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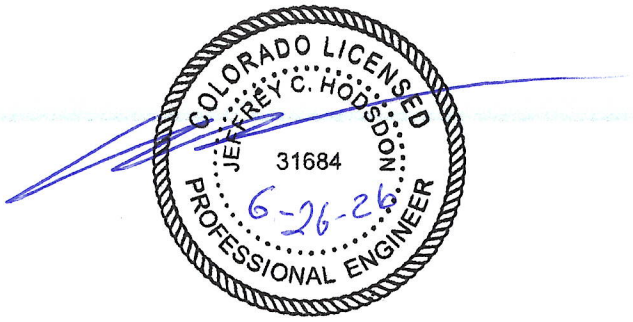
4-Way Commercial
Site Development Plan
Traffic Impact Analysis
PCD File No. PPR2347
(LSC #S224452)
June 17, 2026

Traffic Engineer's Statement

This traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.



Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

6·25·2024

Date

-

4-Way Commercial
Site Development Plan
Traffic Impact Analysis

Prepared for:

Eric Smith, P.E.
ONE La Plata
422 E. Vermijo Avenue, Suite 100
Colorado Springs, CO 80903

JUNE 17, 2026

LSC Transportation Consultants
Prepared by: Kirstin D. Ferrin, P.E.
Reviewed by: Jeffrey C. Hodsdon, P.E.

EPC PCD File No. PPR2347

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CONTENTS

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June 17, 2026

Eric Smith, P.E.
ONE La Plata
422 East Vermijo Avenue, Suite 100
Colorado Springs, CO 80903

RE: 4-Way Commercial
Site Development Plan
El Paso County, CO
Traffic Impact Analysis
PCD File No.: PPR2347
LSC #S224452

Dear Mr. Smith:

LSC Transportation Consultants, Inc. has prepared this traffic impact analysis for the first site development plan (SDP) of the 4-Way Commercial development. As shown in Figure 1, the site is located north and south of Stapleton Drive and northwest of US Highway 24 (US Hwy 24) in El Paso County, Colorado.

LSC recently prepared a Master Traffic Impact Study (MTIS) for the 4-Way Commercial Rezone (CS223) that included trips by the currently-proposed SDP. This memorandum is intended as a site-specific, site-development plan traffic report. This report also includes, for information only, potential changes to the land uses for parcels beyond the currently proposed SDP development area.

REPORT CONTENTS

This report presents:

- The traffic-count data and street conditions;
- Short-term and 2045 baseline/background traffic volumes estimates;
- A summary of the proposed land-use and access plan;
- The projected average weekday and peak-hour vehicle trips to be generated by the currently proposed filings;
- The assignment of the site-generated traffic volumes to the area roadways;
- The resulting traffic impacts, including level of service analysis at key intersection;
- Improvements needed with the currently-proposed SDP; and
- The project's obligation to the County roadway improvement fee program.

RECENT TRAFFIC REPORTS

- LSC prepared a master traffic study (MTIS) for the 4-Way Rezone, December 20, 2022 (CS223). The currently-proposed SDP land uses were accounted for within that recent report.
- A list of other traffic studies in the vicinity of the area of study completed within the past five years (that LSC is aware of) is attached for reference (Appendix Table 1).
- El Paso County is currently studying the Briargate Stapleton Corridor as part of a Pikes Peak Rural Transportation Authority (PPRTA) study. The final version of the Briargate-Stapleton Corridor Study by Wilson & Company was published December 7, 2023.

HORIZON-YEAR SCENARIOS

The report update includes two scenarios in order to adequately address the County comments – short term and long term. The short term (2026) includes the storage SDP development only (shown on the SDP in two phases, which are both included in the short-term scenario). The long-term analysis (2045) includes analysis of a preliminary concept of anticipated future development on the balance of the property south of Stapleton Road. A preliminary concept of the future access plan is included, with potential full-movement and turn-restricted (right-in/right-out) access points to Stapleton Road shown for information only at this time. The anticipated future development land uses on the property, beyond the current SDP area, are called out as future "background" (or "not-part-of-this-application") land uses, as only the storage land uses are proposed (in two phases) with the current SDP.

The 2045 analysis includes the short-term storage use (both phases of the storage development are included), plus these anticipated "background" land uses for the balance of entire property future "buildout", for purposes of determining/verifying adequate spacing and auxiliary lane needs/ configuration on Dumont Drive between Stapleton Drive and the first intersection on Dumont southwest of Stapleton (the placement of the first internal intersection). This long-term analysis also provides preliminary estimates and analysis for information purposes only/preliminary review (for potential discussion purposes) of the future proposed access points to Stapleton Drive. The future land uses and associated trip generation/traffic volumes are subject to change. Future access points would be requested in conjunction with future land-use applications.

LAND USE AND ACCESS

Short Term

Current Land Use Application - Site Development Plan (SDP) for Mini & RV/Boat Storage

The short term (2026) includes the mini-storage and RV/Boat-storage development, only.

Figure 2a shows the currently-proposed SDP with LSC notes. A copy of the SMH SDP plan sheet is also **attached**, for reference. The SDP shows **two separate phases** for the storage development. As shown in Figure 2a the currently-proposed SDP, shown in "Area 1" represents only a portion of the initial development area assumed in the 2022 MTIS. The currently-proposed storage SDP (Phases 1 and 2) includes 89,500 square feet of floor space for mini-warehousing and 31 Boat/RV spaces. This plan represents the anticipated development and trip generation for the short-term scenario. The area labeled as "Area 2" – "Future" is not part of the current SDP. This ground is planned to be graded at the time of the storage development.

Previous Assumptions of Short-Term Land Uses (as shown in the 2022 MTIS - for reference only)

The 4-Way Commercial MTIS assumed the initial development would include the area south of Stapleton Drive adjacent to US Hwy 24 and east of the drainage area including about four to six acres of general commercial uses, three to five acres of mini-warehouse, three to four acres for Boat/RV storage, and three to four acres for contractor equipment storage.

Long-Term Scenario

Land Use – Potential Future Land Uses

Figure 2b shows the potential land uses for the remaining 4-Way Commercial development. The general commercial uses are no longer included in the initial SDP. However, the remaining developable area south of Stapleton Drive and east of the drainage area, shown as Areas 2 and 3 in Figure 2b, is still intended to be developed for commercial uses in the future. This report assumes these parcels will be developed with a gas station with about 83,500 square feet of commercial floor space including a gas station with convenience store, fast food restaurants and general commercial uses.

This report assumes the area west of the drainage, shown as Area 4 in Figure 2b, will be developed for 160 townhomes, instead of the "Business Park" land use assumed in the 2022 MTIS.

Access

Short Term – Current SDP Access

The initial segment of Dumont Drive between Stapleton Road and the site (including the segment along the site frontage) is planned to be constructed as part of this first SDP. Storage development access to this initial section of Dumont Drive is shown in Figure 2a. The Dumont Drive/Stapleton Road intersection will be located 845 feet west of US Highway 24 (centerline spacing). The location of the Stapleton/Dumont intersection (and intersection spacing to US Highway 24) was previously established with the Stapleton Corridor Study and access control plan and the intersection is shown on the PPRTA CDs for Stapleton Road. While this access does not meet the general intersection spacing requirements for an Urban Principal Arterial found in the *El Paso County Engineering Criteria Manual* (*ECM*), the Stapleton Corridor study and access control plan overrides the general *ECM* spacing criteria (as is typical with roadway corridor access management plans). Therefore, County staff has indicated a deviation request to general *ECM* criteria for intersection spacing will not be required.

Dumont Drive will initially be built as a private drive south of Stapleton Drive to serve this initial SDP development. The initial segment will be 28 feet wide (asphalt paved width) and will include curb & gutter on the southeast side. A segment of sidewalk will be installed on the southeast side adjacent to the site (between the two access points). In the future, Dumont Drive will be improved to an Urban Non-Residential Collector standard (or potentially a variation of that) in as needed, with future development. The need/timing will be addressed as part of future development submittals/traffic memos.

The northeast site-access point to Dumont Drive is proposed to be located about 280 feet from the south edge of pavement of Stapleton Drive to the centerline of the access point (330 feet from the access centerline to the approximate centerline of the future four-lane Stapleton Drive). This access is proposed as a “T-intersection” configuration with no future access on the opposite side (the future access on the opposite side would be offset 150 feet to the southwest). This access would require a deviation to the criteria contained in *ECM* for shortened left-turn lanes on Dumont Drive approaching both Stapleton Drive and the site-access point.

The southwest site access point to Dumont Drive is proposed to be located about 400 feet south of the northeast site access. It is planned to be restricted to **exit only**.

Long Term - Future Access (For Information Only - anticipated for inclusion with Future Site Development Plans)

The 2022 MTIS assumed the future parcels south of Stapleton Drive would have access to the south side of Stapleton Drive via a full-movement intersection that would have access to Stapleton Drive aligning with the intersection of Saybrook Drive/Stapleton Drive about 1,345 feet

west of the future Dumont Drive. A deviation for a full-movement intersection at this location was previously approved as part of Waterbury Phase 1 (PCD number PUDSP 215).

Two additional right-in/right-out access points to Stapleton Drive are envisioned to serve these future development parcels. One is shown between Saybrook Drive and Dumont Drive and another is shown between Dumont Drive and US Hwy 24. The 2035 MTIS assumed the future development parcel north of Stapleton Drive would have access to Stapleton Drive via a future extension of Dumont Drive and a right-in/right-out access to Stapleton Drive west of Dumont Drive.

In conjunction with future site development plans, both of these access points would require deviations to the criteria contained in the *ECM*. These future potential access points are shown in Figure 2b. This TIA presents two access analysis scenarios, one **with** the potential future right-in/right-out access points and one **without** these access points. The latter scenario assumes the "worst-case" scenario of trips only assigned to the Dumont and Saybrook access points to Stapleton.

INTERSECTION SIGHT DISTANCE

Based on a design speed of 50 miles per hour (mph) and the criteria contained in Table 2-21 of the *Engineering Criteria Manual* (*ECM*), the required intersection sight distance at the intersection of Dumont Drive/Stapleton Drive is 555 feet. (Note: the **required** intersection sight distance for the future **four-lane** Stapleton Drive is subject to change, depending on the timing of potential future signalization of this intersection). The measurements were taken from a driver's eye height of 3.5 feet to an approaching vehicle height of 3.5 feet. The available sight distance is greater than 1,000 feet to both the east and the west. These measurements were conducted in the field by LSC.

The lines of sight for both access-point intersections will need to be kept clear of any sight-distance obstructions. This includes landscaping, signage, etc. proposed for the development.

DESIGN VEHICLE ACCOMMODATION

Please refer to the attached RV Turning Exhibits 1 and 2, prepared by SMH Consultants. Exhibit 1 shows the predominant (left-in and right-out) entering and exiting vehicle turning paths of a recreational vehicle (RV) at the northeast access. The exhibits also show right and left turns to/from Stapleton at the Stapleton/Dumont intersection.

Regarding the placement/location of a security gate near the entry points, an **on-site vehicle stacking distance** of at least 65 feet on the approach to the gate will accommodate a large class A RV towing a car. The proposed gate locations are shown in the attached SDP plan sheet. The plan shows sufficient stacking distances to allow an entering RV design vehicle to stop while a security code is entered (or other method) to activate the opening of the gate without blockage of the adjacent shared access drive. Note: the southwest access to Dumont is proposed as an "EXIT ONLY" driveway.

ROADWAY AND TRAFFIC CONDITIONS

Area Roadways

The major roadways in the site's vicinity are shown in Figure 1 and are described below. Copies *2024 El Paso County Major Transportation Corridors Plan* (*MTCP*) 2045 Roadway Functional Classifications (Figure 22) and 2065 Corridor Preservation Plan (Figure 39) with the site location identified on them have been attached to this report.

Eastonville Road extends northeast from Meridian Road to past Hodgen Road. It is shown as a two-lane Minor Arterial on the El Paso County *Major Transportation Corridors Plan* and the *Preserved Corridor Network Plan*. Eastonville Road has a three-lane cross section (one through lane in each direction plus a center two-way, left-turn lane) from Woodmen Hills Drive to Snaffle Bit Road (approximately midway between Judge Orr Road and Stapleton Road). Eastonville Road is a two-lane roadway north and south of this section. Eastonville Road is currently unpaved north of Londonderry Drive. The posted speed limit is currently 45 miles per hour (mph) north of Stapleton Drive and 35 mph south of Stapleton Drive. Pikes Peak Rural Transportation Authority (PPRTA) Eastonville Phase 1 project-funded improvements are anticipated in the short-term future at the intersection of Eastonville Road and Stapleton Drive. A roundabout is under design for this intersection.

US Highway 24 (US Hwy 24) is generally a two-lane State Highway extending east/west across Colorado connecting the Buena Vista, Colorado Springs, and Limon areas. US Hwy 24 is planned to be widened to four lanes through Woodmen Road in the Falcon area, once funding is available. US Hwy 24 in the vicinity is classified as an EX – Expressway/Major Bypass by the Colorado Department of Transportation (CDOT). The posted speed limit on US Hwy 24 adjacent to the site is 65 mph.

Stapleton Drive is shown as an Urban two-lane Principal Arterial on the 2045 El Paso County *Major Transportation Corridors Plan* and a four-lane Principal Arterial on the *Corridor Preservation Plan (CPP)*. Stapleton Drive extends east from Towner Drive to US Hwy 24. Stapleton continues southeast, then south as Curtis Road. It is planned to ultimately be extended west to connect with the Briargate Parkway extension. Stapleton Drive currently is a half-section of a four-lane Principal Arterial street (one through lane in each direction) between Meridian Road and US Hwy 24. The posted speed limit between Eastonville Road and US Hwy 24 is 45 mph.

Pedestrian and Bicycle Accommodations

The following is a list of known and planned multi-modal and pedestrian accommodations in the vicinity of the site:

- A Park-and-Ride facility exists near Meridian Road and US Highway 24.
- The Rock Island Regional Trail passes adjacent to the site.
- There are currently no sidewalks on Stapleton Drive in the vicinity of the site. This storage development site does not have direct frontage on Stapleton Drive. Moreover, few (if

any) pedestrian trips will be generated by this storage land use. Once parcels directly abutting Stapleton Drive are developed, sidewalks will be installed, as required.

- Many of the area County roads have been or will be upgraded to provide paved shoulders for cyclists. Stapleton Drive is also shown as a future "bike route."
- The Highway 24 PEL study also includes multi-modal elements.

EXISTING TRAFFIC

Figure 3 shows the existing morning and afternoon peak-hour traffic volumes at the intersection of Stapleton/US Hwy 24. The morning peak hour was assumed to occur for one hour between 6:30 a.m. and 8:30 a.m. The afternoon peak hour was assumed to occur for one hour between 4:00 p.m. and 6:00 p.m. These volumes are based on manual intersection turning-movement counts conducted by LSC in January 2023. The count-data sheets are attached for reference.

Existing Levels of Service

Level of service (LOS) is a quantitative measure of the level of delay at an intersection. Level of service is indicated on a scale from "A" to "F." LOS A represents control delay of less than 10 seconds for unsignalized and signalized intersections. LOS F represents control delay of more than 50 seconds for unsignalized intersections and more than 80 seconds for signalized intersections. Table 1 shows the level of service delay ranges.

Table 1: Intersection Levels of Service Delay Ranges

Level of Service	Signalized Intersections	Unsignalized Intersections
	Average Control Delay (seconds per vehicle)	Average Control Delay (seconds per vehicle)(1)
A	10 sec or less	10 sec or less
B	10-20 sec	10-15 sec
C	20-35 sec	15-25 sec
D	35-55 sec	25-35 sec
E	55-80 sec	35-50 sec
F	80 sec or more	50 sec or more

(1) For unsignalized intersections if V/C ratio is greater than 1.0 the level of service is LOS F regardless of the projected average control delay per vehicle.

Figure 3 presents the results of the existing intersection level of service analysis, based on the unsignalized method of analysis procedures from the *Highway Capacity Manual, 6th Edition* by the Transportation Research Board. The peak-hour factors used for each approach are based on the traffic volumes for the peak fifteen minutes of the entire intersection. If the peak 15 minutes for an approach occurs during an interval other than the peak 15 minutes of the entire

intersection, the suggested peak-hour value based on the total approach volume from Table 9-1 of the Synchro Studio 11 User Guide was used instead. The level of service reports are attached.

The eastbound and westbound left-turn and through lanes at the two-way, stop-sign-controlled intersection of US Hwy 24/Stapleton are currently operating at LOS E or LOS F during the peak hours.

LONG-TERM (YEAR 2045) BACKGROUND TRAFFIC

Background traffic is the traffic estimated to be on the adjacent roadways and at adjacent intersections **without** the proposed SDP (Area 1 shown on Figure 2b) development's trip generation and site-generated traffic volumes. Background traffic includes through traffic and the traffic generated by the balance of the future development area south of Stapleton Road (Areas 2, 3 and 4 shown on Figure 2b), future development on the north side of Stapleton Road and other nearby developments but assumes zero traffic generated by the current SDP site.

Based on the preliminary concept shown in Figure 2b, LSC has estimated "background (future)" trip generation and traffic-volume estimates for two access scenarios (with and without the potential right-in/right-out only access points to Stapleton Drive). These have been incorporated with background through traffic-volume estimates for Stapelton Drive and US Highway 24 and background intersection turning movements estimated for other/future developments. Estimates of turning movement and ADT volumes associated with future development on the property beyond the current SDP are called out as future "background" traffic volumes, as only the storage land uses (and associated trip generation) are proposed at this time.

Figure 4a shows the projected long-term (Year 2045) background traffic volumes with the future potential right-in/right-out access points to Stapleton Drive east and west of Dumont Drive. These volumes are estimates by LSC, based on the above and previous work completed in the area including the *Waterbury Filing No. 1 Traffic Impact Analysis* dated February 28, 2025. Figure 6b shows the projected long-term (Year 2045) background traffic volumes without the future potential right-in/right-out access points.

TRIP GENERATION

4-Way Commercial SDP site-generated vehicle trips have been estimated, in part, using the nationally-published trip-generation rates from *Trip Generation, 12th Edition*, 2025 by the Institute of Transportation Engineers (ITE). ITE does not have trip-generation rates for RV/boat storage. The trip-generation rates for this use shown in Table 2 have been estimated by LSC. Please refer to Appendix A for details and the basis of these LSC-estimated trip-generation rates.

Table 2 shows the trip-generation estimate for the current SDP ("Area 1" as shown in Figure 2b) land uses. Table 2 also shows a **future "background"** trip estimate for the currently-anticipated future land uses in Areas 2, 3 and 4 (as shown on Figure 2b) adjacent to the SDP site. The table

also include, for reference, a comparison to estimates assumed in the *4-Way Commercial MTIS* for the same parcels.

The currently-proposed 4-Way Commercial SDP is expected to generate 119 vehicle trips on the average weekday, with about half entering and half exiting the site during a 24-hour period. During the morning peak hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about four vehicles would enter and three vehicles would exit the site. During the afternoon peak hour, which generally occurs for one hour between 4:15 and 6:15 p.m., about six vehicles would enter and seven vehicles would exit the site.

At buildout, the 4-Way Commercial development area south of Stapleton Drive (Areas 1, 2, 3, and 4, as shown in Figure 2b) is expected to generate about 15,927 total vehicle trips on the average weekday, with about half entering and half exiting the site during a 24-hour period. This is about 8,714 more vehicle trips than were assumed in the 2022 MTIS. The total vehicle trips are expected to be reduced due to internal trips between the future proposed land uses within the 4-Way Commercial area south of Stapleton Drive. Appendix Table 2 shows the estimated internal trip reduction.

The total number of vehicle trips generated at future area buildout has also been reduced to account for the "pass by" and "diverted link" phenomena. A pass-by trip is made by a motorist who would already be on the adjacent roadways regardless of the development, but who stops in while passing by. The motorist would then continue on his or her way to a final destination in the original direction. The pass-by and diverted link percentages shown in Appendix Table 3 are from Pass-By Data and Rate Tables/2025 Pass-By Tables for ITE TripGen Appendices.

TRIP DISTRIBUTION AND ASSIGNMENT

The directional distribution of the site-generated traffic volumes on the area roadways is an important factor in determining the site's traffic impacts. Figure 5 shows the directional-distribution estimates for the site-generated traffic volumes. The estimates are consistent with the directional-distribution estimate from the 2022 4-Way MTIS.

Figures 6 and 7 show the short-term and long-term SDP site-generated traffic volumes, respectively. These volumes were determined by applying the distribution percentages from Figure 5 to the SDP trip-generation estimates (from Table 2).

TOTAL TRAFFIC VOLUMES

Figure 8 shows the projected short-term -traffic volumes following buildout of the currently-proposed SDP at the intersection of Stapleton/Dumont. The short-term total traffic volumes are the sum of the existing traffic volumes (from Figure 3) plus the short-term SDP site-generated traffic volumes (from Figure 6).

Figure 9a shows the projected 2045 total traffic volumes with the future potential right-in/right-out access points to Stapleton Drive east and west of Dumont Drive. These volumes are the sum of the 2045 background traffic volumes (from Figure 4a) plus the long-term SDP site-generated traffic volumes (from Figure 7).

Figure 9b shows the projected 2045 total traffic volumes without the future potential right-in/right-out access points to Stapleton Drive east and west of Dumont Drive. These volumes are the sum of the alternate 2045 background traffic volumes (from Figure 4b) plus the long-term SDP site-generated traffic volumes (from Figure 7).

PROJECTED LEVELS OF SERVICE

The key area intersections and site-access points have been analyzed to determine the projected future levels of service, based on the unsignalized method of analysis procedures from the *Highway Capacity Manual, 6th Edition* by the Transportation Research Board and Synchro signalized intersection procedures. The level of service reports are attached.

Dumont Drive/Stapleton Road

Dumont Drive is planned to only be constructed as an interim, private access drive south of Stapleton Drive with this initial SDP. As a stop-sign-controlled "T" intersection, all movements at this intersection are projected to operate at LOS C or better during the morning and afternoon peak hours, based on the projected short-term total traffic volumes. By 2045, it was assumed that the balance of the adjacent development (shown as Areas 2, 3, and 4) would be developed and generating trips. Also, this scenario assumes the north leg of Stapleton Drive/Dumont Drive would be constructed and that the intersection would be converted to traffic-signal control by 2045. All movements at this intersection are projected to operate at LOS D or better based on the projected 2045 total traffic volumes with or without the potential future right-in/right-out access points to Stapleton Drive.

Saybrook Drive/Stapleton Road (FUTURE)

The intersection of Saybrook/Stapleton is projected to operate at LOS D or better for all movements as a signal-controlled intersection, based on the projected 2045 total traffic volumes with or without the potential future right-in/right-out access points to Stapleton Drive.

US Hwy 24/Stapleton Road

The intersection of US Hwy 24/Stapleton is currently stop-sign controlled. The northbound and southbound left-turn movements and the northbound through movements are currently operating at LOS F during the peak hours and are expected to continue to do so with the addition of the SDP site-generated traffic if this intersection remains two-way stop-sign controlled.

The mitigation for side-street level of service at this intersection will be signalization. The signal is already warranted and CDOT has indicated that this intersection is on the list of intersections programmed for signalization. Area development projects are being required to escrow funds as contribution toward signalization. The more projects contributing, the more matching funds will become available, and the signalization will likely move up on the priority list. It would not be practical to implement an interim solution such as restricting turning movements or installing all way stop control (AWSC) traffic control. This development will be required to contribute to the signal through escrow as part of the access permit process.

QUEUING ANALYSIS

A queuing analysis was performed using Synchro/SimTraffic for the study area to determine the projected queue lengths, based on the alternate 2045 total traffic volumes without the potential future right-in/right-out access points (from Figure 9b). Simulations were run five times. The queuing reports are attached.

The projected 95th-percentile northbound left-turn queue on Dumont Drive approaching Stapleton Drive is 171 feet and the projected 95th-percentile southbound left-turn queue on Dumont Drive approaching the first site access point south of Stapleton Drive is 122 feet.

See the attached Exhibit 2 that shows the recommended laneage on Dumont Drive adjacent to the site that would be needed to accommodate the projected queues once the adjacent parcels have been developed and Dumont Drive is built out to its final cross section.

SIGNAL WARRANT ANALYSIS

Stapleton Road/Dumont Drive ("Warrant Threshold" Analysis)

LSC has completed an *MUTCD* "traffic signal volume warrant threshold" analysis of the projected AM AND PM peak-hour volumes at the intersection of Stapleton Road/Dumont Drive. This analysis has been performed to determine if the thresholds for Four-Hour and/or Eight-Hour Vehicular-Volume Traffic-Signal Warrant thresholds would be reached or exceeded, based on the projected short-term peak-hour traffic volumes.

Summary

Based on the projected peak-hour volumes, a vehicular-volume traffic-signal volume warrant is **not** anticipated to be met at the intersection of Stapleton/Dumont with current SDP of the 4-Way Commercial development.

Details

Based on the criteria contained in the *Manual of Uniform Traffic Control Devices* (*MUTCD*) the minimum minor-street volume with one approach on a major street with one through lane in each direction when the posted speed limit exceeds 40 miles per hour (mph) is 60 vehicles per hour for a Four-Hour Vehicular-Volume Traffic-Signal Warrant and 53 vehicles per hour for an Eight-Hour Vehicular-Volume Traffic-Signal Warrant, based on Condition B – Interruption of Continuous Traffic. The projected northbound left-turn volume at the intersection of Stapleton/Dumont following buildout of the current SDP is two vehicles during the morning peak hour and three vehicles during the afternoon peak hour. Based on the projected peak-hour volumes, a vehicular-volume traffic-signal volume warrant is not anticipated to be met at the intersection of Stapleton/Dumont with current SDP development.

POTENTIAL DEVIATON REQUESTS

Current SDP

Dumont Drive Deviation(s)

A future deviation to the criteria contained in the ECM may be needed for intersection spacing from an Arterial roadway (Stapleton Drive) along an intersecting side street. Also, as a function of the spacing, a deviation for abbreviated left-turn lanes on Dumont Road approaching both Stapleton Road and the site-access point. It is our understanding that as the access drive connecting Stapleton Drive and the SDP development is proposed as an interim two-lane roadway and turn lanes will not be necessary for the current SDP-generated traffic a deviation is not required at this time. However, the access points would be "set" with this site plan and, if a deviation is not approved as part of a future submittal, this access could potentially be turn-restricted in the future and/or the traffic control could be modified.

Future Phases (For Information Only)

Stapleton Drive Access Deviations

The concept for adjacent future development shown in Figure 2b shows two right-in/right-out access points to the south side of Stapleton Drive to serve future development within the 4-Way Commercial development (shown in "Areas 2, 3 and 4 in Figure 2b). These access points are not proposed as part of the currently-proposed SDP. Deviations to the criteria contained in the *ECM* will likely be required for these access points when site-development plans for these future parcels are submitted. Note: the 2024 queuing analysis has been run assuming **no** right-in/right out access points to Stapleton between Saybrook and US Hwy 24. This assumption has been made for purposes of evaluating the proposed access spacing along Dumont and reflects a potential "worst-case" for queuing along Dumont.

ROADWAY IMPROVEMENTS

Table 3 contained a summary of needed improvements and recommendations for auxiliary turn-lane lengths for the entire 4-Way Commercial development. These tables will need to be updated with any future traffic studies.

Current SDP

Table 3 presents the SDP improvements (labeled as "Current SDP"). All other improvements in this table are "future." These tables will need to be updated with any future traffic studies.

- Construct the proposed interim two-lane access road to provide access to the storage development.
- An eastbound right-turn lane was incorporated into the construction of the south half of Stapleton Drive (and the lane was "striped-out" until the opening of the future side-street – Dumont Drive). With this initial SDP this turn lane will be "opened" through removal of hatch markings and striping/marking for the eastbound right-turn lane as shown in attached Pavement Marking & Traffic Control Plan prepared by SMH Consultants (Exhibit 1). The right-turn lane, once "opened" through restriping, would meet *ECM* criteria - 235 feet long plus a 200-foot taper and accommodate the projected maximum queue for this movement.
- Based on the projected short-term total-traffic volumes shown in Figure 8 and the criteria contained in the *ECM*, a left-turn lane is **not** projected to be required on Stapleton Drive approaching Dumont Drive with the initial SDP development.
- The US Highway 24/Stapleton intersection is planned to be signalized. A CDOT comment letter dated January 16, 2024 indicated the current SDP development will be *required to escrow $10,833 toward the future traffic signal at the US Hwy 24/Stapleton Road intersection*. An access permit will be required to process the escrow. The remainder of the development will require updated traffic impact studies and additional escrows for each subsequent SDP, subdivision filing or phase. Please refer the "CDOT ESCROW" section below for additional detail.
- Note: The County has indicated that escrow towards a future Stapleton/Dumont traffic signal can be deferred, as the SDP traffic is minimal in comparison to the overall future site traffic.

POTENTIAL CONDITIONS OF APPROVAL OF THE ACCESS

Instead of a condition indicating essentially "We reserve the right to force **closure** of that access, if necessary," a proposed condition allowing flexibility to propose and implement a mitigating solution, as needed (rather than strictly access closure) is requested by the applicant. A condition such as the following is requested: *"The developer will be responsible for implementing a corrective/mitigating solution if, in the future (with future development) traffic queues back into Stapleton intersection and/or otherwise create an operational or safety issue associated with*

traffic turning movements INTO the development from the Stapleton intersection." Potentially, the following specifics could be included in the condition:

- A condition that says that access may need to be converted to a **three-quarter movement** in the future, if necessary, i.e., prohibit the left out/left turn from the stop sign leaving the storage business.
- The access intersection would need to be designed to facilitate an eastbound Stop condition in the future, potentially set up with some channelization/neck-down curbing if necessary. The exit from the storage access would remain a Stop Sign as currently envisioned. The inbound traffic would be signed as *"inbound traffic does not stop."* While not conventional traffic control, this is common at some shopping centers and would keep traffic moving into the development, preventing any potential queue backups to the Stapleton intersection.

The adjustment to the plan to shift the proposed location of the future access on the north side of Dumont 150 feet to the west from the location shown in the prior submittal would create an "offset T" configuration with the future north-side access **not** aligning with the subject east access to the storage development (rather 150 feet to the west). This result in the currently proposed east storage access to Dumont to operate as a T intersection with fewer turning movement conflicts. This would also better facilitate the possible implementation of the above mitigative solutions, if they become necessary.

4-WAY COMMERCIAL BOARD OF COUNTY COMMISSIONERS' RESOLUTIONS

Table 4 shows a summary of the requirements set by Resolution No. 23-41 of Board of County Commissioners County of El Paso, State of Colorado: Approval of Map Amendment (Rezone) to CS 4-Way Commercial Rezoning (CS-22-003) and the associated improvements from Table 6 of the MTIS. Table 4 also shows the responsibility for each improvement and the recommended basis to calculate a fair-share contribution towards future improvements in which the current SDP could potentially be required to participate.

ROADWAY IMPROVEMENT FEE

This project will be required to participate in the El Paso County Road Improvement Fee Program. The applicant will opt-out of the PID options. The current "full fee" building permit fee associated with the opt-out option for mini-warehouse/outdoor storage is $447 per 1,000 square feet of floor area. Based on 89,500 square feet of mini-warehouse and 19,110 square feet of outdoor storage (based on the total area of the RV parking spaces), the "full fee" payable at building permit would be $48,548.67.

CDOT ESCROW – DETAILS

CDOT will require an escrow towards a future traffic signal at the intersection of US Hwy 24/Stapleton Road. LSC recommends the contribution amount be based on a total traffic-signal cost of $650,000 and criteria from Figure 4C-2 Warrant 2, Four Hour Vehicular Volume (70%

Factor) of the *MUTCD*. The preliminary contribution amount for this SDP was calculated by dividing the additional traffic volume on the minor approach generated by that by 60 vehicles per hour which is the lower threshold volume for a minor-street approach with one lane. The eastbound approach has three lanes; however, based on the guidance in Section 4C.01.09, this analysis uses the lower threshold volume for a minor-street approach with one lane, as the eastbound left-turn volume is minor. The minor approach volume for the escrow analysis includes the eastbound left-turn and through movements only, as there is an exclusive eastbound right-turn lane at this intersection.

Based on the average of the morning and afternoon short-term site-generated traffic volumes shown in Figure 6, the SDP development is projected add one vehicle to the minor approach volume at the intersection of US Hwy 24/Stapleton Road and would be responsible for $10,833 towards the cost of the signal.

LSC Note: There are a number of developments – in progress and future/planned - in the area which will also add traffic to this intersection and impact the 4-hour warrant. The escrow amounts are subject to change. Any changes will be addressed with an updated TIS/memo associated with site-specific plan/Plot Plan submittals. As CDOT collects escrow for other developments, LSC recommends that as the collective impact trips (directly impacting the 4-hour warrant volumes) by area developments begin to exceed the 60-vehicle-per-hour denominator, fair-share recalculation of prorate share escrow amounts and credit be provided to developments according to the updated fair-share calculations. Also, once the signal is installed, credit should be provided from the Countywide Fee Program based on a ratio of fee program unit signal cost divided by the $650,000 total signal cost."

* * * * *

Please contact me if you have any questions regarding this report.

Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

By: Jeffrey C. Hodsdon, P.E.
Principal

JCH/KDF:jas

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Pavement Marking & Traffic Control Plan (CDs Sheet 12) (SMH)
RV Turning Exhibits 1 and 2 (SMH)

Tables 2-4

TRANSPORTATION
CONSULTANTS, INC.

Table 2: Trip Generation Estimate (Site Development Plan)

Land Use Code	Land Use Description	Land Use Quantities	Trip Generation Units	Trip Generation Rates [1] Average Weekday Traffic	Morning Peak Hour In	Morning Peak Hour Out	Afternoon Peak Hour In	Afternoon Peak Hour Out	Total Trips Generated Average Weekday Traffic	Morning Peak Hour In	Morning Peak Hour Out	Afternoon Peak Hour In	Afternoon Peak Hour Out
Site Development Plan (SDP) Application Trip Generation:													
1	**Trip Generation Estimate For "Area 1"[2] - The Currently Proposed SDP (Storage Development Phases 1 and 2) of The 4-Way Ranch Commercial Development**												
- - -	RV/Boat Storage[3]	31 Storage Spaces	0.31 100 storage spaces	12.94	0.50	0.47	0.65	0.80	4	0	0	0	0
151	Mini-Warehouse	89,500 leasable sf	89.5 KSF[4]	1.29	0.05	0.03	0.07	0.07	115	4	3	6	7
							Area 1/SDP (Phases 1 and 2) Total		**119**	**4**	**3**	**6**	**7**
"Background" (Future) Trip Generation - for the Balance of the Property South of Stapleton Drive (Preliminary, Not a Part of the SDP Application):													
2	**Potential Future Trip Generation Estimate For "Area 2" (not a part of the current proposal)**												
945	Gasoline/Service Station with Convenience Market (VFP 16-24)	5,500 leasable sf	5.5 KSF	642.41	33.13	31.84	30.55	30.55	3,533	182	175	168	168
934	Fast-Food Restaurant with Drive-Through Window[5]	6,000 leasable sf	6 KSF	448.12	16.95	16.29	16.43	15.17	2,689	102	98	99	91
821	Shopping Plaza (40-150 KSF No Supermarket)	12,000 leasable sf	12 KSF	65.38	0.99	0.60	2.33	2.43	785	12	7	28	29
								Area 2 Total	**7,007**	**296**	**280**	**295**	**288**
3	**Potential Future Trip Generation Estimate For "Area 3" (not a part of the current proposal)**												
934	Fast-Food Restaurant with Drive-Through Window[5]	10,000 leasable sf	10 KSF	448.12	16.95	16.29	16.43	15.17	4,481	170	163	164	152
821	Shopping Plaza (40-150 KSF No Supermarket)	50,000 leasable sf	50 KSF	65.38	0.99	0.60	2.33	2.43	3,269	49	30	117	121
								Area 3Total	**7,750**	**219**	**193**	**281**	**273**
4	**Potential Future Trip Generation Estimate For "Area 4" (not a part of the current proposal)**												
215	Single Family Attached Housing	160 Dwelling Units	160 DU	6.57	0.12	0.35	0.29	0.22	1,051	19	56	47	35
							Totals - Areas 1, 2, 3 and 4		**15,927**	**538**	**532**	**629**	**603**
For Reference: Trip Generation from the 2022 Master TIS													
	Trip Generation Estimate For the Area South of Stapleton Road and East of the Drainage Area												
- - -	RV/Boat Storage		4 Acres	10.90	0.62	0.67	0.37	0.52	44	2	3	1	2
151	Mini-Warehouse		54 KSF	1.45	0.05	0.04	0.07	0.08	78	3	2	4	4
180	Specialty Trade Contractor		17 KSF	9.82	1.23	0.43	0.62	1.31	167	21	7	10	22
821	Shopping Plaza (40-150 KSF No Supermarket)		52 KSF	67.52	1.07	0.66	2.54	2.65	3,511	56	34	132	138
								Total	**3,800**	**82**	**46**	**147**	**166**
	South of Stapleton Road and West of the Drainage Area												
770	Business Park		254 KSF	13.44	1.10	0.19	0.34	0.97	3,413	279	49	86	245
								Subtotal From 2022 Master TIS	7,213	361	95	233	411
								Change	**8,714**	**177**	**437**	**396**	**192**
	Potential Future Trip Generation Estimate For Area north of Stapleton Road (not a part of the current proposal)												
	North of Stapleton Road and East of Dumont Drive												
821	Shopping Plaza (40-150 KSF No Supermarket)		49 KSF	67.52	1.07	0.66	2.54	2.65	3,308	53	32	125	130
	North of Stapleton Road and West of Dumont Drive												
821	Shopping Plaza (40-150 KSF No Supermarket)		66 KSF	67.52	1.07	0.66	2.54	2.65	4,456	71	43	168	175

Notes:

(1) Source: "Trip Generation, 12th Edition, 2025" by the Institute of Transportation Engineers (ITE).

(2) "Areas" 1 through 4 are shown in Figure 2b

(3) See Appendix A for "RV/Boat Storage" rate calculations

(4) KSF = one thousand square feet of floor space

(5) The morning peak hour trip generation for the fast food restaurants may be lower than estimated if the restaurants do not serve breakfast

Source: LSC Transportation Consultants, Inc.

3/31/2026

Table 3: Roadway Improvements

("Future" Except Current Site Development Plan (SDP) Improvements, as Labeled)

Item #	Improvement	Trigger	Timing	Responsibility
	Roadway Segment Improvements			
1	**Dumont Drive - Construct Interim 2-Lane Access Road (Dumont Drive) Adjacent to SDP site frontage and northeast to Stapleton Drive**	**Needed to provide access to the site**	**With this current SDP**	**4-Way Ranch Commercial**
2	Stapleton Drive - US Hwy 24 to Eastonville Road completion of the four-lane Principal Arterial (FUTURE - not shown on current 2045 MTCP Roadway Plan.	average daily traffic > 18,000 vehicles per day	Shown beyond 2045 on the MTCP.	4-Way Metro District east of Eastonville Road (El Paso County west of Eastonville Road)
3	US Hwy 24 - Widen to provide two lanes in each direction (or as indicated on future, updated CDOT plans.	dependent on CDOT funding priorities	Future - dependent on CDOT funding priorities Shown in US Highway 24 PEL Study	CDOT
	Intersection Improvements			
	Stapleton/Saybrook Intersection (FUTURE)			
	South Intersection Leg Improvements:			
4	Construct a westbound left-turn lane on Stapleton Dr approaching Saybrook. This lane should be 375 feet long plus a 200-foot taper.	westbound left-turn volume > 10 vph	With development of 4-Way parcels south of Stapleton and west of the drainage area	4-Way Commercial
5	Construct an eastbound right-turn deceleration lane on Stapleton Dr approaching Saybrook Dr. This lane should be 235 feet long plus a 200-foot taper.	eastbound right-turn volume > 25 vph	With development of 4-Way parcels south of Stapleton and west of the drainage area	4-Way Commercial
	North Intersection Leg Improvements (Not a part)			
6	Construct an eastbound left-turn lane on Stapleton Dr approaching Saybrook Dr. This lane should be 335 feet long plus a 200-foot taper.	eastbound left-turn volume > 10 vph	With Waterbury Filing Nos. 1 and 2	Waterbury Phase 1
7	Construct a westbound right-turn deceleration lane on Stapleton Dr approaching Saybrook Dr. This lane should be 235 feet long plus a 200-foot taper.	westbound right-turn volume > 25 vph	With Waterbury Filing Nos. 1 and 2	Waterbury Phase 1
8	Construct a westbound right-turn acceleration lane on Stapleton Dr at Saybrook Dr. This lane should be 760 feet long plus a 180-foot taper.	southbound right-turn volume > 50 vph	With Future Waterbury Filings	Waterbury Phase 1
	Overall Intersection			
9	Convert from Two-Way, Stop-Sign Control to Signal Control	When Traffic Signal Warrant(s) are met. The decision on timing of traffic signal installation rests with El Paso County	Future	4-Way Commercial and Waterbury
	Stapleton/Conceptual West Right-in/Right-out Access Intersection (POTENTIAL FUTURE)			
10	Construct an eastbound right-turn deceleration lane on Stapleton Dr approaching the **proposed (future)** west right-in/right-out site access. This lane should be 235 feet long plus a 200-foot taper.	eastbound right-turn volume > 25 vph	With development of adjacent 4-Way parcel located south of Stapleton (beyond this current SDP)	4-Way Commercial
	Stapleton/Dumont Intersection			
	South Intersection Leg Improvements:			
11	**Install South Leg of the Intersection (Curb Returns and transition paving to proposed interim two-lane access drive)**	**Needed to provide access to the site**	**With this current SDP**	**4-Way Commercial**
12	**Eastbound right-turn deceleration lane on Stapleton Dr approaching Dumont: Open the previously-constructed (but striped out) eastbound right turn lane by removing the white hatch pavement markings and striping/marking County standard right turn lane striping/markings as shown in Figure 7. The lane, as constructed, includes the ECM-standard 235 feet long full-width lane plus a 200-foot approach taper.**	**To be completed with this initial SDP** (note, for reference only: the ECM threshold is: eastbound right-turn volume > 25 vph)	**With this current SDP**	**4-Way Commercial**
13	Construct a westbound left-turn lane on Stapleton Dr approaching Dumont Dr. This lane should be 315 feet long plus a 200-foot taper.	Once the westbound left-turn volume > 10 vph; A traffic study/memo for the next SDP will determine if the 10 vph threshold would be exceeded.	Not triggered by the current estimated left turn volume shown on Figure 8 for the current storage lane use; To be determined as part of a traffic study/memo for the next SDP, but likely to be triggered with the next SDP/any development of 4-Way parcels south of Stapleton and west of the drainage area	4-Way Commercial
14	Construct a northbound left-turn lane on Dumont Dr. approaching Stapleton Dr. To meet ECM criteria this lane would need to be 305 feet long plus a 160 foot taper. Based on the location of the currently proposed north SDP east access driveway, a **future** deviation to the criteria contained in the ECM may be needed for this turn lane. **Additionally, please refer to the section of the report "POTENTIAL CONDITIONS OF APPROVAL OF THE ACCESS"**	northbound left-turn volume > 25 vph	With development of adjacent 4-Way parcel located south of Stapleton (beyond this current SDP)	4-Way Commercial
15	Construct a northbound right-turn lane on Dumont Dr. approaching Stapleton Dr. To meet ECM criteria this lane would need to be 155 feet long plus a 160 foot taper. **Please refer to Exhibit 1: Dumont Drive Proposed Future Laneage (Conceptual Only).**	northbound right-turn volume > 50 vph	With development of adjacent 4-Way parcel located south of Stapleton (beyond this current SDP)	4-Way Commercial
16	Construct-an ECM prescribed southeast-bound right-turn acceleration lane of 760 feet plus a 15:1 transition taper on Stapleton Dr beginning at Dumont Drive. If a right-in/right-out access to Stapleton Drive east of Dumont Drive is proposed as part a future 4-Way submittal a **future deviation request** to configure the intersection of Stapleton/Dumont without an accel lane may be required. Please refer to Exhibit 1: Dumont Drive Proposed Future Laneage (Conceptual Only).	Threshold for ECM-prescribed lane: northeast bound to southeast bound right-turn acceleration volume > 50 vph	With development of adjacent 4-Way parcel located south of Stapleton (beyond this current SDP)	4-Way Commercial
	North Intersection Leg Improvements (Not a part)			
17	Construct an eastbound left-turn lane on Stapleton Dr approaching Dumont Dr. This lane should be 375 feet long plus a 200-foot taper.	eastbound left-turn volume > 10 vph	With future Waterbury Phases or with development of 4-Way parcels north of Stapleton; potential other development participation, such as if development occurs on the adjacent parcel(s).	4-Way Commercial and/or Waterbury
18	Construct a westbound right-turn deceleration lane on Stapleton Dr approaching Dumont Dr. This lane should be 235 feet long plus a 200-foot taper (or continuous right turn accel/decel. lane).	westbound right-turn volume > 25 vph	With future Waterbury Phases or with development of 4-Way parcels north of Stapleton; potential other development participation, such as if development occurs on the adjacent parcel(s).	4-Way Commercial and/or Waterbury
19	Construct a westbound right-turn acceleration lane on Stapleton Dr at Dumont Dr. This lane should be 760 feet long plus a 180-foot taper (or continuous right turn accel/decel. lane) or no accel. Lane, if a better solution, operationally (with submitted, approved deviation)	southbound right-turn volume > 50 vph	With future Waterbury Phases or with development of 4-Way parcels north of Stapleton; potential other development participation, such as if development occurs on the adjacent parcel(s).	4-Way Commercial or Waterbury
20	Construct a southbound left-turn lane on Dumont Dr. approaching Stapleton Dr. This lane should be 415 feet long plus a 160-foot taper.	southbound left-turn volume > 25 vph	With future Waterbury Phases or with development of 4-Way parcels north of Stapleton; potential other development participation, such as if development occurs on the adjacent parcel(s).	4-Way Commercial and/or Waterbury
21	Construct a southbound right-turn lane on Dumont Dr. approaching Stapleton Dr. This lane should be 155 feet long plus a 160-foot taper.	southbound right-turn volume > 50 vph	With future Waterbury Phases or with development of 4-Way parcels north of Stapleton; potential other development participation, such as if development occurs on the adjacent parcel(s).	4-Way Commercial and/or Waterbury
	Overall Intersection			
22	Add intersection eastbound and/or westbound approach through lanes on Stapleton	As may be needed to maintain acceptable LOS, or if needed due to vehicle queueing or otherwise needed for satisfactory traffic operations.	TBD with TIS reports submitted with development of 4-Way parcels south of Stapleton (beyond this current SDP)	4-Way Commercial
23	Escrow Funds if required by EPC (as contribution toward future traffic signal) - if not an "eligible intersection" under the County Road Improvement Fee Program	County staff has indicated that escrow towards a future Stapleton/Dumont traffic signal can be deferred as the SDP traffic is minimal in comparison to the overall future site traffic.	Future SDP Applications	Future SDP Applications 4-Way Ranch Commercial
24	Convert from Two-Way, Stop-Sign Control to Signal Control	When Traffic Signal Warrant(s) are met. The decision on timing of traffic signal installation rests with El Paso County	With future Waterbury Phases or with development of 4-Way parcels north of Stapleton; potential other development participation, such as if development occurs on the adjacent parcel(s).	4-Way Commercial and/or Waterbury
	Stapleton/Conceptual East Right-in/Right-out Access (POTENTIAL FUTURE)			
25	Construct a southeast-bound right-turn deceleration lane on Stapleton Dr approaching the east right-in/right-out site access. Please refer to Exhibit 1: Dumont Drive Proposed Future Laneage (Conceptual Only). This lane would be about 125-135 feet long plus a 100- foot taper (dual taper) This improvement would also include the right turn lane at the US Highway 24 intersection extended back across this RI/RO access point. The taper would be dual width, reverse-curve bay taper for both of these lanes. Construction would likely include building the south edge of Stapleton to the ultimate condition along the property frontage.	eastbound right-turn volume > 25 vph	With development of adjacent 4-Way parcel located south of Stapleton (beyond this current SDP)	4-Way Commercial
26	**[Future Deviation Request in leu of construction of]** a ECM prescribed southeast-bound right-turn acceleration lane on Stapleton Dr beginning at the east right-in/right-out site access. Please refer to Exhibit 1: Dumont Drive Proposed Future Laneage (Conceptual Only). Deviation to configure without an accel. Lane as shown.	Threshold for ECM-prescribed lane: northeast bound to southeast bound right-turn acceleration volume > 50 vph	With development of adjacent 4-Way parcel located south of Stapleton (beyond this current SDP)	4-Way Commercial
	Stapleton/US Hwy 24 Intersection			
	Auxiliary Turn Lanes and Associated Improvements			
27	**Turn Lane expansion to northeast-bound dual left-turn lanes** As part of a northeast-bound dual left-turn lane this turn lane improvement, the completion of Stapleton/the northwest leg of this intersection to provide the north half section would be needed, as well, for sufficient "departure" laneage (to "receive" the dual NEB 24 to NWB Stapleton. This could be considered a part of improvement item no. 4e-i-1. Complete this improvement a sufficient distance to the west along Stapleton for merging back to the single through lane, taking in to consideration the Dumont/Stapleton intersection laneage/traffic control needed for turning traffic generated by future development and associated traffic operations. Also - Improvements may be needed on the NE and SE legs for lane alignment across the intersection.	TBD w. TIS/operations analysis, but generally 300 vph. A traffic study/memo for the next SDP may need to assess the timing of need for this future improvement (depending on the extent of the next SDP/ application for the next phase of development)	Future: As determined by traffic study/memos for 4 Way Commercial (for future SDP submittals) and/or other developments future TIS reports should assess the timing of need for this future improvement.	4 Way Commercial and/or other area developments located on the north side of US Highway 24 generating turning traffic from eastbound Highway 24; any available escrow collected from area developments through the access permitting process toward this project could be used to offset the construction costs. Also, potentially eligible for EPC roadway improvement fee program intersection improvement reimbursement according to Fee Program guidelines.
28	**Turn Lane expansion to southeast-bound dual left-turn lanes on Stapleton at US 24** As part of a southeast-bound dual left-turn lane on Stapleton at US 24of this turn lane improvement, if this approach leg of the intersection not already completed with item 4a-19, then complete Stapleton/the northwest leg of this intersection to provide the ultimate five-lane approach and "departure: laneage" by completing the north half section. This could be considered a part of improvement item no. 4e-i-1. Complete this improvement a sufficient distance to the west along Stapleton for sufficient deceleration and vehicle queuing distances for the approach auxiliary lanes, as well as sufficient distance to the west along Stapleton for westbound traffic to merge back to the single through lane, taking in to consideration the Dumont/Stapleton intersection laneage/traffic control needed for turning traffic generated by future development and associated traffic operations. This improvement will require two NEB through lanes on US Highway 24 to "receive" the dual left SEB Stapleton to NEB US Highway 24 traffic. Also - Improvements may be needed on the NE and SE legs for lane alignment across the intersection.	TBD w. TIS/operations analysis, but generally 300 vph A traffic study/memo for the next SDP may need to assess the timing of need for this future improvement (depending on the extent of the next SDP/ application for the next phase of development)	Future: As determined by traffic study/memos for 4 Way Commercial (for future SDP submittals) and/or other developments future TIS reports should assess the timing of need for this future improvement.	4 Way Commercial and/or other area developments located on the north side of US Highway 24 generating turning traffic from eastbound Highway 24; any available escrow collected from area developments through the access permitting process toward this project could be used to offset the construction costs. Also, potentially eligible for EPC roadway improvement fee program intersection improvement reimbursement according to Fee Program guidelines.
29	Turn Lane expansion to dual left-turn lanes on the other two approaches. These improvements will require two through lanes on corresponding departure legs to "receive" the dual left-turning traffic.	TIS/operations analysis, but generally 300 vph	Primarily as identified in TIS reports for projects south of US Highway 24.	Likely projects south of US Highway 24
	Other and Overall Intersection			
30	**Escrow Funds as required by CDOT (as contribution toward future traffic signal)**	**Prior to CDOT Access Permit Notice-to-Proceed (NTP)**	**With this current SDP, as part of the Access Permit Process with CDOT**	**4-Way Ranch Commercial**
31	Convert from Two-Way, Stop-Sign Control to Signal Control	When Traffic Signal Warrant(s) are met. The decision on timing of traffic signal installation rests with the Colorado Department of Transportation	Anticipated in the short-term but likely beyond initial SDP of 4-Way Commercial. It is our understanding that this is on the CDOT list of intersections planned for signalization.	CDOT; along with any available escrow collected from area developments through the access permitting process, including those within this 4 Way Ranch commercial development
32	Add intersection approach thru lanes on the Stapleton approaches or Completion of Stapleton/the northwest leg of this intersection to the ultimate cross section - including future, buildout auxiliary lanes, if required. Including approach and "departure" lanes extending northwest as needed for adequate transitions/tapers, extent may need to include associated improvements at the adjacent Dumont/Stapleton intersection and/or the proposed future right-in/right-out intersection on the south side of Stapleton. If not already completed as part of item 4a or 4f (This could be considered a part of improvement item no. 4e-i-1) Complete this improvement a sufficient distance to the west along Stapleton for sufficient deceleration and vehicle queuing distances for the approach auxiliary lanes, as well as sufficient distance to the west along Stapleton for westbound traffic to merge back to the single through lane, taking in to consideration the Dumont/Stapleton intersection laneage/traffic control needed for turning traffic generated by future development and associated traffic operations. 'Also - Improvements may be needed on the NE and SE legs for lane alignment across the intersection.	As needed to maintain acceptable LOS, or if needed due to vehicle queueing or other wise needed for satisfactory traffic operations, "As needed with future developments/access permit application submittals/access permit application submittals, in conjunction with future additional/expanded auxiliary turn lanes, and/or for general traffic operations. A traffic study/memo for the next SDP may need to assess the timing of need for this future improvement (depending on the extent of the next SDP/ application for the next phase of development)	As required by CDOT with future development/access permit application submittals. A traffic study/memo for the next SDP may need to assess the timing of need for this future improvement (depending on the extent of the next SDP/ application for the next phase of development)	4 Way Commercial and/or other area developments located on the north side of US Highway 24 generating turning traffic from eastbound Highway 24; any available escrow collected from area developments through the access permitting process toward this project could be used to offset the construction costs. Also, potentially eligible for EPC roadway improvement fee program intersection improvement reimbursement according to Fee Program guidelines. Note: if necessitated by development project(s) located south of US Highway 24 first, then responsibility assigned accordingly
33	Potential long-term capacity upgrades (jughandle, a Jr Interchange, etc.)	When level of service degrades below acceptable levels **and depending on CDOTNorth Program Region 2 project priorities/available funding.**	Shown in US Highway 24 PEL Study;	CDOT; along with any available escrow collected from area developments, including **the 4-Way Commercial project,** through the access permitting process.
	Dumont/North Site Access			
34	**Install North Site Access (curb returns, ped. ramps, apron, etc. connecting this currnet SDP internal drive aisles to Dumont (see SDP).**	**Needed to provide access to the site**	**With this current SDP**	**4-Way Ranch Commercial**
35	Construct a southbound left-turn lane on Dumont Dr. approaching the north site access. This lane should be 55 feet long plus a 60-foot reverse curve taper.	southbound left-turn volume > 25 vph	With development of adjacent 4-Way parcel located south of Stapleton (beyond this currnet SDP)	4-Way Commercial
	Dumont/South Site Access (Exit Only)			
36	**Install South Site Access (curb returns, ped. ramps, apron, etc. connecting this currnet SDP internal drive aisles to Dumont (see SDP).**	**Needed to provide egress/exit only from the site (while allowing for emergency vehicle access into the site)**	**With this current SDP**	**4-Way Ranch Commercial**
37	(Future) Construct a northbound left-turn lane on Dumont Dr. approaching a future access assumed to align with the currently proposed south site access (exit only). This lane should be 205 feet long plus a 160-foot taper	northbound left-turn volume > 25 vph	With development of adjacent 4-Way parcel located south of Stapleton (beyond this current SDP)	4-Way Commercial

Source: LSC Transportation Consultants, Inc. ***(rev. June 2026 for current SDP)***

Table 4: Fair Share Contributions Towards Improvements Required by the Conditions of Approval for the 4-Way Commercial Rezoning

Resolution No. 23-41 Board of County Commissioners County of El Paso, State of Colorado Approval of Map Amendment (Rezone) to CS 4-Way Commercial Rezoning (CS-22-003)		Portion of the Overall Development	Roadway improvement number and description from Table 6 of the *4-Way Ranch Commercial Master Traffic Impact Analysis*, (CS-22-003) December 20, 2023		Quantity	Units	Unit Cost	Total Estimated Cost	Fair Share Contribution Basis	Percent For The Current SDP	The Current SDP Amount
4) a.	US Highway 24/Stapleton Drive Intersection: Design, construction and/or deposit of escrow funds per Colorado Department of Transportation access permit conditions	Future	2	Widen US Hwy 24 to provide two lanes in each direction	CDOT Responsibility						
		Current SDP[1]	18	Convert from two-way, stop-sign control to signal control[2]							$10,833 (CDOT)
		Future	19	Add northeast-bound dual left-turn lane (On US 24 approaching Stapleton Dr)	To Be Determined				2026 AM and PM northwest bound left-turn volume	TBD[3]	
		Future	20	Add Southwest-bound dual left-turn lane (On US Hwy 24 approaching Stapleton Dr)	To Be Determined				2042 AM and PM southwest bound left-turn volume	TBD[3]	
		Future		Potentially add Southeast-bound dual left-turn lane (On Stapleton Dr approaching US Hwy 24)	To Be Determined				2042 AM and PM southeast bound left-turn volume	TBD[3]	
		Future		Potentially add Northwest-bound dual left-turn lane (On Stapleton Dr approaching US Hwy 24)	To Be Determined				2042 AM and PM northwest bound left-turn volume	TBD[3]	
		Future	21	Potential long-term capacity upgrades (jughandle, a Jr Interchange, etc.)	To Be Determined				2042 Total AM and PM total intersection volumes	TBD[3]	
4) b.	Eastonville Road/Stapleton Drive: Design, construction, contribution and/or escrow of funds as appropriate for intersection improvements and traffic signals, as warranted	Future	3	Reconstruct as modern roundabout	Responsibility of PPRTA Eastonville Phase 1 Project/El Paso County						
4) c.	Eastonville Road: Construction, contribution, and/or escrow of funds for final grading and asphalt paving between Latigo Boulevard and Stapleton Drive.[4]	Future	- - -		To Be Determined				2042 Daily Traffic Volume on Eastonville Road north of Stapleton Drive	TBD[3]	
4) d.	Stapleton Drive/Dumont Drive intersection: Design and construction of intersection improvements	Future	11	Construct a westbound left-turn lane on Stapleton Dr approaching Dumont Dr. This lane should be 315 feet long plus a 200-foot taper.	To Be Determined				2042 AM and PM westbound left-turn volume	TBD[3]	
		Current SDP[1]	12	Construct an eastbound right-turn deceleration lane on Stapleton Dr approaching Dumont Dr. This lane should be 235 feet long plus a 200-foot taper.	The lane has been constructed. Stapleton Drive should be restriped as shown in Figure 7 with the currently proposed SDP						
		Future	13	Construct an continuous eastbound right-turn acceleration lane on Stapleton Dr between Dumont Dr. and US Hwy 24	To Be Determined				2042 AM and PM northbound right-turn volume	TBD[3]	
		Future	14	Construct an eastbound left-turn lane on Stapleton Dr approaching Dumont Dr. This lane should be 375 feet long plus a 200-foot taper.	To Be Determined				2042 AM and PM eastbound left-turn volume	TBD[3]	
		Future	15	Construct a westbound right-turn deceleration lane on Stapleton Dr approaching Dumont Dr. This lane should be 235 feet long plus a 200-foot taper (or continuous right turn accel/decel. lane).	To Be Determined				2042 AM and PM westbound right-turn volume	TBD[3]	
		Future	16	Construct a westbound right-turn acceleration lane on Stapleton Dr at Dumont Dr. This lane should be 760 feet long plus a 180-foot taper (or continuous right turn accel/decel. lane)	To Be Determined				2042 AM and PM southbound right-turn volume	TBD[3]	
		Future	17	Convert from Two-Way, Stop-Sign Control to Signal Control	To Be Determined				2042 AM and PM northbound and southbound left-turn and through volumes	TBD[3]	
4) e. i.	Stapleton Drive: Design, construction, contribution, and/or escrow of funds for the second two lanes from Eastonville Road to Highway 24	Future	1	Stapleton Drive - US Hwy 24 to Eastonville Road complete southern (eastbound) half	To Be Determined				4-Way Ranch Metro District Generated Average Daily Traffic on Stapleton Drive[5]	TBD[3]	
4) e. ii.	Design, construction, contribution and/or escrow of funds as appropriate to construct intersection improvements, including traffic signals, as warranted	Future	4-10	Various improvements at the intersection of Stapleton Drive/Saybrook Drive	Responsibility of future phases of the 4-Way Ranch Commercial Rezone Area						
4)	Other offsite impacts as identified in any new/updated traffic impact analysis for this development	Future	No new offsite impacts have been identified								

Notes:

(1) Improvements directly associated with the SDP have been labeled above; All other line items in this table, notably the precentages in are based on the Master TIS, and NOT the projected volumes shown in Figure 8 of this TIS Report. The reason is that the land uses beyond the current SDP remain preliminary. The volumes shown in Figure 8 of this report have been utilized in the analysis for purpose of determining the buildout needs for access spacing and future laneage along Dumont Drive. An updated version of this table will be provided with future TIS reports for the other development parcels. (Added January 2026)

(2) This development will need to escrow funds as participation in a future traffic signal. The amount will be determined through the CDOT access permit process. It is our understanding that this intersection is considered an “eligible intersection” with respect to a future traffic signal in the County Road Improvement Fee Program. Therefore, once a signal is installed, the applicant may be entitled to a credit and reimbursement for a portion of the amount escrowed to CDOT. The credit would be based on the Fee Program rules and would be based on the fee program signal unit cost. As such any credit would likely be a prorated portion of the total amount escrowed.

(3) This current SDP development's contribution for improvements - To Be Determined later with future phases. (IE due to the low trip generation, we are proposing the current SDP contribution be "pushed out to future phases." With the next significant phase of development, the percentage and amount for that next land use application will be calculated and the deferred initial SDP amount will be calculated and added to that amount. (Added January 2026)

(4) PPRTA Project No. U19 - potentially reimbursable under the Fee Program

(5) Source: *4-Way Ranch Commercial Master Traffic Impact Analysis* (CS-22-003), December 20, 2023 and *4 Way Ranch Updated Traffic Impact Analysis* (PUD 123), January 29, 2009

Source: LSC Transportation Consultants, Inc.

April 2026 (with January 2026 notations added)

Figures 1-9b

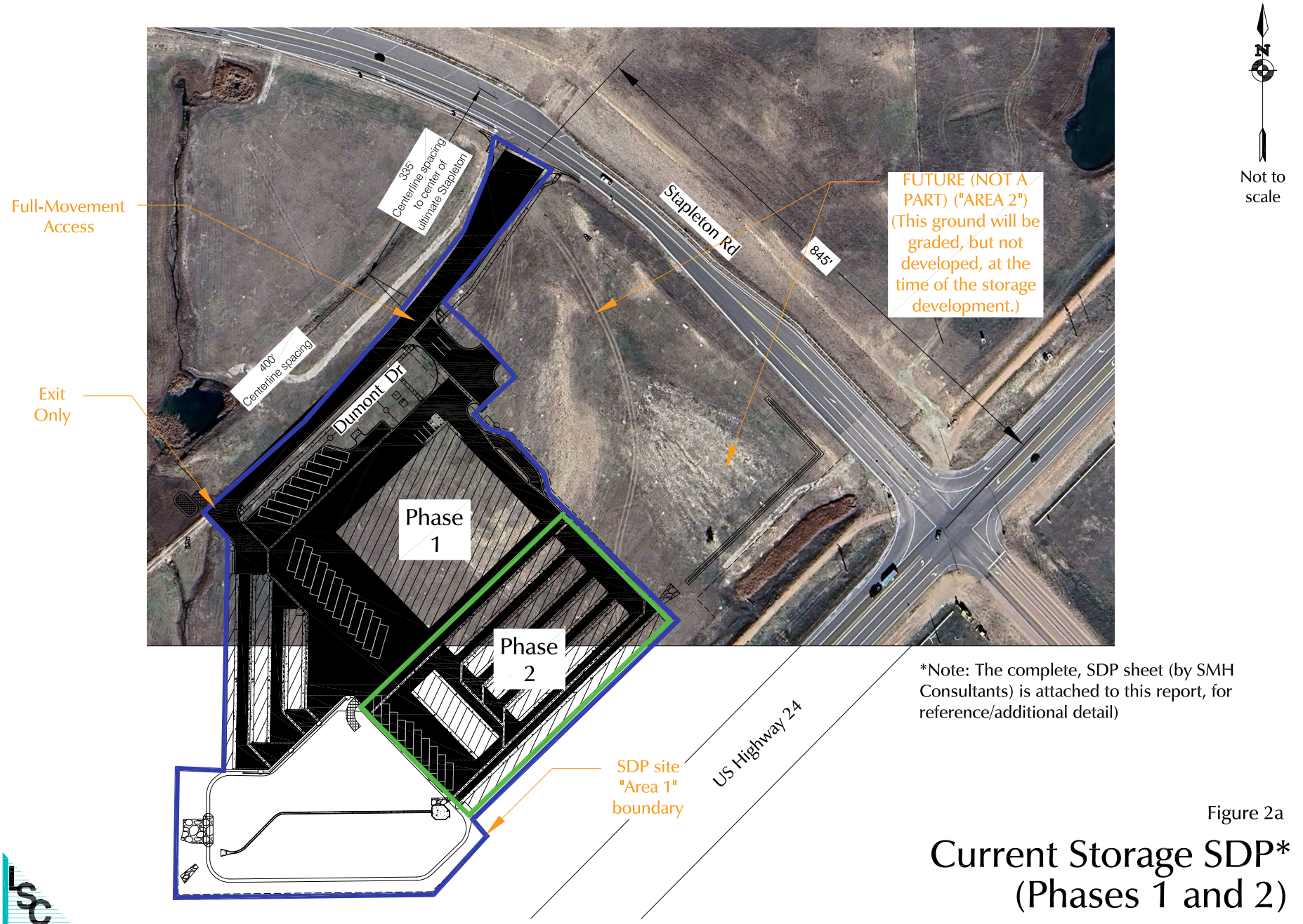
TRANSPORTATION
CONSULTANTS, INC.

Figure 1

Vicinity Map

4-Way Ranch Commercial Phase 1 (LSC #S224452)

TRANSPORTATION CONSULTANTS, INC.



*Note: The complete, SDP sheet (by SMH Consultants) is attached to this report, for reference/additional detail)

Figure 2a

Current Storage SDP* (Phases 1 and 2)

4-Way Ranch Commercial Phase 1 (LSC #S224452)

LSC TRANSPORTATION CONSULTANTS, INC.

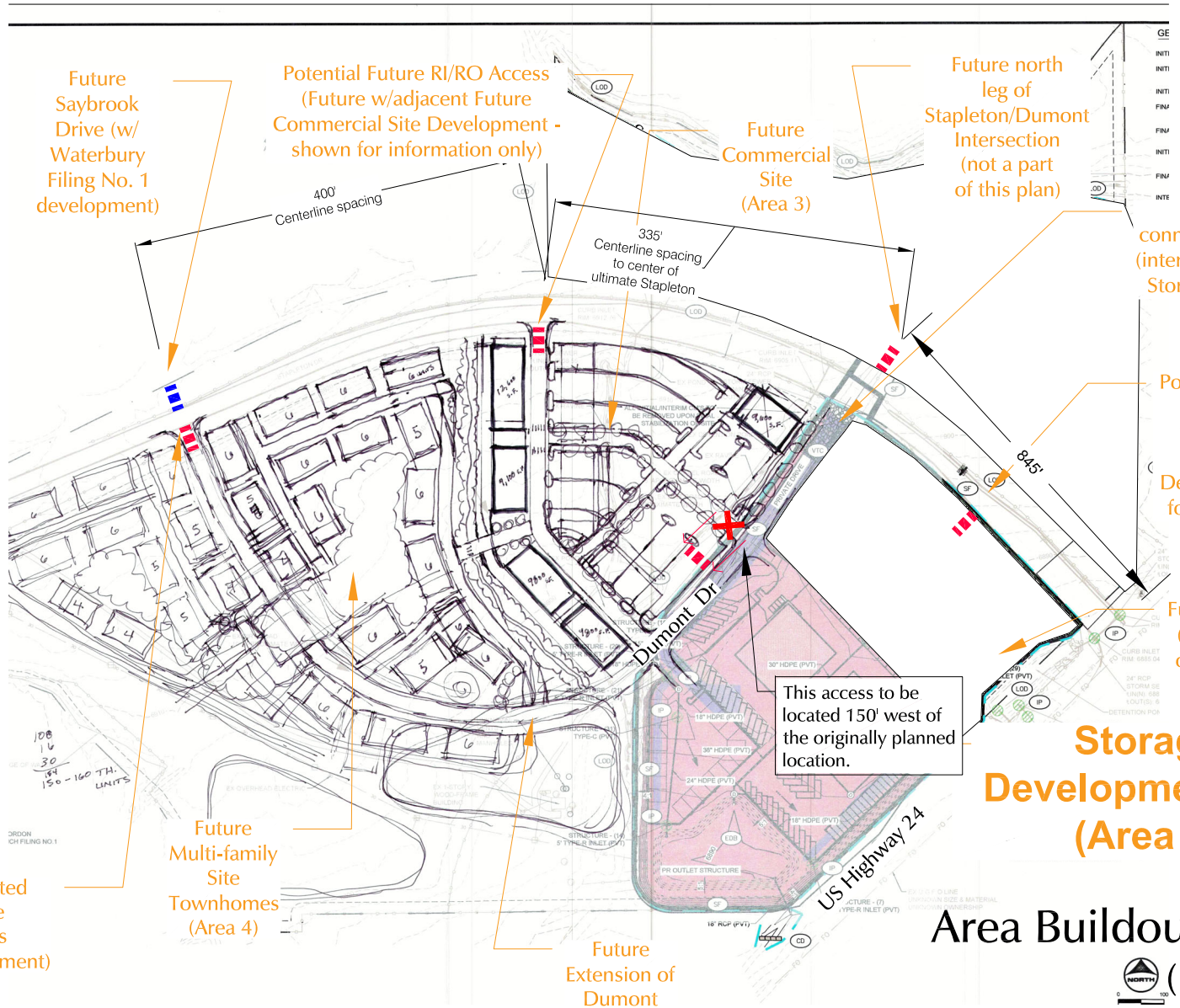
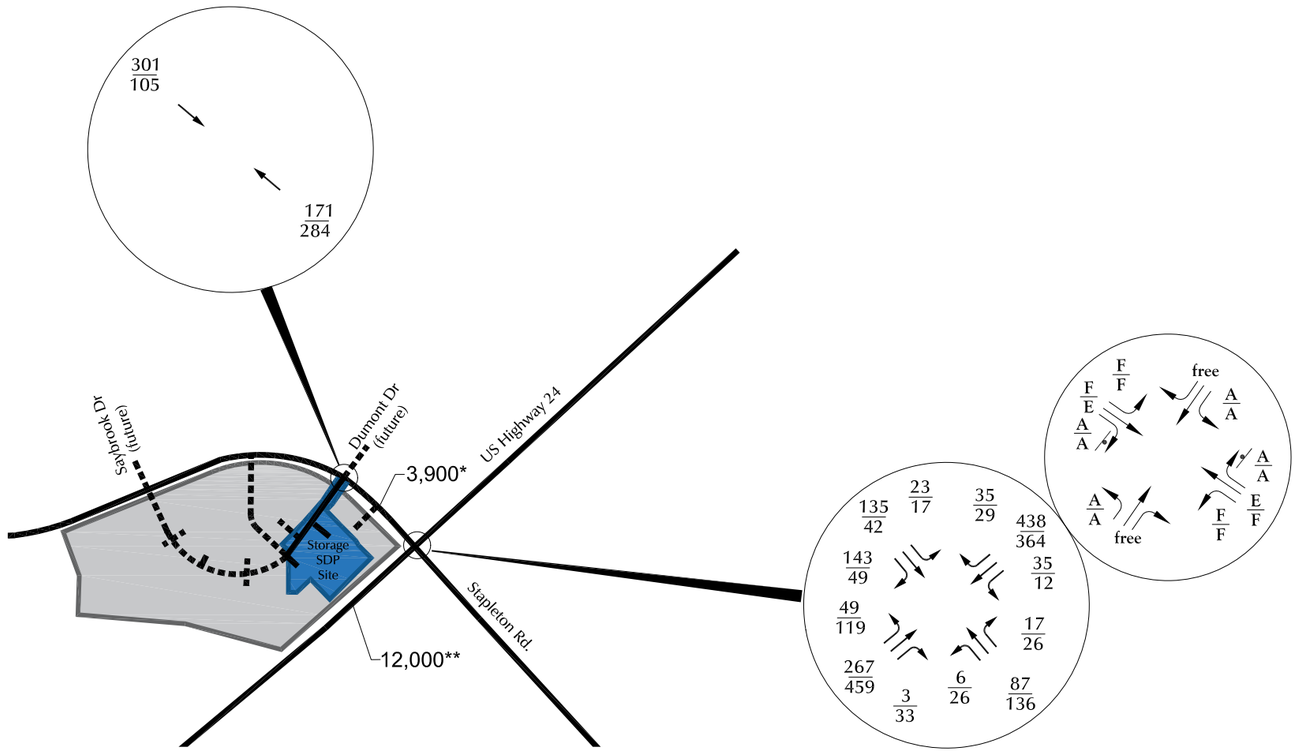


Figure 2b

Area Buildout Concept (Preliminary)

4-Way Ranch Commercial Phase 1 (LSC #S224452)

LSC TRANSPORTATION CONSULTANTS, INC.



Counts by LSC (January 2023)
* Estimate by LSC
** 2023 CDOT AADT

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (Veh/Hour)}}{\text{PM Weekday Peak-Hour Traffic (Veh/Hour)}}$

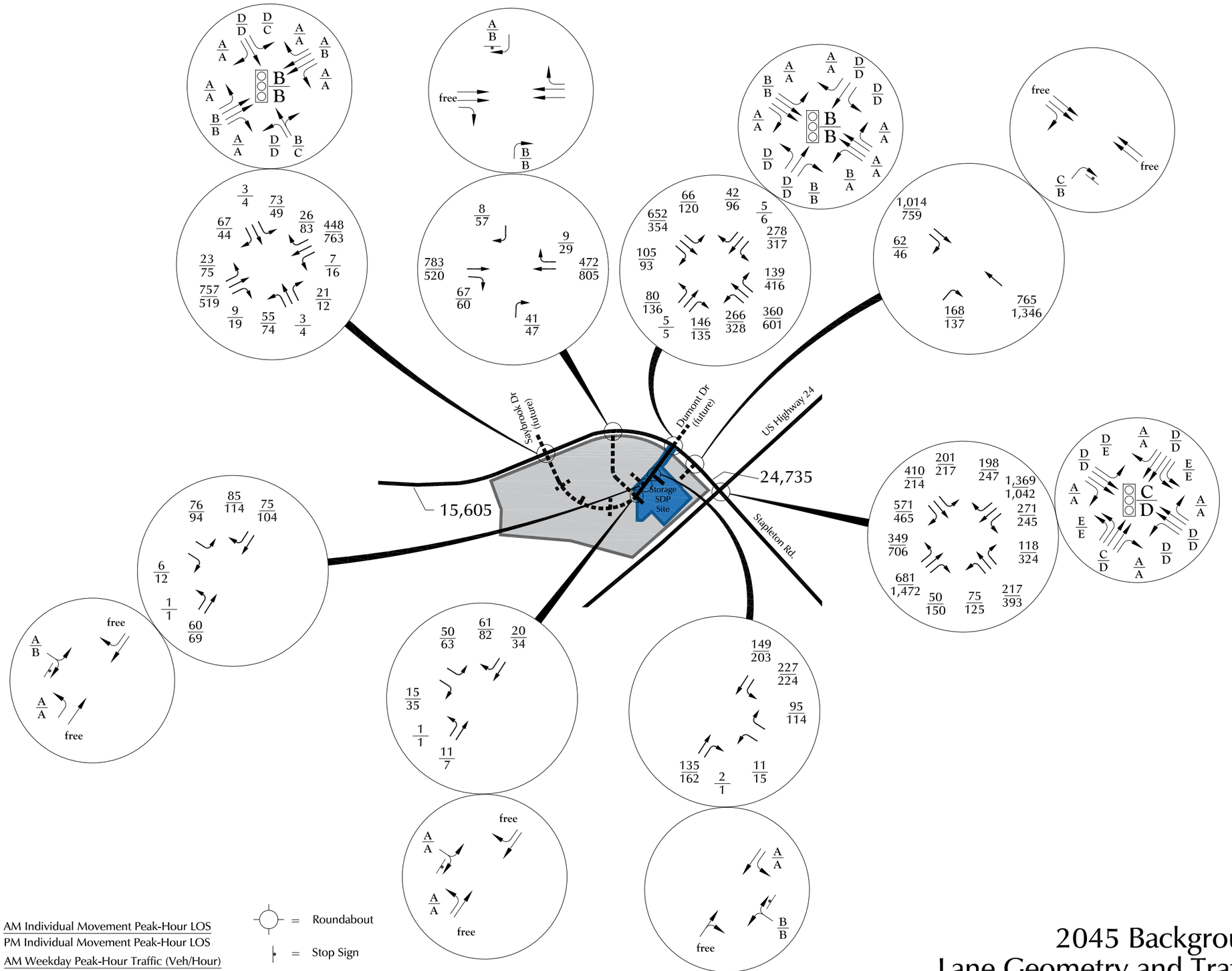
X,XXX = Average Daily Traffic (Vehicles/Day)

TRANSPORTATION CONSULTANTS, INC.

Figure 3

Existing Traffic Volumes

4-Way Ranch Commercial Phase 1 (LSC #S224452)


N
Not to scale
Sahtrook Dr (future)
Dumont Dr (future)
US Highway 24
15,605
24,735
Stapleton Rd.
Storage SDP Site
free
Figure 4a
2045 Background Traffic, Lane Geometry and Traffic Control
4-Way Ranch Commercial (LSC #S224450)
X/X = AM Individual Movement Peak-Hour LOS / PM Individual Movement Peak-Hour LOS
XX/XX = AM Weekday Peak-Hour Traffic (Veh/Hour) / PM Weekday Peak-Hour Traffic (Veh/Hour)
X,XXX = Average Daily Traffic (Vehicles/Day)
= Roundabout
= Stop Sign
= Traffic Signal
LSC TRANSPORTATION CONSULTANTS, INC.

*Note: The alternate analysis assumes no right-in/right-out access points between Saybrook Drive and US Highway 24

Not to scale

Saybrook Dr (future)

Dumont Dr (future)

US Highway 24

Storage SDP Site

15,605

24,735

Stapleton Rd.

1,182 / 896

765 / 1,346

850 / 580

481 / 862

LSC TRANSPORTATION CONSULTANTS, INC.

X / X = AM Individual Movement Peak-Hour LOS / PM Individual Movement Peak-Hour LOS

XX / XX = AM Weekday Peak-Hour Traffic (Veh/Hour) / PM Weekday Peak-Hour Traffic (Veh/Hour)

X,XXX = Average Daily Traffic (Vehicles/Day)

= Roundabout

= Stop Sign

= Traffic Signal

Figure 4b

2045 Alternate* Background Traffic, Lane Geometry and Traffic Control

4-Way Ranch Commercial (LSC #S224450)

N

Not to scale

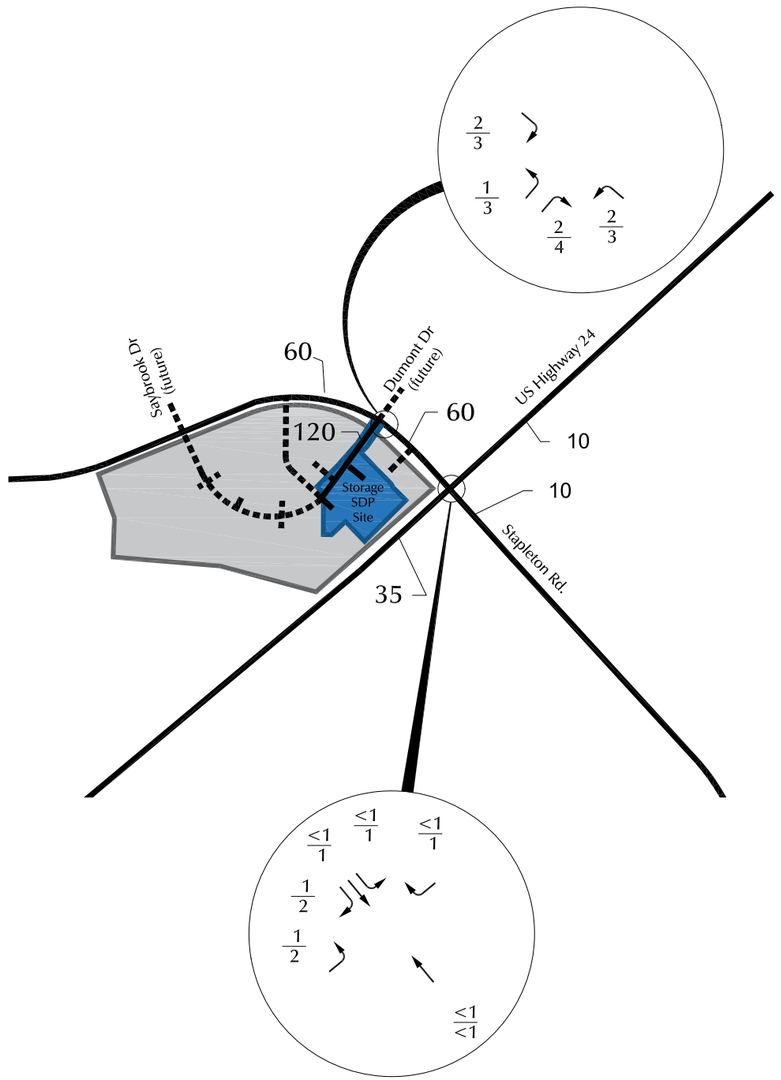
Figure 5

Directional Distribution of Site-Generated Traffic

4-Way Ranch Commercial Phase 1 (LSC #S224452)

TRANSPORTATION CONSULTANTS, INC.

XX% / XX% = Short-Term Estimated % Directional Distribution / Long-Term Estimated % Directional Distribution



N

Not to scale

XX / XX = AM Weekday Peak-Hour Traffic (Veh/Hour) / PM Weekday Peak-Hour Traffic (Veh/Hour)

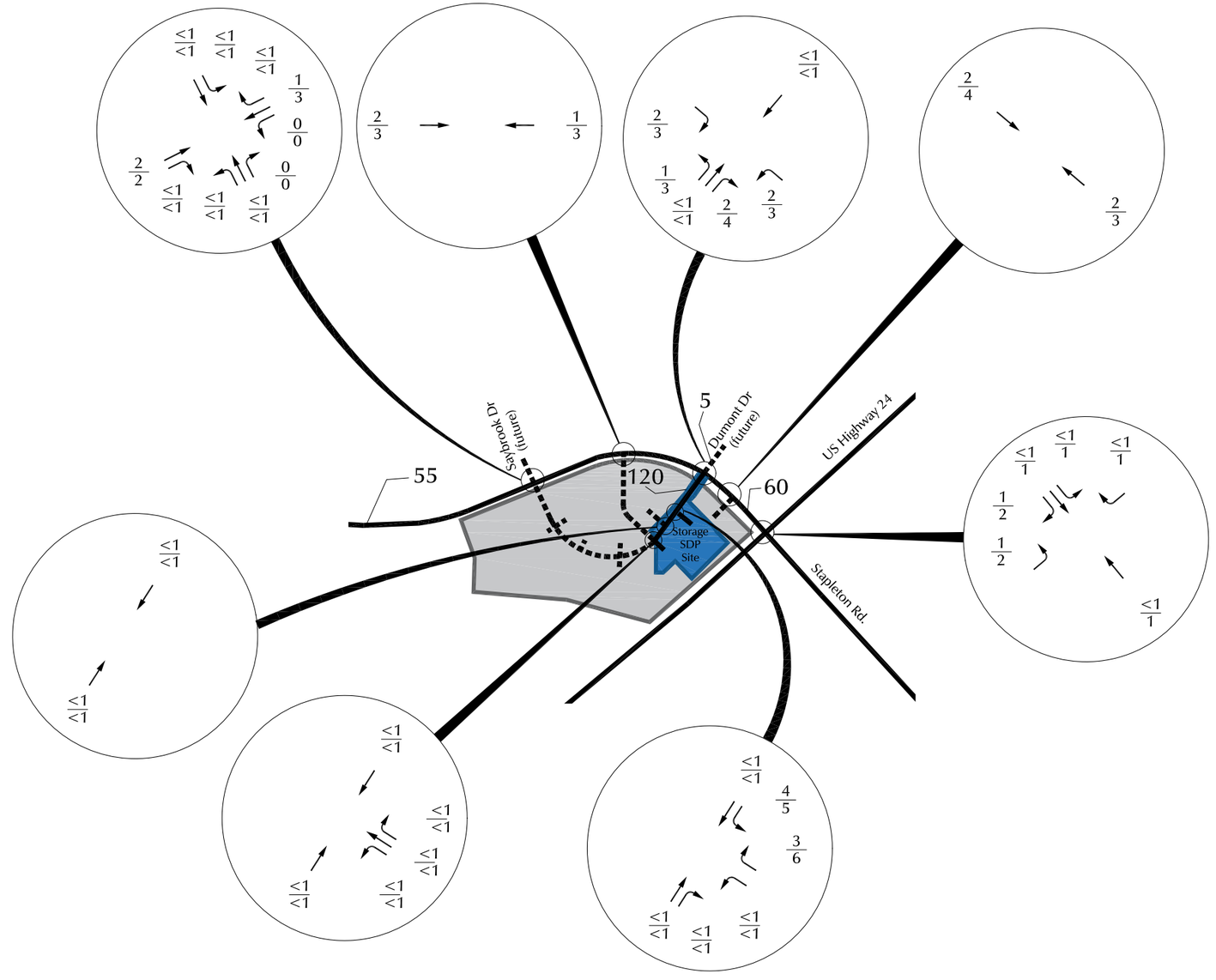
X,XXX = Average Daily Traffic (Vehicles/Day)

TRANSPORTATION CONSULTANTS, INC.

Figure 6

Assignment of Short-Term Storage Development (SDP) Only Site-Generated Traffic

4-Way Ranch Commercial Phase 1 (LSC #S224452)



XX / XX = AM Weekday Peak-Hour Traffic (Veh/Hour) / PM Weekday Peak-Hour Traffic (Veh/Hour)

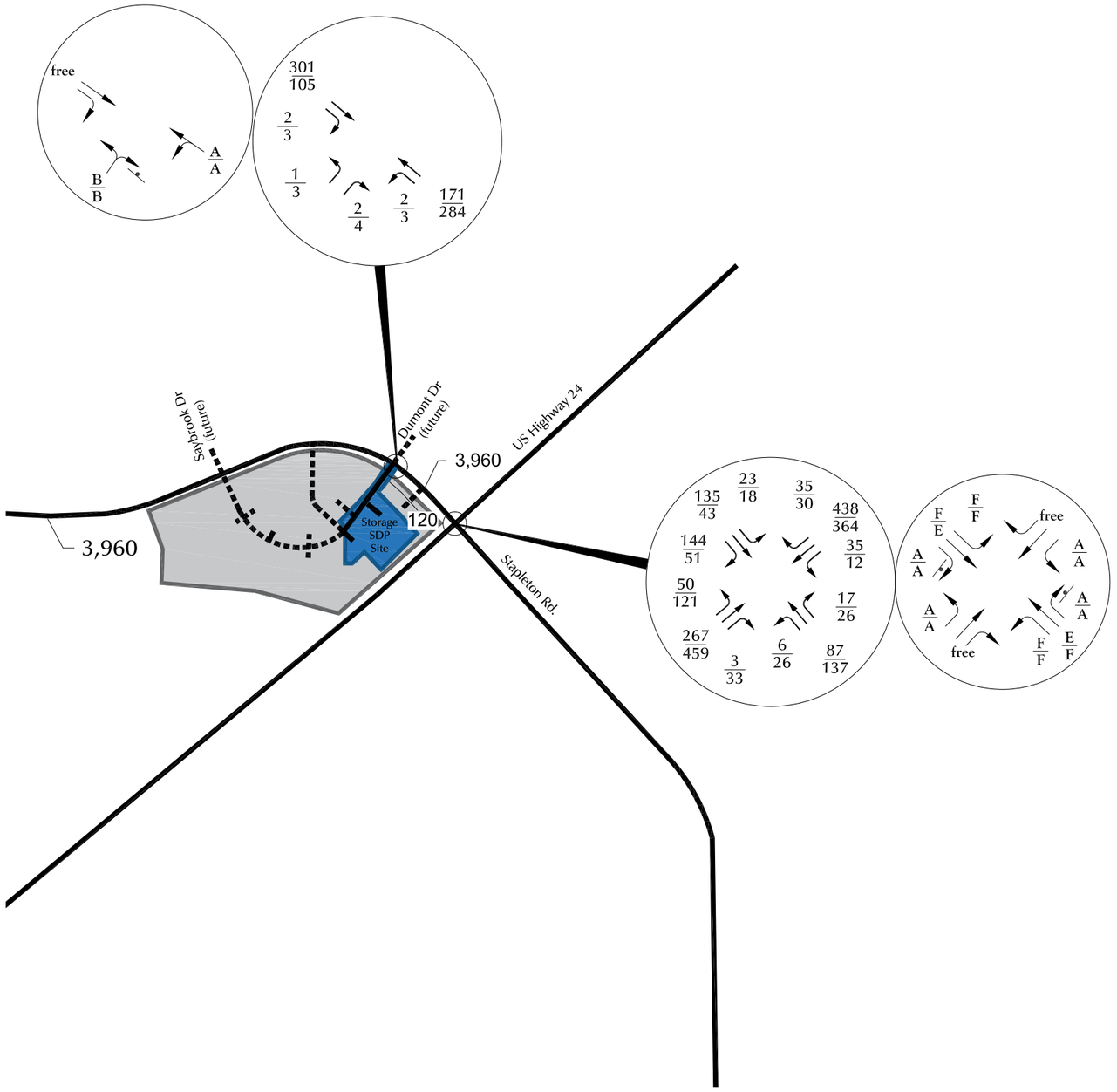
X,XXX = Average Daily Traffic (Vehicles/Day)

LSC TRANSPORTATION CONSULTANTS, INC.

Figure 7

Assignment of Long-Term Storage Development (SDP) Only Site-Generated Traffic

4-Way Ranch Commercial (LSC #S224450)



$\vdash$ = Stop Sign

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (vehicles per hour)}}{\text{PM Weekday Peak-Hour Traffic (vehicles per hour)}}$

$\frac{A}{B}$ = $\frac{\text{AM Individual Movement Peak-Hour Level of Service}}{\text{PM Individual Movement Peak-Hour Level of Service}}$

X,XXX= Average Daily Traffic (vehicles per day)

*Note: the previous figure shows the current projected phase 1 site-generated traffic at this intersection; the currently projected phase 1 site-generated volumes at the US Highway 24/Stapleton Road intersection have not changed from Figure 5 of the November 2023 Phase 1 traffic memo.

LSC TRANSPORTATION CONSULTANTS, INC.

Figure 8

Existing + Storage Development (SDP) Only-Generated Total Traffic, Lane Geometry and Traffic Control

4-Way Ranch Commercial Phase 1 (LSC #S224452)

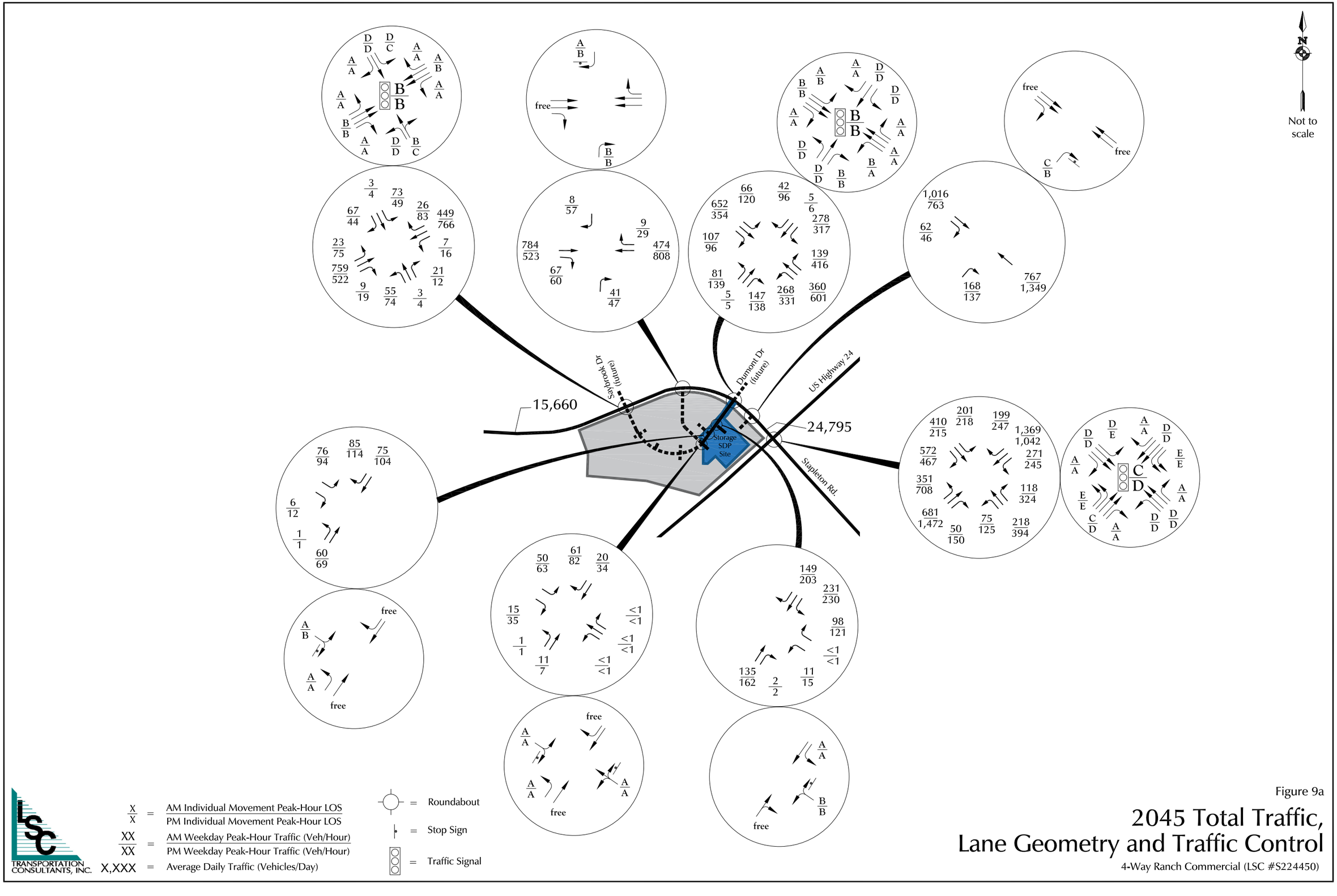


Figure 9a

2045 Total Traffic, Lane Geometry and Traffic Control

4-Way Ranch Commercial (LSC #S224450)

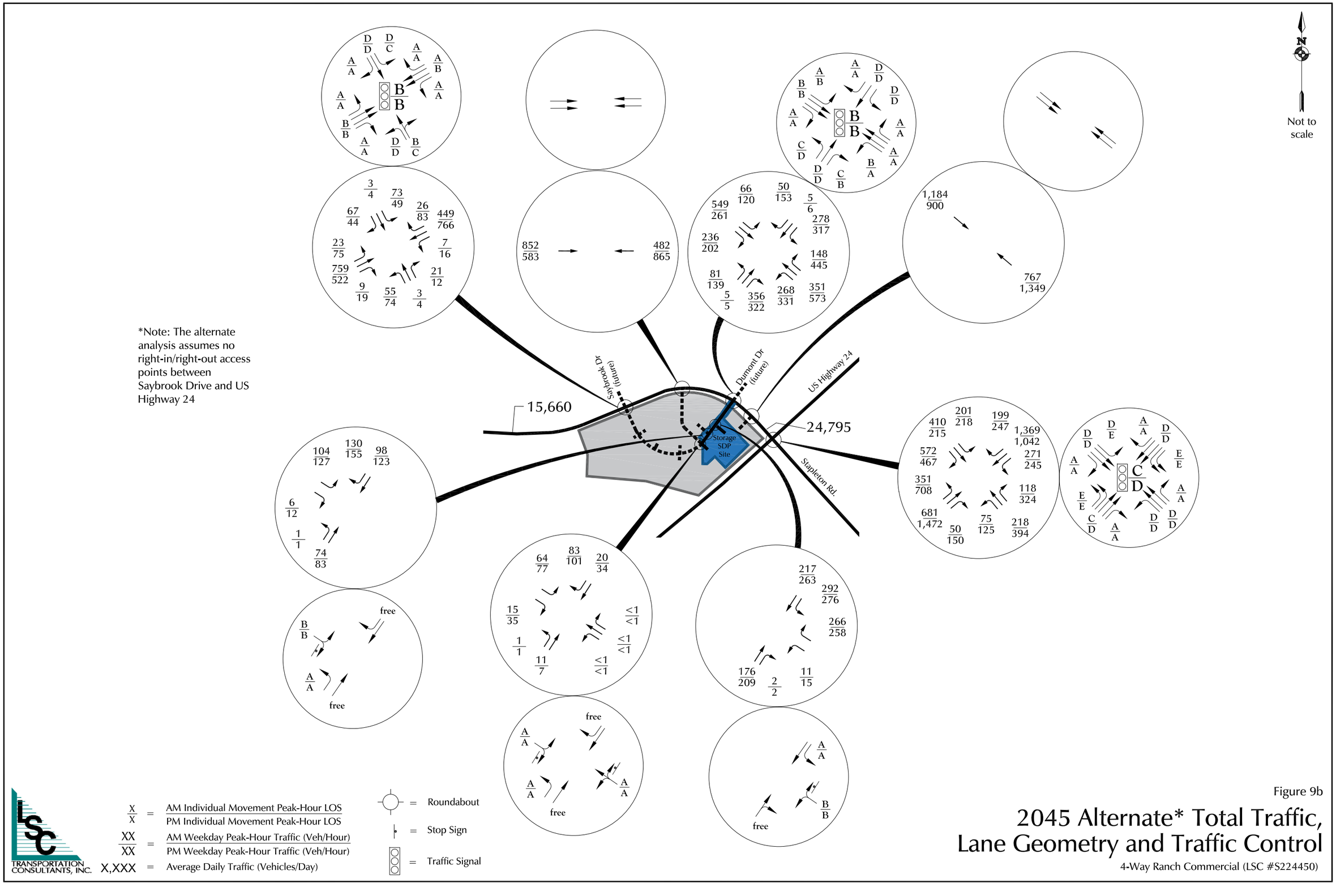


Figure 9b

2045 Alternate* Total Traffic, Lane Geometry and Traffic Control

4-Way Ranch Commercial (LSC #S224450)

Lane Exhibit Dumont Drive – Future

TRANSPORTATION
CONSULTANTS, INC.

Approx
Scale
1" = 100'

Potential Future
Access

Dumont Drive

250'

Future Commercial
Development Site

Potential Future
Access

150'

Westbound
left-turn lane

PHASE 1 SITE

335'

Westbound
"intersection
departure" lane
(recommend about a
15'-wide lane to
"receive" turns from
Stapleton. Lane can
taper to standard 12'
lane to the west)

Eastbound right-turn
lane

Stapleton Road

Option:
considering likely
future opposing left
on the opposite side
of Stapleton

Future Commercial
Development Site

Eastbound through
lane

Eastbound left-turn
lane

TRANSPORTATION
CONSULTANTS, INC.

Exhibit 2

Dumont Drive Proposed Future Laneage

4-Way Ranch Commercial Phase 1 (LSC #S224452)

Traffic Counts

TRANSPORTATION
CONSULTANTS, INC.

LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304
Colorado Springs, CO 80909
719-633-2868

File Name : Hwy 24 - Stapleton Rd AM PM
Site Code : S224640
Start Date : 1/10/2023
Page No : 1

Groups Printed- Unshifted

	Hwy 24 Southbound					Stapleton Dr Westbound					Hwy 24 Northbound					Stapleton Dr Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:30	1	29	1	0	31	0	1	1	0	2	1	7	1	0	9	20	11	1	0	32	74
06:35	0	33	0	0	33	1	4	0	0	5	0	12	0	0	12	11	11	2	0	24	74
06:40	0	35	2	0	37	1	0	0	0	1	0	13	2	0	15	16	8	2	0	26	79
06:45	3	41	3	0	47	1	6	3	0	10	1	22	4	0	27	13	9	2	0	24	108
06:50	3	32	1	0	36	1	3	0	0	4	1	15	7	0	23	14	7	1	0	22	85
06:55	2	22	1	0	25	2	8	0	0	10	0	24	6	0	30	16	13	0	0	29	94
Total	9	192	8	0	209	6	22	4	0	32	3	93	20	0	116	90	59	8	0	157	514
07:00	4	35	3	0	42	2	6	0	0	8	0	29	2	0	31	7	13	1	0	21	102
07:05	4	33	4	0	41	1	10	0	0	11	0	22	4	0	26	7	11	6	0	24	102
07:10	0	33	3	0	36	4	11	1	0	16	0	30	5	0	35	15	12	2	0	29	116
07:15	2	36	2	0	40	4	14	1	0	19	0	29	7	0	36	13	15	3	0	31	126
07:20	4	46	1	0	51	1	6	0	0	7	0	30	4	0	34	11	13	1	0	25	117
07:25	5	51	8	0	64	0	7	0	0	7	0	28	0	0	28	10	7	1	0	18	117
07:30	2	34	2	0	38	0	7	0	0	7	1	16	6	0	23	9	20	2	0	31	99
07:35	6	40	5	0	51	0	9	1	0	10	0	9	2	0	11	12	7	2	0	21	93
07:40	4	31	1	0	36	0	7	2	0	9	0	9	3	0	12	5	9	0	0	14	71
07:45	1	31	1	0	33	2	5	1	0	8	0	13	6	0	19	6	17	2	0	25	85
07:50	3	21	4	0	28	0	5	0	0	5	1	18	1	0	20	10	15	2	0	27	80
07:55	2	15	3	0	20	1	1	0	0	2	0	16	4	0	20	8	5	1	0	14	56
Total	37	406	37	0	480	15	88	6	0	109	2	249	44	0	295	113	144	23	0	280	1164
08:00	3	39	2	0	44	0	6	0	0	6	0	10	5	0	15	4	10	2	0	16	81
08:05	1	30	0	0	31	1	2	1	0	4	2	19	5	0	26	4	6	4	0	14	75
08:10	2	27	2	0	31	2	2	1	0	5	0	13	4	0	17	5	6	0	0	11	64
08:15	4	31	0	0	35	5	1	2	0	8	0	7	5	0	12	8	5	2	0	15	70
08:20	5	22	3	0	30	1	7	0	0	8	0	3	3	0	6	7	4	1	0	12	56
08:25	4	34	1	0	39	0	2	0	0	2	1	14	0	0	15	4	7	5	0	16	72
*** BREAK ***																					
Total	19	183	8	0	210	9	20	4	0	33	3	66	22	0	91	32	38	14	0	84	418
*** BREAK ***																					
16:00	2	26	0	0	28	3	7	1	0	11	0	41	13	0	54	3	3	4	0	10	103
16:05	3	25	0	0	28	4	6	0	0	10	0	46	15	0	61	1	2	5	0	8	107
16:10	3	32	0	0	35	2	8	0	0	10	3	35	15	0	53	6	4	2	0	12	110
16:15	3	36	1	0	40	3	9	1	0	13	4	45	7	0	56	4	1	2	0	7	116
16:20	0	31	3	0	34	1	7	1	0	9	2	46	15	0	63	4	2	1	0	7	113
16:25	1	24	1	0	26	2	11	0	0	13	3	47	8	0	58	5	10	3	0	18	115
16:30	1	23	0	0	24	0	10	2	0	12	1	42	7	0	50	5	3	2	0	10	96
16:35	2	32	1	0	35	1	5	1	0	7	4	34	4	0	42	2	1	1	0	4	88
16:40	5	29	1	0	35	2	13	0	0	15	1	29	7	0	37	4	9	1	0	14	101
16:45	3	31	2	0	36	5	10	3	0	18	2	31	13	0	46	3	2	2	0	7	107
16:50	1	32	1	0	34	2	11	0	0	13	4	39	7	0	50	6	4	2	0	12	109

LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304
Colorado Springs, CO 80909
719-633-2868

File Name : Hwy 24 - Stapleton Rd AM PM
Site Code : S224640
Start Date : 1/10/2023
Page No : 2

Groups Printed- Unshifted

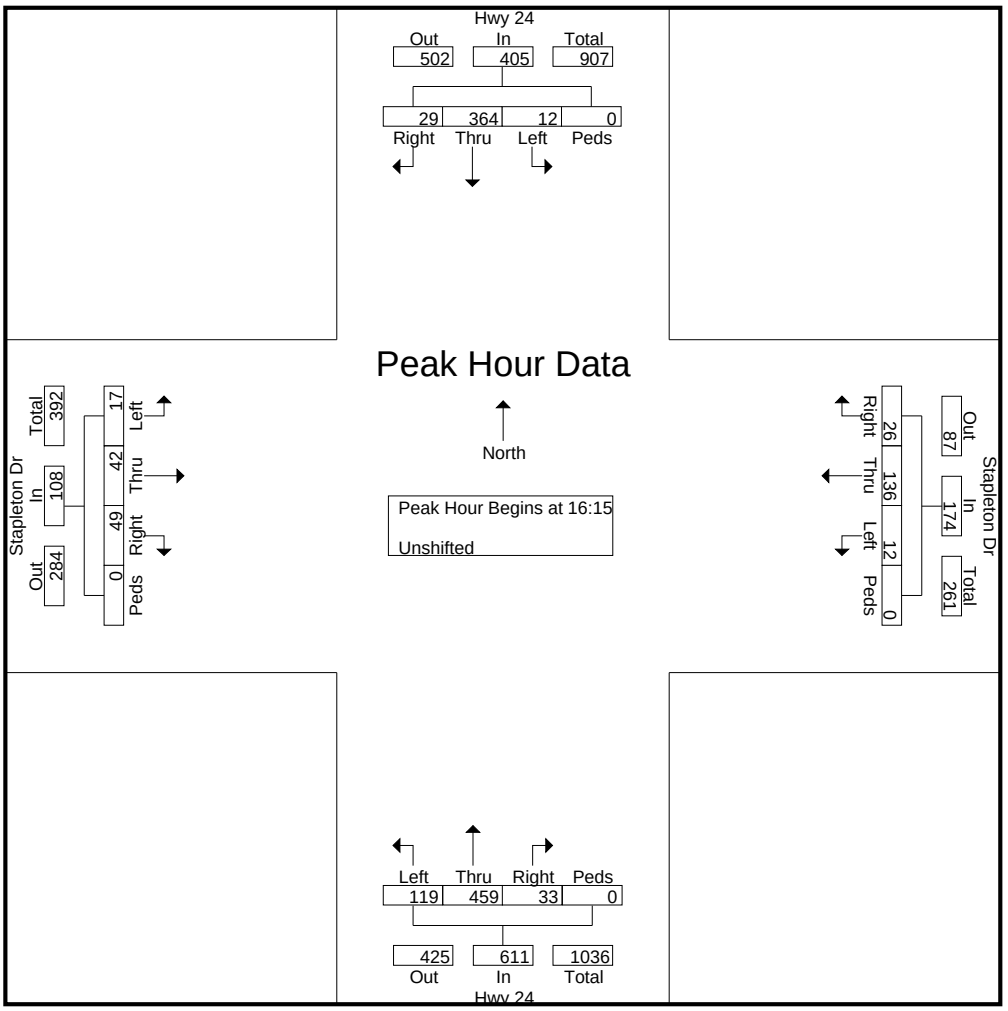
	Hwy 24 Southbound					Stapleton Dr Westbound					Hwy 24 Northbound					Stapleton Dr Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
16:55	5	29	1	0	35	3	15	2	0	20	3	31	15	0	49	2	4	2	0	8	112
Total	29	350	11	0	390	28	112	11	0	151	27	466	126	0	619	45	45	27	0	117	1277
17:00	3	22	0	0	25	0	20	0	0	20	1	37	13	0	51	8	1	0	0	9	105
17:05	2	30	0	0	32	4	6	1	0	11	7	47	14	0	68	2	4	0	0	6	117
17:10	3	45	1	0	49	3	19	1	0	23	1	31	9	0	41	4	1	1	0	6	119
17:15	3	29	1	0	33	1	4	1	0	6	0	46	7	0	53	3	1	1	0	5	97
17:20	3	27	1	0	31	4	11	1	0	16	3	34	8	0	45	3	5	2	0	10	102
17:25	3	21	0	0	24	3	2	0	0	5	0	30	11	0	41	2	4	2	0	8	78
17:30	3	18	0	0	21	5	8	0	0	13	2	43	8	0	53	1	3	0	0	4	91
17:35	3	17	0	0	20	2	6	0	0	8	0	33	14	0	47	2	1	3	0	6	81
17:40	1	18	0	0	19	2	6	2	0	10	1	32	6	0	39	0	1	3	0	4	72
17:45	4	24	1	0	29	2	4	1	0	7	1	51	7	0	59	3	2	1	0	6	101
17:50	1	13	0	0	14	1	6	1	0	8	0	48	13	0	61	2	5	3	0	10	93
17:55	3	18	0	0	21	3	7	0	0	10	1	23	9	0	33	4	7	2	0	13	77
Total	32	282	4	0	318	30	99	8	0	137	17	455	119	0	591	34	35	18	0	87	1133
Grand Total	126	1413	68	0	1607	88	341	33	0	462	52	1329	331	0	1712	314	321	90	0	725	4506
Apprch %	7.8	87.9	4.2	0		19	73.8	7.1	0		3	77.6	19.3	0		43.3	44.3	12.4	0		
Total %	2.8	31.4	1.5	0	35.7	2	7.6	0.7	0	10.3	1.2	29.5	7.3	0	38	7	7.1	2	0	16.1	

LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304
Colorado Springs, CO 80909
719-633-2868

File Name : Hwy 24 - Stapleton Rd AM PM
Site Code : S224640
Start Date : 1/10/2023
Page No : 3

	Hwy 24 Southbound					Stapleton Dr Westbound					Hwy 24 Northbound					Stapleton Dr Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 to 17:55 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:15																					
16:15	3	36	1	0	40	3	9	1	0	13	4	45	7	0	56	4	1	2	0	7	116
16:20	0	31	**3**	0	34	1	7	1	0	9	2	46	**15**	0	63	4	2	1	0	7	113
16:25	1	24	1	0	26	2	11	0	0	13	3	**47**	8	0	58	5	**10**	**3**	0	**18**	115
16:30	1	23	0	0	24	0	10	2	0	12	1	42	7	0	50	5	3	2	0	10	96
16:35	2	32	1	0	35	1	5	1	0	7	4	34	4	0	42	2	1	1	0	4	88
16:40	**5**	29	1	0	35	2	13	0	0	15	1	29	7	0	37	4	9	1	0	14	101
16:45	3	31	2	0	36	**5**	10	**3**	0	18	2	31	13	0	46	3	2	2	0	7	107
16:50	1	32	1	0	34	2	11	0	0	13	4	39	7	0	50	6	4	2	0	12	109
16:55	5	29	1	0	35	3	15	2	0	20	3	31	15	0	49	2	4	2	0	8	112
17:00	3	22	0	0	25	0	**20**	0	0	20	1	37	13	0	51	**8**	1	0	0	9	105
17:05	2	30	0	0	32	4	6	1	0	11	**7**	47	14	0	**68**	2	4	0	0	6	117
17:10	3	**45**	1	0	**49**	3	19	1	0	**23**	1	31	9	0	41	4	1	1	0	6	**119**
Total Volume	29	364	12	0	405	26	136	12	0	174	33	459	119	0	611	49	42	17	0	108	1298
% App. Total	7.2	89.9	3	0		14.9	78.2	6.9	0		5.4	75.1	19.5	0		45.4	38.9	15.7	0		
PHF	.483	.674	.333	.000	.689	.433	.567	.333	.000	.630	.393	.814	.661	.000	.749	.510	.350	.472	.000	.500	.909



Level of Service Reports

TRANSPORTATION
CONSULTANTS, INC.

Intersection	
Int Delay, s/veh	14.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	135	143	6	87	17	49	267	3	35	438	35
Future Vol, veh/h	23	135	143	6	87	17	49	267	3	35	438	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	Free	-	-	None	-	-	Free
Storage Length	185	-	325	225	-	225	1000	-	0	785	-	785
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	65	65	65	76	76	76	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	155	164	9	134	26	64	351	4	38	476	38

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1100	1035	-	1109	1031	-	476	0	0	355	0	0
Stage 1	552	552	-	479	479	-	-	-	-	-	-	-
Stage 2	548	483	-	630	552	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	-	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	-	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	190	232	0	187	233	0	1086	-	-	1204	-	0
Stage 1	518	515	0	568	555	0	-	-	-	-	-	0
Stage 2	521	553	0	470	515	0	-	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	88	211	-	70	212	-	1086	-	-	1204	-	-
Mov Cap-2 Maneuver	88	211	-	70	212	-	-	-	-	-	-	-
Stage 1	487	499	-	534	522	-	-	-	-	-	-	-
Stage 2	365	520	-	314	499	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	59	48.3	1.3	0.6
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT
Capacity (veh/h)	1086	-	-	88	211	-	70	212	-	1204	-
HCM Lane V/C Ratio	0.059	-	-	0.3	0.735	-	0.132	0.631	-	0.032	-
HCM Control Delay (s)	8.5	-	-	62.6	58.4	0	64.1	47.2	0	8.1	-
HCM Lane LOS	A	-	-	F	F	A	F	E	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	1.1	4.9	-	0.4	3.7	-	0.1	-

Intersection	
Int Delay, s/veh	21

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	42	49	12	136	26	119	459	33	12	364	29
Future Vol, veh/h	17	42	49	12	136	26	119	459	33	12	364	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	Free	-	-	None	-	-	Free
Storage Length	185	-	325	225	-	225	1000	-	0	785	-	785
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	86	86	86	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	51	59	14	164	31	138	534	38	14	418	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1357	1294	-	1282	1256	-	418	0	0	572	0	0
Stage 1	446	446	-	810	810	-	-	-	-	-	-	-
Stage 2	911	848	-	472	446	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	-	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	-	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	126	163	0	142	171	0	1141	-	-	1001	-	0
Stage 1	591	574	0	374	393	0	-	-	-	-	-	0
Stage 2	328	378	0	573	574	0	-	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	-	141	-	93	~ 148	-	1141	-	-	1001	-	-
Mov Cap-2 Maneuver	-	141	-	93	~ 148	-	-	-	-	-	-	-
Stage 1	519	566	-	329	345	-	-	-	-	-	-	-
Stage 2	151	332	-	514	566	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s		156.7	1.7	0.3
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT
Capacity (veh/h)	1141	-	-	-	141	-	93	148	-	1001	-
HCM Lane V/C Ratio	0.121	-	-	-	0.359	-	0.155	1.107	-	0.014	-
HCM Control Delay (s)	8.6	-	-	-	44.2	0	50.7	166.1	0	8.6	-
HCM Lane LOS	A	-	-	-	E	A	F	F	A	A	-
HCM 95th %tile Q(veh)	0.4	-	-	-	1.5	-	0.5	8.9	-	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	301	2	2	171	1	2
Future Vol, veh/h	301	2	2	171	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	235	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	354	2	2	201	1	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	356	0	559	354
Stage 1	-	-	-	-	354	-
Stage 2	-	-	-	-	205	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1203	-	490	690
Stage 1	-	-	-	-	710	-
Stage 2	-	-	-	-	829	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1203	-	489	690
Mov Cap-2 Maneuver	-	-	-	-	489	-
Stage 1	-	-	-	-	710	-
Stage 2	-	-	-	-	827	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	11
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	607	-	-	1203	-
HCM Lane V/C Ratio	0.006	-	-	0.002	-
HCM Control Delay (s)	11	-	-	8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	14.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	135	144	6	87	17	50	267	3	35	438	35
Future Vol, veh/h	23	135	144	6	87	17	50	267	3	35	438	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	Free	-	-	None	-	-	Free
Storage Length	185	-	325	225	-	225	1000	-	0	785	-	785
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	65	65	65	76	76	76	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	155	166	9	134	26	66	351	4	38	476	38

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1104	1039	-	1113	1035	-	476	0	0	355	0	0
Stage 1	552	552	-	483	483	-	-	-	-	-	-	-
Stage 2	552	487	-	630	552	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	-	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	-	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	188	231	0	186	232	0	1086	-	-	1204	-	0
Stage 1	518	515	0	565	553	0	-	-	-	-	-	0
Stage 2	518	550	0	470	515	0	-	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	87	210	-	69	211	-	1086	-	-	1204	-	-
Mov Cap-2 Maneuver	87	210	-	69	211	-	-	-	-	-	-	-
Stage 1	486	499	-	531	519	-	-	-	-	-	-	-
Stage 2	361	516	-	314	499	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	59.7	48.8	1.3	0.6
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT
Capacity (veh/h)	1086	-	-	87	210	-	69	211	-	1204	-
HCM Lane V/C Ratio	0.061	-	-	0.304	0.739	-	0.134	0.634	-	0.032	-
HCM Control Delay (s)	8.5	-	-	63.5	59.1	0	65.1	47.7	0	8.1	-
HCM Lane LOS	A	-	-	F	F	A	F	E	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	1.1	4.9	-	0.4	3.7	-	0.1	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	105	3	3	284	3	4
Future Vol, veh/h	105	3	3	284	3	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	-	235	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	124	4	4	334	4	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	128	0	466	124
Stage 1	-	-	-	-	124	-
Stage 2	-	-	-	-	342	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1458	-	555	927
Stage 1	-	-	-	-	902	-
Stage 2	-	-	-	-	719	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1458	-	553	927
Mov Cap-2 Maneuver	-	-	-	-	553	-
Stage 1	-	-	-	-	902	-
Stage 2	-	-	-	-	717	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	719	-	-	1458	-
HCM Lane V/C Ratio	0.011	-	-	0.002	-
HCM Control Delay (s)	10.1	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	21.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	43	51	12	137	26	121	459	33	12	364	30
Future Vol, veh/h	18	43	51	12	137	26	121	459	33	12	364	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	Free	-	-	None	-	-	Free
Storage Length	185	-	325	225	-	225	1000	-	0	785	-	785
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	86	86	86	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	52	61	14	165	31	141	534	38	14	418	34

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1364	1300	-	1288	1262	-	418	0	0	572	0	0
Stage 1	446	446	-	816	816	-	-	-	-	-	-	-
Stage 2	918	854	-	472	446	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	-	7.12	6.52	-	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	-	3.518	4.018	-	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	125	161	0	141	170	0	1141	-	-	1001	-	0
Stage 1	591	574	0	371	391	0	-	-	-	-	-	0
Stage 2	326	375	0	573	574	0	-	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	-	139	-	90	~ 147	-	1141	-	-	1001	-	-
Mov Cap-2 Maneuver	-	139	-	90	~ 147	-	-	-	-	-	-	-
Stage 1	518	566	-	325	343	-	-	-	-	-	-	-
Stage 2	148	329	-	513	566	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s		162.2	1.7	0.3
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBL	SBT
Capacity (veh/h)	1141	-	-	-	139	-	90	147	-	1001	-
HCM Lane V/C Ratio	0.123	-	-	-	0.373	-	0.161	1.123	-	0.014	-
HCM Control Delay (s)	8.6	-	-	-	45.5	0	52.5	171.8	0	8.6	-
HCM Lane LOS	A	-	-	-	E	A	F	F	A	A	-
HCM 95th %tile Q(veh)	0.4	-	-	-	1.6	-	0.5	9.1	-	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	23	757	9	7	448	26	55	3	73	3	67
Future Volume (vph)	23	757	9	7	448	26	55	3	73	3	67
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8	7	4	
Permitted Phases	2		2	6		6	8		4		4
Detector Phase	5	2	2	1	6	6	3	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	10.0	25.0	25.0	10.0	25.0	25.0	10.0	15.0	10.0	15.0	15.0
Total Split (s)	12.0	71.0	71.0	12.0	71.0	71.0	12.0	25.0	12.0	25.0	25.0
Total Split (%)	10.0%	59.2%	59.2%	10.0%	59.2%	59.2%	10.0%	20.8%	10.0%	20.8%	20.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	77.2	75.8	75.8	74.6	71.1	71.1	28.0	22.4	28.0	22.4	22.4
Actuated g/C Ratio	0.64	0.63	0.63	0.62	0.59	0.59	0.23	0.19	0.23	0.19	0.19
v/c Ratio	0.04	0.37	0.01	0.02	0.23	0.03	0.17	0.08	0.23	0.01	0.19
Control Delay	7.7	11.7	0.0	6.1	8.1	0.2	35.0	18.7	36.0	42.0	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.7	11.7	0.0	6.1	8.1	0.2	35.0	18.7	36.0	42.0	3.9
LOS	A	B	A	A	A	A	D	B	D	D	A
Approach Delay		11.4			7.7			30.1		21.0	
Approach LOS		B			A			C		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 80 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.37	
Intersection Signal Delay: 12.1	Intersection LOS: B
Intersection Capacity Utilization 41.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Saybrook Dr & Stapleton Dr

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	0	783	67	0	472	9	0	0	41	0	0	8
Future Vol, veh/h	0	783	67	0	472	9	0	0	41	0	0	8
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	-	-	0	-	-	200	-	-	0	-	-	0
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	0	851	73	0	513	10	0	0	45	0	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	426	-	-	257
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	577	0	0	742
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	577	-	-	742
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	11.8	9.9
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	577	-	-	-	-	742
HCM Lane V/C Ratio	0.077	-	-	-	-	0.012
HCM Control Delay (s)	11.8	-	-	-	-	9.9
HCM Lane LOS	B	-	-	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	652	105	266	360	139	80	5	146	278	5	42
Future Volume (vph)	66	652	105	266	360	139	80	5	146	278	5	42
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	10.0	25.0	25.0	10.0	25.0	25.0	10.0	20.0	20.0	10.0	20.0	20.0
Total Split (s)	12.0	58.0	58.0	12.0	58.0	58.0	25.0	25.0	25.0	25.0	25.0	25.0
Total Split (%)	10.0%	48.3%	48.3%	10.0%	48.3%	48.3%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	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)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Min	Min	None	Min	Min
Act Effct Green (s)	63.0	55.6	55.6	75.1	64.8	64.8	20.4	10.6	10.6	34.9	20.0	20.0
Actuated g/C Ratio	0.52	0.46	0.46	0.63	0.54	0.54	0.17	0.09	0.09	0.29	0.17	0.17
v/c Ratio	0.13	0.43	0.14	0.61	0.20	0.16	0.32	0.03	0.56	0.74	0.02	0.13
Control Delay	7.9	15.8	1.2	15.2	6.3	1.8	35.5	49.8	15.8	48.2	42.6	0.8
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	7.9	15.8	1.2	15.2	6.3	1.8	35.5	49.8	15.8	48.2	42.6	0.8
LOS	A	B	A	B	A	A	D	D	B	D	D	A
Approach Delay		13.3			8.6			23.3			41.9	
Approach LOS		B			A			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 101 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 17.0	Intersection LOS: B
Intersection Capacity Utilization 67.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Dumont Dr & Stapleton Dr

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1014	62	0	765	0	168
Future Vol, veh/h	1014	62	0	765	0	168
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	-	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	1102	67	0	832	0	183

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	551
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	478
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	478
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

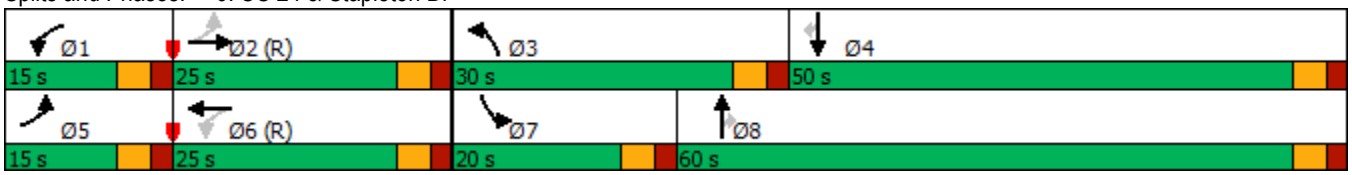
Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	478	-	-	-
HCM Lane V/C Ratio	0.382	-	-	-
HCM Control Delay (s)	17.1	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.8	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	201	410	571	75	217	118	349	681	50	271	1369	198
Future Volume (vph)	201	410	571	75	217	118	349	681	50	271	1369	198
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free			8			4
Detector Phase	5	2		1	6		3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0		8.0	5.0		15.0	5.0	5.0	15.0	15.0	15.0
Minimum Split (s)	10.0	15.0		13.0	10.0		20.0	11.0	11.0	20.0	20.0	20.0
Total Split (s)	15.0	25.0		15.0	25.0		30.0	60.0	60.0	20.0	50.0	50.0
Total Split (%)	12.5%	20.8%		12.5%	20.8%		25.0%	50.0%	50.0%	16.7%	41.7%	41.7%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max		None	Max	Max	None	Max	Max
Act Effct Green (s)	31.5	23.5	120.0	29.1	20.0	120.0	18.4	55.0	55.0	15.0	51.6	51.6
Actuated g/C Ratio	0.26	0.20	1.00	0.24	0.17	1.00	0.15	0.46	0.46	0.12	0.43	0.43
v/c Ratio	0.69	0.62	0.38	0.33	0.39	0.08	0.70	0.44	0.07	0.66	0.92	0.26
Control Delay	45.3	47.3	1.0	35.8	46.8	0.1	55.5	23.2	0.2	58.4	43.3	3.9
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	45.3	47.3	1.0	35.8	46.8	0.1	55.5	23.2	0.2	58.4	43.3	3.9
LOS	D	D	A	D	D	A	E	C	A	E	D	A
Approach Delay		24.6			31.3			32.5			41.3	
Approach LOS		C			C			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 64 (53%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 33.8	Intersection LOS: C
Intersection Capacity Utilization 84.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: US 24 & Stapleton Dr



Intersection	
Int Delay, s/veh	4.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	95	135	2	227	149
Future Vol, veh/h	11	95	135	2	227	149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	103	147	2	247	162

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	804	148	0	0	149	0
Stage 1	148	-	-	-	-	-
Stage 2	656	-	-	-	-	-
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	352	899	-	-	1432	-
Stage 1	880	-	-	-	-	-
Stage 2	516	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	291	899	-	-	1432	-
Mov Cap-2 Maneuver	291	-	-	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	427	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	4.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	739	1432	-
HCM Lane V/C Ratio	-	-	0.156	0.172	-
HCM Control Delay (s)	-	-	10.8	8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.6	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	76	6	1	60	75	85
Future Vol, veh/h	76	6	1	60	75	85
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	-	50	-	-	100
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	83	7	1	65	82	92

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	149	82	174	0	-	0
Stage 1	82	-	-	-	-	-
Stage 2	67	-	-	-	-	-
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	843	978	1403	-	-	-
Stage 1	941	-	-	-	-	-
Stage 2	956	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	842	978	1403	-	-	-
Mov Cap-2 Maneuver	842	-	-	-	-	-
Stage 1	940	-	-	-	-	-
Stage 2	956	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1403	-	851	-	-
HCM Lane V/C Ratio	0.001	-	0.105	-	-
HCM Control Delay (s)	7.6	-	9.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	15	1	11	20	61
Future Vol, veh/h	50	15	1	11	20	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	100
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	54	16	1	12	22	66

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	36	22	88	0	-	0
Stage 1	22	-	-	-	-	-
Stage 2	14	-	-	-	-	-
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	977	1055	1508	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	1009	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	976	1055	1508	-	-	-
Mov Cap-2 Maneuver	976	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	1009	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1508	-	993	-	-
HCM Lane V/C Ratio	0.001	-	0.071	-	-
HCM Control Delay (s)	7.4	-	8.9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	75	519	19	16	763	83	74	4	49	4	44
Future Volume (vph)	75	519	19	16	763	83	74	4	49	4	44
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8	7	4	
Permitted Phases	2		2	6		6	8		4		4
Detector Phase	5	2	2	1	6	6	3	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	10.0	25.0	25.0	10.0	25.0	25.0	10.0	15.0	10.0	15.0	15.0
Total Split (s)	12.0	71.0	71.0	12.0	71.0	71.0	12.0	25.0	12.0	25.0	25.0
Total Split (%)	10.0%	59.2%	59.2%	10.0%	59.2%	59.2%	10.0%	20.8%	10.0%	20.8%	20.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	76.3	73.5	73.5	73.3	68.4	68.4	28.0	22.4	28.0	22.4	22.4
Actuated g/C Ratio	0.64	0.61	0.61	0.61	0.57	0.57	0.23	0.19	0.23	0.19	0.19
v/c Ratio	0.21	0.26	0.02	0.03	0.41	0.09	0.23	0.05	0.15	0.01	0.12
Control Delay	9.1	11.8	0.1	8.9	15.3	2.8	36.1	23.4	34.8	42.0	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.1	11.8	0.1	8.9	15.3	2.8	36.1	23.4	34.8	42.0	0.7
LOS	A	B	A	A	B	A	D	C	C	D	A
Approach Delay		11.1			14.0			33.8		19.4	
Approach LOS		B			B			C		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 80 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.41	
Intersection Signal Delay: 14.3	Intersection LOS: B
Intersection Capacity Utilization 48.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Saybrook Dr & Stapleton Dr

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱		↑↑	↱			↱			↱
Traffic Vol, veh/h	0	520	60	0	805	29	0	0	47	0	0	57
Future Vol, veh/h	0	520	60	0	805	29	0	0	47	0	0	57
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	-	-	0	-	-	200	-	-	0	-	-	0
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	0	565	65	0	875	32	0	0	51	0	0	62

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	283	-	-	438
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	714	0	0	567
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	714	-	-	567
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

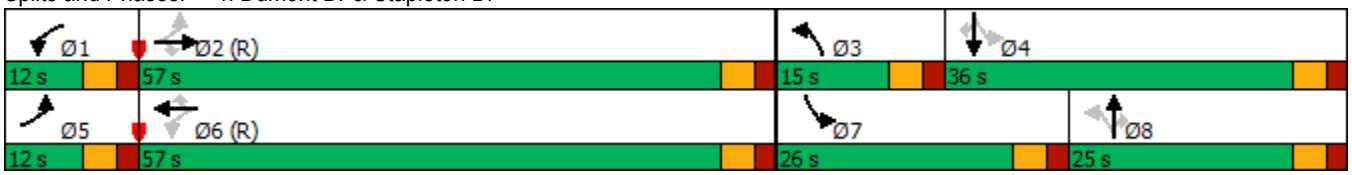
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	10.4	12.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	714	-	-	-	-	567
HCM Lane V/C Ratio	0.072	-	-	-	-	0.109
HCM Control Delay (s)	10.4	-	-	-	-	12.1
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	354	93	328	601	416	136	5	135	317	6	96
Future Volume (vph)	120	354	93	328	601	416	136	5	135	317	6	96
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	10.0	25.0	25.0	10.0	25.0	25.0	10.0	20.0	20.0	15.0	20.0	20.0
Total Split (s)	12.0	57.0	57.0	12.0	57.0	57.0	15.0	25.0	25.0	26.0	36.0	36.0
Total Split (%)	10.0%	47.5%	47.5%	10.0%	47.5%	47.5%	12.5%	20.8%	20.8%	21.7%	30.0%	30.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	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)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Min	Min	None	Min	Min
Act Effct Green (s)	63.1	53.9	53.9	73.7	59.9	59.9	20.1	10.4	10.4	35.9	21.2	21.2
Actuated g/C Ratio	0.53	0.45	0.45	0.61	0.50	0.50	0.17	0.09	0.09	0.30	0.18	0.18
v/c Ratio	0.29	0.24	0.13	0.57	0.37	0.44	0.56	0.03	0.53	0.81	0.02	0.28
Control Delay	10.0	14.1	0.6	5.5	6.6	2.7	42.6	50.2	14.3	53.0	40.5	9.1
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	10.0	14.1	0.6	5.5	6.6	2.7	42.6	50.2	14.3	53.0	40.5	9.1
LOS	A	B	A	A	A	A	D	D	B	D	D	A
Approach Delay		11.0			5.1			28.9			42.8	
Approach LOS		B			A			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 101 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 15.0	Intersection LOS: B
Intersection Capacity Utilization 71.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Dumont Dr & Stapleton Dr



Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	759	46	0	1346	0	137
Future Vol, veh/h	759	46	0	1346	0	137
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	-	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	825	50	0	1463	0	149

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	413
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	588
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	588
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

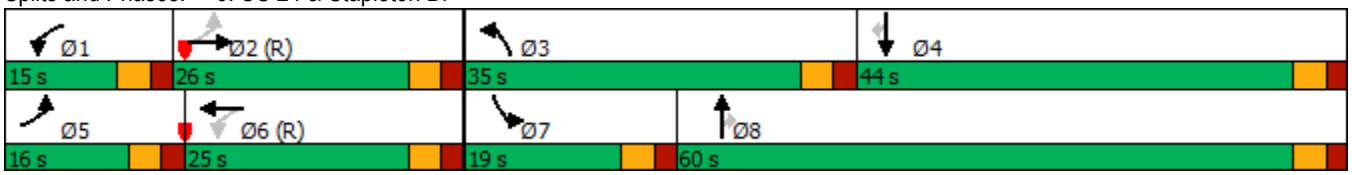
Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	588	-	-	-
HCM Lane V/C Ratio	0.253	-	-	-
HCM Control Delay (s)	13.2	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	1	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	217	214	465	125	393	324	706	1472	150	245	1042	246
Future Volume (vph)	217	214	465	125	393	324	706	1472	150	245	1042	246
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free			8			4
Detector Phase	5	2		1	6		3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0		8.0	5.0		8.0	5.0	5.0	5.0	15.0	15.0
Minimum Split (s)	10.0	15.0		13.0	10.0		13.0	11.0	11.0	20.0	20.0	20.0
Total Split (s)	16.0	26.0		15.0	25.0		35.0	60.0	60.0	19.0	44.0	44.0
Total Split (%)	13.3%	21.7%		12.5%	20.8%		29.2%	50.0%	50.0%	15.8%	36.7%	36.7%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max		None	Max	Max	None	Max	Max
Act Effct Green (s)	32.4	21.4	120.0	29.6	20.0	120.0	28.8	56.0	56.0	13.0	40.2	40.2
Actuated g/C Ratio	0.27	0.18	1.00	0.25	0.17	1.00	0.24	0.47	0.47	0.11	0.34	0.34
v/c Ratio	0.91	0.36	0.31	0.40	0.70	0.22	0.90	0.94	0.20	0.69	0.90	0.38
Control Delay	67.1	38.5	0.6	36.4	54.4	0.3	59.4	42.7	6.5	61.8	49.4	7.9
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	67.1	38.5	0.6	36.4	54.4	0.3	59.4	42.7	6.5	61.8	49.4	7.9
LOS	E	D	A	D	D	A	E	D	A	E	D	A
Approach Delay		25.7			30.9			45.4			44.6	
Approach LOS		C			C			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 64 (53%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 39.8	Intersection LOS: D
Intersection Capacity Utilization 88.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: US 24 & Stapleton Dr



Intersection	
Int Delay, s/veh	4.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	114	162	1	224	203
Future Vol, veh/h	15	114	162	1	224	203
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	121	172	1	238	216

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	865	173	0	0	173	0
Stage 1	173	-	-	-	-	-
Stage 2	692	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	324	871	-	-	1404	-
Stage 1	857	-	-	-	-	-
Stage 2	497	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	269	871	-	-	1404	-
Mov Cap-2 Maneuver	269	-	-	-	-	-
Stage 1	857	-	-	-	-	-
Stage 2	413	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	4.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	691	1404	-
HCM Lane V/C Ratio	-	-	0.199	0.17	-
HCM Control Delay (s)	-	-	11.5	8.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.6	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	94	12	1	69	104	114
Future Vol, veh/h	94	12	1	69	104	114
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	-	50	-	-	100
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	102	13	1	75	113	124

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	190	113	237	0	-	0
Stage 1	113	-	-	-	-	-
Stage 2	77	-	-	-	-	-
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	799	940	1330	-	-	-
Stage 1	912	-	-	-	-	-
Stage 2	946	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	798	940	1330	-	-	-
Mov Cap-2 Maneuver	798	-	-	-	-	-
Stage 1	911	-	-	-	-	-
Stage 2	946	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1330	-	812	-	-
HCM Lane V/C Ratio	0.001	-	0.142	-	-
HCM Control Delay (s)	7.7	-	10.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	63	35	1	7	34	82
Future Vol, veh/h	63	35	1	7	34	82
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	100
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	68	38	1	8	37	89

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	47	37	126	0	-	0
Stage 1	37	-	-	-	-	-
Stage 2	10	-	-	-	-	-
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	963	1035	1460	-	-	-
Stage 1	985	-	-	-	-	-
Stage 2	1013	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	962	1035	1460	-	-	-
Mov Cap-2 Maneuver	962	-	-	-	-	-
Stage 1	984	-	-	-	-	-
Stage 2	1013	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	0.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1460	-	987	-	-
HCM Lane V/C Ratio	0.001	-	0.108	-	-
HCM Control Delay (s)	7.5	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	23	757	9	7	448	26	55	3	73	3	67
Future Volume (vph)	23	757	9	7	448	26	55	3	73	3	67
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8	7	4	
Permitted Phases	2		2	6		6	8		4		4
Detector Phase	5	2	2	1	6	6	3	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	10.0	25.0	25.0	10.0	25.0	25.0	10.0	15.0	10.0	15.0	15.0
Total Split (s)	12.0	71.0	71.0	12.0	71.0	71.0	12.0	25.0	12.0	25.0	25.0
Total Split (%)	10.0%	59.2%	59.2%	10.0%	59.2%	59.2%	10.0%	20.8%	10.0%	20.8%	20.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	77.2	75.8	75.8	74.6	71.1	71.1	28.0	22.4	28.0	22.4	22.4
Actuated g/C Ratio	0.64	0.63	0.63	0.62	0.59	0.59	0.23	0.19	0.23	0.19	0.19
v/c Ratio	0.04	0.37	0.01	0.02	0.23	0.03	0.17	0.08	0.23	0.01	0.19
Control Delay	7.7	11.7	0.0	6.1	8.1	0.2	35.0	18.7	36.0	42.0	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.7	11.7	0.0	6.1	8.1	0.2	35.0	18.7	36.0	42.0	3.9
LOS	A	B	A	A	A	A	D	B	D	D	A
Approach Delay		11.4			7.6			30.1		21.0	
Approach LOS		B			A			C		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 80 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.37	
Intersection Signal Delay: 12.1	Intersection LOS: B
Intersection Capacity Utilization 41.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Saybrook Dr & Stapleton Dr

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	549	234	266	351	148	80	5	355	278	5	50
Future Volume (vph)	66	549	234	266	351	148	80	5	355	278	5	50
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	10.0	25.0	25.0	10.0	25.0	25.0	10.0	20.0	20.0	10.0	20.0	20.0
Total Split (s)	12.0	58.0	58.0	12.0	58.0	58.0	20.0	30.0	30.0	20.0	30.0	30.0
Total Split (%)	10.0%	48.3%	48.3%	10.0%	48.3%	48.3%	16.7%	25.0%	25.0%	16.7%	25.0%	25.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	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)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Min	Min	None	Min	Min
Act Effct Green (s)	65.0	58.1	58.1	73.1	64.4	64.4	25.5	15.7	15.7	35.0	21.0	21.0
Actuated g/C Ratio	0.54	0.48	0.48	0.61	0.54	0.54	0.21	0.13	0.13	0.29	0.18	0.18
v/c Ratio	0.12	0.35	0.28	0.59	0.20	0.17	0.27	0.02	0.86	0.76	0.02	0.15
Control Delay	8.4	13.3	1.4	13.7	6.9	2.2	31.9	40.6	33.3	48.4	37.8	0.8
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	8.4	13.3	1.4	13.7	6.9	2.2	31.9	40.6	33.3	48.4	37.8	0.8
LOS	A	B	A	B	A	A	C	D	C	D	D	A
Approach Delay		9.6			8.3			33.1			41.1	
Approach LOS		A			A			C			D	

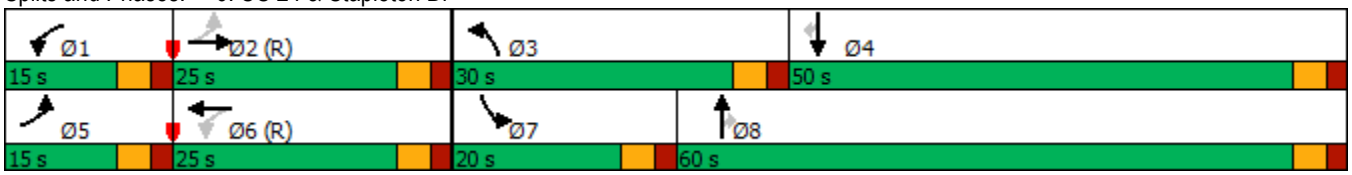
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 101 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 17.9	Intersection LOS: B
Intersection Capacity Utilization 66.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Dumont Dr & Stapleton Dr

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	201	410	571	75	217	118	349	681	50	271	1369	198
Future Volume (vph)	201	410	571	75	217	118	349	681	50	271	1369	198
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free			8			4
Detector Phase	5	2		1	6		3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0		8.0	5.0		15.0	5.0	5.0	15.0	15.0	15.0
Minimum Split (s)	10.0	15.0		13.0	10.0		20.0	11.0	11.0	20.0	20.0	20.0
Total Split (s)	15.0	25.0		15.0	25.0		30.0	60.0	60.0	20.0	50.0	50.0
Total Split (%)	12.5%	20.8%		12.5%	20.8%		25.0%	50.0%	50.0%	16.7%	41.7%	41.7%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max		None	Max	Max	None	Max	Max
Act Effct Green (s)	31.5	23.5	120.0	29.1	20.0	120.0	18.4	55.0	55.0	15.0	51.6	51.6
Actuated g/C Ratio	0.26	0.20	1.00	0.24	0.17	1.00	0.15	0.46	0.46	0.12	0.43	0.43
v/c Ratio	0.69	0.62	0.38	0.33	0.39	0.08	0.70	0.44	0.07	0.66	0.92	0.26
Control Delay	45.3	47.4	0.8	35.8	46.8	0.1	55.5	23.2	0.2	58.4	43.3	3.9
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	45.3	47.4	0.8	35.8	46.8	0.1	55.5	23.2	0.2	58.4	43.3	3.9
LOS	D	D	A	D	D	A	E	C	A	E	D	A
Approach Delay		24.5			31.3			32.5			41.3	
Approach LOS		C			C			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 64 (53%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 33.8	Intersection LOS: C
Intersection Capacity Utilization 84.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: US 24 & Stapleton Dr



Intersection	
Int Delay, s/veh	6.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	263	176	2	289	217
Future Vol, veh/h	11	263	176	2	289	217
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	286	191	2	314	236

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1056	192	0	0	193	0
Stage 1	192	-	-	-	-	-
Stage 2	864	-	-	-	-	-
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	250	850	-	-	1380	-
Stage 1	841	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	193	850	-	-	1380	-
Mov Cap-2 Maneuver	193	-	-	-	-	-
Stage 1	841	-	-	-	-	-
Stage 2	319	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13	0	4.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	748	1380	-
HCM Lane V/C Ratio	-	-	0.398	0.228	-
HCM Control Delay (s)	-	-	13	8.4	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	1.9	0.9	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	104	6	1	74	98	130
Future Vol, veh/h	104	6	1	74	98	130
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	-	50	-	-	100
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	113	7	1	80	107	141

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	189	107	248	0	-	0
Stage 1	107	-	-	-	-	-
Stage 2	82	-	-	-	-	-
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	800	947	1318	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	941	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	799	947	1318	-	-	-
Mov Cap-2 Maneuver	799	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	941	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1318	-	806	-	-
HCM Lane V/C Ratio	0.001	-	0.148	-	-
HCM Control Delay (s)	7.7	-	10.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	64	15	1	11	20	83
Future Vol, veh/h	64	15	1	11	20	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	100
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	70	16	1	12	22	90

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	36	22	112	0	-	0
Stage 1	22	-	-	-	-	-
Stage 2	14	-	-	-	-	-
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	977	1055	1478	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	1009	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	976	1055	1478	-	-	-
Mov Cap-2 Maneuver	976	-	-	-	-	-
Stage 1	1000	-	-	-	-	-
Stage 2	1009	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1478	-	990	-	-
HCM Lane V/C Ratio	0.001	-	0.087	-	-
HCM Control Delay (s)	7.4	-	9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	75	519	19	16	763	83	74	4	49	4	44
Future Volume (vph)	75	519	19	16	763	83	74	4	49	4	44
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8	7	4	
Permitted Phases	2		2	6		6	8		4		4
Detector Phase	5	2	2	1	6	6	3	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	10.0	25.0	25.0	10.0	25.0	25.0	10.0	15.0	10.0	15.0	15.0
Total Split (s)	12.0	71.0	71.0	12.0	71.0	71.0	12.0	25.0	12.0	25.0	25.0
Total Split (%)	10.0%	59.2%	59.2%	10.0%	59.2%	59.2%	10.0%	20.8%	10.0%	20.8%	20.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	76.3	73.5	73.5	73.3	68.4	68.4	28.0	22.4	28.0	22.4	22.4
Actuated g/C Ratio	0.64	0.61	0.61	0.61	0.57	0.57	0.23	0.19	0.23	0.19	0.19
v/c Ratio	0.21	0.26	0.02	0.03	0.41	0.09	0.23	0.05	0.15	0.01	0.12
Control Delay	9.1	11.8	0.1	8.8	15.2	2.6	36.1	23.4	34.8	42.0	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.1	11.8	0.1	8.8	15.2	2.6	36.1	23.4	34.8	42.0	0.7
LOS	A	B	A	A	B	A	D	C	C	D	A
Approach Delay		11.1			13.9			33.8		19.4	
Approach LOS		B			B			C		B	

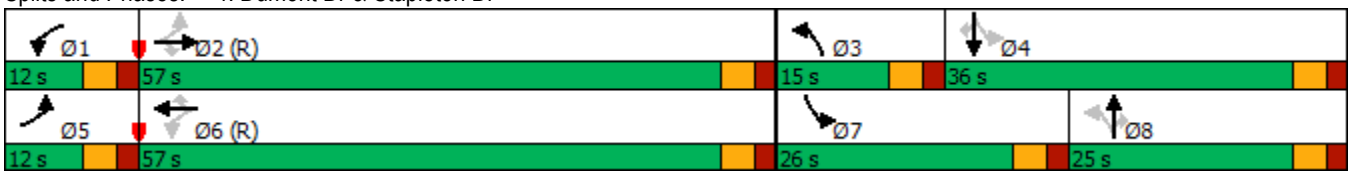
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 80 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.41	
Intersection Signal Delay: 14.2	Intersection LOS: B
Intersection Capacity Utilization 48.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Saybrook Dr & Stapleton Dr

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	261	199	328	573	445	136	5	319	317	6	153
Future Volume (vph)	120	261	199	328	573	445	136	5	319	317	6	153
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	10.0	25.0	25.0	10.0	25.0	25.0	10.0	20.0	20.0	15.0	20.0	20.0
Total Split (s)	12.0	57.0	57.0	12.0	57.0	57.0	15.0	25.0	25.0	26.0	36.0	36.0
Total Split (%)	10.0%	47.5%	47.5%	10.0%	47.5%	47.5%	12.5%	20.8%	20.8%	21.7%	30.0%	30.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	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)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Min	Min	None	Min	Min
Act Effct Green (s)	62.3	53.9	53.9	71.6	59.1	59.1	21.6	11.9	11.9	37.4	22.7	22.7
Actuated g/C Ratio	0.52	0.45	0.45	0.60	0.49	0.49	0.18	0.10	0.10	0.31	0.19	0.19
v/c Ratio	0.29	0.18	0.26	0.53	0.36	0.47	0.52	0.03	0.74	0.78	0.02	0.38
Control Delay	10.6	13.1	1.6	5.6	7.0	3.3	39.0	46.6	15.3	48.2	37.3	8.3
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	10.6	13.1	1.6	5.6	7.0	3.3	39.0	46.6	15.3	48.2	37.3	8.3
LOS	B	B	A	A	A	A	D	D	B	D	D	A
Approach Delay		8.6			5.4			22.6			35.3	
Approach LOS		A			A			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 101 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 13.8	Intersection LOS: B
Intersection Capacity Utilization 71.6%	ICU Level of Service C
Analysis Period (min) 15	

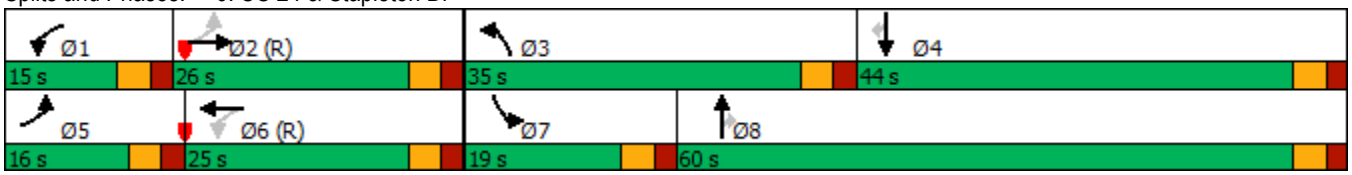
Splits and Phases: 4: Dumont Dr & Stapleton Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	217	214	465	125	393	324	706	1472	150	245	1042	246
Future Volume (vph)	217	214	465	125	393	324	706	1472	150	245	1042	246
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free			8			4
Detector Phase	5	2		1	6		3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0		8.0	5.0		8.0	5.0	5.0	5.0	15.0	15.0
Minimum Split (s)	10.0	15.0		13.0	10.0		13.0	11.0	11.0	20.0	20.0	20.0
Total Split (s)	16.0	26.0		15.0	25.0		35.0	60.0	60.0	19.0	44.0	44.0
Total Split (%)	13.3%	21.7%		12.5%	20.8%		29.2%	50.0%	50.0%	15.8%	36.7%	36.7%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max		None	Max	Max	None	Max	Max
Act Effct Green (s)	32.4	21.4	120.0	29.6	20.0	120.0	28.8	56.0	56.0	13.0	40.2	40.2
Actuated g/C Ratio	0.27	0.18	1.00	0.25	0.17	1.00	0.24	0.47	0.47	0.11	0.34	0.34
v/c Ratio	0.91	0.36	0.31	0.40	0.70	0.22	0.90	0.94	0.20	0.69	0.90	0.38
Control Delay	65.2	38.1	0.5	36.4	54.4	0.3	59.4	42.7	6.5	61.8	49.4	7.9
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	65.2	38.1	0.5	36.4	54.4	0.3	59.4	42.7	6.5	61.8	49.4	7.9
LOS	E	D	A	D	D	A	E	D	A	E	D	A
Approach Delay		25.2			30.9			45.4			44.6	
Approach LOS		C			C			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 64 (53%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 39.7	Intersection LOS: D
Intersection Capacity Utilization 88.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: US 24 & Stapleton Dr



Intersection	
Int Delay, s/veh	5.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	251	209	1	271	263
Future Vol, veh/h	15	251	209	1	271	263
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	267	222	1	288	280

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1079	223	0	0	223	0
Stage 1	223	-	-	-	-	-
Stage 2	856	-	-	-	-	-
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	242	817	-	-	1346	-
Stage 1	814	-	-	-	-	-
Stage 2	416	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	190	817	-	-	1346	-
Mov Cap-2 Maneuver	190	-	-	-	-	-
Stage 1	814	-	-	-	-	-
Stage 2	327	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.8	0	4.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	689	1346	-
HCM Lane V/C Ratio	-	-	0.411	0.214	-
HCM Control Delay (s)	-	-	13.8	8.4	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	2	0.8	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	127	12	1	83	122	155
Future Vol, veh/h	127	12	1	83	122	155
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	-	50	-	-	100
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	138	13	1	90	133	168

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	225	133	301	0	-	0
Stage 1	133	-	-	-	-	-
Stage 2	92	-	-	-	-	-
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	763	916	1260	-	-	-
Stage 1	893	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	762	916	1260	-	-	-
Mov Cap-2 Maneuver	762	-	-	-	-	-
Stage 1	892	-	-	-	-	-
Stage 2	932	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1260	-	773	-	-
HCM Lane V/C Ratio	0.001	-	0.195	-	-
HCM Control Delay (s)	7.9	-	10.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	77	35	1	7	34	101
Future Vol, veh/h	77	35	1	7	34	101
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	100
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	84	38	1	8	37	110

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	47	37	147	0	-	0
Stage 1	37	-	-	-	-	-
Stage 2	10	-	-	-	-	-
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	963	1035	1435	-	-	-
Stage 1	985	-	-	-	-	-
Stage 2	1013	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	962	1035	1435	-	-	-
Mov Cap-2 Maneuver	962	-	-	-	-	-
Stage 1	984	-	-	-	-	-
Stage 2	1013	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1435	-	984	-	-
HCM Lane V/C Ratio	0.001	-	0.124	-	-
HCM Control Delay (s)	7.5	-	9.2	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	23	759	9	7	449	26	55	3	73	3	67
Future Volume (vph)	23	759	9	7	449	26	55	3	73	3	67
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8	7	4	
Permitted Phases	2		2	6		6	8		4		4
Detector Phase	5	2	2	1	6	6	3	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	10.0	25.0	25.0	10.0	25.0	25.0	10.0	15.0	10.0	15.0	15.0
Total Split (s)	12.0	71.0	71.0	12.0	71.0	71.0	12.0	25.0	12.0	25.0	25.0
Total Split (%)	10.0%	59.2%	59.2%	10.0%	59.2%	59.2%	10.0%	20.8%	10.0%	20.8%	20.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	77.2	75.8	75.8	74.6	71.1	71.1	28.0	22.4	28.0	22.4	22.4
Actuated g/C Ratio	0.64	0.63	0.63	0.62	0.59	0.59	0.23	0.19	0.23	0.19	0.19
v/c Ratio	0.04	0.37	0.01	0.02	0.23	0.03	0.17	0.08	0.23	0.01	0.19
Control Delay	7.7	11.7	0.0	6.1	8.2	0.2	35.0	18.7	36.0	42.0	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.7	11.7	0.0	6.1	8.2	0.2	35.0	18.7	36.0	42.0	3.9
LOS	A	B	A	A	A	A	D	B	D	D	A
Approach Delay		11.4			7.7			30.1		21.0	
Approach LOS		B			A			C		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 80 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.37	
Intersection Signal Delay: 12.1	Intersection LOS: B
Intersection Capacity Utilization 41.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Saybrook Dr & Stapleton Dr

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	0	784	67	0	474	9	0	0	41	0	0	8
Future Vol, veh/h	0	784	67	0	474	9	0	0	41	0	0	8
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	-	-	0	-	-	200	-	-	0	-	-	0
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	0	852	73	0	515	10	0	0	45	0	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	426	-	-	258
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	577	0	0	741
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	577	-	-	741
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	11.8	9.9
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	577	-	-	-	-	741
HCM Lane V/C Ratio	0.077	-	-	-	-	0.012
HCM Control Delay (s)	11.8	-	-	-	-	9.9
HCM Lane LOS	B	-	-	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	652	107	268	360	139	81	5	147	278	5	42
Future Volume (vph)	66	652	107	268	360	139	81	5	147	278	5	42
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	10.0	25.0	25.0	10.0	25.0	25.0	10.0	20.0	20.0	10.0	20.0	20.0
Total Split (s)	12.0	58.0	58.0	12.0	58.0	58.0	25.0	25.0	25.0	25.0	25.0	25.0
Total Split (%)	10.0%	48.3%	48.3%	10.0%	48.3%	48.3%	20.8%	20.8%	20.8%	20.8%	20.8%	20.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	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)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Min	Min	None	Min	Min
Act Effct Green (s)	62.9	55.5	55.5	75.1	64.8	64.8	20.5	10.6	10.6	34.9	19.9	19.9
Actuated g/C Ratio	0.52	0.46	0.46	0.63	0.54	0.54	0.17	0.09	0.09	0.29	0.17	0.17
v/c Ratio	0.13	0.43	0.15	0.61	0.20	0.16	0.33	0.03	0.56	0.74	0.02	0.13
Control Delay	7.9	15.8	1.2	15.4	6.3	1.8	35.5	49.8	15.8	48.2	42.6	0.8
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	7.9	15.8	1.2	15.4	6.3	1.8	35.5	49.8	15.8	48.2	42.6	0.8
LOS	A	B	A	B	A	A	D	D	B	D	D	A
Approach Delay		13.3			8.7			23.3			41.9	
Approach LOS		B			A			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 101 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 17.1	Intersection LOS: B
Intersection Capacity Utilization 67.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Dumont Dr & Stapleton Dr

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1016	62	0	767	0	168
Future Vol, veh/h	1016	62	0	767	0	168
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	-	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	1104	67	0	834	0	183

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	552
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	477
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	477
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

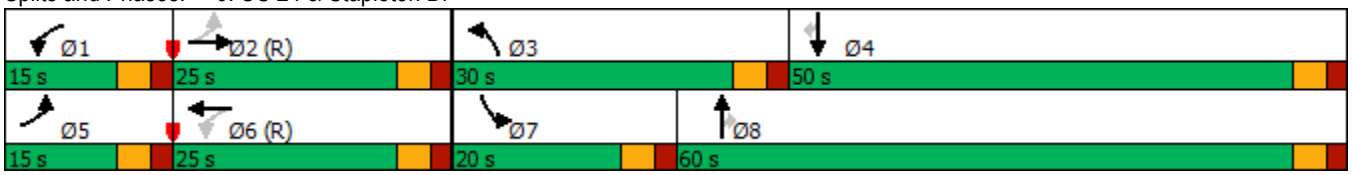
Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	477	-	-	-
HCM Lane V/C Ratio	0.383	-	-	-
HCM Control Delay (s)	17.2	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.8	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	201	410	572	75	218	118	351	681	50	271	1369	199
Future Volume (vph)	201	410	572	75	218	118	351	681	50	271	1369	199
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free			8			4
Detector Phase	5	2		1	6		3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0		8.0	5.0		15.0	5.0	5.0	15.0	15.0	15.0
Minimum Split (s)	10.0	15.0		13.0	10.0		20.0	11.0	11.0	20.0	20.0	20.0
Total Split (s)	15.0	25.0		15.0	25.0		30.0	60.0	60.0	20.0	50.0	50.0
Total Split (%)	12.5%	20.8%		12.5%	20.8%		25.0%	50.0%	50.0%	16.7%	41.7%	41.7%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max		None	Max	Max	None	Max	Max
Act Effct Green (s)	31.5	23.5	120.0	29.1	20.0	120.0	18.4	55.0	55.0	15.0	51.6	51.6
Actuated g/C Ratio	0.26	0.20	1.00	0.24	0.17	1.00	0.15	0.46	0.46	0.12	0.43	0.43
v/c Ratio	0.69	0.62	0.38	0.33	0.39	0.08	0.70	0.44	0.07	0.66	0.92	0.26
Control Delay	45.4	47.3	1.0	35.8	46.8	0.1	55.5	23.2	0.2	58.4	43.4	4.0
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	45.4	47.3	1.0	35.8	46.8	0.1	55.5	23.2	0.2	58.4	43.4	4.0
LOS	D	D	A	D	D	A	E	C	A	E	D	A
Approach Delay		24.6			31.4			32.6			41.3	
Approach LOS		C			C			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 64 (53%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 33.9	Intersection LOS: C
Intersection Capacity Utilization 84.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: US 24 & Stapleton Dr



Intersection	
Int Delay, s/veh	4.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	98	135	2	231	149
Future Vol, veh/h	11	98	135	2	231	149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	107	147	2	251	162

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	812	148	0	0	149	0
Stage 1	148	-	-	-	-	-
Stage 2	664	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	348	899	-	-	1432	-
Stage 1	880	-	-	-	-	-
Stage 2	512	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	287	899	-	-	1432	-
Mov Cap-2 Maneuver	287	-	-	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	422	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	4.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	740	1432	-
HCM Lane V/C Ratio	-	-	0.16	0.175	-
HCM Control Delay (s)	-	-	10.8	8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.6	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	76	6	1	60	75	85
Future Vol, veh/h	76	6	1	60	75	85
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	-	50	-	-	100
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	83	7	1	65	82	92

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	149	82	174	0	-	0
Stage 1	82	-	-	-	-	-
Stage 2	67	-	-	-	-	-
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	843	978	1403	-	-	-
Stage 1	941	-	-	-	-	-
Stage 2	956	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	842	978	1403	-	-	-
Mov Cap-2 Maneuver	842	-	-	-	-	-
Stage 1	940	-	-	-	-	-
Stage 2	956	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1403	-	851	-	-
HCM Lane V/C Ratio	0.001	-	0.105	-	-
HCM Control Delay (s)	7.6	-	9.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	50	0	15	0	0	0	1	11	0	0	20	61
Future Vol, veh/h	50	0	15	0	0	0	1	11	0	0	20	61
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	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	54	0	16	0	0	0	1	12	0	0	22	66

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	36	36	22	77	102	12	88	0	-	-	-	0
Stage 1	22	22	-	14	14	-	-	-	-	-	-	-
Stage 2	14	14	-	63	88	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	970	856	1055	912	788	1069	1508	-	0	0	-	-
Stage 1	996	877	-	1006	884	-	-	-	0	0	-	-
Stage 2	1006	884	-	948	822	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	969	855	1055	897	787	1069	1508	-	-	-	-	-
Mov Cap-2 Maneuver	969	855	-	897	787	-	-	-	-	-	-	-
Stage 1	995	877	-	1005	883	-	-	-	-	-	-	-
Stage 2	1005	883	-	933	822	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	0	0.6	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1508	-	988	-	-	-
HCM Lane V/C Ratio	0.001	-	0.072	-	-	-
HCM Control Delay (s)	7.4	-	8.9	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	75	522	19	16	766	83	74	4	49	4	44
Future Volume (vph)	75	522	19	16	766	83	74	4	49	4	44
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8	7	4	
Permitted Phases	2		2	6		6	8		4		4
Detector Phase	5	2	2	1	6	6	3	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	10.0	25.0	25.0	10.0	25.0	25.0	10.0	15.0	10.0	15.0	15.0
Total Split (s)	12.0	71.0	71.0	12.0	71.0	71.0	12.0	25.0	12.0	25.0	25.0
Total Split (%)	10.0%	59.2%	59.2%	10.0%	59.2%	59.2%	10.0%	20.8%	10.0%	20.8%	20.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	76.3	73.5	73.5	73.3	68.4	68.4	28.0	22.4	28.0	22.4	22.4
Actuated g/C Ratio	0.64	0.61	0.61	0.61	0.57	0.57	0.23	0.19	0.23	0.19	0.19
v/c Ratio	0.21	0.26	0.02	0.03	0.41	0.09	0.23	0.05	0.15	0.01	0.12
Control Delay	9.1	11.8	0.1	8.9	15.3	2.8	36.1	23.4	34.8	42.0	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.1	11.8	0.1	8.9	15.3	2.8	36.1	23.4	34.8	42.0	0.7
LOS	A	B	A	A	B	A	D	C	C	D	A
Approach Delay		11.1			14.0			33.8		19.4	
Approach LOS		B			B			C		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 80 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.41	
Intersection Signal Delay: 14.3	Intersection LOS: B
Intersection Capacity Utilization 48.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Saybrook Dr & Stapleton Dr

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↱		↑↑	↱			↱			↱
Traffic Vol, veh/h	0	523	60	0	808	29	0	0	47	0	0	57
Future Vol, veh/h	0	523	60	0	808	29	0	0	47	0	0	57
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	-	-	0	-	-	200	-	-	0	-	-	0
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	0	568	65	0	878	32	0	0	51	0	0	62

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	284	-	-	439
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	713	0	0	566
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	713	-	-	566
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

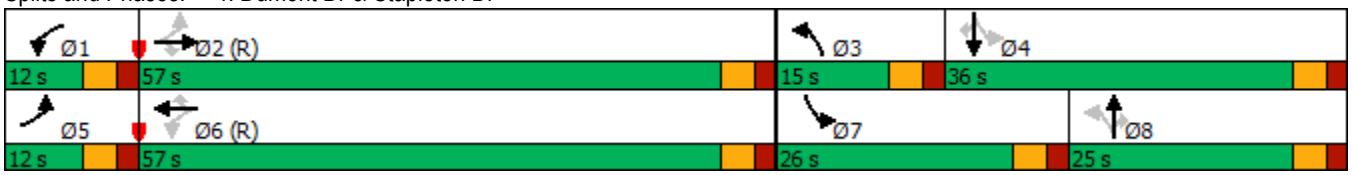
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	10.4	12.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	713	-	-	-	-	566
HCM Lane V/C Ratio	0.072	-	-	-	-	0.109
HCM Control Delay (s)	10.4	-	-	-	-	12.1
HCM Lane LOS	B	-	-	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	354	96	331	601	416	139	5	138	317	6	96
Future Volume (vph)	120	354	96	331	601	416	139	5	138	317	6	96
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	10.0	25.0	25.0	10.0	25.0	25.0	10.0	20.0	20.0	15.0	20.0	20.0
Total Split (s)	12.0	57.0	57.0	12.0	57.0	57.0	15.0	25.0	25.0	26.0	36.0	36.0
Total Split (%)	10.0%	47.5%	47.5%	10.0%	47.5%	47.5%	12.5%	20.8%	20.8%	21.7%	30.0%	30.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	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)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Min	Min	None	Min	Min
Act Effct Green (s)	63.1	53.9	53.9	73.6	59.9	59.9	20.2	10.4	10.4	36.0	21.2	21.2
Actuated g/C Ratio	0.53	0.45	0.45	0.61	0.50	0.50	0.17	0.09	0.09	0.30	0.18	0.18
v/c Ratio	0.29	0.24	0.13	0.57	0.37	0.44	0.57	0.03	0.54	0.81	0.02	0.28
Control Delay	10.0	14.1	0.7	5.6	6.7	2.7	42.9	50.2	14.9	52.9	40.5	9.1
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	10.0	14.1	0.7	5.6	6.7	2.7	42.9	50.2	14.9	52.9	40.5	9.1
LOS	B	B	A	A	A	A	D	D	B	D	D	A
Approach Delay		11.0			5.2			29.3			42.7	
Approach LOS		B			A			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 101 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 15.0	Intersection LOS: B
Intersection Capacity Utilization 71.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Dumont Dr & Stapleton Dr



Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	763	46	0	1349	0	137
Future Vol, veh/h	763	46	0	1349	0	137
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	-	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	829	50	0	1466	0	149

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	415
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	586
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	586
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

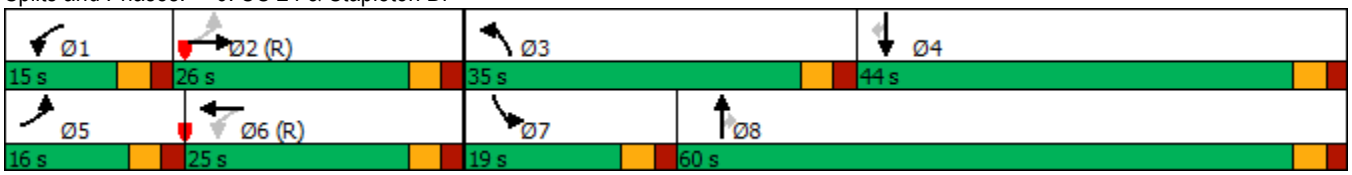
Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	586	-	-	-
HCM Lane V/C Ratio	0.254	-	-	-
HCM Control Delay (s)	13.2	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	1	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	218	215	467	125	394	324	708	1472	150	245	1042	247
Future Volume (vph)	218	215	467	125	394	324	708	1472	150	245	1042	247
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free			8			4
Detector Phase	5	2		1	6		3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0		8.0	5.0		8.0	5.0	5.0	5.0	15.0	15.0
Minimum Split (s)	10.0	15.0		13.0	10.0		13.0	11.0	11.0	20.0	20.0	20.0
Total Split (s)	16.0	26.0		15.0	25.0		35.0	60.0	60.0	19.0	44.0	44.0
Total Split (%)	13.3%	21.7%		12.5%	20.8%		29.2%	50.0%	50.0%	15.8%	36.7%	36.7%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max		None	Max	Max	None	Max	Max
Act Effct Green (s)	32.4	21.4	120.0	29.6	20.0	120.0	28.8	56.0	56.0	13.0	40.2	40.2
Actuated g/C Ratio	0.27	0.18	1.00	0.25	0.17	1.00	0.24	0.47	0.47	0.11	0.34	0.34
v/c Ratio	0.92	0.36	0.31	0.41	0.70	0.22	0.90	0.94	0.20	0.69	0.90	0.38
Control Delay	68.5	38.5	0.6	36.4	54.5	0.3	59.5	42.7	6.5	61.8	49.5	8.0
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	68.5	38.5	0.6	36.4	54.5	0.3	59.5	42.7	6.5	61.8	49.5	8.0
LOS	E	D	A	D	D	A	E	D	A	E	D	A
Approach Delay		26.1			31.0			45.5			44.7	
Approach LOS		C			C			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 64 (53%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 39.9	Intersection LOS: D
Intersection Capacity Utilization 88.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: US 24 & Stapleton Dr



Intersection	
Int Delay, s/veh	4.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	121	162	2	230	203
Future Vol, veh/h	15	121	162	2	230	203
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	129	172	2	245	216

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	879	173	0	0	174	0
Stage 1	173	-	-	-	-	-
Stage 2	706	-	-	-	-	-
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	318	871	-	-	1403	-
Stage 1	857	-	-	-	-	-
Stage 2	489	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	262	871	-	-	1403	-
Mov Cap-2 Maneuver	262	-	-	-	-	-
Stage 1	857	-	-	-	-	-
Stage 2	403	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.6	0	4.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	693	1403	-
HCM Lane V/C Ratio	-	-	0.209	0.174	-
HCM Control Delay (s)	-	-	11.6	8.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.8	0.6	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	94	12	1	69	104	114
Future Vol, veh/h	94	12	1	69	104	114
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	-	50	-	-	100
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	102	13	1	75	113	124

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	190	113	237	0	-	0
Stage 1	113	-	-	-	-	-
Stage 2	77	-	-	-	-	-
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	799	940	1330	-	-	-
Stage 1	912	-	-	-	-	-
Stage 2	946	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	798	940	1330	-	-	-
Mov Cap-2 Maneuver	798	-	-	-	-	-
Stage 1	911	-	-	-	-	-
Stage 2	946	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1330	-	812	-	-
HCM Lane V/C Ratio	0.001	-	0.142	-	-
HCM Control Delay (s)	7.7	-	10.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	63	0	35	0	0	0	1	7	0	0	34	82
Future Vol, veh/h	63	0	35	0	0	0	1	7	0	0	34	82
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	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	68	0	38	0	0	0	1	8	0	0	37	89

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	47	47	37	111	136	8	126	0	-	-	-	0
Stage 1	37	37	-	10	10	-	-	-	-	-	-	-
Stage 2	10	10	-	101	126	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	954	845	1035	867	755	1074	1460	-	0	0	-	-
Stage 1	978	864	-	1011	887	-	-	-	0	0	-	-
Stage 2	1011	887	-	905	792	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	953	844	1035	835	754	1074	1460	-	-	-	-	-
Mov Cap-2 Maneuver	953	844	-	835	754	-	-	-	-	-	-	-
Stage 1	977	864	-	1010	886	-	-	-	-	-	-	-
Stage 2	1010	886	-	872	792	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	0	0.9	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1460	-	981	-	-	-
HCM Lane V/C Ratio	0.001	-	0.109	-	-	-
HCM Control Delay (s)	7.5	-	9.1	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	23	759	9	7	449	26	55	3	73	3	67
Future Volume (vph)	23	759	9	7	449	26	55	3	73	3	67
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8	7	4	
Permitted Phases	2		2	6		6	8		4		4
Detector Phase	5	2	2	1	6	6	3	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	10.0	25.0	25.0	10.0	25.0	25.0	10.0	15.0	10.0	15.0	15.0
Total Split (s)	12.0	71.0	71.0	12.0	71.0	71.0	12.0	25.0	12.0	25.0	25.0
Total Split (%)	10.0%	59.2%	59.2%	10.0%	59.2%	59.2%	10.0%	20.8%	10.0%	20.8%	20.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	77.2	75.8	75.8	74.6	71.1	71.1	28.0	22.4	28.0	22.4	22.4
Actuated g/C Ratio	0.64	0.63	0.63	0.62	0.59	0.59	0.23	0.19	0.23	0.19	0.19
v/c Ratio	0.04	0.37	0.01	0.02	0.23	0.03	0.17	0.08	0.23	0.01	0.19
Control Delay	7.7	11.7	0.0	6.3	8.1	0.2	35.0	18.7	36.0	42.0	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.7	11.7	0.0	6.3	8.1	0.2	35.0	18.7	36.0	42.0	3.9
LOS	A	B	A	A	A	A	D	B	D	D	A
Approach Delay		11.4			7.7			30.1		21.0	
Approach LOS		B			A			C		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 80 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.37	
Intersection Signal Delay: 12.1	Intersection LOS: B
Intersection Capacity Utilization 41.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Saybrook Dr & Stapleton Dr

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	549	236	268	351	148	81	5	356	278	5	50
Future Volume (vph)	66	549	236	268	351	148	81	5	356	278	5	50
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	10.0	25.0	25.0	10.0	25.0	25.0	10.0	20.0	20.0	10.0	20.0	20.0
Total Split (s)	12.0	58.0	58.0	12.0	58.0	58.0	20.0	30.0	30.0	20.0	30.0	30.0
Total Split (%)	10.0%	48.3%	48.3%	10.0%	48.3%	48.3%	16.7%	25.0%	25.0%	16.7%	25.0%	25.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	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)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Min	Min	None	Min	Min
Act Effct Green (s)	64.9	58.0	58.0	73.0	64.4	64.4	25.6	15.8	15.8	35.1	21.0	21.0
Actuated g/C Ratio	0.54	0.48	0.48	0.61	0.54	0.54	0.21	0.13	0.13	0.29	0.18	0.18
v/c Ratio	0.13	0.35	0.29	0.60	0.20	0.17	0.27	0.02	0.86	0.76	0.02	0.15
Control Delay	8.4	13.4	1.4	13.9	6.8	2.2	31.8	40.6	33.4	48.3	37.8	0.8
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	8.4	13.4	1.4	13.9	6.8	2.2	31.8	40.6	33.4	48.3	37.8	0.8
LOS	A	B	A	B	A	A	C	D	C	D	D	A
Approach Delay		9.6			8.4			33.2			41.0	
Approach LOS		A			A			C			D	

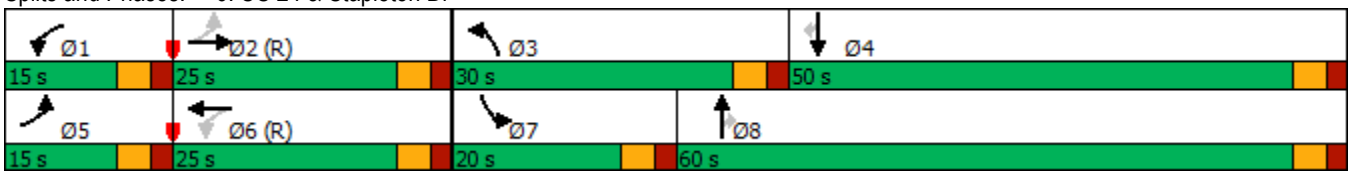
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 101 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 17.9	Intersection LOS: B
Intersection Capacity Utilization 66.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Dumont Dr & Stapleton Dr

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	201	410	572	75	218	118	351	681	50	271	1369	199
Future Volume (vph)	201	410	572	75	218	118	351	681	50	271	1369	199
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free			8			4
Detector Phase	5	2		1	6		3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0		8.0	5.0		15.0	5.0	5.0	15.0	15.0	15.0
Minimum Split (s)	10.0	15.0		13.0	10.0		20.0	11.0	11.0	20.0	20.0	20.0
Total Split (s)	15.0	25.0		15.0	25.0		30.0	60.0	60.0	20.0	50.0	50.0
Total Split (%)	12.5%	20.8%		12.5%	20.8%		25.0%	50.0%	50.0%	16.7%	41.7%	41.7%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max		None	Max	Max	None	Max	Max
Act Effct Green (s)	31.5	23.5	120.0	29.1	20.0	120.0	18.4	55.0	55.0	15.0	51.6	51.6
Actuated g/C Ratio	0.26	0.20	1.00	0.24	0.17	1.00	0.15	0.46	0.46	0.12	0.43	0.43
v/c Ratio	0.69	0.62	0.38	0.33	0.39	0.08	0.70	0.44	0.07	0.66	0.92	0.26
Control Delay	45.4	47.4	0.8	35.8	46.8	0.1	55.5	23.2	0.2	58.4	43.4	4.0
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	45.4	47.4	0.8	35.8	46.8	0.1	55.5	23.2	0.2	58.4	43.4	4.0
LOS	D	D	A	D	D	A	E	C	A	E	D	A
Approach Delay		24.6			31.4			32.6			41.3	
Approach LOS		C			C			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 64 (53%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 33.9	Intersection LOS: C
Intersection Capacity Utilization 84.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: US 24 & Stapleton Dr



Intersection	
Int Delay, s/veh	6.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	266	176	2	292	217
Future Vol, veh/h	11	266	176	2	292	217
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	289	191	2	317	236

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1062	192	0	0	193	0
Stage 1	192	-	-	-	-	-
Stage 2	870	-	-	-	-	-
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	247	850	-	-	1380	-
Stage 1	841	-	-	-	-	-
Stage 2	410	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	190	850	-	-	1380	-
Mov Cap-2 Maneuver	190	-	-	-	-	-
Stage 1	841	-	-	-	-	-
Stage 2	316	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13	0	4.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	747	1380	-
HCM Lane V/C Ratio	-	-	0.403	0.23	-
HCM Control Delay (s)	-	-	13	8.4	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	2	0.9	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	104	6	1	74	98	130
Future Vol, veh/h	104	6	1	74	98	130
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	-	50	-	-	100
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	113	7	1	80	107	141

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	189	107	248	0	-	0
Stage 1	107	-	-	-	-	-
Stage 2	82	-	-	-	-	-
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	800	947	1318	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	941	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	799	947	1318	-	-	-
Mov Cap-2 Maneuver	799	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	941	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1318	-	806	-	-
HCM Lane V/C Ratio	0.001	-	0.148	-	-
HCM Control Delay (s)	7.7	-	10.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	0	15	0	0	0	1	11	0	0	20	83
Future Vol, veh/h	64	0	15	0	0	0	1	11	0	0	20	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	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	70	0	16	0	0	0	1	12	0	0	22	90

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	36	36	22	89	126	12	112	0	-	-	-	0
Stage 1	22	22	-	14	14	-	-	-	-	-	-	-
Stage 2	14	14	-	75	112	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	970	856	1055	896	764	1069	1478	-	0	0	-	-
Stage 1	996	877	-	1006	884	-	-	-	0	0	-	-
Stage 2	1006	884	-	934	803	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	969	855	1055	882	763	1069	1478	-	-	-	-	-
Mov Cap-2 Maneuver	969	855	-	882	763	-	-	-	-	-	-	-
Stage 1	995	877	-	1005	883	-	-	-	-	-	-	-
Stage 2	1005	883	-	920	803	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9	0	0.6	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1478	-	984	-	-	-
HCM Lane V/C Ratio	0.001	-	0.087	-	-	-
HCM Control Delay (s)	7.4	-	9	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	75	522	19	16	766	83	74	4	49	4	44
Future Volume (vph)	75	522	19	16	766	83	74	4	49	4	44
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8	7	4	
Permitted Phases	2		2	6		6	8		4		4
Detector Phase	5	2	2	1	6	6	3	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	10.0	25.0	25.0	10.0	25.0	25.0	10.0	15.0	10.0	15.0	15.0
Total Split (s)	12.0	71.0	71.0	12.0	71.0	71.0	12.0	25.0	12.0	25.0	25.0
Total Split (%)	10.0%	59.2%	59.2%	10.0%	59.2%	59.2%	10.0%	20.8%	10.0%	20.8%	20.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	None	Max	Max
Act Effct Green (s)	76.3	73.5	73.5	73.3	68.4	68.4	28.0	22.4	28.0	22.4	22.4
Actuated g/C Ratio	0.64	0.61	0.61	0.61	0.57	0.57	0.23	0.19	0.23	0.19	0.19
v/c Ratio	0.21	0.26	0.02	0.03	0.41	0.09	0.23	0.05	0.15	0.01	0.12
Control Delay	9.1	11.8	0.1	8.8	15.2	2.6	36.1	23.4	34.8	42.0	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.1	11.8	0.1	8.8	15.2	2.6	36.1	23.4	34.8	42.0	0.7
LOS	A	B	A	A	B	A	D	C	C	D	A
Approach Delay		11.1			13.9			33.8		19.4	
Approach LOS		B			B			C		B	

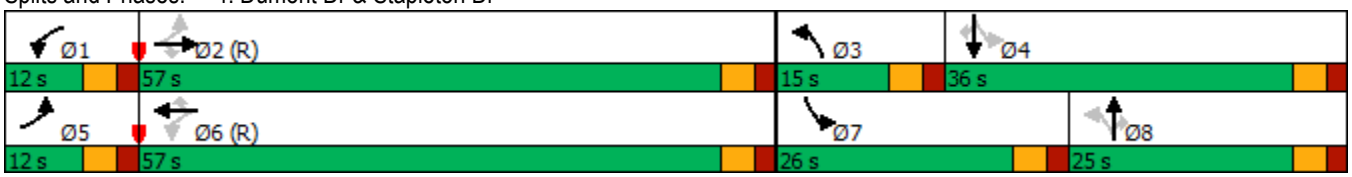
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 80 (67%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.41	
Intersection Signal Delay: 14.3	Intersection LOS: B
Intersection Capacity Utilization 48.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 2: Saybrook Dr & Stapleton Dr

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	261	202	331	573	445	139	5	322	317	6	153
Future Volume (vph)	120	261	202	331	573	445	139	5	322	317	6	153
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	10.0	25.0	25.0	10.0	25.0	25.0	10.0	20.0	20.0	15.0	20.0	20.0
Total Split (s)	12.0	57.0	57.0	12.0	57.0	57.0	15.0	25.0	25.0	26.0	36.0	36.0
Total Split (%)	10.0%	47.5%	47.5%	10.0%	47.5%	47.5%	12.5%	20.8%	20.8%	21.7%	30.0%	30.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	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)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Min	Min	None	Min	Min
Act Effct Green (s)	62.3	53.9	53.9	71.6	59.1	59.1	21.7	11.9	11.9	37.4	22.6	22.6
Actuated g/C Ratio	0.52	0.45	0.45	0.60	0.49	0.49	0.18	0.10	0.10	0.31	0.19	0.19
v/c Ratio	0.29	0.18	0.26	0.54	0.36	0.47	0.53	0.03	0.74	0.78	0.02	0.38
Control Delay	10.6	13.1	1.6	5.6	7.0	3.3	39.3	46.6	15.3	48.3	37.3	8.3
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	10.6	13.1	1.6	5.6	7.0	3.3	39.3	46.6	15.3	48.3	37.3	8.3
LOS	B	B	A	A	A	A	D	D	B	D	D	A
Approach Delay		8.6			5.4			22.8			35.3	
Approach LOS		A			A			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 101 (84%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 13.8	Intersection LOS: B
Intersection Capacity Utilization 71.7%	ICU Level of Service C
Analysis Period (min) 15	

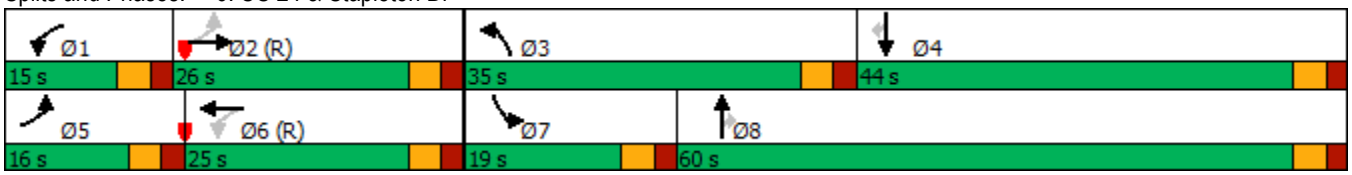
Splits and Phases: 4: Dumont Dr & Stapleton Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	218	215	467	125	394	324	708	1472	150	245	1042	247
Future Volume (vph)	218	215	467	125	394	324	708	1472	150	245	1042	247
Turn Type	pm+pt	NA	Free	pm+pt	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		Free	6		Free			8			4
Detector Phase	5	2		1	6		3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0		8.0	5.0		8.0	5.0	5.0	5.0	15.0	15.0
Minimum Split (s)	10.0	15.0		13.0	10.0		13.0	11.0	11.0	20.0	20.0	20.0
Total Split (s)	16.0	26.0		15.0	25.0		35.0	60.0	60.0	19.0	44.0	44.0
Total Split (%)	13.3%	21.7%		12.5%	20.8%		29.2%	50.0%	50.0%	15.8%	36.7%	36.7%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max		None	C-Max		None	Max	Max	None	Max	Max
Act Effct Green (s)	32.4	21.4	120.0	29.6	20.0	120.0	28.8	56.0	56.0	13.0	40.2	40.2
Actuated g/C Ratio	0.27	0.18	1.00	0.25	0.17	1.00	0.24	0.47	0.47	0.11	0.34	0.34
v/c Ratio	0.92	0.36	0.31	0.41	0.70	0.22	0.90	0.94	0.20	0.69	0.90	0.38
Control Delay	66.6	38.2	0.5	36.4	54.5	0.3	59.5	42.7	6.5	61.8	49.5	8.0
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	66.6	38.2	0.5	36.4	54.5	0.3	59.5	42.7	6.5	61.8	49.5	8.0
LOS	E	D	A	D	D	A	E	D	A	E	D	A
Approach Delay		25.5			31.0			45.5			44.7	
Approach LOS		C			C			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 64 (53%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 39.8	Intersection LOS: D
Intersection Capacity Utilization 88.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: US 24 & Stapleton Dr



Intersection	
Int Delay, s/veh	6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	258	209	2	276	263
Future Vol, veh/h	15	258	209	2	276	263
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	274	222	2	294	280

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1091	223	0	0	224	0
Stage 1	223	-	-	-	-	-
Stage 2	868	-	-	-	-	-
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	238	817	-	-	1345	-
Stage 1	814	-	-	-	-	-
Stage 2	411	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	186	817	-	-	1345	-
Mov Cap-2 Maneuver	186	-	-	-	-	-
Stage 1	814	-	-	-	-	-
Stage 2	321	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14	0	4.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	689	1345	-
HCM Lane V/C Ratio	-	-	0.422	0.218	-
HCM Control Delay (s)	-	-	14	8.4	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	2.1	0.8	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	127	12	1	83	123	155
Future Vol, veh/h	127	12	1	83	123	155
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	-	50	-	-	100
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	138	13	1	90	134	168

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	226	134	302	0	-	0
Stage 1	134	-	-	-	-	-
Stage 2	92	-	-	-	-	-
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	762	915	1259	-	-	-
Stage 1	892	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	761	915	1259	-	-	-
Mov Cap-2 Maneuver	761	-	-	-	-	-
Stage 1	891	-	-	-	-	-
Stage 2	932	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1259	-	772	-	-
HCM Lane V/C Ratio	0.001	-	0.196	-	-
HCM Control Delay (s)	7.9	-	10.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

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	77	0	35	0	0	0	1	7	0	0	34	101
Future Vol, veh/h	77	0	35	0	0	0	1	7	0	0	34	101
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	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	84	0	38	0	0	0	1	8	0	0	37	110

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	47	47	37	121	157	8	147	0	-	-	-	0
Stage 1	37	37	-	10	10	-	-	-	-	-	-	-
Stage 2	10	10	-	111	147	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	954	845	1035	854	735	1074	1435	-	0	0	-	-
Stage 1	978	864	-	1011	887	-	-	-	0	0	-	-
Stage 2	1011	887	-	894	775	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	953	844	1035	822	734	1074	1435	-	-	-	-	-
Mov Cap-2 Maneuver	953	844	-	822	734	-	-	-	-	-	-	-
Stage 1	977	864	-	1010	886	-	-	-	-	-	-	-
Stage 2	1010	886	-	861	775	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	0	0.9	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1435	-	977	-	-	-
HCM Lane V/C Ratio	0.001	-	0.125	-	-	-
HCM Control Delay (s)	7.5	-	9.2	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-	-

Queuing Reports

TRANSPORTATION
CONSULTANTS, INC.

Queuing and Blocking Report

Intersection: 2: Saybrook Dr & Stapleton Dr

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	L	T
Maximum Queue (ft)	42	171	202	15	35	143	145	39	94	40	100	31
Average Queue (ft)	10	82	109	2	6	66	82	9	39	14	44	3
95th Queue (ft)	31	146	175	11	25	123	134	31	85	40	86	15
Link Distance (ft)		1048	1048			794	794		464	464	524	524
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	235			235	235			235				
Storage Blk Time (%)			0									
Queuing Penalty (veh)			0									

Intersection: 2: Saybrook Dr & Stapleton Dr

Movement	SB
Directions Served	R
Maximum Queue (ft)	60
Average Queue (ft)	23
95th Queue (ft)	48
Link Distance (ft)	524
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: West RIRO & Stapleton Dr

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

Model Node Between Links Only
No Access in this Scenario

Queuing and Blocking Report

Intersection: 4: Dumont Dr & Stapleton Dr

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	63	161	219	85	231	203	126	69	114	101	193	327
Average Queue (ft)	19	54	94	39	138	27	28	13	37	6	97	200
95th Queue (ft)	48	117	180	69	218	122	78	41	88	60	176	346
Link Distance (ft)		396	396			259	259			234		
Upstream Blk Time (%)					0	0				0	0	1
Queuing Penalty (veh)					0	1				0	0	0
Storage Bay Dist (ft)	250			205	250			205	200		200	350
Storage Blk Time (%)			0		0	0	0			0	1	4
Queuing Penalty (veh)			1		1	1	0			0	0	2

Intersection: 4: Dumont Dr & Stapleton Dr

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	167	94
Average Queue (ft)	46	19
95th Queue (ft)	242	90
Link Distance (ft)	372	
Upstream Blk Time (%)	1	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		200
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: East RIRO & Stapleton Dr

Movement	WB
Directions Served	T
Maximum Queue (ft)	6
Average Queue (ft)	0
95th Queue (ft)	5
Link Distance (ft)	439
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Model Node Between Links Only
No Access in this Scenario

Queuing and Blocking Report

Intersection: 6: US 24 & Stapleton Dr

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	R	L	L	T	T
Maximum Queue (ft)	258	191	206	228	128	196	147	58	213	231	240	229
Average Queue (ft)	124	116	129	81	50	97	65	10	111	136	123	125
95th Queue (ft)	214	174	189	173	98	169	121	39	184	208	210	206
Link Distance (ft)		439	439			926	926				1161	1161
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	350			325	225			225	1000	1000		
Storage Blk Time (%)				0		0						
Queuing Penalty (veh)				0		0						

Intersection: 6: US 24 & Stapleton Dr

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R
Maximum Queue (ft)	42	204	455	761	696	112
Average Queue (ft)	11	101	162	455	433	45
95th Queue (ft)	32	193	304	731	697	90
Link Distance (ft)	1161			1008	1008	
Upstream Blk Time (%)				0		
Queuing Penalty (veh)				0		
Storage Bay Dist (ft)		785	785			785
Storage Blk Time (%)				1	0	
Queuing Penalty (veh)				2	0	

Intersection: 7: Dumont Dr & North Site Access

Movement	WB	NB	SB
Directions Served	LR	TR	L
Maximum Queue (ft)	141	21	94
Average Queue (ft)	60	1	34
95th Queue (ft)	103	13	76
Link Distance (ft)	215	76	234
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report

Intersection: 8: Dumont Dr & NE Future Access

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	69	6
Average Queue (ft)	28	0
95th Queue (ft)	52	5
Link Distance (ft)	175	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		50
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: Dumont Dr & SW Future Access/South Site Access

Movement	EB	NB
Directions Served	LTR	L
Maximum Queue (ft)	49	6
Average Queue (ft)	23	0
95th Queue (ft)	41	4
Link Distance (ft)	135	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 8

Queuing and Blocking Report

Intersection: 2: Saybrook Dr & Stapleton Dr

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	L	T
Maximum Queue (ft)	93	138	145	20	52	212	226	58	124	61	98	26
Average Queue (ft)	36	51	72	3	13	128	144	27	51	12	34	3
95th Queue (ft)	73	105	130	14	41	195	208	52	101	39	77	16
Link Distance (ft)		1048	1048			794	794		464	464	524	524
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	235			235	235			235				
Storage Blk Time (%)						0	0					
Queuing Penalty (veh)						0	0					

Intersection: 2: Saybrook Dr & Stapleton Dr

Movement	SB
Directions Served	R
Maximum Queue (ft)	52
Average Queue (ft)	17
95th Queue (ft)	42
Link Distance (ft)	524
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: West RIRO & Stapleton Dr

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

Model Node Between Links Only
No Access in this Scenario

Queuing and Blocking Report

Intersection: 4: Dumont Dr & Stapleton Dr

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	133	85	129	70	219	219	216	131	171	19	174	331
Average Queue (ft)	58	24	40	35	119	44	51	36	69	2	74	199
95th Queue (ft)	113	61	89	62	199	132	126	82	135	11	146	321
Link Distance (ft)		396	396			259	259			234		
Upstream Blk Time (%)					0	0	0					0
Queuing Penalty (veh)					0	2	1					0
Storage Bay Dist (ft)	250			205	250			205	200		200	350
Storage Blk Time (%)					0	0	0	0	0		0	1
Queuing Penalty (veh)					1	1	0	0	0		0	1

Intersection: 4: Dumont Dr & Stapleton Dr

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	107	77
Average Queue (ft)	11	30
95th Queue (ft)	105	62
Link Distance (ft)	372	
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		200
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: East RIRO & Stapleton Dr

Movement	EB	WB	WB
Directions Served	T	T	T
Maximum Queue (ft)	11	36	19
Average Queue (ft)	0	2	1
95th Queue (ft)	4	28	14
Link Distance (ft)	259	439	439
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Model Node Between Links Only
No Access in this Scenario

Queuing and Blocking Report

Intersection: 6: US 24 & Stapleton Dr

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	R	L	L	T	T
Maximum Queue (ft)	318	238	237	88	196	302	296	250	461	512	645	811
Average Queue (ft)	181	70	80	29	87	173	179	51	302	352	427	472
95th Queue (ft)	330	175	168	71	159	264	269	118	475	534	665	730
Link Distance (ft)		439	439			926	926				1161	1161
Upstream Blk Time (%)	0	0										0
Queuing Penalty (veh)	0	0										0
Storage Bay Dist (ft)	350			325	225			225	1000	1000		
Storage Blk Time (%)	4	1	0		0	4	5					
Queuing Penalty (veh)	4	1	0		0	6	16					

Intersection: 6: US 24 & Stapleton Dr

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R
Maximum Queue (ft)	513	175	207	632	615	194
Average Queue (ft)	67	86	133	390	365	93
95th Queue (ft)	279	177	194	606	582	165
Link Distance (ft)	1161			1008	1008	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		785	785			785
Storage Blk Time (%)					0	
Queuing Penalty (veh)					0	

Intersection: 7: Dumont Dr & North Site Access

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	170	24	122	6
Average Queue (ft)	68	2	43	0
95th Queue (ft)	126	13	89	5
Link Distance (ft)	215	76	234	234
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 8: Dumont Dr & NE Future Access

Movement	EB	NB
Directions Served	LR	T
Maximum Queue (ft)	78	14
Average Queue (ft)	36	1
95th Queue (ft)	67	11
Link Distance (ft)	175	196
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Intersection: 9: Dumont Dr & SW Future Access/South Site Access

Movement	EB	NB
Directions Served	LTR	L
Maximum Queue (ft)	62	12
Average Queue (ft)	30	0
95th Queue (ft)	52	4
Link Distance (ft)	135	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 33

Appendix Tables 1-3

TRANSPORTATION
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Appendix Table 1: Area Trafffic Impact Studies by LSC

Study	Date
4-Way Ranch/Waterbury	
4-Way Ranch Updated TIA	January 29, 2009
Waterbury PUD Development Plan Updated TIA	January 10, 2013
Waterbury Filing Nos. 1 and 2 TIA	December 18, 2020
4-Way Ranch Commercial Master Traffic Impact Analysis	December 20, 2022
Meridian Ranch	
Meridian Ranch Sketch Plan TIA	April 11, 2011
Meridian Ranch Filing 11 Updated TIA	November 26, 2013
Stonebridge at Meridian Ranch Filing No. 1 Updated TIA	April 23, 2014
Stonebridge at Meridian Ranch Transportation Memorandum	July 28, 2015
Meridian Ranch Filing 8 Updated TIA	December 23, 2014
Meridian Ranch Filing 9 Updated TIA	May 21, 2015
Meridian Ranch Sketch Plan 2015 Amendment TIA	July 30, 2015
The Vistas at Meridian Ranch TIA	March 24, 2016
Meridian Ranch Estates Filing No. 2 Transportation	August 27, 2015
The Vistas at Meridian Ranch Updated Transportation	June 20, 2017
Londonderry Drive Pedestrian Operations and Safety Study	February 8, 2017
Stonebridge Filing 3 at Meridian Ranch Updated TIA	March 20, 2017
Meridian Ranch Sketch Plan 2017 Amendment TIA	October 3, 2017
WindingWalk at Meridian Ranch and The Enclave at	May 10, 2018
Rolling Hills Ranch at Meridian Ranch PUDSP Traffic Impact	June 29, 2020
The Estates at Rolling Hills Ranch Filing No. 1 Traffic Impact	May 13, 2020
Rolling Hills Ranch at Meridian Ranch Filing No. 1 Traffic	July 14, 2020
The Estates at Rolling Hills Ranch Filing No. 2 Traffic Impact	October 8, 2020
Rolling Hills Ranch at Meridian Ranch Filing No. 2	December 29, 2020
Rolling Hills Ranch at Meridian Ranch Filing No. 3	June 29, 2021
Meridian Ranch 2021 Sketch Plan Amendment Traffic Impact	June 25, 2021
The Sanctuary at Meridian Ranch Transportation Memorandum	May 3, 2022
Grandview Reserve	
Grandview Reserve Updated Master TIA	December 5, 2020
Grandview Reserve Phase 1 TIA	March 8, 2022
Meadowlake Ranch	
Meadowlake Ranch Traffic Impact Analysis	May 29, 2019
Latigo Preserve	
Latigo Preserve Filing No. 10	March 31, 2022
Source: LSC Transportation Consultants, Inc.	*Jan-26*

Appendix Table 2
Future Buildout Internal Trip Calculations

Land Use	Trip Generation Units		Raw ITE Trip Generation[1] (Individual Driveway Trips)					Internal Trips (%)			Total Internal Trips (vph)					Total External Trips				
				AM Peak Hour		PM Peak Hour			AM Peak Hour	PM Peak Hour		AM Peak Hour		PM Peak Hour			AM Peak Hour		PM Peak Hour	
	Quantity	Unit	Daily	In	Out	In	Out	Daily			Daily	In	Out	In	Out	Daily	In	Out	In	Out
Areas 1-4 (as shown in Figure 2b)																				
RV/Boat Storage	32	Spaces	4	0	0	0	0	5%	2%	8%	0	0	0	0	0	4	0	0	0	0
Mini-Warehouse	89.5	KSF[2]	115	4	3	6	7	5%	2%	8%	5	0	0	0	0	11 5	4	3	5	6
Gasoline/Service Station with Convenience Market (VFP 16-24)	5.5	KSF	3,533	182	175	168	168	5%	2%	8%	177	4	4	13	13	3,356	178	171	155	155
Fast-Food Restaurant with Drive-Through Window	16	KSF	7,170	272	261	263	243	5%	2%	8%	359	5	5	21	19	6,811	267	256	242	224
Shopping Plaza (40-150 KSF No Supermarket)	62	KSF	4,054	61	37	145	150	5%	2%	8%	203	1	1	12	12	3,851	60	36	133	138
Single Family Attached Housing	160	DU[3]	1,051	19	56	47	35	5%	2%	8%	53	0	1	4	3	998	19	55	43	32
			15,927	**538**	**532**	**629**	**603**				**797**	**10**	**11**	**50**	**47**	**15,135**	**528**	**521**	**580**	**557**

Notes:
(1) See Table 1a
(2) KSF = 1,000 square feet of floor area
(3) DU = dwelling unit

LSC Transportation Consultants, Inc.

Appendix Table 3
Future Buildout Passby & Diverted Link Trip Calculations

Land Use	Trip Generation Units		Total External Trips (vph)[1]					Passby Trips (%)			Total Passby Trips (vph)					Diverted Link Trips (%)			Total Diverted Link Trips (vph)				
	Quantity	Unit	Daily	AM Peak Hour		PM Peak Hour		Daily	AM Peak Hour	PM Peak Hour	Daily	AM Peak Hour		PM Peak Hour		Daily	AM Peak Hour	PM Peak Hour	Daily	AM Peak Hour		PM Peak Hour	
				In	Out	In	Out					In	Out	In	Out					In	Out	In	Out
Areas 1-4 (as shown in Figure 2b)																							
RV/Boat Storage	32	Spaces	4	0	0	0	0	0%	0%	0%	0	0	0	0	0	0%	0%	0%	0	0	0	0	0
Mini-Warehouse	89.5	KSF[3]	11 5	4	3	6	7	0%	0%	0%	0	0	0	0	0	0%	0%	0%	0	0	0	0	0
Gasoline/Service Station with Convenience Market (VFP 16-24)	5.5	KSF	3,356	178	171	155	155	51%	51%	50%	1,695	89	89	78	78	25%	25%	25%	839	44	44	39	39
Fast-Food Restaurant with Drive-Through Window	16	KSF	6,811	267	256	242	224	53%	50%	55%	3,576	131	131	128	128	24%	28%	19%	1,601	73	73	44	44
Shopping Plaza (40-150 KSF No Supermarket)	62	KSF	3,851	60	36	133	138	40%	40%	40%	1,540	19	19	54	54	23%	23%	23%	886	11	11	31	31
Single Family Attached Housing	160	DU[4]	998	19	55	43	32	0%	0%	0%	0	0	0	0	0	0%	0%	0%	0	0	0	0	0
			15,135	**528**	**521**	**579**	**556**				**6,811**	**239**	**239**	**260**	**260**				**3,326**	**128**	**128**	**114**	**114**

Notes:

(1) See Table 1b

(3) Source: Pass-By Data and Rate Tables/2025 Pass-By Tables for ITETripGen Appendices

(4) KSF = 1,000 square feet of floor area

(5) DU = dwelling unit

LSC Transportation Consultants, Inc.

Appendix A

TRANSPORTATION
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Appendix A

Trip Generation Rate Estimate

Land Use: RV & Boat Storage

(LSC Revised 6-15-2023)

LSC estimates of trip-generation rates for the proposed RV & Boat Storage land use for this project have been based on averages of rates from other studies summarized in the following table:

ITE Land Use Code	Land Use	Units [1]	Trip Generation Rates: Average Weekday	Weekday A.M. In	Weekday A.M. Out	Weekday P.M. In	Weekday P.M. Out
RV Storage Trip Generation Report - Valley Park, St. Louis, MO for the RV Storage facility to be located at 802 Forest Avenue by The Traffic Group							
-	RV Storage - Data Point 1	100 Storage Units	10.78				
-	RV Storage - Data Point 2	100 Storage Units	10.8				
-	RV Storage - Data Point 3	100 Storage Units	17.23	(duplicate data point)			
Trip Generation Analysis for the Proposed Self-Storage and RV Storage Facility at 3701 Pacific Place, Long Beach, California, by LSA Associates							
-	RV Storage - Data Point 1	100 Storage Units	17.23	0.50	0.47	0.93	1.12
Route 52 RV Traffic Impact Study in Weld County, CO (2017) -- by Sustainable Traffic Solutions, Inc.							
-	RV Storage - Data Point 1	100 Storage Units				0.36	0.48
	Average Rates		**12.94**	**0.50**	**0.47**	**0.65**	**0.80**

Revised JCH 6-15-2023

LSC estimates of trip-generation rates shown in the table above and used to estimate the trip generation for the proposed RV & Boat Storage land use for this project have been based on averages of rates from the following studies:

Route 52 RV Traffic Impact Study 8/28/2017 by Sustainable Traffic Solutions, Inc.

Outdoor RV Storage Trip Generation

Trip Generation Summary

Location	Area (100 Spaces)	Peak Hour Volume					
		Weekday Evening			Sunday Afternoon		
		Total	In	Out	Total	In	Out
Recreational Storage Solutions	6.92	9	3	6	19	9	10
Brighton Outdoor Storage	9.67	5	3	2	36	20	16
Total	16.59	14	6	8	55	29	26
Average	8.30	7	3	4	28	15	13
Percentage	—	100%	43%	57%	100%	53%	47%
Rates (trips/100 spaces)	—	0.84	0.36	0.48	3.32	1.75	1.57

Data Summary

Recreational Storage Solutions			
Weekday			
Interval	In	Out	Total
1	1	2	
2	0	2	
3	2	2	
4	0	0	9
5	1	1	8
6	1	0	7
7	0	1	4
8	1	1	6
Total	6	9	—

Brighton Outdoor Storage			
Weekday			
Interval	In	Out	Total
1	0	0	
2	2	0	
3	0	1	
4	0	1	4
5	1	0	5
6	0	1	4
7	1	0	4
8	0	1	4
Total	4	4	—

Sunday			
Interval	In	Out	Total
1	2	3	
2	2	2	
3	2	2	
4	3	3	19
5	1	3	18
6	1	2	17
7	1	4	18
8	4	0	16
Total	16	19	—

Sunday			
Interval	In	Out	Total
1	5	0	
2	5	3	
3	6	6	
4	4	7	36
5	3	2	36
6	4	3	35
7	2	2	37
8	3	3	22
Total	32	26	—

Trip-Generation Analysis for the Proposed Self-Storage and RV Storage Facility at 3701 Pacific Place, Long Beach, California*, 2/27/2020 by LSA Associates*

Table B: Project Trip Generation (Gate Trip Rates)

Land Use	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates[1]									
Self-Storage		100 storage units	12.90	0.53	0.40	0.93	0.93	0.79	1.72
RV Storage		100 RV spaces	17.23	0.50	0.47	0.97	0.93	1.12	2.05
Project Trip Generation									
Self-Storage	11.00	100 storage units	142	6	4	10	10	9	19
RV Storage	5.80	100 RV spaces	100	3	3	6	5	7	12
Total			242	9	7	16	15	16	31

[1] Trip rates developed from gate data for the Moreno Valley Self Storage and Desert Hot Springs Self Storage and RV Storage facilities (November 2019 to January 2020).

ADT = average daily traffic

RV = recreational vehicle

RV Storage Trip Generation Report - Valley Park, St. Louis, MO*, for the RV storage facility to be located at 802 Forest Avenue* 1/6/2022 by The Traffic Group

Source/Land Use		Daily
ITE -151 (Trip Generation Manual, 11th Ed.)		
Trip Rates	Rate per 100 spaces	17.96
RV Storage	265 RV Spaces	48
Fort Collins - 60% Reduction		
Trip Rates	Rate per 100 spaces	10.78
RV Storage	265 RV Spaces	29
McBride Traffic Study		
Trip Rates	Rate per 100 spaces	10.80
RV Storage	265 RV Spaces	29
Long Beach, CA		
Trip Rates	Rate per 100 spaces	17.23
RV Storage	265 RV Spaces	46
Average Trips for 265 RV Spaces		38

MTCP Maps

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Figure 22. 2045 Roadway Functional Classifications

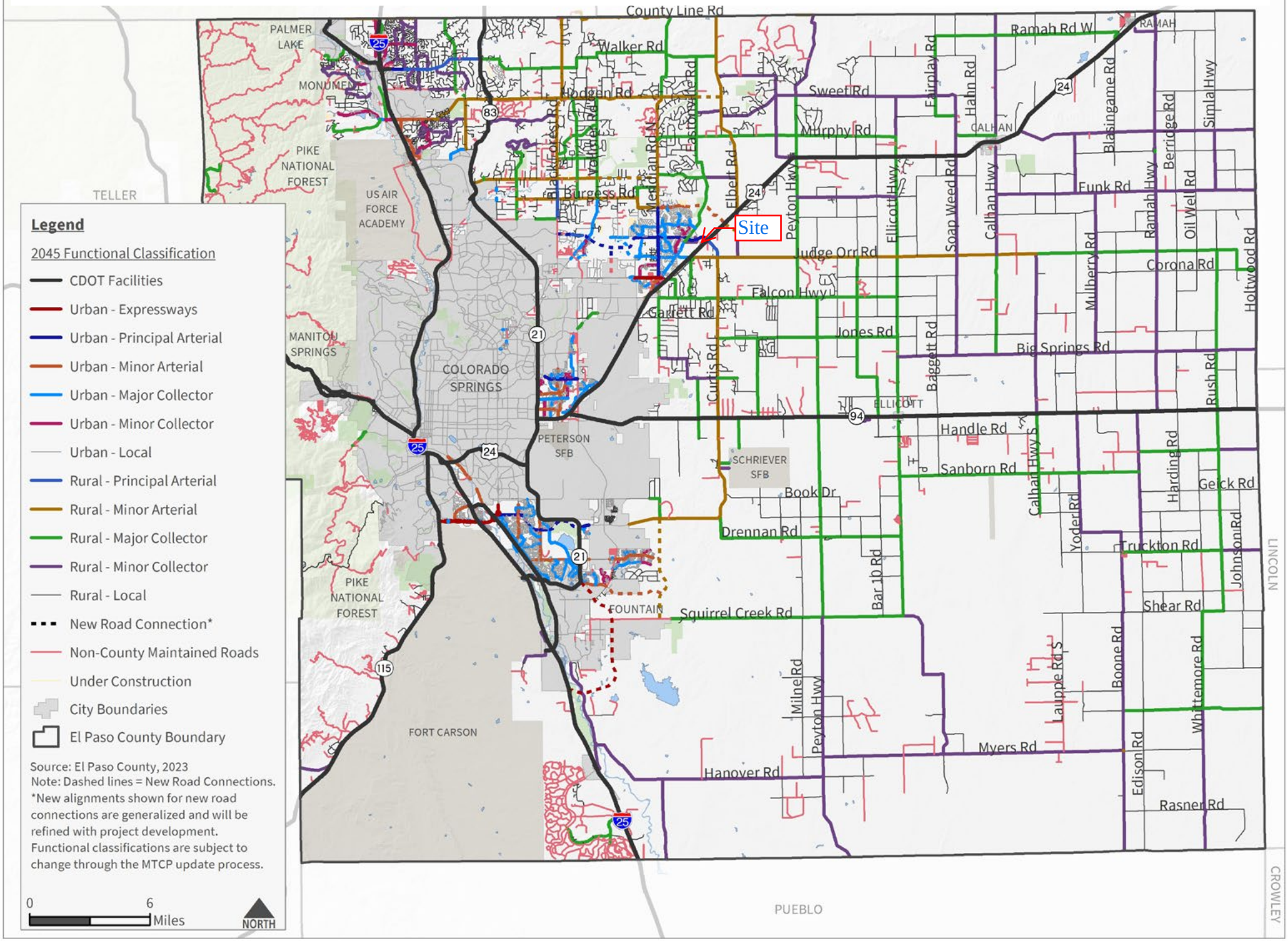
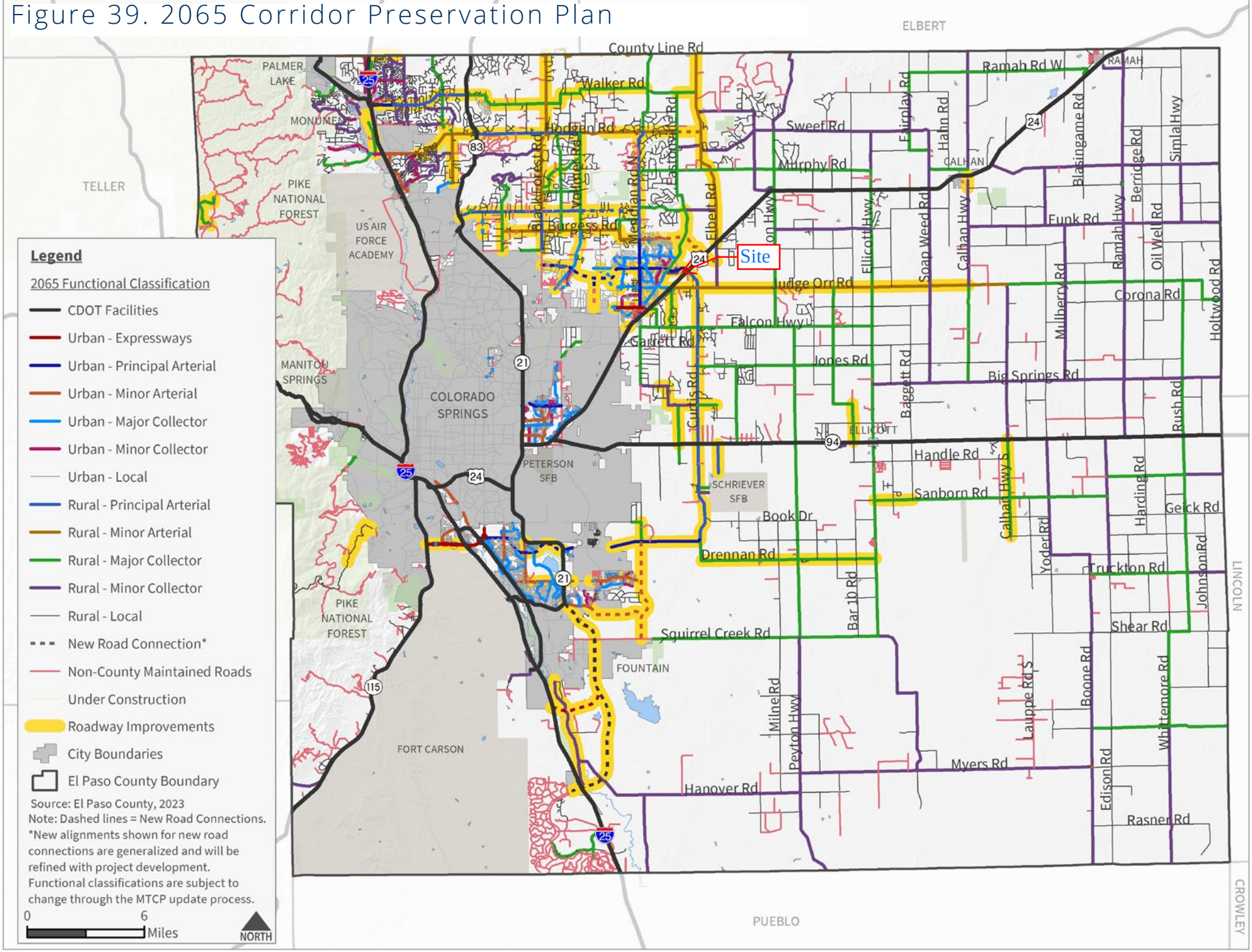


Figure 39. 2065 Corridor Preservation Plan



Site Development Plan (SMH)

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EASEMENT LEGEND

- WELL EASEMENT (EXISTING)
- UTILITY EASEMENT (EXISTING)
- UTILITY EASEMENT (PROPOSED)
- DRAINAGE EASEMENT (PROPOSED)
- UTILITY & DRAINAGE EASEMENT (PROPOSED)

EXISTING POND #4 (STOCK POND)
80.00' PROPOSED UTILITY & DRAINAGE EASEMENT
L=1198.13, R=1275.00 Δ=053°50'29"
L=33.70, R=20.00 Δ=096°32'36"
EXISTING POND #3 (STOCK POND)
N 34°33'02" E 79.10'
N 55°26'58" W 100.00'
L=1127.37 R=1405.00 Δ=045°58'27"
EXISTING 65' U.E REC. NO. 207143733
EXISTING 25' U.E REC. NO. 207143733
PROPOSED UTILITY EASEMENT
PROPOSED 8" PVC WATERLINE
5.0' SIDEWALK
ADA CURB RAMP
ADA CURB RAMP
UNCOVERED RV/BOAT PARKING STALLS
PROPOSED 10'X10' CONCRETE PAD
ADA CURB RAMP (2)
DUMONT DRIVE (FUTURE NON-RESIDENTIAL COLLECTOR)
S'MARLETON ROAD
80.00' ROW
L=31.37, R=20.00 Δ=089°52'06"
29.00' B-B
25' W MOTORIZED SLIDING SECURITY GATE & KNOX BOX
43.00' B-B
ADA CURB RAMP
30"X30" R1-1 SIGN
S 34°33'02" W 87.29'
30"X30" R1-1 SIGN AND 12" PRIVATE STREET SIGN "DUMONT DRIVE"
PROPOSED STORAGE BUILDING 10' X 290' 2900 SF 14191 STAPLETON ROAD BLD. A
PROPOSED STORAGE BUILDING 20' X 240' + (10' X 10') 4900 SF 14191 STAPLETON ROAD BLD. B
PROPOSED STORAGE BUILDING 20' X 140' + (10' X 10') 2900 SF 14191 STAPLETON ROAD BLD. C
EXISTING PUMP HOUSE
EXISTING 20' U.E REC. NO. 207011652
5.00' CONC. (TYP.)
4.00' VALLEY GUTTER
BOLLARD (TYP.)
INSTALL MOUNTED ADA PARKING SIGN (VAN ACCESSIBLE)
PROPOSED 12" HDPE (STORM SEWER D)
L=266.18, R=1275.00 Δ=011°57'42"
130.00' ROW
UNCOVERED RV/BOAT PARKING STALLS
PROPOSED 15'X8' TRASH ENCLOSURE
25' W MOTORIZED SLIDING SECURITY GATE & KNOX BOX
27.50'
5.00' SIDEWALK
10.00' PROP. UTILITY EASEMENT
PROPOSED SLOTTED CURB / LEVEL SPREADER
PROPOSED DRAINAGE EASEMENT
PROPOSED OFFICE 20'X20' + 10'X10' (500 SQFT)
398.64'
19.00'
FUTURE COMMERCIAL AREA
PROPOSED 18" HDPE (STORM SEWER A)
PROPOSED MINI-STORAGE WAREHOUSE 14191 STAPLETON ROAD 46,000 SF FFE: 6898.50
PROPOSED RV DUMP STATION & DRIVE LANE
PROPOSED FIRE HYDRANT (TYP.)
PROPERTY LINE
S 89°21'55" W 518.84'
184.86'
567.03'
58.16'
PROPOSED PHASE 2 IMPROVEMENTS (FUTURE)
PROPOSED GRAVEL MAINTENANCE ROAD
PROPOSED DETENTION AREA
PROPOSED STORAGE BUILDING (FUTURE) 40' X 160' 6400 SF
PROPOSED STORAGE BUILDING (FUTURE) (4) 20' X 230' EACH 18,400 SF TOTAL
PROPOSED 18" HDPE (STORM SEWER C)
N 43°37'59" W 344.57'
N 43°37'55" W 344.14'
397.50'
COVERED/UNCOVERED RV/BOAT PARKING STALLS (FUTURE)
STANDARD CURB & GUTTER
4.00' VALLEY GUTTER (FUTURE)
10.00' PROP. UTILITY EASEMENT
PROPOSED BUILDING (FUTURE) 20' X 40' 8000 SF
PROPOSED 6' BERM
PROPOSED DRAINAGE EASEMENT
N 00°32'40" W 531.35'
100-YEAR ZONE-A FEMA FLOODPLAIN LIMITS
BOLLARD (TYP.)
366.88'
PROPERTY LINE
PROPOSED PHASE 2 IMPROVEMENTS (FUTURE)
45.51'
PROPOSED 36" HDPE (STORM SEWER B)
S 45°57'41" W 894.27'
EXISTING POND #5 (STOCK POND)
N 45°57'41" E 130.00'
N 45°57'41" E 18.02'
5.00' MEDIAN
12.00' LANE
270.00' ROW
HWY 24
STAPLETON ROAD
SPEED LIMIT

NOTES:

1. ALL PROPOSED ROOFTOP/CANOPY AREAS SHALL BE SLOPED TO DRAIN INTO THE PROPOSED PARKING LOT, AND INTO EXTENDED DETENTION BASIN A.

2. THE EXISTING PAVEMENT MARKING CONFIGURATIONS SHOWN FOR HIGHWAY 24 WERE DETERMINED FROM EXISTING SATELLITE IMAGERY ON APRIL 21, 2025.

3. PHASE 2 FUTURE IMPROVEMENTS CONSIST OF ALL PROPOSED SURFACING AND BUILDING WITHIN THE DENOTED AREA, AND WILL BE CONSTRUCTED AT A FUTURE TIME. STORM SEWERS B AND C WILL BE CONSTRUCTED AT THE TIME OF PHASE 1 IMPROVEMENTS.

4. ROADWAY LANDSCAPE REQUIREMENTS, CLOUDED ON THE LANDSCAPE PLAN OF THIS SUBMITTAL, SHALL BE INSTALLED WITH THE FUTURE DEVELOPMENT OF THE COMMERCIAL PARCEL ADJACENT TO THE SELF-STORAGE SITE (DENOTED ON THESE PLANS AS 'FUTURE COMMERCIAL AREA').

LEGEND

- PROPERTY LINE
- EXISTING RIGHT OF WAY
- EXISTING ROADWAY CENTERLINE
- PROPOSED FLOWLINE
- PROPOSED BUILDING
- PROPOSED ASPHALT PAVEMENT
- PROPOSED ASPHALT MILLINGS
- PROPOSED CONCRETE PAVEMENT
- PROPOSED RIPRAP
- PROPOSED FIRE HYDRANT

PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR APPROVAL:

DIRECTOR DATE

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(719) 465-2145

4-WAY COMMERCIAL

SITE DEVELOPMENT PLANS

EL PASO COUNTY, CO

REVISION DESCRIPTION (DESCRIPTION)

REVISION DATE 00/00/00

SITE DEVELOPMENT PLAN

NORTH

SCALE: 1" = 50'

PROJECT #: 2412-0471
CHECKED BY: BML
DRAWN BY: EDM

DATE: 06/11/2026

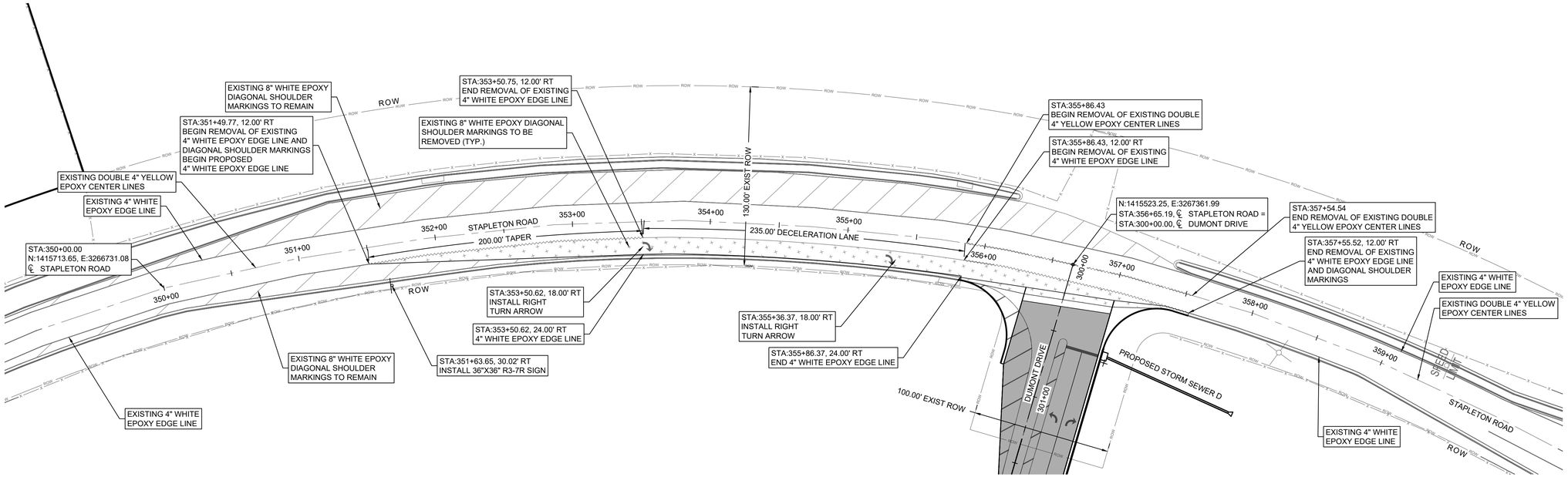
SHEET # 2

TOTAL SHEETS 3

PCD FILE NO: PPR2347

Pavement Marking & Traffic Control Plan (CDs Sheet 12) (SMH)

TRANSPORTATION
CONSULTANTS, INC.



EL PASO COUNTY STANDARD SIGNING AND STRIPING NOTES:

1. ALL SIGNS AND PAVEMENT MARKING DEVICES SHALL BE IN COMPLIANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY A METHOD THAT DOES NOT MATERIALLY DAMAGE THE PAVEMENT. THE PAVEMENT MARKINGS SHALL BE REMOVED TO THE EXTENT THAT THEY WILL NOT BE VISIBLE UNDER DAY OR NIGHT CONDITIONS. AT NO TIME WILL IT BE ACCEPTABLE TO PAINT OVER EXISTING PAVEMENT MARKINGS.
3. ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS (DPW).
4. ALL SIGNS SHOWN ON THE STRIPING AND SIGNING PLAN SHALL BE NEW SIGNS. EXISTING SIGNS MAY REMAIN OR BE REUSED IF THEY MEET CURRENT EL PASO COUNTY AND MUTCD STANDARDS.
5. STREET NAME AND REGULATORY STOP SIGNS SHALL BE ON THE SAME POST AT INTERSECTIONS.
6. ALL REMOVED SIGNS SHALL BE DISPOSED OF IN A PROPER MANNER BY THE CONTRACTOR.
7. ALL STREET NAME SIGNS SHALL HAVE “D” SERIES LETTERS, WITH LOCAL ROADWAY SIGNS BEING 4” UPPER-LOWER CASE LETTERING ON 8” BLANK AND NON-LOCAL ROADWAY SIGNS BEING 6” LETTERING, UPPER-LOWER CASE ON 12” BLANK, WITH A WHITE BORDER THAT IS NOT RECESSED. MULTI-LANE ROADWAYS WITH SPEED LIMITS OF 35 MPH OR HIGHER SHALL HAVE 8” UPPER-LOWER CASE LETTERING ON 12” BLANK WITH A WHITE BORDER THAT IS NOT RECESSED. THE WIDTH OF THE NON-RECESSED WHITE BORDERS SHALL MATCH PAGE 255 OF THE FHWA STANDARD HIGHWAY SIGNS: 2004 EDITION WITH 2012 SUPPLEMENT. SIGNAL POLE MOUNTED AND OVERHEAD STREET NAME SIGNS SHALL BE PER MUTCD SIZE STANDARDS.
8. ALL TRAFFIC SIGNS SHALL HAVE A MINIMUM DIAMOND GRADE RETROFLECTIVE SHEETING THAT MEETS ASTM D4956 TYPE XI SHEETING REQUIREMENTS.
9. ALL LOCAL RESIDENTIAL STREET SIGNS SHALL BE MOUNTED ON A 1.75" X 1.75" SQUARE TUBE SIGN POST AND STUB POST BASE. FOR OTHER APPLICATIONS, REFER TO THE CDOT STANDARD S-614-8 REGARDING USE OF THE P2 TUBULAR STEEL POST SLIPBASE DESIGN.
10. ALL SIGNS SHALL BE SINGLE SHEET ALUMINUM WITH 0.125" MINIMUM THICKNESS.
11. ALL LIMIT LINES/STOP LINES, CROSSWALK LINES, PAVEMENT LEGENDS, AND ARROWS SHALL BE A MINIMUM 125 MIL THICKNESS PREFORMED THERMOPLASTIC PAVEMENT MARKINGS WITH TAPERED LEADING EDGES PER CDOT STANDARD S-627-1. STOP BARS SHALL BE 24" IN WIDTH. CROSSWALKS LINES SHALL BE 24" WIDE AND A MINIMUM OF 9' LONG. CROSSWALKS SHALL BE INLAID IN ACCORDANCE WITH SECTION 627 OF THE 2025 CDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION.
12. WORD AND SYMBOL MARKINGS SHALL BE THE NARROW TYPE.
13. ALL LONGITUDINAL LINES SHALL BE A MINIMUM 18 MIL THICKNESS EPOXY PAINT. ALL NON-LOCAL RESIDENTIAL ROADWAYS SHALL INCLUDE BOTH RIGHT AND LEFT EDGE LINE STRIPING AND ANY ADDITIONAL STRIPING AS REQUIRED BY CDOT S-627-1.
14. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH CDOT STANDARD S-614-1 OR MUTCD FIGURE 2A-2.
15. THE CONTRACTOR SHALL NOTIFY EL PASO DPW - INSPECTIONS (719) 520-6819 PRIOR TO AND UPON COMPLETION OF SIGNING AND STRIPING.
16. THE CONTRACTOR SHALL OBTAIN A WORK IN THE RIGHT OF WAY PERMIT FROM THE EL PASO COUNTY DPW PRIOR TO ANY SIGNAGE OR STRIPING WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY.

STAPLETON ROAD PAVEMENT MARKING PLAN

SCALE:1"-40'

LEGEND

- EXISTING PAVEMENT MARKINGS TO BE REMOVED
- EXISTING PAVEMENT MARKINGS TO REMAIN (8" GORE MARKINGS)
- EXISTING PAVEMENT MARKINGS TO BE REMOVED (8" GORE MARKINGS)

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4-WAY COMMERCIAL

CONSTRUCTION DOCUMENTS

EL PASO COUNTY, CO

REVISION	REVISION DESCRIPTION (DESCRIPTION)
△	
REVISION DATE 00/00/00	

PAVEMENT MARKING & TRAFFIC CONTROL PLAN

NORTH

40' 20' 0' 40'
SCALE: 1" = 40'

PROJECT #: 2412-0471
CHECKED BY: BML
DRAWN BY: EDM

DATE: 06/11/2026

SHEET # 11

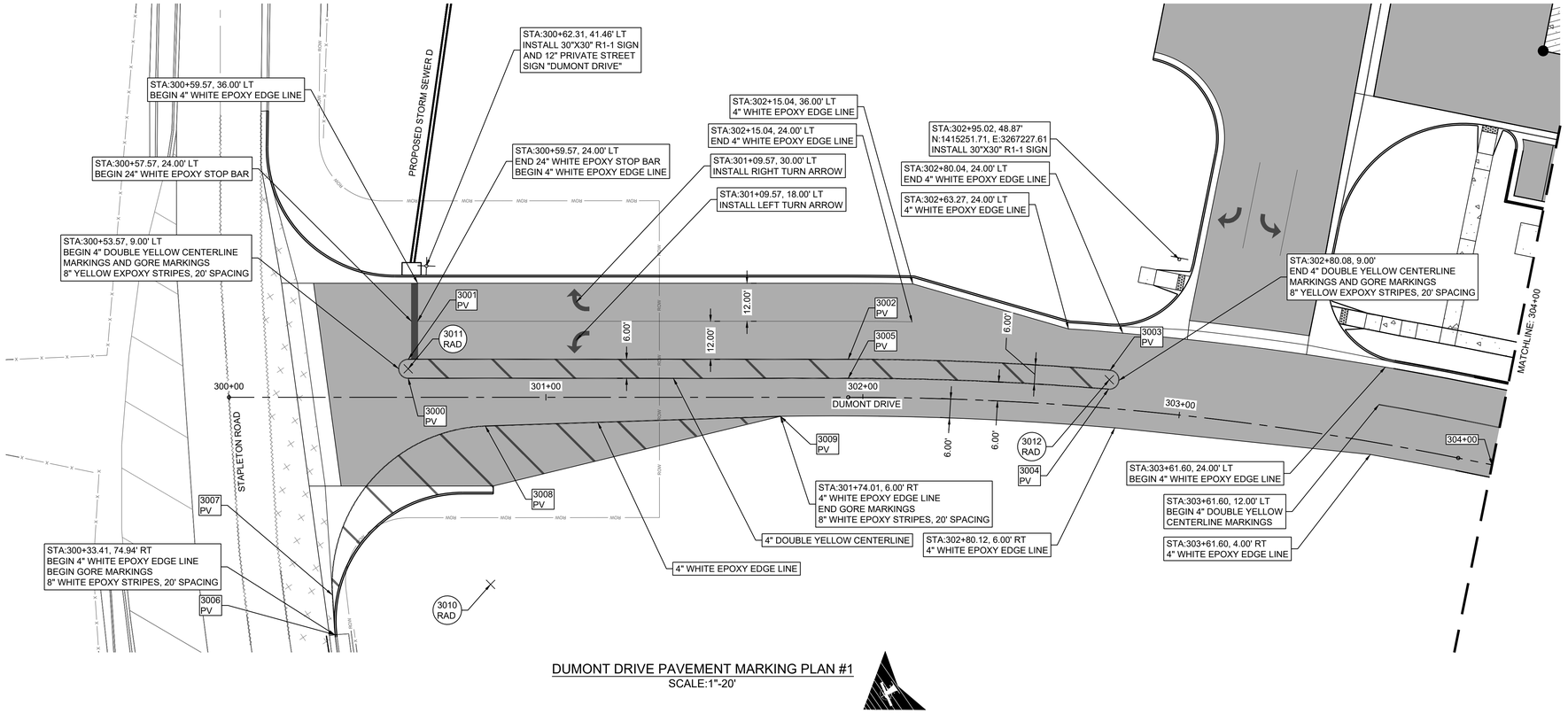
TOTAL SHEETS 48

LEGEND

PV	PAVEMENT MARKING EDGE
RAD	RADIUS
	COORDINATE POINT
	RADIUS POINT

PAVEMENT MARKING POINTS			
POINT #	NORTHING	EASTING	DESCRIPTION
3000	1415473.28	3267334.81	PV
3001	1415469.87	3267339.75	PV
3002	1415355.59	3267260.95	PV
3003	1415289.53	3267211.18	PV
3004	1415293.34	3267206.54	PV
3005	1415359.00	3267256.01	PV
3006	1415538.29	3267281.33	PV
3007	1415531.78	3267292.09	PV
3008	1415461.81	3267308.59	PV
3009	1415383.40	3267258.26	PV

RADIUS POINTS				
POINT #	NORTHING	EASTING	RADIUS	DESCRIPTION
3010	1415488.82	3267266.51	50.00'	RAD
3011	1415471.57	3267337.28	3.00'	RAD
3012	1415291.43	3267208.86	3.00'	RAD



DUMONT DRIVE PAVEMENT MARKING PLAN #1
SCALE:1"-20'

EL PASO COUNTY STANDARD SIGNING AND STRIPING NOTES:

1. ALL SIGNS AND PAVEMENT MARKING DEVICES SHALL BE IN COMPLIANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY A METHOD THAT DOES NOT MATERIALLY DAMAGE THE PAVEMENT. THE PAVEMENT MARKINGS SHALL BE REMOVED TO THE EXTENT THAT THEY WILL NOT BE VISIBLE UNDER DAY OR NIGHT CONDITIONS. AT NO TIME WILL IT BE ACCEPTABLE TO PAINT OVER EXISTING PAVEMENT MARKINGS.
3. ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS (DPW).
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10. ALL SIGNS SHALL BE SINGLE SHEET ALUMINUM WITH 0.125" MINIMUM THICKNESS.
11. ALL LIMIT LINES/STOP LINES, CROSSWALK LINES, PAVEMENT LEGENDS, AND ARROWS SHALL BE A MINIMUM 125 MIL THICKNESS PREFORMED THERMOPLASTIC PAVEMENT MARKINGS WITH TAPERED LEADING EDGES PER CDOT STANDARD S-627-1. STOP BARS SHALL BE 24" IN WIDTH. CROSSWALKS LINES SHALL BE 24" WIDE AND A MINIMUM OF 9' LONG. CROSSWALKS SHALL BE INLAID IN ACCORDANCE WITH SECTION 627 OF THE 2025 CDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION.
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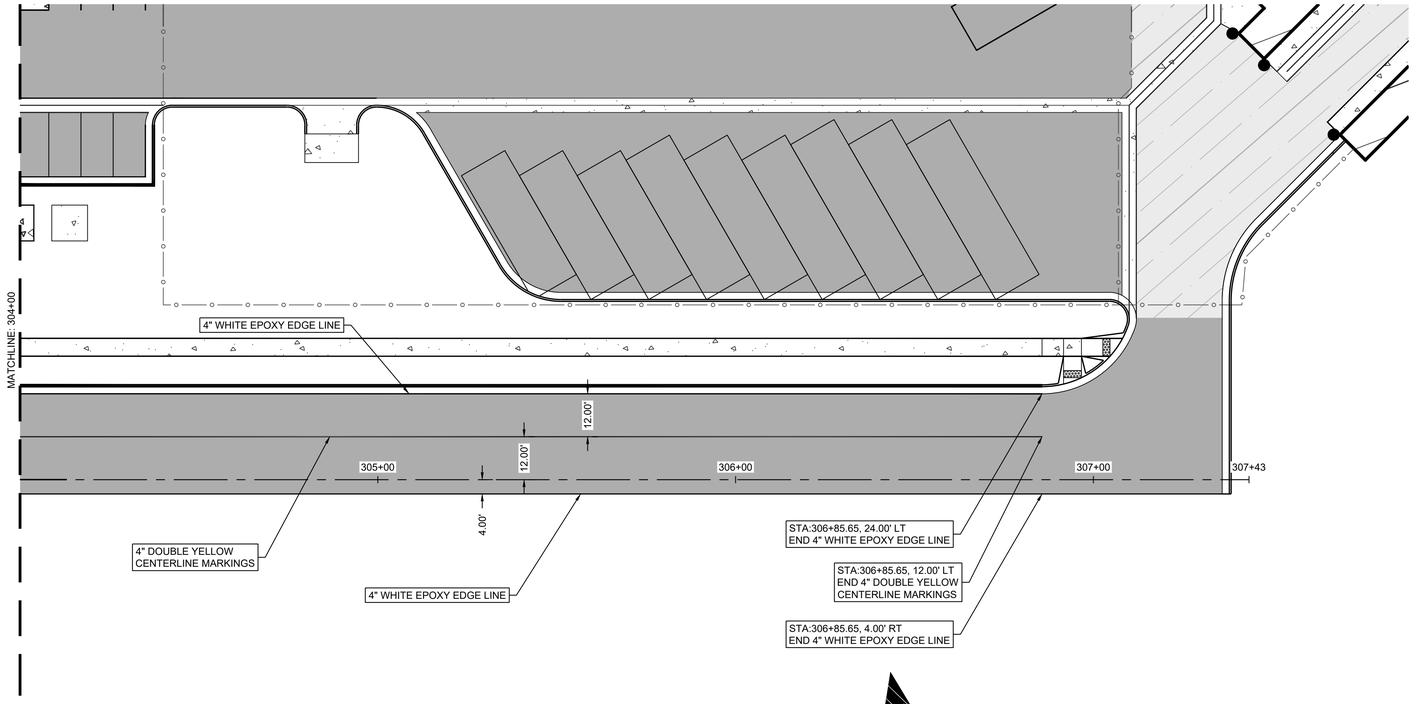
16. THE CONTRACTOR SHALL OBTAIN A WORK IN THE RIGHT OF WAY PERMIT FROM THE EL PASO COUNTY DPW PRIOR TO ANY SIGNAGE OR STRIPING WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY.



DUMONT DRIVE PAVEMENT MARKING PLAN #2
SCALE:1"-20'

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4-WAY COMMERCIAL

CONSTRUCTION DOCUMENTS

EL PASO COUNTY, CO

REVISION DATE		REVISION DESCRIPTION
00/00/00		(DESCRIPTION)

20' 10' 0' 20'
SCALE: 1" = 20'

PROJECT #: 2412-0471
CHECKED BY: BML
DRAWN BY: EDM

DATE: 06/11/2026

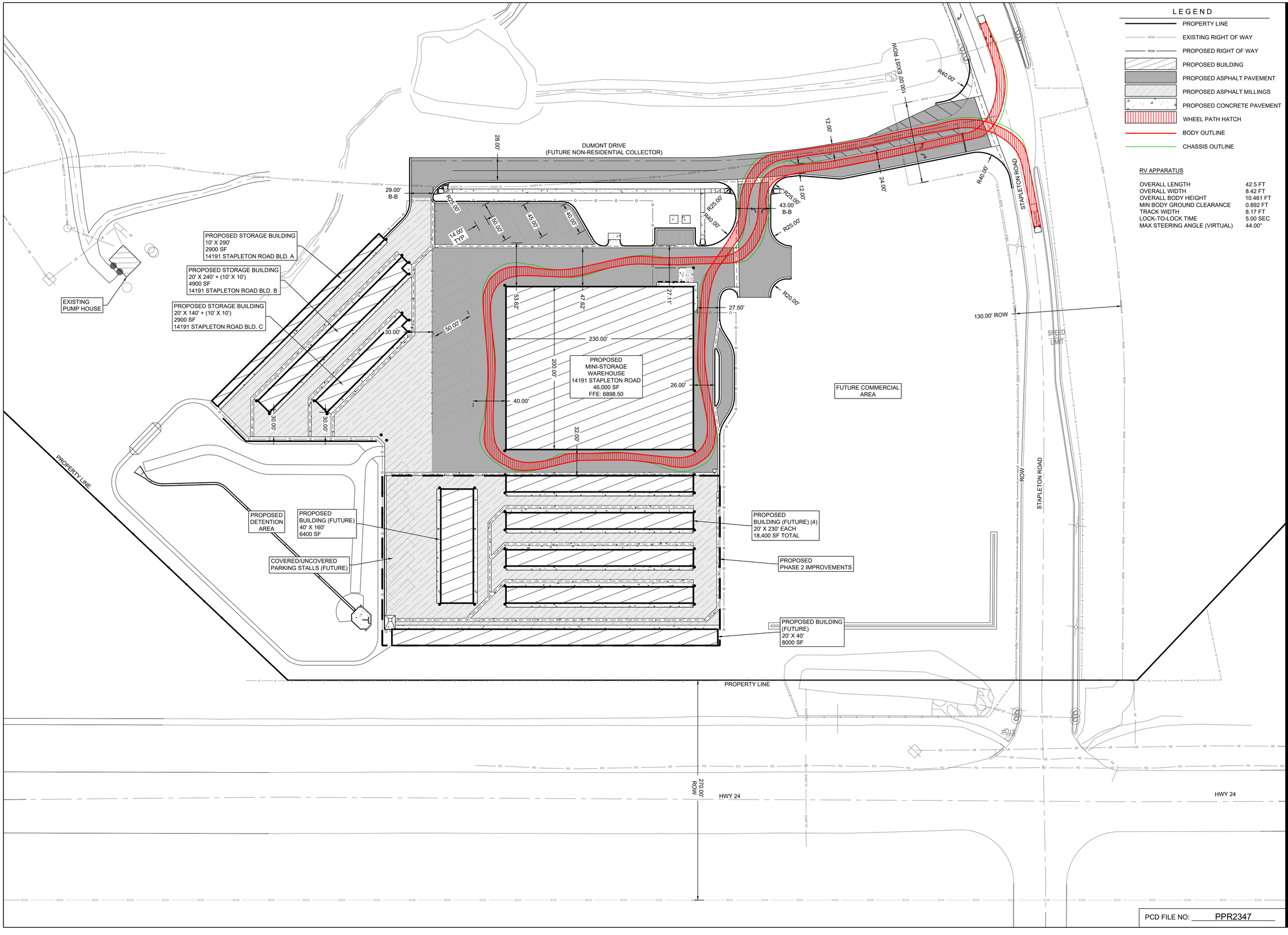
SHEET # 12

TOTAL SHEETS 48

PAVEMENT MARKING & TRAFFIC CONTROL PLAN

RV Turning Exhibits 1 and 2 (SMH)

TRANSPORTATION
CONSULTANTS, INC.



RV APPARATUS

OVERALL LENGTH	42.5 FT
OVERALL WIDTH	8.42 FT
OVERALL BODY HEIGHT	10.461 FT
MIN BODY GROUND CLEARANCE	0.892 FT
TRACK WIDTH	8.17 FT
LOCK-TO-LOCK TIME	5.00 SEC
MAX STEERING ANGLE (VIRTUAL)	44.00°

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4-WAY COMMERCIAL

SITE DEVELOPMENT PLAN DOCUMENTS

EL PASO COUNTY, CO

REVISION	DATE	REVISION DESCRIPTION (DESCRIPTION)
△	00/00/00	. . . . .

RV TURNING EXHIBIT 1

NORTH

SCALE: 1" = 50'

PROJECT #: 2412-0471
CHECKED BY: BML
DRAWN BY: EDM

DATE: 06/11/2026

SHEET # 1

TOTAL SHEETS 2

PCD FILE NO: PPR2347

Note: This portion of the entering vehicle path is no longer applicable, as the southwest access is now proposed as an "EXIT ONLY" driveway.

Please refer to Sheet 1 which shows the predominant (left turn) entering vehicle path at the northeast access.

DOMONT DRIVE
(FUTURE NON-RESIDENTIAL COLLECTOR)

28.00'
29.00'
B-B
43.00'
B-B
12.00'
24.00'
100.00' EXIST ROW
R40.00'
R25.00'
R20.00'
14.00' TYP.
50.00'
45.00'
40.00'
53.62'
47.62'
27.11'
27.50'
230.00'
200.00'
40.00'
26.00'
32.00'
30.00'
50.00'
130.00' ROW
SPEED LIMIT

PROPOSED STORAGE BUILDING
10' X 290'
2900 SF
14191 STAPLETON ROAD BLD. A

PROPOSED STORAGE BUILDING
20' X 240' + (10' X 10')
4900 SF
14191 STAPLETON ROAD BLD. B

PROPOSED STORAGE BUILDING
20' X 140' + (10' X 10')
2900 SF
14191 STAPLETON ROAD BLD. C

EXISTING
PUMP HOUSE

PROPOSED
MINI-STORAGE
WAREHOUSE
14191 STAPLETON ROAD
46,000 SF
FFE: 6898.50

FUTURE COMMERCIAL
AREA

PROPERTY LINE

PROPOSED
DETENTION
AREA

PROPOSED
BUILDING (FUTURE)
40' X 160'
6400 SF

COVERED/UNCOVERED
PARKING STALLS (FUTURE)

PROPOSED
BUILDING (FUTURE) (4)
20' X 230' EACH
18,400 SF TOTAL

PROPOSED
PHASE 2 IMPROVEMENTS

PROPOSED BUILDING
(FUTURE)
20' X 40'
8000 SF

STAPLETON ROAD
ROW

PROPERTY LINE

270.00'
ROW

HWY 24

HWY 24

STOP

LEGEND

- PROPERTY LINE
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- PROPOSED BUILDING
- PROPOSED ASPHALT PAVEMENT
- PROPOSED ASPHALT MILLINGS
- PROPOSED CONCRETE PAVEMENT
- WHEEL PATH HATCH
- BODY OUTLINE
- CHASSIS OUTLINE

RV APPARATUS

OVERALL LENGTH	42.5 FT
OVERALL WIDTH	8.42 FT
OVERALL BODY HEIGHT	10.461 FT
MIN BODY GROUND CLEARANCE	0.892 FT
TRACK WIDTH	8.17 FT
LOCK-TO-LOCK TIME	5.00 SEC
MAX STEERING ANGLE (VIRTUAL)	44.00°

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4-WAY COMMERCIAL

SITE DEVELOPMENT PLAN DOCUMENTS

EL PASO COUNTY, CO

REVISION	DATE	(DESCRIPTION)
1	00/00/00	

RV TURNING EXHIBIT 2

NORTH

SCALE: 1" = 50'

PROJECT #: 2412-0471
CHECKED BY: BML
DRAWN BY: EDM

DATE: 06/11/2026

SHEET # 2

TOTAL SHEETS 2

PCD FILE NO: PPR2347