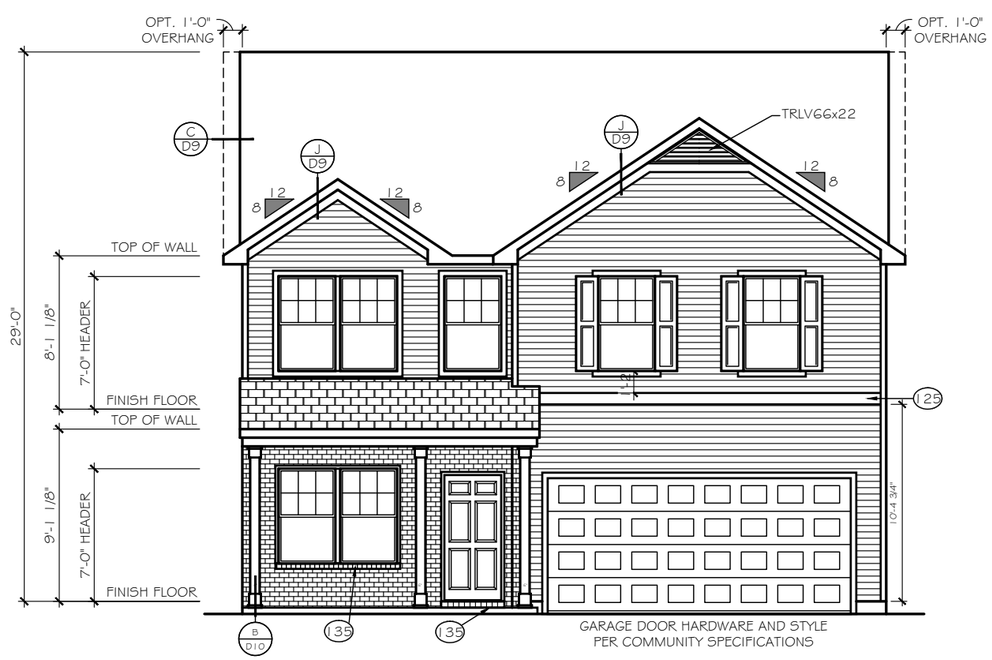


FRONT ELEVATION

ELEVATION 'E-C2'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-C3'

SCALE: 1/8" = 1'-0"

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SCALE: 3/16"= 1'-0"

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SHEET: A4.7

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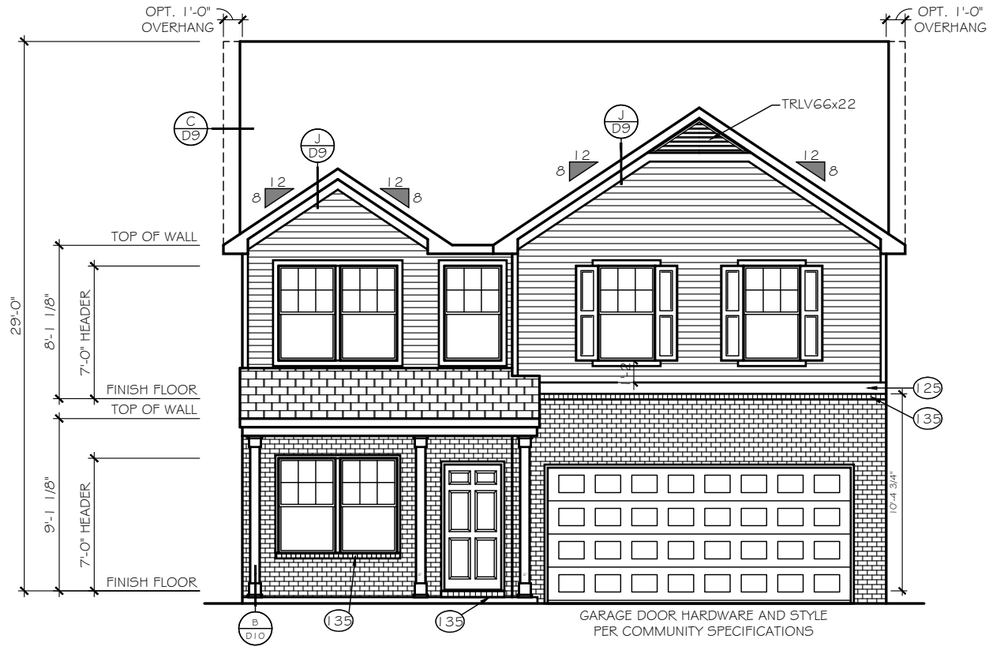
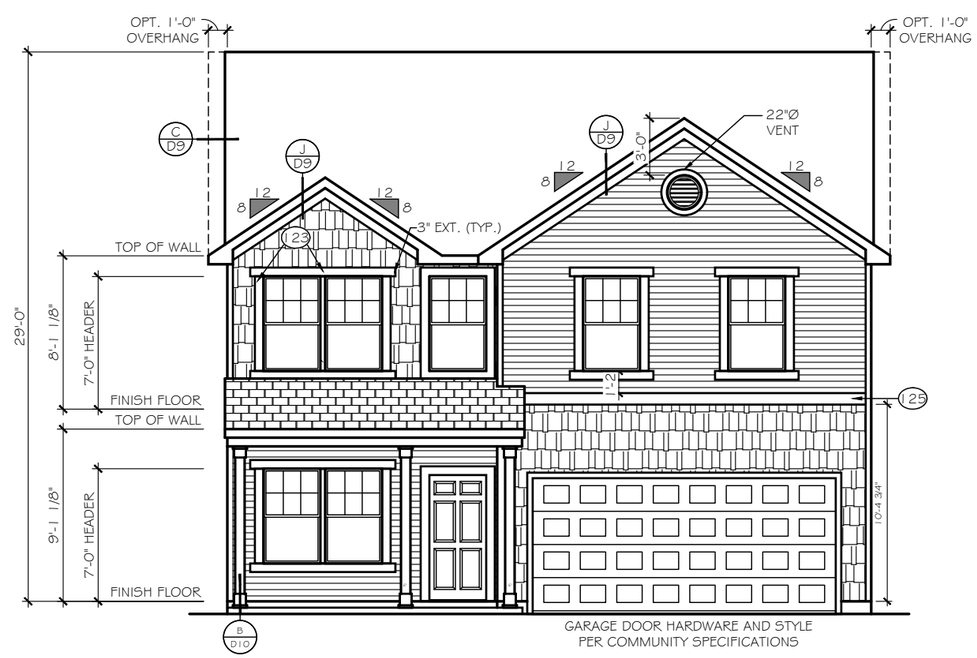


FRONT ELEVATION

ELEVATION 'E-C4'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-D1'

SCALE: 1/8" = 1'-0"

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ELEVATION OPTIONS
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SHEET: A4.8

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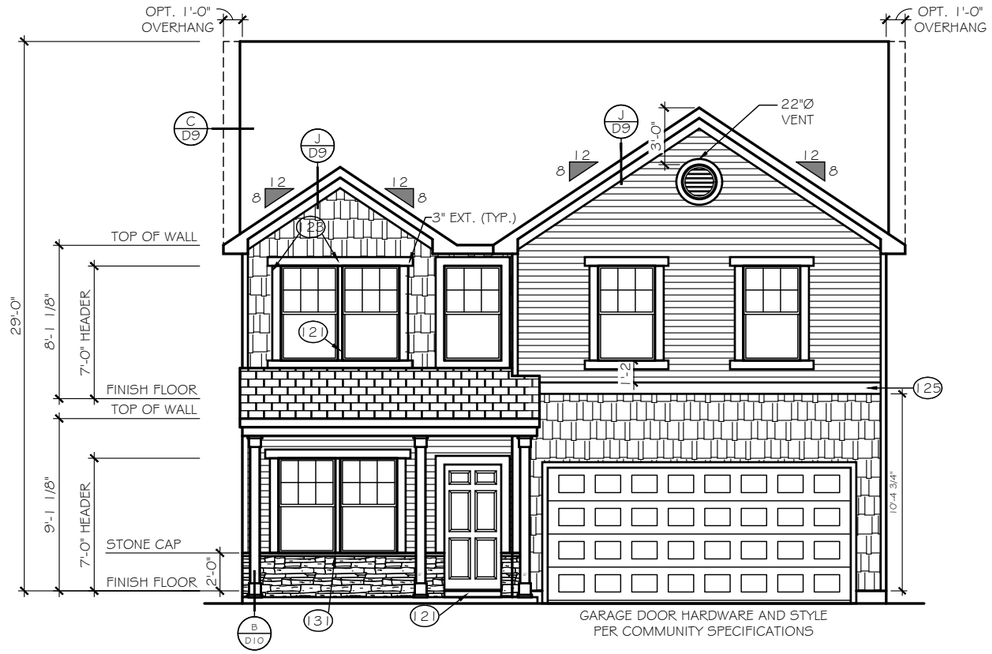
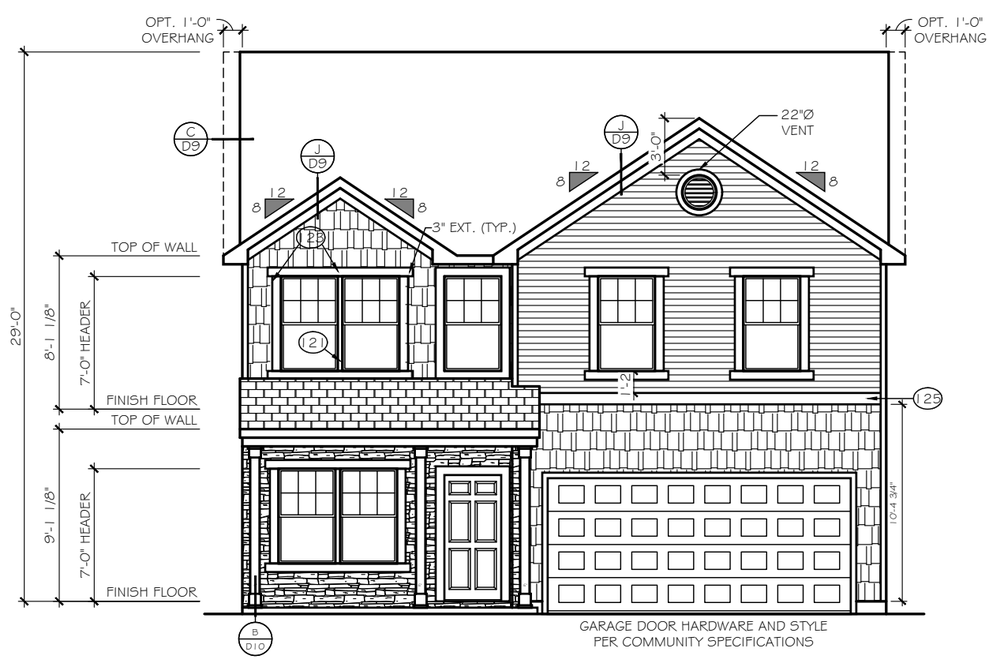


FRONT ELEVATION

ELEVATION 'E-D2'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-D3'

SCALE: 1/8" = 1'-0"

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ELEVATION OPTIONS
FRONT ELEVATIONS

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SCALE: 3/16"= 1'-0"

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SHEET: A4.9

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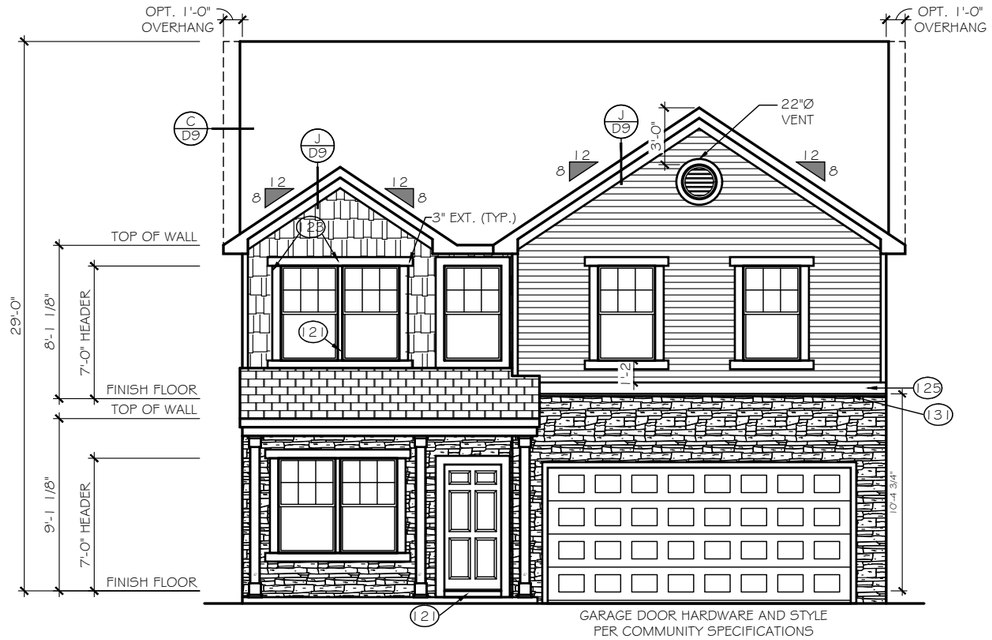
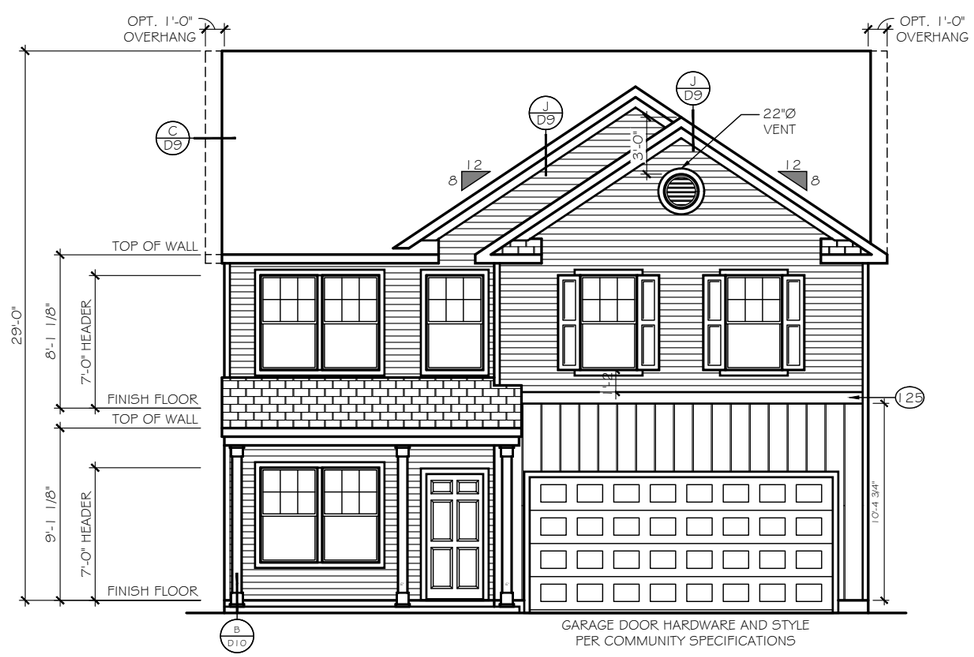


FRONT ELEVATION

ELEVATION 'E-D4'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-E1'

SCALE: 1/8" = 1'-0"

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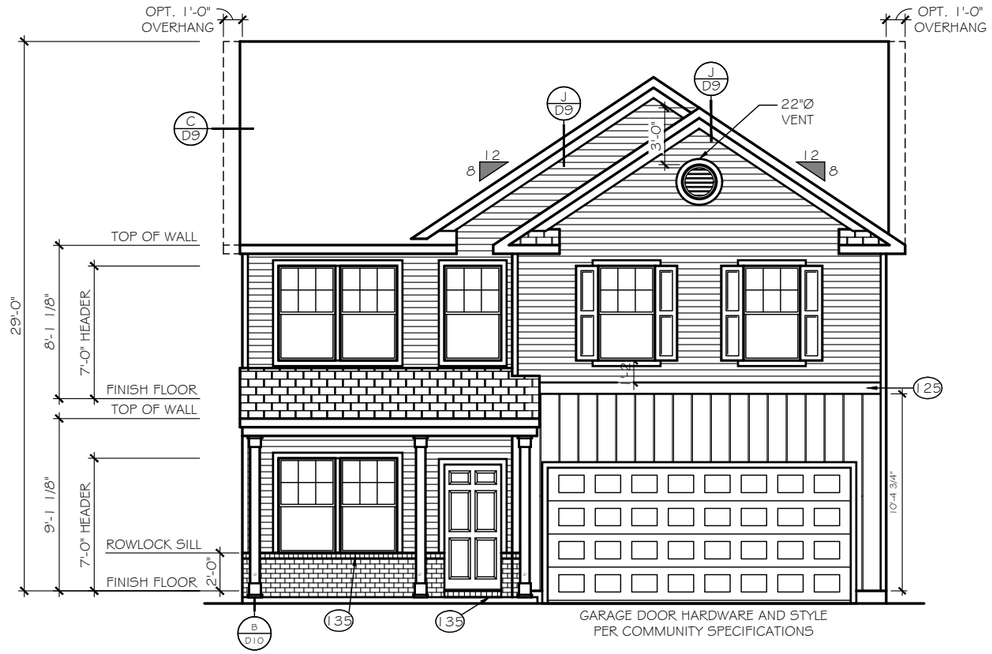
SHEET: A4.10

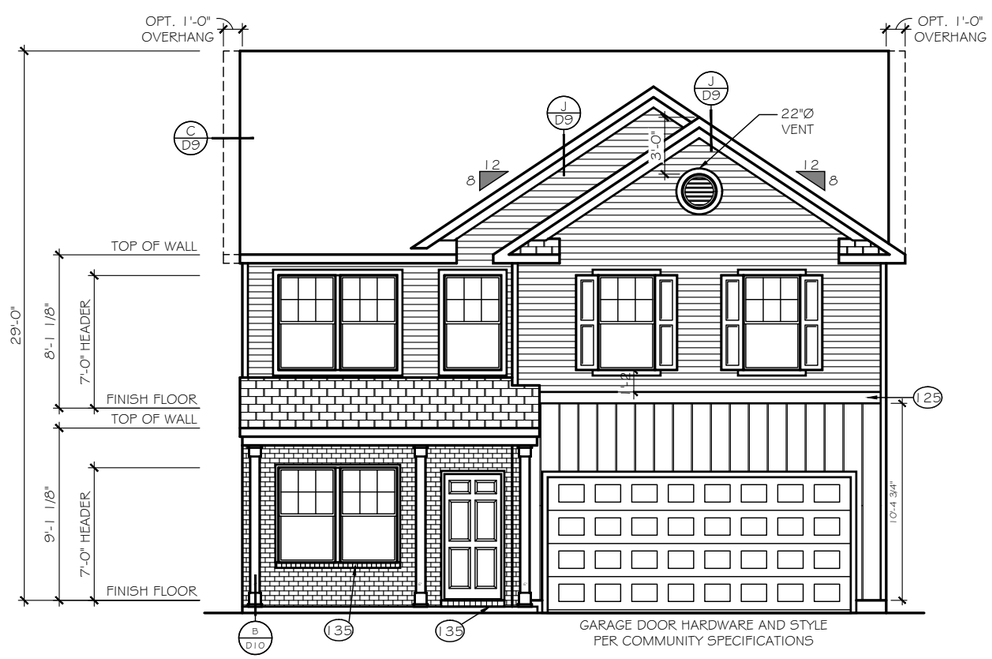
v. 5.4



FRONT ELEVATION

ELEVATION 'E-E2'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-E3'

SCALE: 1/8" = 1'-0"

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ELEVATION OPTIONS
FRONT ELEVATIONS

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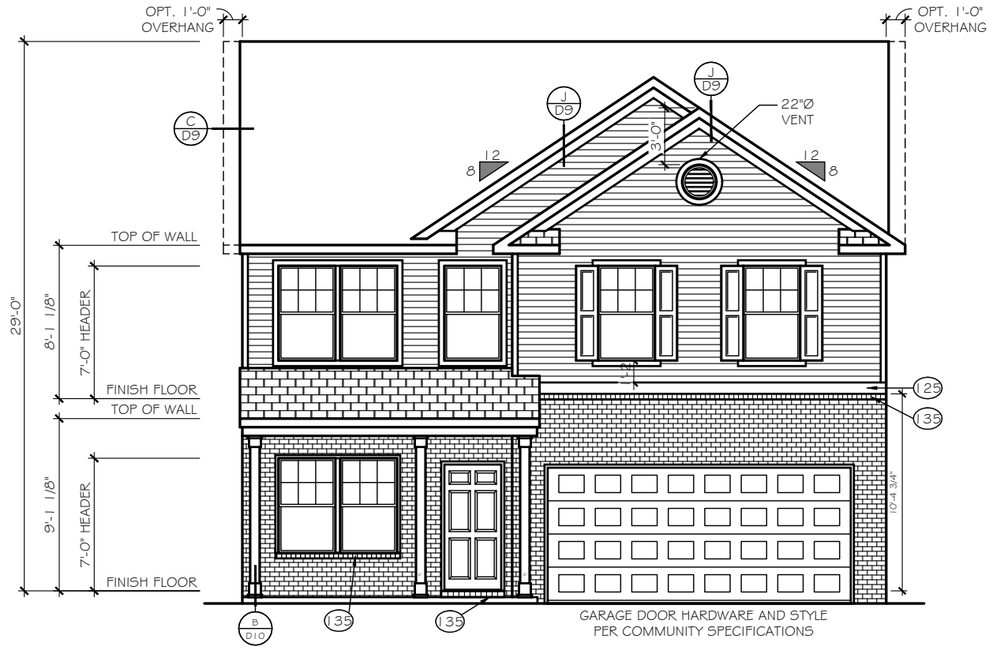
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.11

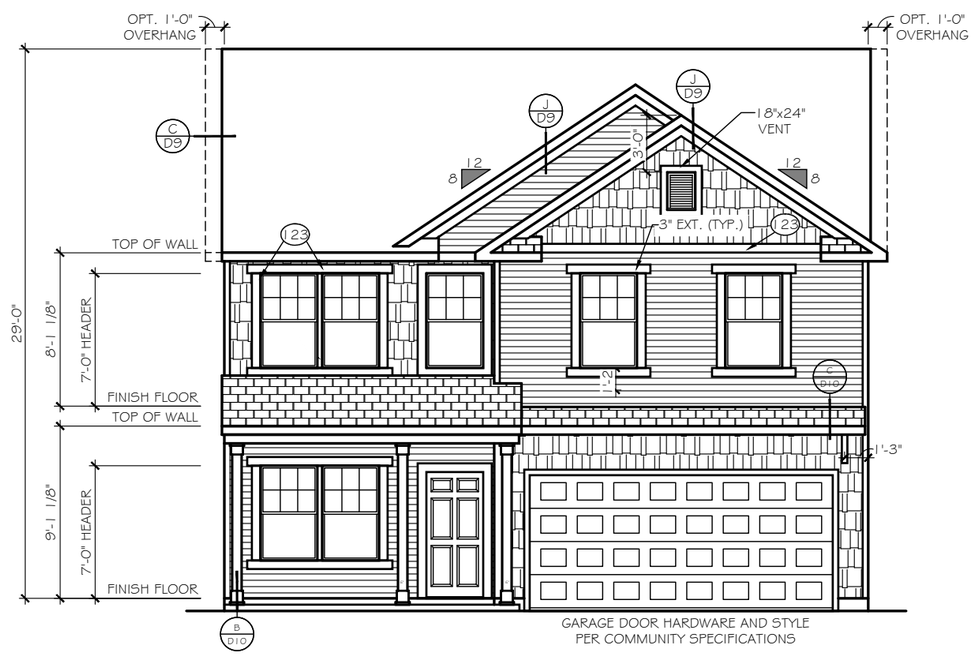
v. 5.4



FRONT ELEVATION

ELEVATION 'E-E4'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-F1'

SCALE: 1/8" = 1'-0"

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SCALE: 3/16"= 1'-0"

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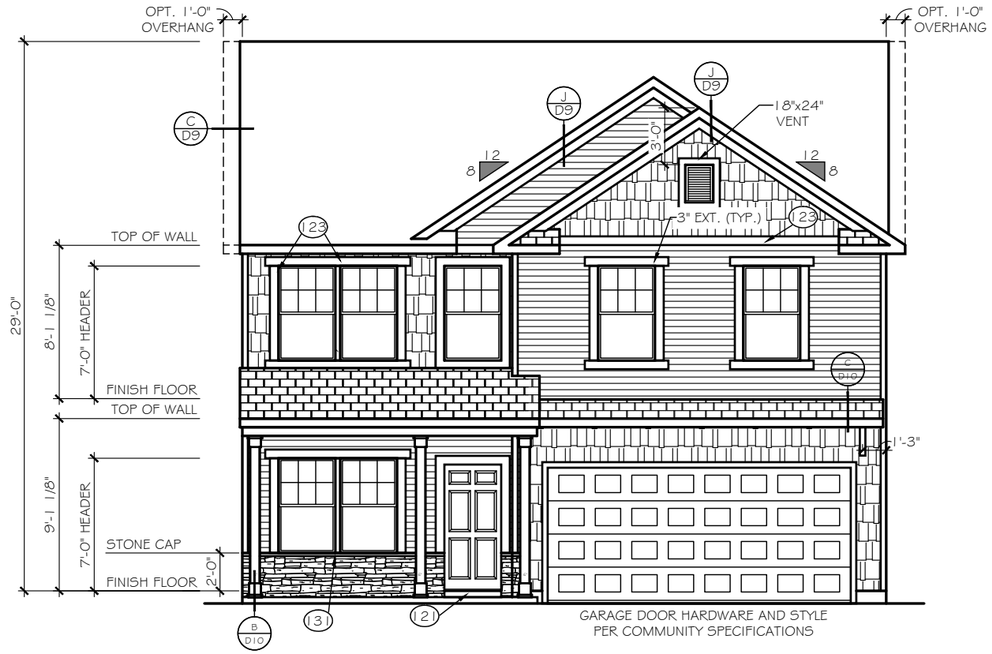
SHEET: A4.12

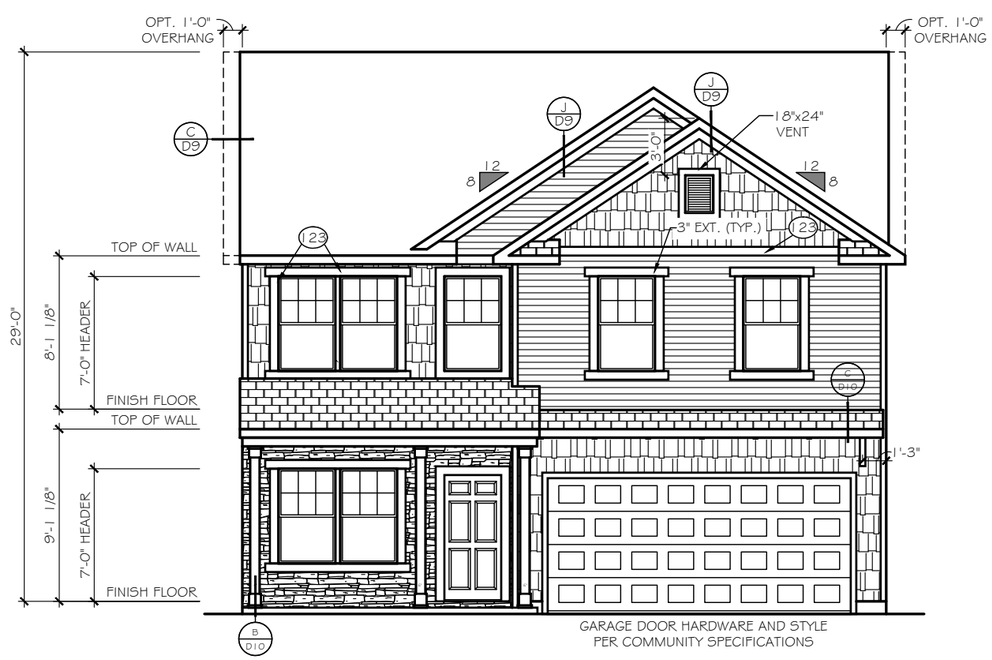
v. 5.4



FRONT ELEVATION

ELEVATION 'E-F2'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-F3'

SCALE: 1/8" = 1'-0"

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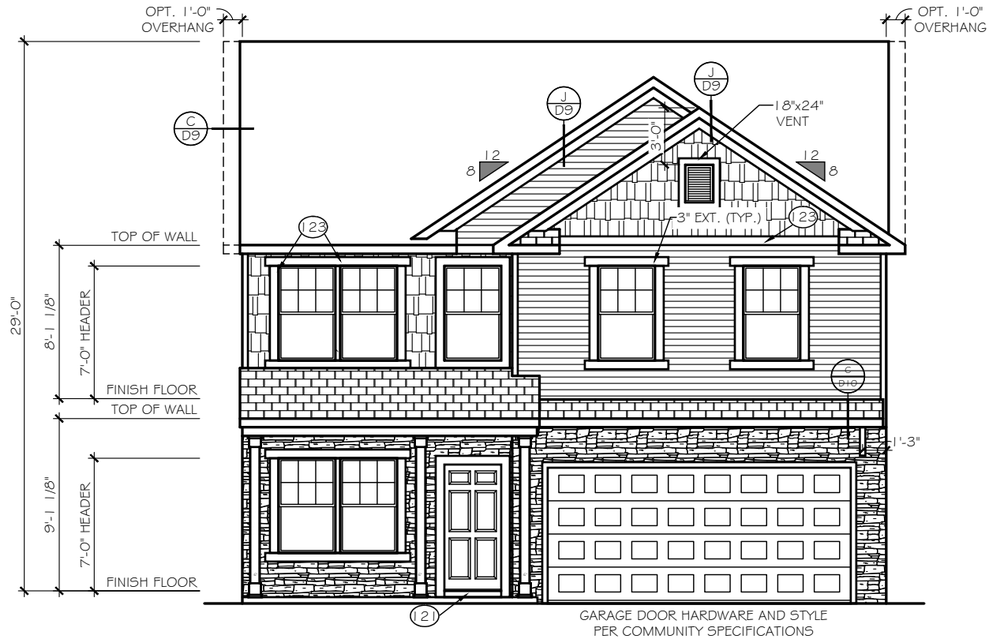
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.13

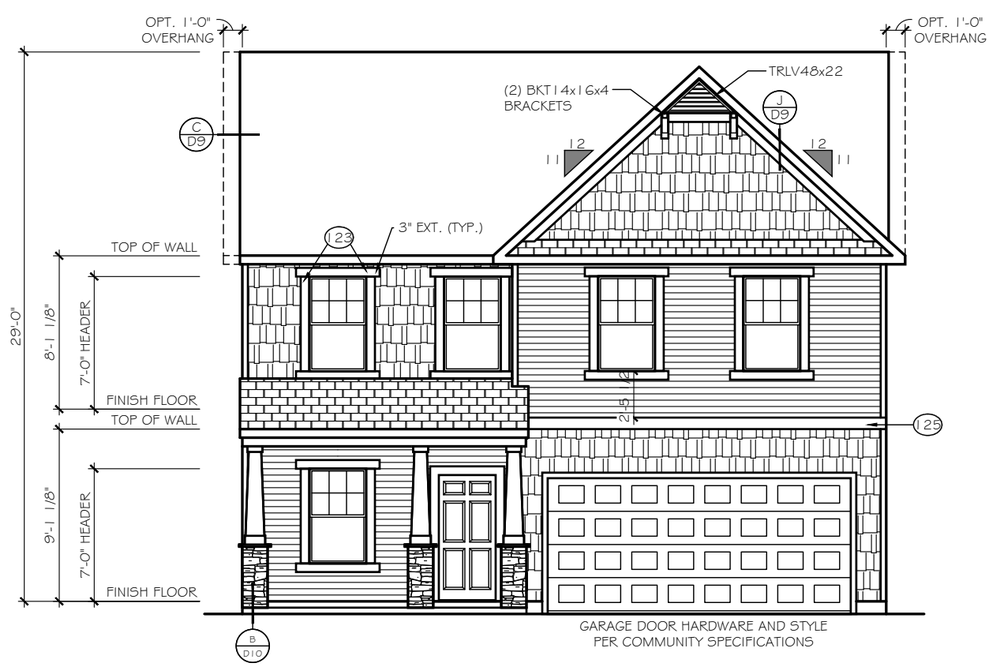
v. 5.4



FRONT ELEVATION

ELEVATION 'E-F4'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-G1'

SCALE: 1/8" = 1'-0"

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SCALE: 3/16"= 1'-0"

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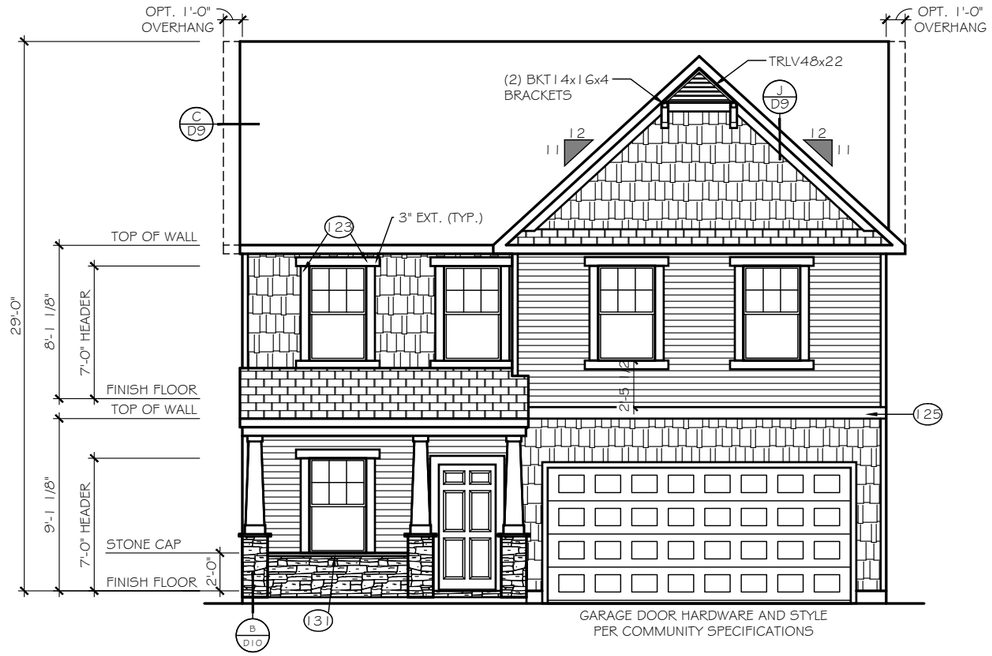
SHEET: A4.14

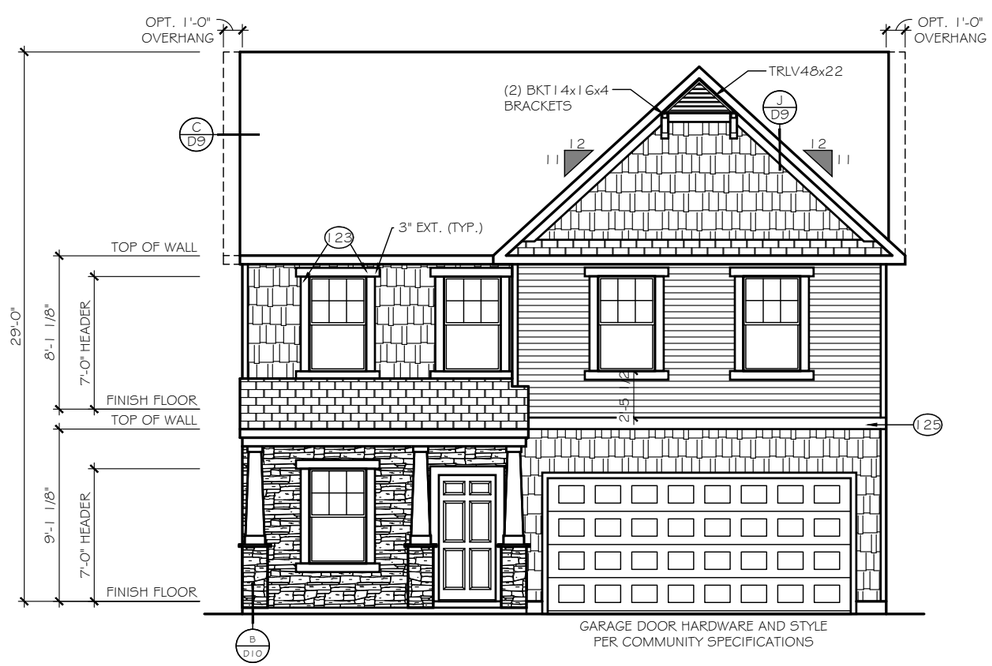
v. 5.4



FRONT ELEVATION

ELEVATION 'E-G2'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-G3'

SCALE: 1/8" = 1'-0"

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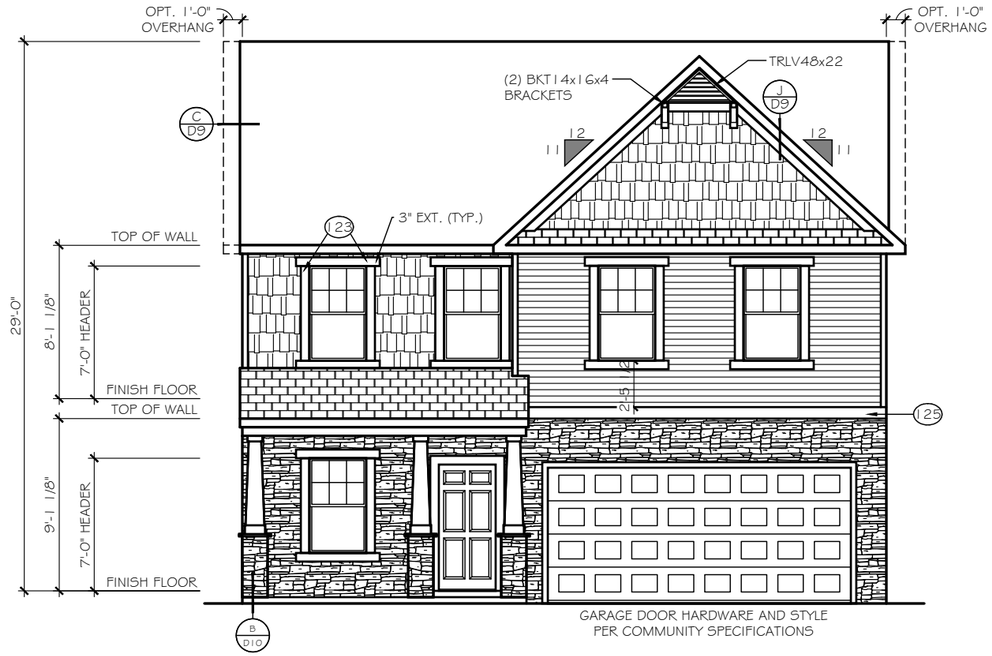
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.15

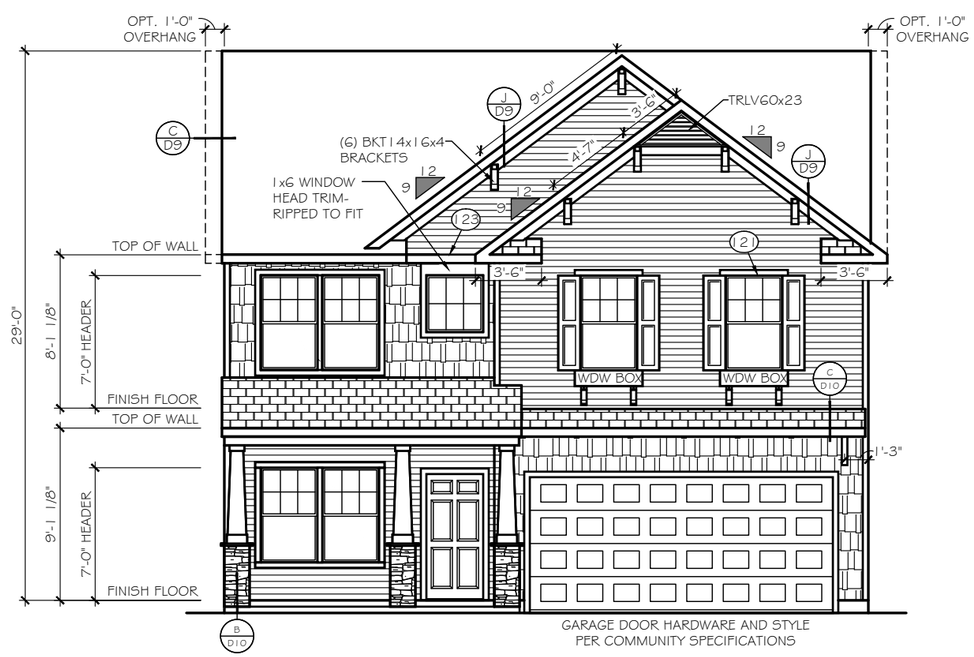
v. 5.4



FRONT ELEVATION

ELEVATION 'E-G4'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-H1'

SCALE: 1/8" = 1'-0"

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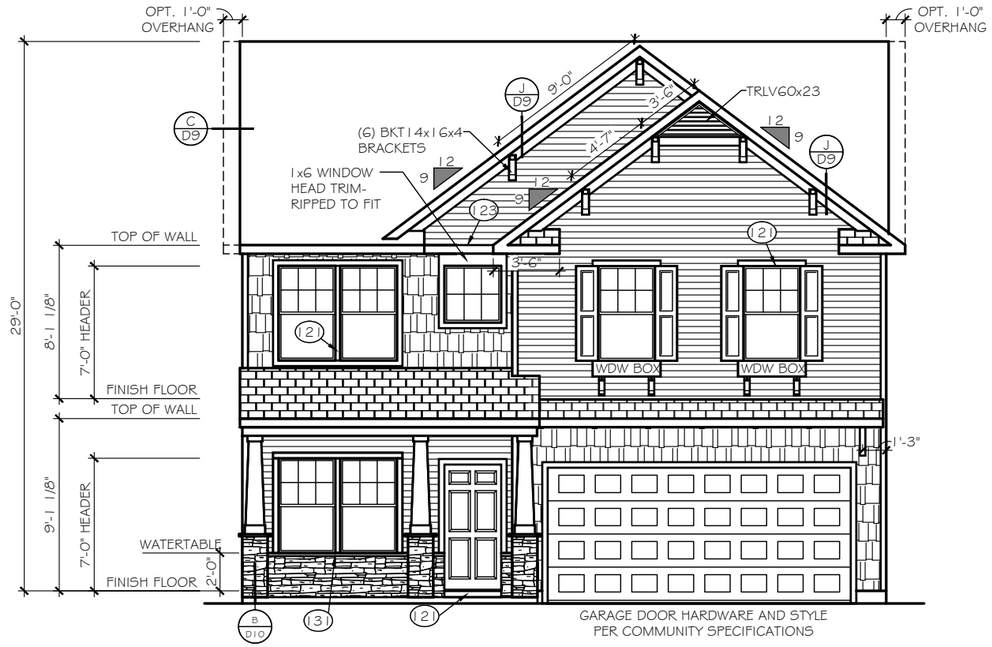
SHEET: A4.16

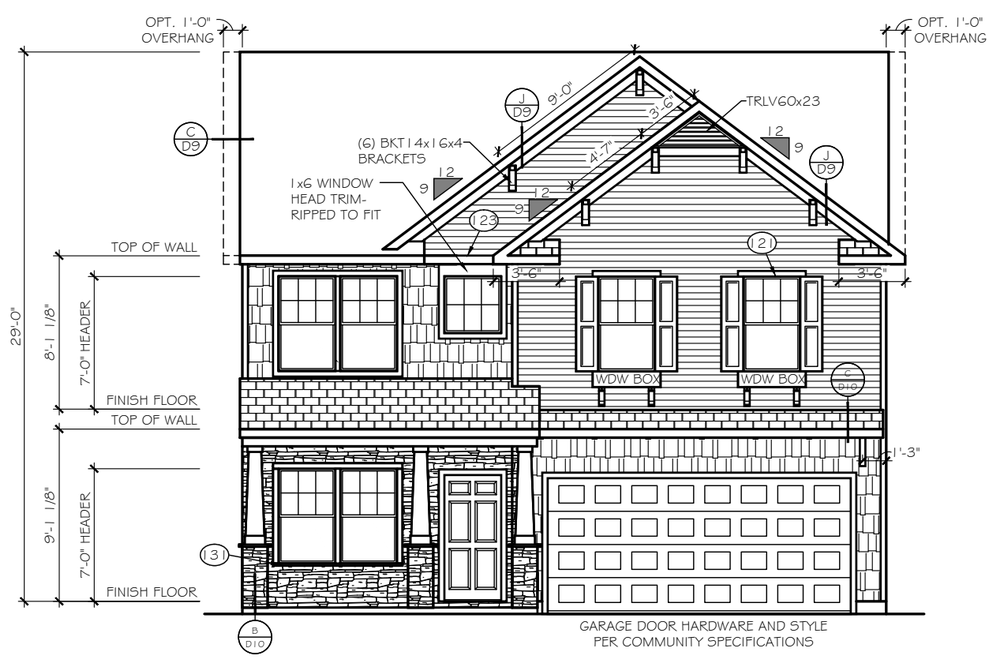
v. 5.4



FRONT ELEVATION

ELEVATION 'E-H2'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-H3'

SCALE: 1/8" = 1'-0"

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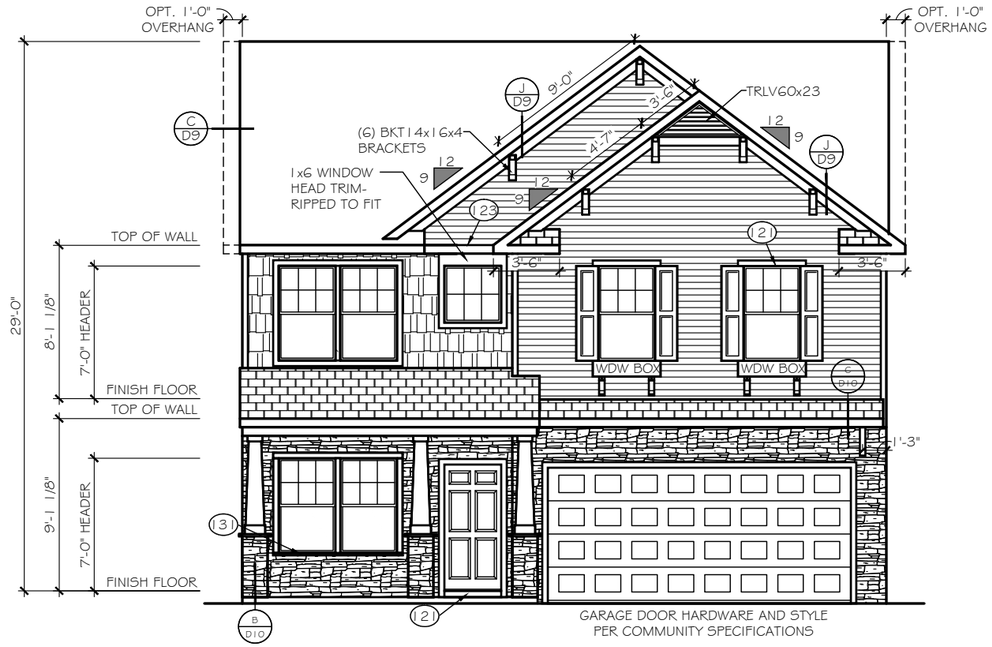
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.17

v. 5.4



FRONT ELEVATION

ELEVATION 'E-H4'

SCALE: 1/8" = 1'-0"

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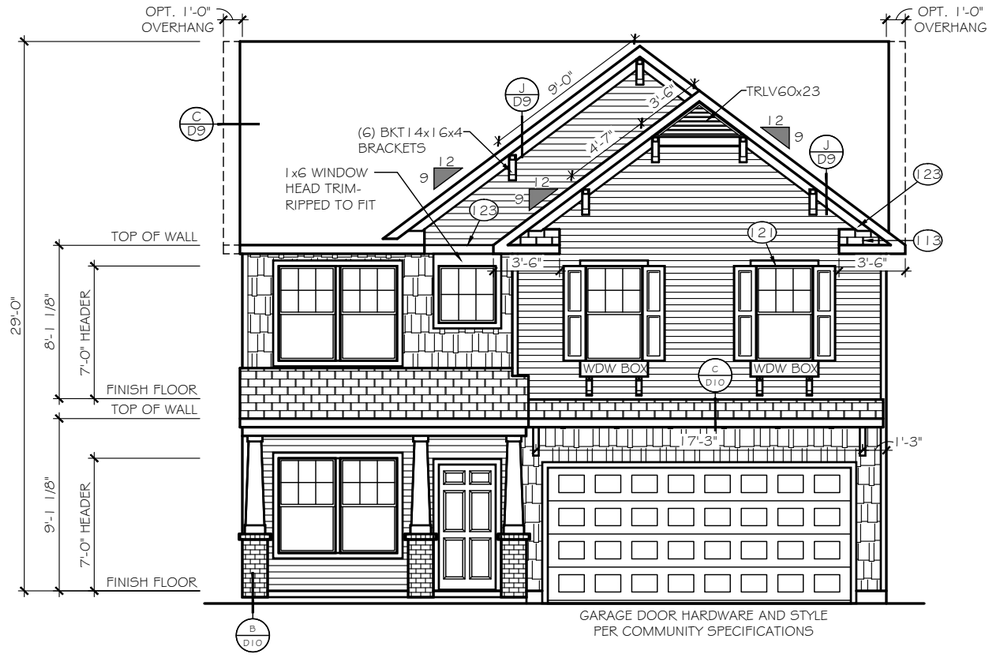
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.18

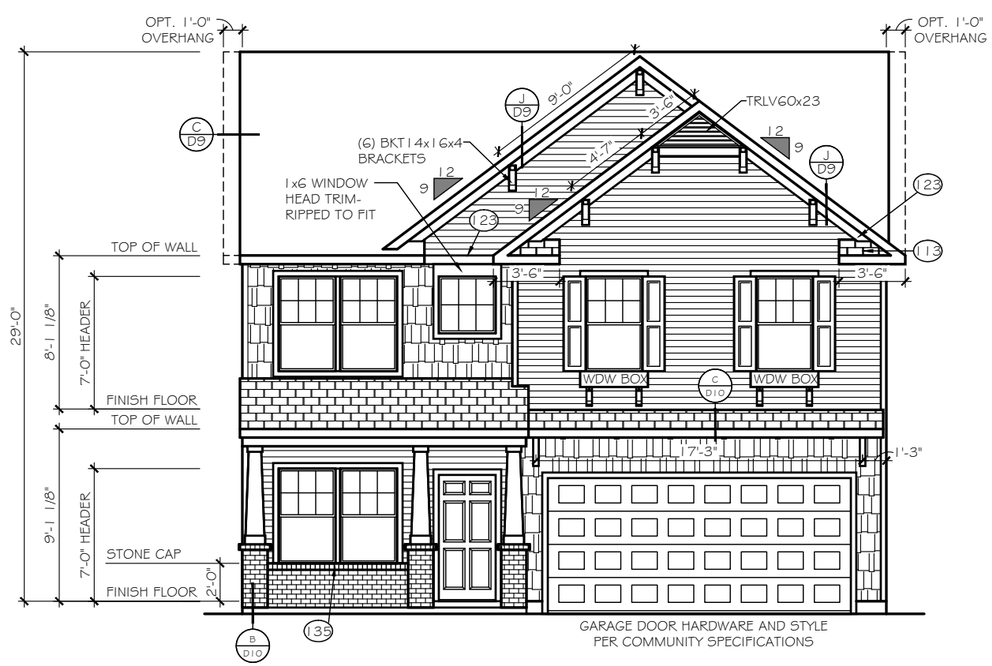
v. 5.4



FRONT ELEVATION

ELEVATION 'E-H5'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-H6'

SCALE: 1/8" = 1'-0"

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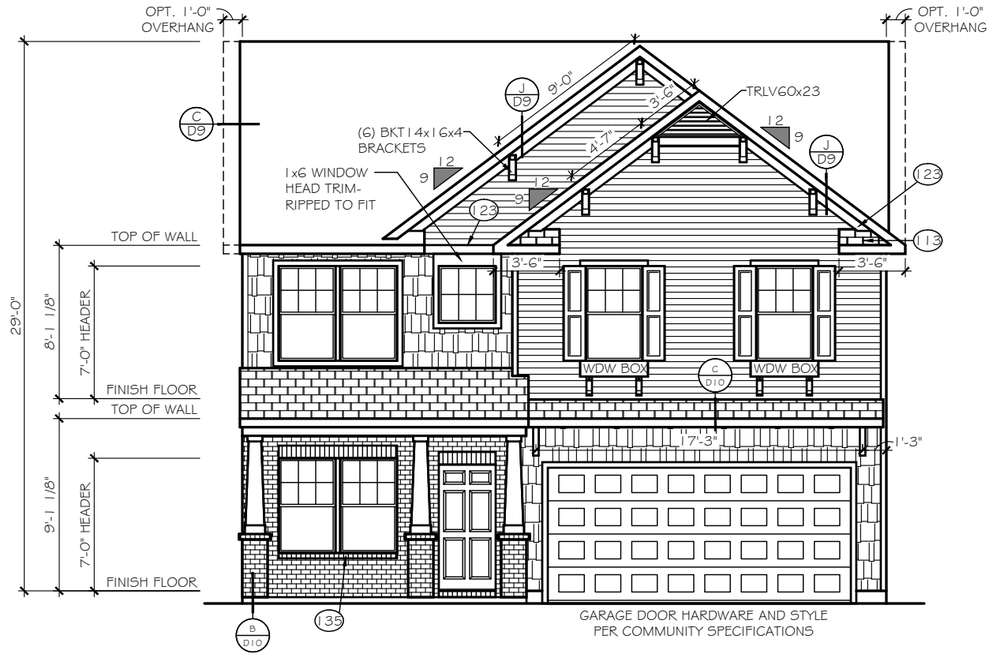
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.19

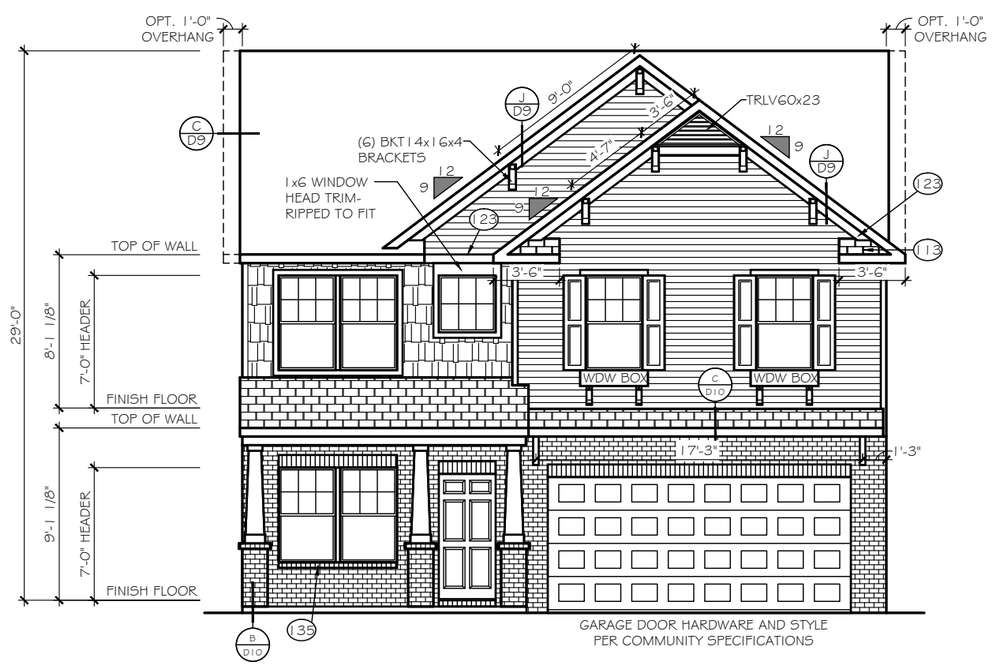
v. 5.4



FRONT ELEVATION

ELEVATION 'E-H7'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-H8'

SCALE: 1/8" = 1'-0"

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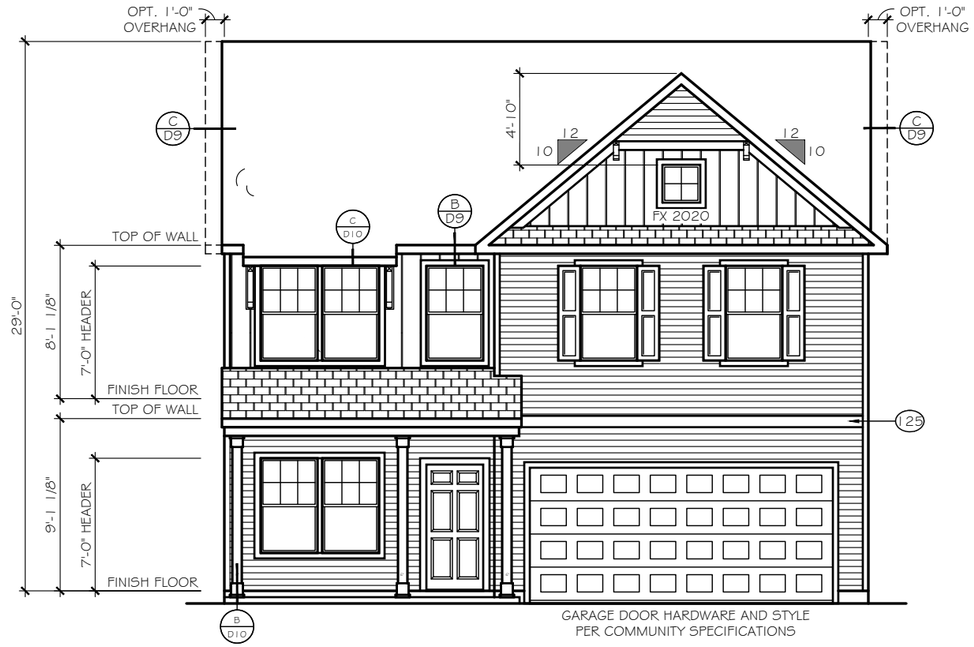
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.20

v. 5.4



FRONT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-J1'

EXTERIOR MATERIAL LEGEND

- B-N-B SIDING
- SHAKE SIDING
- HORIZONTAL SIDING
- BRICK
- STONE
- METAL ROOF
- ROOF SHINGLE
- SCALLOP SIDING

KEY NOTES

- 115 FLASHING
- 117 VINYL SHUTTER
- 120 BRICKMOLD TRIM
- 121 1X4 TRIM BOARD
- 123 1X6 TRIM BOARD
- 125 1X8 TRIM BOARD
- 128 1X10 FRIEZE BOARD
- 131 1-1/2" THICK STONE CAP
- 135 ROWLOCK SILL
- 137 BRICK JACK ARCH
- 139 SOLDIER COURSE
- 141 PRECAST KEYSTONE

1x4 TRIM WHERE SHOWN AT WINDOWS AND DOORS UNLESS OTHERWISE NOTED

SEE ROOF FRAMING PLANS FOR OVERHANG DIMENSIONS AND DORMER LOCATIONS

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ELEVATION 'J'
FRONT ELEVATION

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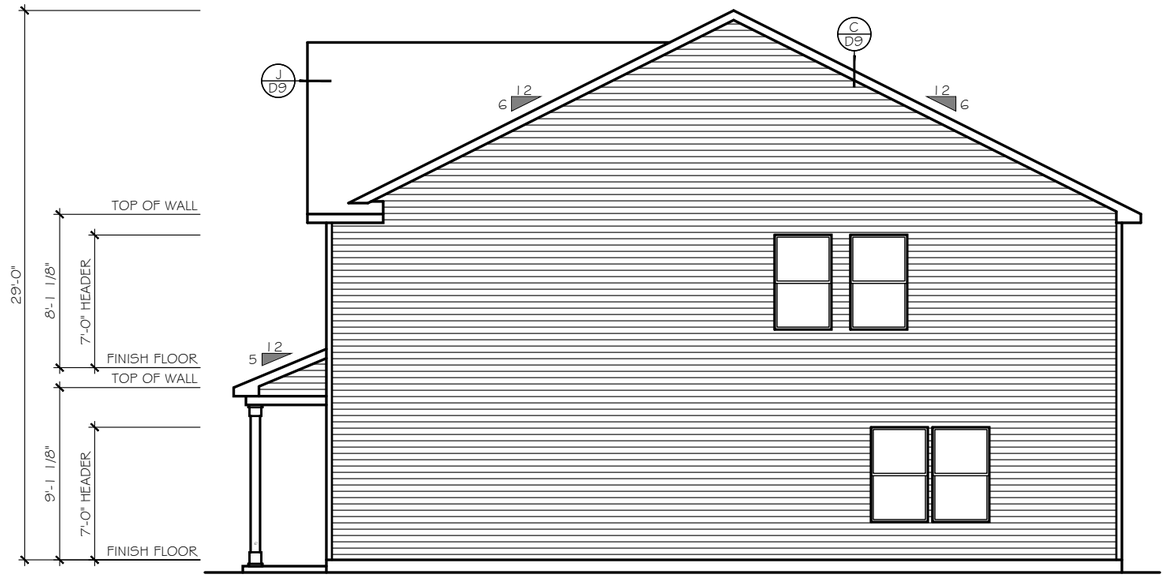
SHEET: A4.21

v. 5.4



RIGHT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-J1'

EXTERIOR MATERIAL LEGEND

- B-N-B SIDING
- SHAKE SIDING
- HORIZONTAL SIDING
- BRICK
- STONE
- METAL ROOF
- ROOF SHINGLE
- SCALLOP SIDING

KEY NOTES

- 115 FLASHING
- 117 VINYL SHUTTER
- 120 BRICKMOLD TRIM
- 121 1X4 TRIM BOARD
- 123 1X6 TRIM BOARD
- 125 1X8 TRIM BOARD
- 128 1X10 FRIEZE BOARD
- 131 1-1/2" THICK STONE CAP
- 135 ROWLOCK SILL
- 137 BRICK JACK ARCH
- 139 SOLDIER COURSE
- 141 PRECAST KEYSTONE

1x4 TRIM WHERE SHOWN AT WINDOWS AND DOORS UNLESS OTHERWISE NOTED

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ELEVATION 'J'
RIGHT ELEVATION

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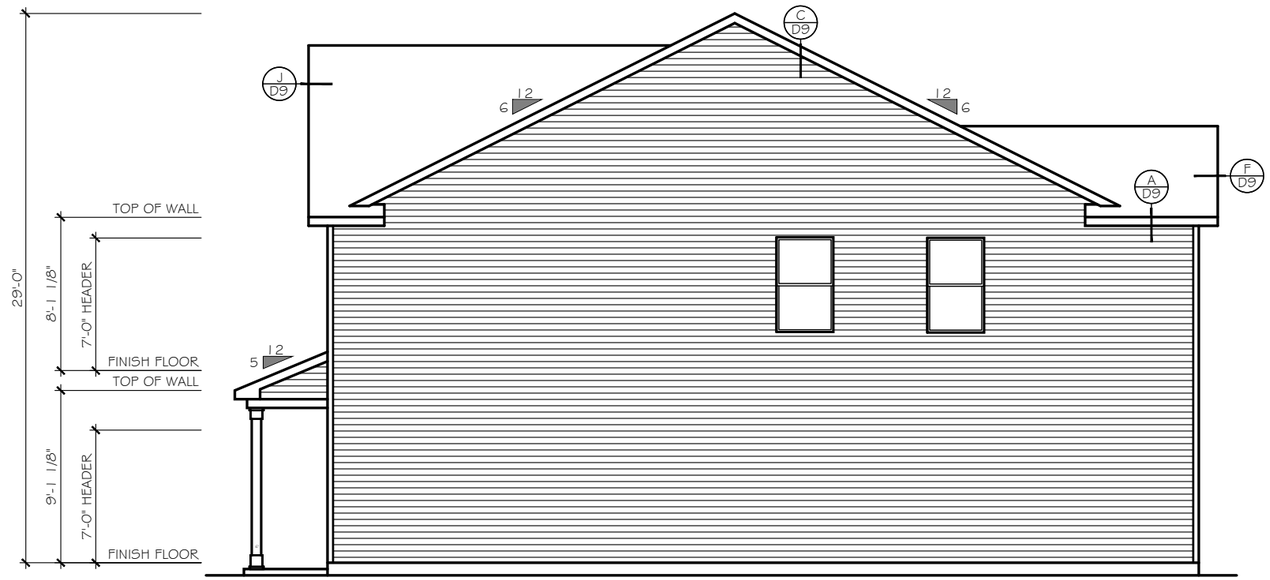
SHEET: A4.22

v. 5.4

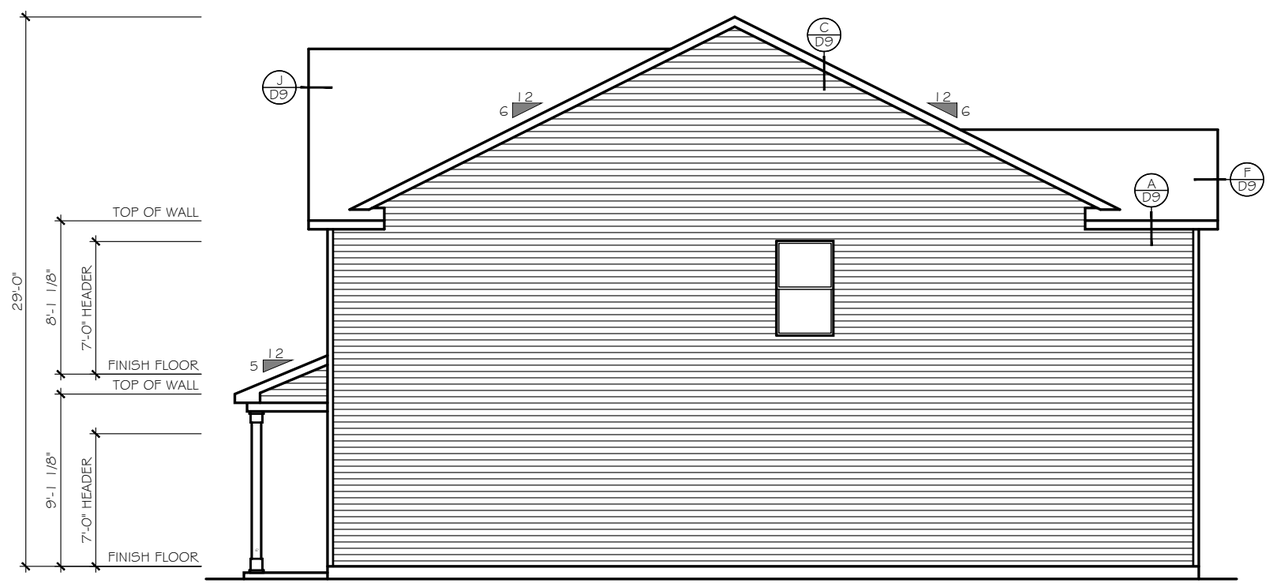


RIGHT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-J1'

TRADITIONAL PLAN 2478



RIGHT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-J1'

CONTEMPORARY PLAN 2475

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ELEVATION 'J'
RIGHT ELEVATION

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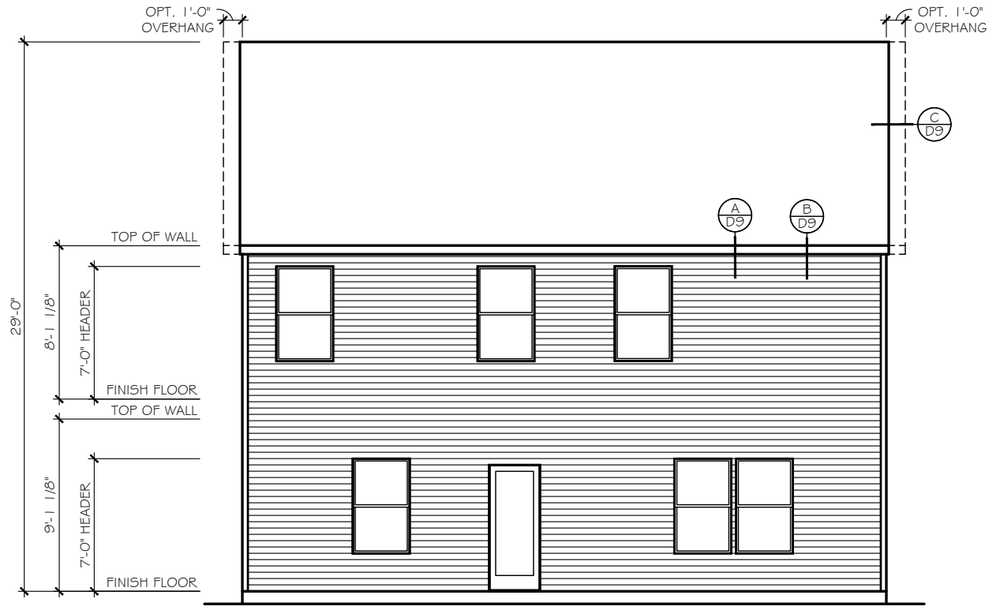
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.23

v. 5.4



REAR ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-J1'

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ELEVATION 'J'
REAR ELEVATION

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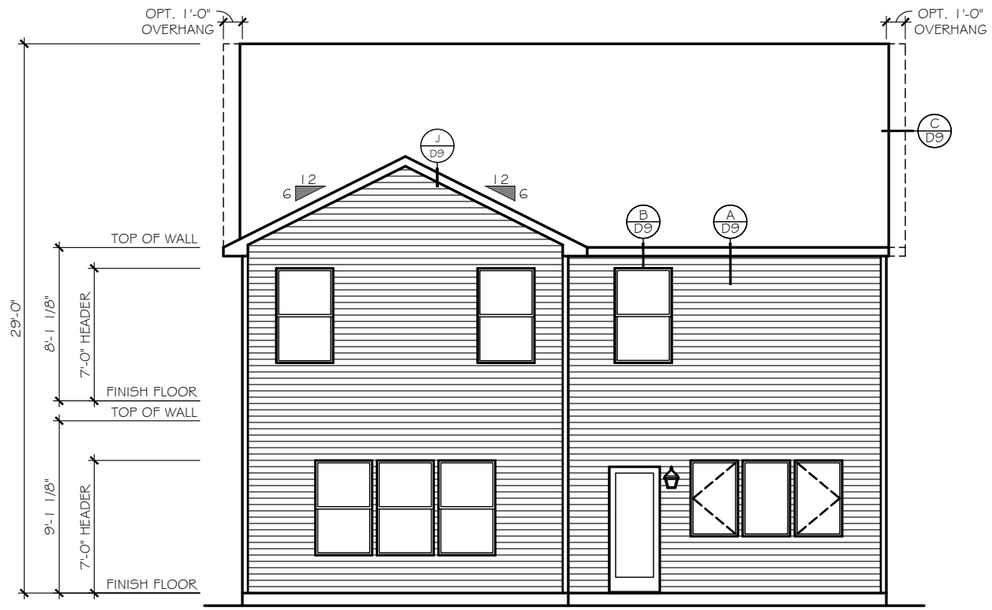
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.24

v. 5.4

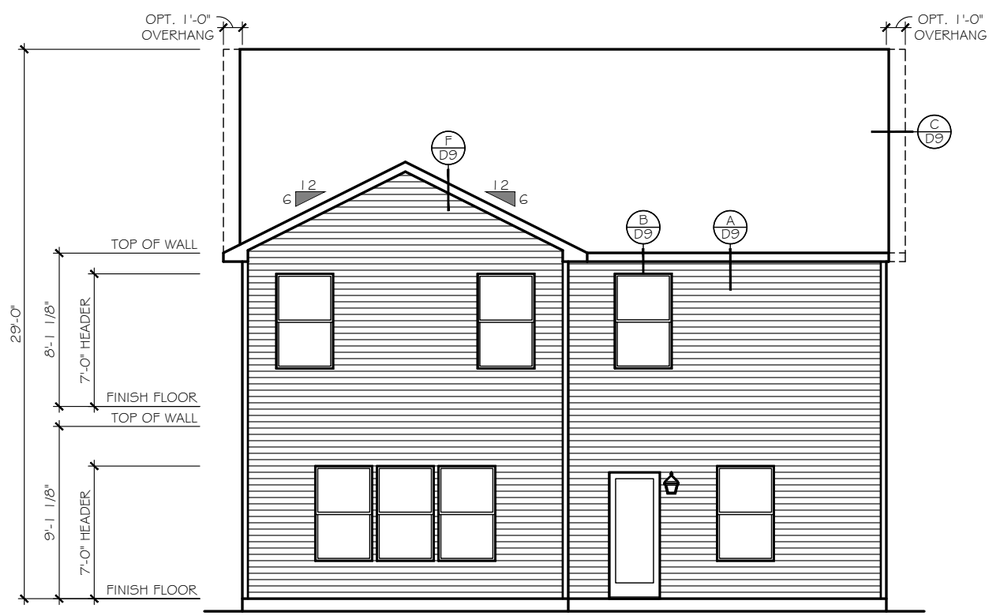


REAR ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-J1'

CONTEMPORARY PLAN 2475



REAR ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-J1'

TRADITIONAL PLAN 2478

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ELEVATION 'J'
REAR ELEVATION

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SCALE: 3/16"= 1'-0"

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SHEET: A4.25

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LEFT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-J1'

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ELEVATION 'J'
LEFT ELEVATION

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DRAWN BY: MLM

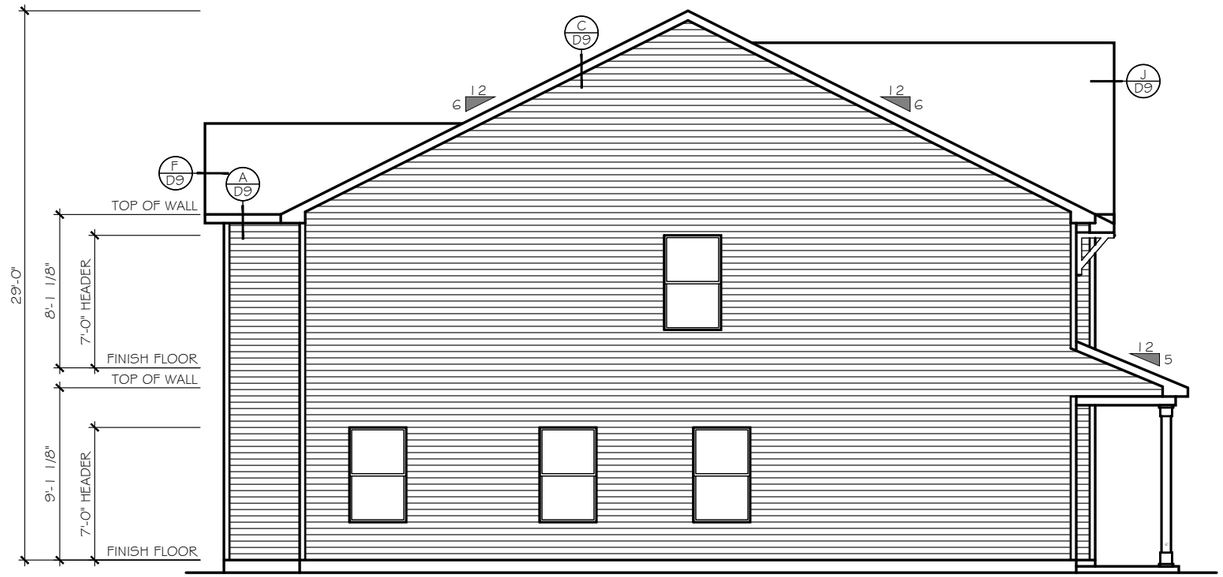
DATE: 06.22.21

SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.26

v. 5.4

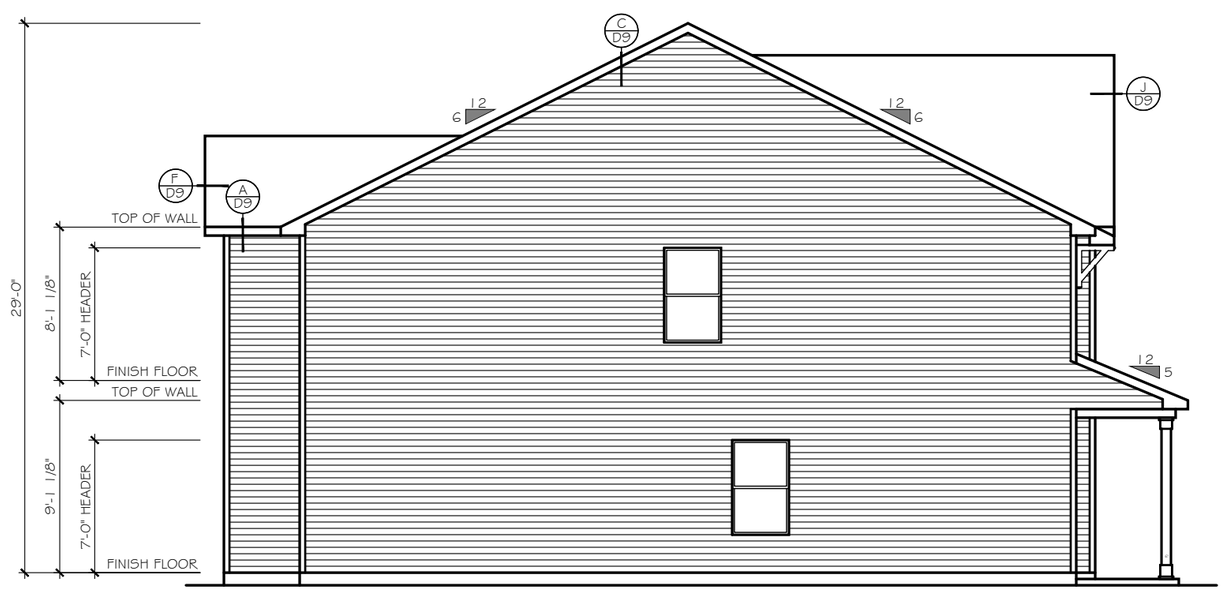


LEFT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-J1'

CONTEMPORARY PLAN 2475



LEFT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-J1'

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ELEVATION 'J'
LEFT ELEVATION

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SCALE: 3/16"= 1'-0"

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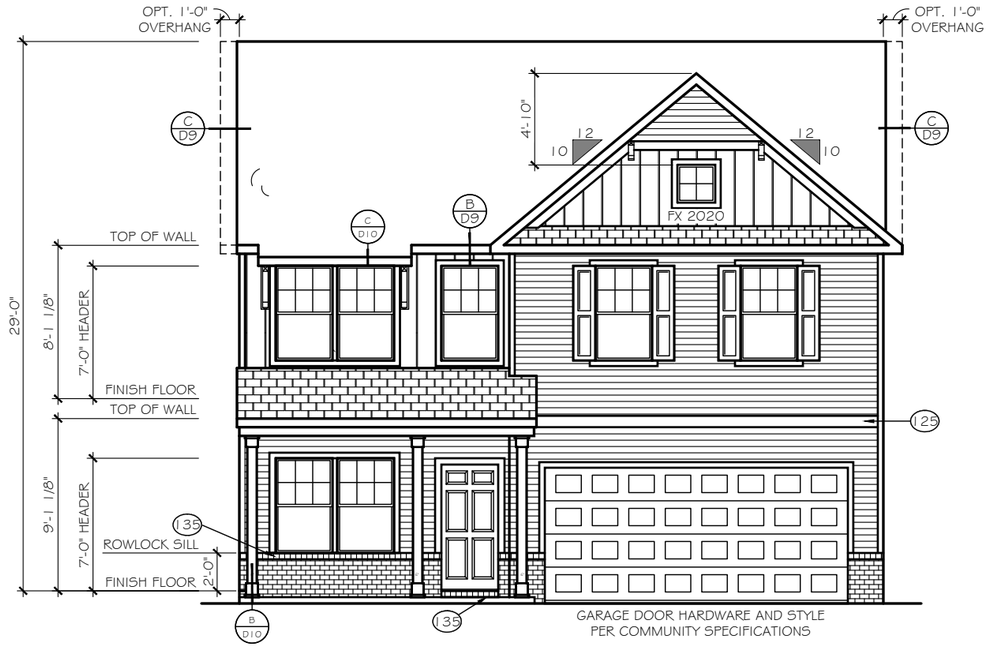
SHEET: A4.27

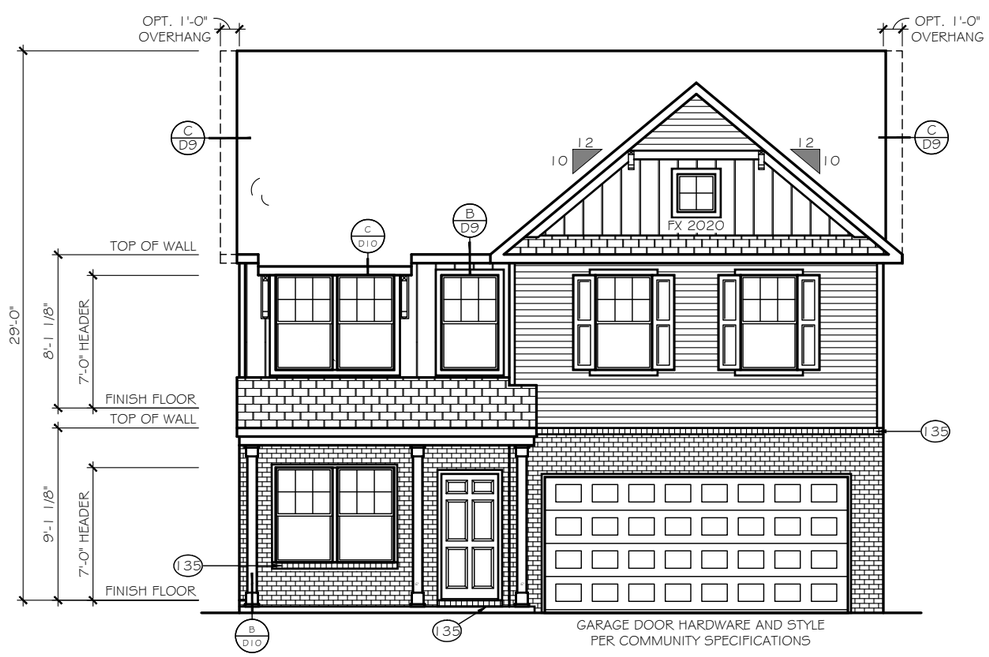
v. 5.4



FRONT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-J2'



FRONT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-J3'

EXTERIOR MATERIAL LEGEND

- B-N-B SIDING
- STONE
- SHAKE SIDING
- METAL ROOF
- HORIZONTAL SIDING
- ROOF SHINGLE
- BRICK
- SCALLOP SIDING

KEY NOTES

- 115 FLASHING
- 117 VINYL SHUTTER
- 120 BRICKMOLD TRIM
- 121 1X4 TRIM BOARD
- 123 1X6 TRIM BOARD
- 125 1X8 TRIM BOARD
- 128 1X10 FRIEZE BOARD
- 131 1-1/2" THICK STONE CAP
- 135 ROWLOCK SILL
- 137 BRICK JACK ARCH
- 139 SOLDIER COURSE
- 141 PRECAST KEYSTONE

1x4 TRIM WHERE SHOWN AT WINDOWS AND DOORS UNLESS OTHERWISE NOTED

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ELEVATION 'J'
FRONT ELEVATION

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SCALE: 3/16"= 1'-0"

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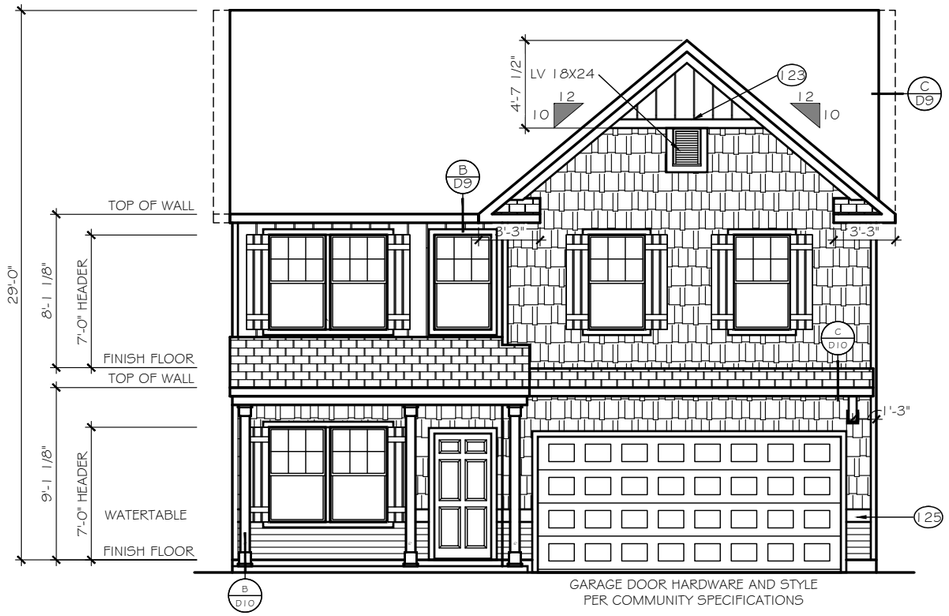
SHEET: A4.28

v. 5.4



FRONT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-K1'

EXTERIOR MATERIAL LEGEND

- B-N-B SIDING
- SHAKE SIDING
- HORIZONTAL SIDING
- BRICK
- STONE
- METAL ROOF
- ROOF SHINGLE
- SCALLOP SIDING

KEY NOTES

- 115 FLASHING
- 117 VINYL SHUTTER
- 120 BRICKMOLD TRIM
- 121 1X4 TRIM BOARD
- 123 1X6 TRIM BOARD
- 125 1X8 TRIM BOARD
- 128 1X10 FRIEZE BOARD
- 131 1-1/2" THICK STONE CAP
- 135 ROWLOCK SILL
- 137 BRICK JACK ARCH
- 139 SOLDIER COURSE
- 141 PRECAST KEYSTONE

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ELEVATION 'K'
FRONT ELEVATION

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SCALE: 3/16"= 1'-0"

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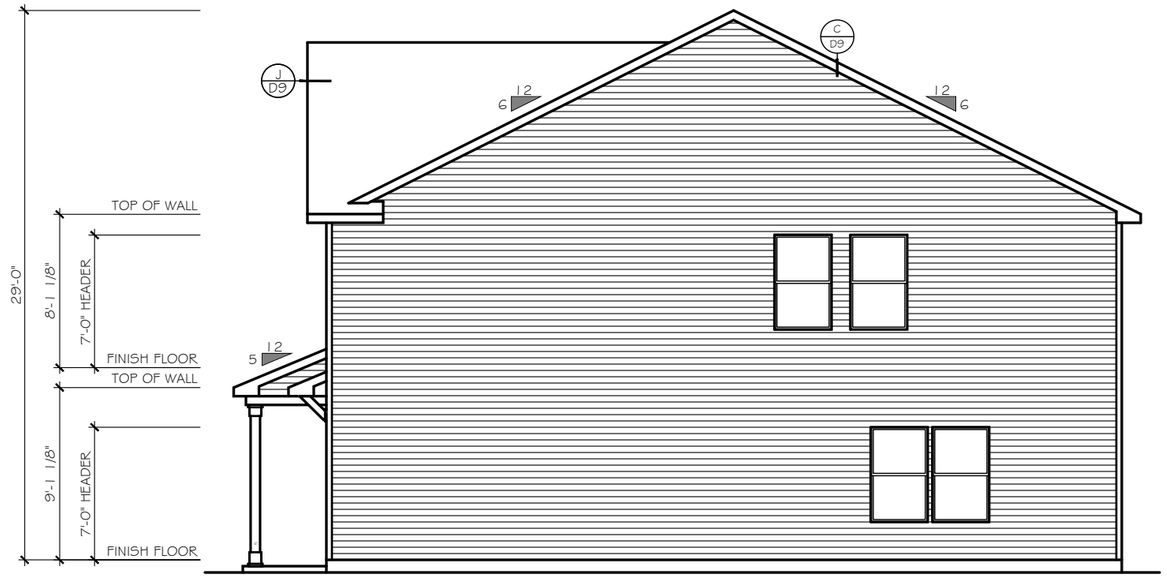
SHEET: A4.29

v. 5.4



RIGHT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-K1'

OPEN PLAN 2470

EXTERIOR MATERIAL LEGEND

- B-N-B SIDING
- SHAKE SIDING
- HORIZONTAL SIDING
- BRICK
- STONE
- METAL ROOF
- ROOF SHINGLE
- SCALLOP SIDING

KEY NOTES

- 115 FLASHING
- 117 VINYL SHUTTER
- 120 BRICKMOLD TRIM
- 121 1X4 TRIM BOARD
- 123 1X6 TRIM BOARD
- 125 1X8 TRIM BOARD
- 128 1X10 FRIEZE BOARD
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- 135 ROWLOCK SILL
- 137 BRICK JACK ARCH
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1x4 TRIM WHERE SHOWN AT WINDOWS AND DOORS UNLESS OTHERWISE NOTED

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ELEVATION 'K'
RIGHT ELEVATION

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SCALE: 3/16"= 1'-0"

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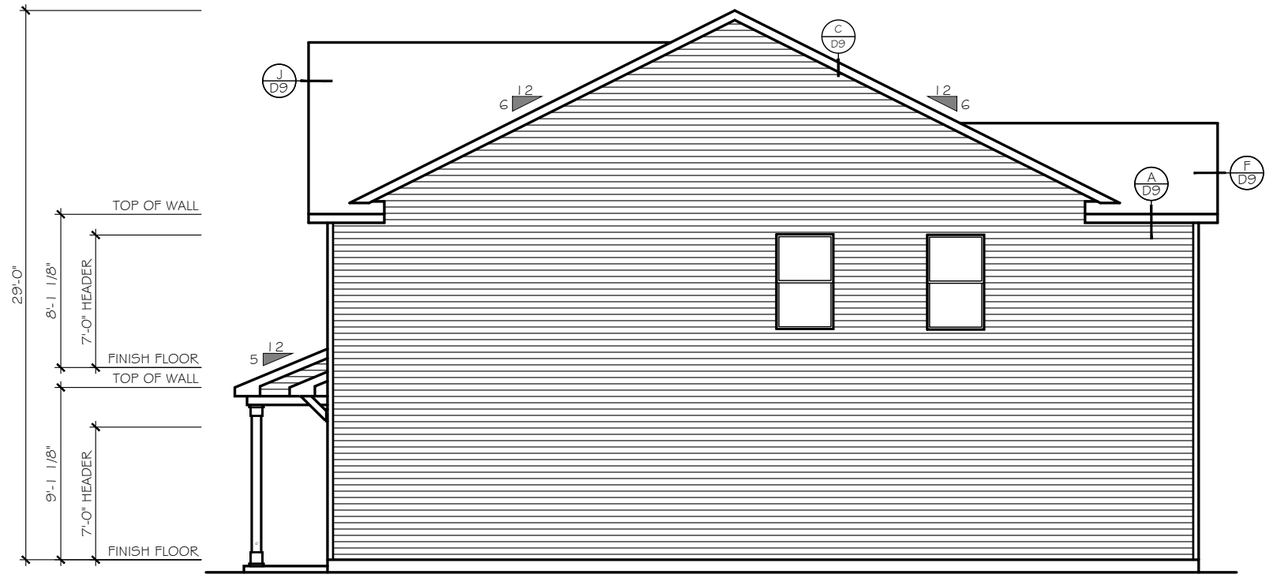
SHEET: A4.30

v. 5.4



RIGHT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-K1'

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CONTEMPORARY 2475

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ELEVATION 'K'
RIGHT ELEVATION

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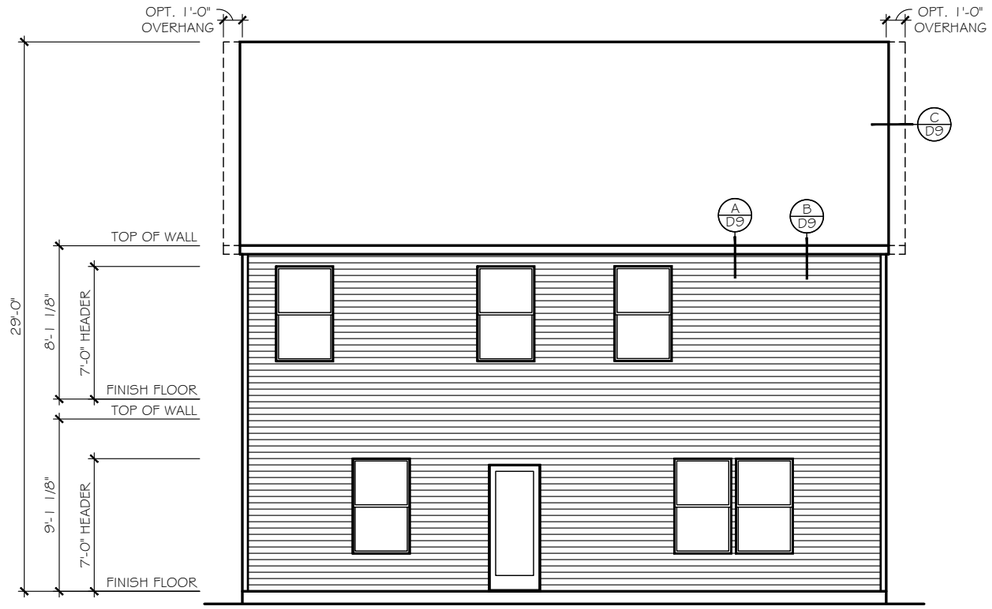
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.31

v. 5.4



REAR ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-K1'

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ELEVATION 'K'
REAR ELEVATION

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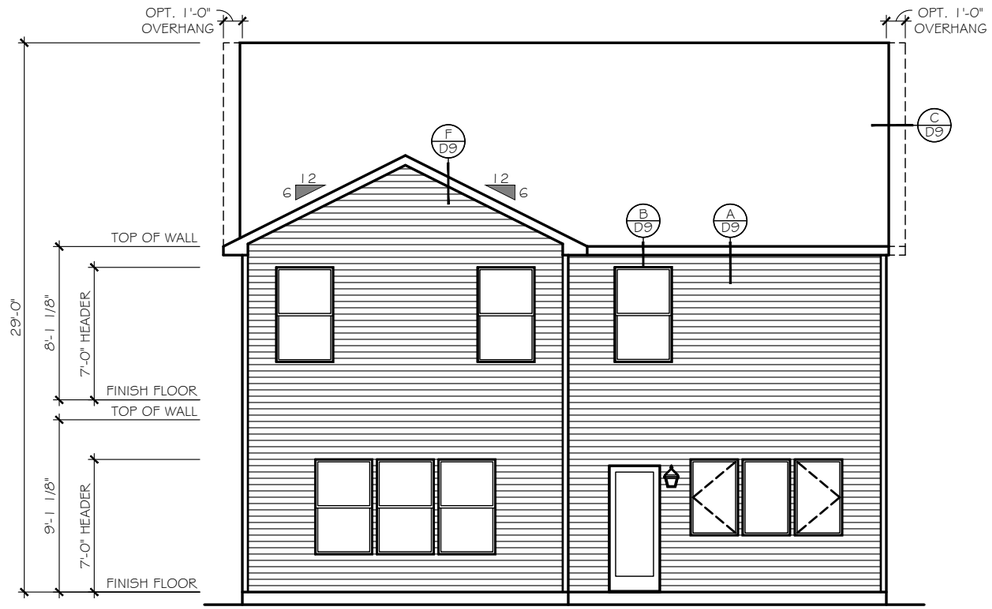
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.32

v. 5.4

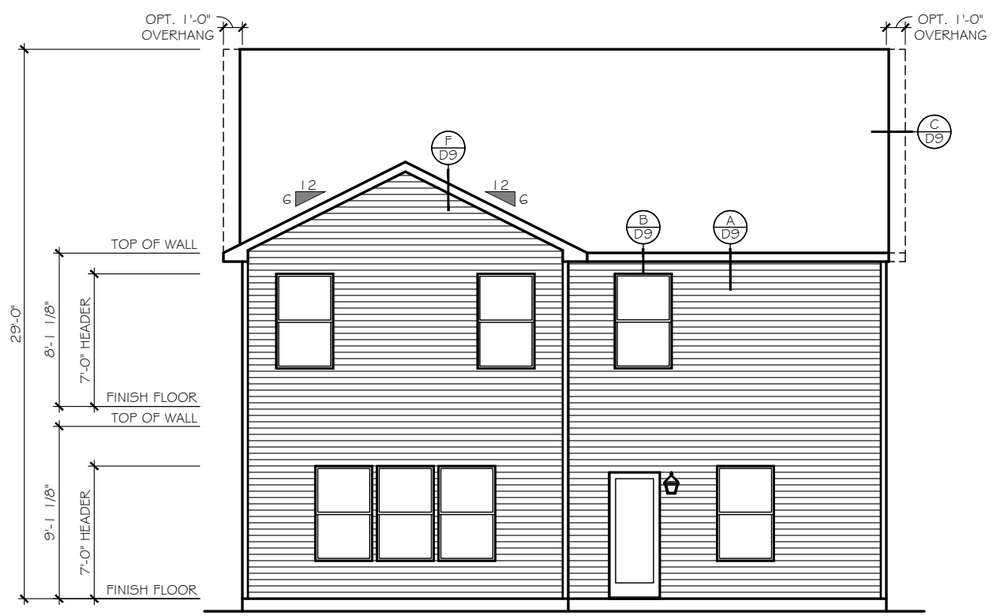


REAR ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-K1'

CONTEMPORARY PLAN 2475



REAR ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-K1'

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ELEVATION 'K'
REAR ELEVATION

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DATE: 06.22.21

SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.33

v. 5.4

LEFT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-K1'

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ELEVATION 'K'
LEFT ELEVATION

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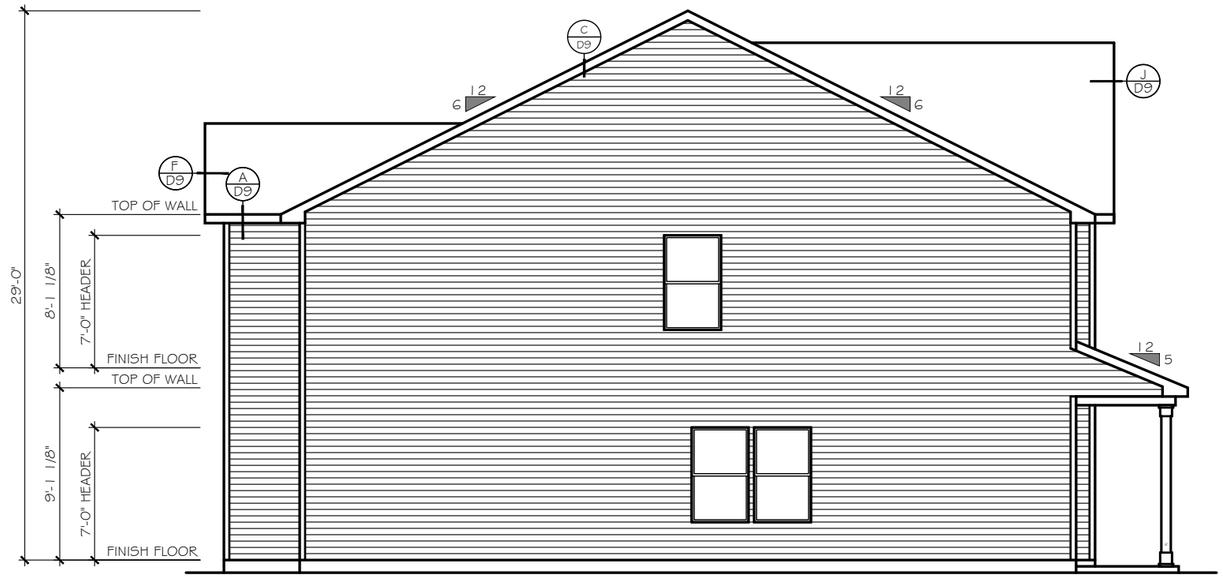
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.34

v. 5.4

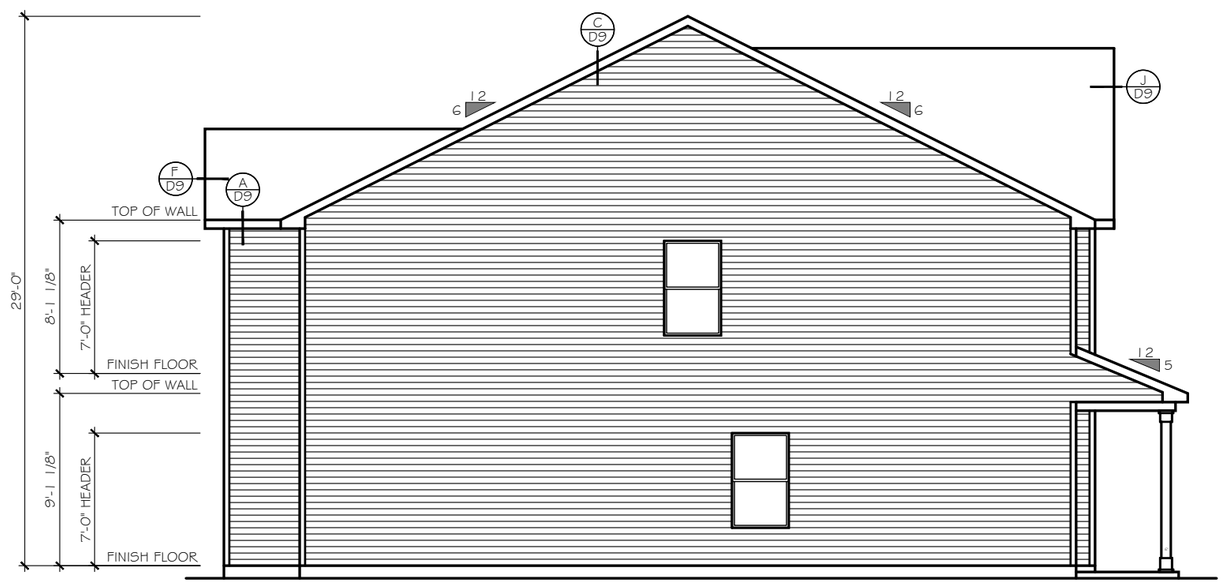


LEFT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-K1'

CONTEMPORARY PLAN 2475



LEFT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-K1'

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ELEVATION 'K'
LEFT ELEVATION

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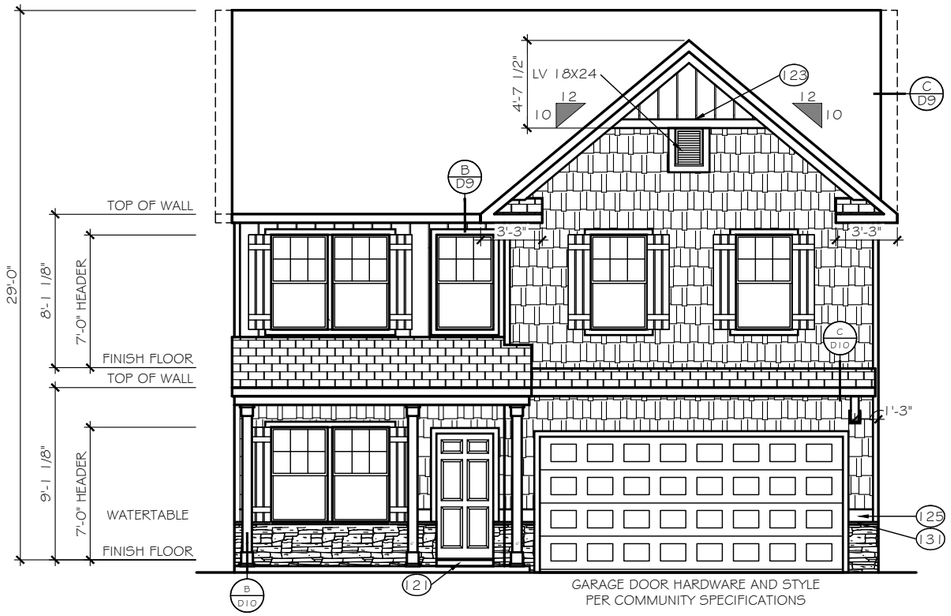
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.35

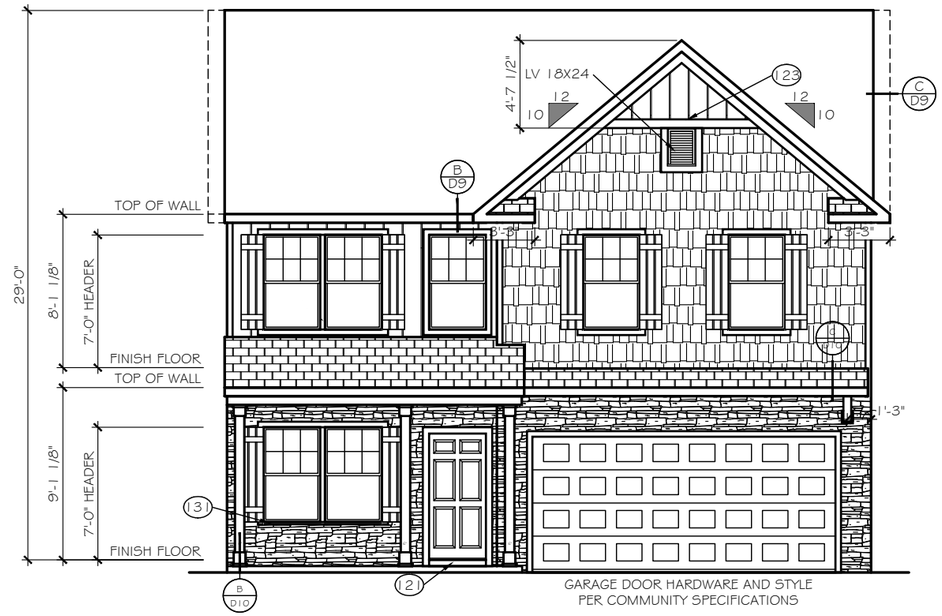
v. 5.4



FRONT ELEVATION

ELEVATION 'E-K2'

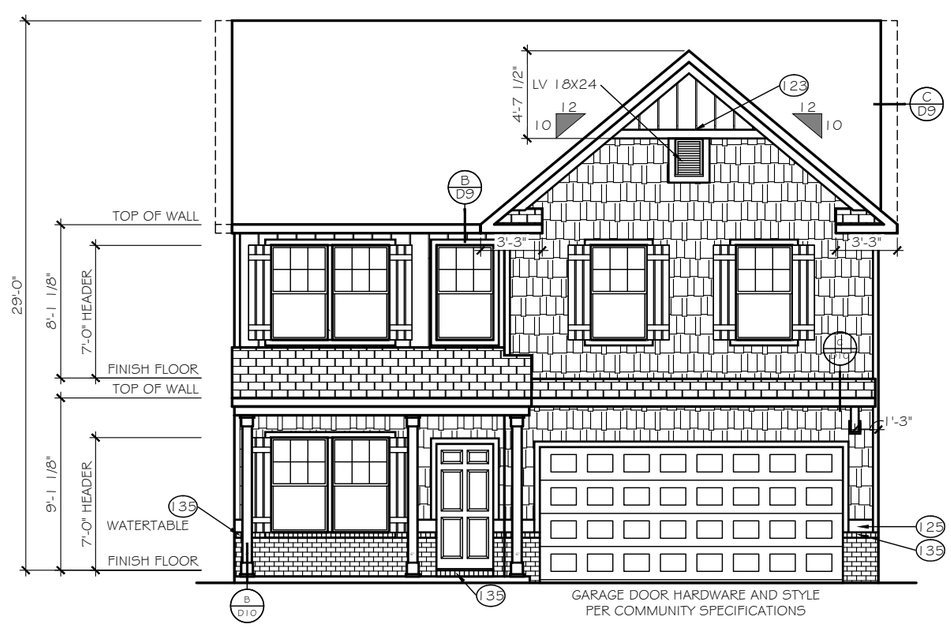
SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-K3'

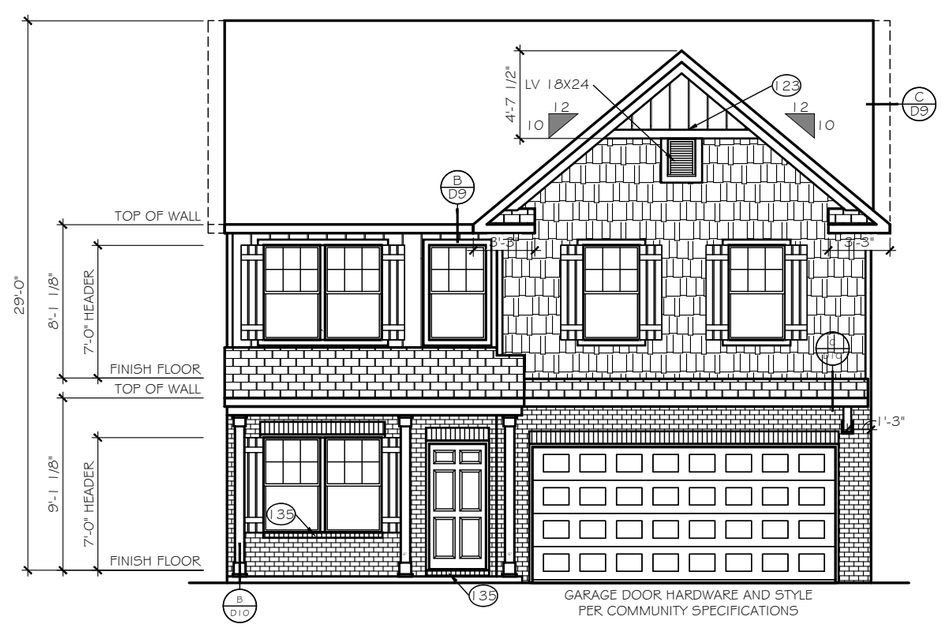
SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-K4'

SCALE: 1/8" = 1'-0"



FRONT ELEVATION

ELEVATION 'E-K5'

SCALE: 1/8" = 1'-0"

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ELEVATION 'K'
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SCALE: 3/16"= 1'-0"

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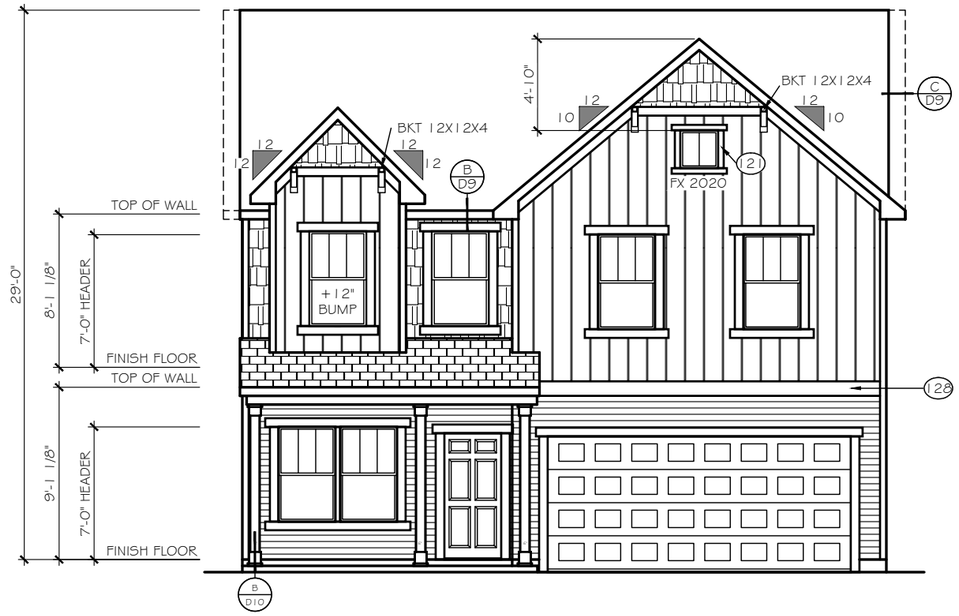
SHEET: A4.36

v. 5.4



FRONT ELEVATION

ELEVATION 'E-L1'

SCALE: 1/8" = 1'-0"

EXTERIOR MATERIAL LEGEND

- B-N-B SIDING
- SHAKE SIDING
- HORIZONTAL SIDING
- BRICK
- STONE
- METAL ROOF
- ROOF SHINGLE
- SCALLOP SIDING

KEY NOTES

- 115 FLASHING
- 117 VINYL SHUTTER
- 120 BRICKMOLD TRIM
- 121 1X4 TRIM BOARD
- 123 1X6 TRIM BOARD
- 125 1X8 TRIM BOARD
- 128 1X10 FRIEZE BOARD
- 131 1-1/2" THICK STONE CAP
- 135 ROWLOCK SILL
- 137 BRICK JACK ARCH
- 139 SOLDIER COURSE
- 141 PRECAST KEYSTONE

1x4 TRIM WHERE SHOWN AT WINDOWS AND DOORS UNLESS OTHERWISE NOTED

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ELEVATION 'L'
FRONT ELEVATION

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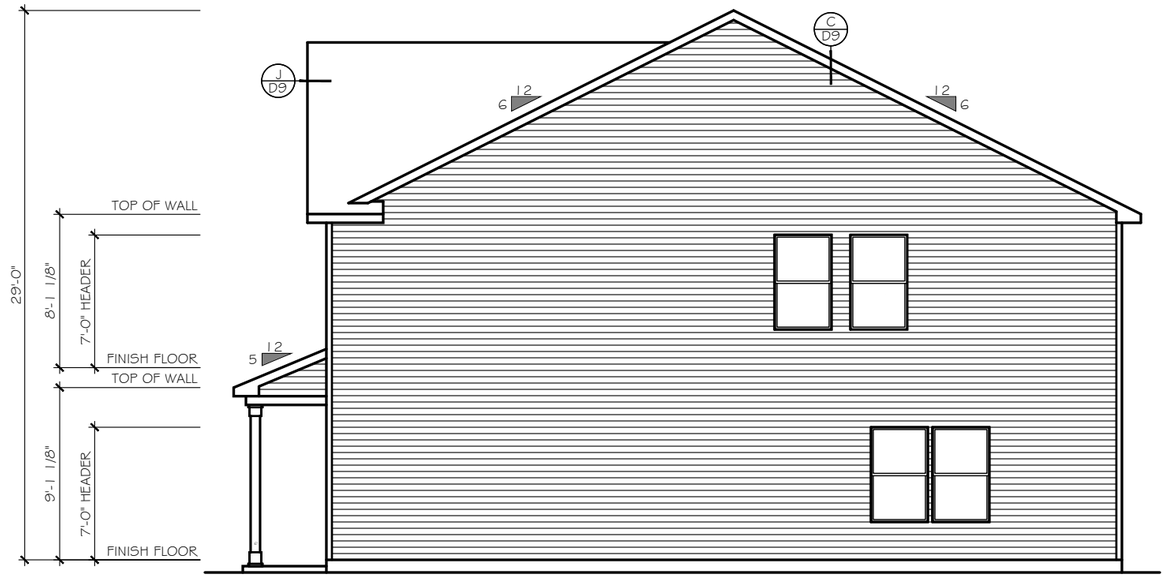
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.37

v. 5.4



RIGHT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-L1'

OPEN PLAN 2470

EXTERIOR MATERIAL LEGEND

- B-N-B SIDING
- SHAKE SIDING
- HORIZONTAL SIDING
- BRICK
- STONE
- METAL ROOF
- ROOF SHINGLE
- SCALLOP SIDING

KEY NOTES

- 115 FLASHING
- 117 VINYL SHUTTER
- 120 BRICKMOLD TRIM
- 121 1X4 TRIM BOARD
- 123 1X6 TRIM BOARD
- 125 1X8 TRIM BOARD
- 128 1X10 FRIEZE BOARD
- 131 1-1/2" THICK STONE CAP
- 135 ROWLOCK SILL
- 137 BRICK JACK ARCH
- 139 SOLDIER COURSE
- 141 PRECAST KEYSTONE

1x4 TRIM WHERE SHOWN AT WINDOWS AND DOORS UNLESS OTHERWISE NOTED

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ELEVATION 'L'
RIGHT ELEVATION

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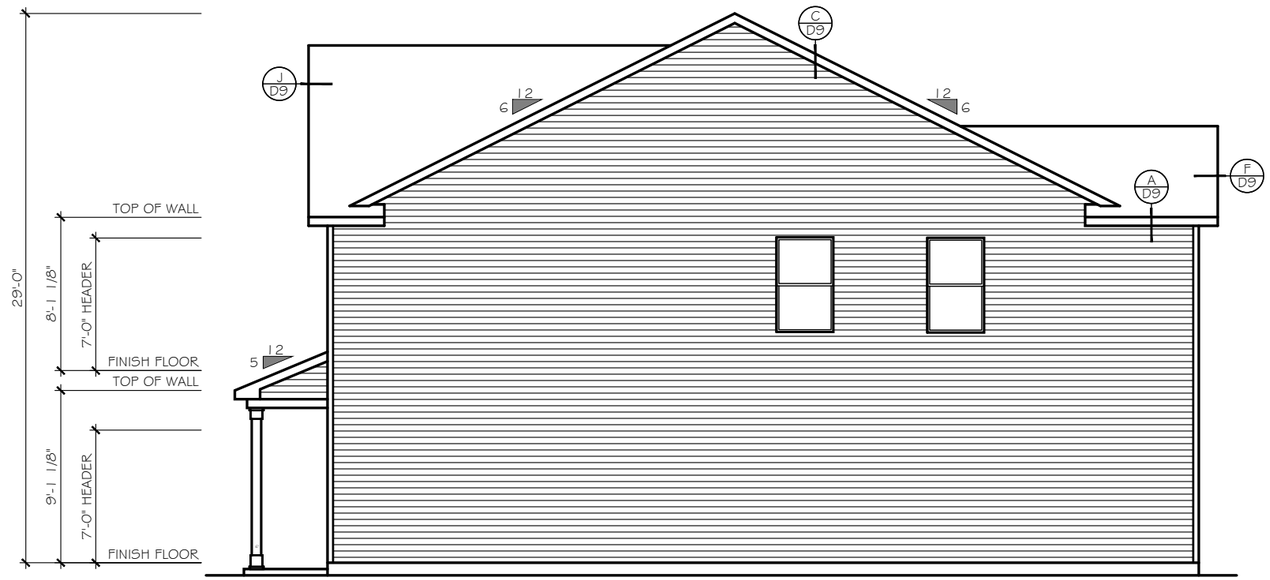
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.38

v. 5.4



RIGHT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-L1'

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CONTEMPORARY 2475

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ELEVATION 'L'
RIGHT ELEVATION

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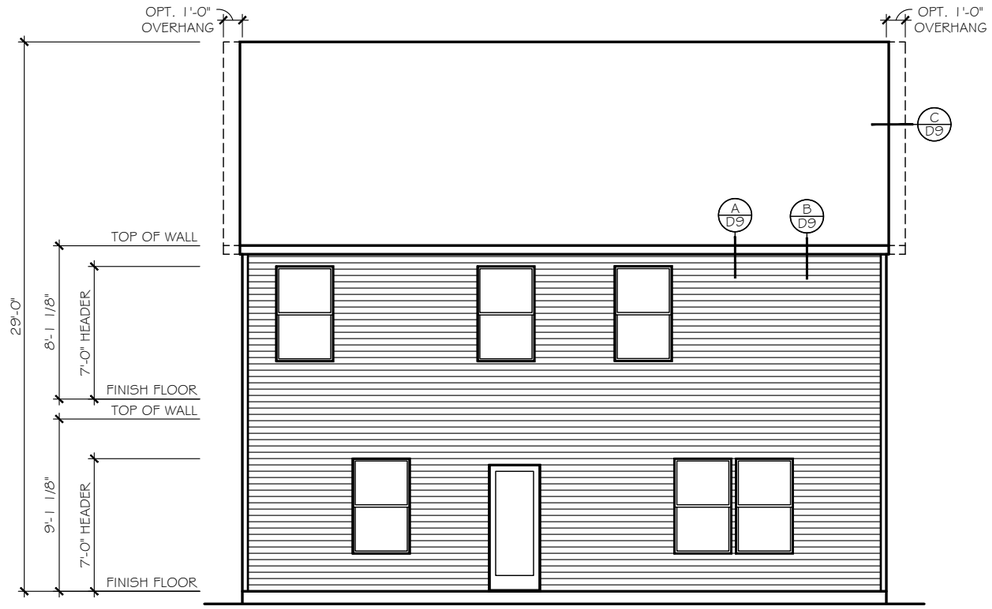
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.39

v. 5.4



REAR ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-L1'
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ELEVATION 'L'
REAR ELEVATION

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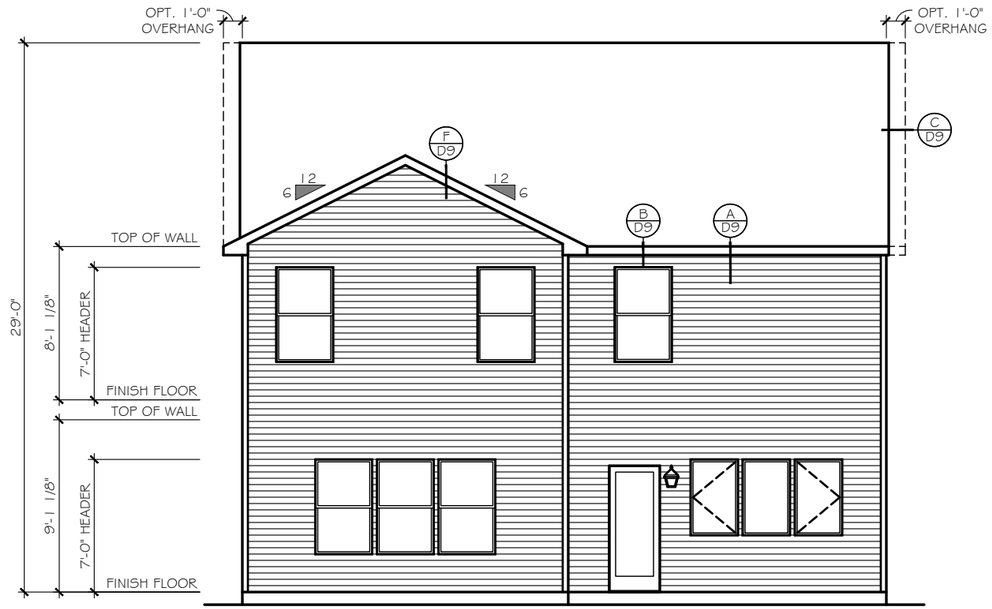
SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.40

v. 5.4

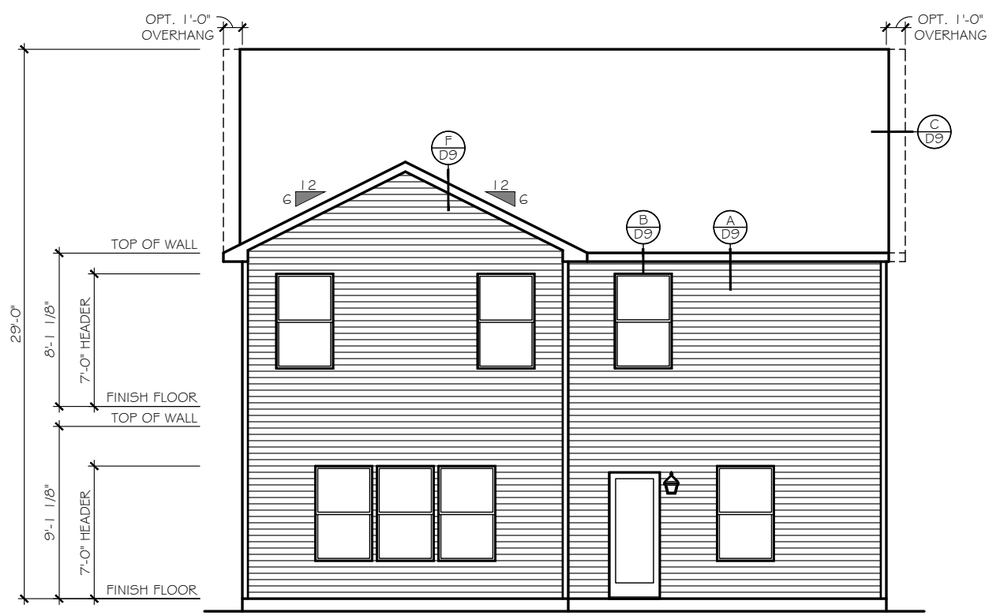


REAR ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-L1'

CONTEMPORARY PLAN 2475



REAR ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-L1'

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Monroe, North Carolina 28110
Phone: 704-238-1229 Fax: 704-238-1150

ELEVATION 'L'
REAR ELEVATION

THE LENOX - OPEN

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DRAWN BY: MLM

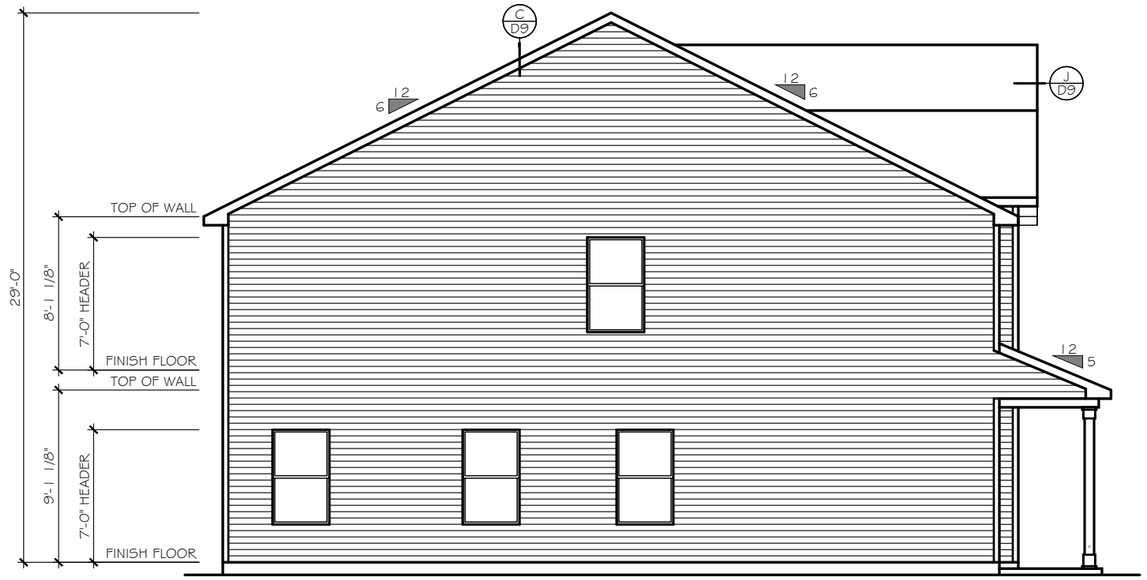
DATE: 06.22.21

SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.41

v. 5.4



LEFT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-L1'

OPEN PLAN 2470

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ELEVATION 'L'
LEFT ELEVATION

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SCALE: 3/16"= 1'-0"

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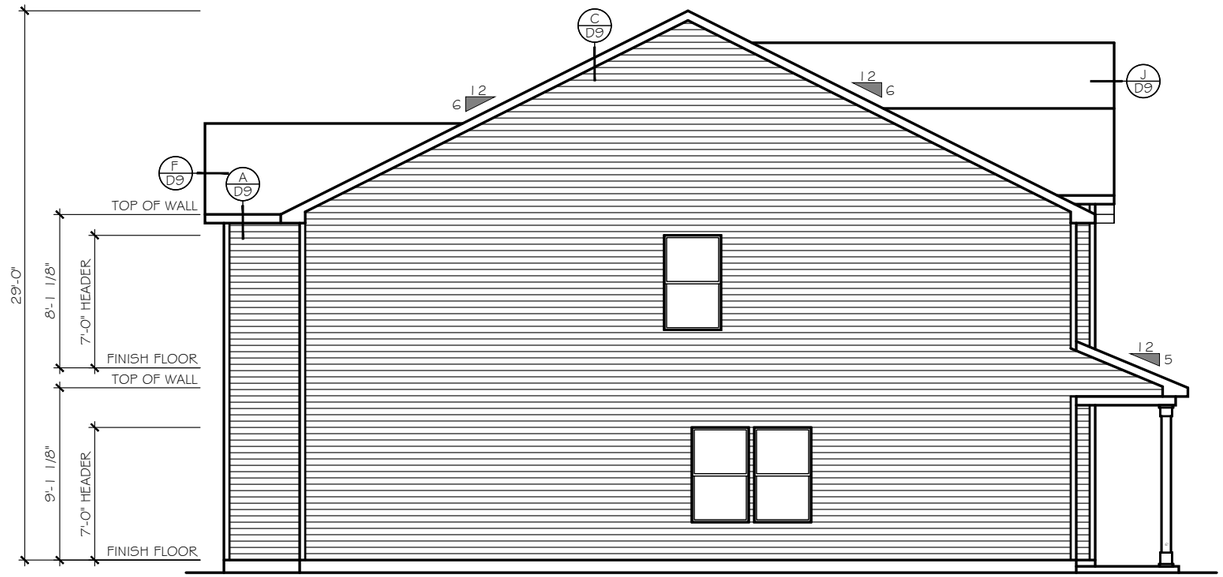
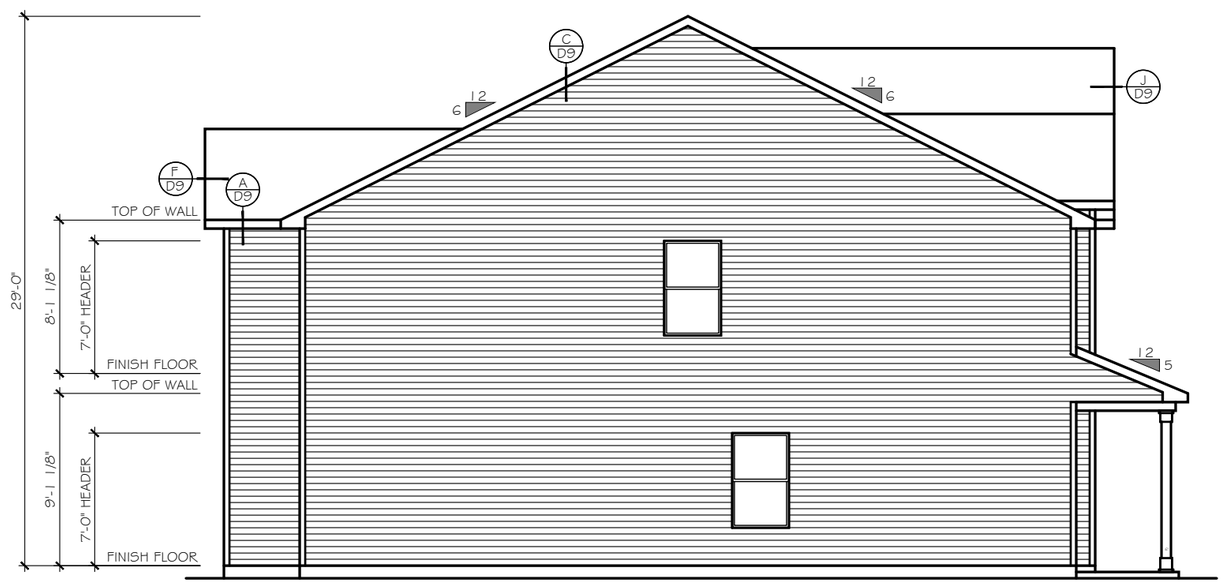


LEFT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-L1'

CONTEMPORARY PLAN 2475



LEFT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-L1'

TRADITIONAL PLAN 2478

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ELEVATION 'L'
LEFT ELEVATION

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CHECKED BY: RS / BS

SHEET: A4.43

v. 5.4

FRONT ELEVATION

ELEVATION 'E-L2'

SCALE: 1/8" = 1'-0"

EXTERIOR MATERIAL LEGEND

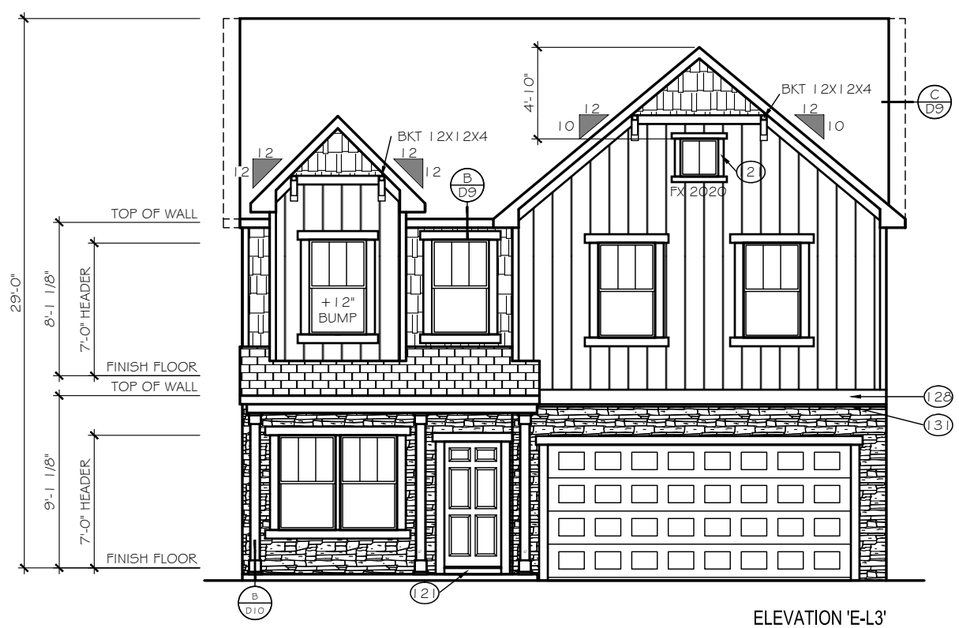
- B-N-B SIDING
- SHAKE SIDING
- HORIZONTAL SIDING
- BRICK
- STONE
- METAL ROOF
- ROOF SHINGLE
- SCALLOP SIDING

KEY NOTES

- 115 FLASHING
- 117 VINYL SHUTTER
- 120 BRICKMOLD TRIM
- 121 1X4 TRIM BOARD
- 123 1X6 TRIM BOARD
- 125 1X8 TRIM BOARD
- 128 1X10 FRIEZE BOARD
- 131 1-1/2" THICK STONE CAP
- 135 ROWLOCK SILL
- 137 BRICK JACK ARCH
- 139 SOLDIER COURSE
- 141 PRECAST KEYSTONE

1x4 TRIM WHERE SHOWN AT WINDOWS AND DOORS UNLESS OTHERWISE NOTED

SEE ROOF FRAMING PLANS FOR OVERHANG DIMENSIONS AND DORMER LOCATIONS



FRONT ELEVATION

ELEVATION 'E-L3'

SCALE: 1/8" = 1'-0"

EXTERIOR MATERIAL LEGEND

- B-N-B SIDING
- SHAKE SIDING
- HORIZONTAL SIDING
- BRICK
- STONE
- METAL ROOF
- ROOF SHINGLE
- SCALLOP SIDING

KEY NOTES

- 115 FLASHING
- 117 VINYL SHUTTER
- 120 BRICKMOLD TRIM
- 121 1X4 TRIM BOARD
- 123 1X6 TRIM BOARD
- 125 1X8 TRIM BOARD
- 128 1X10 FRIEZE BOARD
- 131 1-1/2" THICK STONE CAP
- 135 ROWLOCK SILL
- 137 BRICK JACK ARCH
- 139 SOLDIER COURSE
- 141 PRECAST KEYSTONE

1x4 TRIM WHERE SHOWN AT WINDOWS AND DOORS UNLESS OTHERWISE NOTED

SEE ROOF FRAMING PLANS FOR OVERHANG DIMENSIONS AND DORMER LOCATIONS

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FRONT ELEVATION

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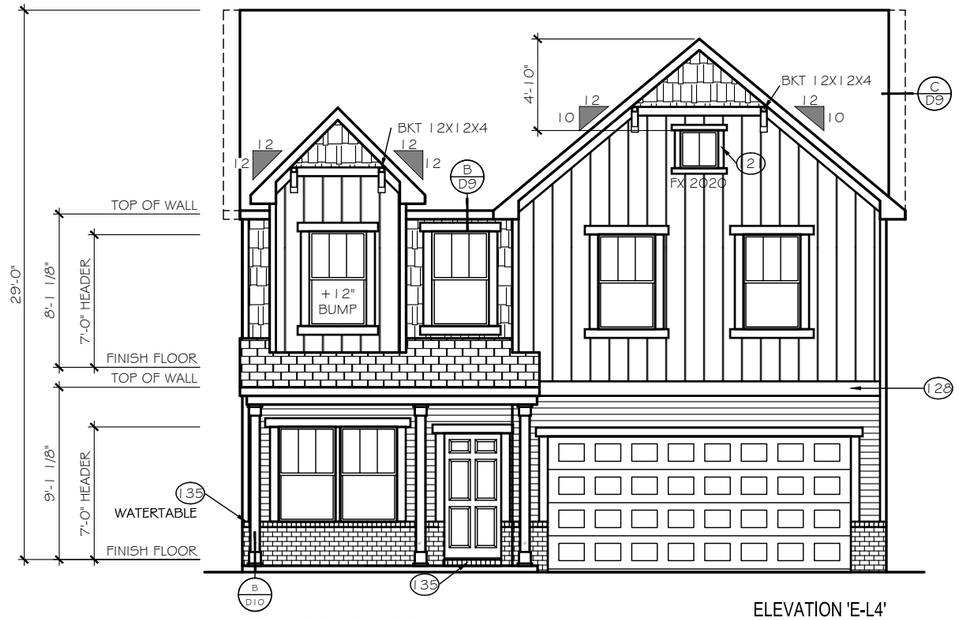

FRONT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-L4'

EXTERIOR MATERIAL LEGEND

- B-N-B SIDING
- STONE
- SHAKE SIDING
- METAL ROOF
- HORIZONTAL SIDING
- ROOF SHINGLE
- BRICK
- SCALLOP SIDING

KEY NOTES

- 115 FLASHING
- 117 VINYL SHUTTER
- 120 BRICKMOLD TRIM
- 121 1X4 TRIM BOARD
- 123 1X6 TRIM BOARD
- 125 1X8 TRIM BOARD
- 128 1X10 FRIEZE BOARD
- 131 1-1/2" THICK STONE CAP
- 135 ROWLOCK SILL
- 137 BRICK JACK ARCH
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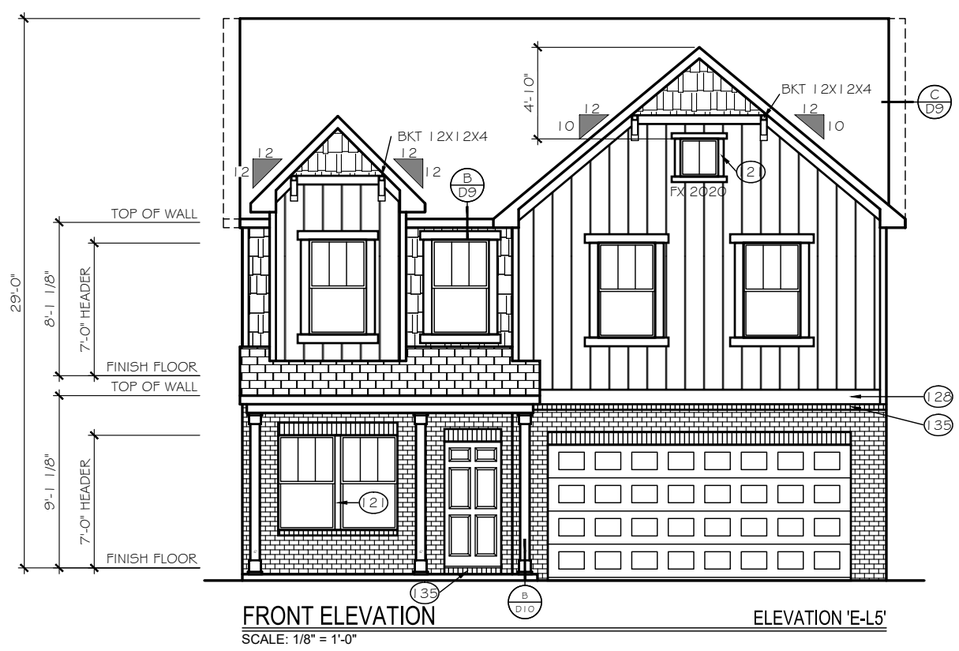
- 141 PRECAST KEYSTONE

1x4 TRIM WHERE SHOWN AT WINDOWS AND DOORS UNLESS OTHERWISE NOTED

SEE ROOF FRAMING PLANS FOR OVERHANG DIMENSIONS AND DORMER LOCATIONS



FRONT ELEVATION

SCALE: 1/8" = 1'-0"

ELEVATION 'E-L5'

EXTERIOR MATERIAL LEGEND

- B-N-B SIDING
- STONE
- SHAKE SIDING
- METAL ROOF
- HORIZONTAL SIDING
- ROOF SHINGLE
- BRICK
- SCALLOP SIDING

KEY NOTES

- 115 FLASHING
- 117 VINYL SHUTTER
- 120 BRICKMOLD TRIM
- 121 1X4 TRIM BOARD
- 123 1X6 TRIM BOARD
- 125 1X8 TRIM BOARD
- 128 1X10 FRIEZE BOARD
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- 135 ROWLOCK SILL
- 137 BRICK JACK ARCH
- 139 SOLDIER COURSE
- 141 PRECAST KEYSTONE

1x4 TRIM WHERE SHOWN AT WINDOWS AND DOORS UNLESS OTHERWISE NOTED

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SCALE: 3/16"= 1'-0"

CHECKED BY: RS / BS

SHEET: A4.45

v. 5.4

limitation, the North Carolina Department of Transportation and the North Carolina Department of Environmental Quality.

APPLICANT INFORMATION

Applicant Ridge Road Partners, LLC *Applicant's Phone #* 980-722-1010

Applicant's Address PO Box 1609

Monroe NC 2811

Applicant email address jerry@fitzcomm.net

PROPERTY INFORMATION

Property Owner's Name Hillcrest Farm Estates, LLC

Location of Property Zoo Parkway *Property Size (ac. or s.f.)* 102.76

Randolph County Property Identification Number (PIN#) 7760008593

Current Zoning District R10, R15,R40 *Requested Zoning District* R7.5 CZ

Date Property Title Acquired _____ *Deed Book* 2214 *Page* 1281

Subdivision _____ *Section* _____ *Lot #* _____

Plat Book _____ *Page* _____

CONDITIONAL ZONING DISTRICT INFORMATION (Attach additional sheets if necessary)

1. Application is hereby made to the City of Asheboro for a Conditional Zoning District for the following purpose:

To construct 400 new residences to help supply the growing residential needs of this area.

2. In what manner will the proposed amendment carry out the intent of the Land Development Plan?

Residential growth using the clustering of homes in area most suitable for development.

This development balances the need for residential growth in areas that are supported by the NC zoo and city sportsplex

For questions (3) and (4), if either of these questions apply, please state a reason. If you believe these do not apply, please check "does not apply".

3. Are there alleged errors in this Ordinance that would be corrected by the proposed amendment? If so, give a detailed explanation of such error and detailed reasons how the proposed amendment will correct the errors.

Does not apply ☒

4. What are the changed or changing conditions, if any, in the jurisdiction of the City of Asheboro generally, which would make the proposed amendment reasonably necessary to the promotion of the public health, safety, and general welfare?

Coming growth from nearby industrial facilities.

Promoted neighborhood setting with nearby sportsplex and NC Zoo.

Does not apply ☐

5. Are there any other circumstances, factors, or reasons that the applicant offers in support of the proposed amendment?

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APPLICATION SIGNATURES

It is understood by the undersigned that while this application will be carefully reviewed and considered, the burden of proving the need for a Conditional Zoning District rests with the applicant.

No application for a Conditional Zoning District will be advertised for public hearing until the Planning and Zoning Department has received all required materials. If all required materials are not received prior to the specified deadlines, hearings for the case may be delayed.

Per Section 4.05 of the zoning ordinance, it is intended that property will be reclassified to a Conditional Zoning District only in the event of firm plans to develop the property. Accordingly, subject to any specific durational limits imposed by the ordinance applying conditional zoning to the Zoning Lot, if no action has been taken to obtain a Zoning Compliance Permit in conformance with the conditional zoning ordinance within 36 months of the City Council's approval of conditional zoning for the Zoning Lot, the Community Development Director or his or her designee shall initiate appropriate action to rezone the Zoning Lot to a general zoning classification that is consistent with the adopted comprehensive plan.

Applicant Signature

Drew Boggs

Printed Name of Authorized Signatory (if different from Applicant)

Drew Boggs

Position/Relationship of Authorized Signatory to Applicant

Member-Manager

Rec'd 8/11/23
TMTTAL

HILLCREST FARM ESTATES, LLC BY:

Owner Signature (if different than Applicant)

DocuSigned by:
Charles C. Chandler
DocuSigned by:
Robert G. Chandler
18649D57AB514FB...

EACH A MEMBER AND MANAGER

Owner Address

Telephone Number

703-628-9366

Printed Name of Authorized Signatory (if different from Owner)

Position/Relationship of Authorized Signatory to Owner

Legal Description

Application for Conditional Zoning District

A 92.76 +/- acre portion of the 102.76 +/- acre tract, belonging to Hillcrest Farm Estates, LLC located between Zoo parkway and Newbern Ave. An eastern portion of the property runs along Zoo parkway between Rockliff Terrace and Holly Drive. A North Western portion of the property is located between 294 Newbern Ave (Teachey School) and 360 Newbern Ave. The parcel contains 102.76 acres +/- more specifically identified by Randolph County PIN 7760008593, Deed Book 2214 PG 1281. Additionally, a 1.51 +/- acre tract abutting Newborn Ave beside Teachy School and farther identified by Randolph County PIN 7760013008, Deed Book 2251 PG 896 is included in the land description.

REGULAR MEETING
ASHEBORO CITY COUNCIL
CITY COUNCIL CHAMBER, ASHEBORO CITY HALL
THURSDAY, DECEMBER 7, 2023
7:00 P.M.

This being the time and place for a regular meeting of the Asheboro City Council, a meeting was held with the following elected officials and city management team members present:

David H. Smith	) – Mayor Presiding
Clark R. Bell	)
Edward J. Burks	)
Kelly L. Heath	)
William N. McCaskill	) – Council Members Present
Walker B. Moffitt	)
Jane H. Redding	)
Charles A. Swiers	)

John N. Ogburn, III, City Manager
Robert L. Brown, Jr., Assistant Chief of Police
Timothy E. Cockman, Deputy Fire Chief
Holly H. Doerr, CMC, NCCMC, City Clerk/Paralegal
John L. Evans, Assistant Community Development Director
N. Byron Hill, Police Captain
Michael L. Leonard, PE, City Engineer
Deborah P. Reaves, Finance Director
Michael D. Rhoney, PE, Water Resources Director
Jeffrey C. Sugg, City Attorney
Willie Summers, Fire Chief
Charles D. Wagner, Police Captain

I. Pre-Organizational Phase of the Meeting

1. Call to Order

A quorum thus being present, Mayor Smith called the meeting to order for the transaction of business, and business was transacted as follows.

2. Moment of Silent Prayer and Pledge of Allegiance

After a moment of silence was observed in order to allow for private prayer and meditation, Mayor Smith asked everyone to stand and recite the pledge of allegiance.

3. Public Comment Period

Mayor Smith opened the floor for comments from the public, and none were offered.

Mayor Smith closed the public comment period.

4. Public Hearing for Land Use Case No. RZ-23-14: An application to rezone property located along the west side of Zoo Parkway and the south side of Newbern Avenue from R40, R15, and R10 zoning to R7.5 (CZ) zoning for a residential planned unit development.

Mayor Smith opened the above-described legislative hearing for Case No. RZ-23-14. Assistant Community Development Director John Evans presented a written request

from the applicant to continue the legislative hearing to the council's regular January 2024 meeting that is scheduled for January 11, 2024.

Council Member Bell moved, and Council Member Heath seconded the motion to continue the above-described legislative hearing to the council's regular meeting in January, 2024. Council Members Bell, Burks, Heath, McCaskill, Moffitt, Redding, and Swiers voted aye. There were no dissenting votes.

5. Annexation Petitions

(a) Crestview Church Road

This annexation petition was withdrawn by petitioner J-MAC Properties, LLC

(b) Public Hearing – McMasters Street Tracts of Land

Mayor Smith opened the public hearing on the question of the annexation petition submitted by Habitat for Humanity of Randolph County, N.C., Inc. requesting the annexation into the Asheboro city limits of land owned by the nonprofit corporation along the south side of McMasters Street. As part of the public hearing, City Engineer Michael Leonard, PE presented the staff's analysis of the annexation petition. Mayor Smith then invited testimony from the public, but none was offered.

In the absence of any public input, Mayor Smith transitioned to the deliberative phase of the hearing. Council Member Bell moved, and Council Member Burks seconded the motion, to approve/adopt the following annexation ordinance by reference. Council Members Bell, Burks, Heath, McCaskill, Moffitt, Redding, and Swiers voted aye. There were no dissenting votes.

ORDINANCE NO. 73 ORD 12-23

CITY COUNCIL OF THE CITY OF ASHEBORO, NORTH CAROLINA

AN ORDINANCE EXTENDING THE ASHEBORO CITY LIMITS BY ANNEXING APPROXIMATELY 1.380 ACRES OF LAND OWNED BY HABITAT FOR HUMANITY OF RANDOLPH COUNTY, N.C., INC. ALONG THE SOUTH SIDE OF MCMASTERS STREET AND NOT CONTIGUOUS WITH THE EXISTING PRIMARY CITY LIMITS

WHEREAS, in accordance with Section 160A-58.1 of the North Carolina General Statutes, Habitat for Humanity of Randolph County, N.C., Inc., a North Carolina nonprofit corporation, has submitted a petition requesting the annexation into Asheboro of approximately 1.380 acres of land owned by the petitioner along the south side of McMasters Street; and

WHEREAS, the territory proposed for annexation is more specifically described by metes and bounds in Section 1 of this Ordinance; and

WHEREAS, on November 8, 2023, by means of a duly adopted resolution (Resolution Number 44 RES 11-23), the Asheboro City Council directed the city clerk to investigate the sufficiency of the annexation petition submitted by Habitat for Humanity of Randolph County, N.C., Inc., and the city clerk has in fact certified the sufficiency of the annexation petition submitted by the nonprofit corporation; and

WHEREAS, pursuant to Asheboro City Council Resolution Number 45 RES 11-23, a legal notice was published on November 21, 2023, in *The Courier-Tribune*, a newspaper with general circulation in the City of Asheboro, announcing that a public hearing to consider the adoption of an ordinance annexing the described territory into the City of Asheboro would be held during the city council's next regular meeting, which was scheduled to begin at 7:00 p.m. on December 7, 2023, in the council chamber on the second floor of Asheboro City Hall, 146 North Church Street, Asheboro, North Carolina 27203; and

WHEREAS, the public hearing was held, as advertised, on December 7, 2023; and

WHEREAS, the Asheboro City Council finds that the area described within the petition meets the standards prescribed by Section 160A-58.1(b) of the North Carolina General Statutes, to wit:

(a) The nearest point on the proposed satellite corporate limits is not more than three miles from the primary corporate limits of the City of Asheboro;

(b) No point on the proposed satellite corporate limits line is closer to the primary corporate limits of another municipality than to the primary corporate limits of the City of Asheboro;

(c) The area for which annexation is requested is situated so that the City of Asheboro will be able to provide the same services within the proposed satellite corporate limits that are provided within the primary corporate limits; and

(d) A subdivision will not be fragmented by the requested annexation; and

WHEREAS, the city council has concluded that all landowners required by law to sign the annexation petition have, in fact, signed the petition; and

WHEREAS, the city council further finds that the annexation petition is otherwise valid and that the public health, safety, and welfare of the City of Asheboro and the area proposed for annexation will be best served by annexing the territory described in Section 1 of this Ordinance.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Asheboro as follows:

Section 1. By virtue of the authority granted in Section 160A-58.2 of the North Carolina General Statutes, the following described non-contiguous territory is annexed, attached to, and hereby becomes a part of the City of Asheboro, North Carolina:

Asheboro Township, Randolph County, North Carolina:

BEGINNING on the proposed Asheboro satellite city limits line at a 5/8-inch new iron rod flush with the ground in the southern margin of the public right-of-way for McMasters Street (North Carolina Secondary Road 1489), this BEGINNING point is located South 01 degree 51 minutes 18 seconds West 8.48 feet from a 1-inch existing iron pipe flush with the ground and located by means of the North Carolina Coordinate System at the coordinates of North 718,612.05 ground US survey feet and East 1,758,884.75 ground US survey feet (NAD 83 (2011)); thence from the BEGINNING point (this point is at the northwest corner of the land acquired by Habitat for Humanity of Randolph County, N.C., Inc. by means of a deed recorded in the Office of the Register of Deeds for Randolph County, North Carolina (the "Randolph County Registry") in Deed Book 2828, Page 206 (plat reference to Plat Book 182, Page 98, Randolph County Registry) and for which annexation has been requested (this land will be hereinafter referred to as the "Annexation Area")) and proceeding along the proposed Asheboro satellite city limits line by running with the southern margin of the public right-of-way for McMasters Street, which also serves as the northern boundary of the Annexation Area, the next five bearings and distances: South 89 degrees 25 minutes 34 seconds East 67.71 feet to a 5/8-inch new iron rod flush with the ground; thence South 89 degrees 32 minutes 53 seconds East 67.45 feet to a 5/8-inch new iron rod flush with the ground; thence South 88 degrees 41 minutes 38 seconds East 67.50 feet to a 5/8-inch new iron rod flush with the ground; thence South 89 degrees 10 minutes 52 seconds East 14.83 feet to a 5/8-inch new iron rod flush with the ground; thence South 81 degrees 00 minutes 32 seconds East 69.65 feet to a 5/8-inch new iron rod flush with the ground at the northeast corner of the Annexation Area; thence departing from the southern margin of the public right-of-way for McMasters Street, but continuing to follow the proposed Asheboro satellite city limits line, by running South 06 degrees 54 minutes 03 seconds West 221.88 feet along the western margin of the unopened right-of-way identified as "Clover Street" in Plat Book 1, Page 87, Randolph County Registry to a 12-inch Poplar tree at the southeast corner of the Annexation Area (this point is located South 49 degrees 06 minutes 49 seconds West 111.95 feet from a point on the existing Asheboro primary city limits line); thence continuing along the proposed Asheboro satellite city limits

line by running with the southern boundary of the Annexation Area the next six bearings and distances along the Ethel Pegram Justice and Angela Dawn Justice property described in Deed Book 1947, Page 1731, Randolph County Registry (shown as Lots 87-88 and 100-101 in Plat Book 1, Page 87, Randolph County Registry): North 84 degrees 29 minutes 42 seconds West 3.54 feet to an existing nail; thence North 87 degrees 07 minutes 35 seconds West 56.64 feet to a 5/8-inch new iron rod up two inches; thence North 87 degrees 07 minutes 35 seconds West 67.54 feet to a 5/8-inch new iron rod up two inches; thence North 87 degrees 07 minutes 35 seconds West 61.23 feet to a 1-inch existing iron pipe down four inches; thence North 86 degrees 51 minutes 54 seconds West 6.32 feet to a 5/8-inch new iron rod up two inches; thence North 86 degrees 51 minutes 54 seconds West 43.70 feet to a computed point / point not set at the southwest corner of the Annexation Area; thence departing from the southern boundary of the Annexation Area and continuing to follow the proposed Asheboro satellite city limits line by running with the western boundary of the Annexation Area the next four bearings and distances along the Ethel Pegram Justice property described in Deed Book 1978, Page 2607, Randolph County Registry (shown as all of Lot 97 and a portion of Lots 96, 98, & 99 in Plat Book 1, Page 87, Randolph County Registry): North 01 degree 11 minutes 30 seconds East 1.95 feet to a 3/4-inch existing iron pipe up four inches; thence North 01 degree 11 minutes 30 seconds East 77.72 feet to a 1.5-inch existing iron pipe up two inches; thence North 88 degrees 16 minutes 21 seconds West 27.19 feet to a 1.5-inch existing iron pipe up four inches; thence North 01 degree 51 minutes 18 seconds East 141.35 feet to the point and place of BEGINNING, and containing a total of 1.380 acres, more or less, to be annexed.

The above-stated legal description is in accordance with a plat of survey drawn under the supervision of Dan W. Tanner, II, Professional Land Surveyor with License Number L-4787. The plat of survey is identified as Job # 14702 and is titled "Annexation Survey For: ***Habitat For Humanity of Randolph County****."*

The plat of survey referenced in the immediately preceding paragraph is recorded in Plat Book ___183___, Page __65__, Randolph County Registry.

Section 2. Upon and after December 7, 2023, the above-described territory and its citizens and property shall be subject to all debts, laws, ordinances, and regulations in force in the City of Asheboro and shall be entitled to the same privileges and benefits as other parts of the City of Asheboro. The above-described territory shall be subject to municipal taxes according to Section 160A-58.10 of the North Carolina General Statutes.

Section 3. The Mayor of the City of Asheboro shall cause to be recorded in the Office of the Randolph County Register of Deeds and in the Office of the North Carolina Secretary of State an accurate map of the annexed territory that is described in Section 1 of this Ordinance together with a duly certified copy of this Ordinance. Such a map shall also be delivered to the Randolph County Board of Elections as required by Section 163-288.1 of the North Carolina General Statutes.

Section 4. All ordinances and clauses of ordinances in conflict with this Ordinance are hereby repealed.

Section 5. This Ordinance shall be in full force and effect upon and after December 7, 2023.

This Ordinance was adopted by the Asheboro City Council in open session during a regular meeting held on December 7, 2023.

/s/David H. Smith
David H. Smith, Mayor

ATTEST:

/s/Holly H. Doerr
Holly H. Doerr, CMC, NCCMC, City Clerk

Approved as to form:

/s/Jeffrey C. Sugg
Jeffrey C. Sugg, City Attorney

6. Public Hearing: Proposed Economic Development Appropriation

This advertised public hearing pertained to proposed economic development appropriations to Downtown Asheboro Inc. ("DAI") that are not for real property or business location incentives. Before the public hearing was opened, Mayor Smith and Council Member Heath discussed the role they play with the board of directors for DAI, which is a nonprofit corporation. To avoid a conflict of interest under state law, Mayor Smith and Council Member Heath asked to be recused from participating in any manner in the discussion and potential council action under meeting agenda item no. 6.

Council Member Burks moved, and Council Member Bell seconded the motion, to recuse Mayor Smith and Council Member Heath from participating or acting in any manner in connection with agenda item no. 6. Council Members Bell, Burks, McCaskill, Moffitt, Redding, and Swiers voted aye. There were no dissenting votes.

Mayor Pro Tempore Moffitt then opened the public hearing on the proposed economic development appropriations. Finance Director Deborah Reaves was recognized as the first person to speak.

As part of the hearing, Ms. Reaves noted that an appropriation in the amount of $75,000 to DAI has been requested for salary, benefits, office rent, and office support for January 2024 through June 2024.

Ms. Addie Corder, who is the Executive Director of DAI, presented comments in support of the requested appropriation. When no one else asked to speak, Mayor Pro Tempore Moffitt closed the public hearing.

Subsequent to the public hearing, Council Member Bell moved, and Council Member Swiers seconded the motion to adopt/approve the following ordinance to amend the general fund. Council Members Bell, Burks, McCaskill, Moffitt, Redding, and Swiers voted aye. There were no dissenting votes.

74 ORD 12-23

ORDINANCE TO AMEND THE GENERAL FUND
FY 2023-2024

WHEREAS, the City of Asheboro would like to appropriate fund balance of $75,000 for an appropriation for the economic development purposes of Downtown Asheboro Inc.

WHEREAS, these funds will be used for salary and benefits and office rent and office support for Downtown Asheboro Inc for January 2024-June 2024.

WHEREAS, the City of Asheboro desires to amend the 2023-2024 budget to be in compliance with all generally accepted accounting principles.

THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ASHEBORO, NORTH CAROLINA:

That the following Revenue line items be increased:

Line Item	Description	Increase
10-000-399.0000	Fund Balance Allocation	$75,000

That the following Expense line items be increased:

Line Item	Description	Increase
10-610-501.0001	Downtown Asheboro Inc	$75,000

Adopted this the 7th day of December 2023.

/s/David H. Smith
David H. Smith, Mayor

ATTEST:

/s/Holly H. Doerr
Holly H Doerr, CMC, NCCMC, City Clerk

At the conclusion of the public hearing and adoption of the aforementioned ordinance, Council Member Bell moved, and Council Member Burks seconded the motion for Mayor Smith and Council Member Heath to participate in the remainder of the meeting. Council Members Bell, Burks, McCaskill, Moffitt, Redding, and Swiers voted aye. There were no dissenting votes.

7. Presentation on the Success of the Youth Football Program

Mr. Ryan Patton and coaches of the Blue Comet Youth Football program discussed the positive impact of the program and expressed their appreciation to the city council for its support of the program.

No formal action was taken by the council during this portion of the meeting.

8. Consent Agenda

Council Member Bell moved, and Council Member Burks seconded the motion to approve/adopt the following consent agenda items. Council Members Bell, Burks, Heath, McCaskill, Moffitt, Redding, and Swiers voted aye. There were no dissenting votes.

(a) Approval of the City Council Meeting Minutes for November 8, 2023

The meeting minutes for the city council's regular meeting on November 8, 2023, were approved and have been filed in the city clerk's office. An electronic copy of the approved document has been posted on the city's website.

(b) Acknowledgement of the Receipt of the Meeting Minutes for the Asheboro ABC Board Meeting Held on October 2, 2023, and November 6, 2023

The meeting minutes for the above-listed Asheboro ABC Board meetings were received and distributed to the elected officials. The documents have been filed in the city clerk's office.

(c) Approval of a Contract Amendment to Extend the Due Date for the Fiscal Year 2022-2023 Audit to December 31, 2023

The contract amendment to extend the due date for the Fiscal Year 2022-2023 audit to December 31, 2023 was approved by the city council. A copy of the approved contract amendment is on file in the city clerk's office.

(d) Approval of an Ordinance to Amend the Asheboro Housing Development Fund

75 ORD 12-23

ORDINANCE TO AMEND
THE ASHEBORO HOUSING DEVELOPMENT FUND (#62)
FY 2023-2024

WHEREAS, the City Council has consistently planned and invested in community revitalization using founded urban design and strategic planning methods.

WHEREAS, the North Carolina Housing Finance Agency approved up to a maximum $132,000 funding for 2023 Urgent Repair Program with no additional funding contribution required from the City of Asheboro.

WHEREAS, the City of Asheboro began receiving applications to assist low-moderate income households with owner-occupied emergency housing repairs on November 13, 2023.

WHEREAS, revenues and expenses in the Asheboro Housing Development Fund have changed over time in relation to the current budget.

WHEREAS, the City Council of the City of Asheboro desires to be in compliance with all generally accepted accounting principles.

THEREFORE, BE IT ORDAINED by the City Council of the City of Asheboro, North Carolina that following revenue and expense line items are changed as follows:

Section 1: Revenues

Account #	Revenue Description	Increase
62-000-320.0000	Urgent Repair Funding	132,000

Section 2: Expenses

Account #	Expense Description	Increase
62-000-510.0001-62	URP Repairs	120,000
62-000-510.0002-62	URP Admin	12,000
		132,000

Adopted this 7th day of December 2023.

/s/David H. Smith
David H. Smith, Mayor

ATTEST:

/s/Holly H. Doerr
Holly H. Doerr, CMC, NCCMC, City Clerk

(e) Approval of the Community Development Division's request to schedule for the regular January 2024 city council meeting, and to advertise, a legislative hearing on an application to rezone property at 115 South Fayetteville Street and 142 Worth Street (a portion of Randolph County Parcel Identification Number 7751823582 and all of Randolph County Parcel Identification Number 7751825638) from OA6 to B3 zoning.

(f) Acknowledgement of the Receipt of a Report Detailing Major Subdivisions Administratively Approved since August 10, 2023

(g) Approval of a Resolution to Approve an Updated City of Asheboro Water Shortage Response Plan

RESOLUTION NUMBER 46 RES 12-23

CITY COUNCIL OF THE CITY OF ASHEBORO, NORTH CAROLINA

A RESOLUTION APPROVING AN UPDATED CITY OF ASHEBORO WATER SHORTAGE RESPONSE PLAN

WHEREAS, Section 143-355.2 of the North Carolina General Statutes requires each unit of local government that provides public water service and each large community water system to develop and implement water conservation measures to respond to drought or other water shortage conditions as set out in a Water Shortage Response Plan that is submitted to the Department of Environmental Quality (the "Department") for review and approval; and

WHEREAS, as required by the cited statute and in the interests of sound local planning, a Water Shortage Response Plan for the City of Asheboro (the "Plan") was previously approved by the Asheboro City Council (the "City Council") on November 8, 2018; and

WHEREAS, consistent with the cited statute, the previously approved Plan, and in the interests of sound local planning, an updated Water Shortage Response Plan for the City of Asheboro (the "Updated Plan") has now been submitted to the City Council for approval; and

WHEREAS, the Updated Plan is attached to this Resolution as EXHIBIT 1 and is hereby incorporated into this Resolution by reference as if copied fully herein; and

WHEREAS, the City Council has made the following findings: (1) the Updated Plan is compliant with the applicable legal authorities, specifically including Section 143-355.2 of the North Carolina General Statutes and the previously adopted Plan; (2) the Updated Plan will provide appropriate guidance for the future management of water supplies for the City of Asheboro; and (3) the Updated Plan will provide useful information to the Department for the development of a state water supply plan as required by statute.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Asheboro that the Updated Plan titled *City of Asheboro Water Shortage Response Plan*, which has been most recently reviewed and acted upon by the City Council as of December 7, 2023, is hereby approved and shall be submitted to the Department's Water Planning Section; and

BE IT FURTHER RESOLVED that the City Council intends that this Plan shall be revised to reflect changes in relevant data and projections at least once every five years, or as otherwise requested by the Department, in accordance with the applicable legal authorities and sound planning practice.

This Resolution was adopted by the Asheboro City Council in open session during a regular meeting held on the 7th day of December, 2023.

/s/David H. Smith
David H. Smith, Mayor
City of Asheboro, North Carolina

ATTEST:

/s/Holly H. Doerr
Holly H. Doerr, CMC, NCCMC, City Clerk
City of Asheboro, North Carolina

EXHIBIT 1

City of Asheboro
Water Shortage Response Plan

The procedures herein are written to reduce potable water demand and protect existing drinking water supplies whenever they are in danger of being inadequate to meet customer needs. This plan is adopted to give the City of Asheboro guidelines to deal with water emergency issues related to drought. Elements of this plan may also be used to deal with reservoir contamination or if there is equipment or facility failure.

Conditions justifying declaration of water emergency.

(a) *Insufficient reserve supply.* A water emergency may be declared to exist when the combined reserve supplies available from Lake Reese and Lake Lucas shall have reached the point where the reserve supply has been so reduced that the citizens cannot be supplied with water to protect their health and safety without curtailing substantially the water demand.

(b) *Reservoir contamination.* A water emergency may be declared to exist when the reserve supplies available at Lake Reese and Lake Lucas have been contaminated in such a manner as to permit contamination to pass through the water treatment plant, damage equipment or endanger employees, or cannot be treated to the standards *established* by the Safe Drinking Water Act or the standards established by the state, or endangers the health and safety of the citizens.

(c) *Equipment or facility failure.* A water emergency may be declared in the event of failure of raw water transmission lines, chlorination systems, flocculation systems, settling systems, filtration systems, chemical feed systems, storage systems, including finished water reservoirs and elevated tanks, high-service pumps or elements of the distribution system. Equipment or facility failure shall include any occurrence, which reduces the ability to produce and distribute water at the designed capacity of the water plant or to the minimum level necessary to protect the health and safety of the citizens.

I. Authorization

Subject to review by the City Council at any regular or special meeting of the City Council, a water emergency may be declared by the City Manager or his or her designee to exist when any condition or situation exists that may threaten the availability and/or safety of either treated or potable water from the water supply, treatment, and distribution system operated and maintained by the city. A water emergency shall be declared by the City Manager or his or her designee to exist when users of the city water system cannot be supplied with treated or potable water without substantially curtailing the water demand placed on the city's water system. Furthermore, a water emergency shall be declared to exist when production, treatment, transmission, and storage facilities are incapable of meeting all daily water demands or when projections of available water show that the available supply of water will not meet the daily water demands.

II. Notification

A declaration of the existence of a water emergency by the City Manager or his or her designee shall specify the level of severity of the emergency and be in the form of a signed executive order that, upon its issuance, shall be distributed to the Mayor and members of the City Council in a manner designed to provide the most expeditious notification possible. Once the distribution of the declaration of the existence of a water emergency to the Mayor and members of the City Council has been undertaken, the City Manager or his or her designee shall give notice to the general public by means of a public press announcement of the existence of a water emergency and the severity thereof. The regulatory provisions authorized by this plan will become effective 24 hours after the issuance of the public press announcement specified in the preceding sentence.

III. Levels of Response

Four levels of water emergency response are outlined in the table below. The four levels of water emergency response are: voluntary restrictions and mandatory restrictions I, II, and III. A detailed description of each response level and corresponding water reduction measures follow below.

Level	Response	Description
1	Voluntary Restrictions	Water users are encouraged to reduce their water use and improve water use efficiency; however, no penalties apply for noncompliance. Water supply conditions indicate a potential for emergency.
2	Mandatory Restrictions I	Water users must abide by required water use reduction and efficiency measures; penalties apply for noncompliance. Water supply conditions are significantly lower than the seasonal norm and water emergency conditions are expected to persist. Allows maintaining jobs and landscaping investments related to water use.
3	Mandatory Restrictions	Bans additional water usages not included in Level 2 Mandatory Restrictions I
4	Mandatory Restrictions III	Water supply conditions are substantially diminished and pose an imminent threat to human health or environmental integrity.

(1) *Level I (Voluntary).* During a declared Level I water emergency, consumers of water from the city water system shall be encouraged to implement the following voluntary water conservation practices:

(a) Watering of lawns, ornamental plants, and gardens should be limited to the hours between 7:00 p.m. and 7:00 a.m.;

(b) Use of water for wash down of outside areas such as driveways, parking lots, and sidewalks should be curtailed;

(c) Faucets should not be left running while shaving, brushing teeth, or washing dishes;

(d) The use of clothes and dishwashers should be limited where possible, and these units should be operated with full loads;

(e) Washing cars and other vehicles should be curtailed to Saturday and Sundays, and hoses should not be left running while washing;

(f) The use of flow restriction and other water saving devices is encouraged;

(g) Showers should be used for bathing, and showers should be limited to four minutes or less; and

(h) Filling of pools should be deferred or limited to hours between 7:00 p.m. and 7:00 a.m.

(2) *Level II (Mandatory).* During a declared Level II water emergency, the following mandatory water use restrictions shall be in effect for consumers of water from the city water system:

(a) The watering of lawns, ornamental plants, and gardens shall be limited to the hours between 7:00 p.m. and 7:00 a.m.;

(b) The watering of lawns, ornamental plants, and gardens shall not be done except by handheld containers (buckets, jugs, etc.), and no applications for irrigation meters will be accepted or approved;

(c) With the exception of situations where a wash down of outside areas is necessary due to public health and safety concerns, the residential use of water for wash down of outside areas is prohibited. Commercial pressure washers shall be permitted to continue normal operations. However, the commercial pressure washer owners and/or operators shall ensure that water wastage does not occur;

(d) Residential washing of cars and other vehicles is prohibited. Automobile retail establishments and commercial automobile washing facilities including those providing hand held washing nozzles shall be permitted to continue normal operations. However, the facility owner/operator shall ensure that water wastage does not occur;

(e) Restaurants and other food serving establishments shall serve water to patrons only at the request of the patron(s);

(f) Commercial, industrial and construction operations shall eliminate all possible waste of water. Large scale commercial and industrial operations and construction activities that utilize 20,000 cubic feet or more of water per month shall submit a water reduction compliance plan to achieve 25%, 50%, or 75% water reduction as specified under the Level II water emergency declaration within 14 days of the effective date of the regulations and restrictions specified in the Level II water emergency declaration; and

(g) Above-ground pools, Jacuzzis, and hot tubs having a capacity of 500 gallons or more and all newly constructed or drained in-ground pools shall be filled by permit only. The Water Resources Director or his or her designee shall review applications for such fill permits. The issuance of such a permit may be denied on the basis of the assessment by the Water Resources Director of the severity of the situation.

(3) *Level III (Mandatory).* During a declared Level III water emergency, the following mandatory use restrictions shall be in effect for consumers of water from the city water system:

(a) Any form of watering or irrigating lawns, gardens, and/or other plants is prohibited;

(b) With the exception of situations where the wash down of certain outside areas is necessary due to public health and safety concerns, the use of water for wash down of outside areas is prohibited;

(c) With the exception of situations where the washing of certain items is necessary due to public health and safety concerns, the washing of cars, vehicles, and/or other equipment is prohibited;

(d) Restaurants and other food serving establishments shall utilize single serving utensils and plates in addition to serving water to patrons only at the request of the patron(s);

(e) Recreational use of potable water, including filling of pools, is prohibited;

(f) Large scale commercial and industrial water customers and construction activities utilizing 20,000 cubic feet or more of water per month shall achieve mandatory restrictions in daily water usage of 25%, 50%, or 75% through whatever means are available. The target reduction percentage shall be determined by the severity of the water emergency and shall be publicly announced as part of the emergency declaration. The Water Resources Director shall determine compliance with the daily usage reduction targets. Variances to this restriction may be granted by the Water Resources Director to public health facilities including, but not limited to, hospitals and nursing homes;

(g) Drinking water taps or hydrant permits shall be issued or revoked at the discretion of the Water Resources Director; and

(h) Unless a bulk water sale is made pursuant to an existing contract, bulk water sales shall be prohibited.

(4) *Level IV (Mandatory).* During a declared Level IV water emergency, the following mandatory water use restrictions shall be in effect for consumers of water from the city water system:

(a) All use of water for purposes other than the maintenance of public health and safety is prohibited;

(b) Unless a bulk water sale is made pursuant to an existing contract, bulk water sales shall be prohibited;

(c) Where the city water system is functional, monthly residential water use shall not exceed 1,200 cubic feet of water at each metered location;

(d) Where the city water system is not functional, National Guard and emergency services vehicles shall be utilized to distribute water for household use at prearranged locations within the affected area. Usage by individuals shall be limited to those amounts necessary to sustain life through drinking, food preparation, and personal hygiene; and

(e) The compliance plan for industries during Level IV remains the same as Level III or as directed by the State Public Health Officials.

In the event of the declaration of a "water emergency" it shall be unlawful for any person to use or permit the use of water from the water system of the city in violation of any of the provisions set forth in this plan until such time as the City Manager or his or her designee has declared the restrictive provision(s) in question to be no longer in effect.

IV. Triggers

Triggers for the City of Asheboro levels of response are provided in Table 1 below. The City's main sources of water are Lake Lucas and Lake Reese. The following measurements of usable storage and/or days of available supply trigger entry into corresponding water restriction stages based on lake level data maintained by the Water Resources Division.

Restriction Level	Usable Storage	Days of Available Supply
1	<60%	<190 Days
2	<50%	<150 Days
3	<40%	<125 Days
4	<35%	<100 Days

Table 1

Once a water emergency has been declared and the appropriate staged restrictions imposed, the Water Resources Director or his or her designee shall review the operational status of the city's water system and the supply of water available to the city's water system and keep the City Manager or his or her designee apprised of the operational status of the city's water system and the available water supply. On the basis of the information gathered, the Water Resources Director or his or her designee shall recommend to the City Manager or his or her designee when a different stage of restriction should be implemented. The City Manager or his or her designee shall make the final determination to change the restriction stage. If such a change in the stage of restriction is warranted, the notification procedures prescribed by Division II above shall be followed in the same manner as for the initial declaration of a water emergency.

V. Enforcement

The provisions of the water shortage response plan will be enforced by the City of Asheboro'. Violators may be reported to the Water Resources Division at (336)-626-1201 Ext. 258 or the Water Treatment Plant at (336) 626-1215.

Compliance with this plan shall be enforced by personnel of the Water Resources Division, the Police Department, and any other personnel designated by the City Manager. Failure to comply with any of the regulations or restrictions of this plan shall be unlawful and a violation of this plan. All remedies authorized by law for noncompliance with this plan, including the issuance of a civil penalty citation or an action for injunctive relief, may be exercised to enforce the provisions of this plan. It shall be unlawful to fail to act in accordance with the provisions of this plan or to use water in any manner that constitutes an attempted and/or actual evasion or avoidance of the water restrictions prescribed by this plan.

Any consumer of water from the city water system who violates any provision of this plan shall be subject to civil penalties as defined in Section 50.027 (EMERGENCY WATER MANAGEMENT PROCEDURES) of the Code of Asheboro.

VI. Variance Protocols

Water use variance requests may be made to the office of the City Manager at 146 N. Church Street (336) 626-1201. The City Manager or his designee may authorize relief from specific provisions of these restrictions in order to maintain an economic or public investment or to continue employment by business or industrial customers.

VII. Revision

The Water Shortage Response Plan will be reviewed and revised as needed to adapt to new circumstances affecting water supply and demand, following implementation of emergency restrictions, and at a minimum of every five years, as required by the provisions of G.S. 143-355(l). Further, the Water Resources Director will review procedures following each emergency to recommend any necessary revisions to the plan to the City Council.

This updated plan was approved by the Asheboro City Council on December 7, 2023.

(h) An Ordinance Setting the Asheboro City Council's Schedule for Regular Meetings During the 2024 Calendar Year

ORDINANCE NUMBER 76 ORD 12-23

CITY COUNCIL OF THE CITY OF ASHEBORO, NORTH CAROLINA

AN ORDINANCE SETTING THE DATES FOR REGULAR MEETINGS OF THE ASHEBORO CITY COUNCIL DURING THE 2024 CALENDAR YEAR

WHEREAS, Section 31.04(A) of the Code of Asheboro provides that the "City Council shall hold a regular meeting on Thursday after the first Monday of each month;" and

WHEREAS, to avoid reasonably foreseeable scheduling conflicts with officially recognized holidays on New Year's Day and Independence Day, the Asheboro City Council has decided to reschedule its regular meetings in January 2024 and July 2024.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Asheboro as follows:

Section 1. During the 2024 calendar year, and subject to any notices to the contrary issued in accordance with the applicable statutes and ordinances, regular meetings of the Asheboro City Council will begin at 7:00 p.m. on the dates listed herein and will be held in the Council Chamber, which is located on the second floor in Asheboro City Hall, 146 North Church Street, Asheboro, North Carolina 27203.

Section 2. Due to the scheduling impact of the officially recognized holiday for New Year's Day, the regular meeting of the Asheboro City Council in January 2024 shall be held in the Council Chamber at Asheboro City Hall, with a beginning time of 7:00 p.m., on the 11th day of January, 2024.

Section 3. Due to the scheduling impact of the officially recognized holiday for Independence Day, the regular meeting of the Asheboro City Council in July 2024 shall be held in the Council Chamber at Asheboro City Hall, with a beginning time of 7:00 p.m., on the 11th day of July, 2024.

Section 4. For purposes of clarity, the schedule for regular meetings of the Asheboro City Council during the 2024 calendar year is listed on the next page of this Ordinance.

Month	Meeting Date
January	11th
February	8th
March	7th
April	4th
May	9th
June	6th
July	11th
August	8th
September	5th
October	10th
November	7th
December	5th

Section 5. All ordinances and clauses of ordinances in conflict with this Ordinance are hereby repealed to the extent of any conflict with the intent of the Asheboro City Council to hold its regular meetings in accordance with the schedule found in Section 4 of this Ordinance. Except for rescheduling the Asheboro City Council's regular meetings in January 2024 and July 2024, the provisions of Section 31.04 of the Code of Asheboro shall remain in full force and effect.

Section 6. This Ordinance shall become effective upon adoption and shall sunset at midnight on December 31, 2024.

This Ordinance was adopted in open session during a regular meeting of the Asheboro City Council held on the 7th day of December, 2023.

/s/David H. Smith
David H. Smith, Mayor

ATTEST:

/s/Holly H. Doerr
Holly H. Doerr, CMC, NCCMC, City Clerk

(i) Approval of city staff's request to continue the consideration of the acquisition of real property in connection with the McCrary Ballpark Project to the council's next regular meeting in January 2024

The request to continue the consideration of the acquisition of real property was approved.

(j) Acknowledgement of the receipt from the Randolph County Board of Elections of the results of the municipal election held on November 7, 2023

9. Presentation of the *Key to the City*

Mayor Smith presented the *Key to the City* to Council Member Jane Redding as a token of appreciation for her distinguished service to the citizens of Asheboro. In return, Ms. Redding thanked the city council and the citizens of Asheboro for their support during her tenure as an Asheboro City Council Member.

No formal action was taken by the council during this portion of the meeting.

Administration of the Oaths of Office

City Clerk Holly H. Doerr administered the oaths of office for the following council members.

10. Oath of office for Edward J. Burks

OATH OF COUNCIL MEMBER

STATE OF NORTH CAROLINA
COUNTY OF RANDOLPH
CITY OF ASHEBORO

I, Edward J. Burks, do solemnly swear that I will support, defend, and maintain the Constitution and laws of the United States, and the Constitution and laws of North Carolina not inconsistent therewith, and that I will faithfully discharge and perform the duties of my office as Council Member for the City of Asheboro, on which I am about to enter, according to my best skill and ability; so help me, God.

/s/Edward J. Burks
Edward J. Burks

Sworn to and subscribed before me this 7th day of December, 2023.

/s/Holly H. Doerr
Holly H. Doerr
City Clerk

11. Oath of office for Charles A. Swiers

OATH OF COUNCIL MEMBER

STATE OF NORTH CAROLINA
COUNTY OF RANDOLPH
CITY OF ASHEBORO

I, Charles A. Swiers, do solemnly swear that I will support, defend, and maintain the Constitution and laws of the United States, and the Constitution and laws of North Carolina

not inconsistent therewith, and that I will faithfully discharge and perform the duties of my office as Council Member for the City of Asheboro, on which I am about to enter, according to my best skill and ability; so help me, God.

/s/Charles A. Swiers
Charles A. Swiers

Sworn to and subscribed before me this 7th day of December, 2023.

/s/Holly H. Doerr
Holly H. Doerr
City Clerk

12. Oath of office for W. Joseph Trogdon, Jr.

OATH OF COUNCIL MEMBER

STATE OF NORTH CAROLINA
COUNTY OF RANDOLPH
CITY OF ASHEBORO

I, W. Joseph Trogdon, Jr., do solemnly swear that I will support, defend, and maintain the Constitution and laws of the United States, and the Constitution and laws of North Carolina not inconsistent therewith, and that I will faithfully discharge and perform the duties of my office as Council Member for the City of Asheboro, on which I am about to enter, according to my best skill and ability; so help me, God.

/s/W. Joseph Trogdon, Jr.
W. Joseph Trogdon, Jr.

Sworn to and subscribed before me this 7th day of December, 2023.

/s/Holly H. Doerr
Holly H. Doerr
City Clerk

Organizational Phase of the Meeting

REGULAR MEETING
NEWLY ORGANIZED ASHEBORO CITY COUNCIL
COUNCIL CHAMBER, ASHEBORO MUNICIPAL BUILDING
THURSDAY, DECEMBER 7, 2023

David H. Smith) – Mayor Presiding

Clark R. Bell)
Edward J. Burks)
Kelly L. Heath)
William N. McCaskill) – Council Members Present
Walker B. Moffitt)
Charles A. Swiers)
W. Joseph Trogdon, Jr.)

John N. Ogburn, III, City Manager
Robert L. Brown, Jr., Assistant Chief of Police
Timothy E. Cockman, Deputy Fire Chief
Holly H. Doerr, CMC, NCCMC, City Clerk/Paralegal
John L. Evans, Assistant Community Development Director
N. Byron Hill, Police Captain
Michael L. Leonard, PE, City Engineer
Deborah P. Reaves, Finance Director
Michael D. Rhoney, PE, Water Resources Director
Jeffrey C. Sugg, City Attorney
Willie Summers, Fire Chief
Charles D. Wagner, Police Captain

13. Election of Mayor Pro Tempore and Administration of Oath of Office

After the oaths of office were administered to Council Members Burks, Swiers, and Trogdon, the council turned its attention to the election of a Mayor Pro Tempore. Council Member Bell moved to select Mr. Walker B. Moffitt as Mayor Pro Tempore, and Council Member Burks seconded the motion. Council Members Bell, Burks, Heath, McCaskill, Moffitt, and Swiers voted aye. Council Member Trogdon voted no.

Subsequent to the adoption of the motion, Ms. Doerr administered the following oath of office to Mayor Pro Tempore Moffitt.

OATH OF MAYOR PRO TEMPORE

STATE OF NORTH CAROLINA
COUNTY OF RANDOLPH
CITY OF ASHEBORO

I, Walker B. Moffitt, do solemnly and sincerely swear that I will support the Constitution and laws of the United States; that I will be faithful and bear true allegiance to the State of North Carolina, and to the constitutional powers and authorities which are or may be established for the government thereof; that I will endeavor to support, maintain, and defend the Constitution and laws of said State, not inconsistent with the Constitution of the United States, to the best of my knowledge and ability; and that I will faithfully discharge the duties of my office as Mayor Pro Tempore for the City of Asheboro, so help me God.

/s/Walker B. Moffitt
Mayor Pro Tempore
City of Asheboro

Sworn to and subscribed before me this 7th day of December, 2023.

/s/Holly H. Doerr
Holly H. Doerr
City Clerk

14. Committee Appointments

Mayor Smith announced his proposed list of committee appointments by discussing the following resolution and requesting council action on the resolution.

Council Member Heath moved, and Council Member Swiers seconded the motion to adopt, without alteration, the resolution introduced by Mayor Smith. Council Members Bell, Burks, Heath, McCaskill, Moffitt, Swiers, and Trogdon voted aye. There were no dissenting votes.

RESOLUTION NUMBER 47 RES 12-23

CITY COUNCIL OF THE CITY OF ASHEBORO, NORTH CAROLINA

A RESOLUTION OF CONCURRENCE WITH THE COMMITTEE APPOINTMENTS MADE BY MAYOR DAVID H. SMITH

WHEREAS, the Code of Asheboro (the "City Code") authorizes the mayor to appoint members of the city council to the various committees listed in Section 31.02 of the City Code as well as to other committees established by and organized in accordance with resolutions adopted by the city council independent of the committee framework established in the City Code; and

WHEREAS, the appointment of individuals to such committees is to take place during the organizational meeting that follows the municipal general election; and

WHEREAS, Section 31.02 of the City Code provides that the above-referenced committee appointments are subject to the approval of the city council; and

WHEREAS, during the organizational meeting held on December 7, 2023, Mayor David H. Smith made the following committee appointments:

Finance and Public Safety Committee

1. Mayor (Designated as Chair by the City Code)
2. Clark R. Bell
3. W. Joseph Trogdon, Jr.
4. Charles A. Swiers

Public Works Committee

1. Mayor Pro Tempore (Designated as Chair by the City Code)
2. Edward J. Burks
3. Kelly L. Heath

Personnel Evaluation Committee

1. Mayor (Designated as Chair by the City Code)
2. Mayor Pro Tempore
3. William N. McCaskill

Tourism and Marketing Committee

1. Mayor (Designated as Chair by the City Code)
2. Edward J. Burks
3. Kelly L. Heath

Identity Theft Prevention Program Committee

1. Mayor (Designated as Chair by the City Code)
2. William N. McCaskill
3. Charles A. Swiers

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Asheboro that the committee appointments specified in the preceding recitals are hereby approved.

This Resolution was adopted in open session during a regular meeting of the Asheboro City Council that was held on the 7th day of December, 2023.

/s/David H. Smith
David H. Smith, Mayor

ATTEST:

/s/Holly H. Doerr
Holly H. Doerr, CMC, NCCMC, City Clerk

Post-Organizational Phase of the Meeting

15. Presentation on Randolph County's Vital Infrastructure and Planning

Assistant Randolph County Manager William Johnson reported on Randolph County's vital infrastructure and planning for current needs and future growth.

During his presentation, Mr. Johnson utilized a slide show presentation and reported that in August 2023, the Randolph County Board of Commissioners voted to award a design contract to The Wooten Company for the design of a water line from PTRWA (Island Ford Road) to Asheboro along I-74. Survey and design of the proposed water line is scheduled for completion in September 2024, with permitting and bidding to be completed by February 2025. The construction of the water line is tentatively scheduled for completion by December 2025.

Additionally, Mr. Johnson reported on the Wolfspeed Water Main Extension. The City of Asheboro is constructing a water line east along US-64 to serve the CAM site in Chatham County with 3.3 mgd. This amount of water would require a 20" line. The ultimate size needed will require hydraulic modeling of the system.

Upsizing the water line along US-64 will enable future growth along US-64, NC-49, NC-22, and US-421. Encouraging growth along these areas will strengthen the water and wastewater systems of Asheboro, Ramseur, Franklinville, and Liberty.

On September 22, 2023, the NC General Assembly passed the state's budget, which included $87 million in infrastructure funding for Randolph County. The county looks forward to working with its partners to take advantage of this opportunity.

Randolph County has four water and sewer districts. The districts were created in 2008, but have not been active.

The US-64 line falls within the Eastern Randolph District. Districts may appoint advisory boards to aid in decision making. The key to future success will be collaboration.

No formal action was taken by the council during this portion of the meeting.

16. Community Development – Rezoning Applications

(a) Legislative Hearing (Case No. RZ-23-19): A request to rezone property at 306 Harrison Street (Randolph County Parcel Identification Number 7761238822) from B1 to RA6 (CZ) zoning to allow for a single-family residential addition that provides a reasonable accommodation.

Mayor Smith opened the above-described legislative hearing for Case No. RZ-23-19. Assistant Community Development Director John Evans was the first speaker, and he gave an overview of the zoning map amendment application submitted by Mr. Robert L. Freeland and the City of Asheboro.

As noted above, the land for which the above-described zoning has been requested is located at 306 Harrison Street and is identified by Randolph County Parcel Identification Number 7761238822 (this property will be hereinafter referred to as the "Zoning Lot.") The Zoning Lot is approximately 0.12 of an acre in size.

In addition to the written staff report, Mr. Evans utilized a slide show presentation in conjunction with his comments. The following points of information were noted.

1. Harrison Street is a local, city-maintained street.

2. The property is inside the city limits.

3. The property is currently zoned B1 Neighborhood Commercial, which is described by the zoning ordinance as "intended to provide for limited retail and personal service uses on free-standing parcels or for small centers to serve adjacent residential neighborhoods. These districts shall normally be located in nodes along minor thoroughfares or higher classification streets."

4. The requested RA6 district is described by the zoning ordinance as "intended to produce a high intensity or residential uses in close proximity to major nodes of non-residential development, characterized primarily by group housing, plus the necessary governmental and other support facilities to service that level of development. Land designate RA6 shall normally be located with access to a minor thoroughfare or higher classification street with access to local residential streets discouraged." In general, the RA6 district allows single-family, two-family and multi-family dwellings. However, a zoning lot with less than 45,000 SF is limited to no more than four dwelling units and multi-family development is limited to a 17% floor area ratio by-right, less than the 22% allowable for a single-or two-family dwelling (equal to 1,149 SF of conditioned floor area on this property).

5. The applicant seeks an addition to the side of the dwelling to meet a need for a reasonable accommodation, which is addressed through various federal laws. According to the US Department of Housing and Urban Development, "Reasonable accommodations may include changes which may be necessary in order for the person with a disability to use and enjoy a dwelling." Reasonable accommodations be made to person(s), including accommodations to policies such as typical zoning standards. The zoning ordinance does have provisions for reasonable accommodations, however, it specifies that the accommodations are for residentially zoned properties.

6. The zoning ordinance allows an applicant to propose a conditional zoning district that deviates from the zoning ordinance's general requirements. In this case, the primary deviation is encroachment into the 10' side setback with a side setback of 2'2". A secondary deviation is to exceed the maximum 1,149 SF of maximum floor area described in (4) above. The applicant's site plan shows that the existing dwelling is approximately 1,166 SF and the proposed bathroom addition would add approximately 88 additional square feet, resulting in a floor area ratio of approximately 24%. Only conditioned space counts towards the floor area ratio.

7. This property is located in the Central Small Area Planning area, which lists "preservation and revitalization of existing residential neighborhoods" as a key issue.

8. During the 2015 update of the Land Development Plan, one of two community meetings to help develop recommendations was held less than half a mile from the subject property. One of the key findings at this meeting was the need to protect established residential neighborhoods from encroachment of commercial and office uses.

Mr. Evans noted that, when evaluating a rezoning application, careful consideration must be given to each goal and policy as outlined in the Land Development Plan.

Proposed Land Use Map Designation: Commercial

Small Area Plan: Central

Growth Strategy Map Designation: Primary Growth

LDP Goals/Policies Which Support Request:

Checklist Item 5: Complies with Growth Strategy Map

Checklist Item 7: The proposed rezoning is compatible with the applicable Small Area Plan.

Checklist Items 12-14: 12.) Property is located outside of the watershed area, Special Hazard Flood Area, and area with steep slopes.

2015 LDP Update Community Workshop 1.

LDP Goals/Policies Which Do Not Support Request:

Checklist Item 1: Rezoning is not compliant with the Proposed Land Use Map.

The City of Asheboro Planning Board considered the rezoning application and recommended placement of the Zoning Lot into the requested RA6 (CZ) zoning district. In making this recommendation, the planning board concurred with the planning staff's analysis of the consistency of the proposed zoning with the adopted comprehensive plans as well as the reasonableness of the proposal. The planning staff's analysis is summarized in the following indented paragraphs.

> The property owner seeks to construct a small addition to an existing dwelling that is considered legal non-conforming due to the current zoning. The addition is related to the alleged need for a reasonable accommodation, a circumstance that the zoning ordinance provides for when property is residentially zoned, but not expressly for commercially zoned property. The application presented seeks to efficiently respond to the requested accommodation through a single-map amendment action rather than utilizing both a map amendment and a separate Board of Adjustment public hearing.
>
> The property has been used residentially for decades. Placing the property in a conditional residential zoning district would support continued use of the property and address the reasonable accommodation request without the need for an additional public hearing. Approval also aligns with the Land Development Plan's recommendation seeking to preserve and protect neighborhoods from commercial encroachment.
>
> Considering the aforementioned analysis, staff believes that the proposed zoning map amendment is reasonable and in the public interest, subject to acceptance of the staff suggested conditions.

In the event of council approval of the application, the planning staff did offer suggested conditions to include as part of a conditional zoning ordinance amendment. These conditions are as follows:

(A) *The use approved shall be a Single-Family Dwelling. Any accessory uses permitted by-right in the RA6 district shall be authorized subject to compliance with general RA6 district regulations.*

(B) *All parties involved in this request, including the owner, successors, heirs, and assigns, agree to the conditions and approved site plan.*

(C) Prior to the issuance of a Zoning Compliance Permit for the proposed land use, the owner shall provide city staff with written acceptance of any conditional zoning district conditions acknowledged during the public hearing.

(D) Deviations from the Zoning Ordinance's pre-determined development requirements shall be strictly limited to construction and maintenance of the identified reasonable accommodation.

(E) The owner(s) of the Zoning Lot shall properly execute and deliver to the Zoning Administrator for recordation in the Office of the Randolph County Register of Deeds a Memorandum of Land Use Restrictions prepared by the city attorney for the purpose of placing notice of the conditions attached to the conditional zoning district in the chain of title for the Zoning Lot.

When no one else other than the applicant asked to speak, Mayor Smith transitioned to the deliberative phase of the process.

After engaging in deliberations about the zoning map amendment application, Council Member Bell moved, and Council Member Trogdon seconded the motion, to adopt the plan consistency statement printed below and to approve the requested rezoning with the following multi-part motion.

1. The property owner seeks to construct a small addition to an existing dwelling that is considered legal non-conforming due to the current zoning. The addition is related to the need for a reasonable accommodation, a circumstance that the zoning ordinance provides for when property is residentially zoned, but not expressly for commercially zoned property. The application seeks to efficiently respond to the requested accommodation through a single-map amendment action rather than utilizing both a map amendment and a separate Board of Adjustment public hearing.

   The property has been used residentially for decades. Placing the property in a conditional residential zoning district would support continued residential use of the property and address the reasonable accommodation request without the need for an additional public hearing. Approval also aligns with the Land Development Plan's recommendation seeking to preserve and protect neighborhoods from commercial encroachment.

   Considering the aforementioned analysis, the council has concluded that the proposed zoning map amendment is generally speaking consistent with the adopted plans, reasonable and in the public interest, subject to acceptance of the staff suggested conditions.

2. The zoning map amendment application seeking to place the Zoning Lot into an RA6 (CZ) zoning district is hereby approved, subject to the inclusion in the approved conditional zoning ordinance of the conditions proposed by city staff.

Council Members Bell, Burks, Heath, McCaskill, Moffitt, Swiers, and Trogdon voted aye. There were no dissenting votes.

(b) Legislative Hearing (Case No. RZ-23-20): A request to rezoning property located north of 4986 US Highway 220 Business North (a portion of Randolph County Parcel Identification Number 7754917907) from R15 to B2 (CZ) zoning to allow for minor motor vehicle repair.

Mayor Smith opened the above-described legislative hearing for Case No. RZ-23-20. Mr. Evans was the first speaker, and he gave an overview of the zoning map amendment application submitted by Rene Avila.

The land for which the above-described zoning has been requested is located on the east side of US Highway 220 Business North and is shown as New Tract 1 in Plat Book 182, Page 33, Randolph County Registry. (this property will be hereinafter referred to as the "Zoning Lot.") The Zoning Lot is approximately 0.68 of an acre (or 29,947 square feet) in size.

In addition to the written staff report, Mr. Evans utilized a slide show presentation in conjunction with his comments. The following points of information were noted.

1. The property is inside the city limits.

2. US 220 Business North is a state-maintained major thoroughfare with a 100' wide public right-of-way. The 2024-2033 State Transportation Improvement Plan (STIP) identifies "widening to multi-lanes" as a potential improvement which is currently listed as unfunded.

3. The R15 zoning district is described by the zoning ordinance as intended to provide regulations which will produce a low intensity of single family residential use with the necessary governmental and other support facilities to service such suburban intensity living.

4. The B2 zoning district is described by the zoning ordinance as "intended to serve the convenience goods, shoppers goods retail and service needs of the motoring public, both local and transient. This district should always be located with access directly to minor thoroughfares or higher classification streets, but never local residential streets."

5. The applicant's proposal is for minor motor vehicle repair only. No major motor vehicle repair is included with the application.

6. The Planning Board reviewed a site plan showing a 1,600 SF principal structure and 400 square foot detached accessory storage building at its November meeting. On November 30, staff was presented with a plan eliminating the accessory storage building but increasing the square footage of the principal structure from 1,600 SF to 1,800 SF. Since the total square footage associated with the proposed use is less, re-review by Planning Board is not necessary.

7. The zoning ordinance allows an applicant to propose a conditional zoning district that deviates from the zoning ordinance's general requirements.

8. The applicant's site plan identifies a landscape screen around the perimeter of the property consisting of evergreen trees placed at no more than 20 feet apart and a row of evergreen shrubs spaced no more than 5 feet apart. There is also a wood slat privacy fence on the eastern side of the property, that the plan indicates is 8 feet in height. Staff notes that code requirements specifies that wooden fencing used to meet screening requirements must be a minimum of 6 feet in height to meet screening requirements. The plan also identifies evergreen landscaping in the front yard at a ratio of one evergreen shrub per 10 linear feet.

Mr. Evans noted that, when evaluating a rezoning application, careful consideration must be given to each goal and policy as outlined in the Land Development Plan.

Proposed Land Use Map Designation: Commercial

Small Area Plan: Northeast

Growth Strategy Map Designation: Primary Growth

LDP Goals/Policies Which Support Request:

Checklist Item 1: Rezoning is compliant with the Proposed Land Use Map.

Checklist Item 3: The property on which the rezoning district is proposed fits the description of the Zoning Ordinance.

Checklist Item 5: Complies with Growth Strategy Map

Checklist Items 12-14: 12.) Property is located outside of the watershed area, Special Hazard Flood Area, and area with steep slopes.

LDP Goals/Policies Which Do Not Support Request

2.1.5 The city will ensure development regulations provide appropriate transitional land uses, such as office and institutional, between high-intensity industrial/commercial and low-intensity residential uses.

The City of Asheboro Planning Board considered the rezoning application and recommended placement of the Zoning Lot into the requested B2 (CZ) zoning district. In making this recommendation, the planning board concurred with the planning staff's analysis of the consistency of the proposed zoning with the adopted comprehensive plans as well as the reasonableness of the proposal. The planning staff's analysis is summarized in the following indented paragraphs.

> The Land Development Plan designates this property for commercial use and the requested commercial designation conforms with the plan's Future Land Use recommendation. The applicant, recognizing that there remains contiguous residential zoning and uses surrounding much of the property, proposes a conditional zoning district in order to offer certainty and specific project details. Staff believes the application proposes a reasonable use for the property and approval would initiate implementation of the Land Development Plan's endorsement of commercial development for this block of N. Fayetteville Street.
>
> Considering the aforementioned analysis, staff believes that the proposed zoning map amendment generally is reasonable and in the public interest, subject to final site plan revisions and acceptance of the staff suggested conditions.

In the event of council approval of the application, the planning staff did offer suggested conditions to include as part of a conditional zoning ordinance amendment. These conditions are as follows:

(A) The use approved shall be Minor Motor Vehicle Repair.

(B) All parties involved in this request, including the owner, successors, heirs, and assigns, agree to the conditions and approved site plan.

(C) Should any outdoor lighting (pole mounted and/or wall mounted) be added, such lighting shall comply with city ordinances and information on such lighting shall be provided to staff for review and approval prior to installation of this outdoor lighting.

(D) No storage of junk or junked vehicles is permitted.

(E) The applicant shall submit a revised site plan detailing the following items:

(a) Information on ground and/or roof mounted mechanical equipment and screening from street view.
(b) Detail on grade separation between the building and the parking area.
(c) Compliance with ADA requirements regarding parking and accessibility to the building.

(F) Prior to the issuance of a Zoning Compliance Permit, the applicant shall obtain the required NCDOT permit(s) and update the plan as necessary to obtain said permit.

(G) Hours of operation shall be from 8:00 AM to 7:00 PM.

(H) Prior to the issuance of a Zoning Compliance Permit for the proposed land use, the owner shall provide city staff with written acceptance of any conditional zoning district conditions acknowledged during the public hearing.

(I) The owner(s) of the Zoning Lot shall properly execute and deliver to the Zoning Administrator for recordation in the Office of the Randolph County Register of Deeds a Memorandum of Land Use Restrictions prepared by the city attorney for the purpose of placing notice of the conditions attached to the conditional zoning district in the chain of title for the Zoning Lot.

The applicant, Rene Avila presented comments in support of the rezoning application, and Mark Harrelson posed questions regarding buffering and screening for the proposed structure.

When no one else asked to speak, Mayor Smith transitioned to the deliberative phase of the process.

After engaging in deliberations about the zoning map amendment application, Council Member Bell moved, and Council Member Heath seconded the motion to adopt the plan consistency statement printed below and to approve the requested rezoning with the following multi-part motion.

1. The Land Development Plan designates this property for commercial use and the applicant's requested commercial designation conforms with the plan's Future Land Use recommendation. The applicant, recognizing that there remains contiguous residential zoning and uses surrounding much of the property, has proposed a conditional zoning district in order to offer certainty and specific project details. With the proposed conditions, the application describes a reasonable use for the property and approval would initiate implementation of the Land Development Plan's endorsement of commercial development for this block of N. Fayetteville Street.

Considering the aforementioned analysis, the council has concluded that the proposed zoning map amendment is generally consistent with the adopted plans, reasonable, and in the public interest, subject to final site plan revisions and acceptance of the staff suggested conditions.

2. The zoning map amendment application seeking to place the Zoning Lot into a B2 (CZ) zoning district is hereby approved, subject to the inclusion in the adopted conditional zoning ordinance of the conditions proposed by city staff.

Council Members Bell, Burks, Heath, McCaskill, Moffitt, Swiers, and Trogdon voted aye. There were no dissenting votes.

17. Work Authorization No. 2 with WK Dickson

Mr. Leonard reported that a 10-unit T-hangar building is proposed to be built along the south end of the hangar development area at the Asheboro Regional Airport. Work Authorization No. 2 includes the design/bid effort for the T-hangar and taxilane development. Site preparation required will include grading, drainage, and erosion control, taxilane paving. The bid documents for the new T-hangar building will be performance based and will include a bathroom with water and sanitary sewer service. The total proposed appropriation within the work authorization is $141,165.00.

Council Member Moffitt moved, and Council Member Burks seconded the motion to approve the Work Authorization No. 2 to address the design and bid administration of a 10-unit T-hangar located at the southern end of the Asheboro Regional Airport. Council Members Bell, Burks, Heath, McCaskill, Moffitt, Swiers, and Trogdon voted aye. There were no dissenting votes.

18. Upcoming Events and Items Not on the Agenda

Mayor Smith and Mr. Ogburn led a discussion of upcoming events within the city government and the community in general. No formal action was taken during this portion of the meeting.

There being no further business, the meeting was adjourned at 9:11 p.m.

_____ _____

Holly H. Doerr, CMC, NCCMC, City Clerk **David H. Smith, Mayor**

ORDINANCE TO AMEND THE GENERAL FUND
FY 2023-2024

WHEREAS, The City of Asheboro entered into a contract for professional services with W.K.Dickson & CO., Inc. on December 6, 2021 for engineering services relating to Corporate Hangar Construction.

WHEREAS, W.K.Dickson & CO., Inc has submitted Work Authorization No. 2 for the design and bid administration of a 10-unit T Hangar Located at the southern end of the Asheboro Regional Airport.

WHEREAS, the additional cost for Amendment 1 is $141,165 and will covered by Federal Grant funding which has a 10% match requirement from the City of Asheboro.

WHEREAS, the 10% match is $14,117.

WHEREAS, the City Council approved this contract amendment at the December 7, 2023 council meeting.

WHEREAS, the City Council of the City of Asheboro desires to amend the budget as required by law to adjust for changes in revenues and expenditures in comparison to the current adopted budget.

THEREFORE, BE IT ORDAINED by the City Council of the City of Asheboro, North Carolina

Section 1: The following revenue line item be increased:

Line Item	Description	Amount
10-000-399.0000	Fund Balance Allocation	14,117

Section 4: The following amounts are appropriated as expenditures for this project:

That the following Expense line items be increased:

Line Item	Description	Amount
10-650-576.0000	Contribution to Airport Improvements Fund II (76)	14,117

Adopted this the 11th day of January 2024.

_____
David H. Smith, Mayor

ATTEST:

_____
Holly H. Doerr, CMC, NCCMC, City Clerk

ORDINANCE TO AMEND
AIRPORT IMPROVEMENTS FUND II (#76)
FY 2023-2024

WHEREAS, The City of Asheboro entered into a contract for professional services with W.K.Dickson & CO., Inc. on December 6, 2021 for engineering services relating to Corporate Hangar Construction.

WHEREAS, W.K.Dickson & CO., Inc has submitted Work Authorization No. 2 for the design and bid administration of a 10-unit T Hangar Located at the southern end of the Asheboro Regional Airport.

WHEREAS, the additional cost for Amendment 1 is $141,165 and will covered by Federal Grant funding which has a 10% match requirement from the City of Asheboro.

WHEREAS, the City Council approved this contract amendment at the December 7, 2023 council meeting.

WHEREAS, the City Council of the City of Asheboro desires to amend the budget as required by law to adjust for changes in revenues and expenditures in comparison to the current adopted budget.

THEREFORE, BE IT ORDAINED by the City Council of the City of Asheboro, North Carolina

Section 1: The following revenue line item be increased:

Line Item	Description	Amount
76-000-301.0000-76	Federal Grant	127,049
76-000-300.0000-76	GF Contribution	14,117
		141,166

Section 4: The following amounts are appropriated as expenditures for this project:

That the following Expense line items be increased:

Line Item	Description	Amount
76-000-410.0001-76	Design & Bid Administration (WA#2)	141,166

Adopted this the 11th day of January 2024.

_____
David H. Smith, Mayor

ATTEST:

_____
Holly H. Doerr, CMC, NCCMC, City Clerk

146 N. Church Street
Asheboro, NC 27203

City of Asheboro
Community Development Division

336-626-1201
www.asheboronc.gov

2023 ADMINISTRATIVELY APPROVED SUBDIVISIONS (SINCE DECEMBER 4, 2023)

Name of Subdivision	Case No.	Location	Number of lots	Type of Approval	Notes
Windcrest Acres, Section 4	SUB-22-01	Bennett Street (off Old Liberty Rd.)	15	Preliminary Plat - December 2023	Subdivision is approved by-right in an R10 Medium-Density Residential zoning district.

Facility Use Agreement

Between

Randolph-Asheboro YMCA and the

City of Asheboro

This Facility Use Agreement of the Zoo City Sportsplex, effective December 1, 2023, is between the Randolph-Asheboro YMCA and the City of Asheboro.

The City of Asheboro shall allow the Randolph-Asheboro YMCA access and the use of the Zoo City Sportsplex as conditioned and described below:

- The City of Asheboro will schedule all activities, programs, tournaments, and special events at the Zoo City Sportsplex. The Randolph-Asheboro YMCA will provide all requested dates for Zoo City Sportsplex usage to the City in advance of each season for approval. Once requested dates have been vetted against City sanctioned events, written notice of approved dates will be given to the Randolph-Asheboro YMCA. Once approval has been given, any additions or rescheduling of dates must be approved by the City in advance of distribution to coaches, participants, and the public.
- Per the Facility Use Agreement, Fields 5-8 are available following the scheduling of City sanctioned events for the Randolph-Asheboro YMCA to have prioritized use for their Recreational Youth Soccer League during the Spring (March-May) and Fall (September-November) on weekdays.
- Per the Facility Use Agreement, Fields 5-8 are available following the scheduling of City sanctioned events for the Randolph-Asheboro YMCA to have prioritized use for their Recreational Adult Soccer League during the months of March-November on weekdays.
- Per the Facility Use Agreement, the Challenge Soccer Program, currently known as the Asheboro City Football Club following the scheduling of City sanctioned events will have prioritized use of Fields 5-8 to practice year-round on weekdays and to hold games in the Spring (February-May) and Fall (August-December) on weekends.
- Per the Facility Use Agreement, Picnic Shelter #6 will have prioritized use by the Randolph-Asheboro YMCA during the Recreational Youth Soccer League and the Challenge Soccer Program, currently known as the Asheboro City Football Club in both the Spring (February-May) and the Fall (August-December).
- Per the Facility Use Agreement, the Randolph-Asheboro YMCA can create, facilitate and insure a maximum of three tournaments following the scheduling of City sanctioned events throughout the year with prioritized use of Fields 5-8 on weekends.
- Per the Facility Use Agreement, the Randolph-Asheboro YMCA will be able to operate concession stand #2 using their own products/supplies and retain all revenue generated

during the facilitation of its Recreational Youth Soccer League, Recreational Adult Soccer League, Challenge Soccer Program, and its three approved tournaments.

- Per the Facility Use Agreement, the Randolph-Asheboro YMCA Recreational Youth and Adult Volleyball Programs following the scheduling of City sanctioned events shall have prioritized use of the beach volleyball courts. These courts are lighted so they can play both day and night.
- Per the Facility Use Agreement, the Randolph-Asheboro YMCA Recreational Youth Soccer League, Recreational Adult Soccer League, Challenge Soccer Program, Recreational Youth and Adult Volleyball Programs and the three yearly tournaments held at the Zoo City Sportsplex will not be charged a rental fee. Any additional events that the Randolph-Asheboro YMCA is allowed to hold at the Zoo City Sportsplex will be charged the current rental rate as set by the city.
- Per the Facility Use Agreement, Randolph-Asheboro YMCA personnel will provide on-site supervision and management of all Randolph-Asheboro YMCA sponsored programs while in progress at the Zoo City Sportsplex to ensure compliance with all established facility rules and regulations. Zoo City Sportsplex personnel shall be provided with a contact list and schedule of these supervisors in advance of all Randolph-Asheboro YMCA sponsored programs.
- This Facility Use Agreement shall be effective upon execution and shall remain in force and effect to and including June 30, 2024, and continue thereafter from year to year unless either party shall file written notice with the other of its desire to amend, modify, or terminate this agreement at least sixty (60) days prior to the expiration of a renewal term.

I, Randolph-Asheboro YMCA, agree to the Facility Use Agreement.

Signature: _____ Date: 12/13/2023

I, City of Asheboro, agree to the Facility Use Agreement.

Signature: _____ Date: 12/13/2023

City Council Approval Scheduled for Jan 11, 2024.

RESOLUTION NUMBER _____

CITY COUNCIL OF THE CITY OF ASHEBORO, NORTH CAROLINA

RESOLUTION AUTHORIZING THE PUBLICATION OF THE CITY COUNCIL'S INTENT TO APPROVE A MCCRARY BALLPARK LEASE WITH ZOOKEEPERS BASEBALL LLC

WHEREAS, Section 160A-272(a) of the North Carolina General Statutes provides as follows:

> Any property owned by a city may be leased or rented for such terms and upon such conditions as the council may determine, but not for longer than 10 years (except as otherwise provided in subsection (b1) of this section) and only if the council determines that the property will not be needed by the city for the term of the lease. In determining the term of a proposed lease, periods that may be added to the original term by options to renew or extend shall be included; and

WHEREAS, Section 160A-272(a1) of the North Carolina General Statutes provides as follows:

> Property may be rented or leased only pursuant to a resolution of the council authorizing the execution of the lease or rental agreement adopted at a regular council meeting upon 30 days' public notice. Notice shall be given by publication describing the property to be leased or rented, stating the annual rental or lease payments, and announcing the council's intent to authorize the lease or rental at its next regular meeting; and

WHEREAS, the city owns McCrary Ballpark and has previously leased the ballpark to Copperheads Baseball LLC, a North Carolina limited liability company, for the operation of a collegiate summer baseball program; and

WHEREAS, the most recent leasing instrument between the city and Copperheads Baseball LLC has expired; and

WHEREAS, by means of an instrument dated January 14, 2022, and filed in the Office of the North Carolina Secretary of State on January 20, 2022, the name of

the above-referenced limited liability company has been changed from Copperheads Baseball LLC to ZooKeepers Baseball LLC; and

WHEREAS, the city and ZooKeepers Baseball LLC wish to continue to provide the citizens of Asheboro and the surrounding areas with the opportunity to attend and view collegiate summer baseball; and

WHEREAS, city staff has requested authorization from the city council to publish the required legal notice of the intent to enter into a 10-year lease agreement, which will contain terms and conditions consistent with the material terms and conditions of the expired lease with Copperheads Baseball LLC, for the purpose of granting to ZooKeepers Baseball LLC the nonexclusive use of McCrary Ballpark for a collegiate summer baseball program, specifically including playing baseball, baseball practices, promoting baseball, and any other ancillary events or activities that have been approved by the city; and

WHEREAS, the Asheboro City Council has concluded that it is appropriate to grant the requested authorization.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Asheboro that, in furtherance of the goal of entering into a 10-year lease agreement with ZooKeepers Baseball LLC, the city clerk is hereby authorized to publish the notice prescribed by Section 160A-272 of the North Carolina General Statutes.

This Resolution was adopted by the Asheboro City Council in open session during a regular meeting held on the 11th day of January, 2024.

_____

David H. Smith, Mayor

ATTEST:

_____

Holly H. Doerr, CMC, NCCMC, City Clerk

RZ-23-21: Request to rezone property (Parcel Identification Number 7764011937) located at 115 South Fayetteville Street and 142 Worth Street and identified by a portion of Randolph County Parcel Identification Number and 7751823582 and all of PIN 7751825638) from OA6 Office-Apartment to B3 Central Commercial zoning.

Planning Board Recommendation and Staff Report

Planning Board Recommendation & Comments to City Council

NOTE: Have applicant Certify to Council mailings to all adjoining property owners.

Case # **RZ-23-21**

Date 12/4/2023 and 1/8/2024

Applicant Al LaPrade

Legal Description

The property of DLAA, LLC, located at 142 Worth Street and 115 S. Fayetteville Street, consisting of a total of 0.93 acres +/- of 1.46 acres +/- identified as a portion of Randolph County Parcel Identification Numbers 7751825638 and 7751823582.

Requested Action Rezone from OA6 Office-Apartment to B3 Central Commercial

Existing Zone OA6

Land Development Plan See Rezoning Staff Report

Planning Board Recommendation

The Planning Board continued the request at its December 4 meeting to the January 8, 2024 due to a notification issue; on January 8, the Board recommended approval of the request.

Reason for Recommendation

The Planning Board concurred with staff reasoning.

Planning Board Comments

Rezoning Staff Report

RZ Case # **RZ-23-21**

Date 1/8/2024 Planning Board
continued from 12/4/2023

General Information

Applicant Al LaPrade

Address 220 Sunset Avenue

City Asheboro NC 27203

Phone 336-610-3001

Location 115 South Fayetteville Street and 142 Worth Street

Requested Action Rezone from OA6 Office-Apartment to B3 Central Commercial

Existing Zone OA6

Existing Land Use Former bank (currently vacant), including associated surface parking and parking structure

Size 0.93 acres +/- of 1.46 acres +/-

Pin # 7751825638 and 7751823582

Applicant's Reasons as stated on application

Property is in the Central Business District which is within the Center City Planning. To contiguously zone the property complex which includes multiple parcels.

Surrounding Land Use

North Central Business District/Governmental

East Governmental

South Office

West Central Business District

Zoning History N/A

Legal Description

The property of DLAA, LLC, located at 142 Worth Street and 115 S. Fayetteville Street, consisting of a total of 0.93 acres +/- of 1.46 acres +/- identified as a portion of Randolph County Parcel Identification Numbers 7751825638 and 7751823582.

Analysis

1. The property is inside the city limits and is split zoned. Much of 115 S. Fayetteville Street already is zoned B3.
2. North Fayetteville Street (US 220 Business) is a state-maintained major thoroughfare. Worth Street is a city-maintained collector street. Scarboro Street is a one-way (west to east), local city-maintained street.
3. The existing OA6 zoning district is described by the zoning ordinance as "intended to produce moderate intensity office and residential development to serve adjacent residential areas and to provide a transition from residential to commercial uses. Land designated OA6 shall normally be located with access to a minor thoroughfare or higher classification street with access to local residential streets discouraged." The requested B3 district is described by the zoning ordinance statement of intent as "intended to be applied to the traditional commercial, governmental, administrative and service core of Asheboro, commonly known as the Central Business District."
4. The B3 rezoning district request for the general district. No specific use or site plan is reviewed with this application. Certain uses not permitted in the OA6 district, such as restaurants and retail, are permitted in a B3 district.
5. The property is located within Tier 1 (Central Business Planning Area) of the designated Center City, which is described by the ordinance as "established to strengthen Asheboro's Center City Planning Area by incorporating a mix of commercial, office, institutional, residential and public open space uses. Design standards for revitalization and new development in the Central Business Planning Area encourage a pedestrian oriented mix of multi-story buildings located close to the street and containing an attractive mix of first-story storefronts, ample sidewalks and street trees."
6. A key distinction between the B3 district and other non-residential district is that the B3 district does not require off-street parking and relies on public parking and on-street parking to meet those needs. On-street parking is available along Worth and Scarboro Streets, and there are surface parking lots available within 700 feet on the same side of N. Fayetteville Street, and within 300 feet on the opposite side of N. Fayetteville Street. There is also a Piedmont Authority for Regional Transportation (PART) bus stop in front of 115 S. Fayetteville Street.
7. The property is located within the National Register Asheboro Downtown Historic District. 115 South Fayetteville Street is classified as a contributing structure built in 1963, displaying modernist characteristics. Contributing structures may be eligible for favorable tax treatment in some circumstances, but such classification does not impose restrictions beyond zoning requirements.
8. This case was continued from the 12-4-23 Planning Board meeting due to a notification issue.

Rezoning Staff Report

RZ Case # **RZ-23-21**

Consistency with the 2020 LDP Growth Strategy designations

In reviewing this request, careful consideration is given to each Goal and Policy as outlined in the Land Development Plan. Some Goals and Policies will either support or will not support the request, while others will be neutral or will not apply. Only those Goals and Policies that support or do not support the request will be shown.

Proposed Land Use Map Designation	City Activity Center
Small Area Plan	Central
Growth Strategy Map Designation	Primary Growth

LDP Goals/Policies Which Support Request

Checklist Item 1: Rezoning is compliant with the Proposed Land Use Map.

Checklist Item 5: Complies with Growth Strategy Map

Checklist Item 7: The proposed rezoning is compatible with the applicable Small Area Plan.

Checklist Items 12-14: 12.) Property is located outside of the watershed area, Special Hazard Flood Area, and area with steep slopes

Rezoning Staff Report

RZ Case # **RZ-23-21**

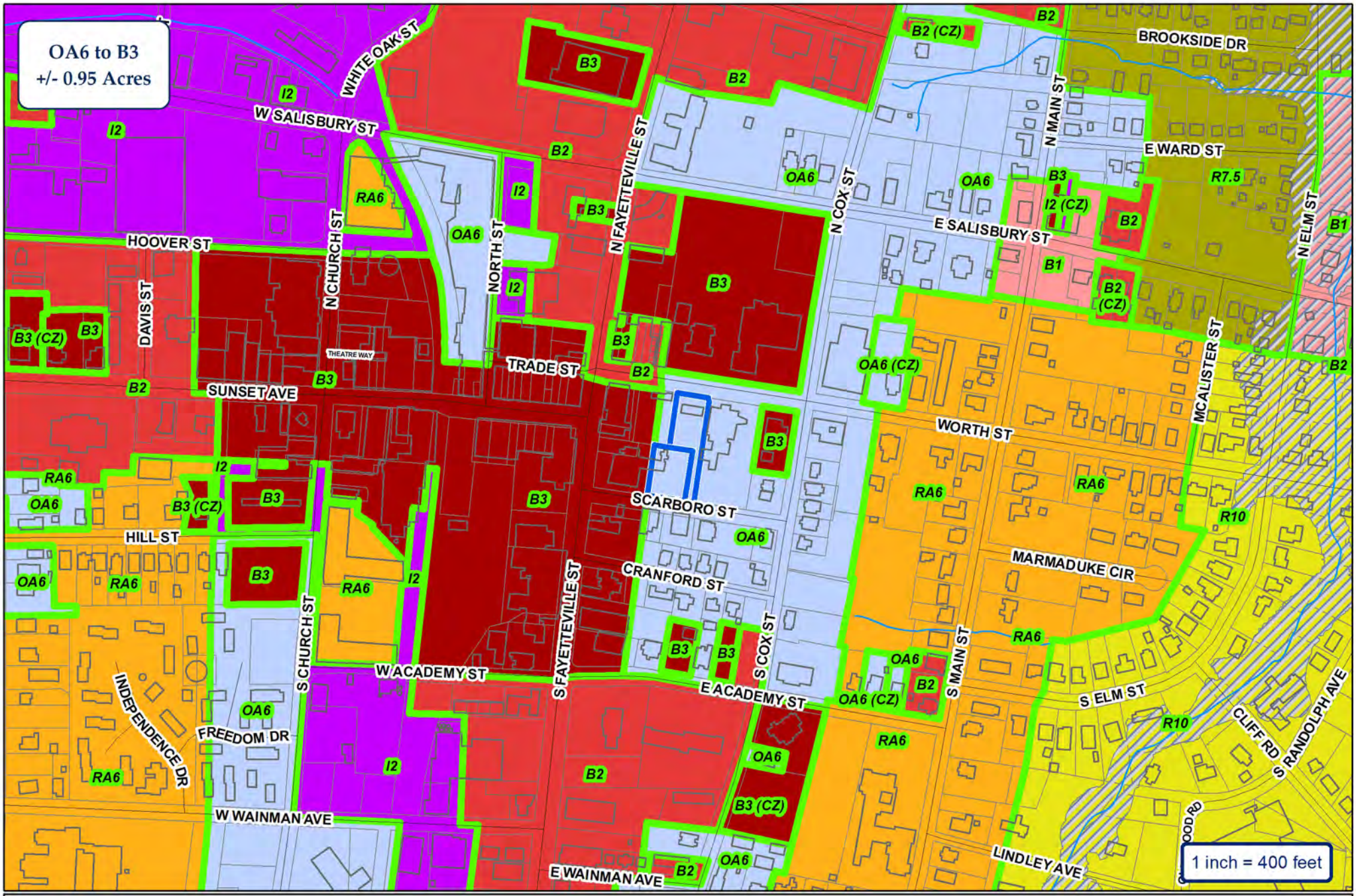
LDP Goals/Policies Which Do Not Support Request

Staff's Final Analysis Concerning Consistency with Adopted Comprehensive Plans, Reasonableness and Public Interest

The subject properties function consistent with the intent of the B3 district and a significant portion of one of the existing structures already is zoned B3. Its functionality as contributing to the Central Business District (CBD) is validated by the property's inclusion in Tier 1 of the Center City Planning Area and the city's Downtown Historic District. The present OA6 zoning, however, limits the property's use in a manner that is inconsistent with the CBD; retail and restaurant uses, for instance, are not permitted.

Care should be taken when applying B3 zoning in order to prevent exacerbating parking availability issues downtown. Accessibility to on and off-street parking is an important consideration, as is the development potential of sites seeking the B3 designation. For this application, staff believes that the proximity to public parking combined with the size of the property and its development characteristics, which include an existing parking structure that is under the control of the applicant, mitigate most of staff's concerns related to parking availability.

Recommendation Considering the aformentioned analysis, staff believes that the proposed zoning map amendment is reasonable and in the public interest and recommends approval of the request.



City of Asheboro Planning & Zoning Department

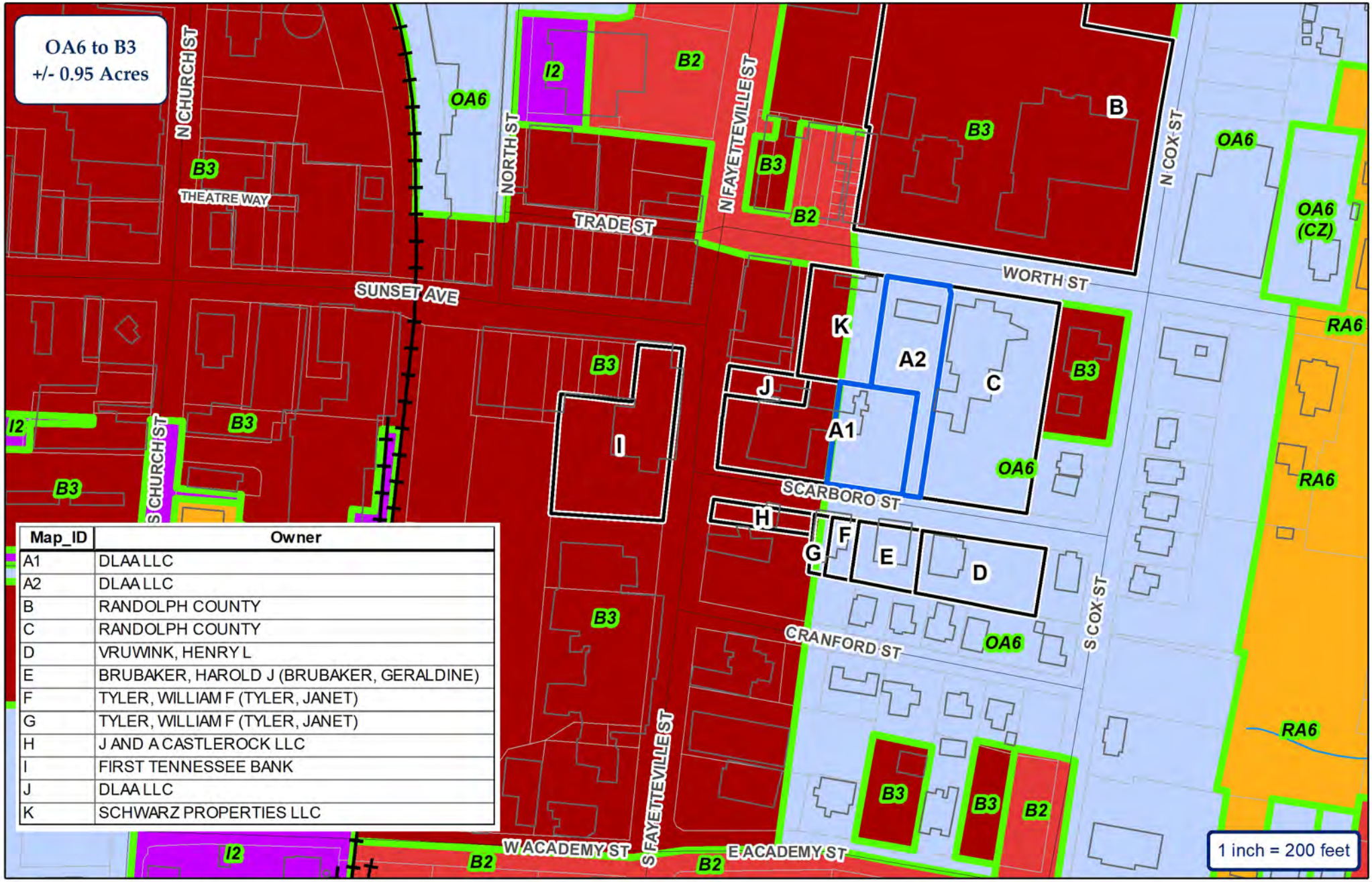
Rezoning Case: RZ-23-21

Parcels: 7751823582 (pt.) & 7751825638

ETJ

Subject Property

Zoning



Map_ID	Owner
A1	DLAA LLC
A2	DLAA LLC
B	RANDOLPH COUNTY
C	RANDOLPH COUNTY
D	VRUWINK, HENRY L
E	BRUBAKER, HAROLD J (BRUBAKER, GERALDINE)
F	TYLER, WILLIAM F (TYLER, JANET)
G	TYLER, WILLIAM F (TYLER, JANET)
H	J AND A CASTLEROCK LLC
I	FIRST TENNESSEE BANK
J	DLAA LLC
K	SCHWARZ PROPERTIES LLC

CITY OF ASHEBORO
NORTH CAROLINA
Exactly where you want to be.

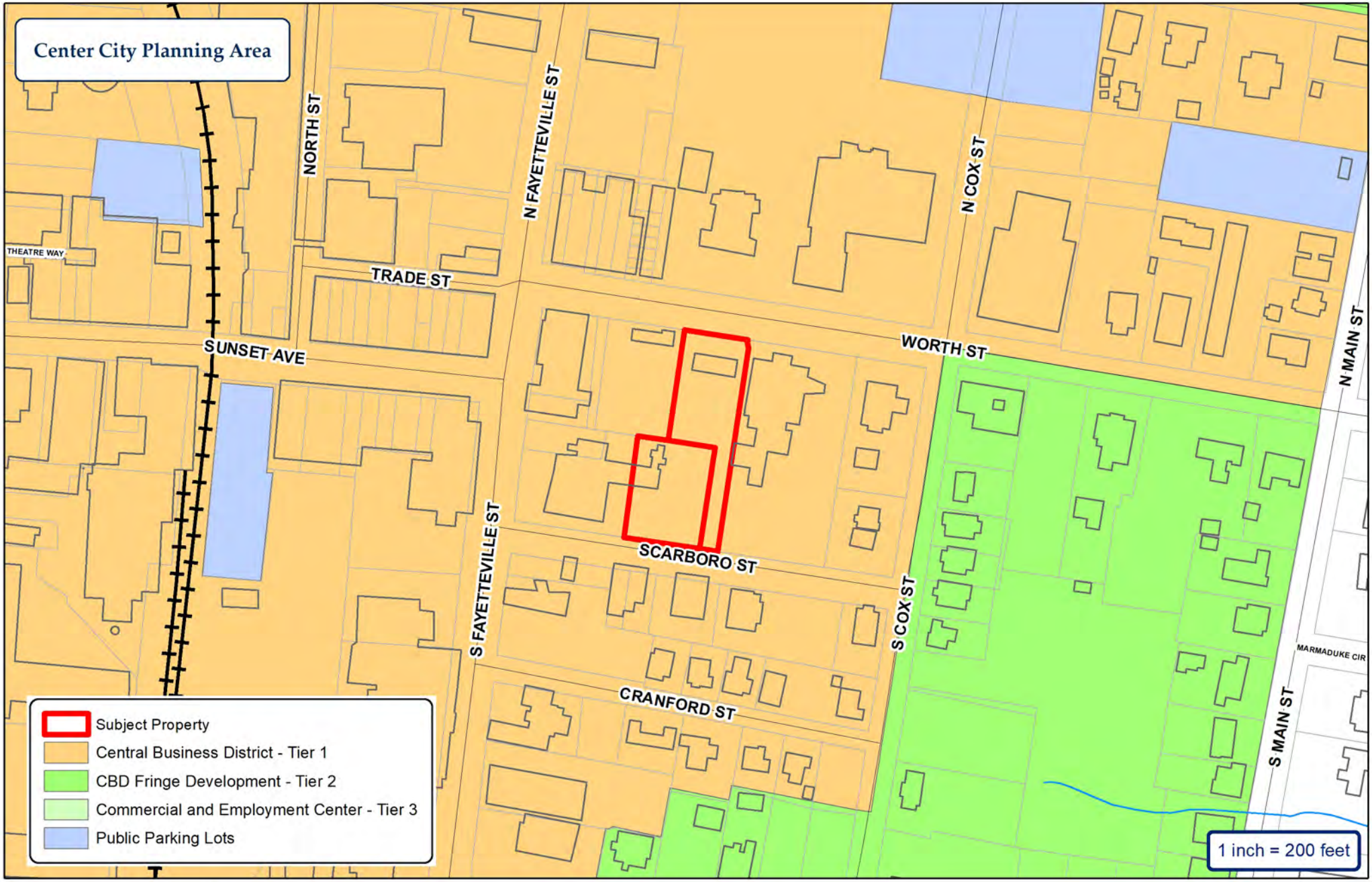
ETJ

City of Asheboro Planning & Zoning Department

Rezoning Case: RZ-23-21

Parcels: 7751823582 (pt.) & 7751825638

Subject Property
Adjoining Properties
City Zoning



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City of Asheboro Planning & Zoning Department

Rezoning Case: RZ-23-21

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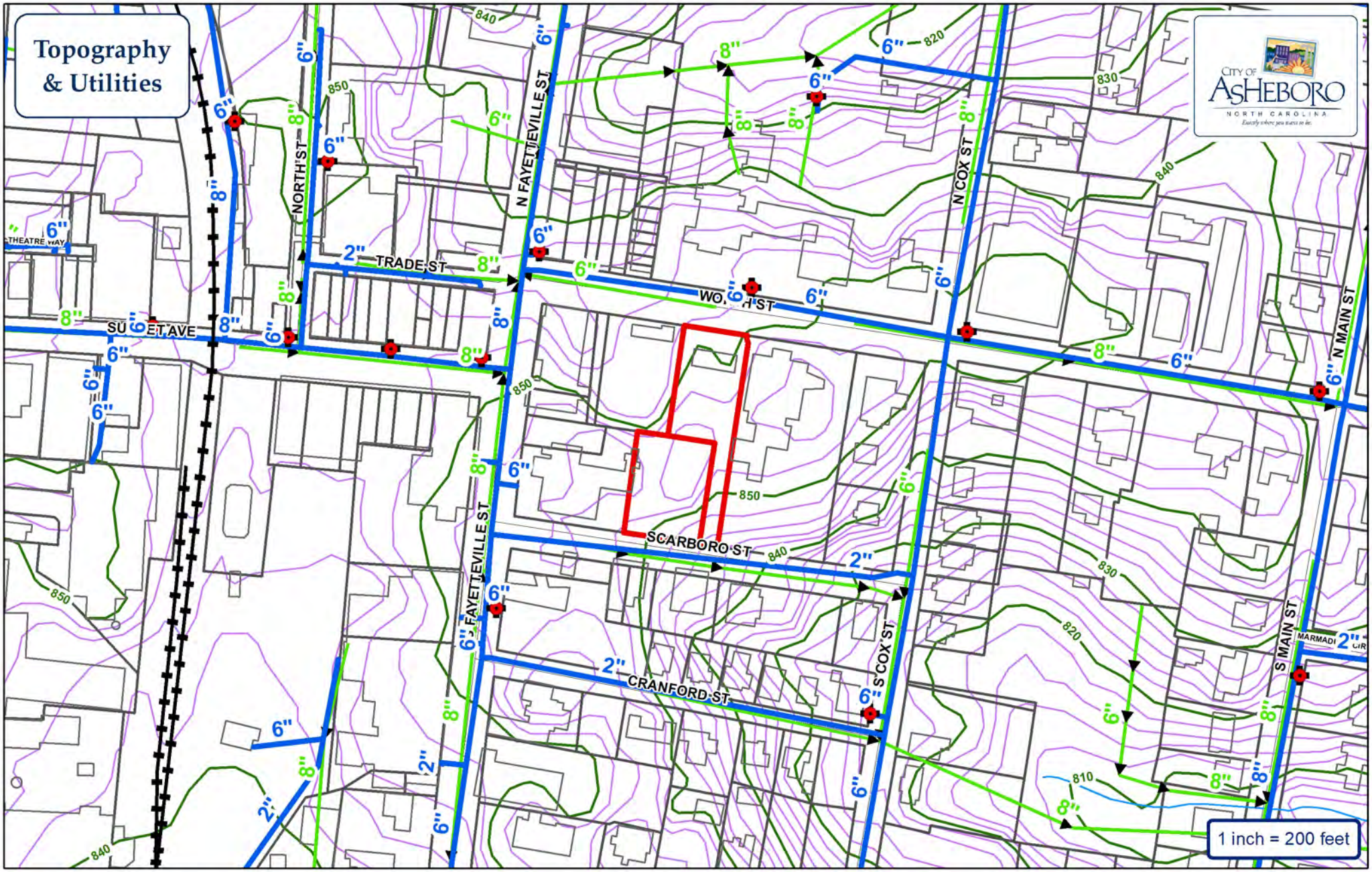


Water Main

Sewer Main

Force Main

Fire Hydrant

Pump Station

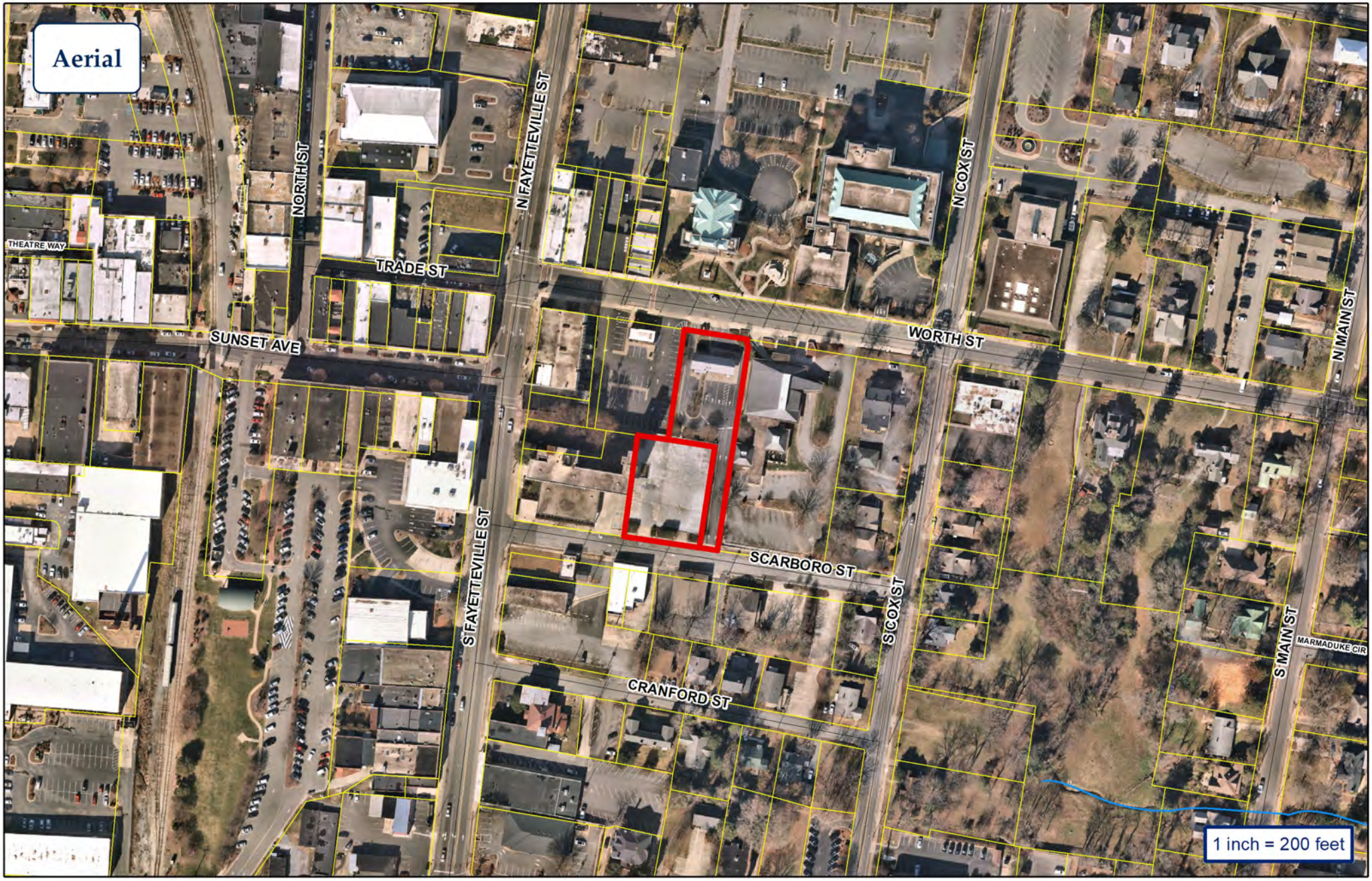
Watershed

City of Asheboro Planning & Zoning Department

Rezoning Case: RZ-23-21

Parcels: 7751823582 (pt.) & 7751825638

Subject Property



City of Asheboro Planning & Zoning Department

Rezoning Case: RZ-23-21

Parcels: 7751823582 (pt.) & 7751825638

Subject Property

APPLICANT INFORMATION

Applicant Al LaPrade

Applicant's Phone # 336-610-3001

Applicant's Address 220 Sunset Ave
Asheboro NC 27203

Applicant Email Address laprade@readytelecom.com

PROPERTY INFORMATION FOR MAP AMENDMENTS

Property Owner's Name DLAA, LLC

Location of Property 142 Worth St., 115 S. Fayetteville St

Property Size (ac. or s.f.) 052 ac, 0.94 ac

Randolph County Property Identification Number (PIN#) 7751825638, 7751823582

Current Zoning District OA6

Requested Zoning District B3

Date Property Title Acquired 4-13-23

Deed Book 002853 Page 01312

Subdivision _____ Section _____ Lot # _____

Plat Book _____ Page _____

ORDINANCE AMENDMENT INFORMATION

1. In what manner will the proposed amendment carry out the intent of the Land Development Plan? property is in the Central Business district which is within the center city planning

For questions (2) and (3), if either of these questions apply, please state a reason. If you believe these do not apply, please check "does not apply".

2. Are there alleged errors in this Ordinance that would be corrected by the proposed amendment? If so, give a detailed explanation of such error and detailed reasons how the proposed amendment will correct the errors.

Does not apply ☑

3. What are the changed or changing conditions, if any, in the jurisdiction of the City of Asheboro generally, which would make the proposed amendment reasonably necessary to the promotion of the public health, safety, and general welfare?

Does not apply ☑

4. Are there any other circumstances, factors, or reasons that the applicant offers in support of the proposed amendment?

to contiguously zone the property complex which includes multiple parcels

APPLICATION SIGNATURES

It is understood by the undersigned that while this application will be carefully reviewed and considered, the burden of proving the need for the proposed amendment rests with the applicant. The applicant for rezoning to any district other than a conditional use district shall be prohibited from offering any testimony or evidence concerning the specific manner in which he or she intends to use or develop the property.

Applicant Signature

Printed Name of Authorized Signatory (if different from Applicant)

Alfred C LaPrade Jr

Position/Relationship of Authorized Signatory to Applicant

Member Manager

Owner Signature (if different than Applicant)

Owner Address

Telephone Number

Printed Name of Authorized Signatory (if different from Owner)

Position/Relationship of Authorized Signatory to Owner

STAFF USE

Received by: John Evans ***Date:*** 10-31-23 ***Case Number:*** TRD

City of Asheboro
Finance Office

To: Mayor, City Council and John Ogburn, City Manger

From: Debbie Reaves, Finance Director

Date: January 9, 2024

Re: Budget ordinances change for January 11 meeting

Last week I submitted for the council agenda that I was looking at presenting an ordinance to amend the General Fund and an ordinance to amend the David and Pauline Jarrell Center City Garden (Jarrel Garden) project at the January 11, 2024 city council meeting.

In preparing the budget amendments and reviewing the potential funding for phase 1 of the construction that Trevor will be presenting, I was reminded that there was a specific allocation for transfer to the Jarrel Garden project already approved in the adopted 2023-2024 budget. Since the allocation was already reviewed and approved in the adopted budget, I am no longer going to need to present an ordinance to amend the General Fund at the meeting.

On the agenda, this item is referenced as item #12. Please amend the agenda to delete reference to this budget ordinance to amend. For proper public notice, if amending the agenda is not desirable, please include this memo in the council packets to notify the council and the public of the change and the reason for the change. I will be happy to clarify / answer questions as applicable at the meeting.

ORDINANCE TO AMEND
DAVID AND PAULINE JARRELL CITY GARDEN FUND
FY 2022-2023

WHEREAS, In February 2021, the City Council of the City of Asheboro executed a contract with Prospect Landscape Architecture for programming, conceptual design, master planning and construction drawings for the David and Pauline Jarrell Center City Garden.

WHEREAS, the City of Asheboro is now ready to start phase 1 construction of the project which includes clearing and vegetation removal, rough grading, and construction of the maintenance driveway and staging area that will become the Garden's parking lot, installation of a perimeter barrier, Duke Energy's relocation of a power pole, and the demolition of the former dwelling on the property, a deteriorated wooden frame storage building and small pump house.

WHEREAS, the 2023-2024 adopted general fund budget includes an appropriation for Phase 1 costs of $240,000 in the Asheboro Parks and Recreation departmental budget.

WHEREAS, the City of Asheboro desires to amend the 2023-2024 project budget to as required by law to adjust for changes in revenues and expenditures in comparison to the current adopted budget.

WHEREAS, the City Council of the City of Asheboro wants to be in compliance with all generally accepted accounting principles.

THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ASHEBORO, NORTH CAROLINA:

That the following revenues be increased:

Line Item	Description	Increase
75-000-300.1000-75	Contribution from General Fund	$240,000

That the following Expense line item be increased:

Line Item	Description	Amount
75-000-400.9001-75	Construction	$240,000

ORDINANCE TO AMEND
DAVID AND PAULINE JARRELL CITY GARDEN FUND
FY 2022-2023

Adopted this the 11th day of January, 2024.

_____
David H. Smith, Mayor

ATTEST:

_____
Holly H. Doerr, CMC, NCCMC, City Clerk

Wolfspeed Watermain Extention
GMP Cost Summary

Task	Description	Garney	Wooten	Total
100	PER Final Document	$ 68,792.00	$ 407,864.00	$ 476,656.00
200	Geotechnical Investigations	$ 568,965.00	$ 7,904.00	$ 576,869.00
300	Design Phase Services 30% & 75%	$ 249,907.00	$ 1,906,157.00	$ 2,156,064.00
	Alternate - Pump Station Design (if required)		$ 57,958.00	$ 57,958.00
400	GMP	$ 31,211.00	$ 6,787.00	$ 37,998.00
500	Permit Phase Services	$ 3,962.00	$ 114,138.00	$ 118,100.00
600	Unallocated Budget	$ 213,500.00	$ 138,234.00	$ 351,734.00
700	Permit Fee Allowance			$ 10,000.00
	Sub-Total	$ 1,136,337.00	$ 2,639,042.00	$ 3,785,379.00
	Design-Builder Fee (10%)			$ 378,537.90
	Sub-Total			$ 4,163,916.90
	Design Builder Contingency			$ 749,375.00
	Sub-Total			**$ 4,913,291.90**

	Allowances	
300	Level A SUE 75 @ $10000	$ 75,000.00
600	Metes & Bounds (hourly billing)	$ 46,310.00

	TOTAL GMP	**$ 5,034,601.90**

	Contingency	Total Fee
	Easement Acquisition Add-ons (See Below)	$ 612,550.00
	Geotech Contingency	$ 50,000.00
	Wetland Delineation Contingency (If Neccesary)	$ 18,700.00
	Sub-total	**$ 681,250.00**
	Design-Builder Fee - 10%	$ 68,125.00
	Total	**$ 749,375.00**

	Telix - Easment Acquisition Efforts	Unit Fee	Units	Total
	Prelim Title Opinions *	$ 650.00	61	$ 39,650.00
	Deed Prep & Attorney Closing *	$ 650.00	61	$ 39,650.00
	Recording Fee & Excise Tax (by Agent)			$ 30,000.00
	ROW Transmittal Summary	$ 3,250.00	61	$ 198,250.00
	Narrative Appraisal *	$ 4,000.00	61	$ 244,000.00
	Appraisal Review *	$ 1,000.00	61	$ 61,000.00
			Total	**$ 612,550.00**

EXHIBIT B

Task 100 – Preliminary Engineering Report (PER)

An evaluation of the proposed project components will be completed to determine detailed project parameters. A Preliminary Engineering Report (PER) will be developed to identify the proposed project design elements. The PER will be developed in accordance with the NC Division of Water Infrastructure Guidelines.

1) Hydraulic Modeling/Capacity Analysis – Hydraulic modeling will be conducted to evaluate various pipe diameters, resultant available capacities and pressures. Wooten will coordinate with the route stakeholders to compile updated water demands and required delivery pressures for incorporation in the modeling analysis. Hydraulic analysis will be based pipeline alignment outlined in RFQ as well as proposed alternate routes.
   Scenarios are anticipated to include:

   a) Recommendations for the final pipeline diameter and potential future intermediate booster pump station capacity will be incorporated as part of the hydraulic modeling analysis.

   Routing Evaluations –As part of the PER, the Design-Build team will develop a routing analysis to identify potential challenges and issues related to the existing available easements and where additional easements will be required. A recommended, preliminary routing map will be developed to assist in the final routing of the main. Existing utility coordination will be performed to assist in route determination Cost considerations will be included in route evaluation. All funding requirements for adherence to Uniform Relocation Assistance and Real Property Acquisitions Act will be met.

2) Pipe Material Analysis – An analysis of commercially available pipe materials will be conducted to determine cost effectiveness and feasibility for the proposed pipeline. Factors will include but not limited to:

   - Material costs
   - Robustness and applicability to finished water service
   - O&M considerations
   - Repair costs and challenges
   - Construction costs and challenges
   - Corrosion Control Evaluation

   For the purposes of this scope of work, the following materials will be included in the evaluation:
   - PVC

EXHIBIT B

- Ductile Iron Pipe (DIP)
- High Density Polyethylene (HDPE) (For Horizontal Directional Drilling if required)

The pipe materials noted above will be screened and ranked for feasibility and applicability for the proposed project.

3) Water Body & Wetland Crossings – Preliminary review of the project route indicates the Deep River will be impacted by construction of the water main. As part of the process, the deign team will consult with the US Army Corps of Engineers and CAMA representatives to determine permitting requirements for the respective crossing. As part of the PER process, we will request consideration for 'open-cut' of the river in areas where feasible in lieu of a trenchless installation based on the anticipated costs impacts of trenchless construction. A recommendation for the river crossing will be provided in the PER.

4) NCDOT Roadway Crossings – Preliminary review of the project indicates approximately 25 NCDOT roadway crossings. The Design-Build Team will contact the respective NCDOT governing offices and determine the permitting process to acquire an encroachment agreement for the proposed project. The Design-Build team will review potential DOT Conservation Easements.

5) Power Line Easements – A large portion of the existing easement parallels a major overhead power transmission line. The proposed pipeline alignment crosses the transmission line in at least two areas. We will consult with the power utility to determine crossing requirements, separation from structures, etc. and provide recommendations as pertinent to the PER.

6) Permitting and Regulatory Requirements – Based on the proposed route and project scope, permitting, and anticipated regulatory agency requirements will be identified in the PER.

7) Workshop Meetings –The design-build team will conduct workshop meetings with project partners during development of the PER document to discuss findings and recommendations. Minutes of each workshop will be provided by the Design-Builder. This scope of work assumes two (2) workshop meetings will be required.

8) Milestone Schedule – The Design-Build team will submit a Milestone Schedule which includes deliverable dates, submission dates and owner review periods.

9) Initial Opinion of Probal Construction Cost – An opinion of probable construction cost will be submitted during Task one and will serve as the basis for cost tracking and GMP development.

EXHIBIT B

10) Project Execution Plan – The Design-Builder will submit for review and approval a project Execution Plan that will include: a communication plan, A list of key personnel, a cost model and permitting plan.

11) Technical Memos (3) & PER - Technical Memo 1 - Route Selection, Technical Memo 2 - Hydraulic Analysis and Technical Memo 3 - BPS, pipe material analysis will be submitted summarizing the findings of the pipe material and corrosion analysis

Task 200 – Geotechnical and Environmental Investigations

Garney will subcontract with F&R, Inc. to provide geotechnical and environmental soil investigations. Services will include:

1) **Field Services**
   Land Borings – Will be performed utilizing a drill rig mounted on a track carrier. Standard Penetration Test (SPT) borings spaced strategically (approx. 500') throughout the alignment to a target depth of 10 feet each. Borings will be advanced to the target depth, or until auger difficulty, whichever occurs first. In addition, at each of the Jack & Bore locations and limits of the river crossings, we will perform a SPT boring to a target depth of 20 feet each. SPT borings for Jack & Bore locations will be advanced to the target depth, or until auger difficulty, whichever occurs first.

2) **Laboratory Testing** – F&R will plan to perform the following laboratory testing on selected representative samples.
3) **Engineering Analysis and Report** - At the completion of the field exploration and laboratory testing, F&R will perform geotechnical engineering analysis and prepare a geotechnical engineering report, which will include:
   a) A brief description of our sampling and testing procedures, as well as our field and laboratory test data, including the boring logs and a test location sketches.
   b) A discussion of our findings, including a brief overview of the site surface conditions observed and a description of the subsurface soil stratigraphy observed. Our discussion will include water level depths measured in the borings at the time of boring, if water is encountered.
   c) General considerations regarding excavations and recommended lateral earth pressure coefficient parameters for conventional excavations at bore pits.

Note that Task 200 will commence concurrently with preparation of the PER detailed in Task 1. Preliminary information obtained from geotechnical investigations will be utilized in preparing Task 1 (as available) and revisited as part of the 30% Design Submittal outlined in Task 300.

EXHIBIT B

Task 300 – Design Phase Services

Design Phase services will be based upon the recommendations of the PER and with the concurrence of the City. Major tasks that will be accomplished for the Design Phase of the project are detailed as follows:

30% Design

1) Aerial and Conventional Field Surveys - Survey work will be performed to the Standards of Practice for Land Surveying in North Carolina. Horizontal survey control will be referenced to NC Grid NAD 83 or otherwise specified. Vertical survey control will be referenced to NAVD88 or otherwise specified. General topography for the route will be collected utilizing LIDAR technology and will provide 1-foot contour level accuracy. The design team will provide ground control for the LIDAR data collection. Conventional field survey methods will be utilized for the following:

    - NCDOT roadway crossings
    - Water bodies and wetlands crossings to supplement the hydrographic survey (Areas shallower than 3 feet)

    Surveys will include site and terrain features to include manholes, ARV's, blow-offs, valves, tree lines, overhead utility lines, underground utilities, etc. as required to develop design level documents.

2) Subsurface Utility Engineering (SUE) – SUE will be utilized to identify the location of existing utilities along the project route. Services include:
    - Conduct utility records research and review prior to executing field work.
    - Perform Quality Level B SUE on NCDOT roadway crossings that will be impacted by the proposed project. Quality Level B services include the horizontal detection, marking and mapping of non-gravity underground facilities 100 feet either side of the existing pipeline between NCDOT right of way boundaries. Utilities are identified and marked in the field in order to be surveyed and mapped.
    - Perform seventy-five (75) Quality Level A vacuum extraction designations along the pipeline route Level A SUE will be completed at NCDOT roadway crossings, water body crossings, and wetland crossings. This will be administered through a project allowance.
    - All SUE services will be field located with conventional survey methods and incorporated in the design documents. SUE services will be performed in accordance with the standards as set by the American Society of Civil Engineers in publication CI/ASCE 38-02 – *Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data*

EXHIBIT B

3) 30% Design Submittal – Upon completion of the Survey/SUE services, the design team will provide a 30% design submittal for review and comments. In addition to the 30% design document submittal, Design-Build team will organize, plan and schedule monthly meetings to review and discuss the 30% submittal with the project partners. Comments received will be incorporated in the 75% submittal documents. The 30% preliminary design documents will include the following:

    - Preliminary water body and NCDOT roadway crossings. For the purposes of this scope of work, it is assumed that the Deep River crossing will be permitted for open-cut installation.
    - Preliminary wetlands delineations and wetland and waterbody impacts
    - Proposed interconnections, valves, and appurtenances
    - Proposed location of air release valves and blow-off assemblies along the route.
    - Identification of existing gas mains in the vicinity.
    - Identify overhead power lines and underground utilities (as available)
    - Review existing rights-of-way and easement needs along proposed route.
    - Make initial contact with all permitting agencies and prepare exhibits to provide project information prior to official permit submission.
    - Technical specifications and details will not be included at the 30% submittal.
    - Preliminary permitting requirements will be identified.
    - The 30% drawings will be provided with plan view only (no profile) at 1″ = 50′ scale.
    - 30% cost opinion including risk register and assumption log.
    - Value engineering options will be provided for consideration.
    - Preliminary project schedule
    - Safety and QC plan development for project
    - Market survey for subcontractor/supplier interest in project with lead times

    The 30% design deliverable will be an electronic format (PDF) copy of the design drawings and a draft of the GMP format. Hard copies to be provided upon request.

75% Design

4) 75 % Design Submittal - A 75% design submittal will be prepared for partner review and comments. In addition to the design document submittal, Design-Build team will organize, plan and schedule monthly meetings to review and discuss the 75% submittal with the project partners as it progresses. Comments received will be incorporated in the 75% submittal documents. The 75% preliminary design documents will include the following:

EXHIBIT B

- Incorporate review comments from the 30% design submittal as appropriate. Note that this scope of work assumes that the new water main will be installed within the existing DOT ROW and that additional easements will be obtained are contiguous, parallel, and adjacent to the existing easements/ROW. If alternate routing deviates from this general alignment, additional design efforts and associated fees may be required.
- For the purposes of this scope of work, it is assumed that the Deep River crossing will be permitted for open-cut installation.
- Prepare plan and profile sheets.
- Provide 75% design of all trenchless method installations with 60% level details.
- Provide standard technical specifications coordinated to comply with the Owner's standards.
- Prepare standard details and/or specific details for primary appurtenances to include ARV's, valves, blow-offs, etc.
- Prepare project specific details for interconnections and items not covered by standard details.
- Provide recommended bedding and foundation details for the pipe material.
- Identify NCDOT rights-of-way limits for NCDOT encroachments.
- Provide geotechnical information collected.
- Incorporate SUE data collected on plan and profile sheets.
- Provide preliminary information on proposed corrosion control measures as required.
- Complete thrust restraint calculations and provide data on drawings where applicable.
- Provide details on crossing or parallelism of gas mains, overhead power mains, or other utilities impacted by the proposed project.
- Provide detail sheets of all details needed for project.
- Identify areas where temporary and permanent easements may be required.
- Identify preliminary staging and storage areas, limits of construction, etc. and clearing limits.
- Identify basic erosion and sedimentation control measures.
- Revised Construction Schedule
- Revised Contingency log for 60% to 100% construction.
- Revised Risk Register and assumption log
- Value Engineering options will be provided for consideration.
- Technical specification will acknowledge and include American Iron and Steel DWSRF requirements, as well as any other federal requirements associated with project funding.

The 75% design deliverable will be an electronic format (PDF) copy. Hard copies to be provided upon request

EXHIBIT B

Task 400 – GMP Proposal

Once Route is approved and a material analysis is performed, the design-builder will submit the first of two GMP's for early material procurement. After the 75% Workshop Garney will provide a construction GMP based upon the 75% drawings, specifications, and permits received or filed. This pricing will be in a format acceptable to The City. In addition to the GMP cost Garney will provide additional documentation

1. Contingency log/Risk register based on 60% design
2. Assumption log for bid
3. Value Engineering ideas and costs
4. Construction Schedule
5. GMP workshop with partners to discuss and review.

Task 500 – Permitting Phase Services

As part of the 75% GMP, the Design Team will provide permit level contract documents and will prepare and submit appropriate permit packages to the required regulatory agencies. The following agency approvals are anticipated and included in this scope of work.

Permit Required	Regulatory Agency
NC Division of Water Infrastructure (ARPA/SRF)	NCDEQ/DWI
NCDOT R/W Encroachment	NCDOT
Public Water Supply	NCDEQ
Erosion Sedimentation Control	NCDEQ
Stormwater Management	NCDEQ
Wetlands/CAMA	USACOE/DEQ/CAMA
Duke Energy Transmission Line Crossing	Duke Energy
NC Department of Administration	State of North Carolina

An allowance for the costs of permit application fees are included in the proposal. However, this scope of work does not include the cost of licensing fees, property acquisition transactions, mitigation, etc. that may be required by the regulatory agency or reviewing entity.

EXHIBIT B

Task 600 – Unallocated Project Budget

This task will be set aside as unallocated project budget to provide for changes in the scope of work or unforeseen revisions to the project approach. The design team will not utilize or expend effort on this task without prior development of a scope, schedule, and fee estimate for the change in scope, and written authorization from Garney and the project partners. Any unused funds from this Task shall be liquidated and returned to The City. We anticipate the following:

(1) With assistance from Telics, conduct research and surveys and prepare necessary plats and maps for the determination of property Ownership and identification of sites and easements to be acquired for the construction of the project (assumes up to 61 parcels).

(2) Staking easement for property acquisition. Where requested by property owner.

(3) Telics and City will be responsible for acquisition and recording of the easements.

Task 700 – Permit Fee Allowance

This task will be set aside as project budget to provide for allowance for payment of permit fees. The design team will not utilize or expend funds from this task without written authorization from Garney and the project partners. Any unused funds from this Task shall be liquidated and returned to The City.

Contingency

A project contingency is included in the Phase 1 GMP. A description of these costs is provided, and the design-build team will not utilize without written authorization form the City or The Owner's Advisor.