

Traffic Impact Study

Kimley-Horn responses are shown in red text and blue outlined boxes. Thank you for your comments. Responses are provided throughout the document.

PA-5 does not appear to be accounted for anywhere in this report but is included as part of the other documents

Fine Point Business Park

Aurora, Colorado

PA-5 is included in the background traffic volumes. The project traffic volumes associated with PA-5 and Porteos Industrial were directly added to the background traffic volumes. For example, at intersection #1 the AM northbound through existing volumes is 94. With a 2% annual growth = 1.06 growth factor the 2025 background NBT traffic volumes is 100. Then the PA-5 project traffic is 65. Therefore, the reported NBT traffic volume is shown as 165.

Prepared for:

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Kimley»Horn

T R A F F I C I M P A C T S T U D Y

Fine Point Business Park

Aurora, Colorado

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April 2023

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2.0 INTRODUCTION

Kimley-Horn and Associates, Inc. has prepared this report to document the results of a Traffic Impact Study for the Fine Point Business Park project proposed to be located on the northeast corner of 56th Avenue and Jackson Gap Way in Aurora, Colorado. A vicinity map illustrating the Fine Point Business Park development location is shown in **Figure 1**. Fine Point Business Park is proposed to include approximately 1,500,000 square feet of industrial park and 160,000 square feet of mixed retail. A conceptual site plan is attached in **Appendix H**. It is expected that Fine Point Business Park will be completed in the next several years; therefore, analysis was conducted for the 2025 short-term buildout horizon as well as the 2040 long-term twenty-year planning horizon.

The purpose of this traffic study is to identify project traffic generation characteristics to determine potential project traffic related impacts on the local street system and to develop the necessary mitigation measures required for the identified traffic impacts. The following intersections were incorporated into this traffic study in accordance with the City of Aurora requested scope:

- 58th Avenue and Jackson Gap Way
- 56th Avenue and Jackson Gap Way
- 56th Avenue and Powhaton Road
- 64th Avenue and Powhaton Road

In addition, the proposed three accesses along Jackson Gap Way, the two accesses along 56th Avenue, the four accesses along 58th Avenue, and the five accesses along Powhaton Road were evaluated. It should be noted that the project team is currently considering two or three accesses along 56th Avenue. This study conservatively was evaluated as delays would improve if three accesses are proposed in

The number of accesses has been revised to match the figures and analysis.

Regional access to Fine Point Business Park will be provided by E-470 and Peña Boulevard while Primary access will be provided by 56th Avenue, Jackson Gap Way, and Powhaton Road. Direct access will be provided by 58th Avenue, 56th Avenue, Jackson Gap Way, and Powhaton Road from 14 accesses.

not seeing anywhere in the analysis that 2 accesses were evaluated before adding the 3rd - sentence seems irrelevant if a comparison demonstrating the need for a 3rd access isn't provided

not sure this is written correctly - between the project and 64th Ave to the north are Karacher North America and Costco distribution center, existing parking adjacent to project, vacant land everywhere else

existing and future conditions need to be separate so justification can be provided for future conditions based on analysis

The future conditions are reported in the NEATS Refresh document or will match the existing cross-sections that are constructed today. This section simply states what is being planned by the City of Aurora from their long-range roadway plans. The analysis did determine if these ultimate roadway conditions will be needed and stated if the ultimate cross-section is not needed operationally within the operational analysis section. However, this section has been moved to the operational analysis section.

The existing study area description has been updated and corrected.

3.0 EXISTING AND FUTURE CONDITIONS

The existing study area consists of vacant land. The surrounding area mostly consists of industrial/warehouse uses. The project fronts 64th Avenue on the west side of Karacher North America to the west. The Denver International Airport is located approximately 1.5 miles north of the site.

street view shows 35 mph posted speed limit adjacent to the project

3.2 Existing and Future Roadway Network

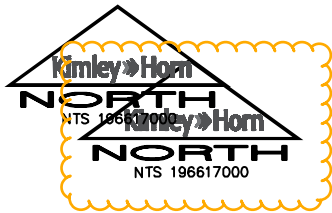
Jackson Gap Way provides a two lanes of travel in both directions, northbound and southbound, with a 40 mile per hour posted speed limit, and a double yellow center line.

Powhaton Road extends north-south with one through lane in each direction, a centerline striping and has a posted speed limit of 40 miles per hour. Powhaton Road extends from 56th Avenue to 68th Avenue. Powhaton Road is a two-lane section with a two-way left turn center lane fronting the Costco Distribution Center and future Porteos Industrial development. Therefore, Powhaton Road will be improved to the five-lane section from the limits of the improvements from the north to 56th Avenue.

The posted speed limit has been corrected. The 40mph posted speed limit is shown for Powhaton Road, south of 64th Avenue in the southbound direction.

56th Avenue and 58th Avenue extend eastbound and westbound with one through lane of travel in each direction with striped center medians. 56th Avenue and 58th Avenue provide a speed limit of 40 miles per hour. 56th Avenue is planned to ultimately provide a six-lane section; however, the interim cross-section will be a three-lane section from Jackson Gap Way to Powhaton Road. 58th Avenue is planned to be a collector roadway with bicycle lanes and on-street parking. 58th Avenue will be extended from the mid-section line east of Jackson Gap Way to Powhaton Road.

64th Avenue extends east/west with two through lanes in each direction and a two-way left-turn lane center lane from Jackson Gap Street to Powhaton Road. The posted speed limit along the roadway is 40 miles per hour with sidewalks provided on the north and south side of the roadway. 64th Avenue is currently constructed from the E-470 interchange to the intersection of Jackson Gap Street. However, the west leg is not open to traffic and barricades block traffic from entering and exiting the west leg. By project buildout in 2025, this leg will be open to traffic.



Extra logo removed.

remove extra logo

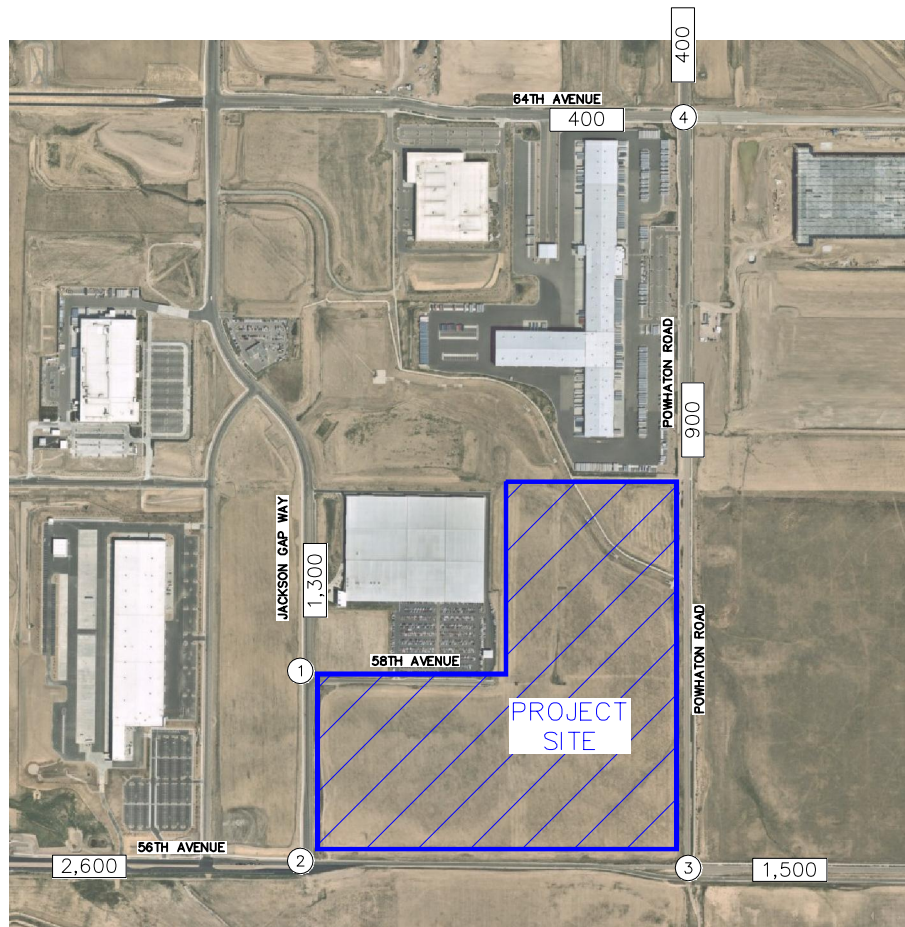
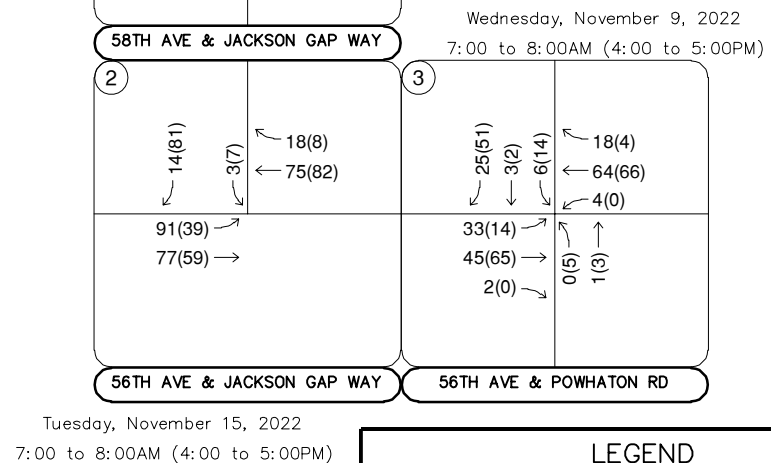
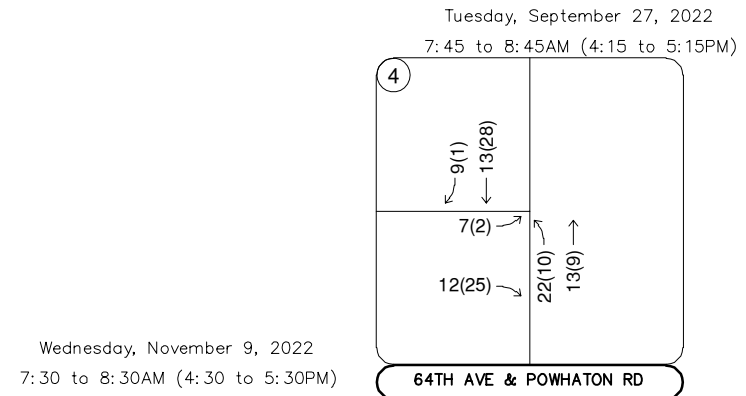


FIGURE 3
FINE POINT BUSINESS PARK
AURORA, COLORADO
2022 EXISTING TRAFFIC VOLUMES



LEGEND

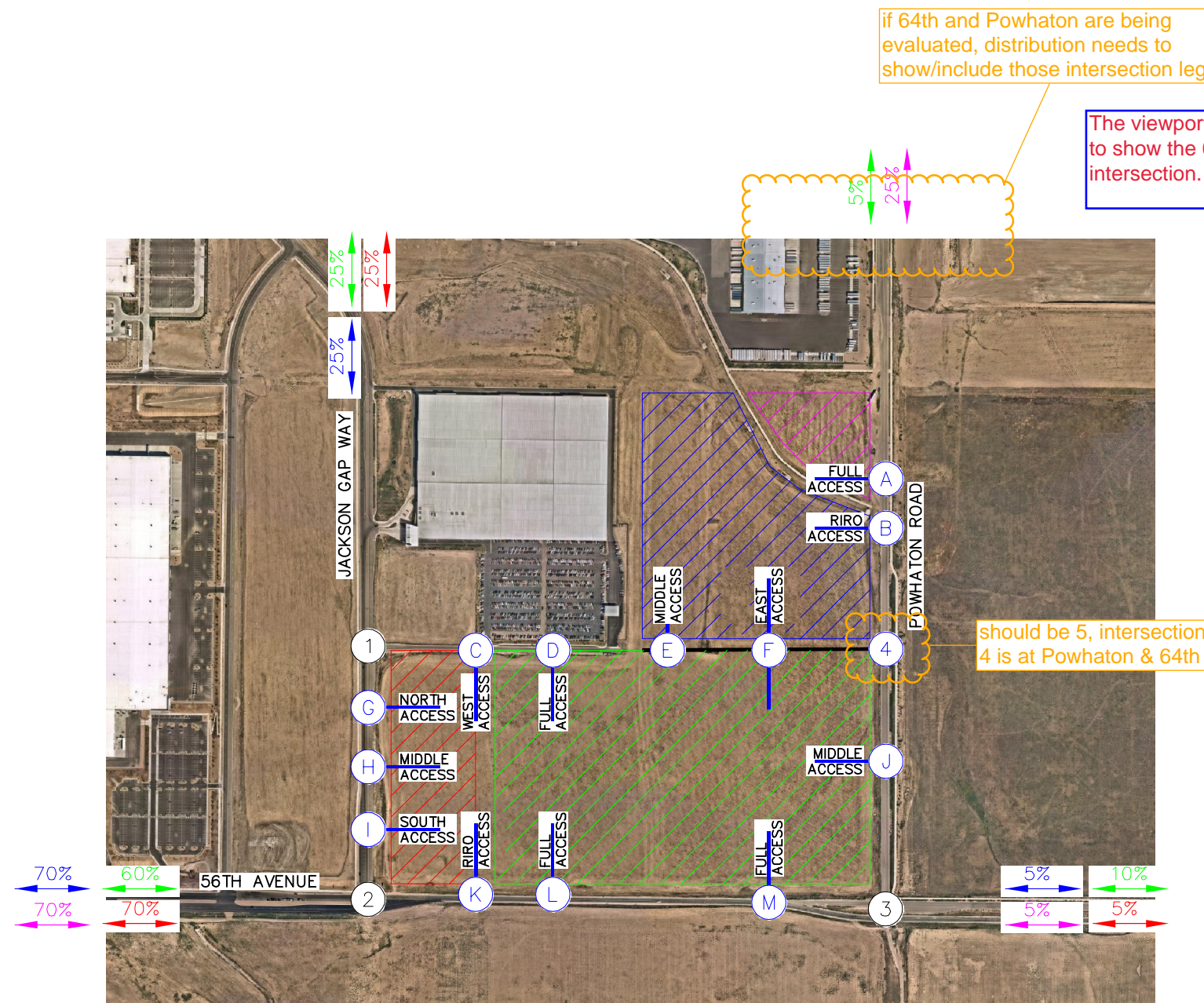
- (X) Study Area Key Intersection
- XXX(XXX) Weekday AM(PM)
Peak Hour Traffic Volumes
- XX,X00 Estimated Daily Traffic Volume

Since the project is a commercial development, pass-by trips are expected. The existing traffic volumes are too low to apply pass-by assignment to some of the intersections. Therefore, the pass-by trips for the retail portion will be applied to the 2040 long-term horizon. It should be noted that pass-by trips were only conservatively applied to the long-term horizon as traffic volumes are currently not high enough to attract pass-by trips. The project traffic has been updated and the intersection analysis has been revised to not account for pass-by for the retail during the morning peak hour. These pass-by trips are vehicles already on the road passing the gas station. The pass-by percentages were obtained from ITE, Eleventh Edition, which has a pass-by percentage of 40 percent during the afternoon peak hour for Shopping Plaza. This 40 percent was also applied to the daily and morning peak hour. Therefore, accounting for pass-by, expected net new (non-pass-by) trips to the surrounding street network results in the approximately 11,738 weekday daily trips, of which 663 trips and 996 trips are anticipated during the weekday morning and afternoon peak hours, respectively. The trip generation worksheets are included in **Appendix C**.

AM/PM pass by assumptions differ per ITE. PM assumptions shouldn't be applied to AM peak

Table 2 – 2040 Fine Point Business Park Traffic Generation

Land Use and Size	Weekday Vehicle Trips						
	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Industrial Park (ITE 130) –							
426,200 SF (Buildings 3 & 4)	1,438	117	28	145	32	113	145
61,500 SF (Building 5)	208	17	4	21	5	16	21
973,620 SF (Buildings 6, 7, & 8)	3,282	268	63	331	73	258	331
Total Industrial Trips							
1,461,320 Square Feet	4,928	402	95	497	110	387	497
Shopping Plaza Non-Pass-By							
160,100 Square Feet	6,486	103	63	166	244	254	499
Shopping Plaza Pass-By	4,324	69	42	111	163	170	332
Total Non-Pass-By Trips	11,738	505	158	663	354	641	996
Total Pass-By Trips	4,324	69	42	111	163	170	332



The intersection # label has been updated.

The viewport has been extended to show the 64th & Powhatan intersection.

if 64th and Powhatan are being evaluated, distribution needs to show/include those intersection legs

should be 5, intersection 4 is at Powhatan & 64th

LEGEND

X

Study Area Key Intersection

X

Project Access Intersection

XX%

External Trip Distribution Percentage

↔

Building 3,4

↔

Building 5

↔

Building 6,7,&8

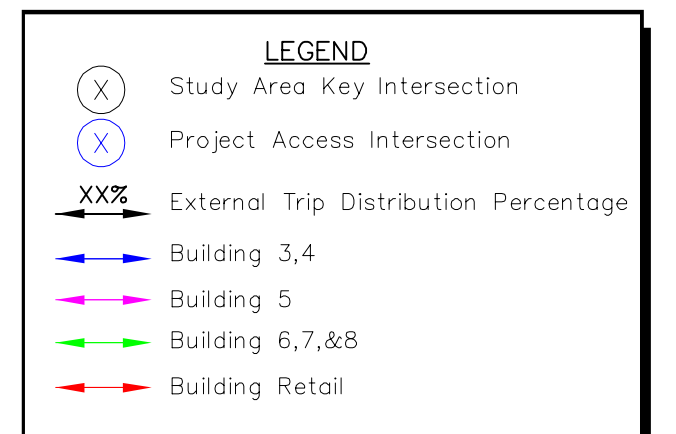
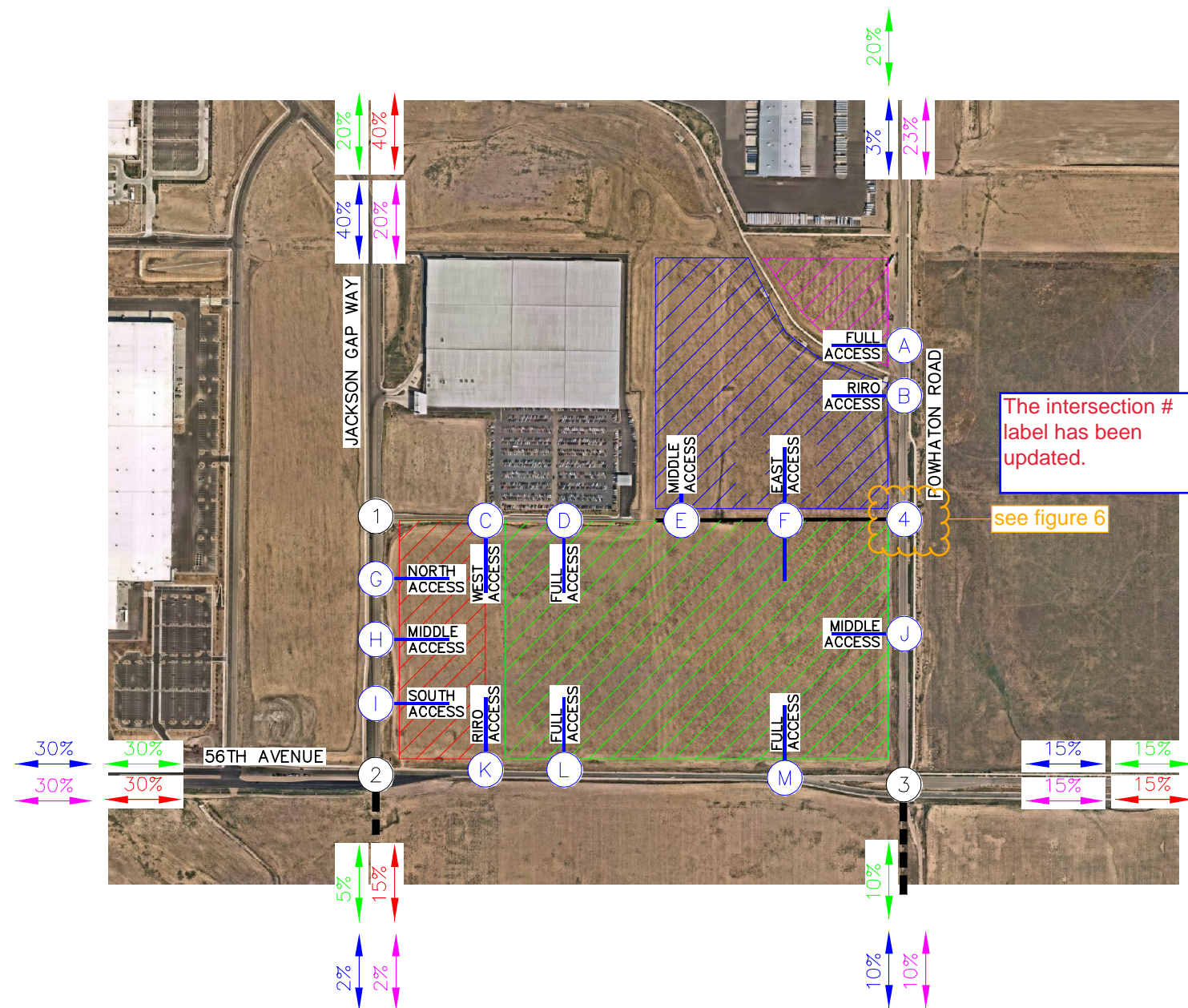
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Building Retail



FIGURE 6
FINE POINT BUSINESS PARK
AURORA, COLORADO
2025 PROJECT TRIP DISTRIBUTION

FIGURE 7
FINE POINT BUSINESS PARK
AURORA, COLORADO
2040 PROJECT TRIP DISTRIBUTION



LEGEND

X

Study Area Key Intersection

X

Project Access Intersection

XXX(XXX)

Weekday AM(PM)

Peak Hour Traffic Volumes

XX,X00

Estimated Daily Traffic Volume

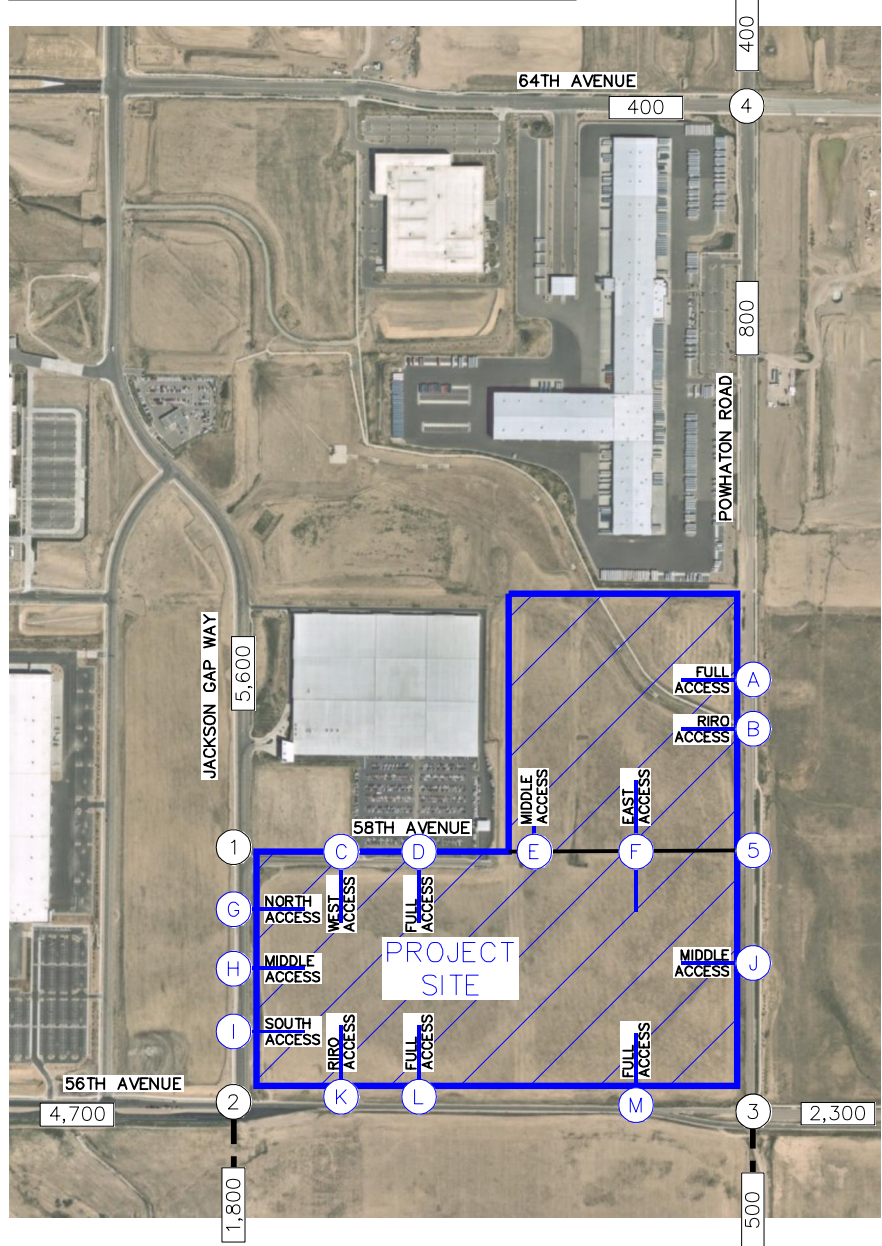
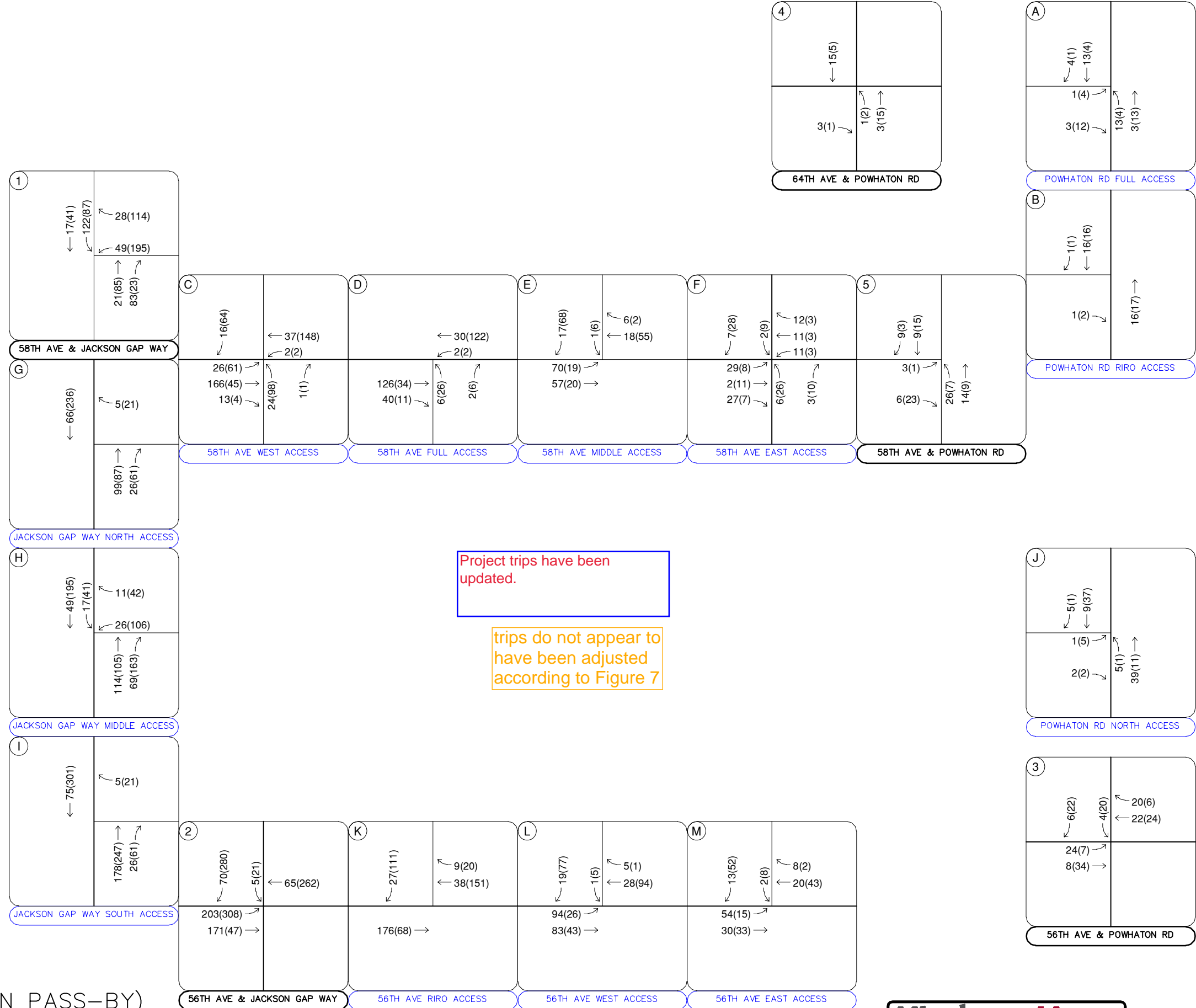


FIGURE 9
FINE POINT BUSINESS PARK
AURORA, COLORADO
2040 PROJECT TRAFFIC ASSIGNMENT (NON PASS-BY)



Study area intersections were analyzed based on average total delay analysis for signalized and unsignalized intersections. Under the unsignalized analysis, the LOS for a two-way stop-controlled intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS for a two-way stop-controlled intersection is not defined for the intersection as a whole. LOS for signalized, roundabout, and all-way stop controlled intersections are defined for each approach and for the overall intersection.

5.2 Key Intersection Operational Analysis

Calculations for the operational level of service at the key intersections for the study area are provided in **Appendix E**. The existing year analysis is based on the lane geometry and intersection control shown in **Figure 2**. Existing p 2025 horizon analysis years while the HCM urb 2040 horizon analysis. Synchro traffic analysis s unsignalized key intersections for HCM level of s

58th Avenue and Jackson Gap Way

The unsignalized 'T'-intersection of 58th Avenue a on the westbound approach of 58th Avenue. With all movements at this intersection currently open during morning and afternoon peak hours. With project traffic, the intersection is anticipated to operate acceptably through the long-term 2040 horizon. Therefore, no improvements or modifications are anticipated to be needed at this intersection based on the addition of project traffic and this operational level of service analysis. **Table 4** provides the results of the LOS analysis conducted at this intersection.

Table 4 – 58th Avenue & Jackson Gap Way LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2022 Existing				
Westbound Left	9.3	A	9.2	A
Southbound Left	0.0	A	0.0	A
2025 Background				
Westbound Left	9.7	A	9.4	A
Southbound Left	0.0	A	0.0	A
2025 Background Plus Project				
Westbound Left	12.2	B	15.5	C
Westbound Right	9.1	A	9.5	A
Southbound Left	8.4	A	7.9	A

The movement LOS is provided in Appendix E. However, the movement LOS has been provided in this table.

provide movement LOS

Table 5 – 56th Avenue & Jackson Gap Way LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2022 Existing				
Eastbound Left	7.7	A	7.5	A
Southbound Left	10.3	B	9.6	A
Southbound Right	8.8	A	9.2	A
2025 Background				
Eastbound Left	8.1	A	8.7	A
Southbound Left	14.6	A	12.3	B
Southbound Right	9.4	A	13.5	B
2025 Background Plus Project #				
Eastbound Left	9.1	A	13.5	B
Southbound Left	24.8	C	28.1	D
Southbound Right	10.3	B	42.8	E
2040 Background #	28.1	C	30.3	C
2040 Background Plus Project #	38.2	D	53.9	D

= Separate Left Turn Lanes

\$ = Signalization with Addition of South Leg and Full Intersection Configuration

56th Avenue and Powhatan Road

The unsignalized 'T'-intersection of 56th Avenue and Powhatan Road operates with stop control on the northbound and southbound approaches of Powhatan Road. With this control and the existing lane configurations, all movements at this intersection currently operate acceptably with LOS B during morning and afternoon peak hours. As mentioned previously, 56th Avenue and Powhatan Road will be widened from two-lane sections to a three-lane section adjacent to the project's frontage. The three-lane section along Powhatan Road will include a center two-way left turn along lane.

By the long-term 2040 horizon, an MUTCD Four Hour Signal Warrant Analysis was completed, and it is determined that all four hours are anticipated to be met for signalization based on background traffic volumes. The four-hour signal warrant is included in **Appendix G**. Signalization of this intersection is consistent with the background traffic studies in the surrounding area. The NEATS Refresh identifies that Powhatan Road will be constructed to the south. The existing second westbound through lane is currently striped out but can be striped once two receiving lanes are constructed. Further, the westbound right turn lane will need to be reconstructed due to currently being in the location of the future through lane. This right turn lane is currently being dropped as a forced right turn lane. In addition, the southbound right turn lane will be continuous

from the second southbound through lane. The auxiliary turn lanes will be warranted with the projected 2040 volumes and the Porteos Industrial Traffic Study identified the intersection to become signalized. When these improvements occur, this intersection is expected to operate acceptably with LOS E better during the morning and afternoon peak hours with project traffic in the long-term 2040 horizon

Of note, if 2040 volumes are realized, NEATS Refresh identifies 56th Avenue with ultimately a six-lane roadway adjacent to the project. With the third through lane, the right turn lanes can be absorbed along 56th Avenue. As shown as a six-lane roadway along 56th Avenue, the intersection will operate with LOS D during both peak hours. **Table 6** provides the results of the level of service at this intersection.

Table 6 – 56th Avenue & Powhatan Road LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2022 Existing				
Northbound Approach	10.5	B	10.0	B
Eastbound Left	7.7	A	7.5	A
Westbound Left	7.5	A	0.0	A
Southbound Left	9.9	A	9.6	A
Southbound Through/Right	9.1	A	9.0	A
2025 Background				
Northbound Approach	27.0	D	18.3	C
Eastbound Left	9.2	A	7.7	A
Westbound Left	7.5	A	0.0	A
Southbound Left	33.3	D	12.1	B
Southbound Through/Right	10.1	B	12.2	B
2025 Background Plus Project				
Northbound Approach	28.5	D	21.6	C
Eastbound Left	9.1	A	7.8	A
Westbound Left	7.4	A	0.0	A
Southbound Left	32.9	D	13.1	B
Southbound Through/Right	10.0	B	13.1	B
2040 Background #	52.6	D	53.2	D
2040 Background Plus Project #	59.1	E	59.1	E
2040 Background Plus Project #	51.9	D	51.3	D

= Signalization with Addition of South Leg and Full Intersection Configuration, Two EB and WB through Lanes

\$ = Three EB and WB Through Lanes, Absorbed Right Turn Lanes along 56th Avenue

provide LOS by movement

The movement LOS is provided in Appendix E. However, the movement LOS has been provided in this table.

Table 7 – 64th Avenue & Powhatan Road LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2022 Existing				
Northbound Left	7.3	A	7.3	A
Eastbound Left	9.0	A	8.9	A
Eastbound Right	0.0	A	0.0	A
2025 Background #				
Northbound Left	7.4	A	7.9	A
Eastbound Left	13.3	B	19.6	C
Eastbound Through	11.6	B	18.9	C
Westbound Left	10.7	B	16.2	A
Westbound Through	12.5	B	18.9	C
Southbound Left	0.0	A	0.0	C
2025 Background Plus Project #				
Northbound Left	7.5	A	7.9	A
Eastbound Left	13.4	B	20.3	C
Eastbound Through	11.7	B	19.4	C
Westbound Left	10.8	B	16.5	A
Westbound Through	12.7	B	19.5	C
Southbound Left	0.0	A	0.0	C
2040 Background##	17.5	B	18.4	B
2040 Background Plus Project #	17.7	B	18.6	B

= Addition of East Leg
\$ = Signalized

provide LOS by movement

should this be #\$\$?

The note symbol has been corrected.

The movement LOS is provided in Appendix E. However, the movement LOS has been provided in this table.

Project Accesses

With completion of the Fine Point Business Park project, 58th Avenue will be extended to the mid-section line east of Jackson Gap Way to Powhaton Road (#4) and a total of four (4) accesses will be provided along Jackson Gap Way, 58th Avenue, Powhaton Road, and 56th Avenue. Three (3) accesses (#G, H, and I) are proposed along Jackson Gap Way, four (4) accesses (#C, D, E, & F) are proposed along 58th Avenue, three (3) accesses (#A, B, and J) are proposed along Powhaton Road, and three (3) accesses (#K, L, and M) along 56th Avenue. The access roadways along Jackson Gap Way, Powhaton Road, and 56th Avenue all will be private roadways.

Corrected numbering.

#5

seems like this should be referring to the actual roadway not the accesses

The wording has been revised.

This wording has been added to the sentence.

north of the project

Powhaton Road is a five-lane section with a center two-way left turn lane. Of note, the accesses along 56th Avenue and Powhaton Road will be constructed with one through lane in each direction and left turn lanes in the interim. 56th Avenue was evaluated as a four-lane roadway with a center median and left turn lanes at intersections and accesses. The NEATS Refresh identifies Jackson Gap Way and 56th Avenue ultimately as six-lane roadways adjacent to the project. However, 56th Avenue and Jackson Gap Way are both expected to operate acceptably as four-lane roadways with 2040 traffic projections; therefore, were evaluated as such in this study. If both 56th Avenue and Jackson Gap Way are constructed as six-lane roadways by 2040, the intersections and accesses along these roadways within the study limits will operate with reduced vehicles delays than reported in this study for 2040.

The future intersection of 58th Avenue and Powhaton Road (#5) is proposed to operate with stop control on the eastbound approach of 58th Avenue. Access B, G, I, and K are proposed to be restricted to right-in/right-out movements. All accesses are recommended to provide R1-1 "STOP" signs on the approaches exiting the development. In addition, at the right-in/right-out accesses, R3-2 "No Left Turn" signs are recommended to be placed below the R1-1 signs. Further, additional signage and physical restrictions could be considered to restrict left turn movements into the site and left turn movements out of the site if desired. **Table 8** provides the results of the level of service for the proposed project accesses and future intersection. As shown in the table, all proposed access intersections are anticipated to have all movements operating with acceptable LOS C or better during the peak hours in both the buildout year 2025 and the 2040 long term horizons.

Table 9 – Turn Lane Warrant and Length Summary

Intersection	2025 Buildout			2040 Horizon		
	Volume	Warrant Met	Turn Lane Length	Volume	Warrant Met	Turn Lane Length
56th Ave & Jackson Gap Way (#1)						
Northbound Right	83	Y	Existing (125')	65	Y	Existing (125')
Southbound Left	122	Y	TWLTL	130	Y	TWLTL
56th Ave & Jackson Gap Way (#2)						
Eastbound Left	365	Y	Existing (225')	245	Y	Existing (225')
Westbound Right	19	N	Existing (C)	65	Y	150'+140'T
Southbound Left	28	N	Existing (C)	240	Y	Existing (300')
Southbound Right	416	Y	Existing (C)	275	Y	Existing (300')
56th Ave & Powhatan Rd (#3)						
Eastbound Left	435	Y	Existing (100')	535	Y	325'+140'T DL
Westbound Right	81	Y	Existing (C)	235	Y	150'+140'T
Southbound Left	81	Y	Existing (150')	240	Y	TWLTL
Southbound Right	443	Y	C	445	Y	C
64th Ave & Powhatan Rd (#4)						
Eastbound Left	65	Y	Existing (200')	200	Y	Existing (200')
Eastbound Right	248	Y	Existing (C)	820	Y	Existing (C)
Westbound Left	10	X	150'+140'T	95	Y	150'+140'T
Westbound Right	0	X	C	50	X	C
Northbound Left	241	Y	Existing (350')	810	Y	350' DL
Northbound Right	11	Y	C	80	Y	C
Southbound Left	0	X	150'+140'T	55	Y	150'+140'T
58th Ave & Powhatan Rd (#5)						
Northbound Left	26	X	TWLTL	40	Y	TWLTL
Southbound Right	9	N	-	50	N	-
Powhatan Rd Full Access (#A)						
Northbound Left	13	X	TWLTL	15	X	TWLTL
Southbound Right	4	N	-	5	N	-
Powhatan Rd RIRO Access (#B)						
Southbound Right	1	N	-	5	N	-
58th Ave West Access (#C)						
Eastbound Left	61	X	-	40	X	-
Eastbound Right	13	N	-	25	N	-
Westbound Left	2	N	-	0	N	-
Westbound Right	0	N	-	0	N	-
58th Ave Full Access (#D)						
Eastbound Right	40	N	-	30	N	-
Westbound Left	2	N	-	30	N	-
58th Ave Middle Access (#E)						
Eastbound Left	70	X	-	65	X	-
Westbound Right	6	N	-	15	N	-
58th Ave East Access (#F)						
Eastbound Left	29	N	-	20	N	-
Eastbound Right	27	Access G, H, and I have been included in the table.	-	35	N	-
Westbound Left	17		-	30	N	-
Westbound Right	12		-	20	N	-
Powhatan Rd Access (#J)						
Southbound Right	5	N	-	5	N	-

missing accesses G, H, I

Intersection	2025 Buildout			2040 Horizon		
	Volume	Warrant Met	Turn Lane Length	Volume	Warrant Met	Turn Lane Length
Northbound Left	5	X	TWLTL	5	X	TWLTL
56th Ave RIRO Access (#K)						
Westbound Right	20	N	-	45	N	-
56th Ave West Access (#L)						
Eastbound Left	94	Y	150'+140'T	40	Y	150'+140'T
Westbound Right	5	N	-	30	N	-
56th Ave Full Access (#M)						
Eastbound Left	54	Y	150'+140'T	40	Y	150'+140'T
Westbound Right	8	N	-	30	N	-

Y = Yes; N = No; X = Explanation Provided Below

include all abbrev.
definitions (C, T, DL, etc.)

These abbreviations have
been included at the
bottom of the table.

Short-Term 2025 Turn Lane Evaluation

The west leg of the 64th Avenue and Powhaton Road (#4) intersection is recommended to provide a southbound left turn lane within the existing unused center lane and a separate westbound left and right turn lane. The westbound turn lanes have been identified in other adjacent studies and have been included to be consistent.

Powhaton Road is planned to be widened from two-lanes to a three-lane section with a two-way left turn center lane. Therefore, the 58th Avenue, Full Access (#A), and Middle Access (#K) intersections along Powhaton Road will utilize the future two-way left-turn lane. Likewise, southbound left turn movement at the Middle Access (#H) will utilize the existing two-way left turn lane. Therefore, the double yellow striped center medians will need to be restriped to allow vehicles to enter the center lane to turn into the site.

58th Avenue is classified as a collector roadway and CDOT does not provide turn lane guidelines for collector roadways. Further, 58th Avenue extends from Jackson Gap Way to Powhaton Road and will not serve intercity or regional travel. Therefore, turn lanes are not recommended or proposed at the project accesses along 58th Avenue.

Intersection Turn Lane	Existing Turn Lane Length (feet)	2025 Calculated Queue (feet)	2025 Recommended Length (feet)	2040 Calculated Queue (feet)	2040 Recommended Length (feet)
Jackson Gap & Middle Access (#H) Northbound Right	DNE	25	150'+140'T	25	150'+140'T
56th Ave West Access (#L) Eastbound Left	DNE	25'	150'+140'T	25'	150'+140'T
56th Ave East Access (#M) Eastbound Left	DNE	25'	150'+140'T	25'	150'+140'T

DNE = Does Not Exist; C = Continuous Lane; T = Taper; DL = Dual Left; TWTLT = Two-Way Left Turn Lane; **Blue** Text = Recommendation, Alternative Analysis w Three EB and WB Through Lanes

The vehicle queues all are anticipated to remain within the existing or recommended turn lane lengths through 2040. A minimum storage length of 150 feet was assumed for all auxiliary turn lanes that reported queues less than 150 feet. Of note, the southbound left and right turn lanes at the 56th Avenue and Jackson Gap Way (#2) intersection are already constructed. However, they are currently striped out and transition from the two southbound through lanes along Jackson Gap Way.

5.5 Pedestrian Safety and Traffic Calming

The surrounding area is half built and half vacant. The built-out areas provide sidewalks along the roadways fronting complete projects. In addition, sidewalk is provided on the north side of 56th Avenue between Jackson Gap Street and Jackson Gap Way and east of Powhaton Road. The site will provide sidewalk fronting the development along Jackson Gap Way, 58th Avenue, 56th Avenue, and Powhaton Road. In addition, the collector roadway cross-section along 58th Avenue will provide bicycle lanes and on-street parking. It is anticipated by 2040, the signalized intersections in the surrounding area will have pedestrian signals. Public transportation does not currently exist in the surrounding area near the project site.

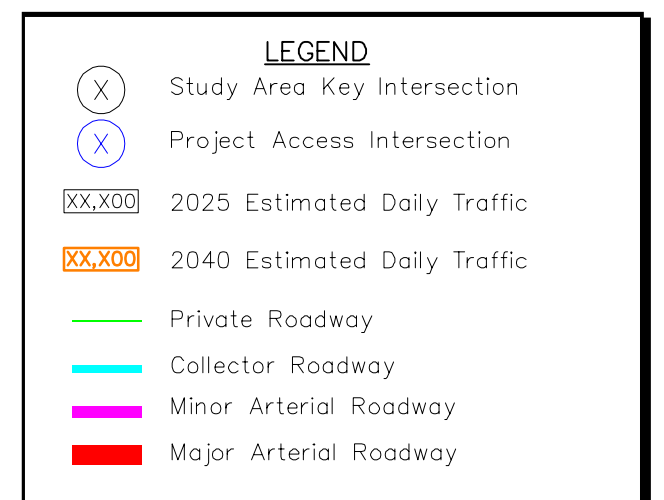
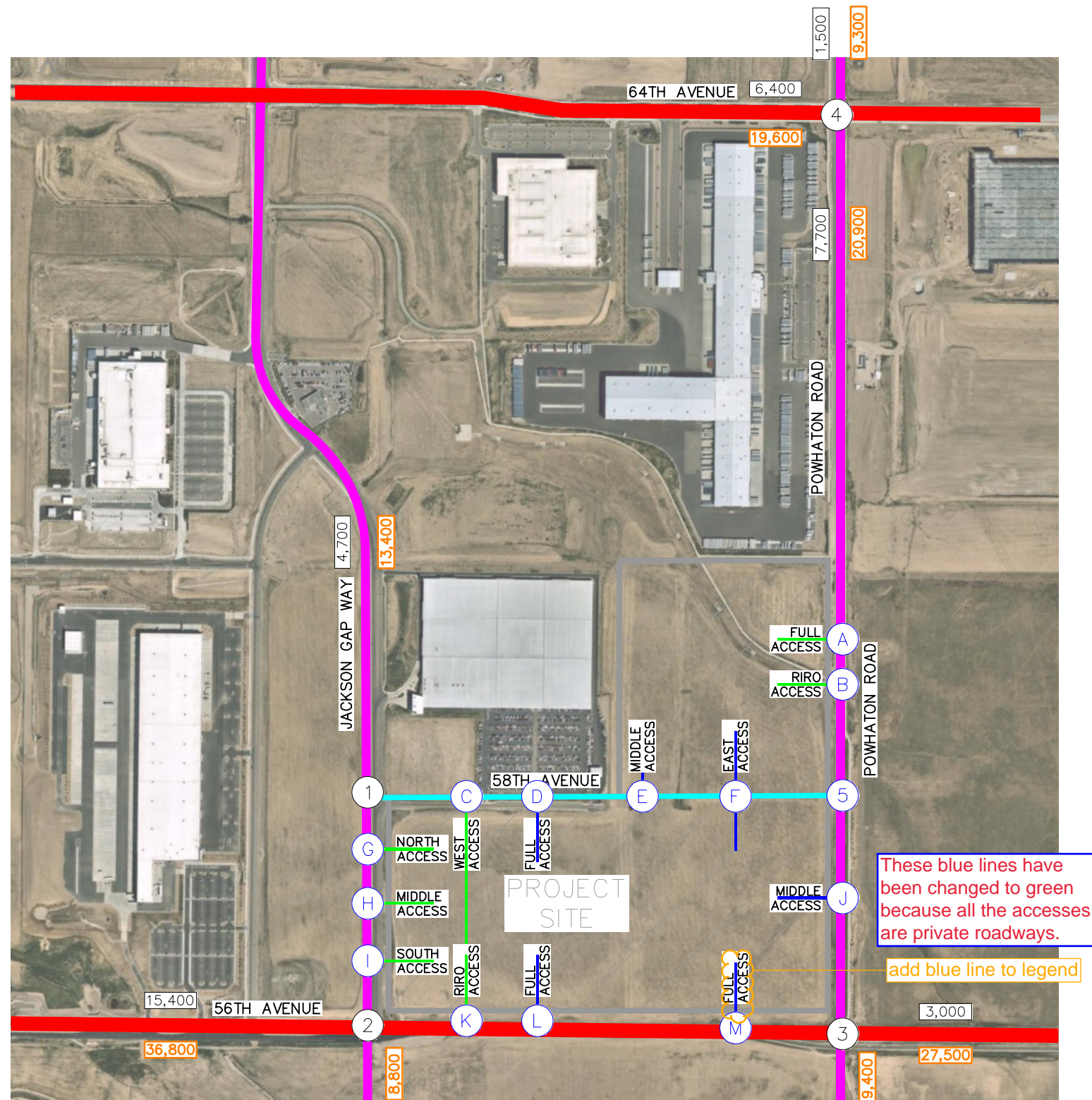
These two text changes have been made.

5.6 Roadway Classification

As noted in the Pre-App notes, the roadway classifications for the surrounding area roadway network are shown in **Figure 13**. Jackson Gap Way is now to be classified as a minor arterial roadway, along with Powhaton Road. 56th Avenue and 58th Avenue will continue to be classified as major arterials and 58th Avenue is classified as a collector roadway. Further, the access connections to Jackson Gap Way, 56th Avenue, Powhaton Road, and 58th Avenue are all planned to be private roadways and provide internal connections between development parcels.



FIGURE 13
FINE POINT BUSINESS PARK
AURORA, COLORADO
ROADWAY CLASSIFICATION



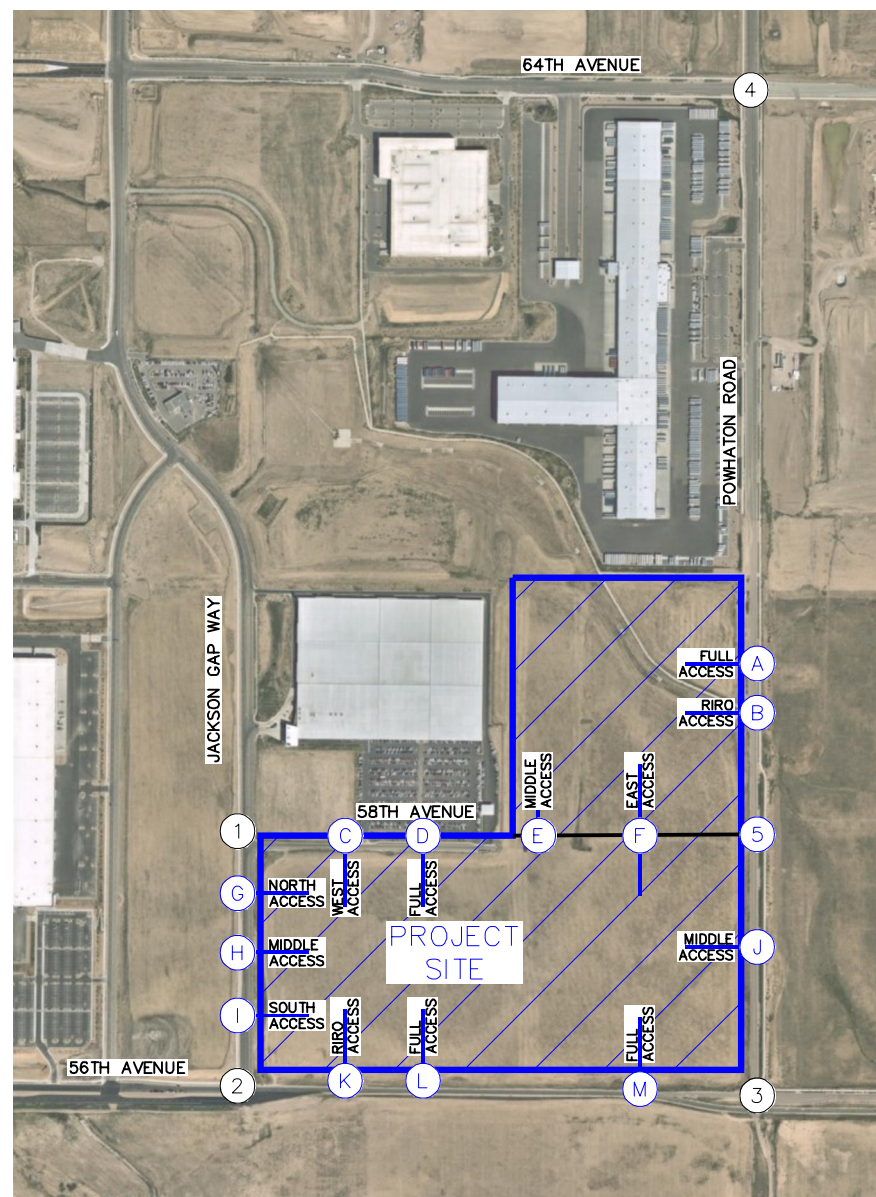
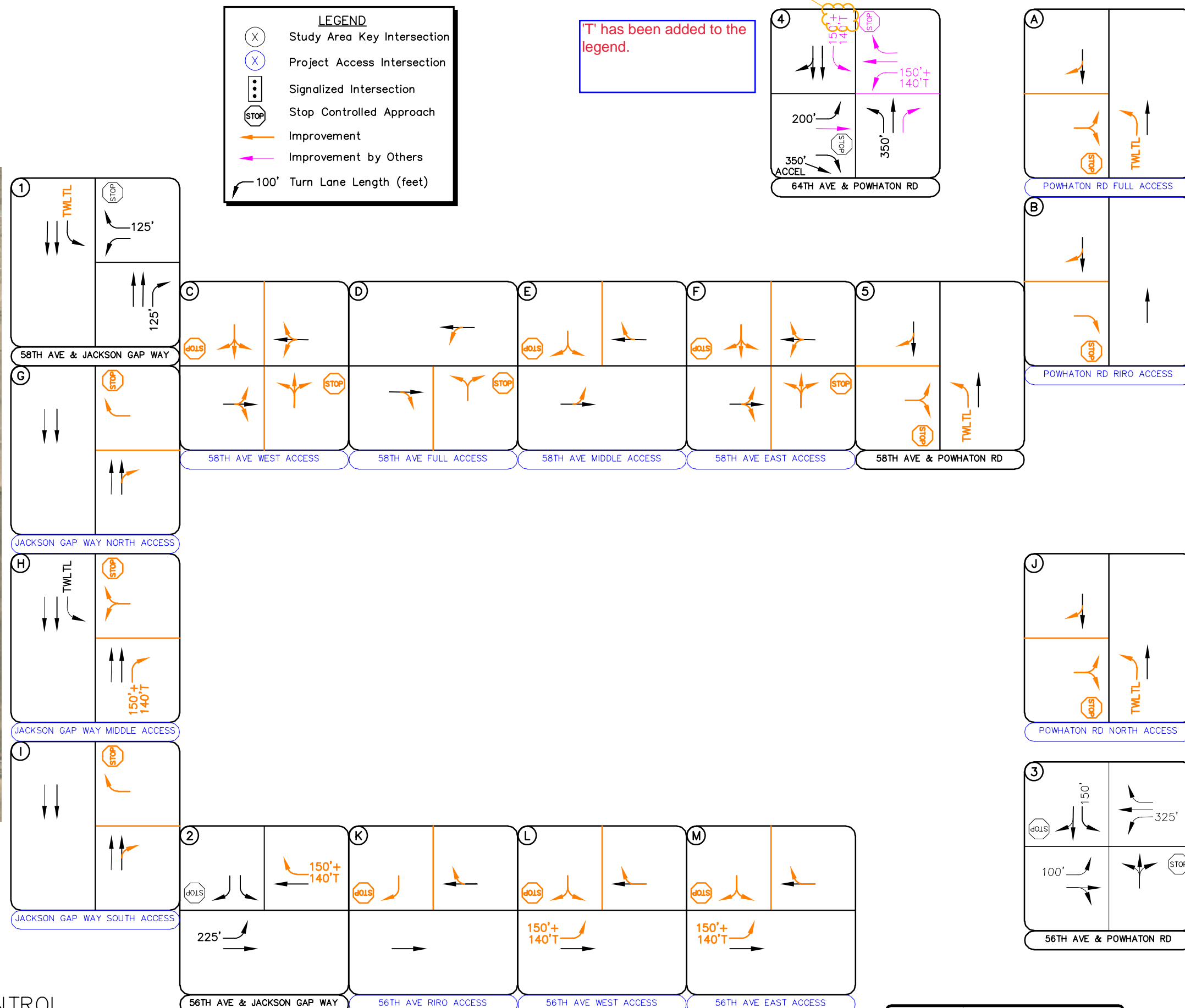


FIGURE 14
FINE POINT BUSINESS PARK
AURORA, COLORADO
2025 RECOMMENDED GEOMETRY AND CONTROL



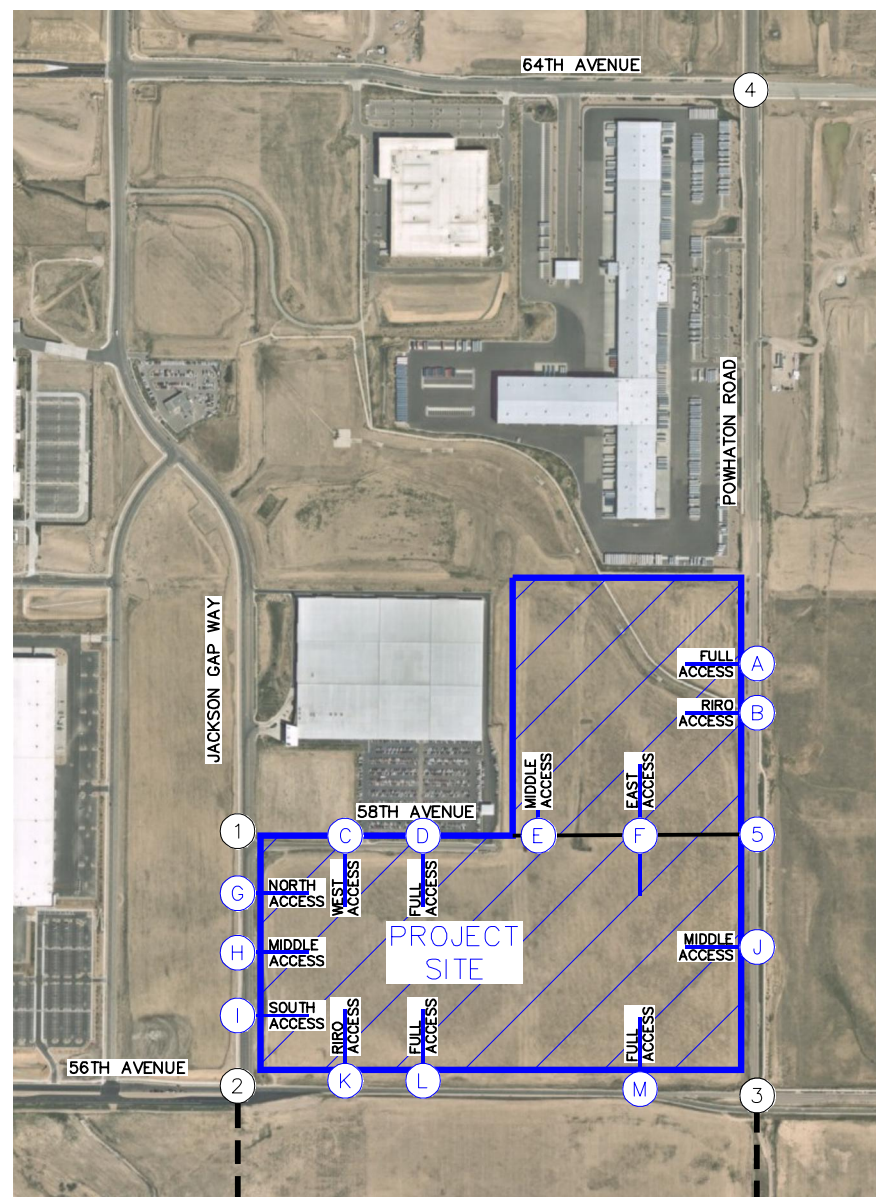
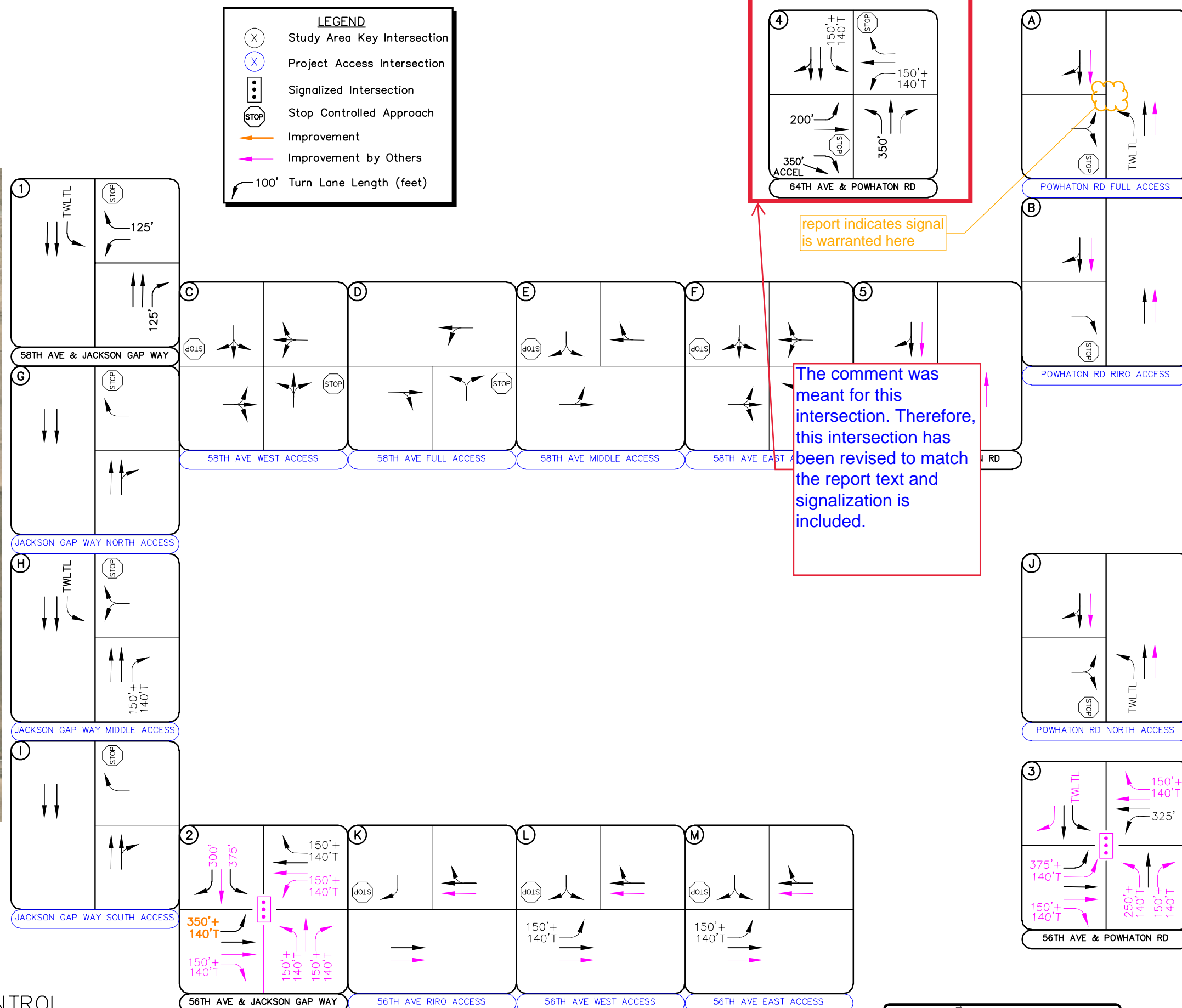


FIGURE 15
FINE POINT BUSINESS PARK
AURORA, COLORADO
2040 RECOMMENDED GEOMETRY AND CONTROL



Project Fine Point Business Park Industrial (Bldg 3 & 4)
 Subject Trip Generation for Industrial Park
 Designed by MAG Date April 17, 2023 Job No. 196617000
 Checked by _____ Date _____ Sheet No. 1 of 1

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rates

Land Use Code - Industrial Park (130)

Independant Variable - 1000 Square Feet (X)

SF = 426,200

X = 426.200

T = Average Vehicle Trip Ends

peak hour of generator is more conservative, update or provide justification for why this is being used (typ all)

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (100 Series Page 49)

The typical peak hour of traffic occurs between 7am to 9am during the morning and 4pm to 6pm during the afternoon. This is a nationally standard procedure. For this reason, ITE has trip generation data that aligns with these peak hours for the morning and afternoon. Using the peak hour generator rates would need to be applied to the morning peak hour that the land use generates the most trips and that hour is unknown. The intention of the intersection analysis is to study the highest one hour during the morning and afternoon. Applying the peak hour generator to the morning peak hour intersection counts is an incorrect application. This is because the peak hour of the generator falls outside of the morning and afternoon peak hours of adjacent street traffic. Additionally, the hours outside of the peak hour of adjacent street traffic is less than the one hour between 7am to 9am.

Directional Distribution: 81% ent. 19% exit.
 T = 145 Average Vehicle Trip Ends
 117 entering 28 exiting
 117 + 28 = 145

Hour Between 4 and 6 p.m. (100 Series Page 50)

Directional Distribution: 22% ent. 78% exit.
 T = 145 Average Vehicle Trip Ends
 32 entering 113 exiting
 32 + 113 = 145

Directional Distribution: 50% ent. 50% exit.
 T = 1438 Average Vehicle Trip Ends
 719 entering 719 exiting
 719 + 719 = 1438