



CLEARFIELD CITY COUNCIL
AGENDA AND SUMMARY REPORT
December 09, 2025 - WORK MEETING

Meetings of the City Council of Clearfield City may be conducted via electronic means pursuant to Utah Code Ann. § 52-4-207 as amended. In such circumstances, contact will be established and maintained via electronic means and the meetings will be conducted pursuant to the Electronic Meetings Policy established by the City Council for electronic meetings.

55 South State Street
Third Floor
Clearfield, Utah

6:00 P.M. WORK MEETING

Discussion of a Development Agreement Request for 175 West Antelope Drive Mixed Use Project

Discussion of a Chatbot on the City's Website

(Any item not fully addressed prior to the Policy Meeting will be addressed in a Work Meeting immediately following the Policy Meeting)

****ADJOURN THE CITY COUNCIL WORK MEETING****

Posted December 5, 2025.

/s/Chersty Titensor, Deputy City Recorder

The City of Clearfield, in accordance with the 'Americans with Disabilities Act' provides accommodations and auxiliary communicative aids and services for all those citizens needing assistance. Persons requesting these accommodations for City sponsored public meetings, service programs or events should call Nancy Dean at 801-525-2714, giving her 48-hour notice.

The complete public notice is posted on the Utah Public Notice Website - www.utah.gov/pmn/, the Clearfield City Website – ClearfieldCityUT.gov, and at Clearfield City Hall, 55 South State Street, Clearfield, UT 84015. To request a copy of the public notice or for additional inquiries please contact Nancy R. Dean at Clearfield City, nancy.dean@clearfieldcity.org & 801-525-2714

TO: Mayor Shepherd and City Council Members

FROM: Tyson Stoddard, Planner

MEETING DATE: December 9, 2025

SUBJECT: Development Agreement Request for 175 West Antelope Mixed Use Project, a mixed-use development at approximately 175 West Antelope Drive.

RECOMMENDED ACTION

The Planning Commission forwarded a recommendation of approval to the City Council for the 175 West Antelope Mixed Use Project Development Agreement. The motion to recommend approval specifically included a recommendation that the owner-occupancy section of the agreement require that the initial sale of each townhome would be for the purpose of owner-occupancy, without a deed restriction requiring continued owner-occupancy for five (5) years. The vote for the recommendation of approval included five (5) in favor of approval and two (2) opposed. Those opposed expressed a desire to require owner-occupancy for a period of five (5) years.


DESCRIPTION / BACKGROUND

Earlier this year, the applicant requested a general plan amendment and rezone to allow for development of the subject property with commercial buildings along the frontage of Antelope Drive and a townhome subdivision to the rear of the commercial. The general plan amendment and rezone were approved by the City Council in February 2025, subject to the execution of a development agreement.

Development Agreement

The development agreement must be executed prior to changing the zoning designation of the rear portion of the subject property from C-2 to R-3 on the City's official zoning map. The draft development agreement is attached to this report for review. Below is a summary of the key components of the proposed agreement as outlined in Section 2, "Development of the Project".

1. The residential (R-3) portion of the development will be limited to two-story townhomes and will be allowed to have up to fifty-five (55) residences (approximately 13 units per acre).
2. The townhomes will be sold for the purpose of home ownership and deed restricted to require owner-occupancy for a period of five (5) years.

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3. The commercial portion will include no less than 9,000 square feet of building area and is subject to terms of a development timeline and performance bond, with a final completion deadline of no later than thirty (30) months following the execution of the agreement.
 4. The project will include two (2) vehicular accesses from Antelope Drive and one (1) access from South Main Street. Final placement and design will be approved through the development application and approval process. A traffic study was conducted by a Transportation Engineering firm which includes the following comments/recommendations.
 - The proposed access that aligns with the recycle center meets the UDOT spacing requirements and no variance should be required. Because there is an existing left turn center lane along Antelope Drive and a full shoulder that can be used for a right turn lane, no widening is needed but the striping could be updated to officially include right turn lanes.
 - The proposed access to be shared with the carwash would ideally be placed as far as possible from the intersection. However, it is projected that the access would continue to function because there are not a significant amount of eastbound left turns at the signalized Main Street because the northern approach is gated. There is only one vehicle each two minutes on average making the movement peak AM and PM hours.

PUBLIC NOTICE AND PUBLIC HEARING REQUIREMENTS

Similar to a zoning text amendment, a development agreement changes the standards for a specific development and therefore should be subject to the same level of public participation and public process as an ordinance amendment. A public hearing must be held with the Planning Commission and with the City Council as part of the review and approval process of the amendment. Notice has been provided on site as well as circulated in accordance with public noticing requirements. Staff has not received any comment to date.

CORRESPONDING POLICY PRIORITIES

- Improving Clearfield's Image, Livability, and Economy

The proposed mixed-use development will include retail commercial development along the Antelope Drive corridor, with incentives for timely construction. The proposed townhomes and owner-occupancy requirements of the agreement will provide opportunities for ownership in Clearfield, in support of General Plan strategies to support home ownership at a range of income levels.

HEDGEHOG SCORE



Not considered

FISCAL IMPACT

Fiscal impacts would include increases to the tax base resulting from additional commercial development and additional residences in Clearfield.

ALTERNATIVES

After careful consideration and analysis of the information presented, the Clearfield City Council may move to:

1. Approve the Development Agreement Request for 175 West Antelope Mixed Use Project.
2. Deny the Development Agreement Request for 175 West Antelope Mixed Use Project.
3. Table the Development Agreement Request to request additional time to consider the request.

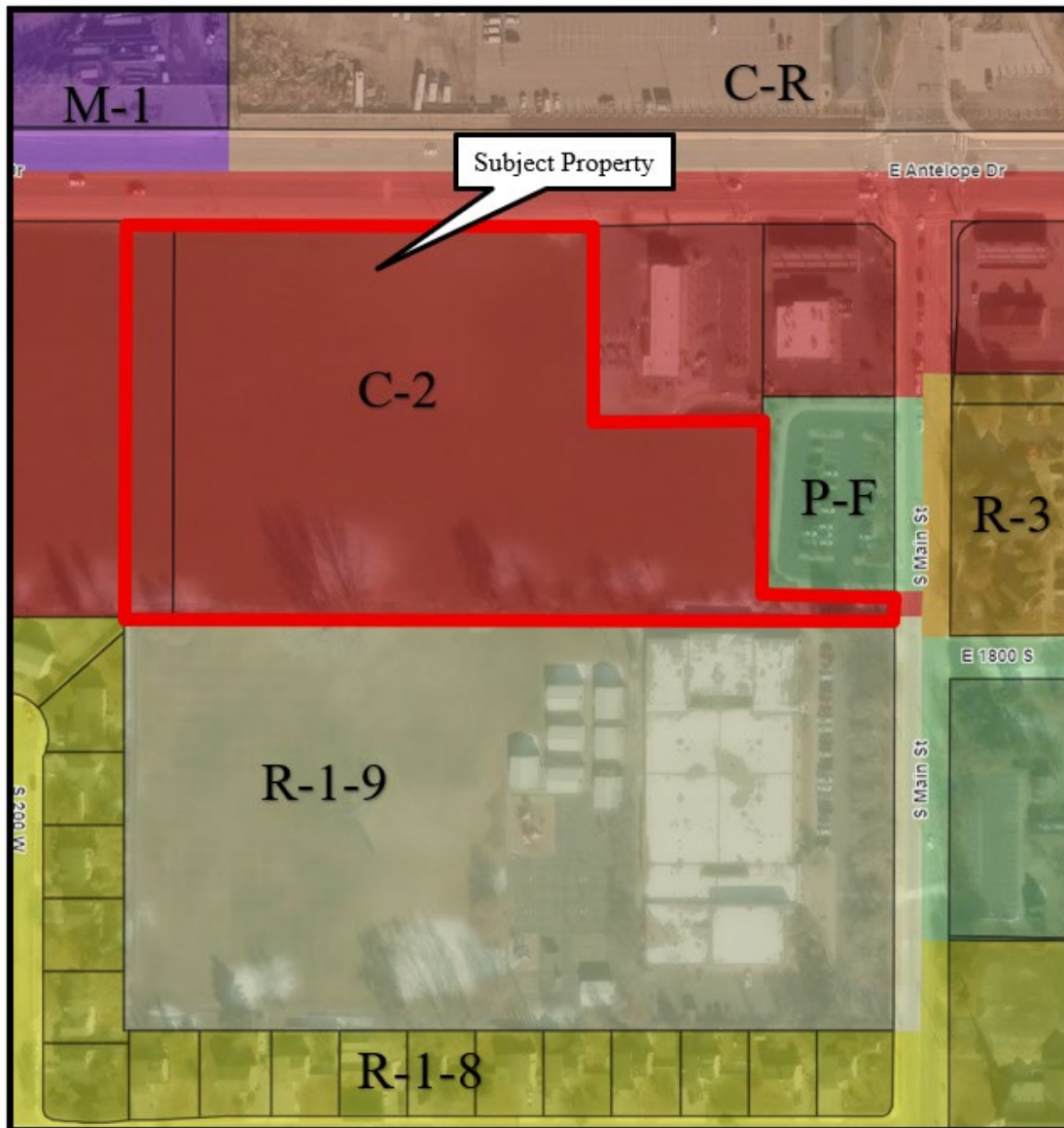
SCHEDULE / TIME CONSTRAINTS

The City Council meeting schedule for this request includes a Work Session on December 9, 2025, and a Public Hearing and Policy Session on January 13, 2026.

LIST OF ATTACHMENTS

- Zoning Map
- Draft Development Agreement
- Concept Site Plan
- Traffic Study

ZONING MAP



**DEVELOPMENT AGREEMENT
FOR
175 W ANTELOPE MIXED USE PROJECT**

**DEVELOPMENT AGREEMENT
FOR
175 W ANTELOPE MIXED USE PROJECT**

THIS DEVELOPMENT AGREEMENT is made and entered into as of the ____ day of _____, 2025 by and between Clearfield City Corporation, a Utah municipality, and S-Devcorp, Inc., a Utah Corporation.

RECITALS

- A. The capitalized terms used in this Development Agreement (DA) and in these Recitals are defined in Section 1.2, below.
- B. Developer is under contract to own and will be developing the Property.

Developer and the City desire that the Property be developed in a unified and consistent fashion with commercial and residential uses pursuant to the Overall Site Plan.
- C. The Parties acknowledge that development of the Property pursuant to this DA will result in significant planning and economic benefits to the City and its residents by, among other things requiring orderly development of the Property as an Overall Site Plan for a mixed use development known as 175 W ANTELOPE and increasing property tax and other revenues to the City based on improvements to be constructed on the Property.
- D. The Parties desire to enter into this DA to specify the rights and responsibilities of

the Developer to develop the Property as expressed in this DA and the rights and responsibilities of the City to allow and regulate such development pursuant to the requirements of this DA.

E. The Parties understand and intend that this DA is a "development agreement" within the meaning of, and entered into pursuant to the terms of Utah Code Ann. §10-9a-101, *et seq.*

F. The rear portion of the Property (approximately 4.3 Acres) is to be zoned R-3 (Residential) and the front portion of the Property (approximately 2.6 Acres) is to be zoned C-2 Commercial subject to the execution of this DA (See Exhibit "B" Parcel Zoning Exhibit)

G. This DA conforms with the intent of the City's General Plan and Zoning.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and other good and valuable considerations, the receipt and sufficiency of which is hereby acknowledged, the City and Developer hereby agree to the following:

TERMS

1. Incorporation of Recitals and Exhibits/ Definitions.

1.1. **Incorporation.** The foregoing Recitals and Exhibits "A" – "D" are hereby incorporated into this DA.

1.2. **Definitions.** As used in this DA, the words and phrases specified below shall have the following meanings:

1.2.1. **Act** means the Land Use, Development, and Management Act, Utah Code Ann. § 10-9a-101, *et seq.*

1.2.2. **Administrator** means the person designated by the City as the Administrator

of this DA.

1.2.3. **Applicant** means a person or entity submitting a Development Application.

1.2.4. **Buildout** means the completion of all the development on the entire Project, Phases 1 and 2, in accordance with the approved plans.

1.2.5. **City** means Clearfield City Corporation, a Utah municipality.

1.2.6. **City's Future Laws** means the ordinances, policies, standards, and procedures which may be in effect as of a particular time in the future when a Development Application is submitted for a part of the Project and which may or may not be applicable to the Development Application depending upon the provisions of this DA.

1.2.7. **Council** means the elected City Council of the City.

1.2.8. **DA** means this Development Agreement including all of its Exhibits.

1.2.9. **Default** means a material breach of this DA as specified herein.

1.2.10. **Denied** means a formal denial issued by the final decision-making body of the City for a particular type of Development Application but does not include review comments or “redlines” by City staff.

1.2.11. **Developer** means Owner and builder.

1.2.12. **Development** means the development of a portion of the Property pursuant to an approved Development Application.

1.2.13. **Development Application** means an application to the City for development of a portion of the Project including a Subdivision or any other permit, certificate or other authorization from the City required for development of the Project.

1.2.14. **Final Plat** means the recordable map or other graphical representation of

land prepared in accordance with Utah Code Ann. § 10-9a-603, or any successor provision, and approved by the City, effectuating a Subdivision of any portion of the Project.

1.2.15. **Maximum Residential Units** means the development of Phase 1 shall have a maximum of 55 Residential Dwelling Units.

1.2.16. **Notice** means any notice to or from any Party to this DA that is either required or permitted to be given to another party.

1.2.17. **Overall Site Plan** means the conceptual layout for Residential Dwelling Units, Commercial Units, and Public Infrastructure for the Project as shown on Exhibit "C".

1.2.18. **Owner** means S-Devcorp. Inc, or its assigns, and any applicable Subdevelopers thereafter.

1.2.19. **Parcel** means a portion of the Property that is created by the Developer to be sold to a Subdeveloper as a Subdivision

1.2.20. **Party/Parties** means, in the singular, Developer or the City, in the plural Developer and the City.

1.2.21. **Phase 1** means the residential portion of the Property as illustrated on the Overall Site Plan to be developed with townhouse residential.

1.2.22. **Phase 2** means the commercial portion of the Property as illustrated on the Overall Site Plan to be developed with commercial uses.

1.2.23. **Planning Commission** means the City's Planning Commission.

1.2.24. **Project** means the total development to be constructed on the Property pursuant to this DA with the associated public and private facilities, and all of the other aspects approved as part of this DA.

1.2.25. **Property** means the real property to be owned and developed by Developer more fully described in Exhibit "A".

1.2.26. **Public Infrastructure** means those elements of infrastructure that are planned to be dedicated to the City as a condition of the approval of a Development Application.

1.2.27. **Residential Dwelling Unit** means a structure or portion thereof designed and intended for use as a residence as illustrated on the Overall Site Plan.

1.2.28. **Subdeveloper** means a person or an entity not "related" (as defined by Section 165 of the Internal Revenue Code) to Developer which purchases a Parcel for development.

1.2.29. **Subdivision** means the division of any portion of the Project into developable lots pursuant to State Law and/or the Zoning Ordinance.

1.2.30. **Subdivision Application** means the application to create a Subdivision.

1.2.31. **Residential Zoning** means City's R-3 Zone.

1.2.32. **Commercial Zoning** means City's C-2 Zone.

1.2.33. **Zoning Ordinance** means the City's Land Use and Development Ordinance adopted pursuant to the Act that was in effect as of the date of this DA as a part of the City's Vested Laws.

2. **Development of the Project.**

2.1. **Compliance with the Overall Site Plan and this DA.** Development of the Project shall be in accordance with the City's Vested Laws, the City's Future Laws (to the extent that these are applicable as otherwise specified in this DA), the Overall Site Plan and this DA.

2.2. **Vehicular Access.** Development of the project shall include two (2) vehicular

accesses from Antelope Drive and one (1) access from South Main Street. The accesses are shown in the conceptual Overall Site Plan of this agreement. The final placement and design of vehicular access will be approved through the Development Application approval process.

2.3. Maximum Residential Units. At Buildout of Phases 1, the Developer shall be entitled to have Fifty Five (55) units, as allowed by this DA.

2.4. Type of Construction. The type of construction for Phase 1 (Residential) of the development shall be limited to townhomes only and shall not include any multi-family apartment buildings.

2.5. Order of Construction. The Parties acknowledge that the Project consists of multiple portions, including both a residential portion (Phase 1) and a commercial portion (Phase 2). While there is no mandated order or sequence of construction requiring that one phase be completed before the other, Developer shall remain subject to the specific performance deadlines and obligations related to Phase 2 as set forth herein. Developer may commence and complete construction of either Phase 1 or Phase 2 in any order, provided that such work is conducted in compliance with all applicable laws, entitlements, approvals, and the terms of this Agreement. Notwithstanding the absence of a required sequence, Developer acknowledges its independent obligation to timely construct the commercial portion (Phase 2), and agrees to do so in accordance with specific deadlines set forth in Section 2.11 of this agreement.

2.6. Height of Residential. The townhomes shall not exceed a height of two-stories above Grade.

2.7. Building Setbacks and Separation. The Parties acknowledge that code

standard of a thirty- foot (30') separation between multi-family buildings shall not apply in Phase 1. There shall be a minimum building separation of twenty feet (20'), a minimum front and side yard setback of ten feet (10'), and a minimum rear yard setback of fifteen feet (15').

2.8. Phase 1 Architecture. The City acknowledges and approves the architectural design elements depicted in the Architectural Design Elevations attached hereto as Exhibit “D”, and generally described as:

Farmhouse Style

Front Façade comprised of horizontal Hardie LAP on ground floor and a combination of horizontal Hardie LAP, Hardie Board and Batton, with stucco accent on the second story. 2 foot wrap along sides of building. Stucco as the primary material along sides and rear of buildings, except along street sides. Along street façades, comprised of horizontal Hardie LAP and stucco as both primary materials. Generally as shown in Exhibit D.

Main Elements of Farmhouse Style design:

- Simple forms without excessive ornamentation
- 1 to 2 stories with steeper pitched roof
- Forward facing gable roof with side wings that are shed, gabled or hip forms
- Large covered front porch with lower slope, sometimes wrap around; entry and porch oriented to the street
- Simple siding types, usually horizontal wood/clapboard siding, stucco or vertical board and batten
- Windows are generally vertically oriented single or double-hung windows; bay windows are also utilized; windows centered are common

- Simple square posts and railings are common
- Traditional Farmhouse exterior colors are appropriate
- Typical main roof pitches shall be 6:12 to 10:12 slopes

Craftsman Style

Front Façade comprised of 3 foot wainscot of brick or stone, with a 2 foot wrap on the side, horizontal Hardie LAP with varying exposures and Hardie Shake with stucco as an accent material. Side and rear façades will be primarily stucco, except along street façades where horizontal Hardie LAP and Stucco with both be primary materials. Generally as shown in Exhibit D.

Main Elements of Craftsman style design:

- Strong square posts proportionate to elevation massing
- Shallow pitched gable incorporating material variation.
- Asymmetrical massing with horizontal proportions
- Expressive but simplified elements such as exposed rafters, knee braces, brackets and tapered columns
- Double hung windows are common, larger horizontal windows utilized in front
- Stucco, stone, brick and shake shingles are common exterior materials, usually not all used together
- Single, rectilinear front door is common
- Traditional Craftsman colors are appropriate
- Typical main roof pitches shall be 4:12 to 8:12 slopes

2.8. Interior Roads. Pursuant to the public works standards of Clearfield City

Ordinance 2024-01, the interior roads in Phase 1 will comply with Private Roadway Street Section B.

2.9. Maximum Unit Connection. No townhome building shall include more than six (6) townhomes without the construction of the next set of townhome units as part of another multi-family building.

2.10. Minimum Commercial Building Area. Developer shall construct not less than 9,000 square feet of commercial building area in Phase 2 (Commercial), in accordance with the Overall Site Plan and in compliance with applicable laws, entitlements, and approvals.

2.11 Development Timeline for Phase 2.

2.11.1. Performance Bond. As security for Developer's obligation to construct the Commercial portion in Phase 2, Developer shall furnish the City with a Performance Bond in the amount of Five Hundred Thousand Dollars (\$500,000.00), in the form of a promissory note or other security acceptable to the City. The Performance Bond shall remain in full force and effect until the City Building Division grants final building inspection approval for all buildings within Phase 2, unless earlier release is approved in writing by the City.

2.11.2. Development Application Approval and Building Permit Issuance. Developer shall obtain all applicable development application approvals and building permits for all Phase 2 commercial buildings no later than twelve (12) months following the execution of this agreement. The City shall process applications in good faith and in accordance with applicable laws and procedures.

2.11.3. Ongoing Construction Obligation and Completion Deadline. Developer shall continuously and diligently pursue construction of each building in Phase 2 to final completion, without material interruption, in accordance with

approved plans and applicable codes and ordinances. Developer shall complete construction of Phase 2 and obtain final building inspection approval for all commercial buildings no later than thirty (30) months following the execution of this agreement.

2.11.4. Remedies for Non-Performance. If Developer fails to (a) timely obtain all applicable development application approvals and building permits for all Phase 2 commercial buildings within the twelve (12) months following the execution of this agreement, or (b) complete the construction of Phase 2 and obtain a final building inspection approval for all commercial buildings within the thirty (30) months following the execution of this agreement, the City shall have the right, upon written notice to Developer and the surety, to draw upon and retain the full amount of the Performance Bond as liquidated damages, and to pursue any and all other rights and remedies available at law or in equity. The process for remedy is fully described in this section and not subject to Section 8, Default.

2.12. Residential Owner-Occupancy Requirement. The townhome units developed on the Property shall be sold for the purpose of long-term owner-occupancy and said units shall be restricted from being used for rental purposes for a minimum period of five (5) years from the date of the initial conveyance of each unit to its first owner.

2.13. Residential Owner-Occupancy Deed Restriction. The Developer shall cause to be recorded, against townhome unit at the time of conveyance, a deed restriction or covenant running with the land, in a form approved by the City, which ensures compliance with the owner-occupancy requirement described herein. Said deed restriction shall expressly state that the townhome unit must be owner-occupied for a minimum of five (5) years from the date of the initial transfer of title and that leasing or renting of the townhome unit during

this period is prohibited.

2.14. Residential Owner-Occupancy Enforcement. The City shall have the right, but not the obligation, to enforce this provision through any lawful means, including injunctive relief, revocation of approvals, or other remedies as provided by law. Any violation of this provision shall constitute a default under this Agreement.

3. Vested Rights.

3.1. Vested Rights Granted by Approval of this DA. To the maximum extent permissible under the laws of Utah and the United States and at equity, the Parties intend that this DA grants Developer all rights to develop the Project in fulfillment of this DA, the City's Vested Laws, the Zoning and the Overall Site Plan except as specifically provided herein. The Parties specifically intend that this DA grant to Developer "vested rights" as that term is construed in Utah's common law and pursuant to Utah Code Ann. § 10-9a-509.

3.2. Exceptions. The restrictions on the applicability of the City's Future Laws to the Project as specified in Section 3.1 are subject to only the following exceptions:

3.2.1. Developer Agreement. City's Future Laws that Developer agrees in writing to the application thereof to the Project;

3.2.2. State and Federal Compliance. City's Future Laws which are generally applicable to all properties in the City and which are required to comply with State and Federal laws and regulations affecting the Project;

3.2.3. Codes. Any City's Future Laws that are updates or amendments to existing building, plumbing, mechanical, electrical, dangerous buildings, drainage, or similar construction or safety related codes, such as the International Building Code, the APWA Specifications, AAHSTO Standards, the Manual of Uniform Traffic

Control Devices or similar standards that are generated by a nationally or statewide recognized construction/safety organization, or by the State or Federal governments and are required to meet legitimate concerns related to public health, safety or welfare;

3.2.4. Taxes. Taxes, or modifications thereto, so long as such taxes are lawfully imposed and charged uniformly by the City to all properties, applications, persons and entities similarly situated.

3.2.5. Fees. Changes to the amounts of fees for the processing of Development Applications that are generally applicable to all development within the City (or a portion of the City as specified in the lawfully adopted fee schedule) and which are adopted pursuant to State law;

3.2.6. Impact Fees. Impact Fees or modifications thereto which are lawfully adopted, and imposed by the City and which meet all requirements of the U. S. Constitution, Utah Constitution, law and applicable statutes, including but not limited to Utah Code Ann. Section 11-36a-101, *et seq.*;

3.2.7. Planning and Zoning Modification. Changes by the City to its planning principles and design standards such as architectural or design requirements, setbacks or similar items so long as such changes do not work to reduce the Maximum Residential Units, are generally applicable across the entire City, and do not materially and unreasonably increase the costs of any Development; or

3.2.8. Compelling. Countervailing Interest. Laws, rules or regulations that the City's land use authority finds, on the record, are necessary to avoid jeopardizing a compelling, countervailing public interest pursuant to Utah Code Ann. § 10-9a-509(l)(a)(i).

4. Processing of Development Applications.

4.1. **City Denial of a Development Application.** If the City denies a Development Application the City shall provide a written determination advising the Applicant of the reasons for denial including specifying the reasons the City believes that the Development Application is not consistent with this DA, the Zoning and/or the City's Vested Laws (or, if applicable, the City's Future Laws).

4.2. **Meet and Confer regarding Development Application Denials.** The City and Applicant shall meet within fifteen (15) calendar days of any Denial and attempt in good faith to resolve the issues specified in the Denial of a Development Application.

4.3. **City Denials of Development Applications Based on Denials from Non-City Agencies.** If the City's denial of a Development Application is based on the denial of the Development Application by a Non-City Agency, Applicant shall appeal any such denial through the appropriate procedures for such a decision and not through the processes specified below.

4.4. Mediation of Development Application Denials.

4.4.1. Issues Subject to Mediation. Issues resulting from the City's Denial of a Development Application that the parties are not able to resolve by "Meet and Confer" upon mutual agreement the parties may be mediated and include the following:

- (i) the location of On-Site Infrastructure, including utility lines and stub outs to adjacent developments,
- (ii) right-of-way modifications that do not involve the altering or vacating of a previously dedicated public right-of-way,
- (iii) interpretations, minor technical edits or inconsistencies

necessary to clarify or modify documents consistent with their intended purpose of the Development Standards, and

(iv) the issuance of building permits.

4.4.2. Mediation Process. If the City and Applicant are unable to resolve a disagreement subject to mediation, the parties may attempt within fifteen (15) calendar days to appoint a mutually acceptable mediator with knowledge of the legal issue in dispute. If the City and Applicant are unable to agree on a single acceptable mediator they shall each, within fifteen (15) calendar days, appoint their own representative. These two representatives shall, between them, choose the single mediator. Applicant and the City shall split the fees of the chosen mediator, each Party paying 50% of the fees. The chosen mediator shall within fifteen (15) calendar days, review the positions of the parties regarding the mediation issue and promptly attempt to mediate the issue between the parties. If the parties are unable to reach agreement, the mediator shall notify the parties in writing of the resolution that the mediator deems appropriate. The mediator's opinion shall not be binding on the parties.

4.5. Arbitration of Development Application Objections.

4.5.1. Arbitration Process. If the City and Applicant are unable to resolve an issue through mediation, the parties may attempt within fifteen (15) calendar days to appoint a mutually acceptable expert in the professional discipline(s) of the issue in question. If the parties are unable to agree on a single acceptable arbitrator they shall each, within fifteen (15) calendar days, each Party shall appoint their own individual appropriate expert. These two experts shall, between them, choose the single arbitrator. Applicant and the City shall split the fees of the chosen arbitrator, each

Party paying 50% of the fees. The chosen arbitrator shall within fifteen (15) calendar days, review the positions of the parties regarding the arbitration issue and render a decision. The arbitrator shall ask the prevailing party to draft a proposed order for consideration and objection by the other side. Upon adoption by the arbitrator, and consideration of such objections, the arbitrator's decision shall be final and binding upon both parties. If the arbitrator determines as a part of the decision that the City's or Applicant's position was not only incorrect but was also maintained unreasonably and not in good faith then the arbitrator may order the City or Applicant to pay the arbitrator's fees.

4.6. Parcel Sales. The City acknowledges that the precise location and details of the public improvements, lot layout and design and any other similar item regarding the development of a particular Parcel may not be known at the time of the creation of or sale of a Parcel. Developer may obtain approval of a Subdivision as is provided in Utah Code Ann. Section 10-9a-103(57)(c)(v) (2018) that does not create any individually developable lots in the Parcel without being subject to any requirement in the City's Vested Laws to complete or provide security for any Public Infrastructure at the time of such subdivision. The responsibility for completing and providing security for completion of any Public Infrastructure in the Parcel shall be that of the Developer or a Subdeveloper upon a subsequent re-Subdivision of the Parcel that creates individually developable lots. However, construction of improvements shall not be allowed until the Developer or Subdeveloper complies with the City's Vested Laws.

5. Application Under City's Future Laws.

5.1. Without waiving any rights granted by this DA, Developer may at any time, choose to submit a Development Application for all or part of the Project under the City's

Future Laws in effect at the time of the Development Application so long as Developer is not in current breach of this Agreement.

6. Public Infrastructure.

6.1. **Construction by Developer.** Developer shall have the right and the obligation to construct or cause to be constructed and installed all Public Infrastructure reasonably and lawfully required as a condition of approval of the Development Application pursuant to the City's Vested Laws.

6.2 **Bonding.** If and to the extent required by the City's Vested Laws, unless otherwise provided by Chapter 10-9a of the Utah Code as amended, security for any Public or private Infrastructure-is required by the City, Applicant shall provide it in a form acceptable to the City as specified in the City's Vested Laws. Partial releases of any such required security shall be made as work progresses based on the City's Vested Laws.

7. Upsizing/Reimbursements to Developer.

7.1. **"Upsizing."** The City shall not require Developer to "upsized" any future Public Infrastructure (i.e., to construct the infrastructure to a size larger than required to service the Project) unless financial arrangements reasonably acceptable to Developer are made to compensate Developer for the incremental or additive costs of such upsizing. For example, if an upsizing to a water pipe size increases costs by 10% but adds 50% more capacity, the City shall only be responsible to compensate Developer for the 10% cost increase. An acceptable financial arrangement for upsizing of improvements means reimbursement agreements, payback agreements, and impact fee credits and reimbursements.

8. Default.

8.1. **Notice.** If Developer or a Subdeveloper or the City fails to perform their respective obligations hereunder or to comply with the terms hereof, the Party believing that a Default has occurred shall provide Notice to the other Party. If the City believes that the Default has been committed by a Subdeveloper then the City shall also provide a courtesy copy of the Notice to Developer.

8.2. **Contents of the Notice of Default.** The Notice of Default shall contain:

8.2.1. Specific Claim. Specify the claimed event of Default;

8.2.2. Applicable Provisions. Identify with particularity the provisions of any applicable law, rule, regulation or provision of this DA that is claimed to be in Default;

8.2.3. Materiality. Identify why the Default is claimed to be material; and

8.2.4. Optional Cure. If the City chooses, in its discretion, it may propose a method and time for curing the Default which shall be of no less than thirty (30) calendar days duration, with the exception of a Default that creates a legitimate concerns related to public health, safety or welfare, which may, at the discretion of the City, be less than thirty (30) calendar days.

8.3. **Meet and Confer, Mediation, Arbitration.** Upon the issuance of a Notice of Default the parties may engage in the "Meet and Confer" and "Mediation" processes specified in Sections 4.4. If the claimed Default is subject to Arbitration as provided in Section 4.5 then the parties may follow such processes.

8.4. **Remedies.** If the parties are not able to resolve the Default by "Meet and Confer" or by "Mediation", and if the Default is not subject to arbitration then the parties may have the following remedies, except as specifically limited in 8.9:

8.4.1 Law and Equity. All rights and remedies available at law and in

equity, including, but not limited to, injunctive relief and/or specific performance.

8.4.2 Security. The right to draw on any security posted or provided in connection with the Project and relating to remedying of the particular Default.

8.4.3 Future Approvals. The right to withhold all further reviews, approvals, licenses, building permits and/or other permits for development of the Project in the case of a default by Developer, or in the case of a default by a Subdeveloper, development of those Parcels owned by the Subdeveloper until the Default has been cured.

8.5. **Public Meeting**. Before any remedy in Section 8.4 may be imposed by the City the party allegedly in Default shall be afforded the right to attend a public meeting before the City Council and address the City Council regarding the claimed Default.

8.6. **Emergency Defaults**. Anything in this DA notwithstanding, if the City Council finds on the record that a default materially impairs a compelling, countervailing interest of the City and that any delays in imposing such a default would also impair a compelling, countervailing interest of the City then the City may impose the remedies of Section 8.4 without the requirements of Sections 8.5. The City shall give Notice to Developer and/or any applicable Subdeveloper of any public meeting at which an emergency default is to be considered and the Developer and/or any applicable Subdeveloper shall be allowed to address the City Council at that meeting regarding the claimed emergency Default.

8.7. **Extended Cure Period**. If any Default cannot be reasonably cured within thirty (30) calendar days then such cure period shall be extended so long as the defaulting party is pursuing a cure with reasonable diligence.

8.8. **Default of Assignee.** A default of any obligations assumed by an assignee shall not be deemed a default of Developer.

8.9. **No Cross-Default.** A default regarding either Phase 1 or Phase 2 shall not be deemed to be a default for the other Phase.

8.10. **Limitation on Recovery for Default - No Damages.** Anything in this DA notwithstanding, no Party shall be entitled to any claim for any monetary damages as a result of any breach of this DA and each Party waives any claims thereto. The sole remedy available to Developer or any Subdeveloper shall be that of specific performance.

8.11. **Exemption for Development Timeline of Phase 2.** Remedies for non-performance of Section 2.11, Development Timeline of Phase 2 of this agreement are not subject to Section 8, Default.

9. **Notices.** All notices required or permitted under this DA shall, in addition to any other means of transmission, be given in writing by certified mail and regular mail to the following address:

To the Developer:

Owners:

S-Devcorp, Inc.
Attn: Nicole Visconti
90 E 7200 S, #200
Midvale, UT 84047

With a copy to:

D.R. Horton, Inc.
Attn: Jonathan Thornley
1785 E 1450 S, Suite 115
Clearfield, UT 84015

To the City:

Clearfield City Corporation
Attn: City Manager
55 South State Street
Clearfield, UT 84015

With a Copy to:

Clearfield City Attorney
55 South State Street
Clearfield, UT 84015

9.1. **Effectiveness of Notice.** Except as otherwise provided in this DA, each Notice shall be effective and shall be deemed delivered on the earlier of:

9.1.0 Hand Delivery. Its actual receipt, if delivered personally, by courier service, or by facsimile provided that a copy of the facsimile Notice is mailed or personally delivered as set forth herein on the same day and the sending party has confirmation of transmission receipt of the Notice. If the copy is not sent on the same day, then notice shall be deemed effective the date that the mailing or personal delivery occurs.

9.1.1. Electronic Delivery. Its actual receipt if delivered electronically by email provided that a copy of the email is printed out in physical form and mailed or personally delivered as set forth herein on the same day and the sending party has an electronic receipt of the delivery of the Notice. If the copy is not sent on the same day, then notice shall be deemed effective the date that the mailing or personal delivery occurs.

9.1.2. Mailing. On the day the Notice is postmarked for mailing, postage prepaid, by First Class or Certified United States Mail and actually deposited in or delivered to the United States Mail. Any party may change its address for Notice under this DA

by giving written Notice to the other party in accordance with the provisions of this Section.

10. Headings. The captions used in this DA are for convenience only and are not intended to be substantive provisions or evidences of intent.

11. No Third-Party Rights/No Joint Venture. This DA does not create a joint venture relationship, partnership or agency relationship between the City, or Developer. Further, the parties do not intend this DA to create any third-party beneficiary rights. The Parties acknowledge that this DA refers to a private development and that the City has no interest in, responsibility for or duty to any third parties concerning any improvements to the Property or unless the City has accepted the dedication of such improvements at which time all rights and responsibilities-except for warranty bond requirements under City's Vested Laws and as allowed by state law-for the dedicated public improvement shall be the City's.

12. Assignability. The rights and responsibilities of Developer under this DA may be assigned in whole or in part, respectively, by Developer with the consent of the City as provided herein.

12.1. Sale of Lots. Developer's selling or conveying lots in any approved Subdivision or Parcels to builders, users, or Subdevelopers, shall not be deemed to be an "assignment" subject to the above-referenced approval by the City unless specifically designated as such an assignment by Developer.

12.2 Related Entity. Developer' transfer of all or any part of the Property to any entity "related" to Developer (as defined by regulations of the Internal Revenue Service in Section 165), Developer' entry into a joint venture for the development of the Project or Developer' pledging of part or all of the Project as

security for financing shall also not be deemed to be an "assignment" subject to the above-referenced approval by the City unless specifically designated as such an assignment by the Developer. Developer shall give the City Notice of any event specified in this sub-section within fifteen (15) calendar days after the event has occurred. Such Notice shall include providing the City with all necessary contact information for the newly responsible party.

12.3 Notice. Developer shall give Notice to the City of any proposed assignment and provide such information regarding the proposed assignee that the City may reasonably request in making the evaluation permitted under this Section. Such Notice shall include providing the City with all necessary contact information for the proposed assignee.

12.4 Time for Objection. Unless the City objects in writing within thirty (30) calendar days of notice, the City shall be deemed to have approved of and consented to the assignment.

12.5 Partial Assignment. If any proposed assignment is for less than all of Developer's rights and responsibilities, then the assignee shall be responsible for the performance of each of the obligations contained in this DA to which the assignee succeeds. Upon any such approved partial assignment Developer shall not be released from any future obligations as to those obligations which are assigned but shall remain responsible for the performance of any obligations herein.

12.6 Denial. The City may only withhold its consent if the City is not reasonably satisfied of the assignee's financial ability to perform the obligations of or Developer proposed to be assigned or there is an existing breach of a development obligation owed to the City by the assignee or related entity that

has not either been cured or in the process of being cured in a manner acceptable to the City. Any refusal of the City to accept an assignment shall be subject to the "Meet and Confer" and "Mediation" processes specified in Sections 4.2 and 4.4. If the refusal is subject to Arbitration as provided in Section 5.5 then the Parties shall follow such processes.

12.7 Assignees Bound by DA. Any assignee shall consent in writing to be bound by the assigned terms and conditions of this DA as a condition precedent to the effectiveness of the assignment. That consent shall specifically acknowledge the provisions of Section 2.

13. Binding Effect. If Developer sells or conveys Parcels of lands to Subdevelopers or related parties, the lands so sold and conveyed shall bear the same rights, privileges, configurations, and number of Residential Dwelling Units as applicable to such Parcel and be subject to the same limitations and rights of the City when owned by or Developer and as set forth in this DA without any required approval, review, or consent by the City except as otherwise provided herein.

14. No Waiver. Failure of any Party hereto to exercise any right hereunder shall not be deemed a waiver of any such right and shall not affect the right of such party to exercise at some future date any such right or any other right it may have.

15. Severability. If any provision of this DA is held by a court of competent jurisdiction to be invalid for any reason, the Parties consider and intend that this DA shall be deemed amended to the extent necessary to make it consistent with such decision and the balance of this DA shall remain in full force and affect.

16. Force Majeure. Any prevention, delay or stoppage of the performance of any obligation under this Agreement which is due to strikes, labor disputes, inability to obtain

labor, materials, equipment or reasonable substitutes therefor; acts of nature, governmental restrictions, regulations or controls, judicial orders, enemy or hostile government actions, wars, civil commotions, fires or other casualties or other causes beyond the reasonable control of the Party obligated to perform hereunder shall excuse performance of the obligation by that Party for a period equal to the duration of that prevention, delay or stoppage.

17. Time is of the Essence. Time is of the essence to this DA and every right or responsibility shall be performed within the times specified.

18. Appointment of Representatives. To further the commitment of the Parties to cooperate in the implementation of this DA, the City and Developer each shall designate and appoint a representative to act as a liaison between the City and its various departments and the Developer. The initial representative for the City shall be the City Manager. The initial representative for Developer shall be **Nicole Stangl Visconti**. The Parties may change their designated representatives by Notice. The representatives shall be available at all reasonable times to discuss and review the performance of the Parties to this DA and the development of the Project.

19. Applicable Law. This DA is entered into in Salt Lake County in the State of Utah and shall be construed in accordance with the laws of the State of Utah irrespective of Utah's choice of law rules.

20. Venue. Any action to enforce this DA shall be brought only in the Second District Court for the State of Utah, Davis County Division.

21. Entire Agreement. This DA, and all Exhibits thereto, is the entire agreement between the Parties and may not be amended or modified except either as provided herein or by a subsequent written amendment signed by all Parties.

22. Mutual Drafting. Each Party has participated in negotiating and drafting this DA and

therefore no provision of this DA shall be construed for or against any Party based on which Party drafted any particular portion of this DA.

23. Recordation and Running with the Land. This DA shall be recorded in the chain of title for the Project. This DA shall be deemed to run with the land.

24. Authority. The Parties to this DA each warrant that they have all of the necessary authority to execute this DA. Specifically, on behalf of the City, the signature of the City is affixed to this DA lawfully.

Signature Page To Follow

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by and through their respective, duly authorized representatives as of the day and year first herein above written.

CITY
Clearfield City Corporation

By: _____
Its: _____

Approved as to form and legality:

Attest:



City Attorney

City Recorder

CITY ACKNOWLEDGMENT

STATE OF UTAH)
 :ss.
COUNTY OF DAVIS)

On the ____ day of _____, 2025 personally appeared before me _____ who being by me duly sworn, did say that he is the _____ of Clearfield City Corporation, a political subdivision of the State of Utah, and that said instrument was signed in behalf of the City by authority of its City Council and said _____ acknowledged to me that the City executed the same.

NOTARY PUBLIC

My Commission Expires: _____

Residing at: _____

DEVELOPER
Phase 1, and 2 Owners

By: _____
Its: _____

DEVELOPER ACKNOWLEDGMENT

STATE OF UTAH)
 :ss.
COUNTY OF)

On the ___ day of , 2020, personally appeared before me _____, who
being by me duly sworn, did say that he is the _____ of _____ a Utah
limited liability company and that the foregoing instrument was duly authorized by the
company at a lawful meeting held by authority of its operating agreement and signed in behalf
of said company.

NOTARY PUBLIC

My Commission Expires: _____

Residing at: _____

TABLE OF EXHIBITS

Exhibit "A"	Legal Description of Property
Exhibit "B"	Parcel Zoning Exhibit
Exhibit "C"	Overall Site Plan
Exhibit "D"	Townhome Elevations

EXHIBIT 'A'

All of Lot 5, HOLT COMMERCIAL SUBDIVISION, according to the official plat thereof, filed in the office of the Davis County Recorder as Entry No. 1248693 and as Map No. 2634 of official records.

Less and excepting therefrom that portion of the subject property as disclosed by that certain Warranty Deed recorded October 15, 2002 as Entry No. 1795163 in Book 3146 at Page 875, being described as follows:

A parcel of land in fee for the widening of an existing highway, State Route 108, known as Project No. 0108, being part of an entire tract of property, situate in Lot 5, HOLT COMMERCIAL SUBDIVISION, and Lot 6, LARSEN COMMERCIAL SUBDIVISION, subdivisions in the NE 1/4 of Section 14, Township 4 North, Range 2 West, Salt Lake Base and Meridian. The boundaries of said parcel of land are described as follows:

Beginning on the southerly right-of-way line of said existing highway at a point 51.35 feet perpendicularly distant southerly from the center line of said project at Engineer Station 149+07.77, which point is the Northeast Corner of said Lot 5, said point being 388.00 feet North 89°59'50" West along the North line of said Section 14 and 33.00 feet South 0°10'11" West from the Northeast Corner of said Section 14, and running thence North 89°59'50" West 545.37 feet to the Northwest Corner of said Lot 6; thence South 0°10'11" West 0.49 feet along the westerly lot line of said Lot 6 to a point 55.00 feet perpendicularly distant southerly from said center line at Engineer Station 154+53.03; thence South 89°39'55" East 545.37 feet along a line parallel to said center line to a point on the easterly lot line of said Lot 5; thence North 0°10'11" East 3.65 feet along said easterly lot line to the point of beginning as shown on the official map of said project in the office of the Utah Department of Transportation. (Note: Rotate all bearings in the above description 0°20'40" clockwise to match highway bearings based upon the Utah State Plane Coordinate System modified)

ALSO Less and excepting therefrom that portion of the subject property as disclosed by that certain Warranty Deed recorded December 23, 2014 as Entry No. 2840503 in Book 6170 at Page 471, being described as follows:

A parcel of land in fee, being part of Lot 5, Holt Commercial Subdivision, according to the official plat thereof, recorded as Entry No. 1248693 in Book 2001 at Page 1170 in the office of the Davis County Recorder, situate in the Northeast Quarter of the Northeast Quarter of Section 14, Township 4 North, Range 2 West, Salt Lake Base and Meridian, the boundaries of said parcel of land are described as follows:

Beginning at the Northeast corner of said Lot 5, which corner is 188.00 feet North 89°59'50" West along the Section line and 238.10 feet South 00°10'11" West from the Northeast corner of said Section 14; and running thence South 00°10'11" West 27.00 feet along the Easterly boundary line of said Lot 5; thence North 89°59'50" West 200.00 feet; thence North 00°10'11" East 27.00 feet to the Southwest corner of Lot 1 of Antelope Business Park Subdivision according to the official plat thereof, recorded as Entry No. 1662664 in Book 2812 at Page 263 in the office of the Davis County Recorder; thence South 89°59'50" East 200.00 feet along the Southerly boundary line of said Lot 1 to the point of beginning.

EXHIBIT 'B'

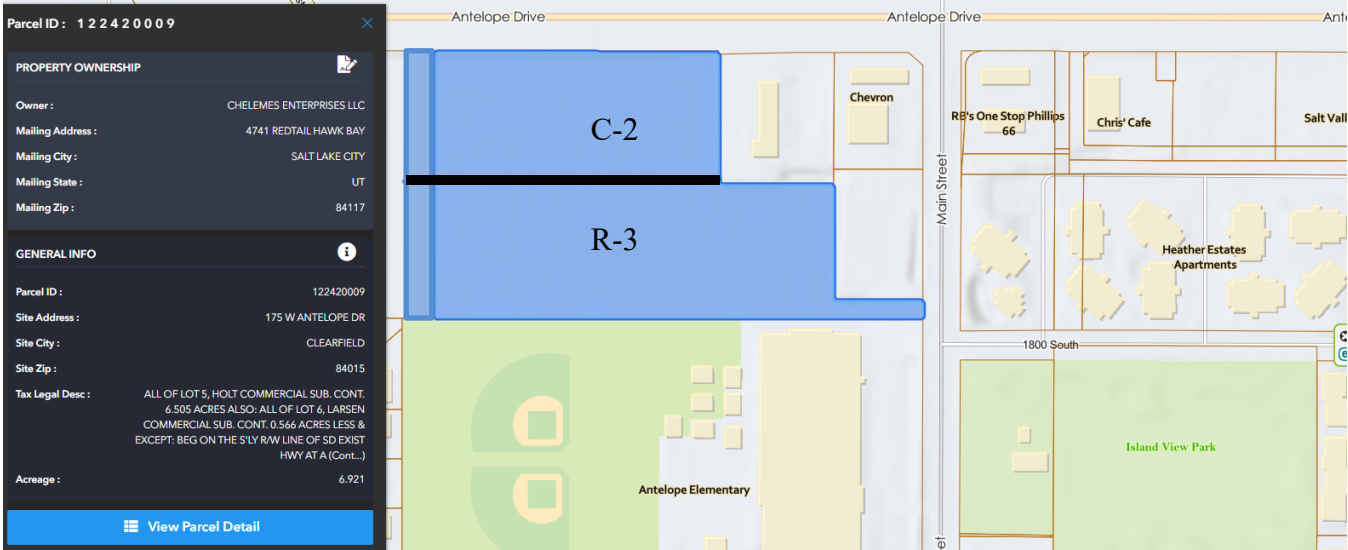
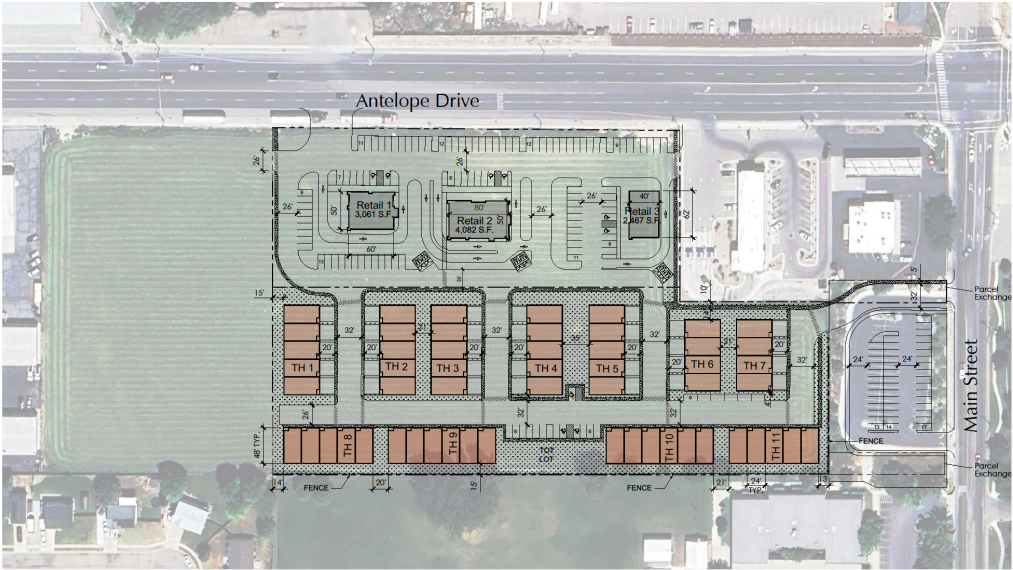


EXHIBIT 'C'



PARKING/BUILDING DATA			
RETAIL 1-3	4,000 SF		
TOTAL PARKING PROVIDED	10 SPACES		
RATIO	0.07/1,000 SF		
TOTAL PARKING REQUIRED	48 SPACES		
* BASED ON ALL PART OCCUPANCY IN (17/200)			

TOWNHOME DATA			
TOWNHOME	(3 UNITS PER BUILDING)	60 UNITS	
GAZON	30 SPACES		
OPEN	30 SPACES		
TOTAL PARKING	60 SPACES		
RATIO	0.07/1,000 SF		
TOWNHOME PARCEL	400 Acres		
LANDSCAPING	47,000 SF	25,000 SF	

CITY ZONING CODE	
Jurisdiction	Clearfield UT
Zoning	C-2 - based on R-3
Setbacks	5' 10'
Height	5' 10' or less to residential zone, a setback yard of equal width to that required for the rear yard in the adjoining residential zone
Density	14 dwelling units per acre
Parking	10/20 24
Landscaping (C-2)	10%
Landscaping (R-3)	20%

CONCEPTUAL SITE PLAN
THIS SITE PLAN IS FOR CONCEPTUAL PLANNING.
THE SITE WILL NEED TO BE SURVEYED TO
ACCURATELY DEFINE ALL BOUNDARIES,
EASEMENTS, UTILITY EASEMENTS, RIGHT-OF-WAYS,
CONFIRM ACCESS LOCATIONS, AND WETLANDS.

S-DEVCORP INC. - Clearfield Mixed Use

Site Plan

AE2024.284 - SP 12

156 West Antelope Drive - Clearfield

October 16, 2025



EXHIBIT 'D'



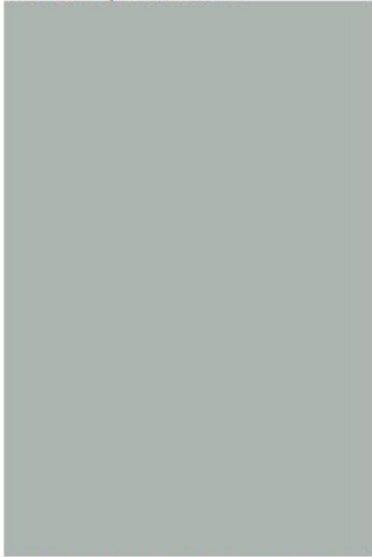
EXHIBIT 'D' continued



EXHIBIT 'D' continued

MULTI-FAMILY | COLOR SCHEME MF-1

SIDING 1/STUCCO 1



SW 7066 GRAY MATTERS

SIDING 2/STUCCO



SW 7068 GRIZZLE GRAY

SIDING 3/TRIM/ENTRY DOOR



SW 7005 PURE WHITE

STONE (ESW)



GREY DRIFT MOUNTAIN LEDGE

STONE (H)



MIDNIGHT UINTAH LEDGE

ASPHALT ROOFING

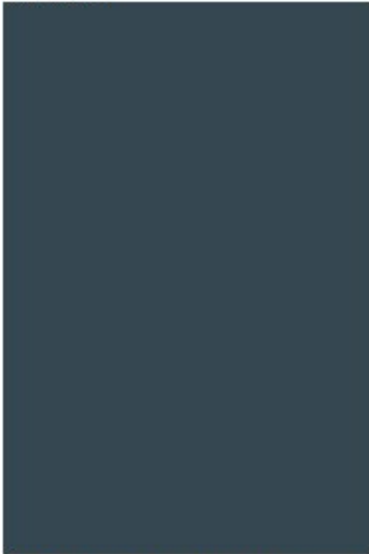


DUAL BLACK

EXHIBIT 'D' continued

MULTI-FAMILY | COLOR SCHEME MF-2

SIDING 1



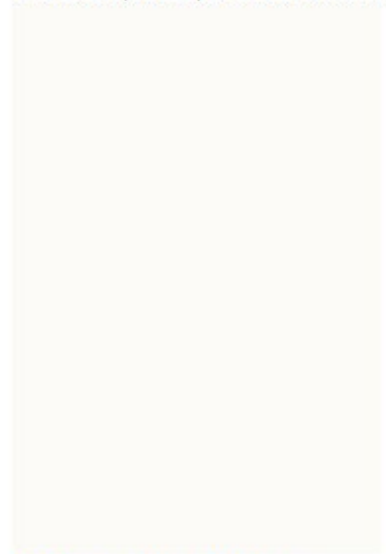
SW 7615 SEA SERPENT

SIDING 2/STUCCO 1



SW 7660 EARL GRAY

SIDING 3/TRIM/ENTRY DOOR



SW 7005 PURE WHITE

STONE (ESW)



SLATE SOUTHERN LEDGE

STONE (H)



SLATE UINTAH LEDGE

ASPHALT ROOFING



DUAL BLACK

EXHIBIT 'D' continued

MULTI-FAMILY | COLOR SCHEME MF-5

SIDING 1



SW 7016 MINDFUL GRAY

SIDING 2



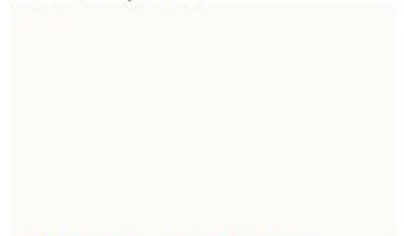
SW 7019 GAUNTLET GRAY

ENTRY DOOR



SW 6222 RIVERWAY

SIDING 3/TRIM



SW 7005 PURE WHITE

STONE (ESW)



SLATE SOUTHERN LEDGE

STONE (H)



SLATE UINTAH LEDGE

ASPHALT ROOFING



DUAL BLACK

EXHIBIT 'D' continued

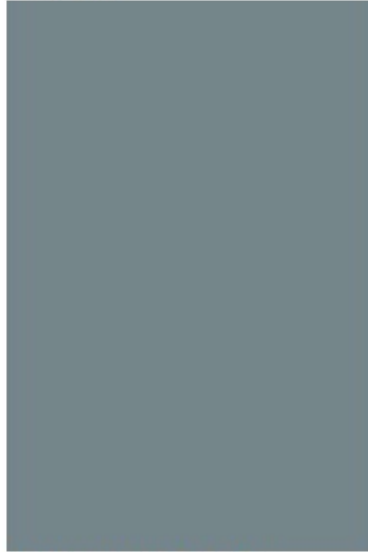
MULTI-FAMILY | COLOR SCHEME MF-6

SIDING 1



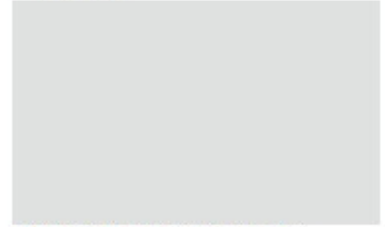
SW 6236 GRAYS HARBOR

SIDING 2



SW 6235 FOGGY DAY

STUCCO 1



SW 6231 ROCK CANDY

STUCCO 2/TRIM/ENTRY DOOR



SW 7005 PURE WHITE

STONE (ESW)



CHAMPAGNE MOUNTAIN LEDGE

STONE (H)



CHABLIS UINTAH

ASPHALT ROOFING



CHARCOAL GREY

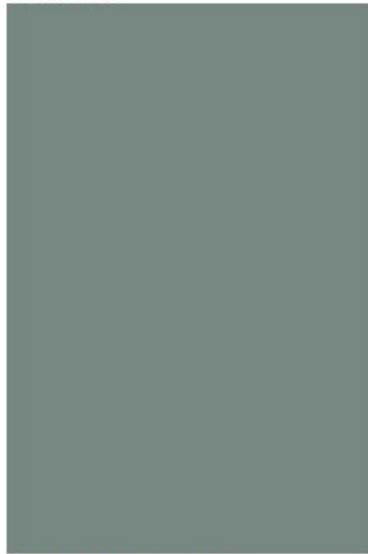
MULTI-FAMILY | COLOR SCHEME MF-7

SIDING 1



SW 6205 COMFORT GREY

SIDING 2



SW 6207 RETREAT

STUCCO 1



SW 7653 SILVERPOINTE

ENTRY DOOR



SW 6991

SIDING 3/TRIM



SW 7005

STONE (ESW)



CHAMPAGNE MOUNTAIN LEDGE

STONE (H)



CHABLIS UINTAH

ASPHALT ROOFING



DUAL BLACK

MULTI-FAMILY | COLOR SCHEME MF-9

SIDING 1



SW 7006 EXTRA WHITE

SIDING 2 / STUCCO 1



SW 7006 EXTRA WHITE

SIDING 3



SW 7006 EXTRA WHITE

ENTRY DOOR



SW 7069

STUCCO 2/TRIM



SW 7006

STONE (ESW)



SIERRA WEATHEREDGE LEDGE

STONE (H)

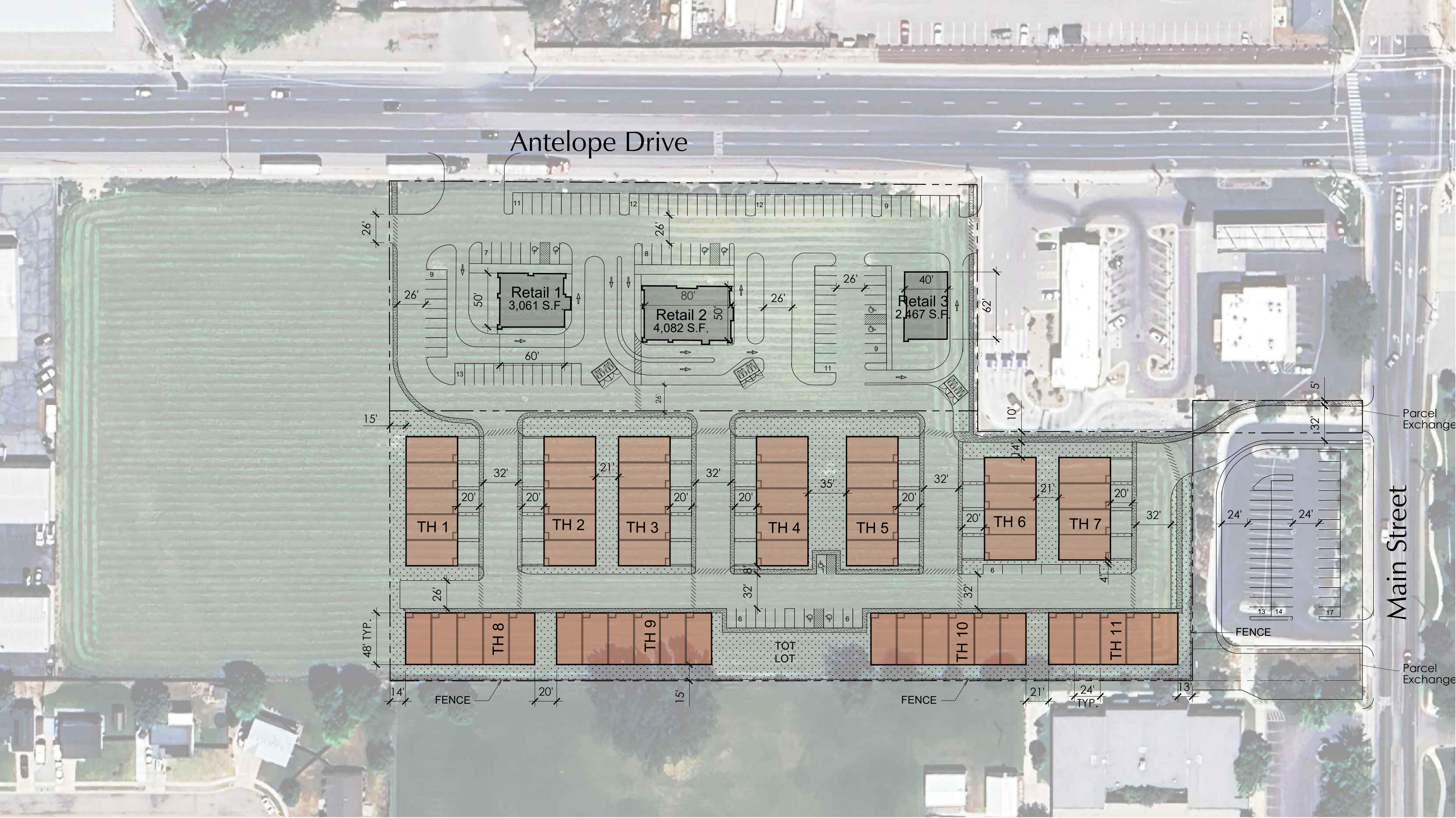


STIRLING DRY STONE

ASPHALT ROOFING



CHARCOAL GREY



PARKING/BUILDING DATA

RETAIL 1-3	9,610 SF
TOTAL PARKING PROVIDED	101 SPACES
RATIO	10.51/1,000 S.F.

TOTAL PARKING REQUIRED 48 STALLS
• BASED ON ALL FAST FOOD/DRIVE-IN (5/1,000)

TOWNHOMES	(5 UNITS PER BLDG AVG.)	55 UNITS
	GARAGE	2/UNIT 110 SPACES
	DRIVEWAYS	55 SPACES
	OPEN	18 SPACES

TOTAL PARKING	183 SPACES
RATIO	3.33/UNIT

TOWNHOME PARCEL RATIO	4.30 Acres
	12.8 Units/Acre

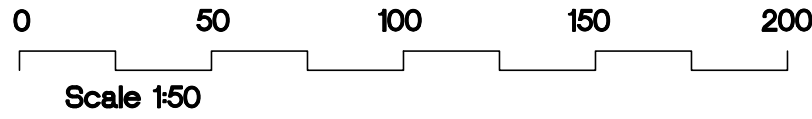
LANDSCAPING	47,992 SF	25.63 %
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CITY ZONING CODE

Jurisdiction	Clearfield UT
Zoning	C-2 - based on R-3
Setbacks	F 10' S/R 0' or next to residential zone, a side/rear yard of equal width to that required for the rear yard in the adjoining residential zone
Height	35'
Density	16 dwelling units per acre
Parking	9x20 26
calculating is a round up	
Retail	3.5/1000
Restaurant	10/1000
Fast Food/Drive-in	5/1000
Office	2.5/1000
Homes	2/Unit
No more that 12 consecutive stalls without landscape planter	

Landscaping (C-2)	10%
Landscaping (R-3)	25%

CONCEPTUAL SITE PLAN
THIS SITE PLAN IS FOR CONCEPTUAL PLANNING. THE SITE WILL NEED TO BE SURVEYED TO ACCURATELY DEFINE ALL BOUNDARIES, EASEMENTS, UTILITY EASEMENTS, RIGHT-OF-WAYS, CONFIRM ACCESS LOCATIONS, AND WETLANDS.



S-DEVCORP INC. - Clearfield Mixed Use

Site Plan

**Clearfield Mixed Use Development
Antelope Drive
Traffic Impact Study**

Clearfield, Utah

June 2025



**A-Trans Engineering
P.O. Box 521651
Salt Lake City, Utah 84152
(801) 949-0348 telephone
(801) 582-6252 fax**

TRAFFIC STUDY



Clearfield Mixed Use Development Antelope Drive Traffic Impact Analysis

Clearfield, Utah

Category II

June 2025

Prepared by:

A-Trans Engineering
Joseph Perrin, PhD, PE, PTOE
P.O. Box City, 521651
Salt Lake City, Utah 84152
(801) 949-0348
atrans@comcast.net



Table of Contents

I.	Introduction and Summary	1
II.	Study Area Conditions	4
III.	Analysis of Existing Condition	7
IV.	Projected Traffic.....	9
V.	Growth.....	13
VI.	Traffic Analysis	17
VII.	Conclusions	22

Table of Figures

Figure 1: Conceptual Site Plan	3
Figure 2: Site Location	5
Figure 3: Existing Geometry.....	6
Figure 4: Existing Traffic	8
Figure 5: Origin Destination	11
Figure 6: Site Trip Distribution	12
Figure 7: 2030 Background Traffic	14
Figure 8: Opening Day Total Traffic	15
Figure 9: 2030 Total Traffic	16

Table of Tables

Table 1: Analysis Results and Summary	1
Table 2: Intersection LOS-Delay Relationship.....	7
Table 3: Existing Level of Service	7
Table 4: Trip Generation for Site.....	9
Table 5: Growth Projections	13
Table 6: Analysis Results	17
Table 7: Main Street / Antelope Drive Intersection Analysis.....	18
Table 8: 300 West / Antelope Drive Intersection Analysis	18
Table 9: Car Wash Access / Antelope Drive Intersection Analysis	19
Table 10: Recycle Access / Access X / Antelope Drive Intersection Analysis	19
Table 11: Main Street / Access Y Intersection Analysis	19
Table 12: 2030 Queue Analysis.....	20

I. Introduction and Summary

This traffic impact analysis is for the proposed Clearfield Mixed Use Development located on the south side of Antelope Drive directly south and west of the existing Velocity car wash in Clearfield, Utah. The development is planned to include 55 townhomes, 4,200 square feet of retail, and 7,500 square feet of drive thru. The new land use site is projected to generate 366 AM and 303 PM peak hour trips with 4,105 daily trips. The site will access the road network by connecting into the existing car wash at Antelope Drive and a new access that aligns with the existing Recycling Center, and a third access located approximately 200 feet south of Antelope Drive on Main Street.

Table 1 shows the results of the analysis.

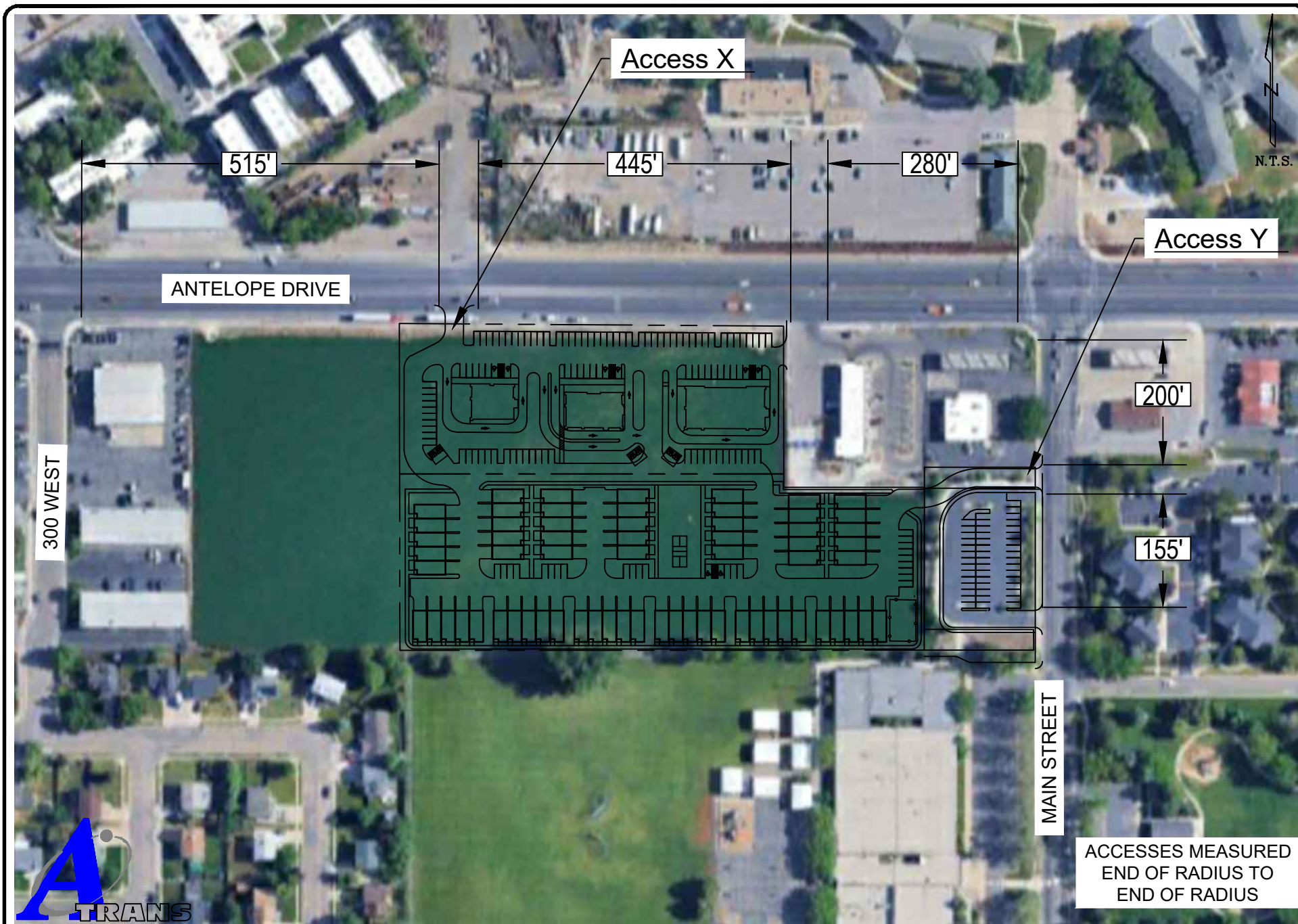
Table 1: Analysis Results and Summary

		2025 Existing	2025 Total	2030 Background	2030 Total
Main Street / Antelope Drive	AM	Total delay at 22.3/C	Total delay at 22.6/C	Total delay at 22.6/C	Total delay at 22.4/C
	PM	Total delay at 29.2/C	Total delay at 30.1/C	Total delay at 30.1/C	Total delay at 30.3/C
300 West / Antelope Drive	AM	Side street delay (NB & SB) at >100/F	Side street delay (NB & SB) at >100/F	Side street delay (NB & SB) at >100/F	Side street delay (NB & SB) at >100/F
	PM	Side street delay (NB & SB) at >100/F	Side street delay (NB & SB) at >100/F	Side street delay (NB & SB) at >100/F	Side street delay (NB & SB) at >100/F
Car Wash Access/ Antelope Drive	AM	Side street delay (NBL) at 17.7/C	Side street delay (NBL) at 37.3/E	Side street delay (NBL) at 19.0/C	Side street delay (NBL) at 44.4/E
	PM	Side street delay (NBL) at 35.3/E	Side street delay (NBL) at 52.6/F	Side street delay (NBL) at 40.4/E	Side street delay (NBL) at 66.5/F
Recycle / Access X / Antelope Drive	AM	Side street delay (SBL) at 60.6/F	Side street delay (NB & SB) at >100/F	Side street delay (SBL) at 72.0/F	Side street delay (NB & SB) at >100/F
	PM	Side street delay (SBL) at >100/F	Side street delay (NB & SB) at >100/F	Side street delay (SBL) at >100/F	Side street delay (NB & SB) at >100/F
Access Y / Main Street	AM		Side street delay (EBL) at 12.4/B		Side street delay (EBL) at 12.7/B
	PM		Side street delay (EBL) at 15.0/C		Side street delay (EBL) at 15.7/C



The findings are that the accesses on Antelope Drive will operate with congestion in the peak periods. This is true for the majority of accesses along the SR 108 corridor.

The proposed conceptual site plan and access spacing are shown in Figure 1.



II. Study Area Conditions

The study area includes the following intersection.

- Antelope Drive / Main Street
- Antelope Drive / 300 West
- Antelope Drive / Recycling Center access
- Antelope Drive / Velocity Car Wash access

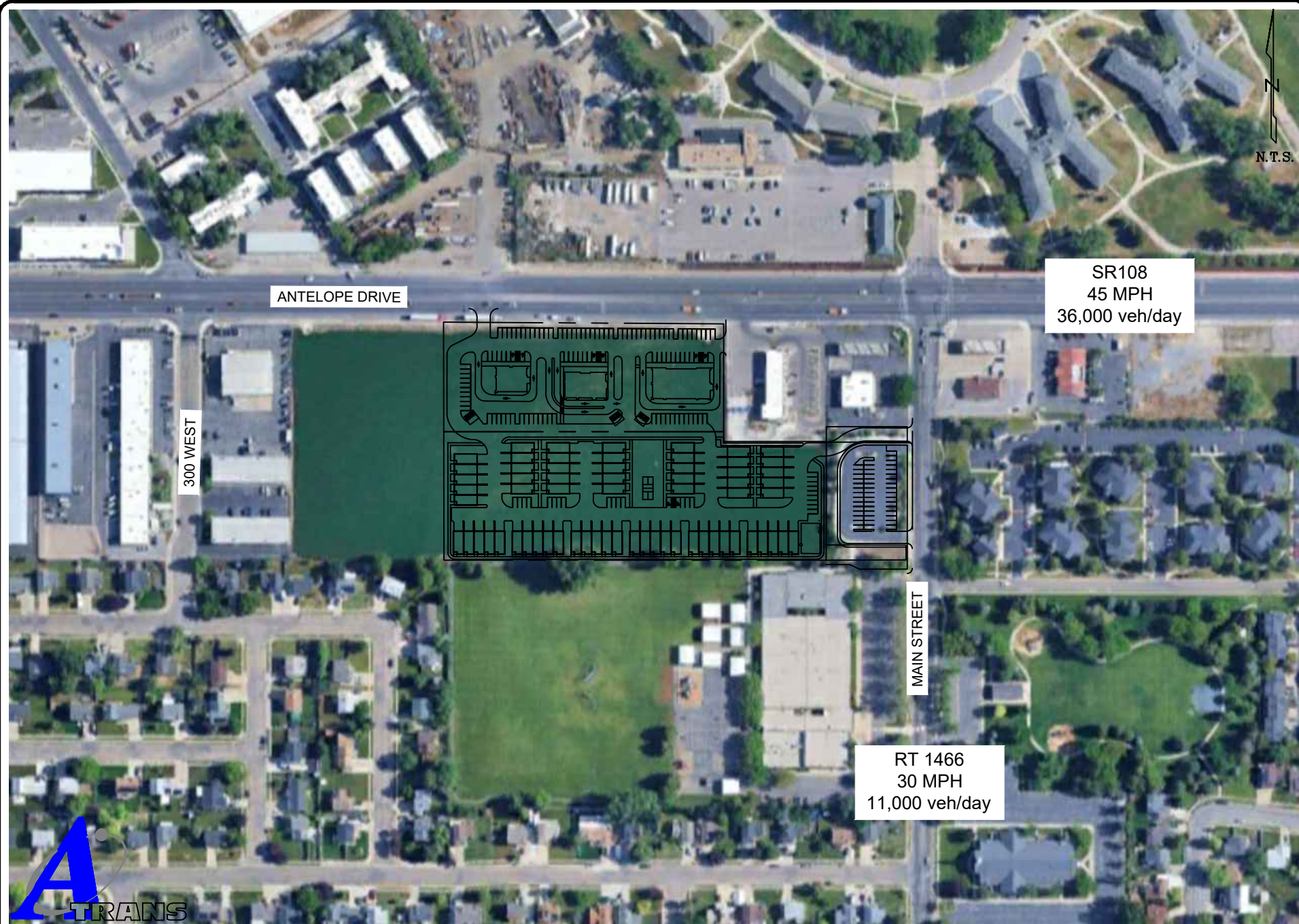
Figure 2 shows the location of the site. Figure 3 shows existing intersection geometry.

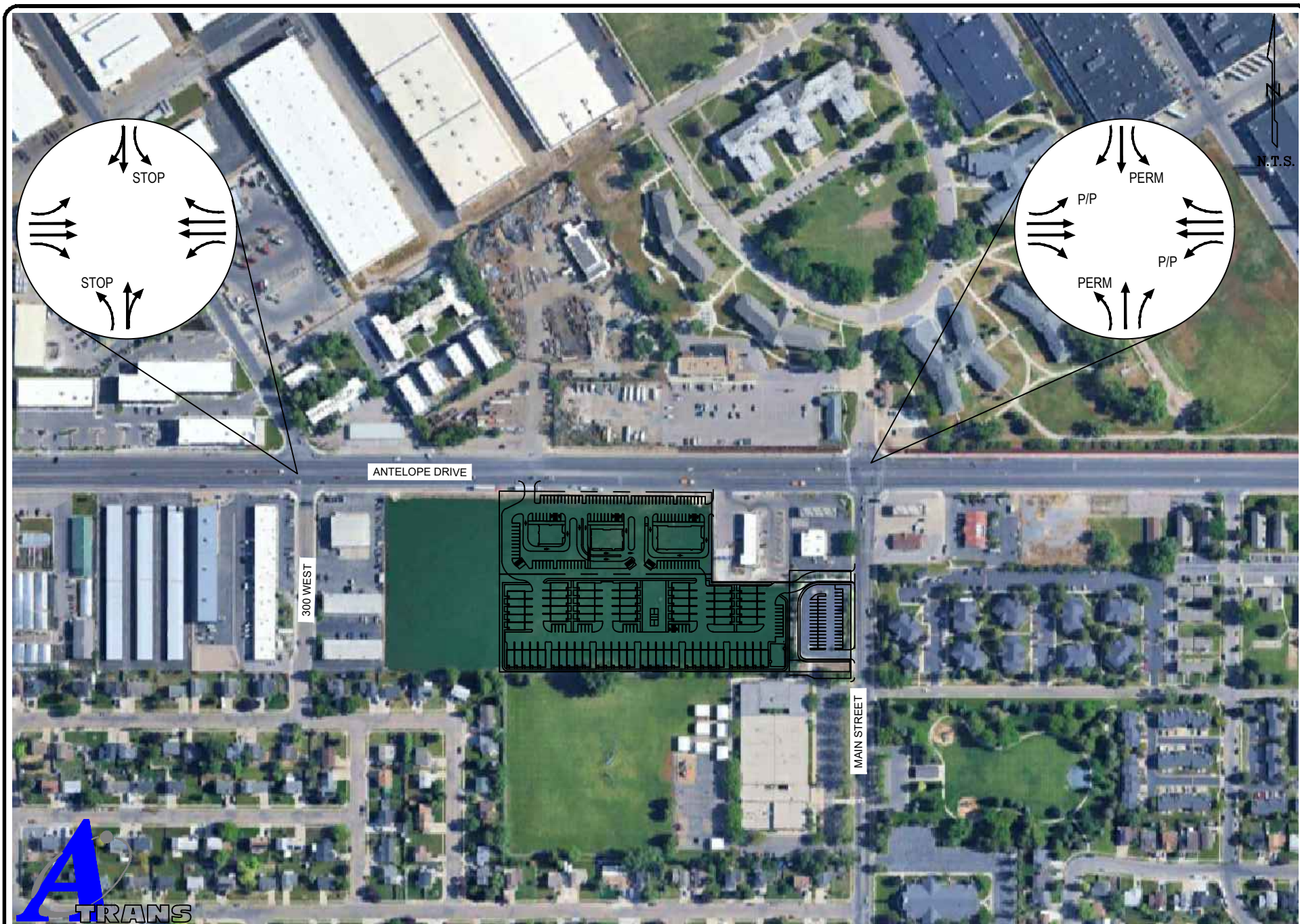
Antelope Drive

Antelope Drive (SR 108) is a 5 lane facility with two lanes in each direction and a center turn lane. The 2023 AADT is 36,000 vehicles per day with a posted speed limit of 45 MPH. UDOT classifies SR 108 as a Category 5 roadway.

Main Street

Main Street (RT 1466) is a 3 lane facility with a single lane in each direction and a center turn lane. The 2023 AADT is 11,000 vehicles per day with a posted speed limit of 30 MPH.





A-TRANS TRANSPORTATION ENGINEERING
P.O. BOX 521651, SLC, UT 84152
Phone: 801-949-0348 Fax: 801-582-6252

Figure 3

Existing Geometry

III. Analysis of Existing Condition

The existing traffic counts were performed May 7th – May 13th, 2025 during the AM (7:00 – 9:00 AM) and PM (4:00 – 6:00 PM) peak periods. Traffic signal timing was taken from UDOT's Automated Traffic Signal Performance Measures Website. 2025 Existing Traffic volumes used in the study are shown in Figure 4.

The Highway Capacity Manual defines the Level of Service (LOS) for both signalized and unsignalized intersections as a range of average experienced delay. LOS is a qualitative rating of traveler satisfaction from A to F whereby LOS A is good and LOS F poor. Table 2 shows the LOS range by delay for unsignalized and signalized intersections and accesses.

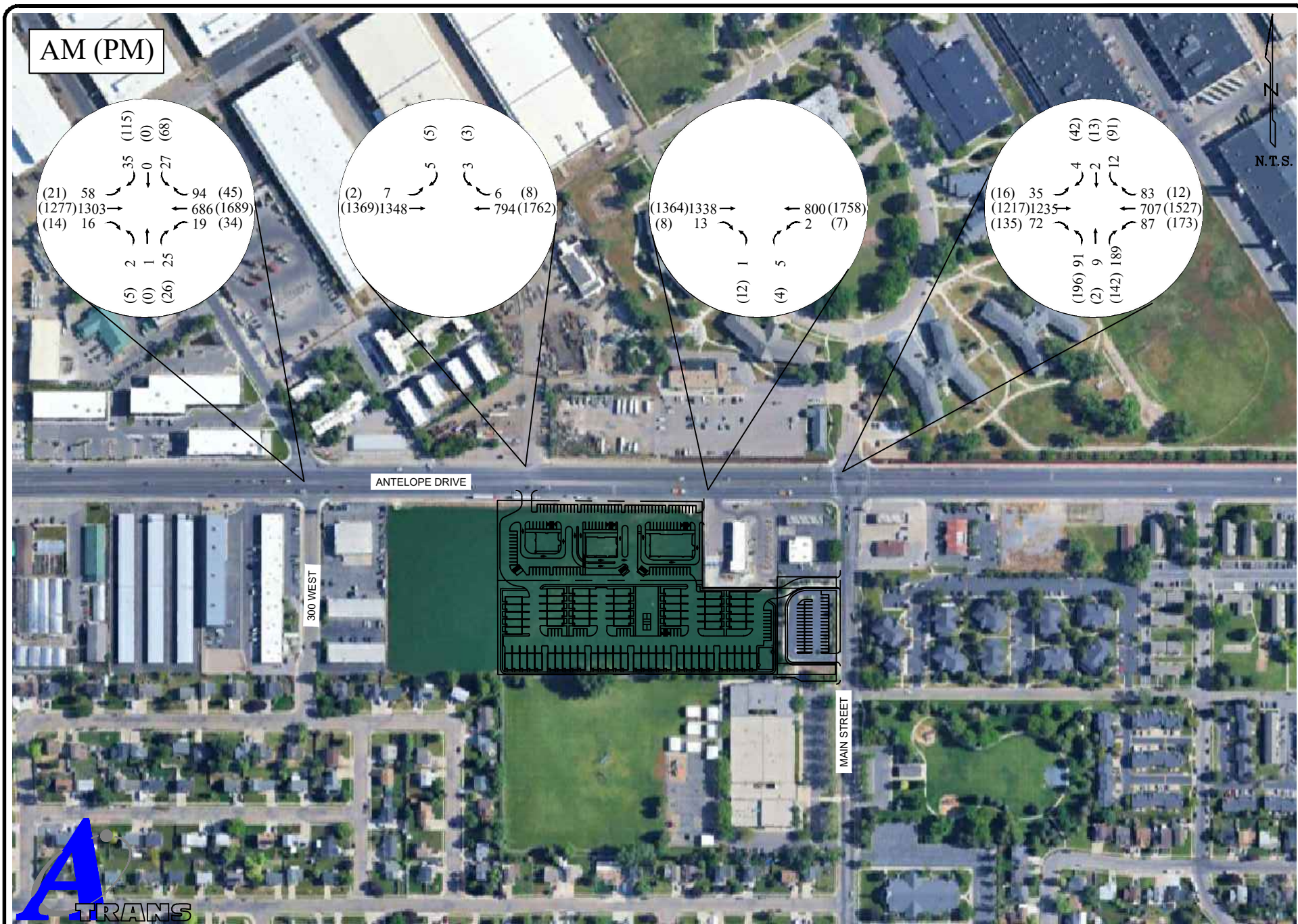
Table 2: Intersection LOS-Delay Relationship

	Unsignalized	Signalized
Level of Service	Total Delay per Vehicle (sec)	Total Delay per Vehicle (sec)
A	≤ 10.0	≤ 10.0
B	> 10.0 and ≤ 15.0	> 10.0 and ≤ 20.0
C	> 15.0 and ≤ 25.0	> 20.0 and ≤ 35.0
D	> 25.0 and ≤ 35.0	> 35.0 and ≤ 55.0
E	> 35.0 and ≤ 50.0	> 55.0 and ≤ 80.0
F	> 50.0	> 80.0

The analysis shows that Antelope Drive / Main Street operates at LOS C in the AM and PM peak period. Table 3 shows the Existing Level of Service for the Antelope Drive / Main Street signalized intersection.

Table 3: Existing Level of Service

	Antelope Drive / Main Street	
AM	22.3	C
PM	29.2	C



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Figure 4

Existing Traffic

IV. Projected Traffic

A. Trip Generation

Trip generation for the site was done using The Institute of Transportation Engineers (ITE) *Trip Generation* (11th Edition) handbook. The development is planned to include 55 townhomes, 4,200 square feet of retail, and 7,500 square feet of drive thru. The new land use site is projected to generate 366 AM and 303 PM peak hour trips with 4,105 daily trips. The trip generation for the site is shown in Table 4.

Table 4: Trip Generation for Site

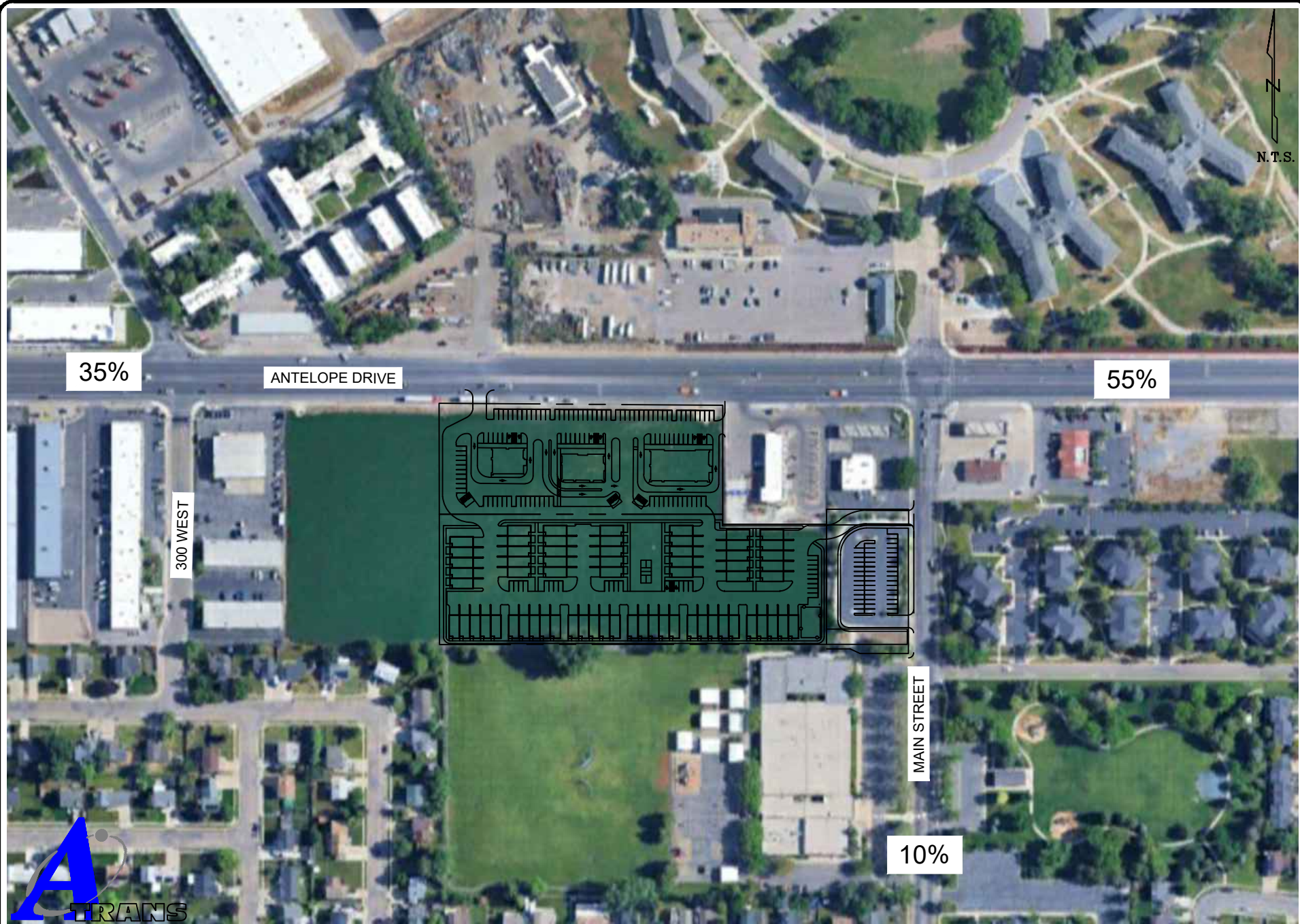
Land Use Type	Density	Land Use #	Trip Rate	Trips	% In	% Out	Trips In	Trips Out
AM								
Townhomes	55	220	0.40	22	24%	76%	5	17
Retail	4,200	822	2.36	10	60%	40%	6	4
Drive Thru	7,500	934	44.61	335	51%	49%	171	164
Total				366			182	185
PM								
Townhomes	55	220	0.51	28	63%	37%	18	10
Retail	4,200	822	6.59	28	50%	50%	14	14
Drive Thru	7,500	934	33.03	248	52%	48%	129	119
Total				303			161	143
Daily								
Townhomes	55	220	6.74	371				
Retail	4,200	822	54.45	229				
Drive Thru	7,500	934	467.48	3,506				
Total				4,105				

B. Trip Distribution

Origin-destination was determined from evaluating the location of neighboring residential development and commercial centers as well as the existing traffic patterns of trips at the counted intersections. This was used as a baseline for origin destination and engineering judgment was applied to this to determine the following OD for the site.

- 55% to/from east on Antelope Drive
- 35% to/from west on Antelope Drive
- 10% to/from south on Main Street

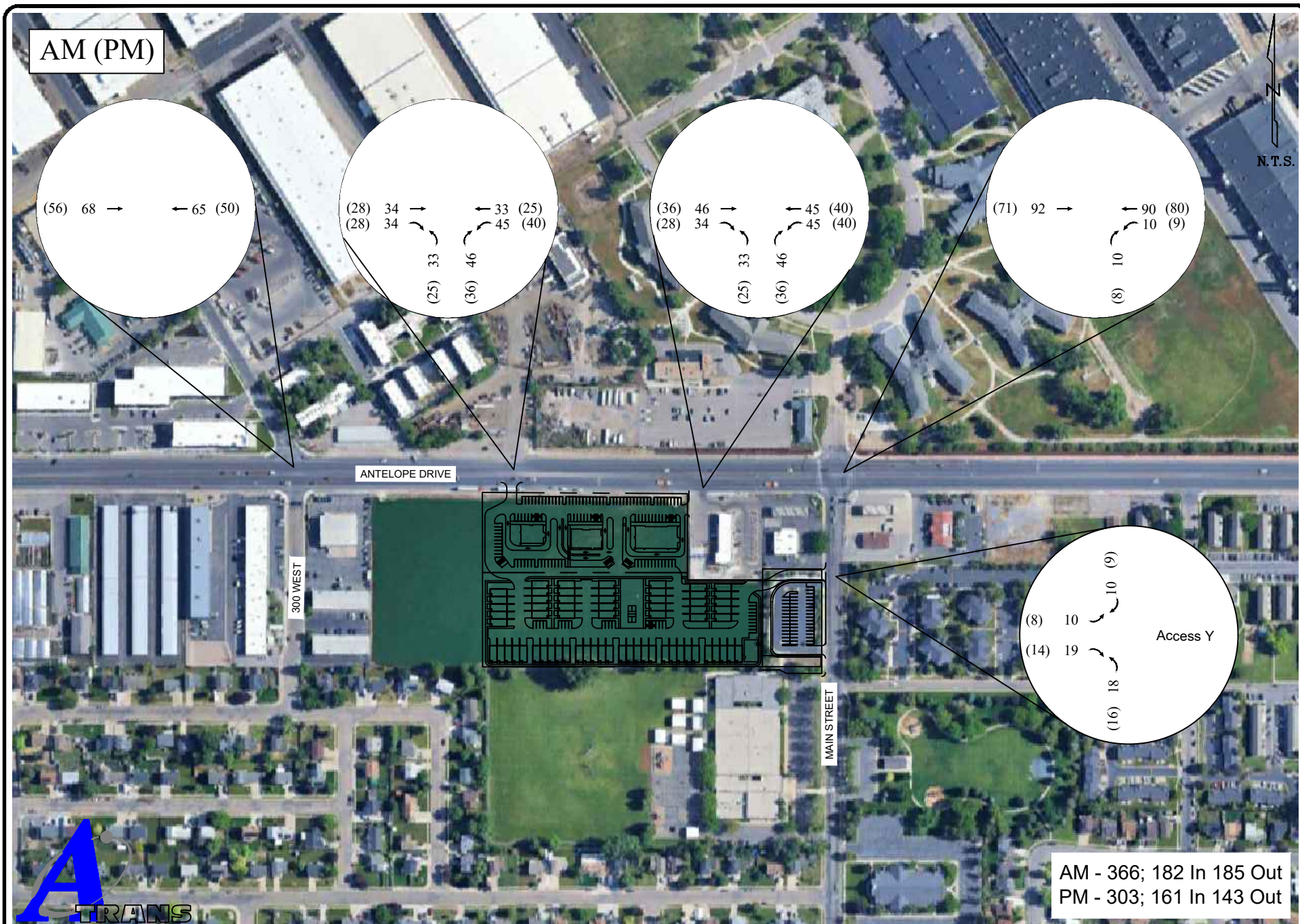
Origin Destination is shown in Figure 5. Site trip distribution is shown in Figure 6.



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Figure 5

Origin Destination



AM - 366; 182 In 185 Out
 PM - 303; 161 In 143 Out

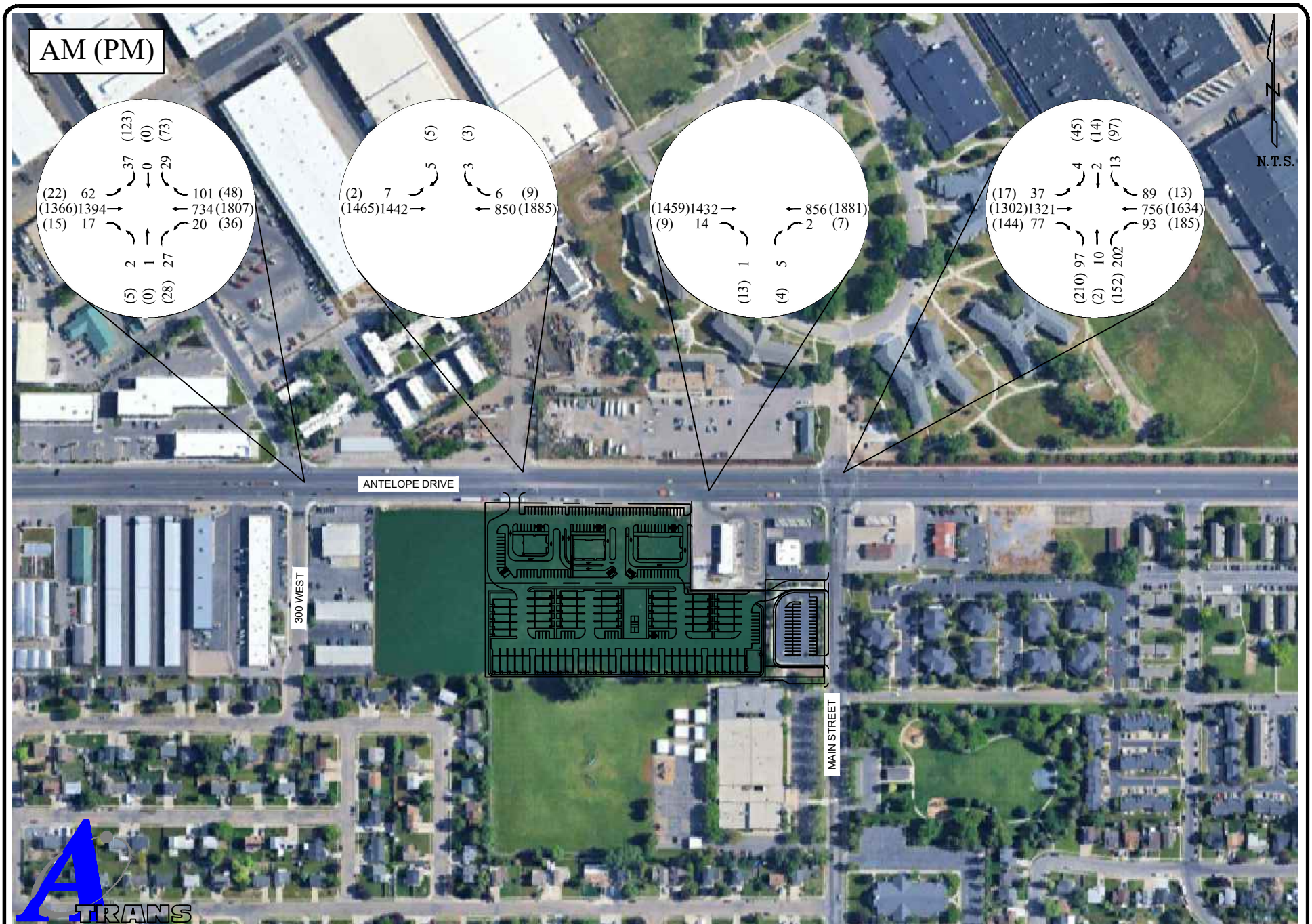
V. Growth

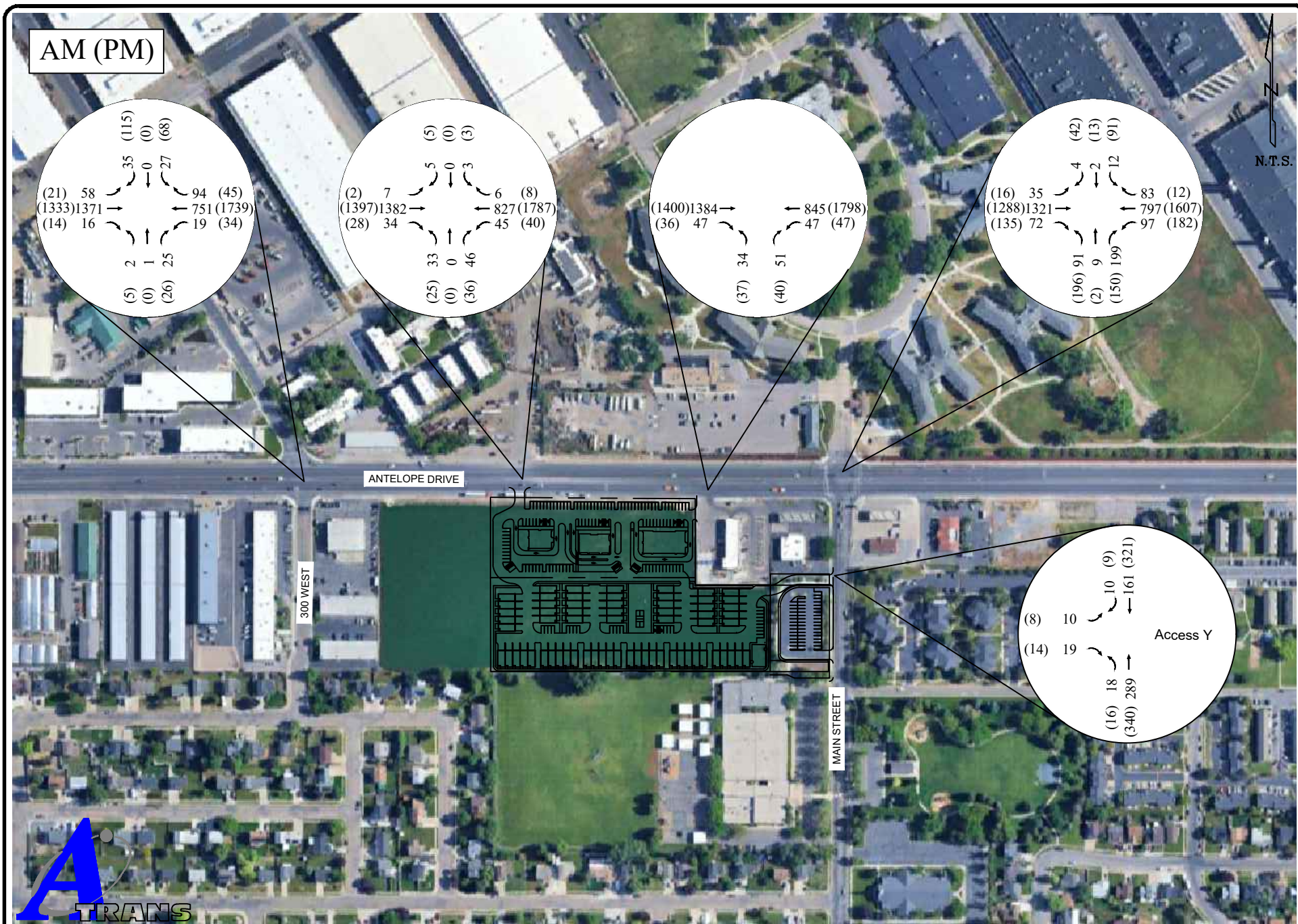
Growth in the area was determined from UDOT's Traffic on Utah Highways and projections from WFRC. The volumes and utilized to determine growth in the area is shown in Table 5. Based on this data an average growth of 1.3% is assumed. The 2030 growth factor is 1.07.

Table 5: Growth Projections

Road:	Antelope Drive (SR 108)	
Year	AADT	Growth
2013	32,000	
2014	32,000	0.0%
2015	34,000	6.3%
2016	35,000	2.9%
2017	36,000	2.9%
2018	36,000	0.0%
2019	37,000	2.8%
2020	33,000	-10.8%
2021	35,000	6.1%
2022	36,000	2.9%
2023	36,000	0.0%
Average		1.3%

Background traffic is determined by multiplying the existing traffic by the growth factor for 2030. 2030 Background Traffic is shown in Figure 7. Total traffic in the area for the future projection years is derived by adding the non-site volume forecasts (background traffic) to the site generated traffic. Opening Day Total Traffic is shown in Figure 8. 2030 Total Traffic is shown in Figure 9.

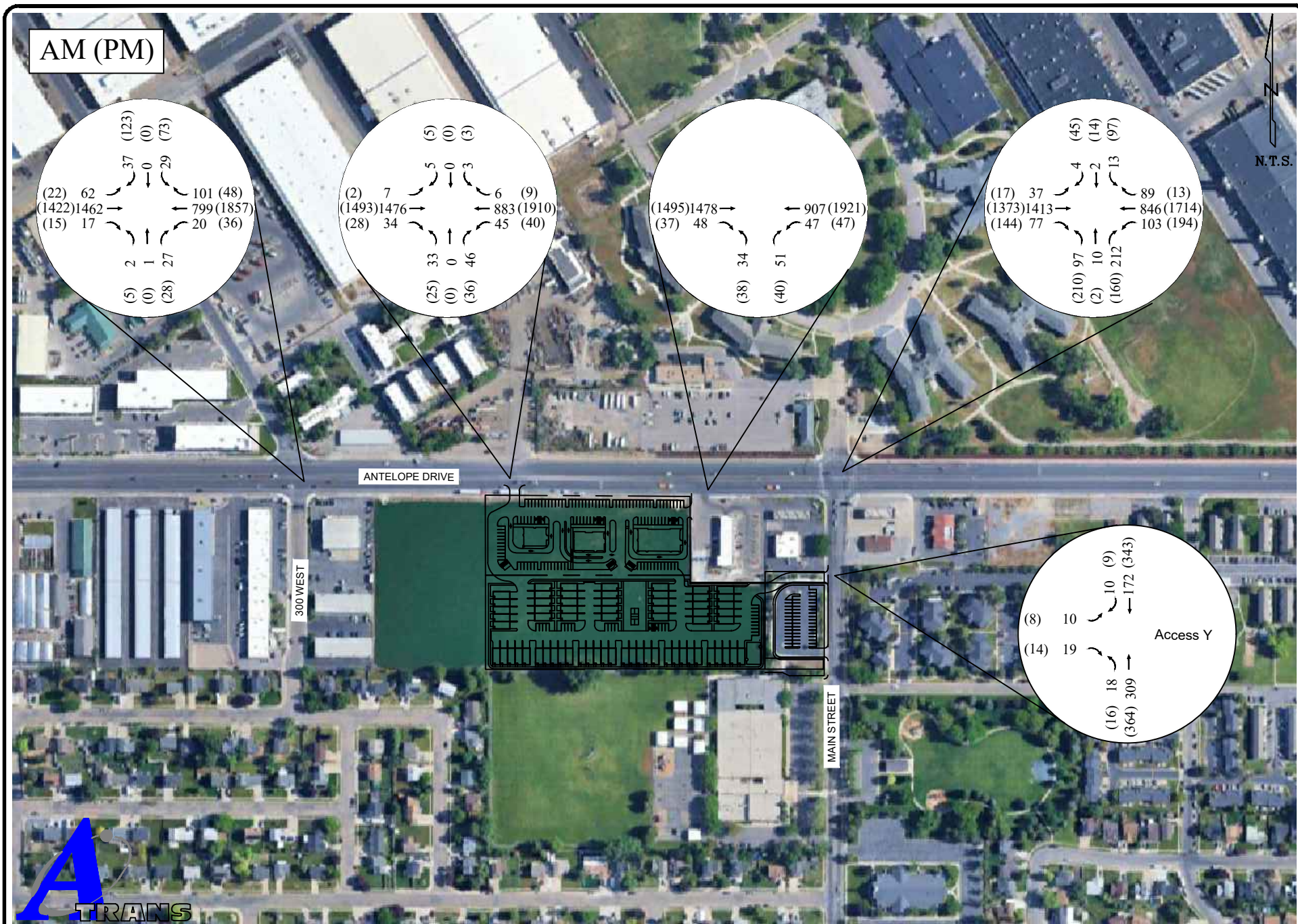




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Figure 8

Opening Day Total Traffic



VI. Traffic Analysis

A. Level of Service Analysis

The intersection and access analysis evaluates the performance of each intersection and access using the measure of performance of delay and level of service (LOS). Table 6 provides a summary of the analysis. Tables 7-11 show the intersection and access analysis.

Table 6: Analysis Results

		2025 Existing	2025 Total	2030 Background	2030 Total
Main Street / Antelope Drive	AM	Total delay at 22.3/C	Total delay at 22.6/C	Total delay at 22.6/C	Total delay at 22.4/C
	PM	Total delay at 29.2/C	Total delay at 30.1/C	Total delay at 30.1/C	Total delay at 30.3/C
300 West / Antelope Drive	AM	Side street delay (NB & SB) at >100/F	Side street delay (NB & SB) at >100/F	Side street delay (NB & SB) at >100/F	Side street delay (NB & SB) at >100/F
	PM	Side street delay (NB & SB) at >100/F	Side street delay (NB & SB) at >100/F	Side street delay (NB & SB) at >100/F	Side street delay (NB & SB) at >100/F
Car Wash Access/ Antelope Drive	AM	Side street delay (NBL) at 17.7/C	Side street delay (NBL) at 37.3/E	Side street delay (NBL) at 19.0/C	Side street delay (NBL) at 44.4/E
	PM	Side street delay (NBL) at 35.3/E	Side street delay (NBL) at 52.6/F	Side street delay (NBL) at 40.4/E	Side street delay (NBL) at 66.5/F
Recycle / Access X / Antelope Drive	AM	Side street delay (SBL) at 60.6/F	Side street delay (NB & SB) at >100/F	Side street delay (SBL) at 72.0/F	Side street delay (NB & SB) at >100/F
	PM	Side street delay (SBL) at >100/F	Side street delay (NB & SB) at >100/F	Side street delay (SBL) at >100/F	Side street delay (NB & SB) at >100/F
Access Y / Main Street	AM		Side street delay (EBL) at 12.4/B		Side street delay (EBL) at 12.7/B
	PM		Side street delay (EBL) at 15.0/C		Side street delay (EBL) at 15.7/C

- The signalized intersection at Main Street and Antelope operates at a LOS C or better for all analysis periods. The accesses along the corridor operate with side street delay in the peak periods. .

Table 7: Main Street / Antelope Drive Intersection Analysis

		EBL		EBT		EBR		WBL		WBT		WBR		NBL		NBT		NBR		SBL		SBT		SBR		INT	
2025 Existing	AM	9.6	A	29.6	C	2.5	A	17.8	B	18.7	B	2.5	A	37.4	D	36.2	D	13.8	B	36.2	D	36.5	D	0.0	A	23.3	C
	PM	12.3	B	34.8	C	3.2	A	41.8	D	26.7	C	0.0	A	42.4	D	36.0	D	6.7	A	37.2	D	35.5	D	1.2	A	29.2	C
2030 Background	AM	8.6	A	28.0	C	2.7	A	21.4	C	17.2	B	2.3	A	40.0	D	37.7	D	17.6	B	37.9	D	38.0	D	0.0	A	22.6	C
	PM	12.4	B	35.6	D	3.2	A	49.8	D	26.5	C	0.0	A	46.1	D	36.5	D	6.7	A	39.1	D	36.6	D	1.8	A	30.1	C
Opening Day Total	AM	8.5	A	27.9	C	2.3	A	22.4	C	17.3	B	2.3	A	40.1	D	38.1	D	17.5	B	38.2	D	38.0	D	0.0	A	22.6	C
	PM	12.1	B	35.8	D	3.2	A	49.8	D	26.6	C	0.0	A	44.3	D	36.0	D	6.7	A	38.4	D	36.2	D	1.2	A	30.1	C
2030 Total	AM	7.8	A	27.1	C	2.6	A	27.8	C	15.9	B	2.1	A	42.8	D	40.0	D	21.4	C	40.2	D	40.0	D	0.0	A	22.4	C
	PM	12.1	B	36.5	D	3.9	A	54.8	D	25.9	C	0.0	A	49.2	D	38.0	D	7.0	A	41.2	D	38.0	D	1.9	A	30.6	C

Table 8: 300 West / Antelope Drive Intersection Analysis

		NBL		NBTR		EBL		WBL		SBL		SBTR	
2025 Existing	AM	>100	F	21.1	C	10.0	A	13.0	B	>100	F	11.1	B
	PM	>100	F	15.1	C	17.4	C	13.1	B	>100	F	28.7	D
2030 Background	AM	>100	F	23.6	C	10.3	B	13.8	B	>100	F	11.4	B
	PM	>100	F	16.0	C	19.1	C	13.9	B	>100	F	35.3	E
Opening Day Total	AM	>100	F	23.3	C	10.3	B	13.6	B	>100	F	11.5	B
	PM	>100	F	15.6	C	18.0	C	13.6	B	>100	F	30.5	D
2030 Total	AM	>100	F	26.3	D	10.7	B	14.4	B	>100	F	11.8	B
	PM	>100	F	16.6	C	19.9	C	14.5	B	>100	F	37.9	E

Table 9: Car Wash Access / Antelope Drive Intersection Analysis

		NBL		WBL	
2025 Existing	AM	17.7	C	12.9	B
	PM	35.3	E	13.2	B
2030 Background	AM	19.0	C	13.7	B
	PM	40.4	E	14.0	B
2025 Opening Day Total	AM	37.3	E	14.7	B
	PM	52.6	F	14.8	B
2030 Total	AM	44.4	E	15.8	C
	PM	66.5	F	15.9	C

Table 10: Recycle Access / Access X / Antelope Drive Intersection Analysis

		NBL		NBTR		EBL		WBL		SBL		SBTR	
2025 Existing	AM	0.0	A	0.0	A	9.7	A	0.0	A	60.6	F	11.4	B
	PM	0.0	A	0.0	A	17.0	C	0.0	A	>100	F	19.3	C
2030 Background	AM	0.0	A	0.0	A	10.0	A	0.0	A	72.0	F	11.6	B
	PM	0.0	A	0.0	A	18.5	C	0.0	A	>100	F	20.9	C
Opening Day Total	AM	>100	F	16.9	C	9.9	A	14.5	B	>100	F	11.5	B
	PM	>100	F	16.6	C	17.3	C	14.5	B	>100	F	19.6	C
2030 Total	AM	>100	F	18.0	C	10.1	B	15.5	C	>100	F	11.8	B
	PM	>100	F	17.7	C	18.9	C	15.5	C	>100	F	21.2	C

Table 11: Main Street / Access Y Intersection Analysis

		NBL		EBL		EBR	
2025 Opening Day Total	AM	7.6	A	12.4	B	9.3	A
	PM	8.0	A	15.0	C	10.3	B
2030 Total	AM	7.7	A	12.7	B	9.3	A
	PM	8.1	A	15.7	C	10.5	B

B. Queue Analysis

Based on the projected traffic, queue storage length requirements can be determined. To determine if sufficient storage space exists to accommodate the projected demand, the intersection and accesses included in this traffic study are analyzed for queue storage capacity. The available queue storage lengths and queue storage recommendations are provided by the HCM analysis and are done through Synchro and shown in Table 12.

Table 12: 2030 Queue Analysis

Queue (feet)		EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
Main Street / Antelope Drive	Available	450	325	325	325	150	150	50	50
	AM Projected	25	25	100	25	135	160	30	0
	PM Projected	25	50	225	0	275	50	130	25
300 West / Antelope Drive	Available	325	325	325	325	75	75	75	75
	AM Projected	25	25	25	25	25	25	100	25
	PM Projected	25	25	25	25	25	25	100	25
Car Wash Access / Antelope Drive	Available								
	AM Projected		0	25		180			
	PM Projected		0	25		50			
Access X / Antelope Drive	Available	350	350	424	425	100	100	100	100
	AM Projected	25	25	25	25	120	25	25	0
	PM Projected	25	0	25	0	100	25	30	25
Main Street / Access Y	Available	100	100			165			100
	AM Projected	25	25			25			25
	PM Projected	25	25			25			25

C. Access Management and Auxiliary Lanes

According to the UDOT, SR 108 is categorized as a Category 5 roadway. As per UDOT Administrative Rule R930-6, signal spacing is required at 2,640 feet, street spacing is required at 660 feet and access spacing is required at 350 feet or by variance. The distance between access points/intersections is measured from end of radius to end of adjacent radius. The site is proposing to utilize the shared access with the gas station and a new access that aligns with the recycling center.

According to UDOT Administrative Rule R930-6 a Category 5 roadway requires:

- A left turn deceleration lane with taper and storage length is required for any access with a projected peak hour left ingress turning volume greater than 10 vehicles per hour. The taper length must be included in the required deceleration length.
- A right turn deceleration lane and taper length is required for any access with a projected peak hour right ingress turning volume greater than 25 vehicles per hour. The taper length must be included in the required deceleration length.
- A right turn acceleration lane and taper length is required for any access with a projected peak hour right turning volume greater than 50 vehicles per hour when the posted speed on the highway is greater than 40 mph. The taper length must be included in the required acceleration length. A right turn acceleration lane may also be required at a signalized intersection if a free-right turn is needed to maintain an appropriate level of service for the intersection.
- Right turn deceleration and acceleration lanes are generally not required on roadways with three or more travel lanes in the direction of the right turn.
- A left turn acceleration lane may be required if it will be a benefit to the safety and operation of the roadway.
- A left turn acceleration lane is generally not required where the posted speed is less than 45 mph, the intersection is signalized, or the acceleration lane would interfere with the left turn ingress movements to any other access.

There is an existing left turn center turn lane along Antelope Drive and a full shoulder that can be used for a right turn lane. Therefore, no widening is needed but the striping could be updated to officially include right turn lanes.

VII. Conclusions

This traffic impact analysis is for the proposed Clearfield Mixed Use Development located on the south side of Antelope Drive directly south and west of the existing Velocity car wash in Clearfield, Utah. The development is planned to include 55 townhomes, 4,200 square feet of retail, and 7,500 square feet of drive thru. The new land use site is projected to generate 366 AM and 303 PM peak hour trips with 4,105 daily trips. The site will access the road network by connecting into existing road connections at Antelope Drive at the existing Recycling Center, along with a second access that will utilize the existing carwash access, and a third access located approximately 200 feet south of Antelope Drive.

The following comments are made about the project:

- While the signalized intersection operates at a LOS C or better, the access points will experience congestion in the peak periods. This is true for all accesses along the corridor.
- The key issue is whether the car wash access is too close to the intersection creating a concern. Ideally, the access would be placed as far as possible from the intersection. The reason this functions well is there are not a significant amount of eastbound left turns at the signalized Main Street because the northern approach is gated. There are only 35 AM and 16 PM peak vehicles making the movement. That's only one vehicle each two minutes on average.
- Therefore it is projected that this access will continue to function.
- The new proposed Access that aligns with the recycle center meets the UDOT spacing requirements and therefore no variance should be required.

Recommendations

There is an existing left turn center turn lane along Antelope Drive and a full shoulder that can be used for a right turn lane. Therefore, no widening is needed but the striping could be updated to officially include right turn lanes at the newly proposed Access X.



APPENDICES

Appendix A	Traffic Counts and Projections
Appendix B	Without Site Intersection Analyses
Appendix C	With Site Intersection Analysis



Appendix A Traffic Counts and Projections

AM PEAK HOUR VOLUMES

INTERSECTION: 300 West and Antelope Drive

Ped = 0

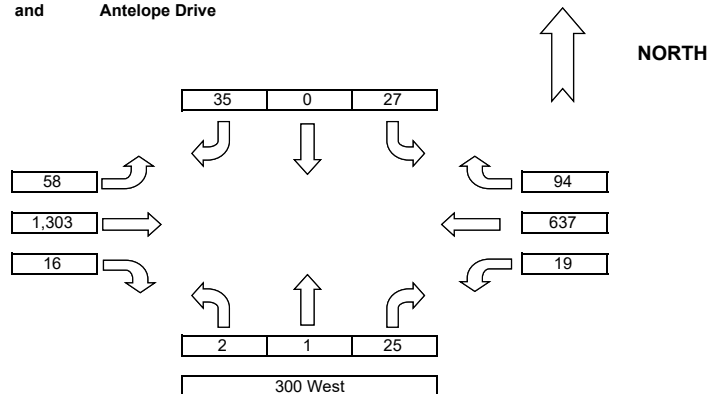
N-S STREET: 300 West
E-W STREET: Antelope Drive

COUNT DATE: May 7, 2025
Day of the Week: Wednesday
NOTES:

COUNT TIME:
FROM: 7:00 AM
TO: 9:00 AM

PK HR VOLUME:	2,217
PHF:	0.91
PEAK HOUR:	
FROM:	TO:
7:30 AM	8:30 AM

Antelope Drive



PM Traffic

COUNT DATA INPUT:

Name: Ziv

Name: Ziv

Name: Ziv

Name: Ziv

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5' VOLUMES	TOTAL 15' VOLUMES	PEDESTRIAN	
FROM:	TO:	NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR			E/W	N/S
7:00 AM	7:05 AM	0	0	0	5	41	1	1	0	5	2	30	7	92	407	0	0
7:05 AM	7:10 AM	1	0	2	0	83	0	0	0	2	5	39	10	142	474	0	0
7:10 AM	7:15 AM	0	0	2	6	110	1	2	0	4	1	38	9	173	487	0	0
7:15 AM	7:20 AM	0	0	2	9	95	1	0	0	3	3	36	10	159	463	0	0
7:20 AM	7:25 AM	0	0	1	6	100	0	0	0	1	2	37	8	155	491	0	0
7:25 AM	7:30 AM	0	0	4	7	87	0	0	0	6	0	36	9	149	542	0	0
7:30 AM	7:35 AM	0	0	2	7	120	2	2	0	5	1	45	3	187	570	0	0
7:35 AM	7:40 AM	0	0	6	3	127	1	3	0	4	2	53	7	206	597	0	0
7:40 AM	7:45 AM	0	0	1	2	107	1	2	0	1	1	53	9	177	584	0	0
7:45 AM	7:50 AM	0	0	0	5	132	3	2	0	3	0	59	10	214	606	0	0
7:50 AM	7:55 AM	0	0	1	9	123	0	1	0	8	2	45	4	193	565	0	0
7:55 AM	8:00 AM	0	0	3	10	102	3	2	0	2	3	61	13	199	556	0	0
8:00 AM	8:05 AM	1	1	1	5	97	0	2	0	2	1	52	11	173	519	0	0
8:05 AM	8:10 AM	0	0	5	3	103	0	2	0	2	0	58	11	184	475	0	0
8:10 AM	8:15 AM	0	0	0	5	83	0	2	0	3	6	53	10	162	484	0	0
8:15 AM	8:20 AM	0	0	2	3	72	2	2	0	1	1	41	5	129	522	0	0
8:20 AM	8:25 AM	0	0	2	4	110	4	1	0	1	2	61	8	193	540	0	0
8:25 AM	8:30 AM	1	0	2	2	127	0	6	0	3	0	56	3	200	542	0	0
8:30 AM	8:35 AM	0	0	4	0	88	0	7	0	3	1	35	9	147	556	0	0
8:35 AM	8:40 AM	0	0	5	8	88	2	1	0	1	0	75	15	195	604	0	0
8:40 AM	8:45 AM	0	0	2	4	130	0	6	0	1	0	65	6	214	628	0	0
8:45 AM	8:50 AM	1	0	5	1	118	0	1	0	3	0	61	5	195	605	0	0
8:50 AM	8:55 AM	0	0	2	3	127	0	2	0	5	0	75	5	219	410	0	0
8:55 AM	9:00 AM	0	0	1	3	120	0	1	0	3	5	56	2	191	191	0	0

PM PEAK HOUR VOLUMES

INTERSECTION: 300 West and Antelope Drive

Ped = 4

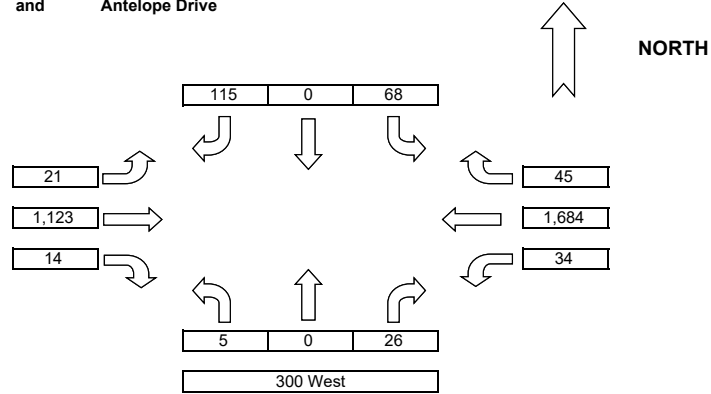
N-S STREET: 300 West
E-W STREET: Antelope Drive

PK HR VOLUME:	3,135
PHF:	0.97
PEAK HOUR:	
FROM: TO:	
4:20 PM 5:20 PM	

COUNT DATE: May 12, 2025
Day of the Week: Monday
NOTES:

COUNT TIME:
FROM: 4:00 PM
TO: 6:00 PM

Antelope Drive



PM Traffic

COUNT DATA INPUT:

Name: Leisel

Name: Leisel

Name: Leisel

Name: Leisel

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5' VOLUMES	TOTAL 15' VOLUMES	PEDESTRIAN	
FROM:	TO:	NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR			E/W	N/S
4:00 PM	4:05 PM	0	1	2	4	103	0	7	0	6	1	106	12	242	749	0	0
4:05 PM	4:10 PM	0	0	1	0	105	0	8	0	11	4	134	6	269	740	0	0
4:10 PM	4:15 PM	0	0	4	2	96	1	3	0	11	5	102	14	238	726	0	0
4:15 PM	4:20 PM	0	0	0	1	97	1	9	0	7	4	105	9	233	759	0	0
4:20 PM	4:25 PM	0	0	3	1	97	0	9	0	7	3	127	8	255	785	0	0
4:25 PM	4:30 PM	0	0	1	2	99	1	7	0	12	4	135	10	271	775	0	0
4:30 PM	4:35 PM	1	0	2	1	90	0	6	0	11	4	138	6	259	785	1	0
4:35 PM	4:40 PM	1	0	4	0	72	1	7	0	20	1	136	3	245	761	1	0
4:40 PM	4:45 PM	0	0	3	2	90	1	8	0	16	0	159	2	281	784	0	0
4:45 PM	4:50 PM	1	0	0	3	91	5	2	0	9	5	114	5	235	750	0	0
4:50 PM	4:55 PM	0	0	2	0	97	1	9	0	9	5	144	1	268	780	0	0
4:55 PM	5:00 PM	0	0	0	0	91	0	4	0	5	1	141	3	247	784	0	0
5:00 PM	5:05 PM	0	0	2	3	108	3	1	0	6	4	134	4	265	784	2	0
5:05 PM	5:10 PM	1	0	6	3	98	2	8	0	11	3	139	1	272	809	0	0
5:10 PM	5:15 PM	1	0	3	2	82	0	7	0	7	2	142	1	247	770	0	0
5:15 PM	5:20 PM	0	0	0	0	108	0	0	0	2	2	175	1	290	757	0	0
5:20 PM	5:25 PM	0	0	2	1	104	4	3	0	5	1	110	3	233	719	0	0
5:25 PM	5:30 PM	0	0	0	1	106	1	2	0	3	0	121	0	234	721	0	0
5:30 PM	5:35 PM	0	0	1	0	97	3	1	0	4	3	140	3	252	693	0	0
5:35 PM	5:40 PM	0	0	2	1	103	1	1	0	6	1	119	1	235	653	0	0
5:40 PM	5:45 PM	0	0	0	2	95	0	0	0	0	3	106	0	206	654	1	0
5:45 PM	5:50 PM	1	0	1	0	92	1	0	0	1	1	114	1	212	664	1	0
5:50 PM	5:55 PM	0	0	4	2	102	1	1	0	1	0	122	3	236	452	1	0
5:55 PM	6:00 PM	0	0	4	0	86	0	2	0	4	7	112	1	216	216	0	0

AM PEAK HOUR VOLUMES

INTERSECTION: Recycling Access and Antelope Drive

Ped = 0

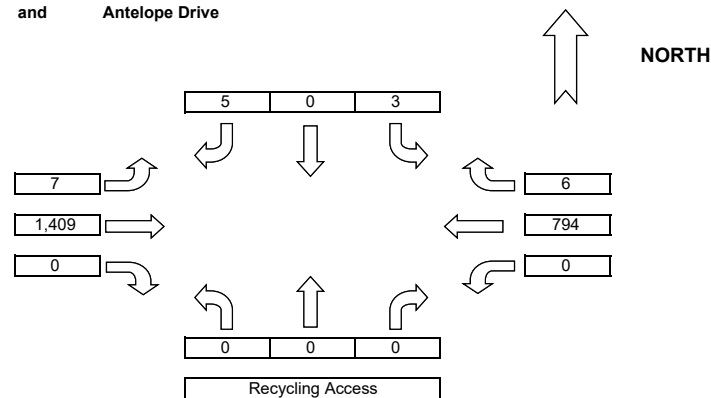
N-S STREET: Recycling Access
E-W STREET: Antelope Drive

COUNT DATE: May 7, 2025
Day of the Week: Wednesday
NOTES:

COUNT TIME:
FROM: 7:00 AM
TO: 9:00 AM

PK HR VOLUME: 2,224
PHF: 0.92
PEAK HOUR:
FROM: 7:40 AM TO: 8:40 AM

Antelope Drive



PM Traffic

COUNT DATA INPUT:

Name: Leisel

Name: Leisel

Name: Leisel

Name: Leisel

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5' VOLUMES	TOTAL 15' VOLUMES	PEDESTRIAN	
FROM:	TO:	NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR			E/W	N/S
7:00 AM	7:05 AM	0	0	0	0	96	0	0	0	0	0	61	0	157	472	0	0
7:05 AM	7:10 AM	0	0	0	0	100	0	0	0	0	0	58	3	161	470	0	0
7:10 AM	7:15 AM	0	0	0	0	100	0	0	0	0	0	53	1	154	460	0	0
7:15 AM	7:20 AM	0	0	0	0	102	0	1	0	0	0	52	0	155	461	0	0
7:20 AM	7:25 AM	0	0	0	0	99	0	1	0	0	0	51	0	151	475	0	0
7:25 AM	7:30 AM	0	0	0	0	109	0	1	0	0	0	44	1	155	473	0	0
7:30 AM	7:35 AM	0	0	0	0	112	0	0	0	0	0	57	0	169	526	0	0
7:35 AM	7:40 AM	0	0	0	2	95	0	0	0	0	0	51	1	149	546	0	0
7:40 AM	7:45 AM	0	0	0	0	139	0	0	0	0	0	68	1	208	591	0	0
7:45 AM	7:50 AM	0	0	0	0	136	0	1	0	0	0	52	0	189	585	0	0
7:50 AM	7:55 AM	0	0	0	0	115	0	0	0	0	0	78	1	194	589	0	0
7:55 AM	8:00 AM	0	0	0	2	142	0	0	0	0	0	56	2	202	565	0	0
8:00 AM	8:05 AM	0	0	0	2	109	0	0	0	0	0	81	1	193	549	0	0
8:05 AM	8:10 AM	0	0	0	1	104	0	0	0	0	0	64	1	170	533	0	0
8:10 AM	8:15 AM	0	0	0	1	110	0	1	0	1	0	73	0	186	523	0	0
8:15 AM	8:20 AM	0	0	0	0	101	0	0	0	1	0	75	0	177	532	0	0
8:20 AM	8:25 AM	0	0	0	0	99	0	0	0	0	0	61	0	160	535	0	0
8:25 AM	8:30 AM	0	0	0	0	117	0	0	0	2	0	76	0	195	545	0	0
8:30 AM	8:35 AM	0	0	0	0	118	0	1	0	0	0	61	0	180	538	0	0
8:35 AM	8:40 AM	0	0	0	1	119	0	0	0	1	0	49	0	170	539	0	0
8:40 AM	8:45 AM	0	0	0	1	96	0	0	0	0	0	91	0	188	575	0	0
8:45 AM	8:50 AM	0	0	0	1	108	0	0	0	0	0	72	0	181	605	0	0
8:50 AM	8:55 AM	0	0	0	0	135	0	3	0	0	0	67	1	206	424	0	0
8:55 AM	9:00 AM	0	0	0	0	144	0	1	0	0	0	72	1	218	218	0	0

PM PEAK HOUR VOLUMES

INTERSECTION: Recycling Access and Antelope Drive

Ped = 0

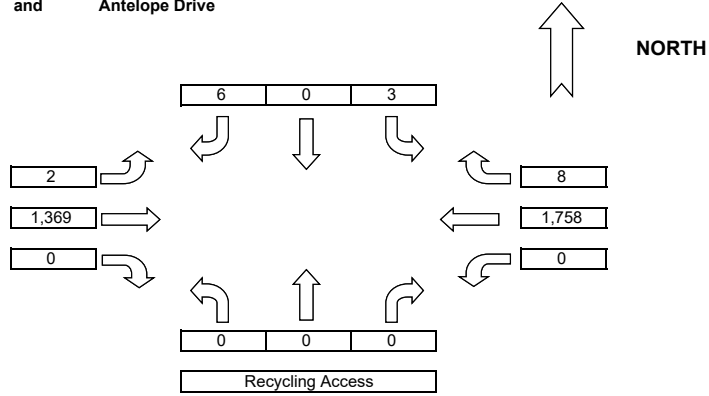
N-S STREET: Recycling Access
E-W STREET: Antelope Drive

COUNT DATE: May 7, 2025
Day of the Week: Wednesday
NOTES:

COUNT TIME:
FROM: 4:00 PM
TO: 6:00 PM

PK HR VOLUME: 3,146
PHF: 0.90
PEAK HOUR:
FROM: 4:35 PM TO: 5:35 PM

Antelope Drive



PM Traffic

COUNT DATA INPUT:

Name: Heather

Name: Heather

Name: Heather

Name: Heather

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5' VOLUMES	TOTAL 15' VOLUMES	PEDESTRIAN	
FROM:	TO:	NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR			E/W	N/S
4:00 PM	4:05 PM	0	0	0	0	87	0	1	0	0	0	125	0	213	715	0	0
4:05 PM	4:10 PM	0	0	0	0	114	0	3	0	0	0	139	0	256	765	0	0
4:10 PM	4:15 PM	0	0	0	0	105	0	0	0	0	0	141	0	246	724	0	0
4:15 PM	4:20 PM	0	0	0	0	104	0	0	0	0	0	159	0	263	734	0	0
4:20 PM	4:25 PM	0	0	0	0	83	0	1	0	0	0	129	2	215	683	0	0
4:25 PM	4:30 PM	0	0	0	0	97	0	2	0	0	0	157	0	256	808	0	0
4:30 PM	4:35 PM	0	0	0	0	93	0	0	0	0	0	119	0	212	812	0	0
4:35 PM	4:40 PM	0	0	0	0	131	0	0	0	1	0	207	1	340	873	0	0
4:40 PM	4:45 PM	0	0	0	0	113	0	0	0	0	0	145	1	260	767	0	0
4:45 PM	4:50 PM	0	0	0	0	114	0	1	0	1	0	157	0	273	728	0	0
4:50 PM	4:55 PM	0	0	0	0	117	0	0	0	0	0	117	0	234	726	0	0
4:55 PM	5:00 PM	0	0	0	0	100	0	0	0	0	0	121	0	221	751	0	0
5:00 PM	5:05 PM	0	0	0	0	121	0	1	0	0	0	149	0	271	808	0	0
5:05 PM	5:10 PM	0	0	0	0	119	0	1	0	0	0	138	1	259	773	0	0
5:10 PM	5:15 PM	0	0	0	0	125	0	0	0	1	0	151	1	278	764	0	0
5:15 PM	5:20 PM	0	0	0	0	77	0	0	0	1	0	157	1	236	735	0	0
5:20 PM	5:25 PM	0	0	0	0	119	0	0	0	1	0	128	2	250	774	0	0
5:25 PM	5:30 PM	0	0	0	0	119	0	0	0	0	0	129	1	249	792	0	0
5:30 PM	5:35 PM	0	0	0	1	114	0	0	0	1	0	159	0	275	789	0	0
5:35 PM	5:40 PM	0	0	0	0	117	0	1	0	0	0	149	1	268	723	0	0
5:40 PM	5:45 PM	0	0	0	3	111	0	2	0	1	0	128	1	246	722	0	0
5:45 PM	5:50 PM	0	0	0	0	77	0	0	0	0	0	131	1	209	696	0	0
5:50 PM	5:55 PM	0	0	0	0	102	0	2	0	0	0	162	1	267	487	0	0
5:55 PM	6:00 PM	0	0	0	1	105	0	0	0	1	0	113	0	220	220	0	0

AM PEAK HOUR VOLUMES

INTERSECTION: Car Wash Access and Antelope Drive

Ped = 0

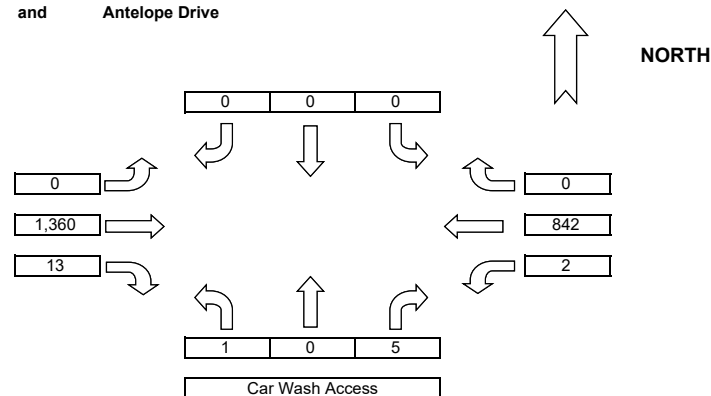
N-S STREET: Car Wash Access
E-W STREET: Antelope Drive

COUNT DATE: May 7, 2025
Day of the Week: Wednesday
NOTES:

COUNT TIME:
FROM: 7:00 AM
TO: 9:00 AM

PK HR VOLUME: 2,223
PHF: 0.92
PEAK HOUR:
FROM: 8:00 AM TO: 9:00 AM

Antelope Drive



PM Traffic

COUNT DATA INPUT:

Name: Leisel

Name: Leisel

Name: Leisel

Name: Leisel

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5' VOLUMES	TOTAL 15' VOLUMES	PEDESTRIAN	
FROM:	TO:	NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR			E/W	N/S
7:00 AM	7:05 AM	0	0	0	0	96	0	0	0	0	0	61	0	157	470	0	0
7:05 AM	7:10 AM	0	0	1	0	100	0	0	0	0	1	58	0	160	467	0	0
7:10 AM	7:15 AM	0	0	0	0	100	0	0	0	0	0	53	0	153	457	0	0
7:15 AM	7:20 AM	0	0	0	0	102	0	0	0	0	0	52	0	154	457	0	0
7:20 AM	7:25 AM	0	0	0	0	99	0	0	0	0	0	51	0	150	472	0	0
7:25 AM	7:30 AM	0	0	0	0	109	0	0	0	0	0	44	0	153	469	0	0
7:30 AM	7:35 AM	0	0	0	0	112	0	0	0	0	0	57	0	169	524	0	0
7:35 AM	7:40 AM	0	0	0	0	95	1	0	0	0	0	51	0	147	544	0	0
7:40 AM	7:45 AM	0	0	0	0	139	1	0	0	0	0	68	0	208	590	0	0
7:45 AM	7:50 AM	0	0	0	0	136	1	0	0	0	0	52	0	189	580	0	0
7:50 AM	7:55 AM	0	0	0	0	115	0	0	0	0	0	78	0	193	582	0	0
7:55 AM	8:00 AM	0	0	0	0	142	0	0	0	0	0	56	0	198	559	0	0
8:00 AM	8:05 AM	0	0	1	0	109	0	0	0	0	0	81	0	191	545	0	0
8:05 AM	8:10 AM	0	0	0	0	104	2	0	0	0	0	64	0	170	534	0	0
8:10 AM	8:15 AM	0	0	1	0	110	0	0	0	0	0	73	0	184	526	0	0
8:15 AM	8:20 AM	1	0	0	0	101	2	0	0	0	1	75	0	180	537	0	0
8:20 AM	8:25 AM	0	0	0	0	99	2	0	0	0	0	61	0	162	536	0	0
8:25 AM	8:30 AM	0	0	1	0	117	0	0	0	0	1	76	0	195	542	0	0
8:30 AM	8:35 AM	0	0	0	0	118	0	0	0	0	0	61	0	179	535	0	0
8:35 AM	8:40 AM	0	0	0	0	119	0	0	0	0	0	49	0	168	539	0	0
8:40 AM	8:45 AM	0	0	0	0	96	1	0	0	0	0	91	0	188	575	0	0
8:45 AM	8:50 AM	0	0	1	0	108	2	0	0	0	0	72	0	183	606	0	0
8:50 AM	8:55 AM	0	0	1	1	135	1	0	0	0	0	67	0	204	423	0	0
8:55 AM	9:00 AM	0	0	0	0	144	3	0	0	0	0	72	0	219	219	0	0

PM PEAK HOUR VOLUMES

INTERSECTION: Car Wash Access and Antelope Drive

Ped = 0

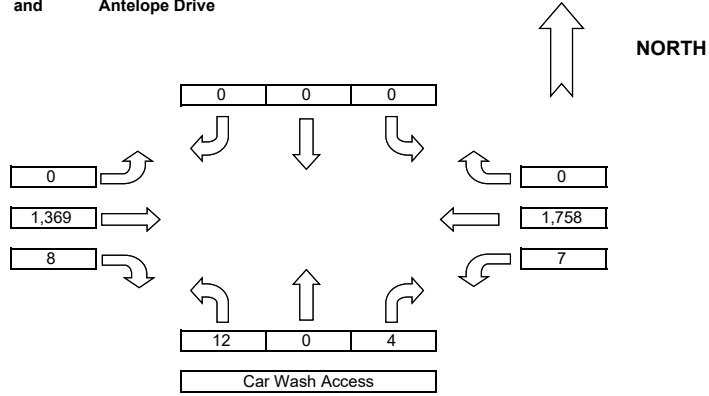
N-S STREET: Car Wash Access
E-W STREET: Antelope Drive

COUNT DATE: May 7, 2025
Day of the Week: Wednesday
NOTES:

COUNT TIME:
FROM: 4:00 PM
TO: 6:00 PM

PK HR VOLUME: 3,158
PHF: 0.90
PEAK HOUR:
FROM: 4:35 PM TO: 5:35 PM

Antelope Drive



PM Traffic

COUNT DATA INPUT:

Name: Heather

Name: Heather

Name: Heather

Name: Heather

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5' VOLUMES	TOTAL 15' VOLUMES	PEDESTRIAN	
FROM:	TO:	NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR			E/W	N/S
4:00 PM	4:05 PM	0	0	0	0	87	0	0	0	0	1	125	0	213	717	0	0
4:05 PM	4:10 PM	0	0	0	0	114	2	0	0	0	1	139	0	256	768	0	0
4:10 PM	4:15 PM	1	0	0	0	105	1	0	0	0	0	141	0	248	725	0	0
4:15 PM	4:20 PM	1	0	0	0	104	0	0	0	0	0	159	0	264	732	0	0
4:20 PM	4:25 PM	0	0	0	0	83	1	0	0	0	0	129	0	213	681	0	0
4:25 PM	4:30 PM	0	0	0	0	97	0	0	0	0	1	157	0	255	809	0	0
4:30 PM	4:35 PM	0	0	0	0	93	0	0	0	0	1	119	0	213	812	0	0
4:35 PM	4:40 PM	1	0	0	0	131	2	0	0	0	0	207	0	341	873	0	0
4:40 PM	4:45 PM	0	0	0	0	113	0	0	0	0	0	145	0	258	770	0	0
4:45 PM	4:50 PM	1	0	0	0	114	1	0	0	0	1	157	0	274	733	0	0
4:50 PM	4:55 PM	3	0	0	0	117	1	0	0	0	0	117	0	238	732	0	0
4:55 PM	5:00 PM	0	0	0	0	100	0	0	0	0	0	121	0	221	755	0	0
5:00 PM	5:05 PM	2	0	0	0	121	0	0	0	0	1	149	0	273	812	0	0
5:05 PM	5:10 PM	0	0	1	0	119	3	0	0	0	0	138	0	261	774	0	0
5:10 PM	5:15 PM	1	0	1	0	125	0	0	0	0	0	151	0	278	765	0	0
5:15 PM	5:20 PM	0	0	0	0	77	0	0	0	0	1	157	0	235	738	0	0
5:20 PM	5:25 PM	1	0	1	0	119	1	0	0	0	2	128	0	252	779	0	0
5:25 PM	5:30 PM	0	0	1	0	119	0	0	0	0	2	129	0	251	793	0	0
5:30 PM	5:35 PM	3	0	0	0	114	0	0	0	0	0	159	0	276	781	0	0
5:35 PM	5:40 PM	0	0	0	0	117	0	0	0	0	0	149	0	266	713	0	0
5:40 PM	5:45 PM	0	0	0	0	111	0	0	0	0	0	128	0	239	711	0	0
5:45 PM	5:50 PM	0	0	0	0	77	0	0	0	0	0	131	0	208	690	0	0
5:50 PM	5:55 PM	0	0	0	0	102	0	0	0	0	0	162	0	264	482	0	0
5:55 PM	6:00 PM	0	0	0	0	105	0	0	0	0	0	113	0	218	218	0	0

AM PEAK HOUR VOLUMES

INTERSECTION: Main Street and Antelope Drive

Ped = 9

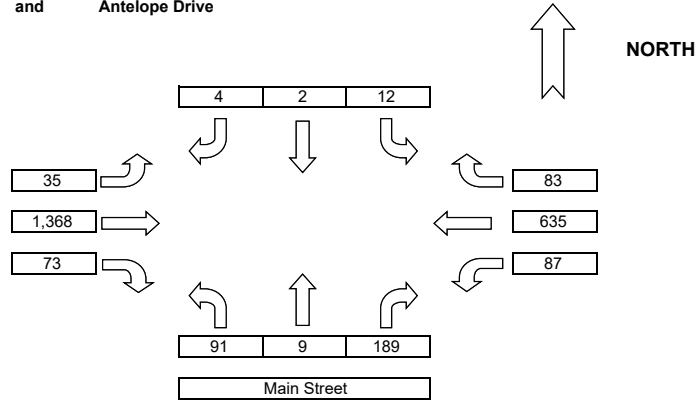
N-S STREET: Main Street
E-W STREET: Antelope Drive

PK HR VOLUME: 2,588
PHF: 0.92
PEAK HOUR:
FROM: 7:15 AM TO: 8:15 AM

COUNT DATE: May 13, 2025
Day of the Week: Tuesday
NOTES:

COUNT TIME:
FROM: 7:00 AM
TO: 9:00 AM

Antelope Drive



PM Traffic

COUNT DATA INPUT:

Name: Leisel

Name: Leisel

Name: Leisel

Name: Leisel

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5' VOLUMES	TOTAL 15' VOLUMES	PEDESTRIAN	
FROM:	TO:	NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR			E/W	N/S
7:00 AM	7:05 AM	2	2	22	3	75	5	1	0	0	7	49	5	171	567	0	0
7:05 AM	7:10 AM	7	0	17	2	91	1	1	0	0	6	55	2	182	591	0	0
7:10 AM	7:15 AM	5	0	21	2	122	3	0	0	0	5	53	3	214	594	0	0
7:15 AM	7:20 AM	4	1	14	3	104	3	0	0	0	3	56	7	195	624	1	0
7:20 AM	7:25 AM	9	1	21	5	95	3	1	1	0	4	40	5	185	643	0	0
7:25 AM	7:30 AM	8	2	18	4	131	6	0	0	0	7	58	10	244	677	0	3
7:30 AM	7:35 AM	9	1	18	7	106	6	1	0	0	11	46	9	214	625	0	2
7:35 AM	7:40 AM	4	3	12	3	120	6	2	0	0	10	49	10	219	656	0	0
7:40 AM	7:45 AM	8	0	18	2	109	5	3	0	1	5	36	5	192	652	1	0
7:45 AM	7:50 AM	8	0	11	2	136	3	0	0	0	9	68	8	245	705	0	0
7:50 AM	7:55 AM	5	0	16	2	121	5	0	0	1	2	54	9	215	675	0	0
7:55 AM	8:00 AM	12	1	16	1	121	11	1	0	0	9	63	10	245	662	0	1
8:00 AM	8:05 AM	5	0	10	3	123	8	0	0	1	9	53	3	215	634	1	0
8:05 AM	8:10 AM	4	0	16	0	110	8	3	0	0	9	48	4	202	601	0	0
8:10 AM	8:15 AM	15	0	19	3	92	9	1	1	1	9	64	3	217	594	0	0
8:15 AM	8:20 AM	10	0	14	0	82	12	1	0	2	9	50	2	182	568	0	1
8:20 AM	8:25 AM	7	0	11	0	111	6	0	0	0	6	53	1	195	571	0	0
8:25 AM	8:30 AM	7	0	13	2	89	10	2	1	0	6	59	2	191	591	0	0
8:30 AM	8:35 AM	14	0	15	1	90	4	1	1	1	9	43	6	185	597	0	0
8:35 AM	8:40 AM	5	0	10	2	121	14	2	0	0	7	53	1	215	637	0	0
8:40 AM	8:45 AM	6	0	9	0	101	10	4	0	0	14	52	1	197	635	1	0
8:45 AM	8:50 AM	5	0	16	0	115	12	0	0	0	16	59	2	225	681	0	0
8:50 AM	8:55 AM	18	0	16	0	97	7	1	0	0	7	65	2	213	456	0	0
8:55 AM	9:00 AM	10	0	14	1	132	11	1	0	1	8	64	1	243	243	1	0

PM PEAK HOUR VOLUMES

INTERSECTION: Main Street and Antelope Drive

Ped = 12

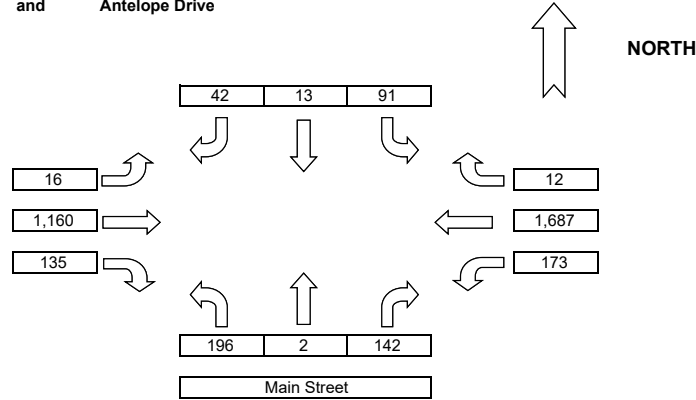
N-S STREET: Main Street
E-W STREET: Antelope Drive

PK HR VOLUME: 3,669
PHF: 0.97
PEAK HOUR:
FROM: 4:00 PM TO: 5:00 PM

COUNT DATE: May 13, 2025
Day of the Week: Tuesday
NOTES:

COUNT TIME:
FROM: 4:00 PM
TO: 6:00 PM

Antelope Drive



PM Traffic

COUNT DATA INPUT:

Name: Heather

Name: Heather

Name: Heather

Name: Heather

TIME PERIOD		NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL 5' VOLUMES	TOTAL 15' VOLUMES	PEDESTRIAN	
FROM:	TO:	NBL	NBT	NBR	EBL	EBT	EBR	SBL	SBT	SBR	WBL	WBT	WBR			E/W	N/S
4:00 PM	4:05 PM	23	0	12	2	107	9	8	0	2	8	136	1	308	938	1	1
4:05 PM	4:10 PM	18	0	11	1	102	10	4	1	6	25	157	1	336	878	0	1
4:10 PM	4:15 PM	11	1	17	2	84	2	4	4	2	17	150	0	294	868	0	0
4:15 PM	4:20 PM	29	0	11	2	84	7	2	0	1	11	101	0	248	880	0	0
4:20 PM	4:25 PM	21	0	16	0	121	15	6	1	2	13	131	0	326	893	1	0
4:25 PM	4:30 PM	15	0	9	3	79	6	3	0	3	16	169	3	306	896	2	0
4:30 PM	4:35 PM	14	0	9	1	75	15	11	5	6	11	114	0	261	902	2	0
4:35 PM	4:40 PM	11	1	10	3	121	18	9	1	9	15	130	1	329	950	3	0
4:40 PM	4:45 PM	7	0	10	0	97	10	9	0	4	9	164	2	312	906	0	0
4:45 PM	4:50 PM	17	0	11	1	86	16	18	1	1	15	140	3	309	949	1	0
4:50 PM	4:55 PM	15	0	11	1	103	8	5	0	4	11	127	0	285	921	0	0
4:55 PM	5:00 PM	15	0	15	0	101	19	12	0	2	22	168	1	355	929	0	0
5:00 PM	5:05 PM	10	0	7	1	101	15	11	1	2	18	113	2	281	868	0	0
5:05 PM	5:10 PM	18	1	10	0	108	10	6	1	10	8	120	1	293	854	0	0
5:10 PM	5:15 PM	8	0	20	0	103	6	0	0	1	11	145	0	294	864	2	0
5:15 PM	5:20 PM	10	0	10	0	82	5	0	0	0	11	149	0	267	865	0	2
5:20 PM	5:25 PM	21	0	15	3	98	10	4	0	2	16	133	1	303	866	1	0
5:25 PM	5:30 PM	15	0	14	0	108	7	5	0	2	20	124	0	295	834	0	0
5:30 PM	5:35 PM	7	0	13	1	88	7	2	0	2	10	137	1	268	822	0	0
5:35 PM	5:40 PM	13	0	18	0	90	13	2	0	2	24	109	0	271	853	0	0
5:40 PM	5:45 PM	18	0	16	1	86	11	3	0	0	15	132	1	283	870	1	0
5:45 PM	5:50 PM	10	0	10	0	110	12	3	1	1	18	134	0	299	796	0	1
5:50 PM	5:55 PM	11	0	17	0	94	10	1	0	0	20	135	0	288	497	1	0
5:55 PM	6:00 PM	7	1	7	1	86	8	2	0	0	11	84	2	209	209	0	0

ITE 11th Edition	Size	Land Use	Trip Rate			Trips				In / Out %				Total			
			AM	PM	Daily	AM	PM	Daily		AM IN	AM Out	PM IN	PM OUT	AM IN	AM Out	PM IN	PM OUT
Townhomes	55	220	0.40	0.51	6.74	22	28	371	Townhomes	24%	76%	63%	37%	5	17	18	10
Retail	4.200	822	2.36	6.59	54.45	10	28	229	Retail	60%	40%	50%	50%	6	4	14	14
Drive thru	7.500	934	44.61	33.03	467.48	335	248	3506	Drive thru	51%	49%	52%	48%	171	164	129	119
Total						366	303	4105	Total					182	185	161	143

1.29%	Growth Factor	Years	Analysis Year
	1.00	0	2025
	1.07	5	2030
	1.38	25	2050

Straight line growth assumed within the study horizon

Source: Traffic on Utah Highways

Road:	SR 108	
Year	AADT	Growth
2013	32,000	
2014	32,000	0.0%
2015	34,000	6.3%
2016	35,000	2.9%
2017	36,000	2.9%
2018	36,000	0.0%
2019	37,000	2.8%
2020	33,000	-10.8%
2021	35,000	6.1%
2022	36,000	2.9%
2023	36,000	0.0%
Average		1.3%

Trip Distribution

1	Antelope Drive / Main Street					1.07
	2025	Site	2025	2030	2030	
AM	2025	Phase I	Total	Background	Total	
EBL	35		35	37	37	
EBT	1235	92	1327	1321	1413	
EBR	72		72	77	77	
WBL	87	10	97	93	103	
WBT	707	90	797	756	846	
WBR	83		83	89	89	
NBL	91		91	97	97	
NBT	9		9	10	10	
NBR	189	10	199	202	212	
SBL	12		12	13	13	
SBT	2		2	2	2	
SBR	4		4	4	4	
East	2313	202		2475	2677	
West	2144	182		2294	2476	
North	145	0		155	155	
South	450	20		482	502	
	2025	Site	2025	2030	2030	
PM	2025	Phase I	Total	Background	Total	
EBL	16		16	17	17	
EBT	1217	71	1288	1302	1373	
EBR	135		135	144	144	
WBL	173	9	182	185	194	
WBT	1527	80	1607	1634	1714	
WBR	12		12	13	13	
NBL	196		196	210	210	
NBT	2		2	2	2	
NBR	142	8	150	152	160	
SBL	91		91	97	97	
SBT	13		13	14	14	
SBR	42		42	45	45	
East	3162	168		3383	3551	
West	3133	151		3352	3503	
North	176	0		188	188	
South	661	17		707	724	

% Increase
1

% Increase
1

2	Antelope Drive / 300 West					1.07
	2025	Site	2025	2030	2030	
AM	2025	Phase I	Total	Background	Total	
EBL	58		58	62	62	
EBT	1303	68	1371	1394	1462	
EBR	16		16	17	17	
WBL	19		19	20	20	
WBT	686	65	751	734	799	
WBR	94		94	101	101	
NBL	2		2	2	2	
NBT	1		1	1	1	
NBR	25		25	27	27	
SBL	27		27	29	29	
SBT	0		0	0	0	
SBR	35		35	37	37	
East	2154	133		2305	2438	
West	2100	133		2247	2380	
North	215	0		230	230	
South	63	0		67	67	
	2025	Site	2025	2030	2030	
PM	2025	Phase I	Total	Background	Total	
EBL	21		21	22	22	
EBT	1277	56	1333	1366	1422	
EBR	14		14	15	15	
WBL	34		34	36	36	
WBT	1689	50	1739	1807	1857	
WBR	45		45	48	48	
NBL	5		5	5	5	
NBT	0		0	0	0	
NBR	26		26	28	28	
SBL	68		68	73	73	
SBT	0		0	0	0	
SBR	115		115	123	123	
East	3139	106		3359	3465	
West	3121	106		3339	3445	
North	249	0		266	266	
South	79	0		85	85	

% Increase
1

% Increase
1

Trip Distribution

3	Antelope Drive / Car Wash		1.07		
	2025	Site	2025	2030	2030
AM	2025	Phase I	Total	Background	Total
EBL			0	0	0
EBT	1338	46	1384	1432	1478
EBR	13	34	47	14	48
WBL	2	45	47	2	47
WBT	800	45	845	856	901
WBR			0	0	0
NBL	1	33	34	1	34
NBT			0	0	0
NBR	5	46	51	5	51
SBL			0	0	0
SBT			0	0	0
SBR			0	0	0

East	2145	182		2295	2477
West	2152	158		2303	2461
North	0	0		0	0
South	21	158		22	180

	2025	Site	2025	2030	2030
PM	2025	Phase I	Total	Background	Total
EBL			0	0	0
EBT	1364	36	1400	1459	1495
EBR	8	28	36	9	37
WBL	7	40	47	7	47
WBT	1758	40	1798	1881	1921
WBR			0	0	0
NBL	12	25	37	13	38
NBT			0	0	0
NBR	4	36	40	4	40
SBL			0	0	0
SBT			0	0	0
SBR			0	0	0

East	3133	152		3352	3504
West	3142	129		3362	3491
North	0	0		0	0
South	31	129		33	162

% Increase
1

% Increase
1

4	Antelope Drive / Recycle Access		1.07		
	2025	Site	2025	2030	2030
AM	2025	Phase I	Total	Background	Total
EBL	7		7	7	7
EBT	1348	34	1382	1442	1476
EBR	0	34	34	0	34
WBL	0	45	45	0	45
WBT	794	33	827	850	883
WBR	6		6	6	6
NBL	0	33	33	0	33
NBT	0		0	0	0
NBR	0	46	46	0	46
SBL	3		3	3	3
SBT	0		0	0	0
SBR	5		5	5	5

East	2151	158		2302	2460
West	2154	134		2305	2439
North	21	0		22	22
South	0	158		0	158

	2025	Site	2025	2030	2030
PM	2025	Phase I	Total	Background	Total
EBL	2		2	2	2
EBT	1369	28	1397	1465	1493
EBR	0	28	28	0	28
WBL	0	40	40	0	40
WBT	1762	25	1787	1885	1910
WBR	8		8	9	9
NBL	0	25	25	0	25
NBT	0		0	0	0
NBR	0	36	36	0	36
SBL	3		3	3	3
SBT	0		0	0	0
SBR	5		5	5	5

East	3142	129		3362	3491
West	3138	106		3358	3464
North	18	0		19	19
South	0	129		0	129

% Increase
1

% Increase
1

5	Main Street / Access Y		1.07		
	2025	Site	2025	2030	2030
AM	2025	Phase I	Total	Background	Total
EBL		10	10	0	10
EBT			0	0	0
EBR		19	19	0	19
WBL			0	0	0
WBT			0	0	0
WBR			0	0	0
NBL		18	18	0	18
NBT	289		289	309	309
NBR			0	0	0
SBL			0	0	0
SBT	161		161	172	172
SBR		10	10	0	10

East	0	0		0	0
West	0	57		0	57
North	450	20		482	502
South	450	37		482	519

	2025	Site	2025	2030	2030
PM	2025	Phase I	Total	Background	Total
EBL		8	8	0	8
EBT			0	0	0
EBR		14	14	0	14
WBL			0	0	0
WBT			0	0	0
WBR			0	0	0
NBL		16	16	0	16
NBT	340		340	364	364
NBR			0	0	0
SBL			0	0	0
SBT	321		321	343	343
SBR		9	9	0	9

East	0	0		0	0
West	0	47		0	47
North	661	17		707	724
South	661	30		707	737



























Appendix B Without Site Intersection Analyses

Timings

1: Main Street & Antelope Drive

06/17/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1235	72	87	707	83	91	9	189	12	2	4
Future Volume (vph)	35	1235	72	87	707	83	91	9	189	12	2	4
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	11.0	84.0	84.0	17.0	90.0	90.0	34.0	34.0	34.0	34.0	34.0	34.0
Total Split (%)	8.1%	62.2%	62.2%	12.6%	66.7%	66.7%	25.2%	25.2%	25.2%	25.2%	25.2%	25.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effect Green (s)	74.0	67.7	67.7	80.4	72.6	72.6	44.6	44.6	44.6	44.6	44.6	44.6
Actuated g/C Ratio	0.55	0.50	0.50	0.60	0.54	0.54	0.33	0.33	0.33	0.33	0.33	0.33
v/c Ratio	0.10	0.76	0.09	0.47	0.40	0.10	0.21	0.02	0.33	0.03	0.00	0.01
Control Delay	9.6	29.6	2.5	17.8	18.7	2.5	37.4	36.2	13.8	36.2	36.5	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.6	29.6	2.5	17.8	18.7	2.5	37.4	36.2	13.8	36.2	36.5	0.0
LOS	A	C	A	B	B	A	D	D	B	D	D	A
Approach Delay		27.6			17.1			22.0			28.6	
Approach LOS		C			B			C			C	

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 23.3

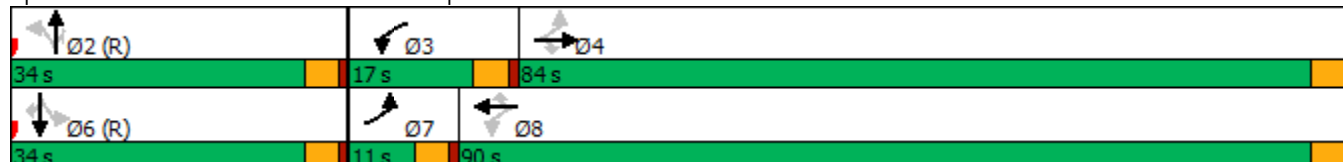
Intersection LOS: C

Intersection Capacity Utilization 61.9%

ICU Level of Service B













Analysis Period (min) 15

Splits and Phases: 1: Main Street & Antelope Drive



HCM 6th TWSC
2: 300 West & Antelope Drive

06/19/2025

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	1303	16	19	686	94	2	1	25	27	0	35
Future Vol, veh/h	58	1303	16	19	686	94	2	1	25	27	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	300	300	-	300	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	63	1416	17	21	746	102	2	1	27	29	0	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	848	0	0	1433	0	0	1957	2432	708	1623	2347	373
Stage 1	-	-	-	-	-	-	1542	1542	-	788	788	-
Stage 2	-	-	-	-	-	-	415	890	-	835	1559	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	785	-	-	470	-	-	38	31	377	68	36	624
Stage 1	-	-	-	-	-	-	120	175	-	350	400	-
Stage 2	-	-	-	-	-	-	585	359	-	328	172	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	785	-	-	470	-	-	32	27	377	55	32	624
Mov Cap-2 Maneuver	-	-	-	-	-	-	32	27	-	55	32	-
Stage 1	-	-	-	-	-	-	110	161	-	322	382	-
Stage 2	-	-	-	-	-	-	525	343	-	278	158	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.3			28.6			62.4		
HCM LOS							D			F		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	32	252	785	-	-	470	-	-	55	624
HCM Lane V/C Ratio	0.068	0.112	0.08	-	-	0.044	-	-	0.534	0.061
HCM Control Delay (s)	125.5	21.1	10	-	-	13	-	-	129	11.1
HCM Lane LOS	F	C	A	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	0.2	0.4	0.3	-	-	0.1	-	-	2.1	0.2

HCM 6th TWSC

3: Car Wash & Antelope Drive

06/19/2025

Intersection













Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Vol, veh/h	1338	13	2	800	1	5
Future Vol, veh/h	1338	13	2	800	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1454	14	2	870	1	5

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1468
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	456
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	456
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.7
HCM LOS			C

























Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	290	-	-	456	-
HCM Lane V/C Ratio	0.022	-	-	0.005	-
HCM Control Delay (s)	17.7	-	-	12.9	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	1348	0	0	794	6	0	0	0	3	0	5
Future Vol, veh/h	7	1348	0	0	794	6	0	0	0	3	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	200	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	1465	0	0	863	7	0	0	0	3	0	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	870	0	0	1465	0	0	1913	2351	733	1612	2344	432
Stage 1	-	-	-	-	-	-	1481	1481	-	863	863	-
Stage 2	-	-	-	-	-	-	432	870	-	749	1481	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	770	-	-	457	-	-	41	35	363	69	36	572
Stage 1	-	-	-	-	-	-	131	187	-	316	370	-
Stage 2	-	-	-	-	-	-	572	367	-	370	187	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	770	-	-	457	-	-	40	35	363	68	36	572
Mov Cap-2 Maneuver	-	-	-	-	-	-	40	35	-	68	36	-
Stage 1	-	-	-	-	-	-	130	185	-	313	370	-
Stage 2	-	-	-	-	-	-	567	367	-	366	185	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0			0			29.9		
HCM LOS							A			D		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	-	-	770	-	-	457	-	-	68	572		
HCM Lane V/C Ratio	-	-	0.01	-	-	-	-	-	0.048	0.01		
HCM Control Delay (s)	0	0	9.7	-	-	0	-	-	60.6	11.4		
HCM Lane LOS	A	A	A	-	-	A	-	-	F	B		
HCM 95th %tile Q(veh)	-	-	0	-	-	0	-	-	0.1	0		

Timings

1: Main Street & Antelope Drive

06/17/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	1217	135	173	1527	12	196	2	142	91	13	42
Future Volume (vph)	16	1217	135	173	1527	12	196	2	142	91	13	42
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	9.6	71.4	71.4	23.2	85.0	85.0	40.4	40.4	40.4	40.4	40.4	40.4
Total Split (%)	7.1%	52.9%	52.9%	17.2%	63.0%	63.0%	29.9%	29.9%	29.9%	29.9%	29.9%	29.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effect Green (s)	68.0	62.9	62.9	81.4	77.6	77.6	44.6	44.6	44.6	44.6	44.6	44.6
Actuated g/C Ratio	0.50	0.47	0.47	0.60	0.57	0.57	0.33	0.33	0.33	0.33	0.33	0.33
v/c Ratio	0.14	0.80	0.18	0.73	0.82	0.01	0.46	0.00	0.25	0.21	0.02	0.08
Control Delay	12.3	34.8	3.2	41.8	26.7	0.0	42.4	36.0	6.7	37.2	35.5	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.3	34.8	3.2	41.8	26.7	0.0	42.4	36.0	6.7	37.2	35.5	1.2
LOS	B	C	A	D	C	A	D	D	A	D	D	A
Approach Delay		31.4			28.1			27.4			26.6	
Approach LOS		C			C			C			C	

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 29.2

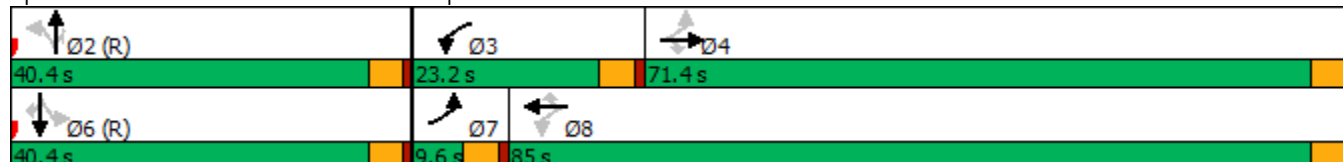
Intersection LOS: C

Intersection Capacity Utilization 75.2%

ICU Level of Service D

Analysis Period (min) 15











Splits and Phases: 1: Main Street & Antelope Drive



HCM 6th TWSC

2: 300 West & Antelope Drive

06/19/2025

Intersection												
Int Delay, s/veh	86.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	1277	14	34	1689	45	5	0	26	68	0	115
Future Vol, veh/h	21	1277	14	34	1689	45	5	0	26	68	0	115
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	300	300	-	300	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	1388	15	37	1836	49	5	0	28	74	0	125
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1885	0	0	1403	0	0	2426	3393	694	2650	3359	918
Stage 1	-	-	-	-	-	-	1434	1434	-	1910	1910	-
Stage 2	-	-	-	-	-	-	992	1959	-	740	1449	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	314	-	-	483	-	-	17	7	385	~ 11	8	274
Stage 1	-	-	-	-	-	-	141	198	-	~ 70	115	-
Stage 2	-	-	-	-	-	-	264	108	-	375	194	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	314	-	-	483	-	-	8	6	385	~ 9	7	274
Mov Cap-2 Maneuver	-	-	-	-	-	-	8	6	-	~ 9	7	-
Stage 1	-	-	-	-	-	-	131	184	-	~ 65	106	-
Stage 2	-	-	-	-	-	-	133	100	-	322	180	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.3			135.4			\$ 1525		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	8 385		314	-	-	483	-	-	9	274		
HCM Lane V/C Ratio	0.679 0.073		0.073	-	-	0.077	-	-	8.213	0.456		
HCM Control Delay (s)	\$ 760.7 15.1		17.4	-	-	13.1	-	-	\$ 4055.6	28.7		
HCM Lane LOS	F C		C	-	-	B	-	-	F D			
HCM 95th %tile Q(veh)	1.3 0.2		0.2	-	-	0.2	-	-	10.7	2.2		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

HCM 6th TWSC












3: Car Wash & Antelope Drive

06/19/2025

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↱	↑↑	↲	
Traffic Vol, veh/h	1364	8	7	1758	12	4
Future Vol, veh/h	1364	8	7	1758	12	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1483	9	8	1911	13	4
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1492	0	2460	746
Stage 1	-	-	-	-	1488	-
Stage 2	-	-	-	-	972	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	446	-	25	356
Stage 1	-	-	-	-	174	-
Stage 2	-	-	-	-	327	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	446	-	25	356
Mov Cap-2 Maneuver	-	-	-	-	113	-
Stage 1	-	-	-	-	174	-
Stage 2	-	-	-	-	321	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.1		35.3	
HCM LOS	E					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	136	-	-	446	-	
HCM Lane V/C Ratio	0.128	-	-	0.017	-	
HCM Control Delay (s)	35.3	-	-	13.2	-	
HCM Lane LOS	E	-	-	B	-	
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-	

Intersection

Int Delay, s/veh 0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	1369	0	0	1762	8	0	0	0	3	0	5
Future Vol, veh/h	2	1369	0	0	1762	8	0	0	0	3	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	200	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	1488	0	0	1915	9	0	0	0	3	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1924	0	0	1488	0	0	2450	3416	744	2663	3407	958
Stage 1	-	-	-	-	-	-	1492	1492	-	1915	1915	-
Stage 2	-	-	-	-	-	-	958	1924	-	748	1492	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	303	-	-	448	-	-	16	7	357	11	7	258
Stage 1	-	-	-	-	-	-	129	185	-	70	114	-
Stage 2	-	-	-	-	-	-	276	113	-	371	185	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	303	-	-	448	-	-	16	7	357	11	7	258
Mov Cap-2 Maneuver	-	-	-	-	-	-	16	7	-	11	7	-
Stage 1	-	-	-	-	-	-	128	184	-	70	114	-
Stage 2	-	-	-	-	-	-	270	113	-	369	184	-

























Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	175.6
HCM LOS			A	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	-	303	-	-	448	-	-	11	258
HCM Lane V/C Ratio	-	-	0.007	-	-	-	-	-	0.296	0.021
HCM Control Delay (s)	0	0	17	-	-	0	-	-	436.1	19.3
HCM Lane LOS	A	A	C	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	-	-	0	-	-	0	-	-	0.7	0.1

Timings

1: Main Street & Antelope Drive

06/17/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	1321	77	93	756	89	97	10	202	13	2	4
Future Volume (vph)	37	1321	77	93	756	89	97	10	202	13	2	4
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	11.0	84.0	84.0	17.0	90.0	90.0	34.0	34.0	34.0	34.0	34.0	34.0
Total Split (%)	8.1%	62.2%	62.2%	12.6%	66.7%	66.7%	25.2%	25.2%	25.2%	25.2%	25.2%	25.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effect Green (s)	77.6	71.3	71.3	83.6	76.1	76.1	41.2	41.2	41.2	41.2	41.2	41.2
Actuated g/C Ratio	0.57	0.53	0.53	0.62	0.56	0.56	0.31	0.31	0.31	0.31	0.31	0.31
v/c Ratio	0.11	0.77	0.10	0.52	0.41	0.10	0.24	0.02	0.38	0.03	0.00	0.01
Control Delay	8.6	28.0	2.7	21.4	17.2	2.3	40.0	37.7	17.6	37.9	38.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.6	28.0	2.7	21.4	17.2	2.3	40.0	37.7	17.6	37.9	38.0	0.0
LOS	A	C	A	C	B	A	D	D	B	D	D	A
Approach Delay		26.1			16.2			25.3			30.3	
Approach LOS		C			B			C			C	

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 22.6

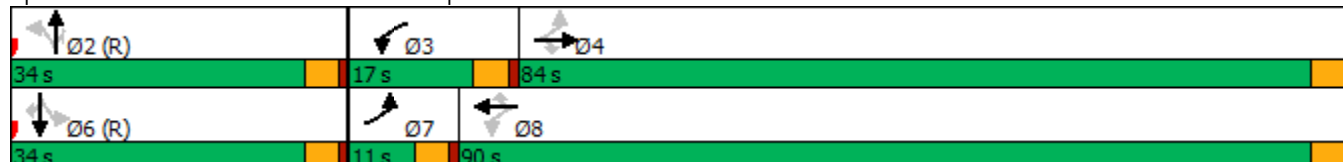
Intersection LOS: C

Intersection Capacity Utilization 65.0%

ICU Level of Service C











Analysis Period (min) 15

Splits and Phases: 1: Main Street & Antelope Drive



HCM 6th TWSC
2: 300 West & Antelope Drive

06/19/2025

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	62	1394	17	20	734	101	2	1	27	29	0	37
Future Vol, veh/h	62	1394	17	20	734	101	2	1	27	29	0	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	300	300	-	300	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	1515	18	22	798	110	2	1	29	32	0	40
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	908	0	0	1533	0	0	2092	2601	758	1734	2509	399
Stage 1	-	-	-	-	-	-	1649	1649	-	842	842	-
Stage 2	-	-	-	-	-	-	443	952	-	892	1667	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	745	-	-	430	-	-	30	24	350	56	28	601
Stage 1	-	-	-	-	-	-	103	155	-	325	378	-
Stage 2	-	-	-	-	-	-	564	336	-	303	152	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	745	-	-	430	-	-	25	21	350	44	24	601
Mov Cap-2 Maneuver	-	-	-	-	-	-	25	21	-	44	24	-
Stage 1	-	-	-	-	-	-	94	141	-	296	359	-
Stage 2	-	-	-	-	-	-	499	319	-	251	138	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.3			32.8			93.2		
HCM LOS							D			F		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	25	224	745	-	-	430	-	-	44	601		
HCM Lane V/C Ratio	0.087	0.136	0.09	-	-	0.051	-	-	0.716	0.067		
HCM Control Delay (s)	162.3	23.6	10.3	-	-	13.8	-	-	197.5	11.4		
HCM Lane LOS	F	C	B	-	-	B	-	-	F	B		
HCM 95th %tile Q(veh)	0.3	0.5	0.3	-	-	0.2	-	-	2.7	0.2		

HCM 6th TWSC

3: Car Wash & Antelope Drive

06/19/2025

Intersection













Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Vol, veh/h	1432	14	2	856	1	5
Future Vol, veh/h	1432	14	2	856	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1557	15	2	930	1	5

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	1572
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	415
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	415
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	19
HCM LOS			C

























Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	264	-	-	415	-
HCM Lane V/C Ratio	0.025	-	-	0.005	-
HCM Control Delay (s)	19	-	-	13.7	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	1442	0	0	850	6	0	0	0	3	0	5
Future Vol, veh/h	7	1442	0	0	850	6	0	0	0	3	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	200	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	1567	0	0	924	7	0	0	0	3	0	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	931	0	0	1567	0	0	2045	2514	784	1724	2507	462
Stage 1	-	-	-	-	-	-	1583	1583	-	924	924	-
Stage 2	-	-	-	-	-	-	462	931	-	800	1583	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	731	-	-	417	-	-	33	28	336	57	28	547
Stage 1	-	-	-	-	-	-	113	167	-	290	346	-
Stage 2	-	-	-	-	-	-	549	344	-	345	167	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	731	-	-	417	-	-	32	28	336	57	28	547
Mov Cap-2 Maneuver	-	-	-	-	-	-	32	28	-	57	28	-
Stage 1	-	-	-	-	-	-	112	165	-	287	346	-
Stage 2	-	-	-	-	-	-	544	344	-	341	165	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			0			34.3		
HCM LOS							A			D		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	-	-	731	-	-	417	-	-	57	547		
HCM Lane V/C Ratio	-	-	0.01	-	-	-	-	-	0.057	0.01		
HCM Control Delay (s)	0	0	10	-	-	0	-	-	72	11.6		
HCM Lane LOS	A	A	A	-	-	A	-	-	F	B		
HCM 95th %tile Q(veh)	-	-	0	-	-	0	-	-	0.2	0		

Timings

1: Main Street & Antelope Drive

06/17/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	1302	144	185	1634	13	210	2	152	97	14	45
Future Volume (vph)	17	1302	144	185	1634	13	210	2	152	97	14	45
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	9.6	71.4	71.4	23.2	85.0	85.0	40.4	40.4	40.4	40.4	40.4	40.4
Total Split (%)	7.1%	52.9%	52.9%	17.2%	63.0%	63.0%	29.9%	29.9%	29.9%	29.9%	29.9%	29.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effect Green (s)	69.8	64.7	64.7	84.5	80.7	80.7	41.5	41.5	41.5	41.5	41.5	41.5
Actuated g/C Ratio	0.52	0.48	0.48	0.63	0.60	0.60	0.31	0.31	0.31	0.31	0.31	0.31
v/c Ratio	0.15	0.83	0.19	0.77	0.84	0.01	0.53	0.00	0.28	0.24	0.03	0.09
Control Delay	12.4	35.6	3.2	49.8	26.5	0.0	46.1	36.5	6.7	39.1	36.3	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.4	35.6	3.2	49.8	26.5	0.0	46.1	36.5	6.7	39.1	36.3	1.8
LOS	B	D	A	D	C	A	D	D	A	D	D	A
Approach Delay		32.1			28.7			29.6			28.0	
Approach LOS		C			C			C			C	

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 30.1

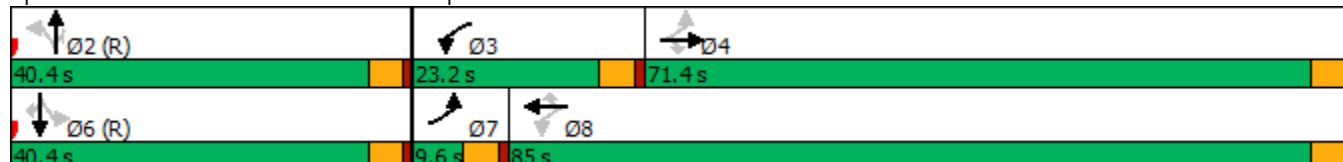
Intersection LOS: C

Intersection Capacity Utilization 78.9%

ICU Level of Service D

Analysis Period (min) 15













Splits and Phases: 1: Main Street & Antelope Drive



HCM 6th TWSC

2: 300 West & Antelope Drive

06/19/2025

Intersection												
Int Delay, s/veh	142.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	1366	15	36	1807	48	5	0	28	73	0	123
Future Vol, veh/h	22	1366	15	36	1807	48	5	0	28	73	0	123
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	300	300	-	300	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	1485	16	39	1964	52	5	0	30	79	0	134
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2016	0	0	1501	0	0	2593	3627	743	2833	3591	982
Stage 1	-	-	-	-	-	-	1533	1533	-	2042	2042	-
Stage 2	-	-	-	-	-	-	1060	2094	-	791	1549	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	279	-	-	442	-	-	12	5	358	~ 8	5	248
Stage 1	-	-	-	-	-	-	122	177	-	~ 58	98	-
Stage 2	-	-	-	-	-	-	239	92	-	349	174	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	279	-	-	442	-	-	~ 5	4	358	~ 6	4	248
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 5	4	-	~ 6	4	-
Stage 1	-	-	-	-	-	-	112	162	-	~ 53	89	-
Stage 2	-	-	-	-	-	-	100	84	-	292	159	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.3			216.3			\$ 2514.8		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	5 358		279	-	-	442	-	-	6	248		
HCM Lane V/C Ratio	1.087 0.085		0.086	-	-	0.089	-	-	13.225	0.539		
HCM Control Delay (s)	\$ 1338.3		16	19.1	-	13.9	-	-	\$ 6692.6	35.3		
HCM Lane LOS	F C		C	-	-	B	-	-	F E			
HCM 95th %tile Q(veh)	1.5 0.3		0.3	-	-	0.3	-	-	11.7	2.9		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

HCM 6th TWSC













3: Car Wash & Antelope Drive

06/19/2025

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↓	↑↑	↓	
Traffic Vol, veh/h	1459	9	7	1881	13	4
Future Vol, veh/h	1459	9	7	1881	13	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1586	10	8	2045	14	4
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1596	0	2630	798
Stage 1	-	-	-	-	1591	-
Stage 2	-	-	-	-	1039	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	407	-	19	329
Stage 1	-	-	-	-	153	-
Stage 2	-	-	-	-	302	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	407	-	19	329
Mov Cap-2 Maneuver	-	-	-	-	100	-
Stage 1	-	-	-	-	153	-
Stage 2	-	-	-	-	296	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.1		40.4	
HCM LOS	E					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	120	-	-	407	-	
HCM Lane V/C Ratio	0.154	-	-	0.019	-	
HCM Control Delay (s)	40.4	-	-	14	-	
HCM Lane LOS	E	-	-	B	-	
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-	

Intersection

Int Delay, s/veh 0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	1465	0	0	1885	9	0	0	0	3	0	5
Future Vol, veh/h	2	1465	0	0	1885	9	0	0	0	3	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	200	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	1592	0	0	2049	10	0	0	0	3	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2059	0	0	1592	0	0	2621	3655	796	2849	3645	1025
Stage 1	-	-	-	-	-	-	1596	1596	-	2049	2049	-
Stage 2	-	-	-	-	-	-	1025	2059	-	800	1596	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	268	-	-	408	-	-	12	5	330	8	5	232
Stage 1	-	-	-	-	-	-	111	165	-	57	97	-
Stage 2	-	-	-	-	-	-	252	96	-	345	165	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	268	-	-	408	-	-	12	5	330	8	5	232
Mov Cap-2 Maneuver	-	-	-	-	-	-	12	5	-	8	5	-
Stage 1	-	-	-	-	-	-	110	164	-	57	97	-
Stage 2	-	-	-	-	-	-	246	96	-	342	164	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	252.5
HCM LOS			A	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	-	268	-	-	408	-	-	8	232
HCM Lane V/C Ratio	-	-	0.008	-	-	-	-	-	0.408	0.023
HCM Control Delay (s)	0	0	18.5	-	-	0	-	-	638.4	20.9
HCM Lane LOS	A	A	C	-	-	A	-	-	F	C
HCM 95th %tile Q(veh)	-	-	0	-	-	0	-	-	0.8	0.1



























Appendix C With Site Intersection Analyses

Timings

1: Main Street & Antelope Drive

06/17/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1327	72	97	797	83	91	9	199	12	2	4
Future Volume (vph)	35	1327	72	97	797	83	91	9	199	12	2	4
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	11.0	84.0	84.0	17.0	90.0	90.0	34.0	34.0	34.0	34.0	34.0	34.0
Total Split (%)	8.1%	62.2%	62.2%	12.6%	66.7%	66.7%	25.2%	25.2%	25.2%	25.2%	25.2%	25.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effect Green (s)	77.7	71.5	71.5	84.1	76.4	76.4	40.9	40.9	40.9	40.9	40.9	40.9
Actuated g/C Ratio	0.58	0.53	0.53	0.62	0.57	0.57	0.30	0.30	0.30	0.30	0.30	0.30
v/c Ratio	0.11	0.77	0.09	0.53	0.43	0.10	0.23	0.02	0.38	0.03	0.00	0.01
Control Delay	8.5	27.9	2.3	22.4	17.3	2.3	40.1	38.1	17.5	38.2	38.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.5	27.9	2.3	22.4	17.3	2.3	40.1	38.1	17.5	38.2	38.0	0.0
LOS	A	C	A	C	B	A	D	D	B	D	D	A
Approach Delay		26.2			16.5			25.0			30.2	
Approach LOS		C			B			C			C	

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 22.6

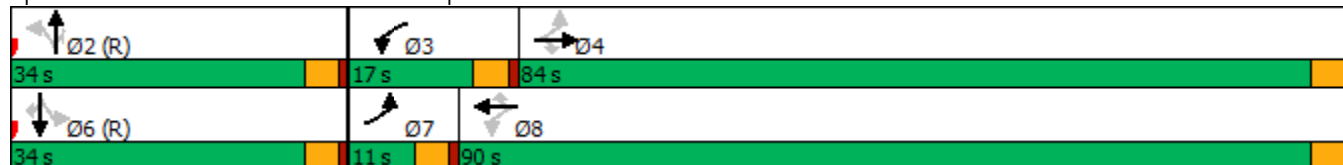
Intersection LOS: C

Intersection Capacity Utilization 65.0%

ICU Level of Service C











Analysis Period (min) 15

Splits and Phases: 1: Main Street & Antelope Drive



HCM 6th TWSC
2: 300 West & Antelope Drive

06/19/2025

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	1371	16	19	751	94	2	1	25	27	0	35
Future Vol, veh/h	58	1371	16	19	751	94	2	1	25	27	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	300	300	-	300	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	63	1490	17	21	816	102	2	1	27	29	0	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	918	0	0	1507	0	0	2066	2576	745	1730	2491	408
Stage 1	-	-	-	-	-	-	1616	1616	-	858	858	-
Stage 2	-	-	-	-	-	-	450	960	-	872	1633	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	739	-	-	440	-	-	31	25	357	57	29	593
Stage 1	-	-	-	-	-	-	108	161	-	318	372	-
Stage 2	-	-	-	-	-	-	558	333	-	312	158	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	739	-	-	440	-	-	26	22	357	46	25	593
Mov Cap-2 Maneuver	-	-	-	-	-	-	26	22	-	46	25	-
Stage 1	-	-	-	-	-	-	99	147	-	291	354	-
Stage 2	-	-	-	-	-	-	497	317	-	262	145	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.3			32.8			81.6		
HCM LOS							D			F		













Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	26	225	739	-	-	440	-	-	46	593
HCM Lane V/C Ratio	0.084	0.126	0.085	-	-	0.047	-	-	0.638	0.064
HCM Control Delay (s)	155.7	23.3	10.3	-	-	13.6	-	-	172.4	11.5
HCM Lane LOS	F	C	B	-	-	B	-	-	F	B
HCM 95th %tile Q(veh)	0.3	0.4	0.3	-	-	0.1	-	-	2.4	0.2

HCM 6th TWSC

3: Car Wash & Antelope Drive

06/19/2025







Intersection						
Int Delay, s/veh	1.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↓	↑↑	↓	
Traffic Vol, veh/h	1384	47	47	845	34	51
Future Vol, veh/h	1384	47	47	845	34	51
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1504	51	51	918	37	55
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1555	0	2091	778
Stage 1	-	-	-	-	1530	-
Stage 2	-	-	-	-	561	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	422	-	45	339
Stage 1	-	-	-	-	165	-
Stage 2	-	-	-	-	535	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	422	-	40	339
Mov Cap-2 Maneuver	-	-	-	-	125	-
Stage 1	-	-	-	-	165	-
Stage 2	-	-	-	-	470	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.8		37.3	
HCM LOS	E					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	201	-	-	422	-	
HCM Lane V/C Ratio	0.46	-	-	0.121	-	
HCM Control Delay (s)	37.3	-	-	14.7	-	
HCM Lane LOS	E	-	-	B	-	
HCM 95th %tile Q(veh)	2.2	-	-	0.4	-	

Intersection												
Int Delay, s/veh	7.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	1382	34	45	827	6	33	0	46	3	0	5
Future Vol, veh/h	7	1382	34	45	827	6	33	0	46	3	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	200	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	1502	37	49	899	7	36	0	50	3	0	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	906	0	0	1539	0	0	2066	2522	751	1764	2552	450
Stage 1	-	-	-	-	-	-	1518	1518	-	997	997	-
Stage 2	-	-	-	-	-	-	548	1004	-	767	1555	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	747	-	-	428	-	-	~ 31	27	353	53	26	556
Stage 1	-	-	-	-	-	-	125	180	-	262	320	-
Stage 2	-	-	-	-	-	-	488	318	-	361	172	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	747	-	-	428	-	-	~ 28	24	353	41	23	556
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 28	24	-	41	23	-
Stage 1	-	-	-	-	-	-	124	178	-	259	284	-
Stage 2	-	-	-	-	-	-	428	282	-	307	170	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.7			208.8			44.8		
HCM LOS							F			E		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	28	353	747	-	-	428	-	-	41	556		
HCM Lane V/C Ratio	1.281	0.142	0.01	-	-	0.114	-	-	0.08	0.01		
HCM Control Delay (s)	\$ 476.3	16.9	9.9	-	-	14.5	-	-	100.3	11.5		
HCM Lane LOS	F	C	A	-	-	B	-	-	F	B		
HCM 95th %tile Q(veh)	4.2	0.5	0	-	-	0.4	-	-	0.2	0		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon		

HCM 6th TWSC

5: Main Street & Access Y

























06/19/2025

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	19	18	289	161	10
Future Vol, veh/h	10	19	18	289	161	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	21	20	314	175	11
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	535	181	186	0	-	0
Stage 1	181	-	-	-	-	-
Stage 2	354	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	506	862	1388	-	-	-
Stage 1	850	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	499	862	1388	-	-	-
Mov Cap-2 Maneuver	499	-	-	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.4	0.4		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1388	-	499	862	-	-
HCM Lane V/C Ratio	0.014	-	0.022	0.024	-	-
HCM Control Delay (s)	7.6	-	12.4	9.3	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.1	-	-

Timings

1: Main Street & Antelope Drive

06/17/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	1288	135	182	1607	12	196	2	150	91	13	42
Future Volume (vph)	16	1288	135	182	1607	12	196	2	150	91	13	42
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	9.6	71.4	71.4	23.2	85.0	85.0	40.4	40.4	40.4	40.4	40.4	40.4
Total Split (%)	7.1%	52.9%	52.9%	17.2%	63.0%	63.0%	29.9%	29.9%	29.9%	29.9%	29.9%	29.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effect Green (s)	69.2	64.1	64.1	83.7	79.8	79.8	42.3	42.3	42.3	42.3	42.3	42.3
Actuated g/C Ratio	0.51	0.47	0.47	0.62	0.59	0.59	0.31	0.31	0.31	0.31	0.31	0.31
v/c Ratio	0.14	0.83	0.18	0.77	0.83	0.01	0.49	0.00	0.27	0.22	0.02	0.08
Control Delay	12.1	35.8	3.2	49.8	26.6	0.0	44.3	36.0	6.7	38.4	36.2	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.1	35.8	3.2	49.8	26.6	0.0	44.3	36.0	6.7	38.4	36.2	1.2
LOS	B	D	A	D	C	A	D	D	A	D	D	A
Approach Delay		32.5			28.8			28.0			27.5	
Approach LOS		C			C			C			C	

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 30.1

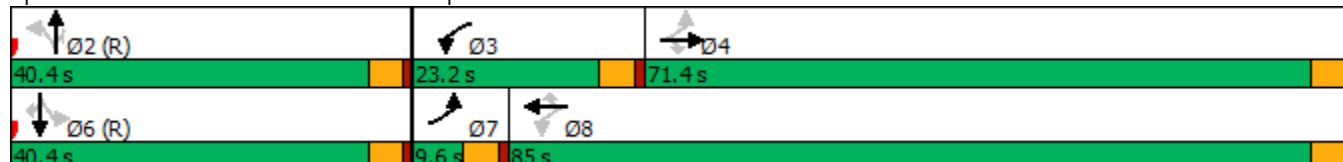
Intersection LOS: C

Intersection Capacity Utilization 77.4%

ICU Level of Service D

Analysis Period (min) 15











Splits and Phases: 1: Main Street & Antelope Drive



HCM 6th TWSC

2: 300 West & Antelope Drive

06/19/2025













Intersection												
Int Delay, s/veh	95.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	1333	14	34	1739	45	5	0	26	68	0	115
Future Vol, veh/h	21	1333	14	34	1739	45	5	0	26	68	0	115
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	300	300	-	300	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	1449	15	37	1890	49	5	0	28	74	0	125
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1939	0	0	1464	0	0	2514	3508	725	2735	3474	945
Stage 1	-	-	-	-	-	-	1495	1495	-	1964	1964	-
Stage 2	-	-	-	-	-	-	1019	2013	-	771	1510	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	299	-	-	457	-	-	14	6	368	~ 10	6	263
Stage 1	-	-	-	-	-	-	129	185	-	~ 65	108	-
Stage 2	-	-	-	-	-	-	254	102	-	359	181	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	299	-	-	457	-	-	6	5	368	~ 8	5	263
Mov Cap-2 Maneuver	-	-	-	-	-	-	6	5	-	~ 8	5	-
Stage 1	-	-	-	-	-	-	119	171	-	~ 60	99	-
Stage 2	-	-	-	-	-	-	122	94	-	306	167	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.3			187.1			\$ 1733.1		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	6 368		299	-	-	457	-	-	8	263		
HCM Lane V/C Ratio	0.906 0.077		0.076	-	-	0.081	-	-	9.239	0.475		
HCM Control Delay (s)	\$ 1078.8 15.6		18	-	-	13.6	-	-	\$ 4612.6	30.5		
HCM Lane LOS	F C		C	-	-	B	-	-	F	D		
HCM 95th %tile Q(veh)	1.4 0.2		0.2	-	-	0.3	-	-	10.8	2.4		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

HCM 6th TWSC

3: Car Wash & Antelope Drive

06/19/2025







Intersection						
Int Delay, s/veh	1.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Vol, veh/h	1400	36	47	1798	37	40
Future Vol, veh/h	1400	36	47	1798	37	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1522	39	51	1954	40	43
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	1561	0	2621	781
Stage 1	-	-	-	-	1542	-
Stage 2	-	-	-	-	1079	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	419	-	~ 20	338
Stage 1	-	-	-	-	162	-
Stage 2	-	-	-	-	288	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	419	-	~ 18	338
Mov Cap-2 Maneuver	-	-	-	-	98	-
Stage 1	-	-	-	-	162	-
Stage 2	-	-	-	-	253	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.4		52.6	
HCM LOS					F	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	155	-	-	419	-	
HCM Lane V/C Ratio	0.54	-	-	0.122	-	
HCM Control Delay (s)	52.6	-	-	14.8	-	
HCM Lane LOS	F	-	-	B	-	
HCM 95th %tile Q(veh)	2.7	-	-	0.4	-	
Notes						
-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

Intersection												
Int Delay, s/veh	10.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	1397	28	40	1787	8	25	0	36	3	0	5
Future Vol, veh/h	2	1397	28	40	1787	8	25	0	36	3	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	200	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	1518	30	43	1942	9	27	0	39	3	0	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1951	0	0	1548	0	0	2579	3559	759	2791	3580	971
Stage 1	-	-	-	-	-	-	1522	1522	-	2028	2028	-
Stage 2	-	-	-	-	-	-	1057	2037	-	763	1552	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	296	-	-	424	-	-	~ 13	6	349	9	5	252
Stage 1	-	-	-	-	-	-	124	179	-	59	100	-
Stage 2	-	-	-	-	-	-	240	99	-	363	173	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	296	-	-	424	-	-	~ 12	5	349	7	4	252
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 12	5	-	7	4	-
Stage 1	-	-	-	-	-	-	123	178	-	59	90	-
Stage 2	-	-	-	-	-	-	211	89	-	320	172	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.3			\$ 506.2			293		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	12	349	296	-	-	424	-	-	7	252		
HCM Lane V/C Ratio	2.264	0.112	0.007	-	-	0.103	-	-	0.466	0.022		
HCM Control Delay (s)	\$ 1211.3	16.6	17.3	-	-	14.5	-	-	\$ 748.7	19.6		
HCM Lane LOS	F	C	C	-	-	B	-	-	F	C		
HCM 95th %tile Q(veh)	4.3	0.4	0	-	-	0.3	-	-	0.9	0.1		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

HCM 6th TWSC

5: Main Street & Access Y

























06/19/2025

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	14	16	340	321	9
Future Vol, veh/h	8	14	16	340	321	9
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	0	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	15	17	370	349	10
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	758	354	359	0	-	0
Stage 1	354	-	-	-	-	-
Stage 2	404	-	-	-	-	-
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	375	690	1200	-	-	-
Stage 1	710	-	-	-	-	-
Stage 2	674	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	370	690	1200	-	-	-
Mov Cap-2 Maneuver	370	-	-	-	-	-
Stage 1	700	-	-	-	-	-
Stage 2	674	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	12	0.4		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1200	-	370	690	-	-
HCM Lane V/C Ratio	0.014	-	0.024	0.022	-	-
HCM Control Delay (s)	8	-	15	10.3	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.1	-	-

Timings

1: Main Street & Antelope Drive

06/17/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	1413	77	103	846	89	97	10	212	13	2	4
Future Volume (vph)	37	1413	77	103	846	89	97	10	212	13	2	4
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	11.0	84.0	84.0	17.0	90.0	90.0	34.0	34.0	34.0	34.0	34.0	34.0
Total Split (%)	8.1%	62.2%	62.2%	12.6%	66.7%	66.7%	25.2%	25.2%	25.2%	25.2%	25.2%	25.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effect Green (s)	80.6	74.4	74.4	87.4	79.6	79.6	37.7	37.7	37.7	37.7	37.7	37.7
Actuated g/C Ratio	0.60	0.55	0.55	0.65	0.59	0.59	0.28	0.28	0.28	0.28	0.28	0.28
v/c Ratio	0.11	0.79	0.09	0.58	0.44	0.10	0.27	0.02	0.43	0.04	0.00	0.01
Control Delay	7.8	27.1	2.6	27.8	15.9	2.1	42.8	40.0	21.4	40.2	40.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.8	27.1	2.6	27.8	15.9	2.1	42.8	40.0	21.4	40.2	40.0	0.0
LOS	A	C	A	C	B	A	D	D	C	D	D	A
Approach Delay		25.4			15.9			28.5			32.1	
Approach LOS		C			B			C			C	

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 22.4

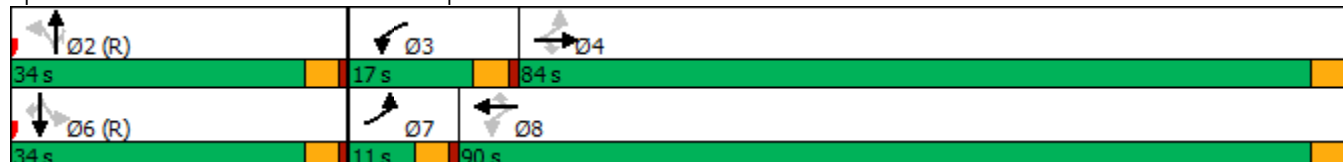
Intersection LOS: C

Intersection Capacity Utilization 68.1%

ICU Level of Service C













Analysis Period (min) 15

Splits and Phases: 1: Main Street & Antelope Drive



HCM 6th TWSC
2: 300 West & Antelope Drive

06/19/2025











Intersection												
Int Delay, s/veh	4.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	62	1462	17	20	799	101	2	1	27	29	0	37
Future Vol, veh/h	62	1462	17	20	799	101	2	1	27	29	0	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	300	300	-	300	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	1589	18	22	868	110	2	1	29	32	0	40
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	978	0	0	1607	0	0	2201	2745	795	1841	2653	434
Stage 1	-	-	-	-	-	-	1723	1723	-	912	912	-
Stage 2	-	-	-	-	-	-	478	1022	-	929	1741	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	701	-	-	403	-	-	25	20	330	47	23	570
Stage 1	-	-	-	-	-	-	92	142	-	295	351	-
Stage 2	-	-	-	-	-	-	537	312	-	288	139	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	701	-	-	403	-	-	21	17	330	36	20	570
Mov Cap-2 Maneuver	-	-	-	-	-	-	21	17	-	36	20	-
Stage 1	-	-	-	-	-	-	83	128	-	267	332	-
Stage 2	-	-	-	-	-	-	472	295	-	235	126	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.3			37.6			128.5		
HCM LOS							E			F		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	21	199	701	-	-	403	-	-	36	570		
HCM Lane V/C Ratio	0.104	0.153	0.096	-	-	0.054	-	-	0.876	0.071		
HCM Control Delay (s)	195.3	26.3	10.7	-	-	14.4	-	-	277.5	11.8		
HCM Lane LOS	F	D	B	-	-	B	-	-	F	B		
HCM 95th %tile Q(veh)	0.3	0.5	0.3	-	-	0.2	-	-	3.2	0.2		

HCM 6th TWSC

3: Car Wash & Antelope Drive

06/19/2025







Intersection						
Int Delay, s/veh	1.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↓	↑↑	↓	
Traffic Vol, veh/h	1478	48	47	901	34	51
Future Vol, veh/h	1478	48	47	901	34	51
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1607	52	51	979	37	55
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1659	0	2225	830
Stage 1	-	-	-	-	1633	-
Stage 2	-	-	-	-	592	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	384	-	37	313
Stage 1	-	-	-	-	145	-
Stage 2	-	-	-	-	516	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	384	-	~ 32	313
Mov Cap-2 Maneuver	-	-	-	-	110	-
Stage 1	-	-	-	-	145	-
Stage 2	-	-	-	-	447	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.8		44.4	
HCM LOS	E					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	180	-	-	384	-	
HCM Lane V/C Ratio	0.513	-	-	0.133	-	
HCM Control Delay (s)	44.4	-	-	15.8	-	
HCM Lane LOS	E	-	-	C	-	
HCM 95th %tile Q(veh)	2.6	-	-	0.5	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Intersection												
Int Delay, s/veh	9.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	1476	34	45	883	6	33	0	46	3	0	5
Future Vol, veh/h	7	1476	34	45	883	6	33	0	46	3	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	200	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	1604	37	49	960	7	36	0	50	3	0	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	967	0	0	1641	0	0	2198	2685	802	1876	2715	480
Stage 1	-	-	-	-	-	-	1620	1620	-	1058	1058	-
Stage 2	-	-	-	-	-	-	578	1065	-	818	1657	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	708	-	-	391	-	-	~ 25	22	327	44	21	532
Stage 1	-	-	-	-	-	-	107	160	-	240	300	-
Stage 2	-	-	-	-	-	-	468	297	-	336	154	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	708	-	-	391	-	-	~ 22	19	327	33	18	532
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 22	19	-	33	18	-
Stage 1	-	-	-	-	-	-	106	158	-	237	263	-
Stage 2	-	-	-	-	-	-	405	260	-	281	152	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.7			296.6			54.5		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	22	327	708	-	-	391	-	-	33	532		
HCM Lane V/C Ratio	1.63	0.153	0.011	-	-	0.125	-	-	0.099	0.01		
HCM Control Delay (s)	\$ 684.9	18	10.1	-	-	15.5	-	-	125.7	11.8		
HCM Lane LOS	F	C	B	-	-	C	-	-	F	B		
HCM 95th %tile Q(veh)	4.6	0.5	0	-	-	0.4	-	-	0.3	0		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

HCM 6th TWSC

5: Main Street & Access Y

























06/19/2025

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	19	18	309	172	10
Future Vol, veh/h	10	19	18	309	172	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	21	20	336	187	11
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	569	193	198	0	-	0
Stage 1	193	-	-	-	-	-
Stage 2	376	-	-	-	-	-
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	484	849	1375	-	-	-
Stage 1	840	-	-	-	-	-
Stage 2	694	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	477	849	1375	-	-	-
Mov Cap-2 Maneuver	477	-	-	-	-	-
Stage 1	827	-	-	-	-	-
Stage 2	694	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	10.5	0.4		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1375	-	477	849	-	-
HCM Lane V/C Ratio	0.014	-	0.023	0.024	-	-
HCM Control Delay (s)	7.7	-	12.7	9.3	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.1	-	-

Timings

1: Main Street & Antelope Drive

06/17/2025

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	1373	144	194	1714	13	210	2	160	97	14	45
Future Volume (vph)	17	1373	144	194	1714	13	210	2	160	97	14	45
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	2	2	2	6	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	9.5	70.5	70.5	26.0	87.0	87.0	38.5	38.5	38.5	38.5	38.5	38.5
Total Split (%)	7.0%	52.2%	52.2%	19.3%	64.4%	64.4%	28.5%	28.5%	28.5%	28.5%	28.5%	28.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effect Green (s)	71.1	66.1	66.1	87.1	83.3	83.3	38.9	38.9	38.9	38.9	38.9	38.9
Actuated g/C Ratio	0.53	0.49	0.49	0.65	0.62	0.62	0.29	0.29	0.29	0.29	0.29	0.29
v/c Ratio	0.15	0.86	0.18	0.79	0.85	0.01	0.57	0.00	0.30	0.26	0.03	0.09
Control Delay	12.1	36.5	3.9	54.8	25.9	0.0	49.2	38.0	7.0	41.2	38.0	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.1	36.5	3.9	54.8	25.9	0.0	49.2	38.0	7.0	41.2	38.0	1.9
LOS	B	D	A	D	C	A	D	D	A	D	D	A
Approach Delay		33.2			28.6			31.0			29.5	
Approach LOS		C			C			C			C	

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 30.6







Intersection LOS: C

Intersection Capacity Utilization 81.1%

ICU Level of Service D













Analysis Period (min) 15

Splits and Phases: 1: Main Street & Antelope Drive

 Ø2 (R)	 Ø3	 Ø4
38.5 s	26 s	70.5 s
 Ø6 (R)	 Ø7	 Ø8
38.5 s	9.5 s	87 s

HCM 6th TWSC
2: 300 West & Antelope Drive

06/19/2025











Intersection												
Int Delay, s/veh	138.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	1422	15	36	1857	48	5	0	28	73	0	123
Future Vol, veh/h	22	1422	15	36	1857	48	5	0	28	73	0	123
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	300	-	300	300	-	300	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	1546	16	39	2018	52	5	0	30	79	0	134
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2070	0	0	1562	0	0	2681	3742	773	2917	3706	1009
Stage 1	-	-	-	-	-	-	1594	1594	-	2096	2096	-
Stage 2	-	-	-	-	-	-	1087	2148	-	821	1610	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	266	-	-	419	-	-	11	4	342	~ 7	4	238
Stage 1	-	-	-	-	-	-	112	165	-	~ 53	92	-
Stage 2	-	-	-	-	-	-	231	87	-	335	162	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	266	-	-	419	-	-	~ 4	3	342	~ 6	3	238
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 4	3	-	~ 6	3	-
Stage 1	-	-	-	-	-	-	102	150	-	~ 48	83	-
Stage 2	-	-	-	-	-	-	92	79	-	278	147	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.3			276.5			\$ 2516.4		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	4	342	266	-	-	419	-	-	6	238		
HCM Lane V/C Ratio	1.359	0.089	0.09	-	-	0.093	-	-	13.225	0.562		
HCM Control Delay (s)	\$ 1731.9	16.6	19.9	-	-	14.5	-	-	\$ 6692.6	37.9		
HCM Lane LOS	F	C	C	-	-	B	-	-	F	E		
HCM 95th %tile Q(veh)	1.5	0.3	0.3	-	-	0.3	-	-	11.7	3.1		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

HCM 6th TWSC

3: Car Wash & Antelope Drive

06/19/2025







Intersection						
Int Delay, s/veh	1.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Vol, veh/h	1495	37	47	1921	38	40
Future Vol, veh/h	1495	37	47	1921	38	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1625	40	51	2088	41	43
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	1665	0	2791	833
Stage 1	-	-	-	-	1645	-
Stage 2	-	-	-	-	1146	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	382	-	~ 15	312
Stage 1	-	-	-	-	143	-
Stage 2	-	-	-	-	265	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	382	-	~ 13	312
Mov Cap-2 Maneuver	-	-	-	-	86	-
Stage 1	-	-	-	-	143	-
Stage 2	-	-	-	-	229	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.4		66.6	
HCM LOS					F	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	137	-	-	382	-	
HCM Lane V/C Ratio	0.619	-	-	0.134	-	
HCM Control Delay (s)	66.6	-	-	15.9	-	
HCM Lane LOS	F	-	-	C	-	
HCM 95th %tile Q(veh)	3.3	-	-	0.5	-	
Notes						
-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

Intersection												
Int Delay, s/veh	15.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	1493	28	40	1910	9	25	0	36	3	0	5
Future Vol, veh/h	2	1493	28	40	1910	9	25	0	36	3	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	200	100	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	1623	30	43	2076	10	27	0	39	3	0	5
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2086	0	0	1653	0	0	2751	3799	812	2978	3819	1038
Stage 1	-	-	-	-	-	-	1627	1627	-	2162	2162	-
Stage 2	-	-	-	-	-	-	1124	2172	-	816	1657	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	262	-	-	386	-	-	~ 9	4	322	6	4	228
Stage 1	-	-	-	-	-	-	106	159	-	48	85	-
Stage 2	-	-	-	-	-	-	219	84	-	337	154	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	262	-	-	386	-	-	~ 8	4	322	5	4	228
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 8	4	-	5	4	-
Stage 1	-	-	-	-	-	-	105	158	-	48	76	-
Stage 2	-	-	-	-	-	-	190	75	-	294	153	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.3			\$ 823.4			\$ 430.6		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	8 322		262	-	-	386	-	-	5	228		
HCM Lane V/C Ratio	3.397 0.122		0.008	-	-	0.113	-	-	0.652	0.024		
HCM Control Delay (s)	\$ 1983.5 17.7		18.9	-	-	15.5	-	-	\$ 1113	21.2		
HCM Lane LOS	F C		C	-	-	C	-	-	F	C		
HCM 95th %tile Q(veh)	4.6 0.4		0	-	-	0.4	-	-	1	0.1		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

HCM 6th TWSC

5: Main Street & Access Y

06/19/2025

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	14	16	364	343	9
Future Vol, veh/h	8	14	16	364	343	9
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	0	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	15	17	396	373	10
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	808	378	383	0	-	0
Stage 1	378	-	-	-	-	-
Stage 2	430	-	-	-	-	-
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	350	669	1175	-	-	-
Stage 1	693	-	-	-	-	-
Stage 2	656	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	345	669	1175	-	-	-
Mov Cap-2 Maneuver	345	-	-	-	-	-
Stage 1	683	-	-	-	-	-
Stage 2	656	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	12.4	0.3		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1175	-	345	669	-	-
HCM Lane V/C Ratio	0.015	-	0.025	0.023	-	-
HCM Control Delay (s)	8.1	-	15.7	10.5	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.1	-	-

TO: Mayor Shepherd and City Council Members

FROM: Shaundra Rushton, Communications Manager

MEETING DATE: December 9, 2025

SUBJECT: Website chatbots

RECOMMENDED ACTION

To seek city council feedback on the implementation of a chatbot on the city's website.

DESCRIPTION / BACKGROUND

The City Council requested that staff investigate the potential of implementing a chatbot on the city's website at the July 2025 retreat. Communications researched different types of chatbots and is seeking council feedback on next steps.

There are three different types of chatbots available for purchase. Staff would like to know which type of chatbot appeals most to the city council.

1. Ai automated texting bots (citizens text a phone number and Ai responds)
2. Ai automated chatbots (with differing levels of staff training the Ai required)
3. Human run chatbots (staff man website chat during business hours and respond)

The options are also generally ranked by price, with fully Ai automated texting bots being the most expensive (around \$13,000 per year) because they charge per text. Traditional Ai chatbots vastly change in price depending on the level of "smart" capabilities it has. A chatbot that doesn't need to be trained by staff costs more (\$10,000 per year) than a chatbot that staff must be fully trained by a staff member (\$2,000 per year).

CORRESPONDING POLICY PRIORITIES

- Providing Quality Municipal Services

A chatbot is anticipated to help the city give better customer service to its residents.

HEDGEHOG SCORE



FISCAL IMPACT

Website chatbots are charged on a yearly subscription, with the most expensive being up to \$13,000 per year. This \$13,000 per year does not include the implementation fee, which many of the services require. The implementation fee is typically the cost of the first year of the subscription.

ALTERNATIVES

The city has researched different types of chatbots for purchase. The city council could also choose not to purchase one.

SCHEDULE / TIME CONSTRAINTS

LIST OF ATTACHMENTS

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