

April 4, 2025

Debbie Bickmire
City of Aurora
Planning Division
15151 E. Alameda Parkway, Ste. 2300
Aurora, CO 80012

RE: Response to Comments

The Aurora Highlands North – Area C – Site Plan – Third Review
Application Number: DA-2062-44
Case Numbers: 2023-4023-00

Dear Debbie:
Below are the city comments followed by the responses.

PLANNING DEPARTMENT COMMENTS

1. Completeness and Clarity of the Application

Letter of Introduction

Comment

1A. The letter states PA-45 is included however it is labeled as “Not a Part” on the Site Plan. Revise for consistency.

Response: This PA has been removed from the LOI.

Comment

1B. Reference the total number of proposed dwelling units.

Response: Number of proposed dwelling units now included.

Comment

1C. Clarify what the ultimate condition of E. 38th Parkway will be.

Response: Street Classification of E. 38th Parkway has been added.

Comment

1D. Please be advised that the PIP amendment must be submitted and approved for the proposed site plan to comply with the approved plans.

Response: The TAH PIP Amendment has been recorded.

General Comments

Comment

1A. The city attorney needs to verify whether the Public Service Company (PSCo) signature block is acceptable or if it needs to be formatted as an owner’s signature block.

Response: Noted. Is this something that Matrix is required to coordinate?

Comment

1B. Repeat Comment: Provide a lot typical for the alley-loaded lot and clarify if they will be for single family detached or duplexes. Show all setbacks, easements, and utility services. Update the Site Data if any duplex residential is proposed.

Response: A rear-loaded alley product has been added. This is for single-family.

Comment

1C. The motor court lot typical shows access from the shared drive to the “rear” of the 4-pack. Will there be sidewalks in the adjacent tracts to connect to?

Response: The motor court lot typical has been replaced with the correct lot typical which does not have access from the shared drive to the rear of the 4-pack. There will not be sidewalks in adjacent tracts.

Comment

1D. Add a note that Tract FF in PA-46 is intended to provide future access to PA-48 and show an access arrow on the Context Map on Sheet 5.

Response: Note has been added.

Comment

1E. Show the existing and/or proposed right-of-way for E. 38th Parkway to the Aerotropolis Parkway intersection.

Response: ROW is now dimensioned/called out.

Comment

1F. Remove the criteria tables on Sheet 4. They are not required with a Site Plan.

Response: Per email from reviewer (Sergio Um, October 4th, 2024) this comment was made in error and the tables should remain

Comment

1G. Add a note that sidewalks through open space tracts shall be connected to a sidewalk or trail with a future Site Plan.

Response: Callouts added for connection to future Site Plan(s).

Comment

1H. Remove the signage at the Reserve Boulevard and E 38th Parkway intersection.

Response: Signage/Monuments have been removed.

Comment

1I. Address all comments and notations in the redlines.

Response: All comments and redlines on the plans have been addressed. They are included at the end of this comment response.

2. Landscaping**Comment**

2A. Revise the Site Data Table to be consistent with the area/acreage on the cover sheet. The sum of the areas needs to equal the total site area.

Response: *The Site Data Table has been updated with the correct area/acreage on the cover sheet. The sum of the areas equals the total site area.*

Comment

2B. Add footnotes to tracts that include detention or drainage facilities and identify the total area of the tract relative to what is shown in the table.

Response: *Footnotes have been added under the tract landscape tables that identify the total area of each tract containing detention or drainage facilities.*

Comment

2C. The area shown in the landscape plans for Tract I, PA-46 does not match the area in the Tract Landscape Table.

Response: *The area in the landscape table has been updated to match the correct area shown on the plans.*

Comment

2D. Revise the highlighted tract areas to be consistent with the areas on the site plan.

Response: *The highlighted tract areas have been revised to match the areas on the site plan.*

Comment

2E. Buffer and open space (tract) landscape can be counted toward both requirements, however, review the distribution of the plant material. The plant material should be distributed more equitably in the open space area.

Response: *Plant material in the open space PA 44 has been distributed more evenly throughout the area.*

Comment

2F. Review the landscape notes on Sheet 60. There are contradictory statements about plant material size. Revise to be more specific about plant material size for curbside vs. tract or front yard landscape.

Response: *The language in the landscape notes on sheet 60 has been revised to specify that shrubs and grasses shall be 5 gal in size at time of installation for curbside and tract landscape areas.*

Comment

2G. Revise the plant material used in the curbside landscape to consist of five-gallon plants. Itemize the quantity of five-gallon and one-gallon material separately in the Plant Schedule. Plant material that is less than five-gallons cannot be counted toward the curbside plant requirement.

Response: *Shrubs and grasses in the curbside landscape tables are all specified to be 5 gallons. Shrubs and grasses used in tract areas are also specified to be 5 gallons. All perennials used will be 1 gallon.*

Comment

2H. Adjust the dimensions of driveway areas omitted from the curbside landscape. A typical driveway width is 16' unless a third garage is provided.

Response: *All driveways have been adjusted to a width of 16ft.*

Comment

2I. Itemize perennials separately in the Plant Schedule.

Response: Perennials are itemized separately in the Plant Schedule.

Comment

2J. Note in the Plant Schedule how the Epilobium Canum (California Fuschia) will be established. Will seed, seedlings, or plugs be used? Upon receipt of additional information, staff may have additional comments.

Response: A footnote has been added under the plant schedule indicating that #1 containers will be used to establish the Epiloboium canum.

Fencing

Comment

2L. There are additional locations of reverse lots that will have fence restrictions. Please see the locations on the redlines.

Response: Additional locations that require fence restrictions have been noted on the fencing plan.

REFERRAL COMMENTS FROM OTHER DEPARTMENTS AND AGENCIES

3. Civil Engineering (Sergio Um / 303-739-7563 / sum@auroragov.org / Comments in green)

Comment

3A. Repeat Comment: Approval of this site plan is subject to the approval of a Master Plan and PIP amendment. Documents were provided to the applicant on March 11, 2024.

Response: The PIP Amendment was approved.

Comment

3B. It seems the infrastructure improvements for PA-44 were completed already. Add a note stating so on Sheet 8.

Response: Note has been added.

Comment

3C. Revise the label for PA-44 and/or Pond 8571 on Sheet 9.

Response: PA-44 label has been moved

Comment

3D. The current PIP shows Section 29 includes PA-46. The roadways required to support the development of Section 29 include the road connecting I-70 to 38th Avenue via Powhaton Road, complete the roadway section of TAH Parkway from 38th Avenue to 26th Avenue, the north half of 26th from the line dividing Sections 29 and 30 to Powhaton Road.

Response: A PIP Amendment has been submitted and approved by City of Aurora.

Comment

3E. Remove the curb ramps as noted on the redlines.

Response: Curb ramps have been removed as requested, or a new receiving ramp has been added.

**4. Traffic Engineering (Carl Harline / 303-739-7584 / charline@auroragov.org / Comments in amber)
Site Plan**

Comment

4A. Revise turn lanes per the volume comments on the redlines.

Response: A new receiving lane has been added to E. 38th Parkway per coordination about the Area C TIS. There are no redlines on the plans.

5. Aurora Water (Steve Dekoskie / 303-739-7490 / sdekoski@auroragov.org / Comments in red)
Comment

5A. The maximum number of homes served on a dead-end water main is 12. Revise E. 38th Place.

Response: The water main is planned to connect to E. 38th Parkway through the cul-de-sac. Please see Grading and Utility Plans.

Comment

5B. Remove the 2nd manhole in the N. Muscadine Street cul-de-sac. Center the sanitary manhole and add a stub behind it for the north cul-de-sac connections.

Response: Second manhole has been removed.

Comment

5C. A 16' UE is required for the water main for the sections located in Tract A, outside of the ROW, as noted on Sheet 45. Trees are not permitted in utility easements. A drainage easement is required for the storm sewer crossing Tract A.

Response: Easements now shown correctly. FYI we believe it should be a Storm Easement for storm sewer crossing Tract A rather than a Drainage Easement.

Comment

5D. Water, sewer, and drainage utility easements are required for the water main outside of the ROW, as noted on Sheet 48. Please delineate the utility easement widths for three public mains crossing Tract A. Trees are not permitted in utility and drainage easements.

Response: Easements now shown correctly.

6. PROS (Scott Hammons / shammons@auroragov.org / Comments in purple)

Comment

6A. Thank you for including an updated open space tracking chart.

Response: You are welcome.

Comment

6B. Drainage infrastructure cannot be counted for open space. Please revise the area numbers.

Response: Drainage Infrastructure has been removed from all applicable open space areas.

Comment

6C. Revise PA-44 to show all detention.

Response: PA-44 has been revised to show all detention.

Comment

6D. Please label grades and widths on all sidewalks/trails and paths on all grading sheets. Cross slopes shall not exceed 2% and longitudinal slopes shall not exceed 5%. Where 5% is exceeded, ensure compliance with ADA requirements. This can be shown on this plan set or the civil drawings.

Response: Grades and widths now shown on all sidewalks and trails/paths.

7. Fire/Life Safety Will Polk / 303-739-7371 / wpolk@auroragov.org / Comments in blue)

Comment

7A. Fire hydrants shall be included along with the construction of water main(s) and roadways. Revise the phasing plans to include fire hydrants.

Response: Fire Hydrants have been added to the Phasing Plan.

Comment

7B. Repeat Comment: Fire hydrants shall be included along with the construction of the water main and roadways. Please revise to include fire hydrants on E. 38th Parkway.

Response: E. 38th Parkway hydrants now shown.

8. Energy & Environment (Maria Alvarez / malvarez@aurora.gov)

Comment

8A. Advisory Comment: A portion of your site is within this 2000' setback from an existing and/or planned oil and gas facility. Currently, there are no City regulations against constructing residences within this setback from an existing oil and gas facility, however, there is a pre-sale requirement to notify future owners of the fact. The following notice language appears in UDO Section 146-3.3.5.DD.2: Notice to Purchasers"

a. A seller of real property upon which an oil or gas well or facility has been located shall provide written notice of the existence of such well to a purchaser of such real property before the closing of the sale. The seller shall cause the following notice to be recorded with the clerk and recorder of the appropriate county.

Notice: The property known as [legal description and address] contains an oil and/or gas well. This requirement to provide notice to prospective purchasers and record such notice shall only apply to the transaction between the developer or builder and the initial purchaser and does not apply to any subsequent sale of the property.

b. Vendors of residentially zoned real property within a state-determined setback shall provide the following notice to prospective purchasers in 14-point bold type on a single sheet of paper that is signed by the prospective purchaser before entering into a contract for purchase:

Notice: Nearby oil and gas facility. This property is located within a state-determined setback from an oil and gas facility. Vendors of residentially zoned real property within a state-determined setback from an oil and gas facility shall cause the following notice to be recorded with the clerk and recorder of the appropriate county:

Notice: The property known as [legal description and address] is located within a state determined setback from an oil and gas facility. This requirement to provide notice to prospective purchasers and record such notice shall only apply to the transaction between the developer or builder and the initial purchaser and does not apply upon any subsequent sale of the property.

Response: Noted; thank you for the advisory comment.

9. Xcel Energy (Donna George / 303-571-3306 / donna.l.george@xcelenergy.com)

Comment

9A. See attached comment letter.

Response: See attached comment letter included in this PDF with responses to XCEL comments.

Sincerely,

Jeff Killion, P.E.
Director, Civil Engineering
Matrix Design Group, Inc.

cc: 21.1229.002



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August 21, 2024

City of Aurora – Planning Department
Debbie Bickmire
15151 E. Alameda
Parkway, 2nd Floor
Aurora, Colorado 80012

Matrix Responses

Re: Letter of Introduction for The Aurora Highlands North – Area C Site Plan

Ms. Bickmire:

On behalf of the Applicant, Aerotropolis Area Coordinating Metropolitan District (AACMD), I am pleased to submit this Letter of Introduction for North Site Plan – Area C at The Aurora Highlands.

The following team of consultants has been assembled to complete this application:

Owner / Master Developer: The Aurora Highlands LLC Carlo Ferreira 6550 South Pecos Road, Suite 124 Las Vegas, NV 11711 720.436.1572 carlo@theaurorahighlands.com	Applicant / Builder: Aerotropolis Area Coordinating Metropolitan District (AACMD) Patrick Chelin 707 17 th Street, STE 3150 Denver, CO 80202 303.250.3737 Patrick_chelin@matrixdesigngroup.com	Civil Engineer: Matrix Design Group Jeff Killion, P.E. 707 17 th Street, STE 3150 Denver, CO 80202 303.226.7832 Jeff.Killion@matrixdesigngroup.com
Planner: Matrix Design Group Tom Kopf 707 17 th Street, STE 3150 Denver, CO 80202 303-502-0200 Thomas.Kopf@matrixdesigngroup.com	Landscape Architect: Matrix Design Group Tom Kopf 707 17 th Street, STE 3150 Denver, CO 80202 303-502-0200 Thomas.Kopf@matrixdesigngroup.com	Surveyor (for future platting): Aztec Consultants, Inc. Brady Moorhead 300 E. Mineral Ave, #1 Littleton, CO 80122 303.327.7499 bmoorhead@aztecconsultants.com

Site Location:

The Aurora Highlands is a 2,497-acre mixed-use community located in northeastern Aurora, Colorado. The community is generally located east of E-470, between 18th Avenue and 26th Avenue. The residential portion of the property is west of the future alignment **Removed** Road.

North Site Plan C is approximately 211 acres and consists of:

- Planning Areas 39, 40, 44, 45 and 46
- N. Newbern Street is designed as a Two-Lane Collector as outlined in the ap

PA-45 is not a part

identify total number of lots proposed

Included total number of lots

Excellence by Design

Anniston, AL | Atlanta, GA | Colorado Springs, CO | Denver, CO | Niceville, FL | Parsons, KS | Phoenix, AZ
Sacramento, CA | Tamuning, GUAM | Texarkana, TX | Washington, DC

Newbern Street will be constructed from 38th Parkway on the south to Reserve Boulevard on the north.

Street classification added

- E. 38th Parkway from Reserve Blvd to Powhatan Road in the ultimate condition. ← as a collector?

Project Overview:

Revised

The planning areas within North Area C include PAs 39, 40, 44, 45 and 46. The development will consist of residential development and supporting district infrastructure. The district infrastructure will consist of roadways, utilities, detention and parks.

Amenities:

The site includes multiple Neighborhood Activity Centers (NAC's), along with sidewalk stubs to the future trail and neighborhood park to be located in PA-45. The plan includes NACs within Planning Areas 40 and 46 as required by the Master Plan (MP).

Public Art:

Per the MP, no public art is proposed in this application and will be installed and designed by Site Plan at a later date.

Approval Criteria:

A. The application complies with the applicable standards in this UDO, other adopted City regulations, any approved Master Plan that includes the property, and any conditions specifically applied to development of the property by the Planning and Zoning Commission or City Council in a prior decision affecting the property.

Revised

and associated studies

The proposed Site Plan application retains compliance with the UDO, the approved MP for the community as well as the City's Comprehensive Plan, Aurora Places. The proposal is consistent with Aurora Places Emerging Neighborhoods Placetype as the community provides necessary infrastructure to support a mix of residential options for buyers which in turn will support future, planned retail, restaurants, commercial, and other neighborhood services. Trail corridors provided connect existing and planned pedestrian routes within the larger Aurora Highlands community.

B. The City's existing infrastructure and public improvements, including but not limited to its water, wastewater, street, trail, and sidewalk systems, have adequate capacity to serve the proposed development, and any burdens on those systems have been mitigated to the degree practicable.

A Public Improvements Phasing Plan was approved with the FDP in 2018 and sized the streets and associated infrastructure to accommodate a maximum of 12,487 units proposed. Revised proposed

with this application is consistent with planned densities/land uses and will include and sustain the improvements as discussed in the Public Improvement Plan and Master Utility Study. Infrastructure to serve the site will be provided through improvements planned with this Site Plan and corresponding Site Plan applications.

as previously stated, this application will not be approved until the PIP has been approved.

C. Major Site Plans shall be designed to preserve and protect natural and rural landforms, water quality and wildlife habitat of riparian corridors, wetlands, and floodplains affected by the proposed development and to integrate those areas into site design where practicable.

PIP is now approved

The design of this TAH North Area C Site Plan intends to minimize the impact to the existing topography and maintain the drainage patterns outlined in the approved Master Drainage Study (approved with MP), where applicable. There are no intended negative impacts to environmentally sensitive areas as outlined above.

D. The application will improve or expand multi-modal connections with adjacent sites, neighborhoods, and urban centers.

This site plan is designed to successfully accommodate both pedestrian and vehicular connectivity as outlined in the Traffic Impact Study. We understand that the open space and trail network are key design elements in every development parcel linking residents to community amenities such as nearby parks, schools, and future commercial centers.

E. The application is compatible with surrounding uses in terms of size, scale and building façade materials.

This application is compatible with the surrounding uses as represented in the MP and other master studies.

F. The application mitigates any adverse impacts on the surrounding area to the degree practicable. There is an existing plugged and abandoned well located adjacent to the south east portion of the site. There is a 40,000 SF easement around the well and a 100' home setback from the well location.

There are no anticipated adverse impacts associated with the proposed Site Plan application.

Adjustments:

No adjustments are being requested at this time.

We look forward to working with the City of Aurora on the review and approval of these next phases of The Aurora Highlands. Feel free to contact me with any questions or request for additional information.

Sincerely,

MATRIX DESIGN GROUP, INC.



Jeff Killion, PE
Associate Vice President

cc: 21.1229.001

EXHIBIT A



PREPARED BY:
Matrix
Excellence by Design
707 17th Street, Suite 3150
Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com



The Aurora Highlands North Area, Area C Traffic Impact Study

Thank you for reviewing our TIS. The list of changes compared to the previous iteration are as follows:

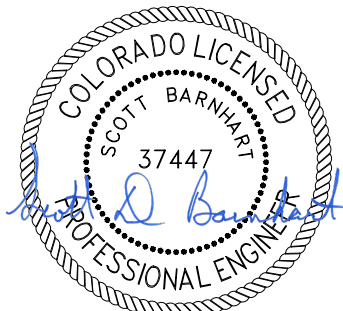
1. The second northbound left-turn at Aerotropolis Pkwy/38th Parkway (#48) has been added. The changes are shown in Tables 5,6 and 7, and Figure 14.
2. A NBL to WBTH receiving lane has been proposed in order to accommodate the second northbound left turn lane. This lane length was designed per the criteria in the FHWA MUTCD Table 2C-3 for a collector roadway with posted speed limit of 30 mph per the COA Roadway Design and Technical Criteria Table 4.04.4.1 Please see Table 7 in the new submittal.
3. The intersection operations for Aerotropolis Pkwy/48th Ave (#47) has been improved in both background and total scenarios. The PTV Vistro has recently added a capability for optimizing the signal timing by allowing the pedestrian splits exceed the vehicular splits for the minor flow. As a result, the deficient movements are now all operate at an acceptable LOS. These changes are reflected on all relevant figures and tables for both scenarios. The queue analysis in the tables have also been updated to reflect these changes.

Please see our responses throughout this document.

707 17th Street, Suite 3150
Denver, CO 80202

Contact: Scott Barnhart, PE, PTOE

July 15, 2024



07/29/2024

Table of Contents

Introduction	3
Proposed Development	4
Area Conditions	6
Study Area Land Use	6
Site Accessibility	6
Projected Development Traffic.....	8
Trip Generation	8
Trip Distribution	8
Traffic Analysis	12
Horizon (2040) Background Conditions.....	12
Horizon (2040) With Project Conditions.....	18
Conclusions and Recommendations.....	26

List of Figures

Figure 1.	Vicinity Map	4
Figure 2.	The Aurora Highlands North Area Site Plan.....	5
Figure 3.	Trip Distribution	9
Figure 4.	The Aurora Highlands North, Area C Project Trips (AM Peak Hour)	10
Figure 5.	The Aurora Highlands North, Area C Project Trips (PM Peak Hour)	11
Figure 6.	The Aurora Highlands North, Area C Daily Site Trips	12
Figure 7.	Horizon (2040) Background Traffic Volumes (AM Peak Hour)	13
Figure 8.	Horizon (2040) Background Traffic Volumes (PM Peak Hour).....	14
Figure 9.	Horizon (2040) Background Daily Traffic.....	15
Figure 10.	Horizon (2040) Background Intersection Configurations and LOS.....	16
Figure 11.	Horizon (2040) With Project Traffic Volumes (AM Peak Hour)	19
Figure 12.	Horizon (2040) With Project Traffic Volumes (PM Peak Hour).....	20
Figure 13.	Horizon (2040) With Project Daily Traffic Volumes	21
Figure 14.	Horizon (2040) With Project Intersection Configurations and LOS.....	22

List of Tables

Table 1.	TAH North Area C Trip Generation	8
Table 2.	Horizon (2040) Background Intersection Operations (AM Peak Hour)	17
Table 3.	Horizon (2040) Background Intersection Operations (PM Peak Hour).....	17
Table 4.	Horizon (2040) Background Turn Lane Evaluations	18
Table 5.	Horizon (2040) With Project Intersection Operations (AM Peak Hour)	23
Table 6.	Horizon (2040) With Project Intersection Operations (PM Peak Hour).....	24
Table 7.	Horizon (2040) With Project Turn Lane Evaluations	25

Appendix A – Background Traffic Volumes

Appendix B – ITE Trip Generation Calculations

Appendix C – Horizon Without Project Analyses

Appendix D – Horizon With Project Analyses

Introduction

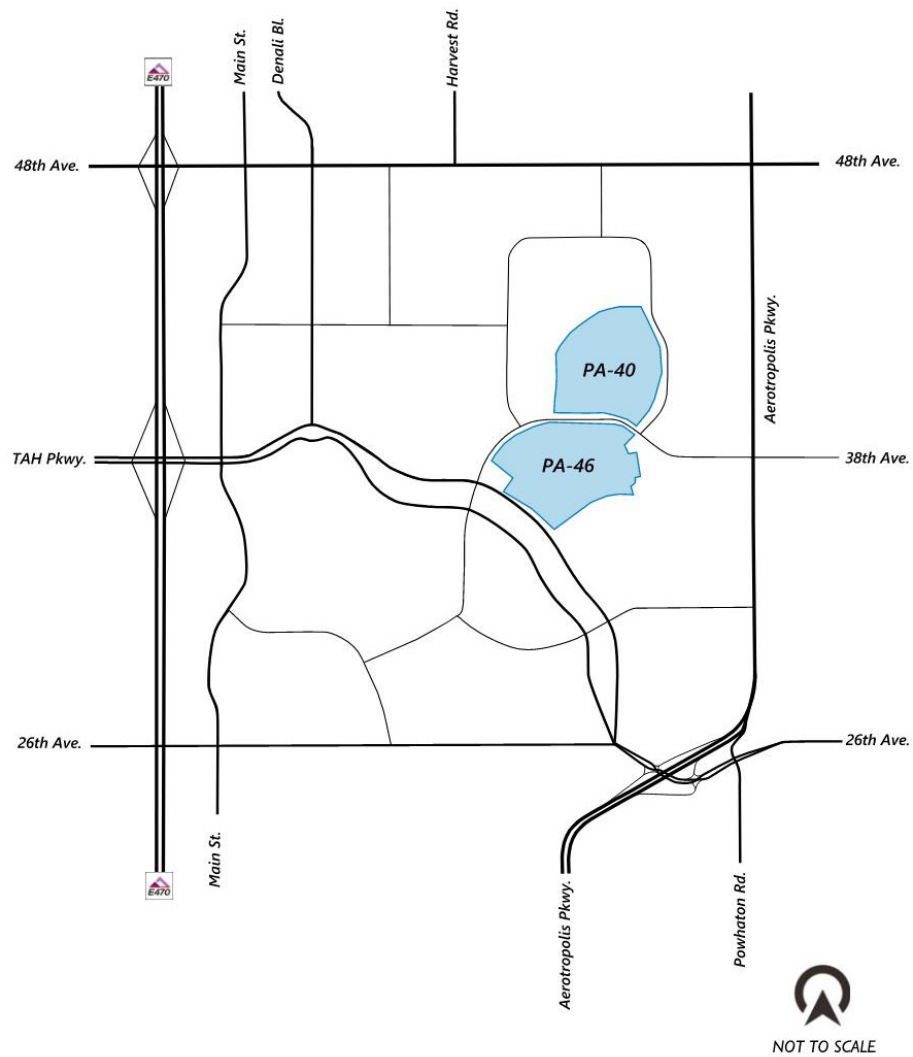
The Aurora Highlands is a 2,550-acre development located between Denver International Airport (DEN) and Interstate 70 (I-70). The Aurora Highlands North (TAH North) phase includes the majority of the planning areas between 42nd Avenue and 28th Avenue. TAH North has been split into three sub-areas: Area A, Area B and Area C.

The purpose of this study is to assess the effects the development of the TAH North, Area C will have on the surrounding transportation system.

The report is organized as follows:

- **Introduction** – Describes the purpose and intent of this study.
- **Area Conditions** – Describes the study area land uses as well as the existing and future roadway network.
- **Proposed Development** – Describes the proposed development and the location.
- **Projected Traffic** – Identifies the expected number of daily and peak hour trips that will be generated by the Aurora Highlands, North Area, Area C development. The expected external trip distribution is also shown.
- **Traffic Analysis** – Analyzes the horizon year (2040) conditions with and without the project. The traffic from Area A north, and Area B north are included in the background volumes.
- **Findings and Conclusions** – Identifies any deficiencies in the study area roadway network with or without the project and mitigation measures that will alleviate any identified deficiencies.
- **Recommendations** – Provides a summary of the study findings.

Figure 1. Vicinity Map

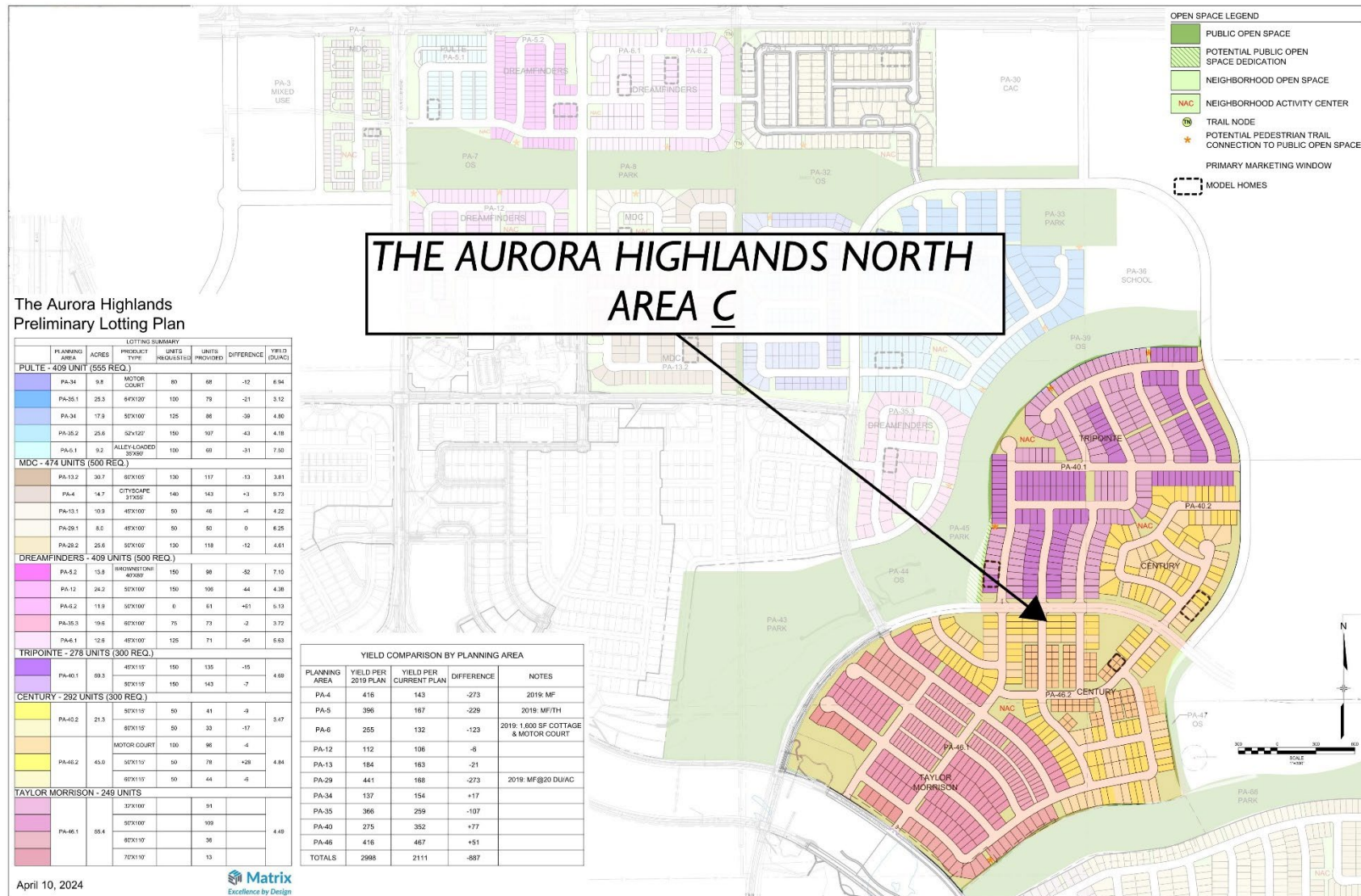


Proposed Development

The Aurora Highlands Area C consists of 819 single family detached dwelling units.

Figure 2 illustrates The Aurora Highlands North site plan for Area C. A higher quality exhibit can be found in Appendix D on the last page of this document.

Figure 2. The Aurora Highlands North Area Site Plan



Area Conditions

This section describes the existing conditions and the planned level of improvements adjacent to the Aurora Highlands North Area, Area C development.

Study Area Land Use

The Aurora Highlands, North Area C will be constructed on vacant land and is bound on the west by E-470, on the south by the future The Aurora Highlands Parkway, on the east by the future Aerotropolis Parkway and the north by 48th Avenue. This area of Aurora is mostly vacant land but is growing rapidly and includes other developments such as other areas of The Aurora Highlands, Windler, and ATEC.

Site Accessibility

The existing roadway system is largely non-existent in this area of Aurora. However, the future roadway network consists of the following transportation facilities:

E-470 is a north-south four-lane tollway that runs along The Aurora Highlands' west side. A grade-separated interchange is provided at 56th Avenue. An interchange is planned at 48th Avenue and the bridge over E-470 at 48th Avenue is in place (the roadway connecting to it is not yet built, nor are the ramps).

26th Avenue is a minor two-lane roadway facility along the south side of The Aurora Highlands spanning E-470 (no interchange) and extending to Picadilly Road to the west and Watkins Road to the east. The Northeast Area Transportation Study (NEATS) recommends this road as a four-lane minor arterial in the 2040 plan.

Aerotropolis Parkway (Powhaton Road) is a two-lane road that will ultimately define the east side of the residential development within The Aurora Highlands. Currently, this road extends south from 26th Avenue as a two-lane facility, crossing the Union Pacific (UP) Railroad at-grade, spanning I-70, and extending south to Jewell Avenue. This road is anticipated to be a 6-lane major arterial per NEATS recommendations and will be renamed Aerotropolis Parkway.

48th Avenue will be constructed on the north side of The Aurora Highlands prior to issuance of any Certificate of Occupancy for lots within TAH North. 48th Avenue will ultimately be a 6-lane major arterial and have a grade-separated interchange with E-470. The south half of this arterial will be built in conjunction with The Aurora Highlands by ARTA (Aerotropolis Regional Transportation Authority). The north half of 48th Avenue will be constructed by the Windler development to the north. The timing of individual developments is unclear, so it is difficult to determine when 48th Avenue will need to be constructed beyond each half-road section. It is assumed that if only the north or south half of 48th Avenue is constructed first, that it would serve temporarily as a 3-lane collector road with one lane in each direction and a center turn lane. In this scenario, the daily threshold for the half roadway section would be 12,000 vehicles-per-day. Daily traffic from Area C alone would not require more than the south half three-lane collector road section on its own.

The Aurora Highlands Parkway currently exists as an east-west four-lane to six-lane facility between Main Street and 38th Parkway. It has a large median east of Denali Boulevard containing a creek and recreational trail. The Aurora Highlands Parkway will ultimately be a four-lane minor arterial.

38th Parkway currently exists as a three-lane (striped median/center turn lane) roadway between The Aurora Highlands Parkway and Reserve Loop (western connection). It will ultimately connect to Aerotropolis Parkway as a three-lane collector road.

No existing conditions analysis will be completed for this study as the land is mostly vacant at this time and has no traffic other than construction traffic. No new traffic counts were conducted for this study. This study builds on the traffic volumes presented *The Aurora Highlands Traffic Impact Study* (August 2019) which looked at the entirety of The Aurora Highlands development. The studies of surrounding developments are as follows:

- The Northeast Area Transportation Study Refresh (NEATS), 2018
- The Aurora Highlands Transportation Impact Study; August 2019
- ATEC Traffic Impact Analysis; November 2019
- Powhaton Alignment Study; October 2022
- The Aurora Highlands CSP#1, TIS; July 2019
- The Aurora Highlands North Area, Area A TIS, December 2022
- The Aurora Highlands North Area, Area B TIS, July 2023

Projected Development Traffic

This section documents how much traffic The Aurora Highlands, North Area, Area C development is expected to generate and how the external site trips will be distributed on the adjacent roadway network.

Trip Generation

The vehicle trips associated with The Aurora Highlands, North Area, Area C were calculated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. This methodology consists of choosing an independent variable for the land use for a particular time of day. The independent variable correlates to the variation in trip ends and is related to the land use. The value of the independent variable is either multiplied by a weighted average or used in a regression equation to calculate the trips generated by the land use. The *ITE Trip Generation Manual* provides guidance on when to use the weighted average versus the regression equation. In most cases, the regression equations are recommended when there are adequate study data points.

Table 1 shows the trips that are expected to be generated by The Aurora Highlands, North Area, Area C at buildout.

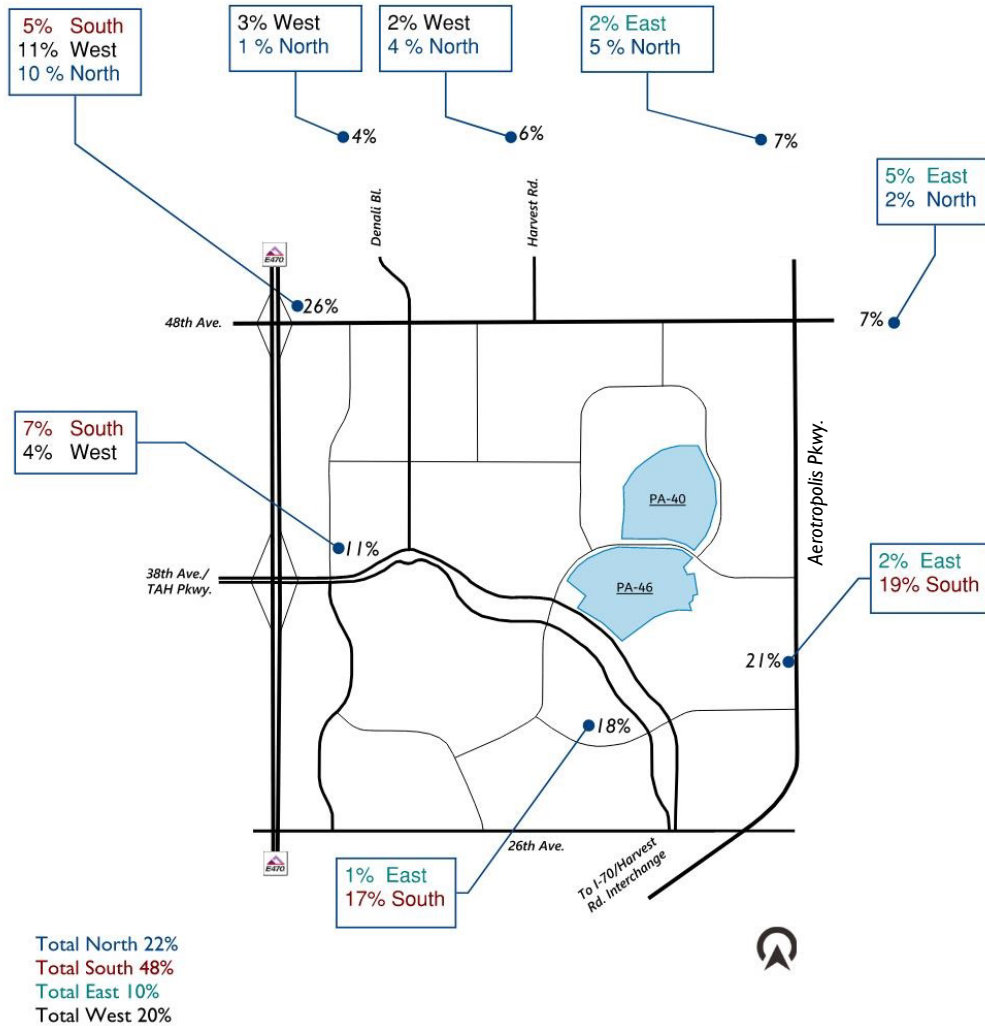
Table 1. TAH North Area C Trip Generation

The Aurora Highlands North, Area C												
Parcel	ITE - Code and Land Use	Size	Units	Weekday			AM Peak Hour			PM Peak Hour		
				Total	Entering	Exiting	Total	Entering	Exiting	Total	Entering	Exiting
PA-40.1	210- Single-Family Detached Housing	278	DU	2,584	1,292	1,292	189	47	142	260	164	96
PA-40.2	210- Single-Family Detached Housing	74	DU	764	382	382	56	14	42	75	47	28
PA-46.1	210- Single-Family Detached Housing	249	DU	2,336	1,168	1,168	171	43	128	235	148	87
PA-46.2	210- Single-Family Detached Housing	218	DU	2,066	1,033	1,033	152	38	114	206	130	76
	Total	819		7,750	3,875	3,875	568	142	426	776	489	287

No trip reduction is accounted for because there is only one land-use. It was also assumed that 100 percent of the trips will be made by personal vehicles.

Trip Distribution

Figure 3 illustrates the expected external distribution of travel for the site-generated trips. This distribution was determined by reviewing the general distribution of trips on the roadway network in 2019 -*The Aurora Highlands Traffic Impact Study* (Derived from *NEATS 2018*).

Figure 3. Trip Distribution

The overall distribution based on the previous study is 48% of the trips will travel to/from the south; 20% of the trips will travel to/from the west; 22% of the trips will travel to/from the north and 10% of the trips will travel to/from the east. Recently, a new connection from Powhatan Road (Aerotropolis Parkway) to Jackson Gap Way was proposed that would ultimately affect the traffic on 48th Avenue, Aerotropolis Parkway, and Harvest Road. After a careful review of this new alignment and its impact on the adjacent road we concluded that it would have a minimal impact on our site trips due to the distance between the new alignment and the project. However, to address this small impact we adjusted the trip distribution on Denali Boulevard, Harvest Road and Aerotropolis Parkway in a way that 2 percent of the trips that were supposed to be made through Denali Boulevard and Harvest Road are now shifted to this new alignment. The overall distribution remained unchanged and when those overall distributions are distributed among the available lanes traveling in each direction, the distributions shown in Figure 3 is the result. This new improvement would mainly alleviate the background traffic on 48th Avenue since it will provide an alternative for long distance travelers especially for trips to/from the DEN airport.

The project trips for both the AM and PM peak hours are shown in Figures 4 and 5 and daily project trips are shown in Figure 6.

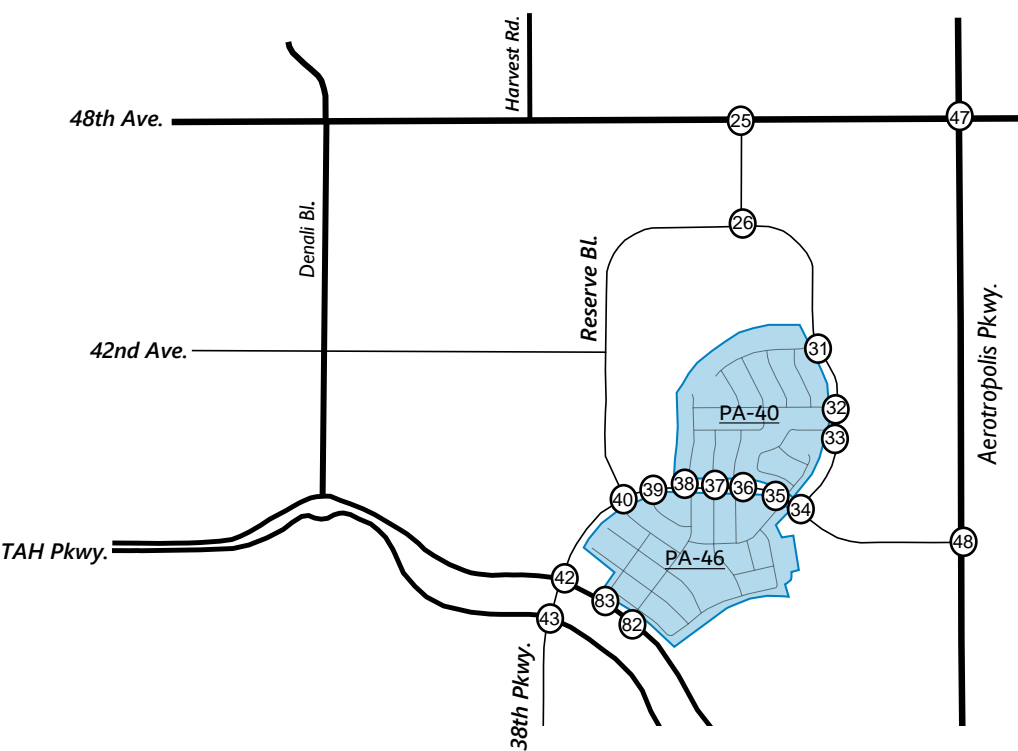
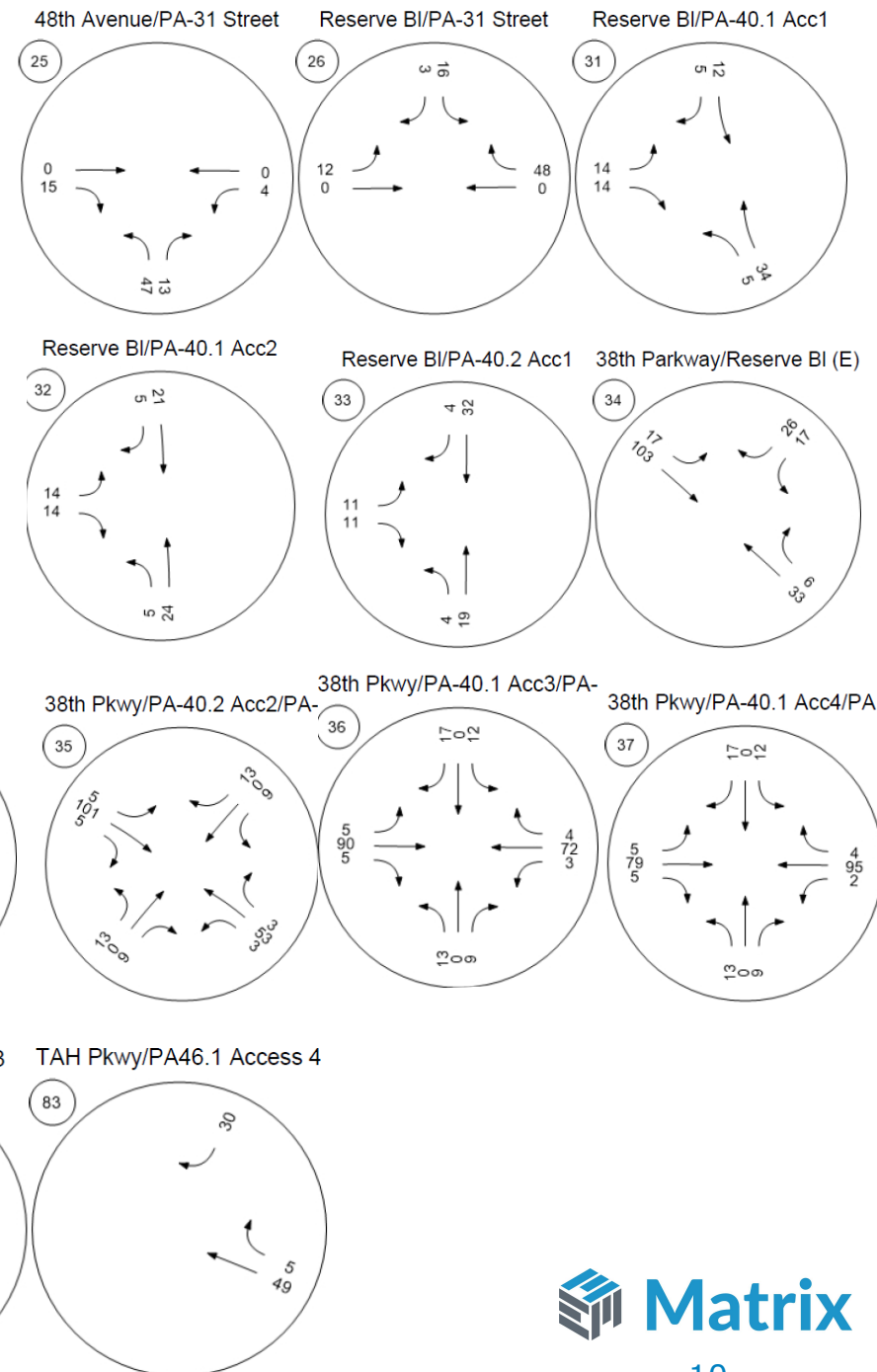


Figure 4. The Area C North Project Trips (AM Peak Hour)



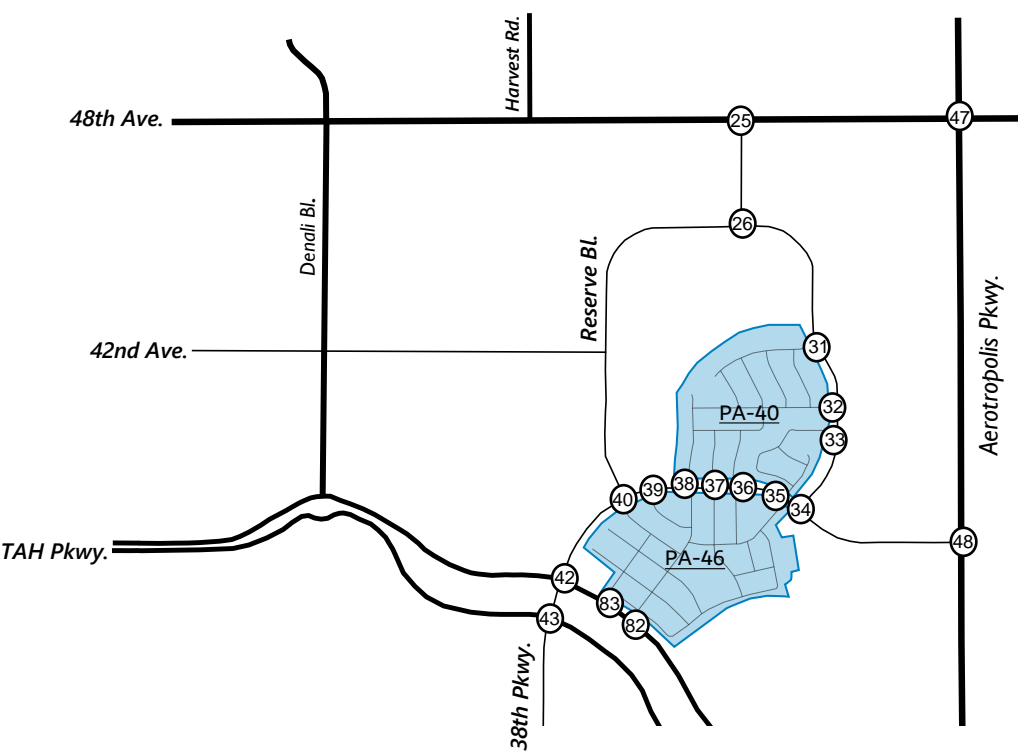


Figure 5. The Area C North Project Trips (PM Peak Hour)

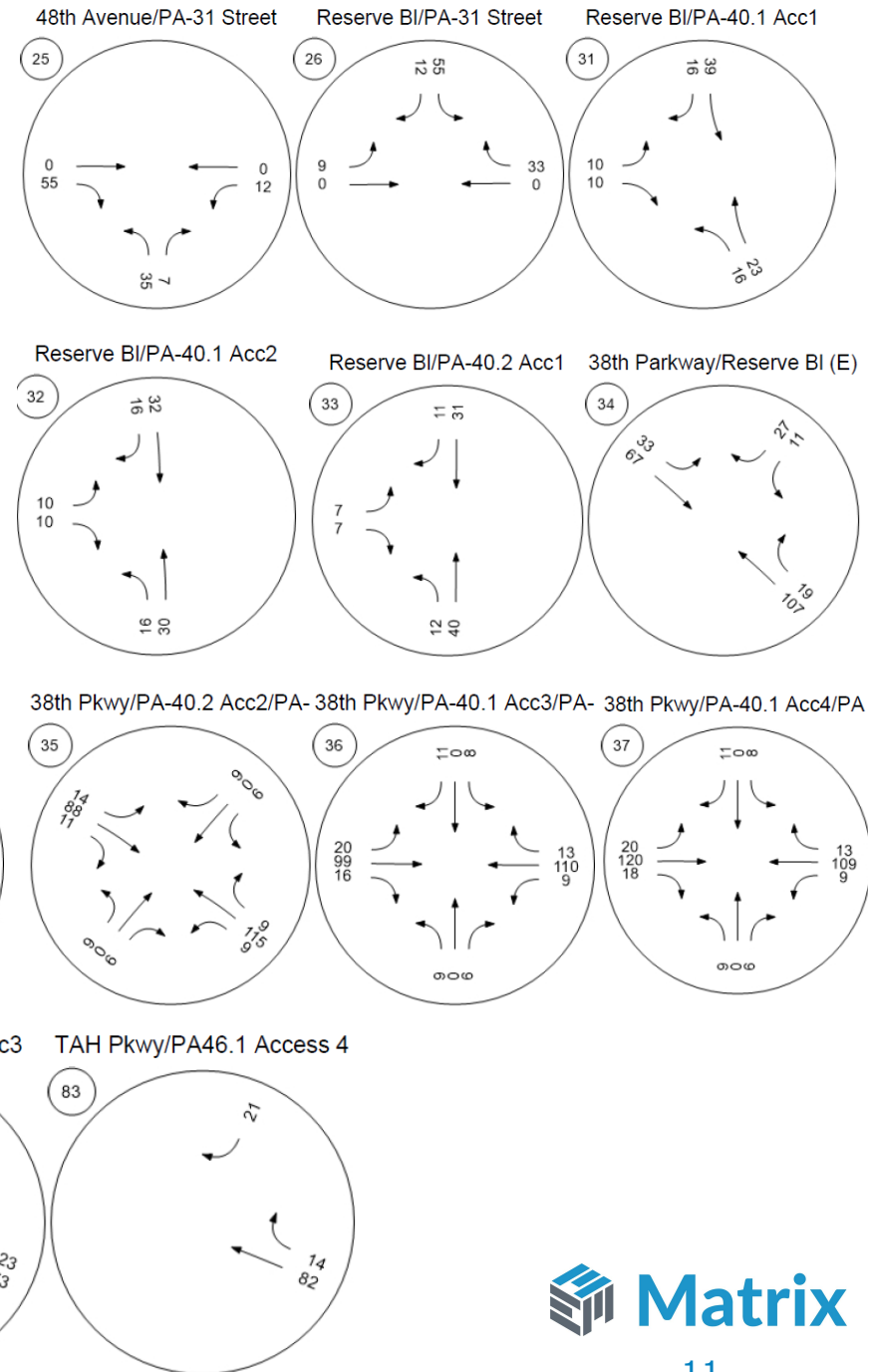
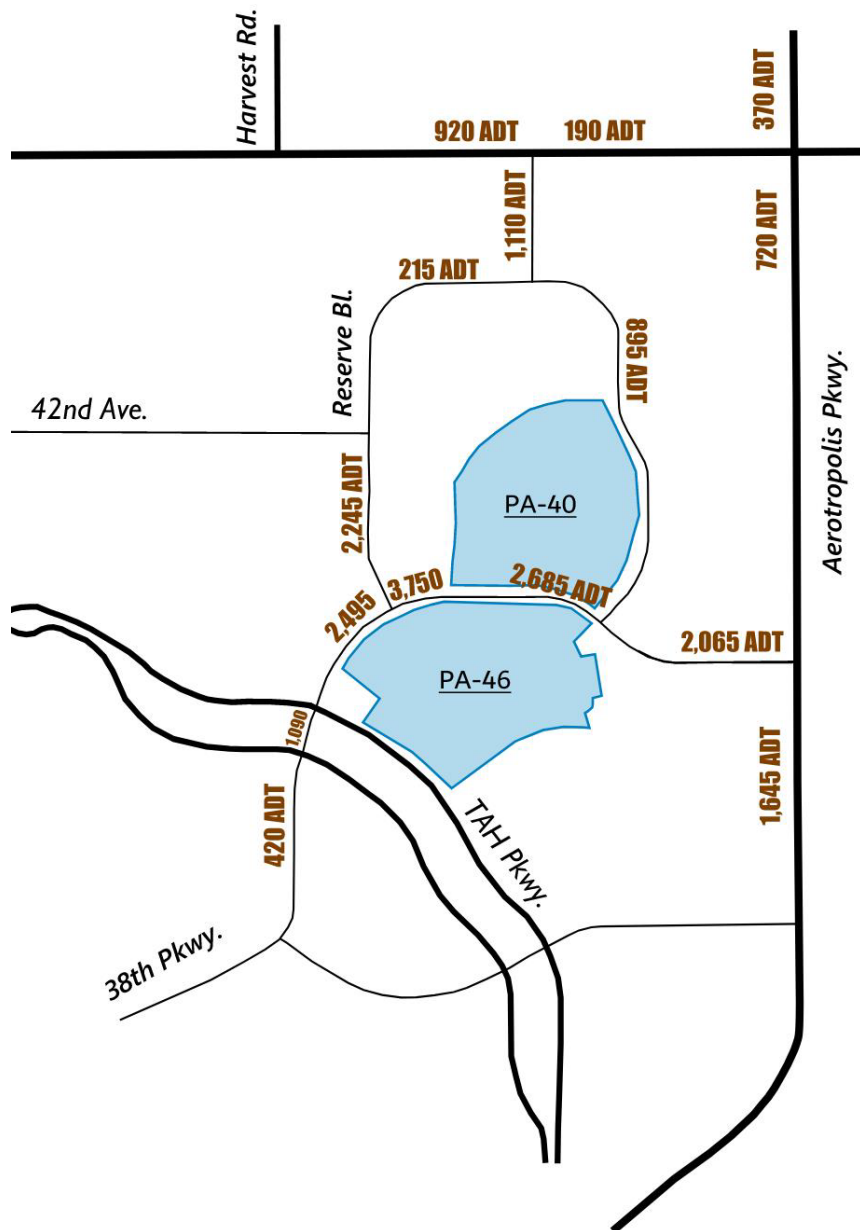


Figure 6. The Aurora Highlands North, Area C Daily Site Trips



Traffic Analysis

Both traffic conditions with and without the project were studied for the horizon year (2040) conditions.

Horizon (2040) Background Conditions

The horizon year traffic volumes without the Aurora Highlands Area C project are shown in Figure 7 and Figure 8, and daily traffic volumes are shown in Figure 9. In this study, *The Aurora Highlands North, Area A (2022)* and *The Aurora Highlands North, Area B (2023)* background volumes were used as the basis of the report. The site traffic from both north areas (Area A and Area B) were later added to the background volumes.

Figure 7. Horizon (2040) Background Traffic Volumes (AM Peak Hour)

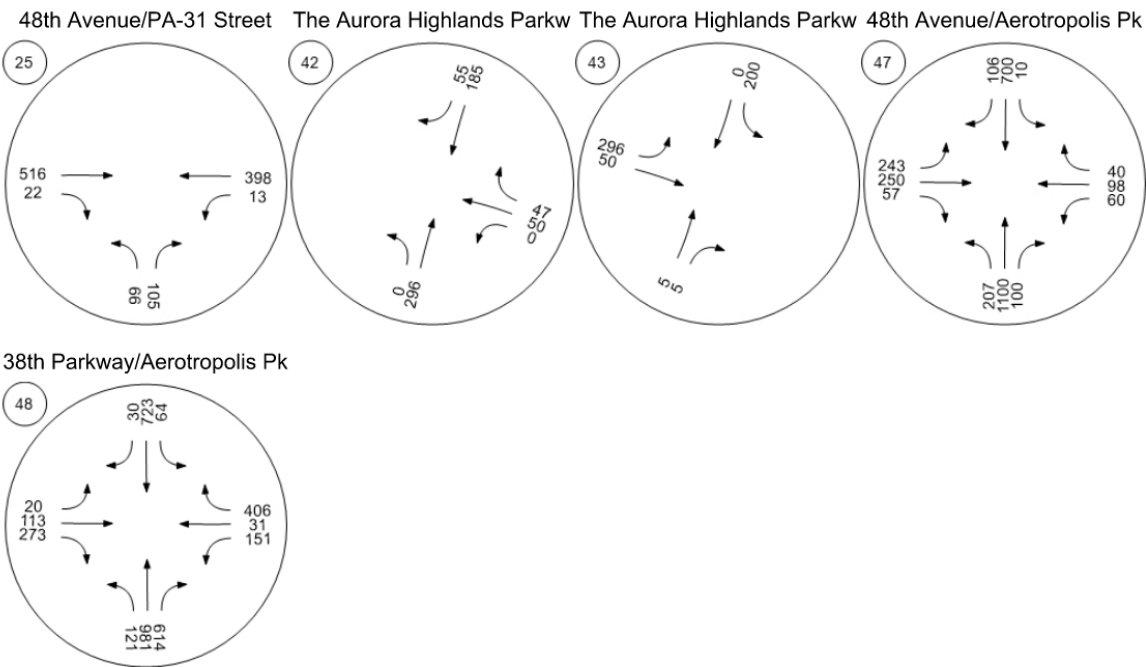
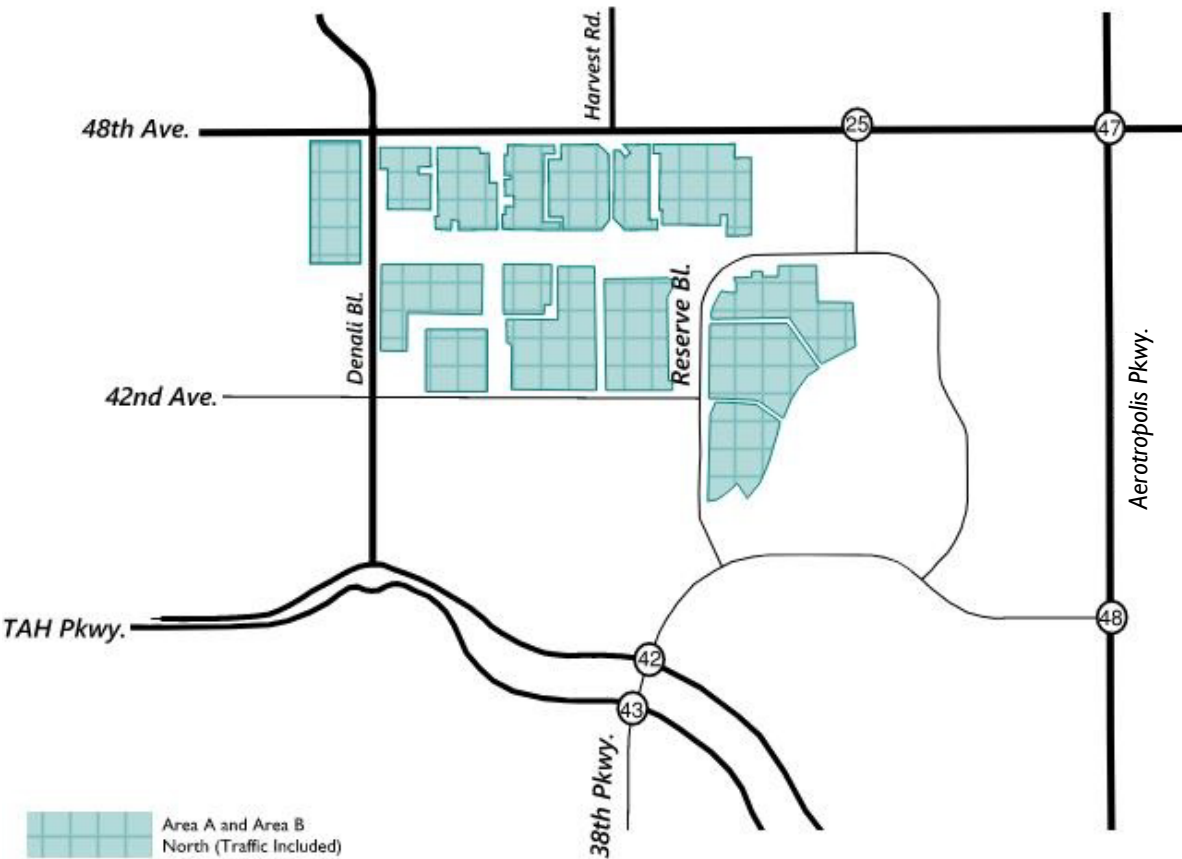


Figure 8. Horizon (2040) Background Traffic Volumes (PM Peak Hour)

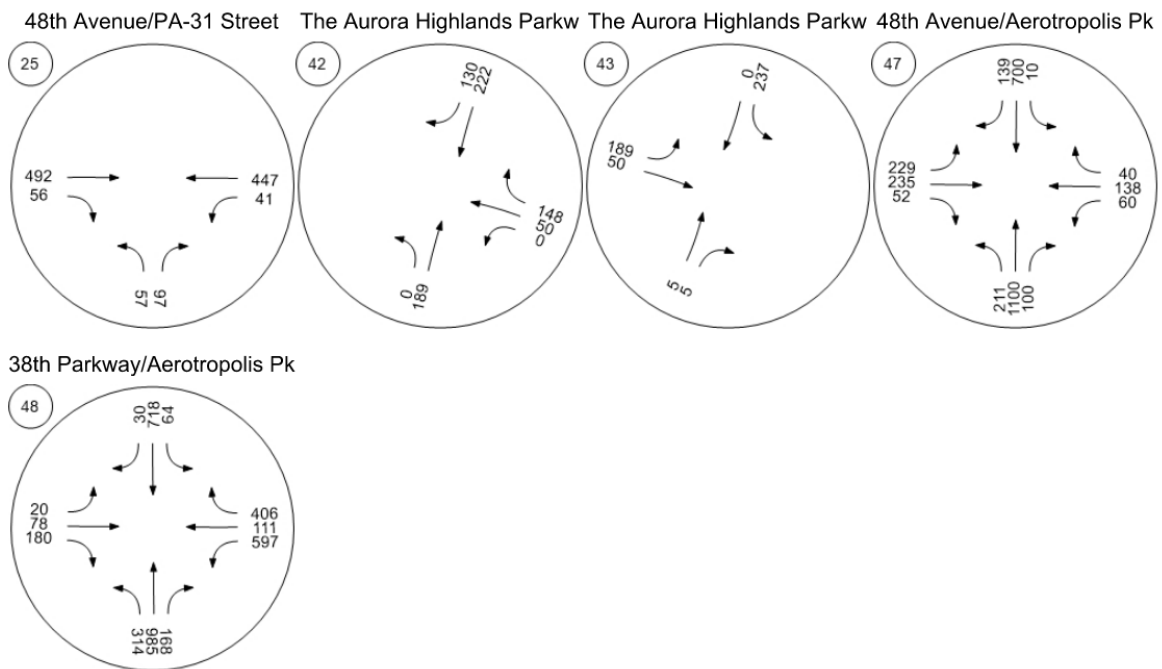
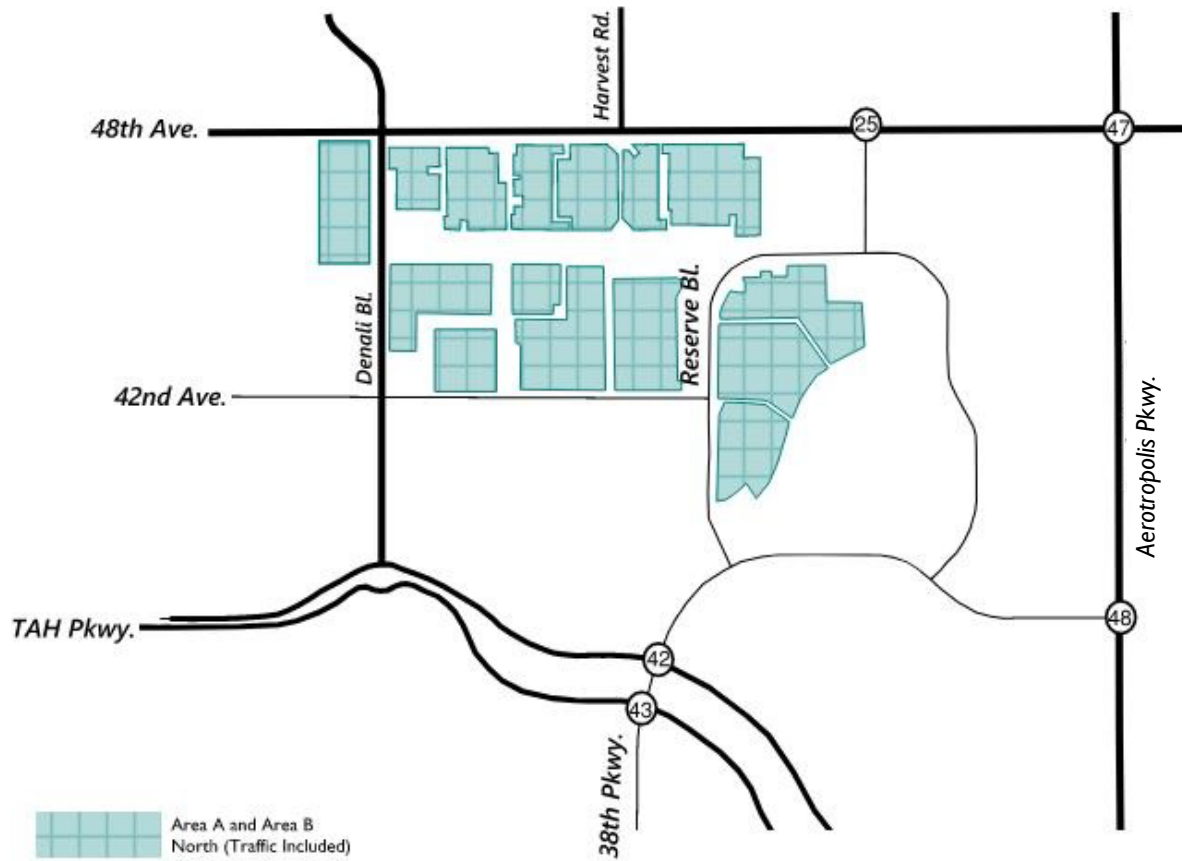
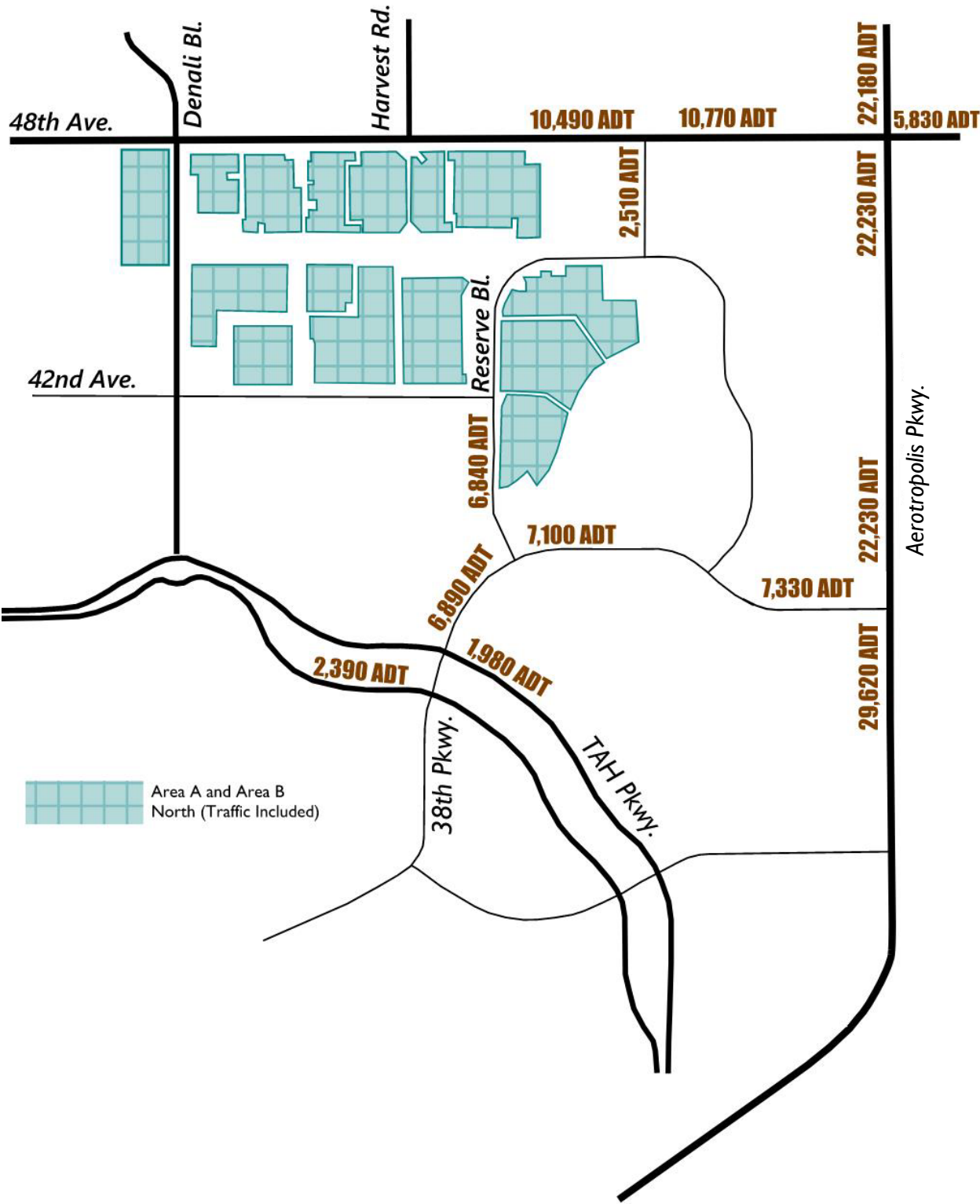


Figure 9. Horizon (2040) Background Daily Traffic



The assumed intersection configurations are shown in Figure 10. The operations of the study area intersections in horizon background (no project) scenario are shown in Table 2 and Table 3. Intersection configurations were taken from the ATEC TIS, TAH MTIS (2019), NEATS (2018) roadway recommendations and planned or built roadways within the Aurora Highlands.

Figure 10. Horizon (2040) Background Intersection Configurations and LOS

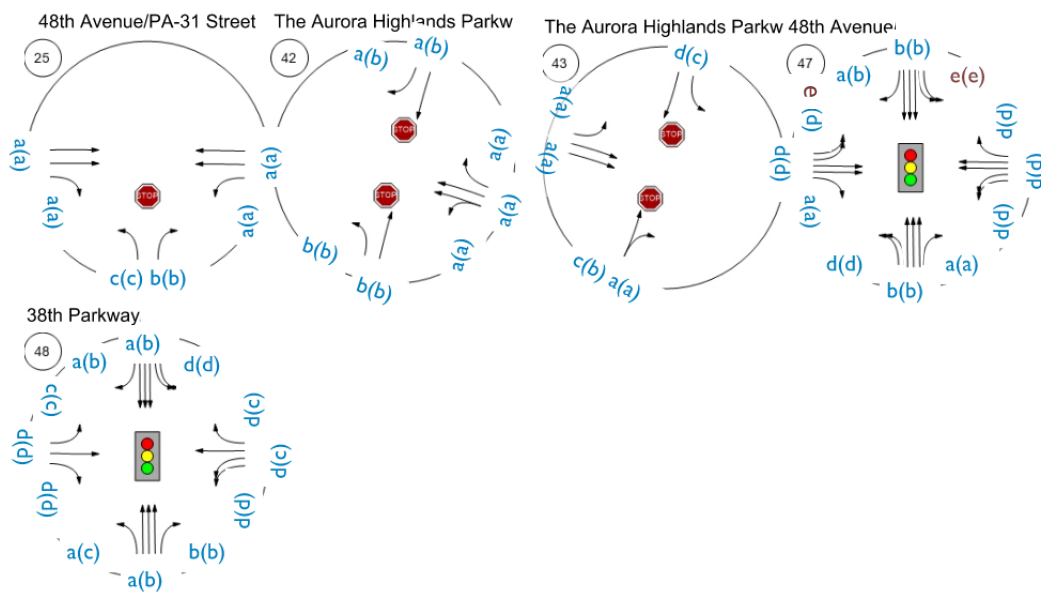
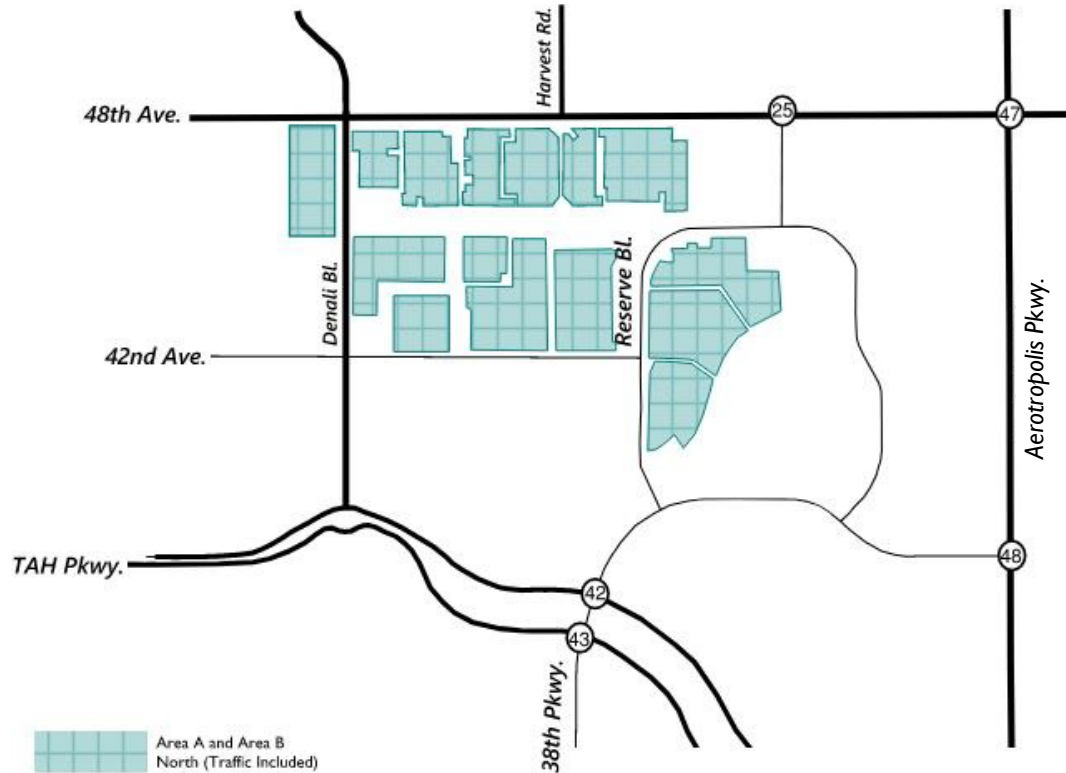


Table 2. Horizon (2040) Background Intersection Operations (AM Peak Hour)**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
25	48th Avenue/PA-31 Street	Two-way stop	HCM 7th Edition	NB Left	0.228	19.8	C
42	The Aurora Highlands Parkway/38th Parkway	Two-way stop	HCM 7th Edition	NB Thru	0.411	12.8	B
43	The Aurora Highlands Parkway/38th Parkway	Two-way stop	HCM 7th Edition	SB Left	0.651	33.9	D
47	48th Avenue/Aerotropolis Pkwy	Signalized	HCM 7th Edition	SB Left	0.344	22.7	C
48	38th Parkway/Aerotropolis Pkwy	Signalized	HCM 7th Edition	WB Left	0.380	19.0	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Table 3. Horizon (2040) Background Intersection Operations (PM Peak Hour)**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
25	48th Avenue/PA-31 Street	Two-way stop	HCM 7th Edition	NB Left	0.223	21.6	C
42	The Aurora Highlands Parkway/38th Parkway	Two-way stop	HCM 7th Edition	NB Thru	0.301	12.5	B
43	The Aurora Highlands Parkway/38th Parkway	Two-way stop	HCM 7th Edition	SB Left	0.524	20.1	C
47	48th Avenue/Aerotropolis Pkwy	Signalized	HCM 7th Edition	SB Left	0.352	22.6	C
48	38th Parkway/Aerotropolis Pkwy	Signalized	HCM 7th Edition	SB Left	0.510	26.2	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

All study area intersections are projected to operate at an acceptable LOS in the horizon year without the project traffic as shown in Tables 2 and 3. Additionally, all the approaches operate at an acceptable LOS. As shown in Figure 9, all movements also operate at an acceptable level of service, except for the southbound left-turn movement at 48th Avenue/Aerotropolis Parkway which operates at LOS E during both AM and PM peak hours. Table 4 shows the turn lane requirements in the 2040 background scenario.

Table 4. Horizon (2040) Background Turn Lane Evaluations

ID	Intersection	Movement	No. of Lanes	Access Category	Speed Limit (mph)	Turning Volume (veh/hr)	Queue (ft)	Deceleration Lane (ft)	Storage Lane (ft)	Taper Lane (ft)	COA Min Decel + Storage (ft)	Total (ft)	Notes
25	48th Ave/Collector Road	NBL	1	NR-C	35	66	22		100	120	150	220	Occur Within the Median
		EBR	1	NR-A	45	56	0	273		162		435	
		WBL	1	NR-A	45	41	4	273	50	162	200	485	
42	TAH Pkwy/38th Pkwy (VV)	SBR	1	NR-C	35	130	12		130	120		250	
		WBR	1	NR-B	40	148	0		50	144		195	
43	TAH Pkwy/38th Pkwy (E)	SBL		NR-C	35	237	108		237	120	150	355	Occur Within the Median
		EBL	1	NR-B	40	296	0		296	144	200	440	
47	48TH Ave/Aerotropolis Pkwy	NBL	2	NR-A	45	211	146	273	105	162	200	540	
		NBR	1	NR-A	45	100	20	273		162		435	
		SBL	2	NR-A	45	10	8	273	50	162	200	485	
		SBR	1	NR-A	45	139	36	373		162		535	
		EBL	2	NR-A	45	243	169	273	121	162	200	555	
		EBR	1	NR-A	45	57	0	273		162		435	
		WBL	2	NR-A	45	60	41	273	50	162	200	485	
		WBR	1	NR-A	45	40	26	273		162		435	
48	38th Pkwy/Aerotropolis Pkwy	NBL	1	NR-A	45	314	206	273	314	162	200	750	
		NBR	1	NR-A	45	614	162	273		162		435	
		SBL	2	NR-A	45	64	40	273	25	162	200	460	
		SBR	1	NR-A	45	30	9	273		162		435	
		EBR	1	NR-C	35	273	175		273	120		395	
		WBL	2	NR-C	35	597	321		299	120	150	420	
		WBR	1	NR-C	35	406	244		406	120		525	

COA: City of Aurora

Total turn lane is rounded to the nearest 5-ft.

Horizon (2040) With Project Conditions

When the project traffic is added to the 2040 background traffic, the resulting AM peak hour, PM peak hour and daily traffic volumes are as shown in Figure 11, Figure 12 and Figure 13.

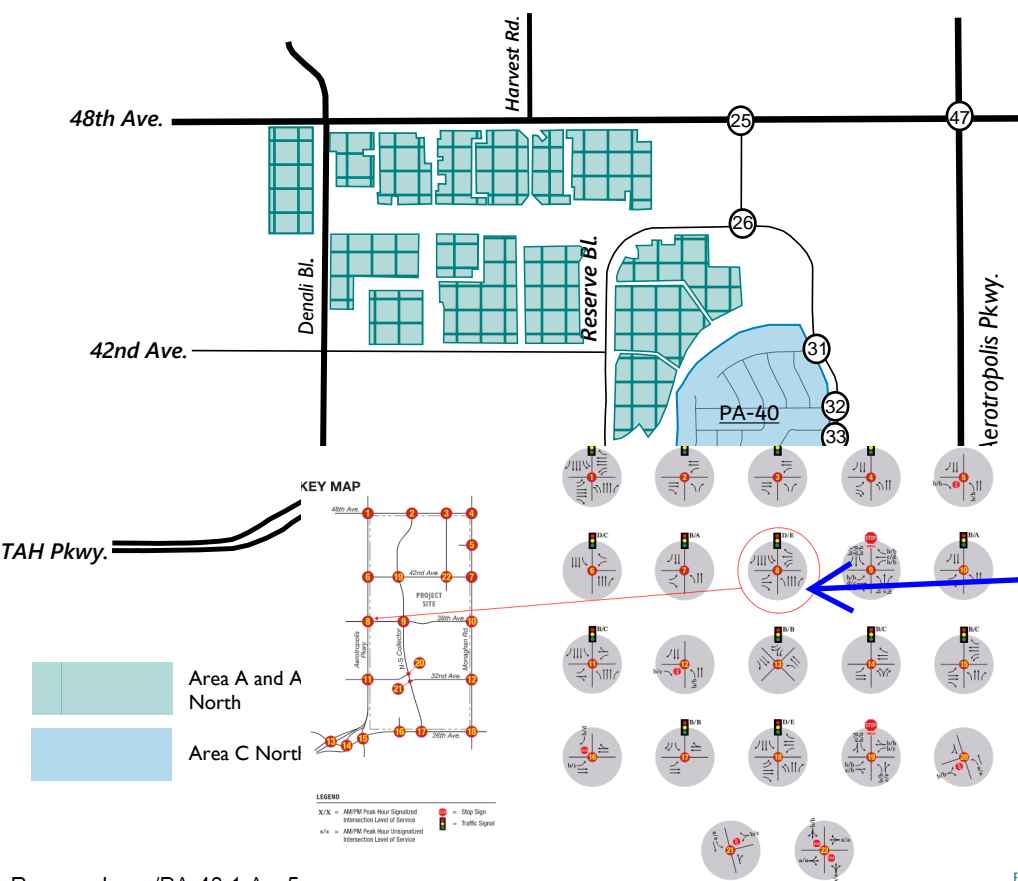


Figure 11. Horizon (2040) With Project Traffic Volumes (AM Peak Hour)

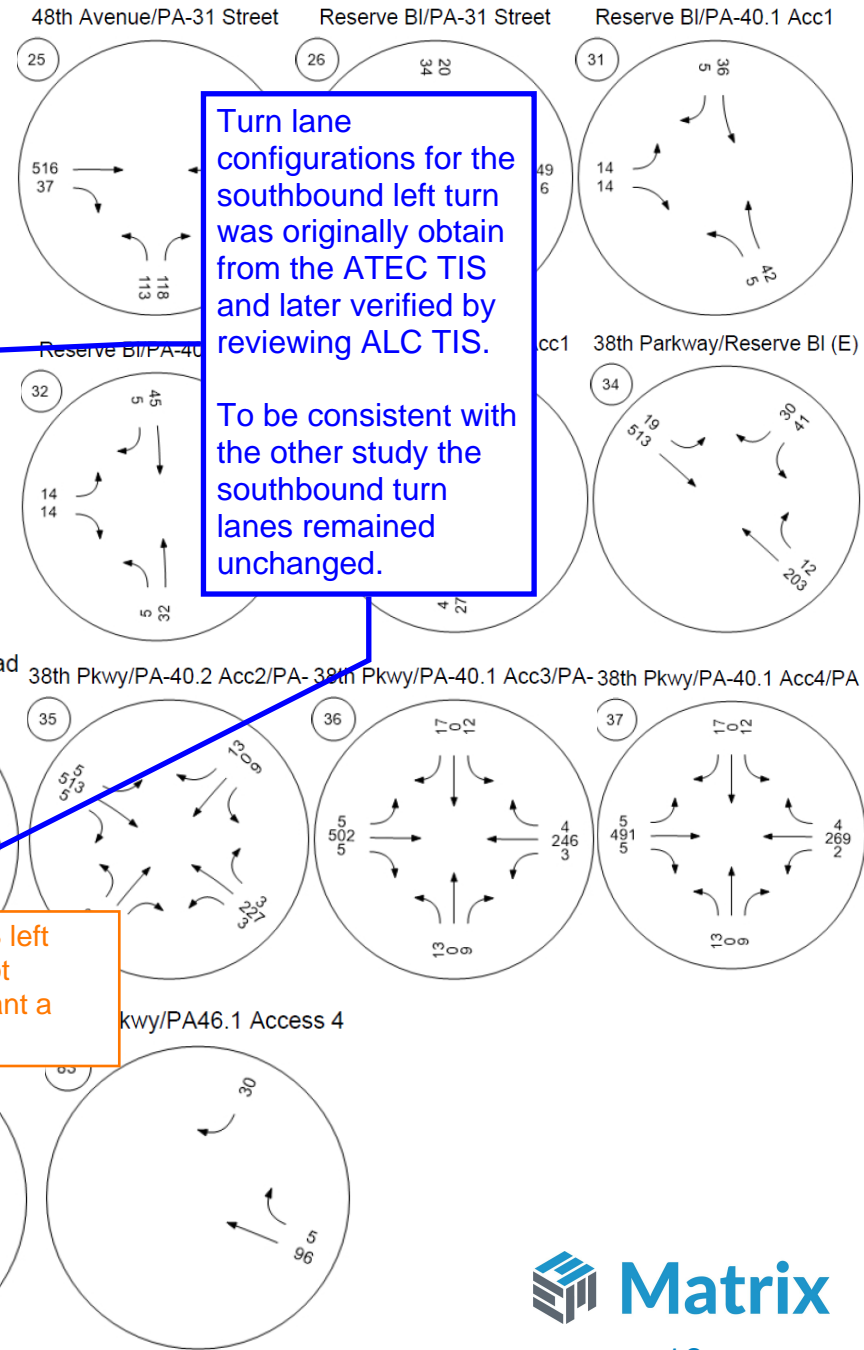
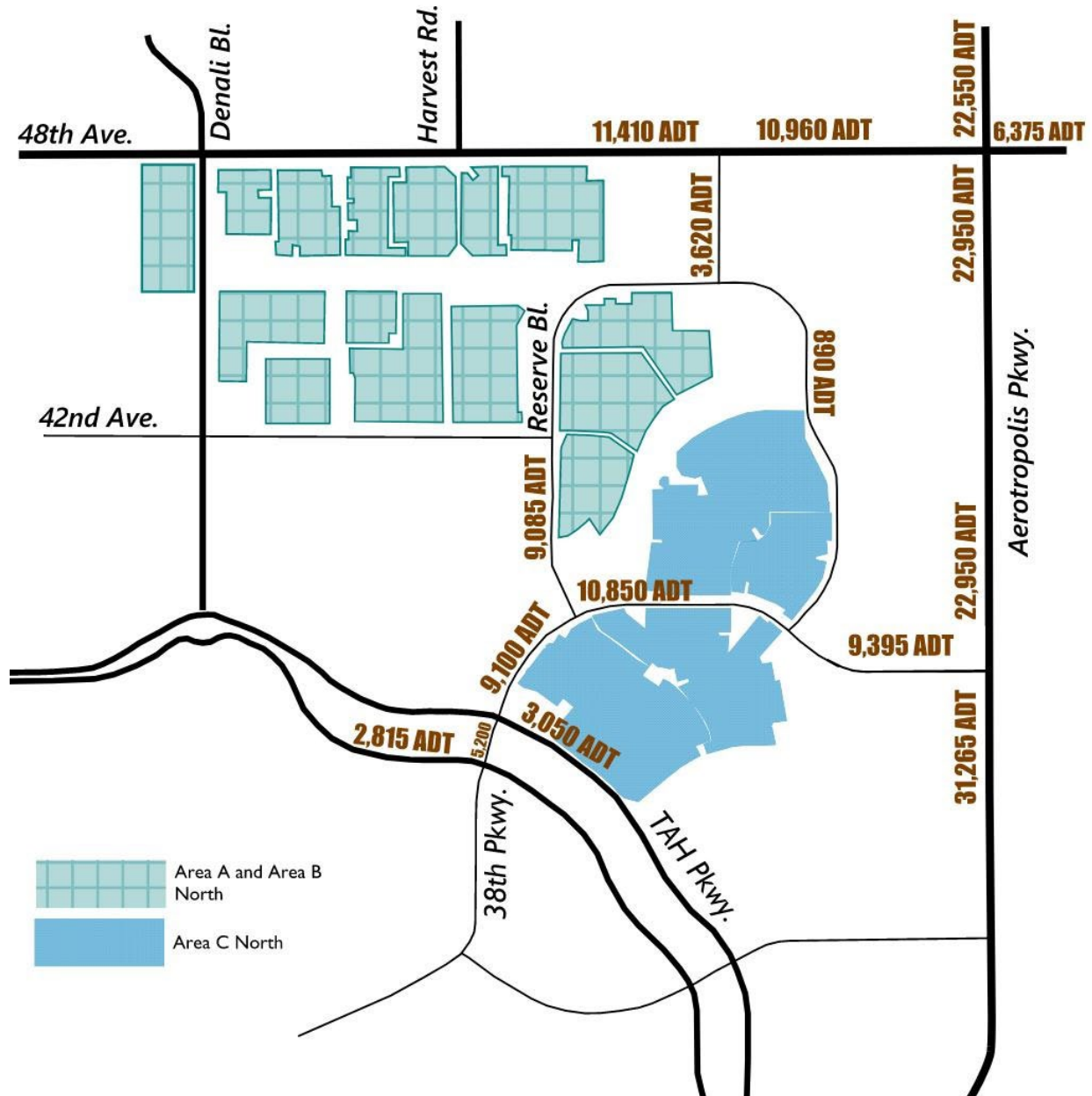




Figure 13. Horizon (2040) With Project Daily Traffic Volumes



Assumed intersection configurations for the study area intersections are shown in Figure 14.

Analysis of the intersections and roadways for buildout conditions with the volumes and configurations shown below results in the operations shown in Tables 5 and 6. Signal Warrant analysis was performed for the studied intersections and the intersection of 38th Parkway/Reserve Boulevard (#40) requires a traffic signal control in the horizon year with addition of the Area C north. Additionally, the intersection of TAH Parkway (E)/38th Parkway (#43) control type should change to an All-Way-Stopped-Controlled (AWSC). Signal warrant analysis is included in Appendix D.

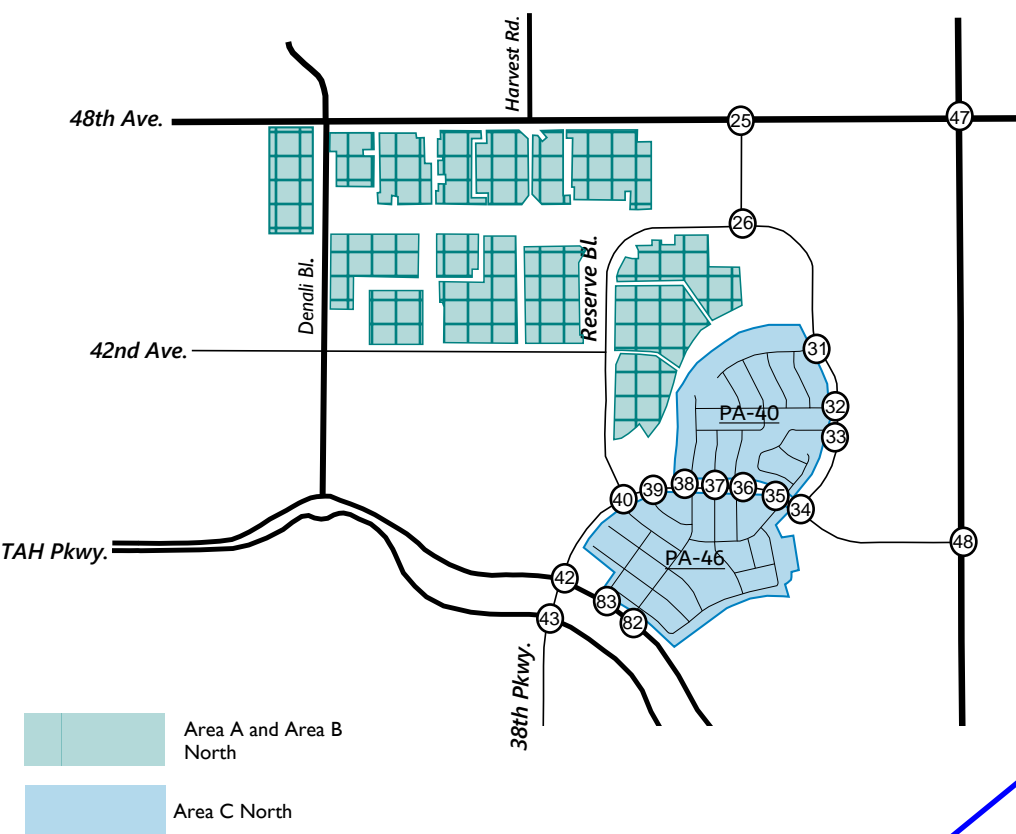


Figure 14. Horizon (2040) With Project Configurations and LOS

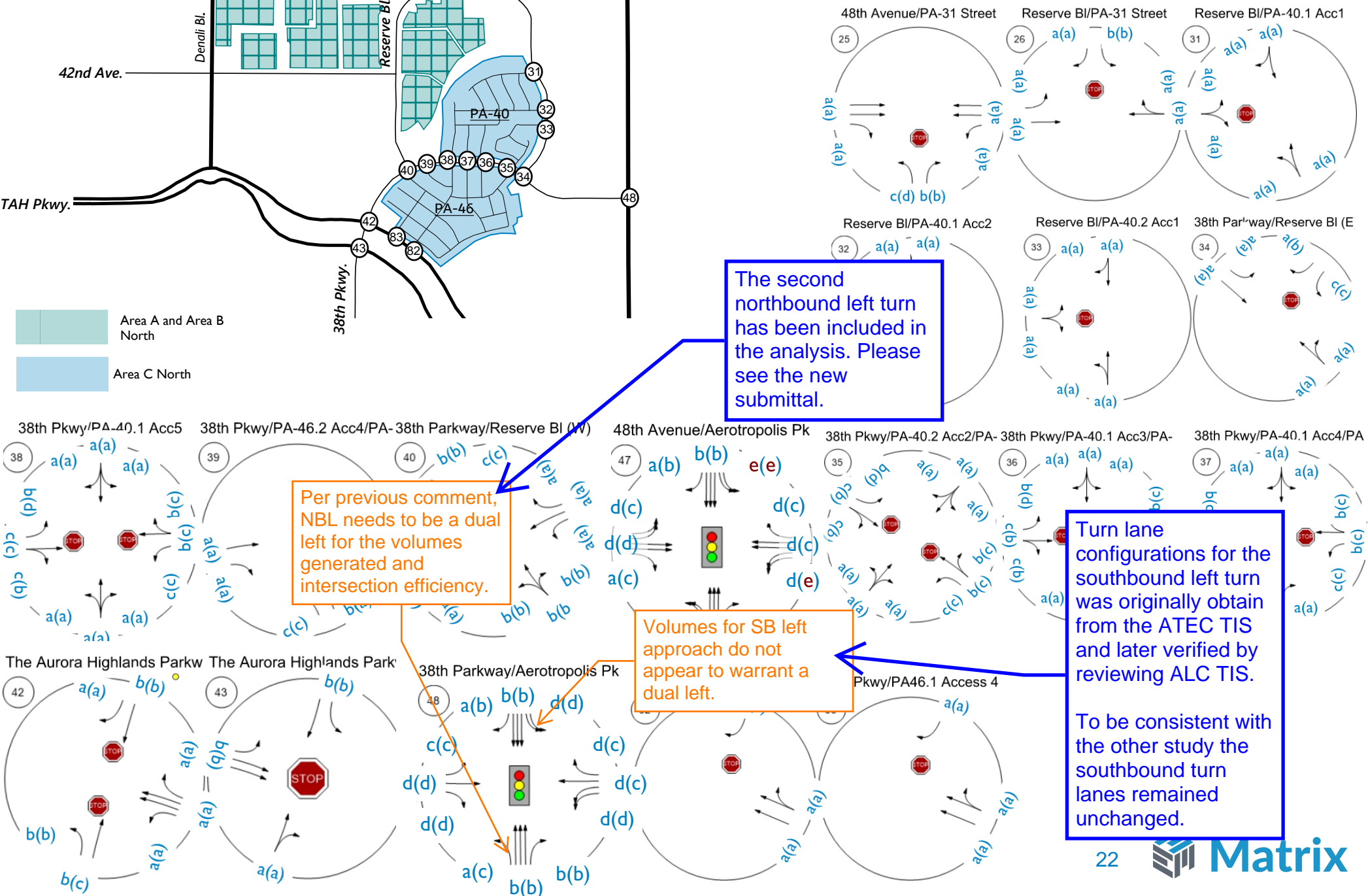


Table 5. Horizon (2040) With Project Intersection Operations (AM Peak Hour)**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
25	48th Avenue/PA-31 Street	Two-way stop	HCM 7th Edition	NB Left	0.396	24.0	C
26	Reserve Bl/PA-31 Street	Two-way stop	HCM 7th Edition	SB Left	0.032	10.4	B
31	Reserve Bl/PA-40.1 Acc1	Two-way stop	HCM 7th Edition	EB Left	0.017	9.1	A
32	Reserve Bl/PA-40.1 Acc2	Two-way stop	HCM 7th Edition	EB Left	0.017	9.1	A
33	Reserve Bl/PA-40.2 Acc1	Two-way stop	HCM 7th Edition	EB Left	0.013	9.1	A
34	38th Parkway/Reserve Bl (E)	Two-way stop	HCM 7th Edition	SB Left	0.134	17.4	C
35	38th Pkwy/PA-40.2 Acc2/PA-46.2 Acc1/PA-46.1 Acc4	Two-way stop	HCM 7th Edition	NB Left	0.050	18.6	C
36	38th Pkwy/PA-40.1 Acc3/PA-46.2 Acc2	Two-way stop	HCM 7th Edition	NB Left	0.051	18.9	C
37	38th Pkwy/PA-40.1 Acc4/PA-46.2 Acc3	Two-way stop	HCM 7th Edition	NB Left	0.052	19.1	C
38	38th Pkwy/PA-40.1 Acc5	Two-way stop	HCM 7th Edition	NB Left	0.061	19.9	C
39	38th Pkwy/PA-46.2 Acc4/PA-46.1 Acc1	Two-way stop	HCM 7th Edition	NB Left	0.128	17.9	C
40	38th Parkway/Reserve Bl (W)	Signalized	HCM 7th Edition	SB Left	0.324	10.8	B
42	The Aurora Highlands Parkway/38th Parkway	Two-way stop	HCM 7th Edition	NB Left	0.013	14.7	B
43	The Aurora Highlands Parkway/38th Parkway	All-way stop	HCM 7th Edition	EB Left	0.552	12.7	B
47	48th Avenue/Aerotropolis Pkwy	Signalized	HCM 7th Edition	SB Left	0.352	22.8	C
48	38th Parkway/Aerotropolis Pkwy	Signalized	HCM 7th Edition	SB Left	0.400	20.1	C
82	TAH Pkwy/PA-46.1 Acc3	Two-way stop	HCM 7th Edition	SB Right	0.037	8.7	A
83	TAH Pkwy/PA46.1 Access 4	Two-way stop	HCM 7th Edition	SB Right	0.033	8.7	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Table 6. Horizon (2040) With Project Intersection Operations (PM Peak Hour)

Intersection Analysis Summary							
ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
25	48th Avenue/PA-31 Street	Two-way stop	HCM 7th Edition	NB Left	0.380	26.8	D
26	Reserve Bl/PA-31 Street	Two-way stop	HCM 7th Edition	SB Left	0.090	10.4	B
31	Reserve Bl/PA-40.1 Acc1	Two-way stop	HCM 7th Edition	EB Left	0.014	9.6	A
32	Reserve Bl/PA-40.1 Acc2	Two-way stop	HCM 7th Edition	EB Left	0.014	9.6	A
33	Reserve Bl/PA-40.2 Acc1	Two-way stop	HCM 7th Edition	EB Left	0.010	9.5	A
34	38th Parkway/Reserve Bl (E)	Two-way stop	HCM 7th Edition	SB Left	0.128	22.5	C
35	38th Pkwy/PA-40.2 Acc2/PA-46.2 Acc1/PA-46.1 Acc4	Two-way stop	HCM 7th Edition	NB Left	0.052	24.5	C
36	38th Pkwy/PA-40.1 Acc3/PA-46.2 Acc2	Two-way stop	HCM 7th Edition	NB Left	0.054	25.5	D
37	38th Pkwy/PA-40.1 Acc4/PA-46.2 Acc3	Two-way stop	HCM 7th Edition	NB Left	0.056	26.3	D
38	38th Pkwy/PA-40.1 Acc5	Two-way stop	HCM 7th Edition	NB Left	0.080	28.8	D
39	38th Pkwy/PA-46.2 Acc4/PA-46.1 Acc1	Two-way stop	HCM 7th Edition	NB Left	0.113	22.6	C
40	38th Parkway/Reserve Bl (W)	Signalized	HCM 7th Edition	SB Left	0.456	11.3	B
42	The Aurora Highlands Parkway/38th Parkway	Two-way stop	HCM 7th Edition	NB Thru	0.480	17.0	C
43	The Aurora Highlands Parkway/38th Parkway	All-way stop	HCM 7th Edition	EB Left	0.429	11.4	B
47	48th Avenue/Aerotropolis Pkwy	Signalized	HCM 7th Edition	SB Left	0.357	23.0	C
48	38th Parkway/Aerotropolis Pkwy	Signalized	HCM 7th Edition	EB Right	0.553	27.0	C
82	TAH Pkwy/PA-46.1 Acc3	Two-way stop	HCM 7th Edition	SB Right	0.029	9.2	A
83	TAH Pkwy/PA46.1 Access 4	Two-way stop	HCM 7th Edition	SB Right	0.026	9.1	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Table 7 shows the recommended auxiliary lane lengths for the corresponding movement in the horizon year with addition of the project.

Table 7. Horizon (2040) With Project Turn Lane Evaluations

ID	Intersection	Movement	No. of Lanes	Access Category	Speed Limit (mph)	Turning Volume (veh/hr)	Queue (ft)	Deceleration Lane (ft)	Storage Lane (ft)	Taper Lane (ft)	COA Min Deceleration + Storage Requirement	Total (ft)	Notes
25	48th Ave/Collector Road	NBL	1	NR-C	35	113	46		113	120	150	235	Occur Within the Median
		EBR	1	NR-A	45	111	0	273		162		435	
		WBL	1	NR-A	45	53	5	273	50	162	200	485	
26	Reserve Bl/PA-31 Street	SBL	1	NR-C	35	61	7		50	120	150	170	
		EBL	1	NR-C	35	91	5		100	120		220	
34	38th Pkwy/Reserve Bl (E)	SBL	1	NR-C	35	41	11		50	120	150	170	
		EBL	1	NR-C	35	44	4		50	0	150	50	Occur Within the Median
39	38th Pkwy/PA-46.2 & PA-46.1 Access	NBL	1	NR-C	35	38	11		50	120		170	
		EBR	1	NR-C	35	54	0		50	120		170	
40	38th Pkwy/Reserve Bl (W)	SBL	1	NR-C	35	254	161		254	120	150	375	
		SBR	1	NR-C	35	182	52		182	120		300	Shared with SBT Due to Low Through Volume
		EBL	1	NR-C	35	227	110		227	120	150	345	Occur Within the Median
		WBL	1	NR-C	35	61	21		50	120	150	170	Occur Within the Median
		WBR	1	NR-C	35	220	22		220	120		340	
42	TAH Pkwy/38th Pkwy (W)	SBR	1	NR-C	35	157	15		130	120		250	
		WBL	1	NR-B	40	32	0		50	144	200	195	
		WBR	1	NR-B	40	228	0		50	144		195	
43	TAH Pkwy/38th Pkwy (E)	SBL		NR-C	35	274	52		237	120	150	355	AWSC Intersection
		EBL	1	NR-B	40	312	53		50	144	200	195	
47	48TH Ave/Aerotropolis Pkwy	NBL	2	NR-A	45	211	172	273	106	162	200	540	
		NBR	1	NR-A	45	120	26	273		162		435	
		SBL	2	NR-A	45	10	8	273	50	162	200	485	
		SBR	1	NR-A	45	145	38	373		162		535	
		EBL	2	NR-A	45	250	204	273	125	162	200	560	
		EBR	1	NR-A	45	57	0	273		162		435	
		WBL	2	NR-A	45	87	62	273	50	162	200	485	
		WBR	1	NR-A	45	40	32	273		162		435	
48	38th Pkwy/Aerotropolis Pkwy	NBL	1	NR-A	45	396	267	273	314	162	200	750	
		NBR	1	NR-A	45	614	179	273		162		435	
		SBL	2	NR-A	45	64	40	273	25	162	200	460	
		SBR	1	NR-A	45	73	25	273		162		435	
		EBL	1	NR-C	35	63	58		50	120	150	170	Occur Within the Median
		EBR	1	NR-C	35	349	214		349	120		470	
		WBL	2	NR-C	35	597	329		299	120	150	420	
		WBR	1	NR-C	35	406	237		406	120		525	

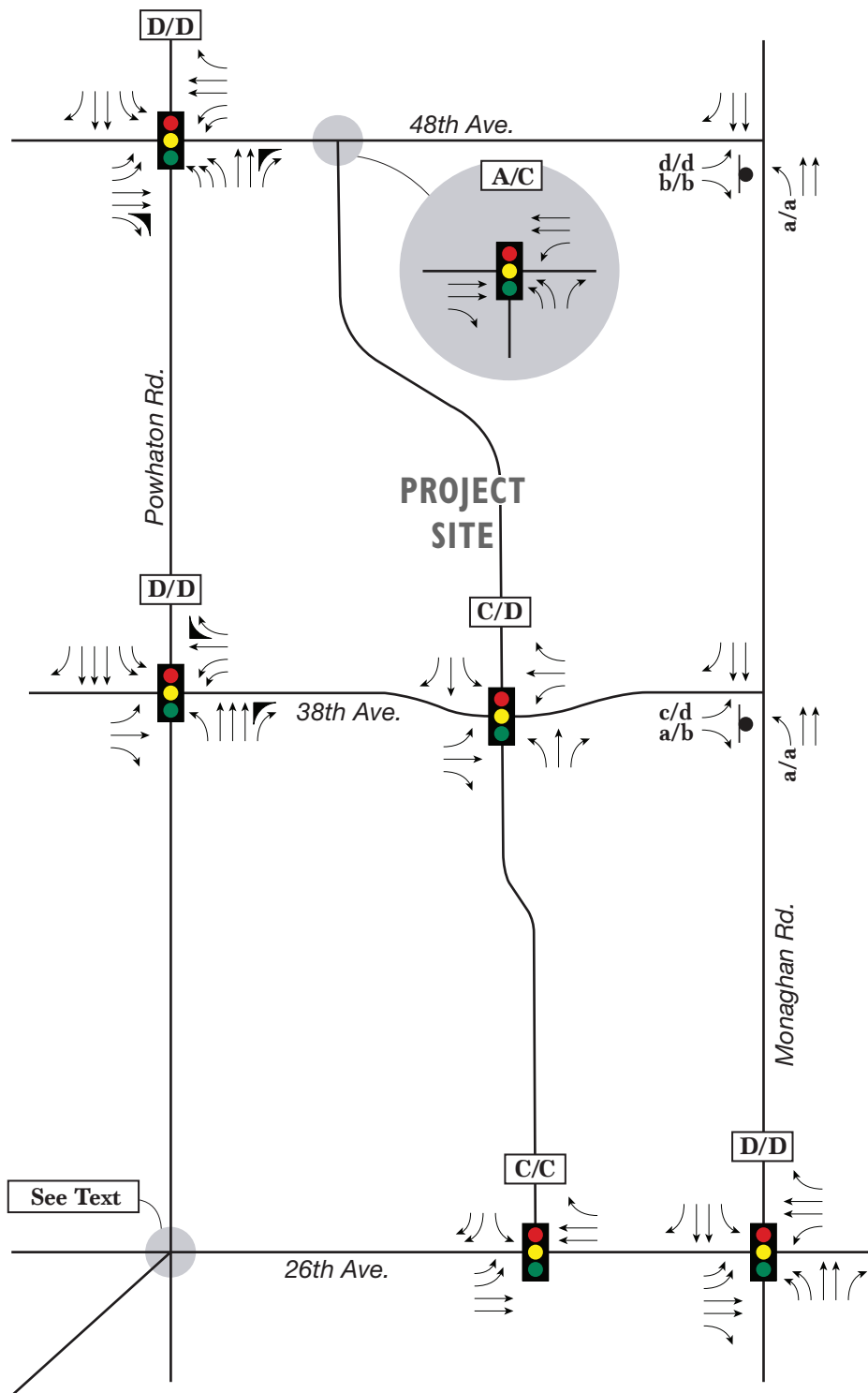
COA: City of Aurora

Total turn lane is rounded to the nearest 5-ft.

Conclusions and Recommendations

The traffic impacts on the assumed roadway network were studied regarding the development of the Aurora Highlands, North Area, Area C. The roadway network assumptions were developed from a combination of *NEATS Final Report, 2018*, *The Aurora Highlands Traffic Impact Study; August 2019*, *Powhaton Road Alignment Study, October 2022*, *ATEC Traffic Impact Analysis; November 2019*, *The Aurora Highlands North, Area A (2022)*, *The Aurora Highlands North Area B (2023)*, and built or planned roadways within the Aurora highlands. These studies were used to obtain the 2040 roadway network, intersection configurations and 2040 background traffic volumes in the study area. New project trips for The Aurora Highlands, North Area, Area C were generated using the ITE Trip Generation Manual, 11th Edition. Subsequently, they were distributed to the roadway network based on trip distribution assumptions from other area studies and then assigned to the roadway network. The transportation network was assessed according to the State Highway Access Code (SHAC), and the roadway needs were summarized in Table 7.

Appendix A – Background Traffic Volumes



LEGEND



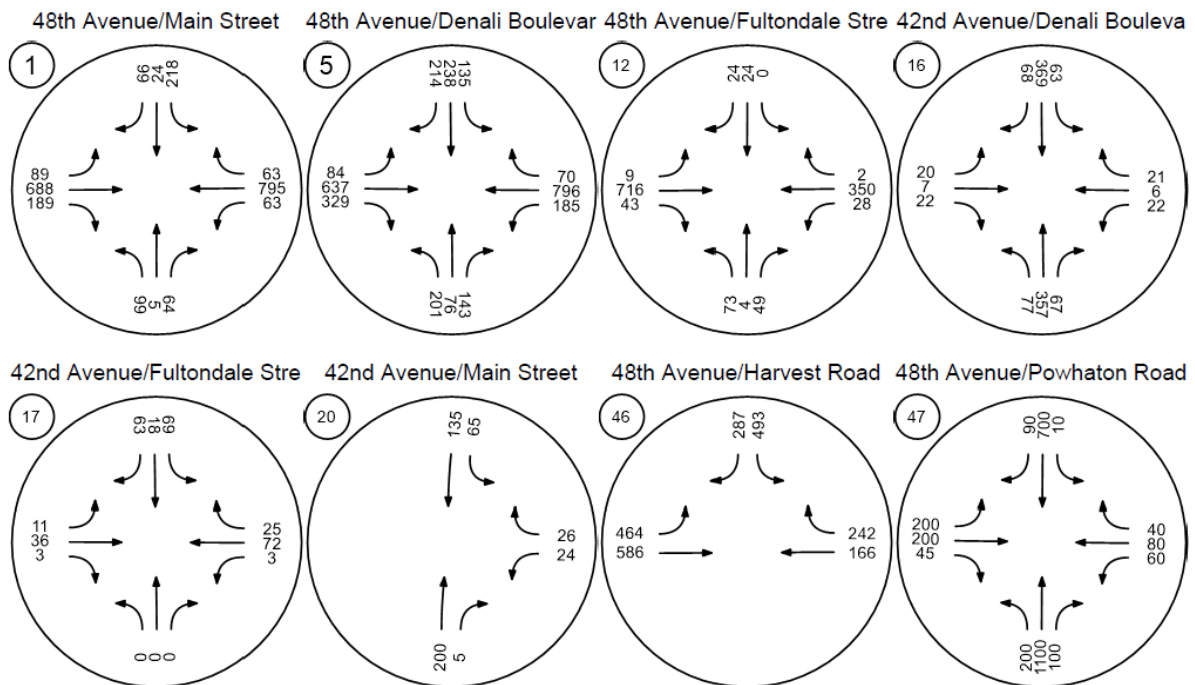
- X/X** = AM/PM Peak Hour Signalized Intersection Level of Service
- x/x** = AM/PM Peak Hour Unsignalized Intersection Level of Service
-  = Stop Sign
-  = Traffic Signal

Figure 7. Horizon Year No Project Traffic Volumes (AM Peak Hour)



Horizon Year No Project Traffic Volumes (AM Peak Hour) Continued



38th Parkway/Powhatan Road

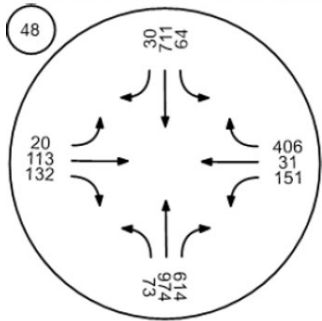
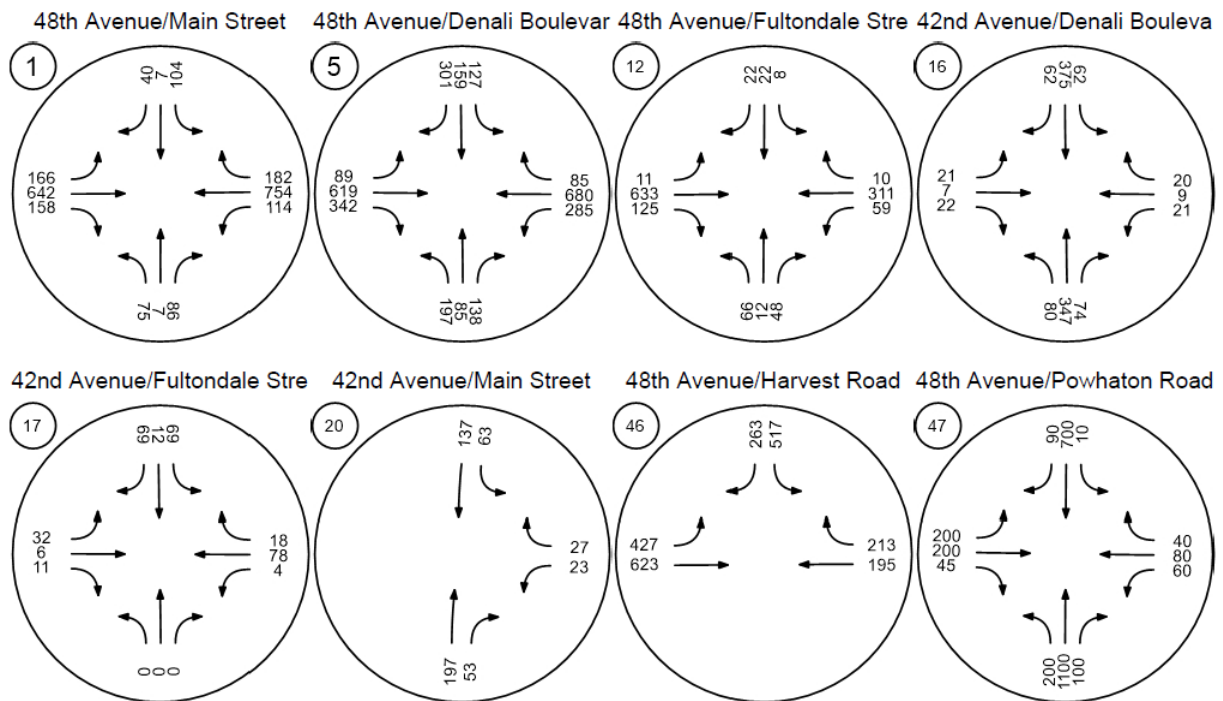


Figure 8. Horizon Year No Project Traffic Volumes (PM Peak Hour)



Horizon Year No Project Traffic Volumes (PM Peak Hour) Continued



38th Parkway/Powhatan Roa

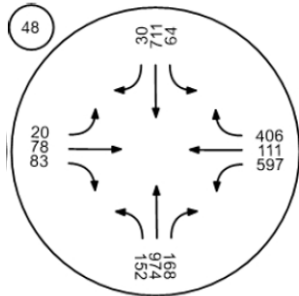
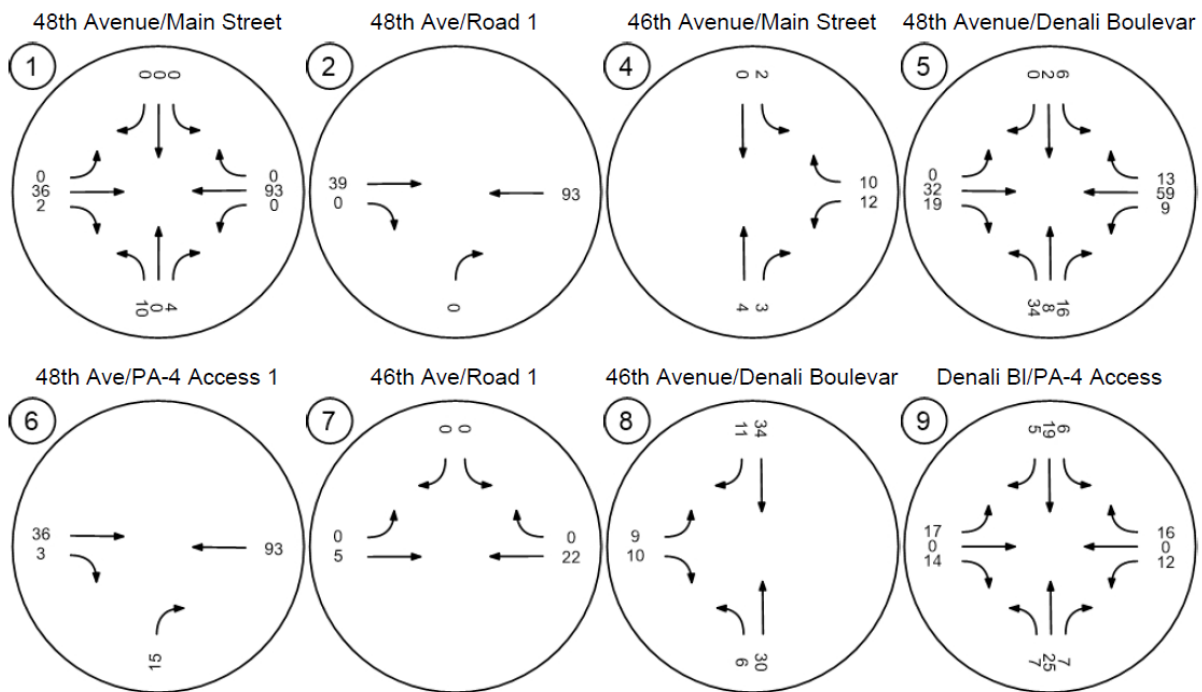
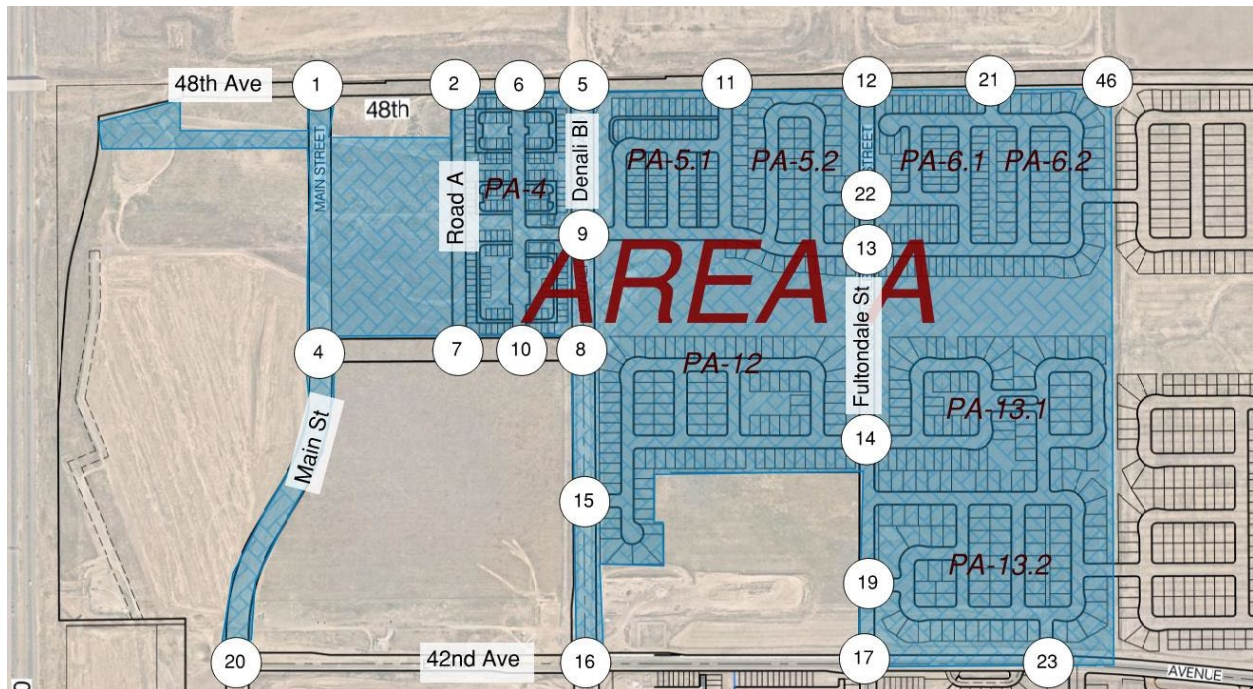
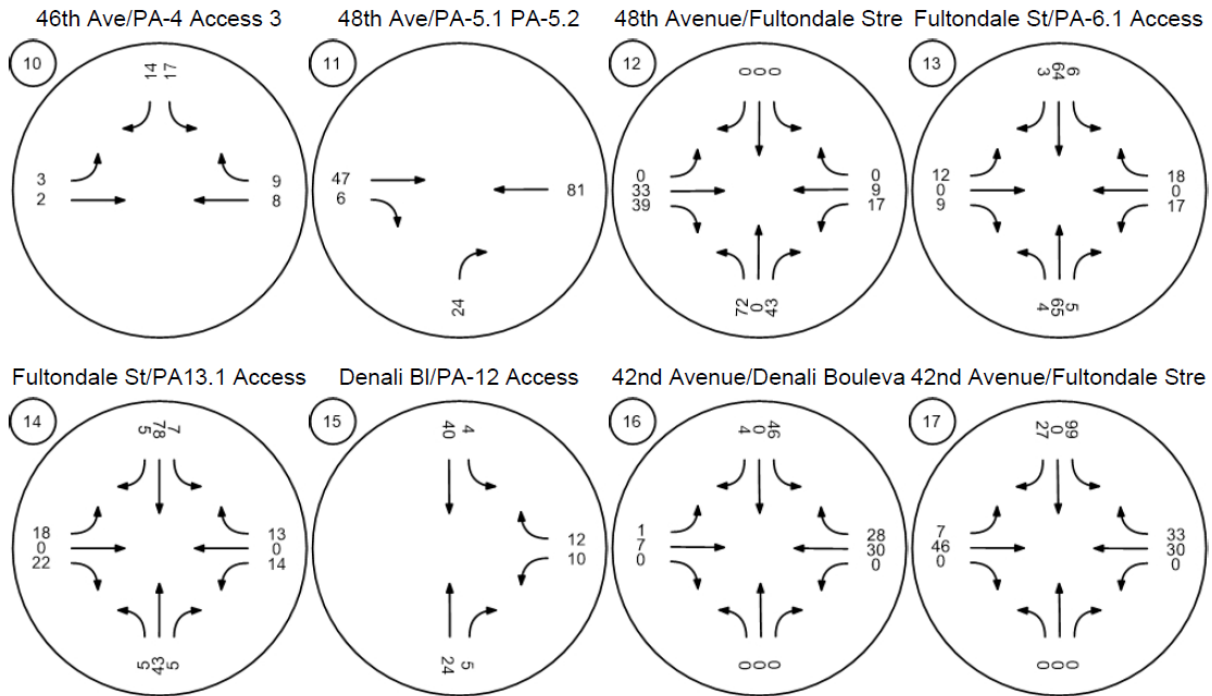
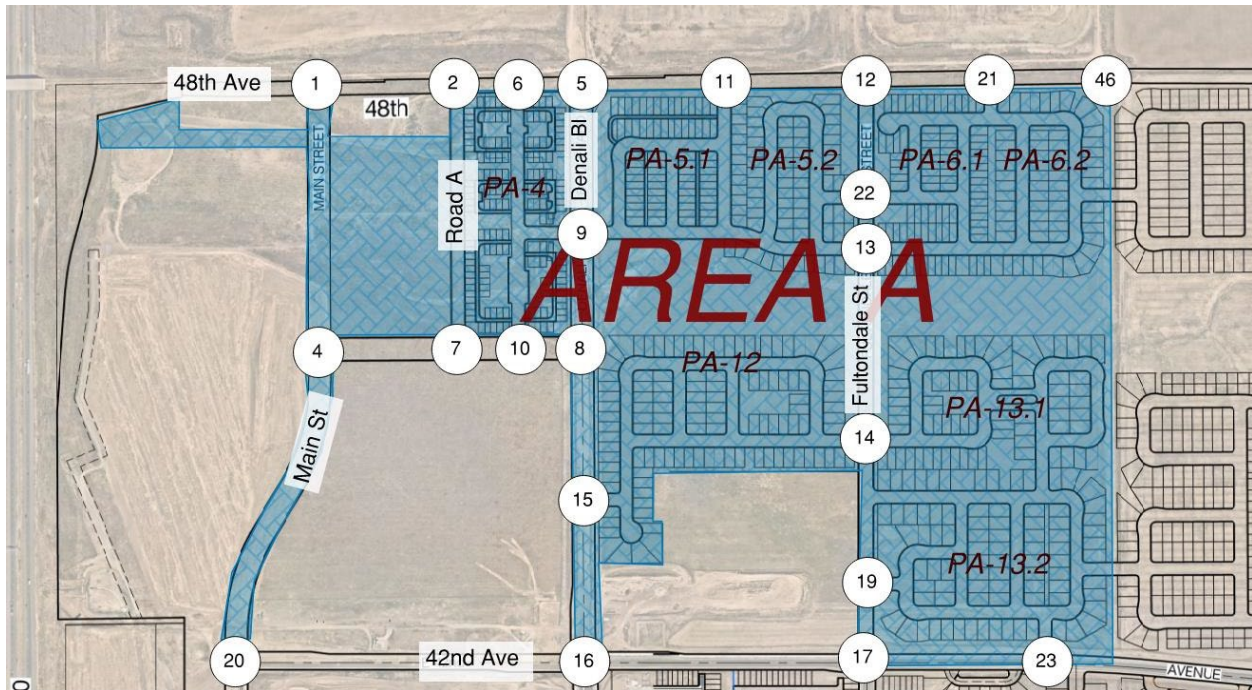


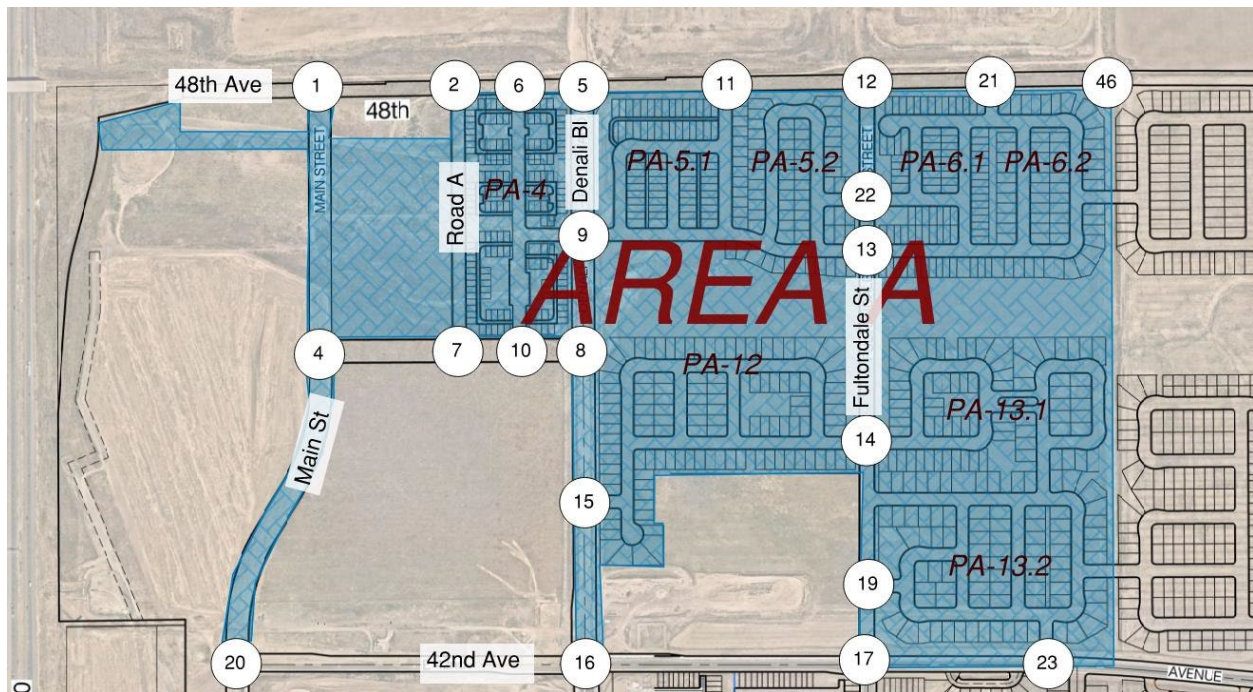
Figure 4. The Aurora Highlands North, Area A Project Trips (AM Peak Hour)



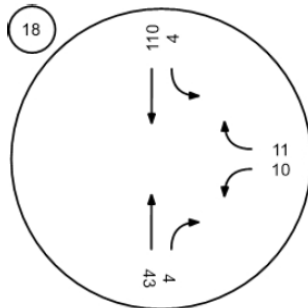
The Aurora Highlands North, Area A Project Trips (AM Peak Hour) Continued



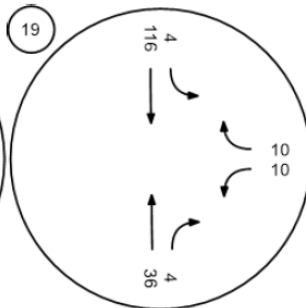
The Aurora Highlands North, Area A Project Trips (AM Peak Hour) Continued



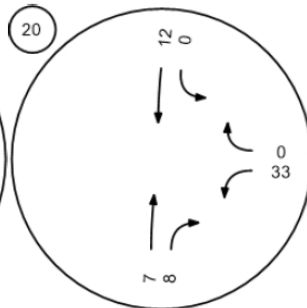
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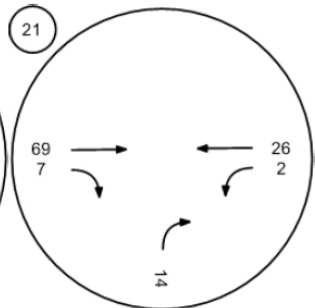
Fultondale St/PA13.2 Access



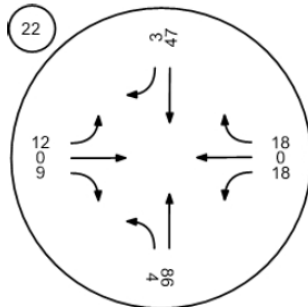
42nd Avenue/Main Street



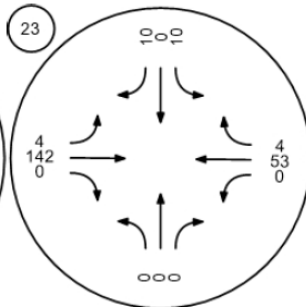
Fultondale St/PA-6.1 Access



Fultondale St/PA-6.1



42nd Ave/PA 13.1 Access 2



48th Avenue/Harvest Road

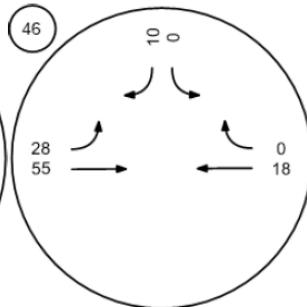
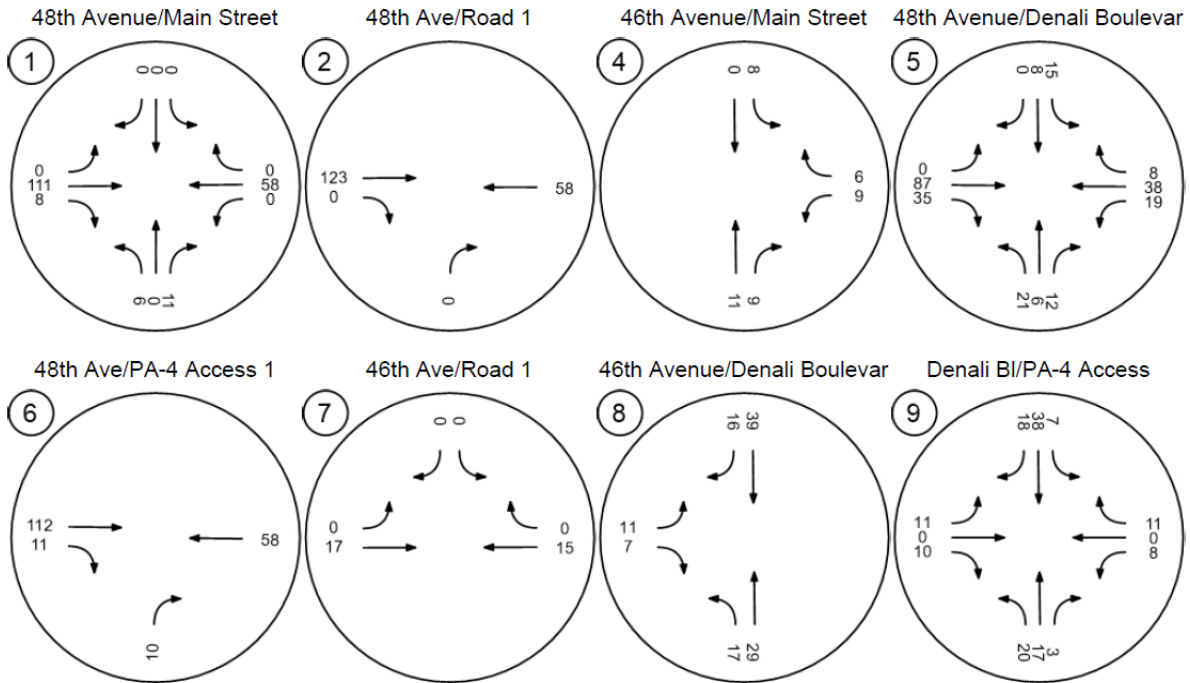
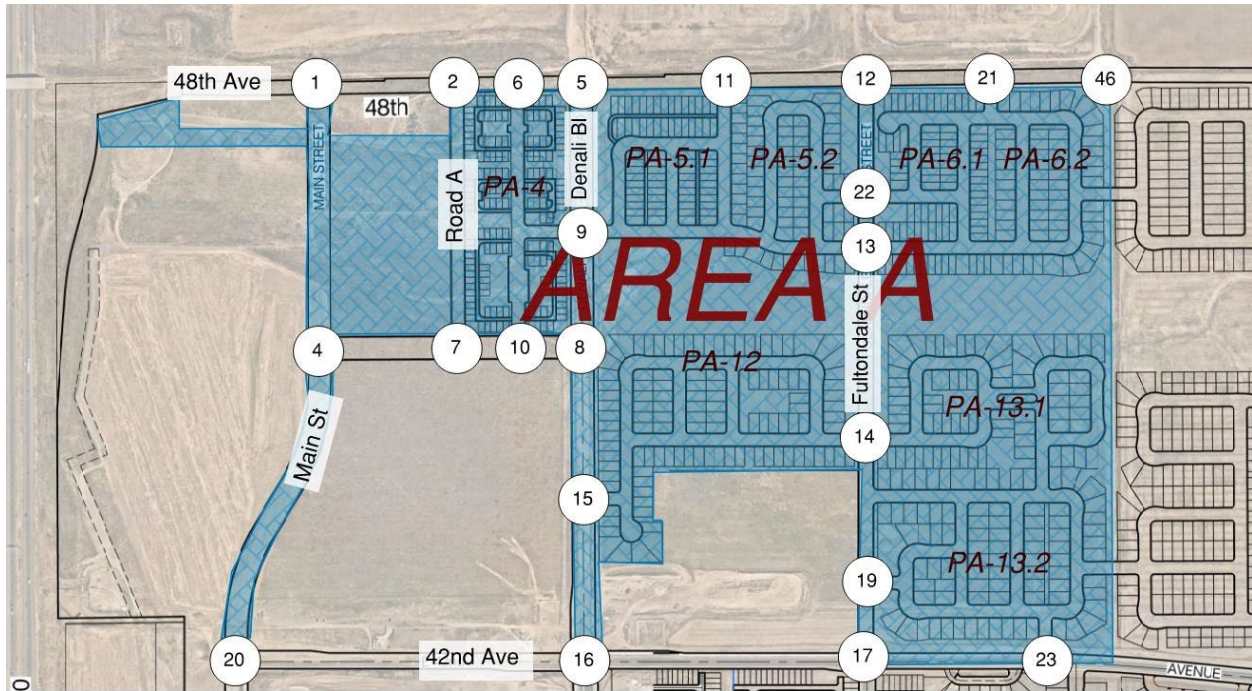
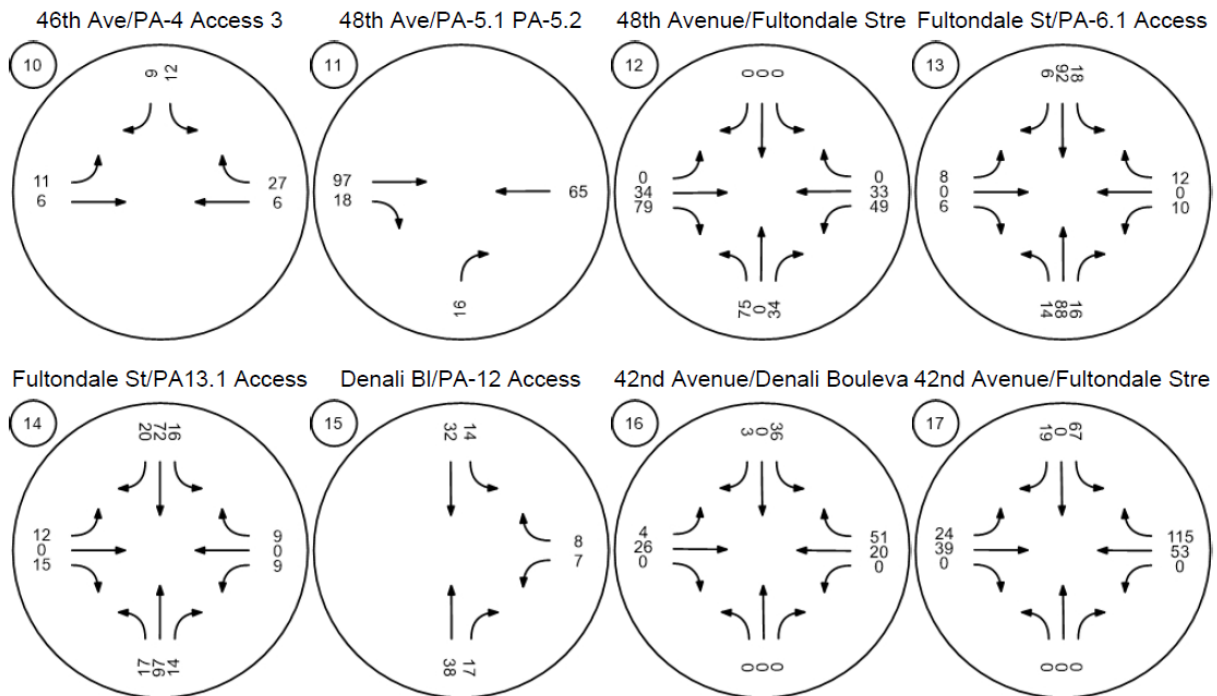
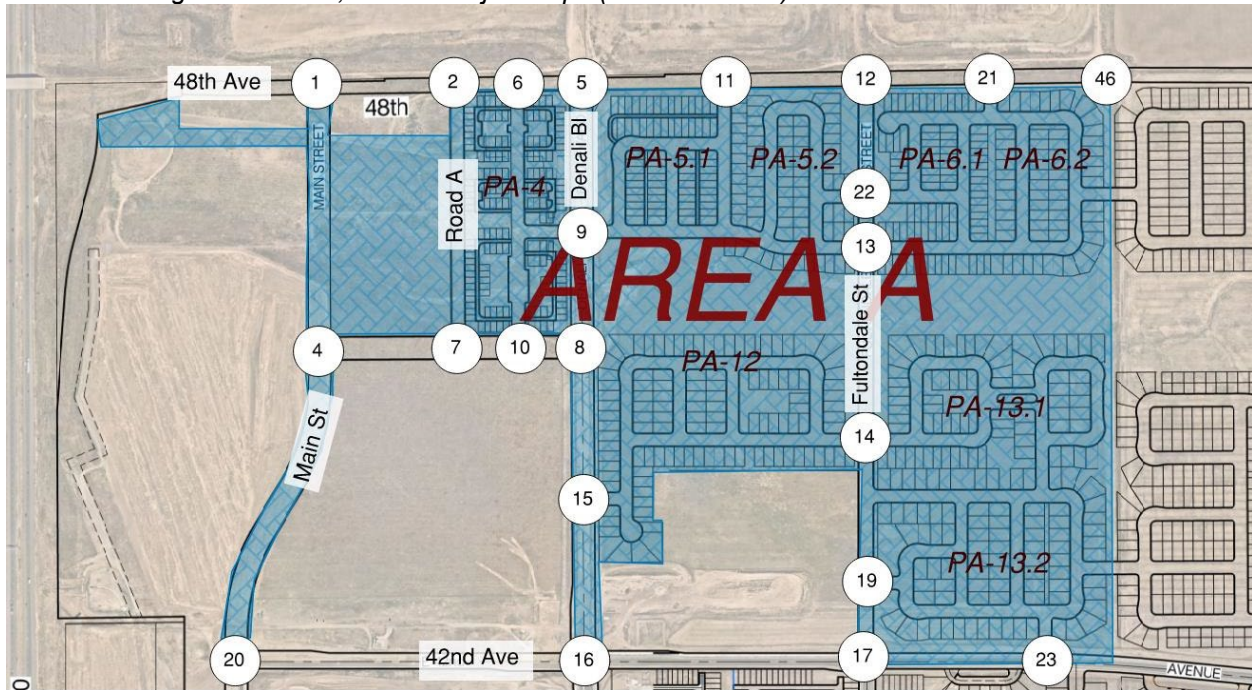


Figure 5. The Aurora Highlands North, Area A Project Trips (PM Peak)



The Aurora Highlands North, Area A Project Trips (PM Peak Hour) Continued



The Aurora Highlands North, Area A Project Trips (PM Peak Hour) Continued

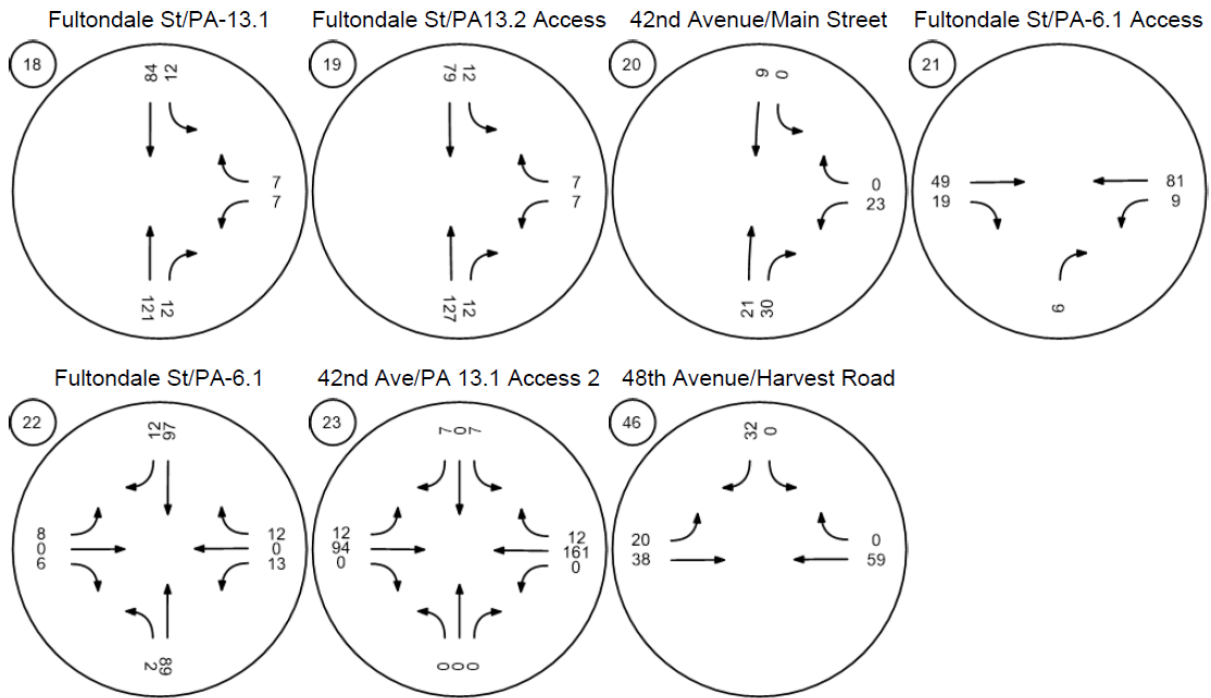
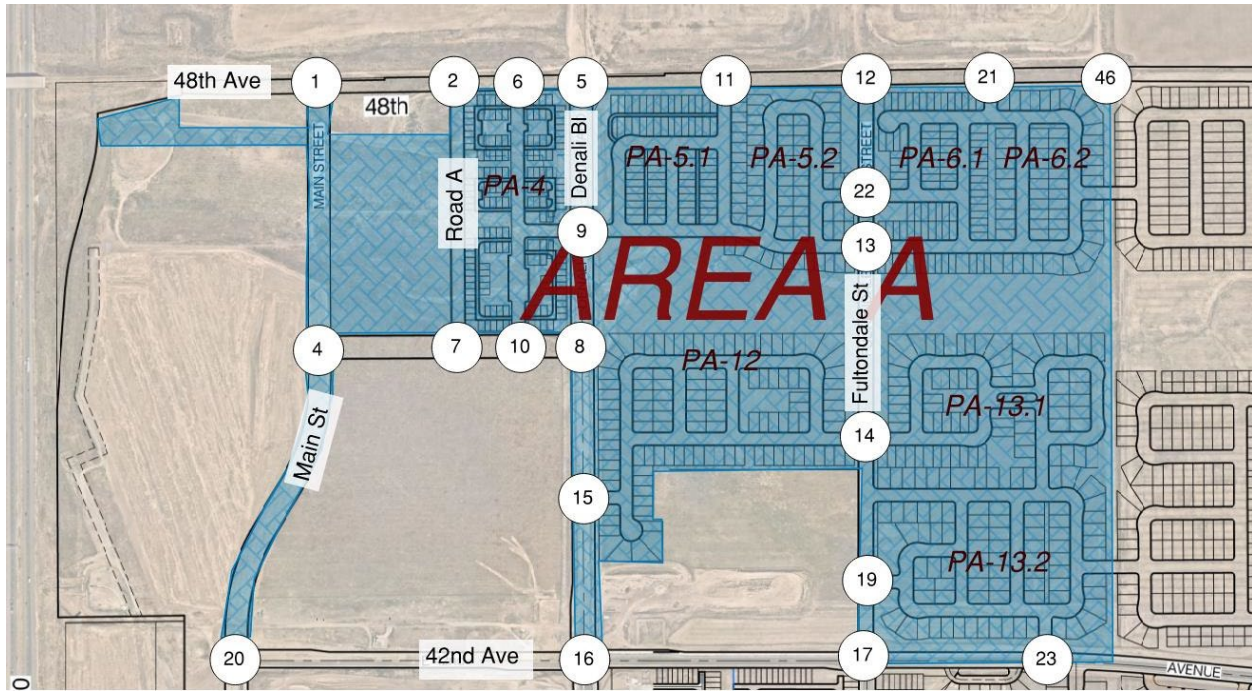
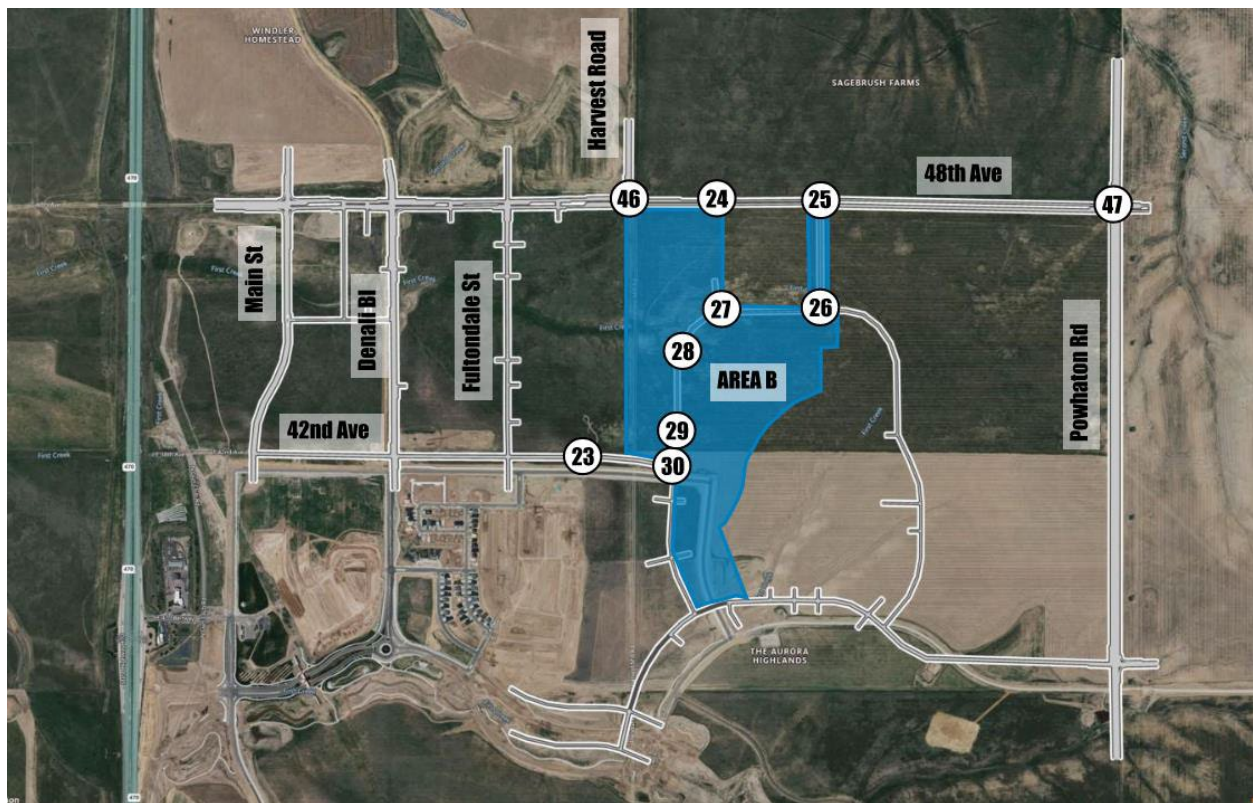
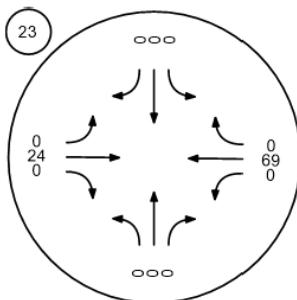


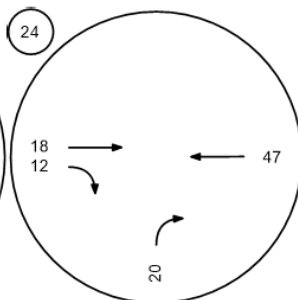
Figure 4. The Aurora Highlands North, Area B Project Trips (AM Peak Hour)



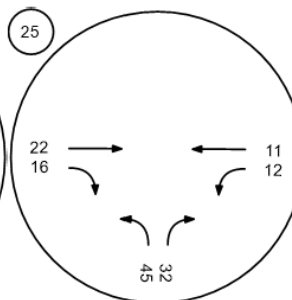
42nd Ave/PA 13.1 Access 2



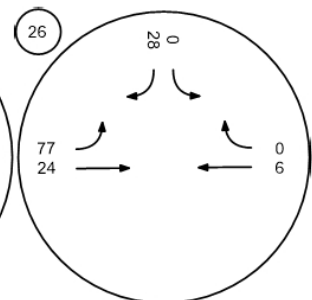
48th Ave/Road D



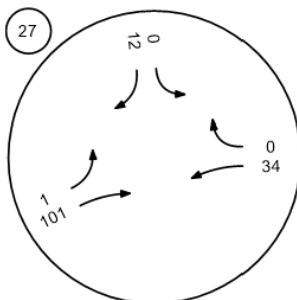
48th Avenue/PA-31 Street



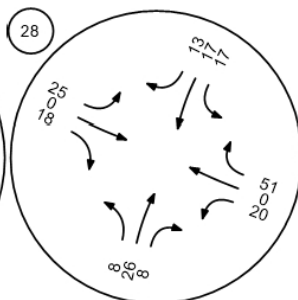
Reserve Loop/PA-31 Street



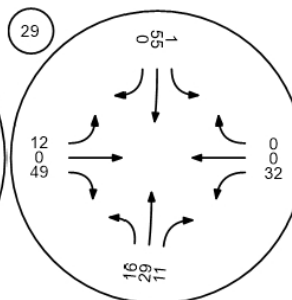
Reserve Loop/Road C



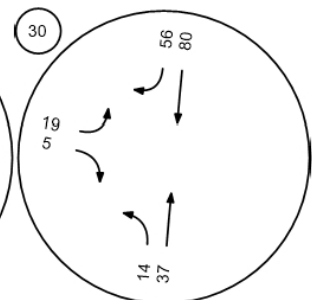
Reserve Loop/Road B



Reserve Loop/Road A



42nd Avenue/Reserve Loop



The Aurora Highlands North, Area B Project Trips (AM Peak Hour) Continued



48th Avenue/Harvest Road 48th Avenue/Powhatan Road

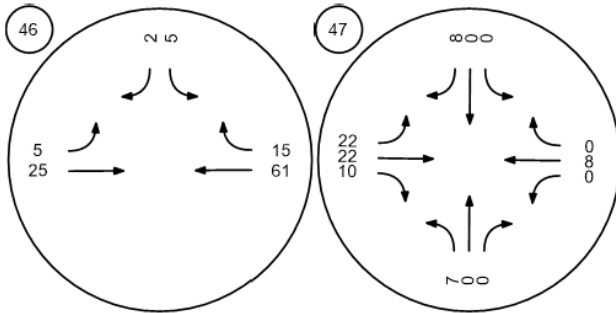
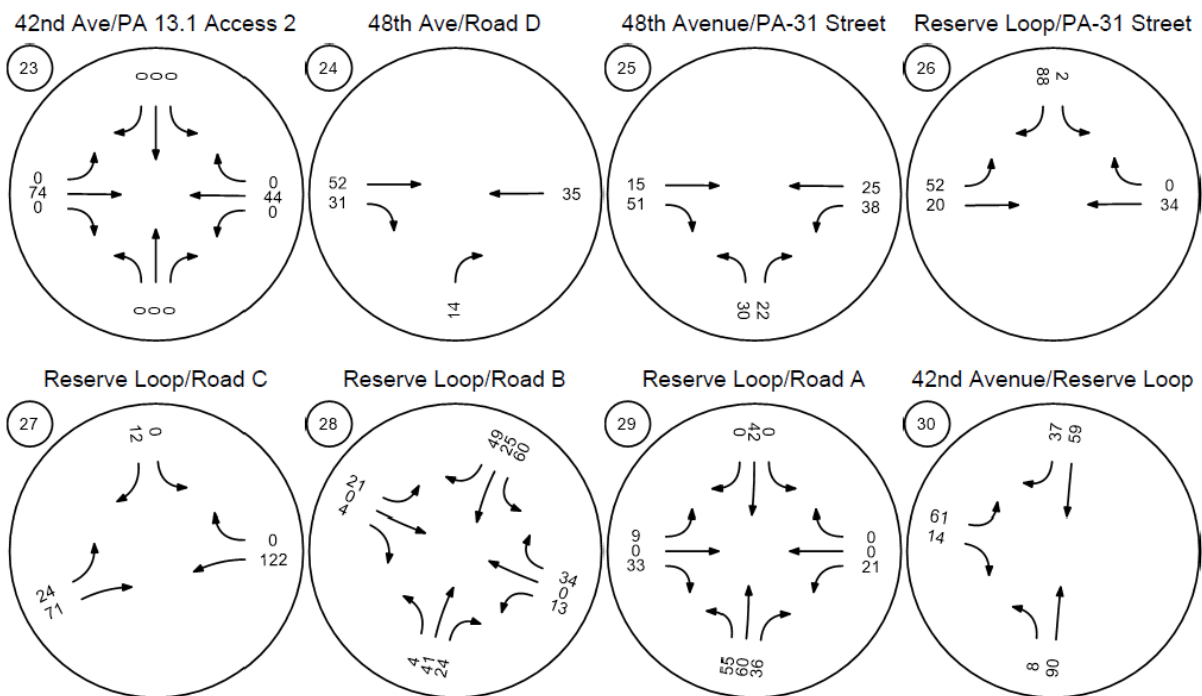
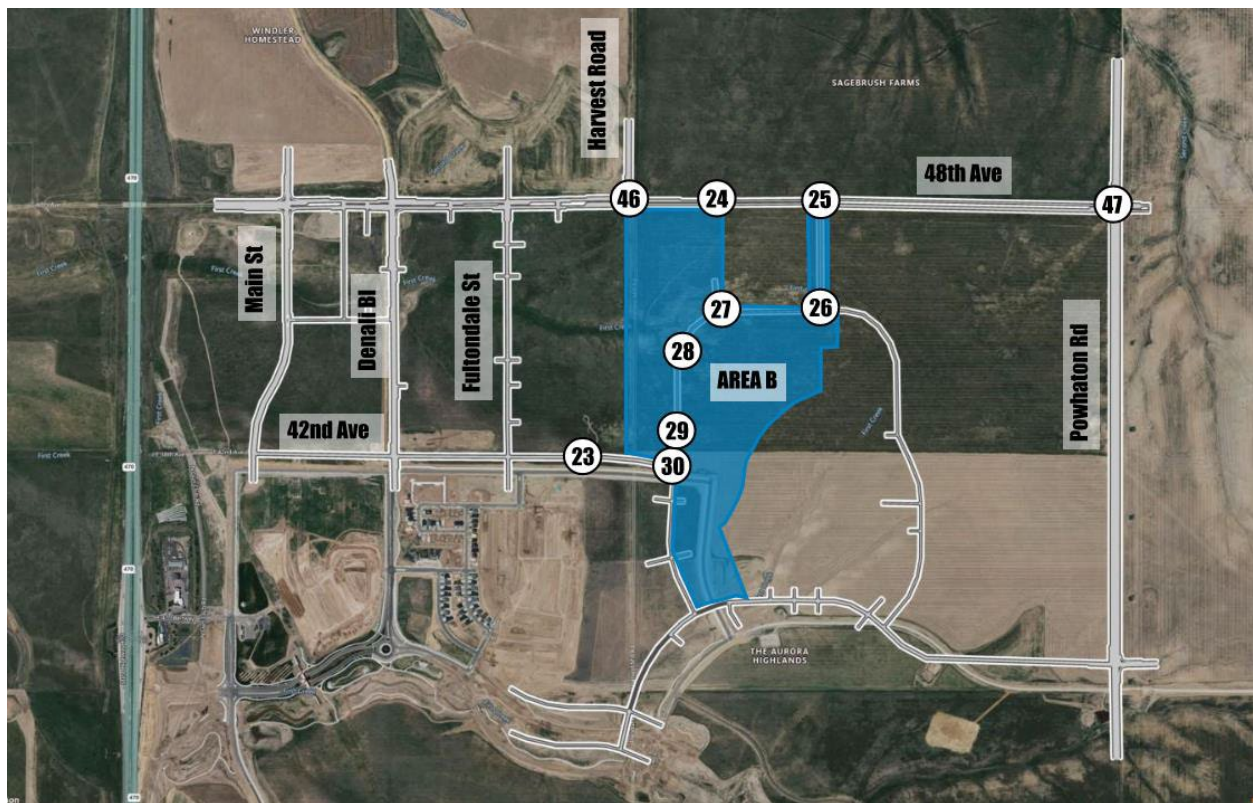


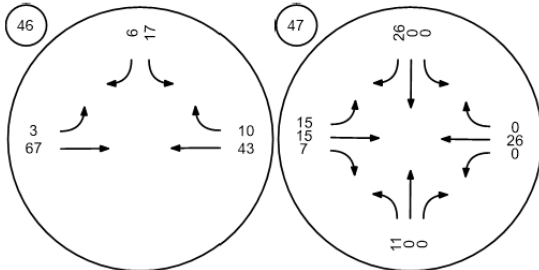
Figure 5. The Aurora Highlands North, Area B Project Trips (PM Peak)



The Aurora Highlands North, Area B Project Trips (PM Peak) Continued



48th Avenue/Harvest Road 48th Avenue/Powhatan Road



Appendix B – ITE Trip Generation Calculations

PROJECT DETAILS			
Project Name:	TAH - Area C	Type of Project:	
Project No:		City:	
Country:		Built-up Area(Sq.ft):	
Analyst Name:	Scott Barnhart	Clients Name:	
Date:	10/1/2022	ZIP/Postal Code:	
State/Province:		No. of Scenarios:	3
Analysis Region:			
SCENARIO SUMMARY			

Scenarios	Name	No. of Land Uses	Phases of Development	No. of Years to Project Traffic	User Group	Estimated New Vehicle Trips		
						Entry	Exit	Total
Scenario - 1	AM Peak Hour	4	1	0		142	426	568
Scenario - 2	PM Peak Hour	4	1	0		489	287	776
Scenario - 3	Weekday	4	1	0		3875	3875	7750

Scenario - 1

Scenario Name: AM Peak Hour

User Group:

Dev. phase: 1

No. of Years to Project 0

Analyst Note:

Traffic :

Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
210 - Single-Family Detached Housing	General	Dwelling Units	278	Weekday, Peak Hour of Adjacent Street Traffic,	Best Fit (LOG)	47	142	189
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				$\ln(T) = 0.91\ln(X) + 0.12$	25%	75%	
210(1) - Single-Family Detached Housing	General	Dwelling Units	74	Weekday, Peak Hour of Adjacent Street Traffic,	Best Fit (LOG)	14	42	56
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				$\ln(T) = 0.91\ln(X) + 0.12$	25%	75%	
210(2) - Single-Family Detached Housing	General	Dwelling Units	249	Weekday, Peak Hour of Adjacent Street Traffic,	Best Fit (LOG)	43	128	171
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				$\ln(T) = 0.91\ln(X) + 0.12$	25%	75%	
210(3) - Single-Family Detached Housing	General	Dwelling Units	218	Weekday, Peak Hour of Adjacent Street Traffic,	Best Fit (LOG)	38	114	152
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				$\ln(T) = 0.91\ln(X) + 0.12$	25%	75%	

VEHICLE TO PERSON TRIP CONVERSION

BASELINE SITE VEHICLE CHARACTERISTICS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
210 - Single-Family Detached Housing	100	100	1	1	25	75
210(1) - Single-Family Detached Housing	100	100	1	1	25	75
210(2) - Single-Family Detached Housing	100	100	1	1	25	75
210(3) - Single-Family Detached Housing	100	100	1	1	25	75

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
210 - Single-Family Detached Housing	47	142	0	0	47	142
	189		0		189	
210(1) - Single-Family Detached Housing	14	42	0	0	14	42
	56		0		56	
210(2) - Single-Family Detached Housing	43	128	0	0	43	128
	171		0		171	
210(3) - Single-Family Detached Housing	38	114	0	0	38	114
	152		0		152	

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
210 - Single-Family Detached Housing	47	142	189
210(1) - Single-Family Detached Housing	14	42	56
210(2) - Single-Family Detached Housing	43	128	171
210(3) - Single-Family Detached Housing	38	114	152

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	142	426	568
External Vehicle Trips	142	426	568
New Vehicle Trips	142	426	568

Scenario - 2

Scenario Name: PM Peak Hour

User Group:

Dev. phase: 1

No. of Years to Project 0

Analyst Note:

Traffic :

Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
210 - Single-Family Detached Housing	General	Dwelling Units	278	Weekday, Peak Hour of Adjacent Street Traffic,	Best Fit (LOG)	164	96	260
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				$\ln(T) = 0.94\ln(X) + 0.27$	63%	37%	
210(1) - Single-Family Detached Housing	General	Dwelling Units	74	Weekday, Peak Hour of Adjacent Street Traffic,	Best Fit (LOG)	47	28	75
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				$\ln(T) = 0.94\ln(X) + 0.27$	63%	37%	
210(2) - Single-Family Detached Housing	General	Dwelling Units	249	Weekday, Peak Hour of Adjacent Street Traffic,	Best Fit (LOG)	148	87	235
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				$\ln(T) = 0.94\ln(X) + 0.27$	63%	37%	
210(3) - Single-Family Detached Housing	General	Dwelling Units	218	Weekday, Peak Hour of Adjacent Street Traffic,	Best Fit (LOG)	130	76	206
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				$\ln(T) = 0.94\ln(X) + 0.27$	63%	37%	

VEHICLE TO PERSON TRIP CONVERSION

BASELINE SITE VEHICLE CHARACTERISTICS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
210 - Single-Family Detached Housing	100	100	1	1	63	37
210(1) - Single-Family Detached Housing	100	100	1	1	63	37
210(2) - Single-Family Detached Housing	100	100	1	1	63	37
210(3) - Single-Family Detached Housing	100	100	1	1	63	37

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
210 - Single-Family Detached Housing	164	96	0	0	164	96
	260		0		260	
210(1) - Single-Family Detached Housing	47	28	0	0	47	28
	75		0		75	
210(2) - Single-Family Detached Housing	148	87	0	0	148	87
	235		0		235	
210(3) - Single-Family Detached Housing	130	76	0	0	130	76
	206		0		206	

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
210 - Single-Family Detached Housing	164	96	260
210(1) - Single-Family Detached Housing	47	28	75
210(2) - Single-Family Detached Housing	148	87	235
210(3) - Single-Family Detached Housing	130	76	206

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	489	287	776
External Vehicle Trips	489	287	776
New Vehicle Trips	489	287	776

Scenario - 3

Scenario Name: Weekday

User Group:

Dev. phase: 1

No. of Years to Project 0

Analyst Note:

Traffic :

Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
210 - Single-Family Detached Housing	General	Dwelling Units	278	Weekday	Best Fit (LOG)	1292	1292	2584
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				$\ln(T) = 0.92\ln(X) + 2.68$	50%	50%	
210(1) - Single-Family Detached Housing	General	Dwelling Units	74	Weekday	Best Fit (LOG)	382	382	764
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				$\ln(T) = 0.92\ln(X) + 2.68$	50%	50%	
210(2) - Single-Family Detached Housing	General	Dwelling Units	249	Weekday	Best Fit (LOG)	1168	1168	2336
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				$\ln(T) = 0.92\ln(X) + 2.68$	50%	50%	
210(3) - Single-Family Detached Housing	General	Dwelling Units	218	Weekday	Best Fit (LOG)	1033	1033	2066
Data Source: Trip Generation Manual, 11th Ed	Urban/Suburban				$\ln(T) = 0.92\ln(X) + 2.68$	50%	50%	

VEHICLE TO PERSON TRIP CONVERSION

BASELINE SITE VEHICLE CHARACTERISTICS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
210 - Single-Family Detached Housing	100	100	1	1	50	50
210(1) - Single-Family Detached Housing	100	100	1	1	50	50
210(2) - Single-Family Detached Housing	100	100	1	1	50	50
210(3) - Single-Family Detached Housing	100	100	1	1	50	50

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
210 - Single-Family Detached Housing	1292	1292	0	0	1292	1292
	2584		0		2584	
210(1) - Single-Family Detached Housing	382	382	0	0	382	382
	764		0		764	
210(2) - Single-Family Detached Housing	1168	1168	0	0	1168	1168
	2336		0		2336	
210(3) - Single-Family Detached Housing	1033	1033	0	0	1033	1033
	2066		0		2066	

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
210 - Single-Family Detached Housing	1292	1292	2584
210(1) - Single-Family Detached Housing	382	382	764
210(2) - Single-Family Detached Housing	1168	1168	2336
210(3) - Single-Family Detached Housing	1033	1033	2066

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	3875	3875	7750
External Vehicle Trips	3875	3875	7750
New Vehicle Trips	3875	3875	7750

Appendix C – Horizon Without Project Analyses



Table of Contents

Intersection Level Of Service Report	2
Intersection 25: 48th Avenue/PA-31 Street	2
Intersection 42: The Aurora Highlands Parkway/38th Parkway	4
Intersection 43: The Aurora Highlands Parkway/38th Parkway	6
Intersection 47: 48th Avenue/Aerotropolis Pkwy	8
Intersection 48: 38th Parkway/Aerotropolis Pkwy	13
Signal Warrants Report	18
Intersection 25: 48th Avenue/PA-31 Street	18
Intersection 42: The Aurora Highlands Parkway/38th Parkway	20
Intersection 43: The Aurora Highlands Parkway/38th Parkway	22



Intersection Level Of Service Report
Intersection 25: 48th Avenue/PA-31 Street

Control Type:	Two-way stop	Delay (sec / veh):	19.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.228

Intersection Setup

Name	PA-31 Street		48th Avenue		48th Avenue	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵↵		↵↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0
Entry Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	PA-31 Street		48th Avenue		48th Avenue	
Base Volume Input [veh/h]	20	71	445	0	0	370
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	1	2	49	6	1	17
Other Volume [veh/h]	45	32	22	16	12	11
Total Hourly Volume [veh/h]	66	105	516	22	13	398
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	29	140	6	4	108
Total Analysis Volume [veh/h]	72	114	561	24	14	433
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.23	0.16	0.01	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	19.76	10.97	0.00	0.00	8.70	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.86	0.56	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	21.58	14.08	0.00	0.00	1.08	0.00
d_A, Approach Delay [s/veh]	14.37		0.00		0.27	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	2.30					
Intersection LOS	C					



Intersection Level Of Service Report

Intersection 42: The Aurora Highlands Parkway/38th Parkway

Control Type:	Two-way stop	Delay (sec / veh):	12.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.411

Intersection Setup

Name	38th Parkway			38th Parkway			Th Au			TAH Parkway (W)		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	38th Parkway			38th Parkway			Th Au			TAH Parkway (W)		
Base Volume Input [veh/h]	0	296	0	0	55	55	0	0	0	0	50	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	73	0	0	0	0	0	0	26
Other Volume [veh/h]	0	0	0	0	57	0	0	0	0	0	0	21
Total Hourly Volume [veh/h]	0	296	0	0	185	55	0	0	0	0	50	47
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	80	0	0	50	15	0	0	0	0	14	13
Total Analysis Volume [veh/h]	0	322	0	0	201	60	0	0	0	0	54	51
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.41	0.00	0.00	0.25	0.06	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.11	12.75	0.00	0.00	10.90	8.81	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS	B	B			B	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	2.02	0.00	0.00	0.98	0.19	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	50.48	0.00	0.00	24.44	4.76	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.75			10.42			0.00			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	9.92											
Intersection LOS	B											



Intersection Level Of Service Report

Intersection 43: The Aurora Highlands Parkway/38th Parkway

Control Type:	Two-way stop	Delay (sec / veh):	33.9
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.651

Intersection Setup

Name				38th Parkway			TAH Parkway (E)					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				38th Parkway			TAH Parkway (E)					
Base Volume Input [veh/h]	0	5	5	70	0	0	296	50	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	73	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	57	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	5	5	200	0	0	296	50	0	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	1	54	0	0	80	14	0	0	0	0
Total Analysis Volume [veh/h]	0	5	5	217	0	0	322	54	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	15.08	8.58	33.88	14.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS		C	A	D	B		A	A				
95th-Percentile Queue Length [veh/ln]	0.00	0.06	0.06	4.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	1.42	1.42	107.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.83			33.88			0.00			0.00		
Approach LOS	B			D			A			A		
d_I, Intersection Delay [s/veh]	12.39											
Intersection LOS	D											



Intersection Level Of Service Report
Intersection 47: 48th Avenue/Aerotropolis Pkwy

Control Type:	Signalized	Delay (sec / veh):	22.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.344

Intersection Setup

Name	Aerotropolis Pkwy			Aerotropolis Pkwy			48th Avenue			48th Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	3	0	0	2	0	1	2	0	0	2	0	1
Entry Pocket Length [ft]	200.00	100.00	100.00	200.00	100.00	200.00	200.00	100.00	100.00	200.00	100.00	200.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Aerotropolis Pkwy			Aerotropolis Pkwy			48th Avenue			48th Avenue		
Base Volume Input [veh/h]	200	1100	100	10	700	90	200	200	45	60	80	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	8	21	28	2	0	10	0
Other Volume [veh/h]	7	0	0	0	0	8	22	22	10	0	8	0
Right Turn on Red Volume [veh/h]	0	0	50	0	0	53	0	0	57	0	0	20
Total Hourly Volume [veh/h]	207	1100	50	10	700	53	243	250	0	60	98	20
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	56	299	14	3	190	14	66	68	0	16	27	5
Total Analysis Volume [veh/h]	225	1196	54	11	761	58	264	272	0	65	107	22
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	27	0	0	30	0	0	31	0	0	27	0
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	17	38	0	20	41	0	14	43	0	9	38	0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Calculated Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	73	73	1	65	65	10	16	16	4	10	10
g / C, Green / Cycle	0.08	0.66	0.66	0.01	0.59	0.59	0.09	0.14	0.14	0.04	0.09	0.09
(v / s)_i Volume / Saturation Flow Rate	0.07	0.23	0.03	0.00	0.15	0.04	0.08	0.08	0.00	0.02	0.03	0.01
s, saturation flow rate [veh/h]	3459	5094	1589	3459	5094	1589	3459	3560	1589	3459	3560	1589
c, Capacity [veh/h]	290	3363	1049	47	3004	937	314	504	225	136	320	143
d1, Uniform Delay [s]	49.36	8.30	6.58	53.70	10.89	9.61	49.21	43.87	0.00	51.74	46.96	46.18
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.42	0.30	0.09	2.55	0.20	0.13	5.98	0.90	0.00	2.60	0.61	0.49
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.36	0.05	0.24	0.25	0.06	0.84	0.54	0.00	0.48	0.33	0.15
d, Delay for Lane Group [s/veh]	53.78	8.60	6.67	56.25	11.09	9.74	55.19	44.77	0.00	54.35	47.56	46.68
Lane Group LOS	D	A	A	E	B	A	E	D	A	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.20	3.99	0.45	0.17	2.93	0.61	3.82	3.50	0.00	0.93	1.40	0.58
50th-Percentile Queue Length [ft/ln]	79.98	99.72	11.13	4.17	73.28	15.33	95.47	87.55	0.00	23.15	35.06	14.40
95th-Percentile Queue Length [veh/ln]	5.76	7.18	0.80	0.30	5.28	1.10	6.87	6.30	0.00	1.67	2.52	1.04
95th-Percentile Queue Length [ft/ln]	143.96	179.49	20.03	7.51	131.90	27.60	171.84	157.59	0.00	41.67	63.11	25.91

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	53.78	8.60	6.67	56.25	11.09	9.74	55.19	44.77	0.00	54.35	47.56	46.68
Movement LOS	D	A	A	E	B	A	E	D	A	D	D	D
d_A, Approach Delay [s/veh]	15.42			11.59			49.90			49.74		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	22.66											
Intersection LOS	C											
Intersection V/C	0.344											

Emissions

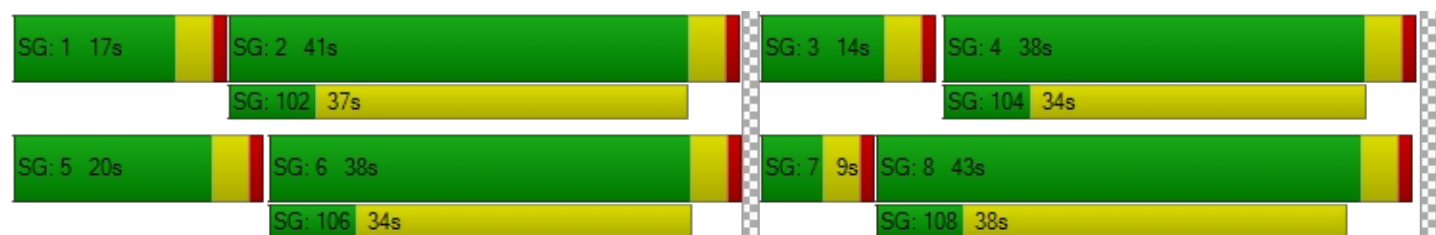
Vehicle Miles Traveled [mph]	211.01	1121.65	50.64	3.34	231.40	17.64	161.10	165.98	0.00	4.49	7.40	1.52
Stops [stops/h]	209.40	391.61	14.57	10.93	287.79	20.07	249.95	229.22	0.00	60.61	91.79	18.85
Fuel consumption [US gal/h]	12.31	50.43	2.24	0.32	12.83	0.95	10.98	10.58	0.00	1.24	1.85	0.38
CO [g/h]	860.16	3525.09	156.48	22.65	897.06	66.53	767.34	739.34	0.00	86.58	129.12	26.26
NOx [g/h]	167.36	685.85	30.44	4.41	174.53	12.95	149.30	143.85	0.00	16.85	25.12	5.11
VOC [g/h]	199.35	816.97	36.27	5.25	207.90	15.42	177.84	171.35	0.00	20.07	29.93	6.09

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	44.55			44.55			44.55			44.55		
I_p,int, Pedestrian LOS Score for Intersectio	3.205			3.193			2.924			2.716		
Crosswalk LOS	C			C			C			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	618			673			709			618		
d_b, Bicycle Delay [s]	26.25			24.22			22.91			26.25		
I_b,int, Bicycle LOS Score for Intersection	2.398			2.045			2.049			1.736		
Bicycle LOS	B			B			B			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-









Intersection Level Of Service Report

Intersection 48: 38th Parkway/Aerotropolis Pkwy

Control Type:	Signalized	Delay (sec / veh):	19.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.380

Intersection Setup

Name	Aerotropolis Pkwy			Aerotropolis Pkwy			38th Parkway					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	2	0	1	1	0	1	2	0	1
Entry Pocket Length [ft]	150.00	100.00	150.00	150.00	100.00	150.00	200.00	100.00	200.00	200.00	100.00	200.00
No. of Lanes in Exit Pocket	0	0	0	0	0	2	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Aerotropolis Pkwy			Aerotropolis Pkwy			38th Parkway					
Base Volume Input [veh/h]	73	974	614	64	711	30	20	113	132	151	31	406
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	31	0	0	0	2	0	0	0	83	0	0	0
Other Volume [veh/h]	17	7	0	0	10	0	0	0	58	0	0	0
Right Turn on Red Volume [veh/h]	0	0	307	0	0	15	0	0	137	0	0	203
Total Hourly Volume [veh/h]	121	981	307	64	723	15	20	113	136	151	31	203
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	267	83	17	196	4	5	31	37	41	8	55
Total Analysis Volume [veh/h]	132	1066	334	70	786	16	22	123	148	164	34	221
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	14	0	0	27	0	0	34	0
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	9	30	0	9	30	0	9	48	0	13	52	0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Calculated Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	69	61	61	4	61	61	23	12	12	7	16	16
g / C, Green / Cycle	0.69	0.61	0.61	0.04	0.61	0.61	0.23	0.12	0.12	0.07	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.17	0.21	0.21	0.02	0.15	0.01	0.02	0.07	0.09	0.05	0.02	0.14
s, saturation flow rate [veh/h]	788	5094	1589	3459	5094	1589	1250	1870	1589	3459	1870	1589
c, Capacity [veh/h]	598	3113	971	148	3083	962	377	223	189	231	305	259
d1, Uniform Delay [s]	5.48	9.56	9.57	46.75	9.21	7.87	30.34	41.52	42.78	45.71	35.69	40.70
k, delay calibration	0.13	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.22	0.30	0.97	2.32	0.20	0.03	0.06	2.13	6.86	4.00	0.16	7.83
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.22	0.34	0.34	0.47	0.25	0.02	0.06	0.55	0.78	0.71	0.11	0.85
d, Delay for Lane Group [s/veh]	5.70	9.86	10.54	49.07	9.41	7.90	30.40	43.65	49.63	49.71	35.85	48.52
Lane Group LOS	A	A	B	D	A	A	C	D	D	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.83	3.64	3.60	0.89	2.55	0.14	0.42	2.98	3.89	2.11	0.72	5.80
50th-Percentile Queue Length [ft/ln]	20.84	90.91	90.03	22.36	63.87	3.47	10.54	74.39	97.14	52.79	17.99	144.88
95th-Percentile Queue Length [veh/ln]	1.50	6.55	6.48	1.61	4.60	0.25	0.76	5.36	6.99	3.80	1.30	9.74
95th-Percentile Queue Length [ft/ln]	37.52	163.63	162.05	40.25	114.96	6.24	18.98	133.89	174.86	95.02	32.38	243.58

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	5.70	9.86	10.54	49.07	9.41	7.90	30.40	43.65	49.63	49.71	35.85	48.52
Movement LOS	A	A	B	D	A	A	C	D	D	D	D	D
d_A, Approach Delay [s/veh]	9.65			12.57			45.68			47.96		
Approach LOS	A			B			D			D		
d_I, Intersection Delay [s/veh]	19.01											
Intersection LOS	B											
Intersection V/C	0.380											

Emissions

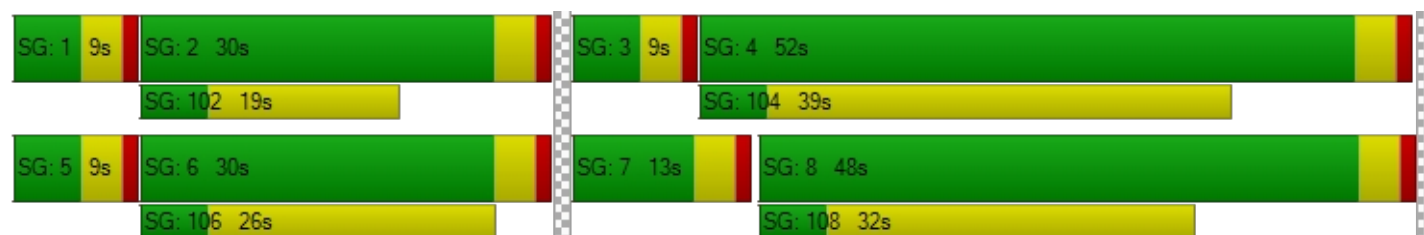
Vehicle Miles Traveled [mph]	25.47	205.72	64.46	65.65	737.14	15.01	11.01	61.54	74.05	14.10	2.92	19.00
Stops [stops/h]	30.02	392.71	129.64	64.40	275.90	5.00	15.18	107.12	139.88	152.04	25.90	208.63
Fuel consumption [US gal/h]	1.37	12.78	4.09	3.76	33.38	0.67	0.67	4.22	5.32	3.08	0.51	4.12
CO [g/h]	95.59	893.21	285.63	262.63	2332.92	46.91	47.05	294.81	371.57	215.25	35.75	287.78
NOx [g/h]	18.60	173.79	55.57	51.10	453.90	9.13	9.15	57.36	72.29	41.88	6.96	55.99
VOC [g/h]	22.16	207.01	66.20	60.87	540.68	10.87	10.90	68.33	86.12	49.89	8.29	66.70

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	41.41			41.41			41.41			41.41		
I_p,int, Pedestrian LOS Score for Intersectio	3.543			3.324			2.603			2.985		
Crosswalk LOS	D			C			B			C		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	520			520			880			960		
d_b, Bicycle Delay [s]	27.38			27.38			15.68			13.52		
I_b,int, Bicycle LOS Score for Intersection	2.571			2.047			2.269			2.586		
Bicycle LOS	B			B			B			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





Signal Warrants Report For Intersection 25: 48th Avenue/PA-31 Street

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	411	538	171
2	399	522	166
3	390	511	162
4	366	479	152
5	325	425	135
6	321	420	133
7	316	414	132
8	288	377	120
9	284	371	118
10	279	366	116
11	242	317	101
12	226	296	94
13	222	291	92
14	164	215	68
15	164	215	68
16	115	151	48
17	66	86	27
18	66	86	27
19	37	48	15
20	21	27	9
21	12	16	5
22	4	5	2
23	4	5	2
24	4	5	2



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	949	2	171	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
2	3	921	2	166	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
3	3	901	2	162	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
4	3	845	2	152	No	No	Yes	Yes	No	Yes	Yes	Yes	No	No
5	3	750	2	135	No	No	No	Yes	No	Yes	Yes	Yes	No	No
6	3	741	2	133	No	No	No	Yes	No	Yes	Yes	Yes	No	No
7	3	730	2	132	No	No	No	Yes	No	Yes	Yes	Yes	No	No
8	3	665	2	120	No	No	No	Yes	No	No	Yes	Yes	No	No
9	3	655	2	118	No	No	No	Yes	No	No	Yes	Yes	No	No
10	3	645	2	116	No	No	No	Yes	No	No	Yes	Yes	No	No
11	3	559	2	101	No	No	No	No	No	No	No	Yes	No	No
12	3	522	2	94	No	No	No	No	No	No	No	Yes	No	No
13	3	513	2	92	No	No	No	No	No	No	No	Yes	No	No
14	3	379	2	68	No	No	No	No	No	No	No	No	No	No
15	3	379	2	68	No	No	No	No	No	No	No	No	No	No
16	3	266	2	48	No	No	No	No	No	No	No	No	No	No
17	3	152	2	27	No	No	No	No	No	No	No	No	No	No
18	3	152	2	27	No	No	No	No	No	No	No	No	No	No
19	3	85	2	15	No	No	No	No	No	No	No	No	No	No
20	3	48	2	9	No	No	No	No	No	No	No	No	No	No
21	3	28	2	5	No	No	No	No	No	No	No	No	No	No
22	3	9	2	2	No	No	No	No	No	No	No	No	No	No
23	3	9	2	2	No	No	No	No	No	No	No	No	No	No
24	3	9	2	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	3	4	10	3	7	10	13	0	0

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	14.4
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:40
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	171
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1120
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 42: The Aurora Highlands Parkway/38th Parkway

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E
Minor Approaches	N, S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets	Minor Streets	
	E	N	S
1	97	240	296
2	94	233	287
3	92	228	281
4	86	214	263
5	77	190	234
6	76	187	231
7	75	185	228
8	68	168	207
9	67	166	204
10	66	163	201
11	57	142	175
12	53	132	163
13	52	130	160
14	39	96	118
15	39	96	118
16	27	67	83
17	16	38	47
18	16	38	47
19	9	22	27
20	5	12	15
21	3	7	9
22	1	2	3
23	1	2	3
24	1	2	3



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	97	2	296	No	No	No	No	No	No	No	No	No	No
2	2	94	2	287	No	No	No	No	No	No	No	No	No	No
3	2	92	2	281	No	No	No	No	No	No	No	No	No	No
4	2	86	2	263	No	No	No	No	No	No	No	No	No	No
5	2	77	2	234	No	No	No	No	No	No	No	No	No	No
6	2	76	2	231	No	No	No	No	No	No	No	No	No	No
7	2	75	2	228	No	No	No	No	No	No	No	No	No	No
8	2	68	2	207	No	No	No	No	No	No	No	No	No	No
9	2	67	2	204	No	No	No	No	No	No	No	No	No	No
10	2	66	2	201	No	No	No	No	No	No	No	No	No	No
11	2	57	2	175	No	No	No	No	No	No	No	No	No	No
12	2	53	2	163	No	No	No	No	No	No	No	No	No	No
13	2	52	2	160	No	No	No	No	No	No	No	No	No	No
14	2	39	2	118	No	No	No	No	No	No	No	No	No	No
15	2	39	2	118	No	No	No	No	No	No	No	No	No	No
16	2	27	2	83	No	No	No	No	No	No	No	No	No	No
17	2	16	2	47	No	No	No	No	No	No	No	No	No	No
18	2	16	2	47	No	No	No	No	No	No	No	No	No	No
19	2	9	2	27	No	No	No	No	No	No	No	No	No	No
20	2	5	2	15	No	No	No	No	No	No	No	No	No	No
21	2	3	2	9	No	No	No	No	No	No	No	No	No	No
22	2	1	2	3	No	No	No	No	No	No	No	No	No	No
23	2	1	2	3	No	No	No	No	No	No	No	No	No	No
24	2	1	2	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.4	12.8
Number of Lanes on Minor Street Approach	2	2
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:41	1:02
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	240	296
High Minor Volume Condition Met	Yes	Yes
Total Entering Volume on All Approaches During Same Hour	633	633
Number of Approaches on Intersection	3	3
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	



Signal Warrants Report For Intersection 43: The Aurora Highlands Parkway/38th Parkway

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	W
Minor Approaches	N, S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets	Minor Streets	
		N	S
1	346	200	10
2	336	194	10
3	329	190	10
4	308	178	9
5	273	158	8
6	270	156	8
7	266	154	8
8	242	140	7
9	239	138	7
10	235	136	7
11	204	118	6
12	190	110	6
13	187	108	5
14	138	80	4
15	138	80	4
16	97	56	3
17	55	32	2
18	55	32	2
19	31	18	1
20	17	10	1
21	10	6	0
22	3	2	0
23	3	2	0
24	3	2	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	346	2	200	No	No	No	Yes	No	No	No	No	No	No
2	3	336	2	194	No	No	No	Yes	No	No	No	No	No	No
3	3	329	2	190	No	No	No	No	No	No	No	No	No	No
4	3	308	2	178	No	No	No	No	No	No	No	No	No	No
5	3	273	2	158	No	No	No	No	No	No	No	No	No	No
6	3	270	2	156	No	No	No	No	No	No	No	No	No	No
7	3	266	2	154	No	No	No	No	No	No	No	No	No	No
8	3	242	2	140	No	No	No	No	No	No	No	No	No	No
9	3	239	2	138	No	No	No	No	No	No	No	No	No	No
10	3	235	2	136	No	No	No	No	No	No	No	No	No	No
11	3	204	2	118	No	No	No	No	No	No	No	No	No	No
12	3	190	2	110	No	No	No	No	No	No	No	No	No	No
13	3	187	2	108	No	No	No	No	No	No	No	No	No	No
14	3	138	2	80	No	No	No	No	No	No	No	No	No	No
15	3	138	2	80	No	No	No	No	No	No	No	No	No	No
16	3	97	2	56	No	No	No	No	No	No	No	No	No	No
17	3	55	2	32	No	No	No	No	No	No	No	No	No	No
18	3	55	2	32	No	No	No	No	No	No	No	No	No	No
19	3	31	2	18	No	No	No	No	No	No	No	No	No	No
20	3	17	2	10	No	No	No	No	No	No	No	No	No	No
21	3	10	2	6	No	No	No	No	No	No	No	No	No	No
22	3	3	2	2	No	No	No	No	No	No	No	No	No	No
23	3	3	2	2	No	No	No	No	No	No	No	No	No	No
24	3	3	2	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	2	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	33.9	11.8
Number of Lanes on Minor Street Approach	2	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	1:52	0:01
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	200	10
High Minor Volume Condition Met	Yes	No
Total Entering Volume on All Approaches During Same Hour	556	556
Number of Approaches on Intersection	3	3
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	



Table of Contents

Intersection Level Of Service Report	2
Intersection 25: 48th Avenue/PA-31 Street	2
Intersection 42: The Aurora Highlands Parkway/38th Parkway	4
Intersection 43: The Aurora Highlands Parkway/38th Parkway	6
Intersection 47: 48th Avenue/Aerotropolis Pkwy	8
Intersection 48: 38th Parkway/Aerotropolis Pkwy	13
Signal Warrants Report	18
Intersection 25: 48th Avenue/PA-31 Street	18
Intersection 42: The Aurora Highlands Parkway/38th Parkway	20
Intersection 43: The Aurora Highlands Parkway/38th Parkway	22



Intersection Level Of Service Report
Intersection 25: 48th Avenue/PA-31 Street

Control Type:	Two-way stop	Delay (sec / veh):	21.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.223

Intersection Setup

Name	PA-31 Street		48th Avenue		48th Avenue	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵↵		↵↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0
Entry Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	PA-31 Street		48th Avenue		48th Avenue	
Base Volume Input [veh/h]	20	73	445	0	0	370
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	7	2	32	5	3	52
Other Volume [veh/h]	30	22	15	51	38	25
Total Hourly Volume [veh/h]	57	97	492	56	41	447
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	26	134	15	11	121
Total Analysis Volume [veh/h]	62	105	535	61	45	486
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.22	0.14	0.01	0.00	0.05	0.00
d_M, Delay for Movement [s/veh]	21.61	10.75	0.00	0.00	8.86	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.83	0.50	0.00	0.00	0.14	0.00
95th-Percentile Queue Length [ft/ln]	20.86	12.51	0.00	0.00	3.62	0.00
d_A, Approach Delay [s/veh]	14.78		0.00		0.75	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	2.22					
Intersection LOS	C					



Intersection Level Of Service Report

Intersection 42: The Aurora Highlands Parkway/38th Parkway

Control Type:	Two-way stop	Delay (sec / veh):	12.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.301

Intersection Setup

Name	38th Parkway			38th Parkway			Th Au			TAH Parkway (W)		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	38th Parkway			38th Parkway			Th Au			TAH Parkway (W)		
Base Volume Input [veh/h]	0	189	0	0	137	130	0	0	0	0	50	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	47	0	0	0	0	0	0	82
Other Volume [veh/h]	0	0	0	0	38	0	0	0	0	0	0	66
Total Hourly Volume [veh/h]	0	189	0	0	222	130	0	0	0	0	50	148
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	51	0	0	60	35	0	0	0	0	14	40
Total Analysis Volume [veh/h]	0	205	0	0	241	141	0	0	0	0	54	161
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.30	0.00	0.00	0.29	0.14	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.25	12.54	0.00	0.00	11.04	8.99	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS	B	B			B	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	1.26	0.00	0.00	1.19	0.47	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	31.59	0.00	0.00	29.87	11.69	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.54			10.28			0.00			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	8.10											
Intersection LOS	B											



Intersection Level Of Service Report

Intersection 43: The Aurora Highlands Parkway/38th Parkway

Control Type:	Two-way stop	Delay (sec / veh):	20.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.524

Intersection Setup

Name				38th Parkway			TAH Parkway (E)					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				38th Parkway			TAH Parkway (E)					
Base Volume Input [veh/h]	0	5	5	152	0	0	189	50	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	47	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	38	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	5	5	237	0	0	189	50	0	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	1	64	0	0	51	14	0	0	0	0
Total Analysis Volume [veh/h]	0	5	5	258	0	0	205	54	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	12.39	8.54	20.06	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS		B	A	C	B		A	A				
95th-Percentile Queue Length [veh/ln]	0.00	0.05	0.05	2.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	1.14	1.14	74.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.46			20.06			0.00			0.00		
Approach LOS	B			C			A			A		
d_I, Intersection Delay [s/veh]	10.02											
Intersection LOS	C											



Intersection Level Of Service Report
Intersection 47: 48th Avenue/Aerotropolis Pkwy

Control Type:	Signalized	Delay (sec / veh):	22.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.352

Intersection Setup

Name	Aerotropolis Pkwy			Aerotropolis Pkwy			48th Avenue			48th Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	3	0	0	2	0	1	2	0	0	2	0	1
Entry Pocket Length [ft]	200.00	100.00	100.00	200.00	100.00	200.00	200.00	100.00	100.00	200.00	100.00	200.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	300.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Aerotropolis Pkwy			Aerotropolis Pkwy			48th Avenue			48th Avenue		
Base Volume Input [veh/h]	200	1100	100	10	700	90	200	200	45	60	80	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	23	14	20	0	0	32	0
Other Volume [veh/h]	11	0	0	0	0	26	15	15	7	0	26	0
Right Turn on Red Volume [veh/h]	0	0	50	0	0	70	0	0	52	0	0	20
Total Hourly Volume [veh/h]	211	1100	50	10	700	69	229	235	0	60	138	20
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	57	299	14	3	190	19	62	64	0	16	38	5
Total Analysis Volume [veh/h]	229	1196	54	11	761	75	249	255	0	65	150	22
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	27	0	0	30	0	0	31	0	0	27	0
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	17	38	0	20	41	0	14	43	0	9	38	0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Calculated Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	73	73	1	65	65	10	15	15	4	10	10
g / C, Green / Cycle	0.09	0.66	0.66	0.01	0.59	0.59	0.09	0.14	0.14	0.04	0.09	0.09
(v / s)_i Volume / Saturation Flow Rate	0.07	0.23	0.03	0.00	0.15	0.05	0.07	0.07	0.00	0.02	0.04	0.01
s, saturation flow rate [veh/h]	3459	5094	1589	3459	5094	1589	3459	3560	1589	3459	3560	1589
c, Capacity [veh/h]	294	3366	1050	47	3001	936	308	502	224	136	325	145
d1, Uniform Delay [s]	49.30	8.27	6.55	53.70	10.91	9.74	49.19	43.71	0.00	51.74	47.41	46.05
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.43	0.29	0.09	2.55	0.20	0.17	5.06	0.80	0.00	2.60	1.02	0.48
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.36	0.05	0.24	0.25	0.08	0.81	0.51	0.00	0.48	0.46	0.15
d, Delay for Lane Group [s/veh]	53.74	8.57	6.64	56.25	11.12	9.91	54.25	44.51	0.00	54.35	48.44	46.53
Lane Group LOS	D	A	A	E	B	A	D	D	A	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.26	3.98	0.44	0.17	2.94	0.80	3.56	3.27	0.00	0.93	2.00	0.57
50th-Percentile Queue Length [ft/ln]	81.39	99.46	11.10	4.17	73.39	20.09	89.09	81.64	0.00	23.15	49.88	14.37
95th-Percentile Queue Length [veh/ln]	5.86	7.16	0.80	0.30	5.28	1.45	6.41	5.88	0.00	1.67	3.59	1.03
95th-Percentile Queue Length [ft/ln]	146.50	179.02	19.98	7.51	132.11	36.16	160.37	146.96	0.00	41.67	89.79	25.86

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	53.74	8.57	6.64	56.25	11.12	9.91	54.25	44.51	0.00	54.35	48.44	46.53
Movement LOS	D	A	A	E	B	A	D	D	A	D	D	D
d_A, Approach Delay [s/veh]	15.49			11.60			49.32			49.88		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	22.63											
Intersection LOS	C											
Intersection V/C	0.352											

Emissions

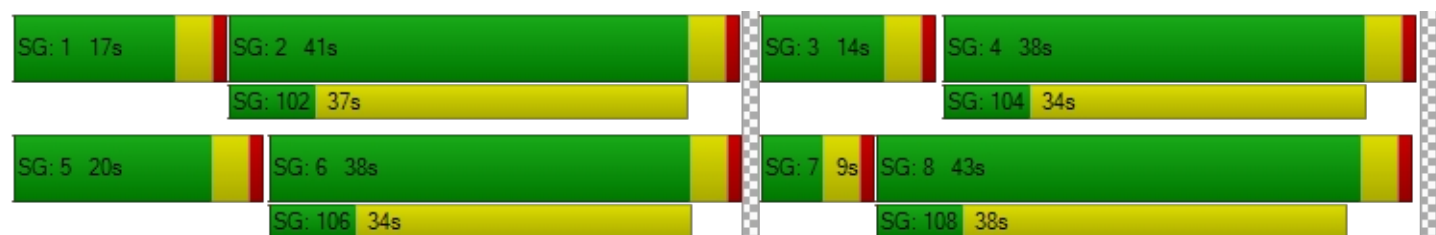
Vehicle Miles Traveled [mph]	214.76	1121.65	50.64	3.34	231.40	22.81	151.95	155.61	0.00	4.49	10.37	1.52
Stops [stops/h]	213.09	390.59	14.53	10.93	288.24	26.30	233.27	213.76	0.00	60.61	130.60	18.81
Fuel consumption [US gal/h]	12.52	50.42	2.24	0.32	12.84	1.24	10.29	9.90	0.00	1.24	2.63	0.37
CO [g/h]	875.31	3524.15	156.44	22.65	897.52	86.35	719.43	691.74	0.00	86.58	183.62	26.20
NOx [g/h]	170.30	685.67	30.44	4.41	174.62	16.80	139.98	134.59	0.00	16.85	35.73	5.10
VOC [g/h]	202.86	816.76	36.26	5.25	208.01	20.01	166.74	160.32	0.00	20.07	42.55	6.07

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	44.55			44.55			44.55			44.55		
I_p,int, Pedestrian LOS Score for Intersectio	3.205			3.219			3.044			2.719		
Crosswalk LOS	C			C			C			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	618			673			709			618		
d_b, Bicycle Delay [s]	26.25			24.22			22.91			26.25		
I_b,int, Bicycle LOS Score for Intersection	2.401			2.064			2.018			1.772		
Bicycle LOS	B			B			B			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





Intersection Level Of Service Report
Intersection 48: 38th Parkway/Aerotropolis Pkwy

Control Type:	Signalized	Delay (sec / veh):	26.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.510

Intersection Setup

Name	Aerotropolis Pkwy			Aerotropolis Pkwy			38th Parkway					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	2	0	1	1	0	1	2	0	1
Entry Pocket Length [ft]	150.00	100.00	150.00	150.00	100.00	150.00	200.00	100.00	200.00	200.00	100.00	200.00
No. of Lanes in Exit Pocket	0	0	0	0	0	2	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Aerotropolis Pkwy			Aerotropolis Pkwy			38th Parkway					
Base Volume Input [veh/h]	152	974	168	64	711	30	20	78	83	597	111	406
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	95	0	0	0	0	0	0	0	58	0	0	0
Other Volume [veh/h]	67	11	0	0	7	0	0	0	39	0	0	0
Right Turn on Red Volume [veh/h]	0	0	84	0	0	15	0	0	90	0	0	203
Total Hourly Volume [veh/h]	314	985	84	64	718	15	20	78	90	597	111	203
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	85	268	23	17	195	4	5	21	24	162	30	55
Total Analysis Volume [veh/h]	341	1071	91	70	780	16	22	85	98	649	121	221
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	14	0	0	27	0	0	34	0
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	17	30	0	10	23	0	9	36	0	24	51	0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Calculated Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	58	50	50	4	42	42	34	10	10	20	28	28
g / C, Green / Cycle	0.58	0.50	0.50	0.04	0.42	0.42	0.34	0.10	0.10	0.20	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.36	0.21	0.06	0.02	0.15	0.01	0.02	0.05	0.06	0.19	0.06	0.14
s, saturation flow rate [veh/h]	951	5094	1589	3459	5094	1589	1132	1870	1589	3459	1870	1589
c, Capacity [veh/h]	583	2531	790	148	2130	665	444	187	159	692	518	441
d1, Uniform Delay [s]	12.16	16.03	13.43	46.75	19.99	17.10	22.15	42.41	43.14	39.39	27.92	30.33
k, delay calibration	0.50	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.26	0.52	0.30	2.32	0.49	0.07	0.05	1.71	3.82	6.85	0.23	0.88
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.59	0.42	0.12	0.47	0.37	0.02	0.05	0.45	0.62	0.94	0.23	0.50
d, Delay for Lane Group [s/veh]	16.43	16.55	13.72	49.06	20.48	17.17	22.19	44.12	46.95	46.24	28.15	31.22
Lane Group LOS	B	B	B	D	C	B	C	D	D	D	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.39	5.13	1.13	0.89	4.16	0.23	0.35	2.06	2.48	8.38	2.26	4.52
50th-Percentile Queue Length [ft/ln]	109.79	128.26	28.36	22.36	104.12	5.66	8.75	51.47	61.98	209.58	56.46	113.10
95th-Percentile Queue Length [veh/ln]	7.83	8.85	2.04	1.61	7.50	0.41	0.63	3.71	4.46	13.13	4.06	8.01
95th-Percentile Queue Length [ft/ln]	195.71	221.13	51.05	40.25	187.42	10.19	15.74	92.65	111.56	328.29	101.62	200.30

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	16.43	16.55	13.72	49.06	20.48	17.17	22.19	44.12	46.95	46.24	28.15	31.22
Movement LOS	B	B	B	D	C	B	C	D	D	D	C	C
d_A, Approach Delay [s/veh]	16.35			22.73			43.12			40.68		
Approach LOS	B			C			D			D		
d_I, Intersection Delay [s/veh]	26.20											
Intersection LOS	C											
Intersection V/C	0.510											

Emissions

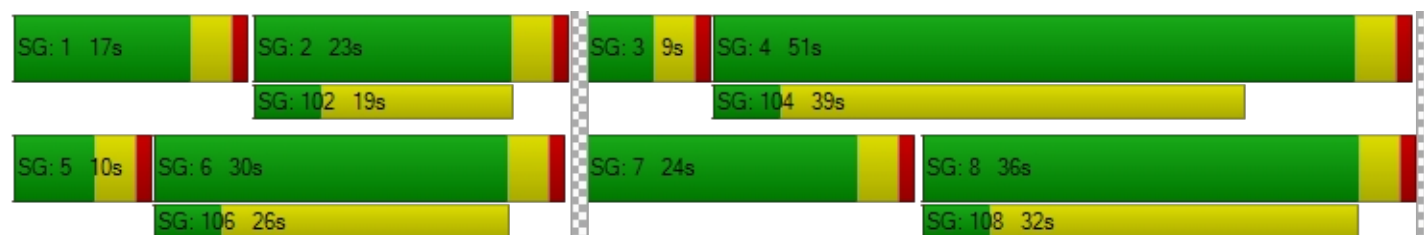
Vehicle Miles Traveled [mph]	65.81	206.69	17.56	65.65	731.51	15.01	11.01	42.53	49.03	55.81	10.41	19.00
Stops [stops/h]	158.10	554.09	40.84	64.40	449.81	8.16	12.60	74.12	89.25	603.58	81.30	162.86
Fuel consumption [US gal/h]	4.72	15.18	1.20	3.76	35.85	0.72	0.62	2.92	3.45	11.74	1.57	3.09
CO [g/h]	330.11	1060.86	84.07	262.63	2505.86	50.24	43.48	204.33	241.01	820.58	109.79	215.72
NOx [g/h]	64.23	206.41	16.36	51.10	487.55	9.77	8.46	39.76	46.89	159.66	21.36	41.97
VOC [g/h]	76.51	245.87	19.48	60.87	580.76	11.64	10.08	47.36	55.86	190.18	25.45	49.99

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	41.41			41.41			41.41			41.41		
I_p,int, Pedestrian LOS Score for Intersectio	3.242			3.328			2.671			2.996		
Crosswalk LOS	C			C			B			C		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	520			380			640			940		
d_b, Bicycle Delay [s]	27.38			32.81			23.12			14.05		
I_b,int, Bicycle LOS Score for Intersection	2.432			2.044			2.046			3.530		
Bicycle LOS	B			B			B			D		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





Signal Warrants Report For Intersection 25: 48th Avenue/PA-31 Street

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	488	548	154
2	473	532	149
3	464	521	146
4	434	488	137
5	386	433	122
6	381	427	120
7	376	422	119
8	342	384	108
9	337	378	106
10	332	373	105
11	288	323	91
12	268	301	85
13	264	296	83
14	195	219	62
15	195	219	62
16	137	153	43
17	78	88	25
18	78	88	25
19	44	49	14
20	24	27	8
21	15	16	5
22	5	5	2
23	5	5	2
24	5	5	2



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	1036	2	154	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No
2	3	1005	2	149	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No
3	3	985	2	146	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No
4	3	922	2	137	No	No	No	Yes	Yes	Yes	Yes	Yes	No	No
5	3	819	2	122	No	No	No	Yes	No	Yes	Yes	Yes	No	No
6	3	808	2	120	No	No	No	Yes	No	Yes	Yes	Yes	No	No
7	3	798	2	119	No	No	No	Yes	No	Yes	Yes	Yes	No	No
8	3	726	2	108	No	No	No	No	No	Yes	Yes	Yes	No	No
9	3	715	2	106	No	No	No	No	No	No	Yes	Yes	No	No
10	3	705	2	105	No	No	No	No	No	No	Yes	Yes	No	No
11	3	611	2	91	No	No	No	No	No	No	No	Yes	No	No
12	3	569	2	85	No	No	No	No	No	No	No	Yes	No	No
13	3	560	2	83	No	No	No	No	No	No	No	Yes	No	No
14	3	414	2	62	No	No	No	No	No	No	No	No	No	No
15	3	414	2	62	No	No	No	No	No	No	No	No	No	No
16	3	290	2	43	No	No	No	No	No	No	No	No	No	No
17	3	166	2	25	No	No	No	No	No	No	No	No	No	No
18	3	166	2	25	No	No	No	No	No	No	No	No	No	No
19	3	93	2	14	No	No	No	No	No	No	No	No	No	No
20	3	51	2	8	No	No	No	No	No	No	No	No	No	No
21	3	31	2	5	No	No	No	No	No	No	No	No	No	No
22	3	10	2	2	No	No	No	No	No	No	No	No	No	No
23	3	10	2	2	No	No	No	No	No	No	No	No	No	No
24	3	10	2	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	3	7	4	8	10	13	0	0

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	14.8
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:37
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	154
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1190
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 42: The Aurora Highlands Parkway/38th Parkway

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E
Minor Approaches	N, S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets	Minor Streets	
	E	N	S
1	198	352	189
2	192	341	183
3	188	334	180
4	176	313	168
5	156	278	149
6	154	275	147
7	152	271	146
8	139	246	132
9	137	243	130
10	135	239	129
11	117	208	112
12	109	194	104
13	107	190	102
14	79	141	76
15	79	141	76
16	55	99	53
17	32	56	30
18	32	56	30
19	18	32	17
20	10	18	9
21	6	11	6
22	2	4	2
23	2	4	2
24	2	4	2



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	198	2	352	No	No	No	No	No	No	No	No	No	No
2	3	192	2	341	No	No	No	No	No	No	No	No	No	No
3	3	188	2	334	No	No	No	No	No	No	No	No	No	No
4	3	176	2	313	No	No	No	No	No	No	No	No	No	No
5	3	156	2	278	No	No	No	No	No	No	No	No	No	No
6	3	154	2	275	No	No	No	No	No	No	No	No	No	No
7	3	152	2	271	No	No	No	No	No	No	No	No	No	No
8	3	139	2	246	No	No	No	No	No	No	No	No	No	No
9	3	137	2	243	No	No	No	No	No	No	No	No	No	No
10	3	135	2	239	No	No	No	No	No	No	No	No	No	No
11	3	117	2	208	No	No	No	No	No	No	No	No	No	No
12	3	109	2	194	No	No	No	No	No	No	No	No	No	No
13	3	107	2	190	No	No	No	No	No	No	No	No	No	No
14	3	79	2	141	No	No	No	No	No	No	No	No	No	No
15	3	79	2	141	No	No	No	No	No	No	No	No	No	No
16	3	55	2	99	No	No	No	No	No	No	No	No	No	No
17	3	32	2	56	No	No	No	No	No	No	No	No	No	No
18	3	32	2	56	No	No	No	No	No	No	No	No	No	No
19	3	18	2	32	No	No	No	No	No	No	No	No	No	No
20	3	10	2	18	No	No	No	No	No	No	No	No	No	No
21	3	6	2	11	No	No	No	No	No	No	No	No	No	No
22	3	2	2	4	No	No	No	No	No	No	No	No	No	No
23	3	2	2	4	No	No	No	No	No	No	No	No	No	No
24	3	2	2	4	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.3	12.5
Number of Lanes on Minor Street Approach	2	2
VehicleHours of Stopped Delay on Minor Approach (h:mm)	1:00	0:39
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	352	189
High Minor Volume Condition Met	Yes	Yes
Total Entering Volume on All Approaches During Same Hour	739	739
Number of Approaches on Intersection	3	3
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	



Signal Warrants Report For Intersection 43: The Aurora Highlands Parkway/38th Parkway

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	W
Minor Approaches	N, S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets	Minor Streets	
		N	S
1	239	237	10
2	232	230	10
3	227	225	10
4	213	211	9
5	189	187	8
6	186	185	8
7	184	182	8
8	167	166	7
9	165	164	7
10	163	161	7
11	141	140	6
12	131	130	6
13	129	128	5
14	96	95	4
15	96	95	4
16	67	66	3
17	38	38	2
18	38	38	2
19	22	21	1
20	12	12	1
21	7	7	0
22	2	2	0
23	2	2	0
24	2	2	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	239	2	237	No	No	No	No	No	No	No	No	No	No
2	3	232	2	230	No	No	No	No	No	No	No	No	No	No
3	3	227	2	225	No	No	No	No	No	No	No	No	No	No
4	3	213	2	211	No	No	No	No	No	No	No	No	No	No
5	3	189	2	187	No	No	No	No	No	No	No	No	No	No
6	3	186	2	185	No	No	No	No	No	No	No	No	No	No
7	3	184	2	182	No	No	No	No	No	No	No	No	No	No
8	3	167	2	166	No	No	No	No	No	No	No	No	No	No
9	3	165	2	164	No	No	No	No	No	No	No	No	No	No
10	3	163	2	161	No	No	No	No	No	No	No	No	No	No
11	3	141	2	140	No	No	No	No	No	No	No	No	No	No
12	3	131	2	130	No	No	No	No	No	No	No	No	No	No
13	3	129	2	128	No	No	No	No	No	No	No	No	No	No
14	3	96	2	95	No	No	No	No	No	No	No	No	No	No
15	3	96	2	95	No	No	No	No	No	No	No	No	No	No
16	3	67	2	66	No	No	No	No	No	No	No	No	No	No
17	3	38	2	38	No	No	No	No	No	No	No	No	No	No
18	3	38	2	38	No	No	No	No	No	No	No	No	No	No
19	3	22	2	21	No	No	No	No	No	No	No	No	No	No
20	3	12	2	12	No	No	No	No	No	No	No	No	No	No
21	3	7	2	7	No	No	No	No	No	No	No	No	No	No
22	3	2	2	2	No	No	No	No	No	No	No	No	No	No
23	3	2	2	2	No	No	No	No	No	No	No	No	No	No
24	3	2	2	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	20.1	10.5
Number of Lanes on Minor Street Approach	2	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	1:19	0:01
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	237	10
High Minor Volume Condition Met	Yes	No
Total Entering Volume on All Approaches During Same Hour	486	486
Number of Approaches on Intersection	3	3
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	

Appendix D – Horizon With Project Analyses



Table of Contents

Intersection Level Of Service Report	3
Intersection 25: 48th Avenue/PA-31 Street	3
Intersection 26: Reserve Bl/PA-31 Street	5
Intersection 31: Reserve Bl/PA-40.1 Acc1	7
Intersection 32: Reserve Bl/PA-40.1 Acc2	9
Intersection 33: Reserve Bl/PA-40.2 Acc1	11
Intersection 34: 38th Parkway/Reserve Bl (E)	13
Intersection 35: 38th Pkwy/PA-40.2 Acc2/PA-46.2 Acc1/PA-46.1 Acc4	15
Intersection 36: 38th Pkwy/PA-40.1 Acc3/PA-46.2 Acc2	17
Intersection 37: 38th Pkwy/PA-40.1 Acc4/PA 46.2 Acc3	19
Intersection 38: 38th Pkwy/PA-40.1 Acc5	21
Intersection 39: 38th Pkwy/PA-46.2 Acc4/PA-46.1 Acc1	23
Intersection 40: 38th Parkway/Reserve Bl (W)	25
Intersection 42: The Aurora Highlands Parkway/38th Parkway	30
Intersection 43: The Aurora Highlands Parkway/38th Parkway	32
Intersection 47: 48th Avenue/Aerotropolis Pkwy	34
Intersection 48: 38th Parkway/Aerotropolis Pkwy	39
Intersection 82: TAH Pkwy/PA-46.1 Acc3	44
Intersection 83: TAH Pkwy/PA46.1 Access 4	46
Signal Warrants Report	48
Intersection 25: 48th Avenue/PA-31 Street	48
Intersection 26: Reserve Bl/PA-31 Street	50
Intersection 31: Reserve Bl/PA-40.1 Acc1	52
Intersection 32: Reserve Bl/PA-40.1 Acc2	54
Intersection 33: Reserve Bl/PA-40.2 Acc1	56
Intersection 34: 38th Parkway/Reserve Bl (E)	58



Intersection 35: 38th Pkwy/PA-40.2 Acc2/PA-46.2 Acc1/PA-46.1 Acc4	60
Intersection 36: 38th Pkwy/PA-40.1 Acc3/PA-46.2 Acc2	62
Intersection 37: 38th Pkwy/PA-40.1 Acc4/PA 46.2 Acc3	64
Intersection 38: 38th Pkwy/PA-40.1 Acc5	66
Intersection 39: 38th Pkwy/PA-46.2 Acc4/PA-46.1 Acc1	68
Intersection 42: The Aurora Highlands Parkway/38th Parkway	70
Intersection 43: The Aurora Highlands Parkway/38th Parkway	72
Intersection 82: TAH Pkwy/PA-46.1 Acc3	74
Intersection 83: TAH Pkwy/PA46.1 Access 4	76



Intersection Level Of Service Report
Intersection 25: 48th Avenue/PA-31 Street

Control Type:	Two-way stop	Delay (sec / veh):	24.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.396

Intersection Setup

Name	PA-31 Street		48th Avenue		48th Avenue	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵↵		↵↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0
Entry Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	PA-31 Street		48th Avenue		48th Avenue	
Base Volume Input [veh/h]	20	71	445	0	0	370
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	47	13	0	15	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	1	2	49	6	1	17
Other Volume [veh/h]	45	32	22	16	12	11
Total Hourly Volume [veh/h]	113	118	516	37	17	398
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	32	140	10	5	108
Total Analysis Volume [veh/h]	123	128	561	40	18	433
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results


V/C, Movement V/C Ratio	0.40	0.18	0.01	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	24.02	11.11	0.00	0.00	8.77	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.83	0.65	0.00	0.00	0.06	0.00
95th-Percentile Queue Length [ft/ln]	45.70	16.17	0.00	0.00	1.41	0.00
d_A, Approach Delay [s/veh]	17.44		0.00		0.35	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	3.48					
Intersection LOS	C					



Intersection Level Of Service Report
Intersection 26: Reserve Bl/PA-31 Street

Control Type:	Two-way stop	Delay (sec / veh):	10.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.032

Intersection Setup

Name	PA-31 Street		Reserve Loop		Reserve Loop	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	PA-31 Street		Reserve Loop		Reserve Loop	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	3	12	0	0	48
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	4	3	2	0	0	1
Other Volume [veh/h]	0	28	77	24	6	0
Total Hourly Volume [veh/h]	20	34	91	24	6	49
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	9	25	7	2	13
Total Analysis Volume [veh/h]	22	37	99	26	7	53
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.03	0.04	0.06	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.44	8.59	7.49	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.10	0.11	0.21	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.49	2.76	5.13	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.28		5.93		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.28					
Intersection LOS	B					



Intersection Level Of Service Report
Intersection 31: Reserve Bl/PA-40.1 Acc1

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.017

Intersection Setup

Name	Reserve Loop		Reserve Loop		Eastbound	
Approach	Northbound		Southbound			
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Reserve Loop		Reserve Loop			
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	34	12	5	14	14
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	1	0	0	0	0
Other Volume [veh/h]	0	7	24	0	0	0
Total Hourly Volume [veh/h]	5	42	36	5	14	14
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	11	10	1	4	4
Total Analysis Volume [veh/h]	5	46	39	5	15	15
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	7.31	0.00	0.00	0.00	9.13	8.62
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.10	0.10
95th-Percentile Queue Length [ft/ln]	0.21	0.21	0.00	0.00	2.42	2.42
d_A, Approach Delay [s/veh]	0.72		0.00		8.87	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.42					
Intersection LOS	A					



Intersection Level Of Service Report
Intersection 32: Reserve BI/PA-40.1 Acc2

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.017

Intersection Setup

Name	Reserve Loop		Reserve Loop		Eastbound	
Approach	Northbound		Southbound			
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Reserve Loop		Reserve Loop			
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	24	21	5	14	14
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	1	0	0	0	0
Other Volume [veh/h]	0	7	24	0	0	0
Total Hourly Volume [veh/h]	5	32	45	5	14	14
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	9	12	1	4	4
Total Analysis Volume [veh/h]	5	35	49	5	15	15
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	7.33	0.00	0.00	0.00	9.12	8.66
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.10	0.10
95th-Percentile Queue Length [ft/ln]	0.21	0.21	0.00	0.00	2.43	2.43
d_A, Approach Delay [s/veh]	0.92		0.00		8.89	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.45					
Intersection LOS	A					



Intersection Level Of Service Report
Intersection 33: Reserve Bl/PA-40.2 Acc1

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	Reserve Loop		Reserve Loop		Eastbound	
Approach	Northbound		Southbound			
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Reserve Loop		Reserve Loop			
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	19	32	4	11	11
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	1	0	0	0	0
Other Volume [veh/h]	0	7	24	0	0	0
Total Hourly Volume [veh/h]	4	27	56	4	11	11
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	7	15	1	3	3
Total Analysis Volume [veh/h]	4	29	61	4	12	12
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	7.35	0.00	0.00	0.00	9.12	8.69
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.01	0.01	0.00	0.00	0.08	0.08
95th-Percentile Queue Length [ft/ln]	0.17	0.17	0.00	0.00	1.95	1.95
d_A, Approach Delay [s/veh]	0.89		0.00		8.90	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.99					
Intersection LOS	A					



Intersection Level Of Service Report
Intersection 34: 38th Parkway/Reserve BI (E)

Control Type:	Two-way stop	Delay (sec / veh):	17.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.134

Intersection Setup

Name	Reserve Loop		38th Parkway		38th Parkway	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Reserve Loop		38th Parkway		38th Parkway	
Base Volume Input [veh/h]	0	0	0	293	128	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	26	17	103	33	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	4	0	0	79	30	1
Other Volume [veh/h]	20	4	2	38	12	5
Total Hourly Volume [veh/h]	41	30	19	513	203	12
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	8	5	139	55	3
Total Analysis Volume [veh/h]	45	33	21	558	221	13
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.04	0.02	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	17.37	9.62	7.74	0.00	0.00	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.46	0.13	0.05	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	11.46	3.17	1.20	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.09		0.28		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.42					
Intersection LOS	C					



Intersection Level Of Service Report

Intersection 35: 38th Pkwy/PA-40.2 Acc2/PA-46.2 Acc1/PA-46.1 Acc4

Control Type:	Two-way stop	Delay (sec / veh):	18.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.050

Intersection Setup

Name							38th Parkway			38th Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+T			+T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							38th Parkway			38th Parkway		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	293	0	0	128	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	0	9	9	0	13	5	101	5	3	53	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	79	0	0	30	0
Other Volume [veh/h]	0	0	0	0	0	0	0	40	0	0	16	0
Total Hourly Volume [veh/h]	13	0	9	9	0	13	5	513	5	3	227	3
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	2	2	0	4	1	139	1	1	62	1
Total Analysis Volume [veh/h]	14	0	10	10	0	14	5	558	5	3	247	3
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.00	0.02	0.04	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	18.55	17.56	12.58	18.22	17.27	10.00	7.75	0.00	0.00	8.58	0.00	0.00
Movement LOS	C	C	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.22	0.22	0.22	0.17	0.17	0.17	0.01	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.50	5.50	5.50	4.20	4.20	4.20	0.29	0.00	0.00	0.22	0.00	0.00
d_A, Approach Delay [s/veh]	16.07			13.43			0.07			0.10		
Approach LOS	C			B			A			A		
d_I, Intersection Delay [s/veh]	0.89											
Intersection LOS	C											



Intersection Level Of Service Report
Intersection 36: 38th Pkwy/PA-40.1 Acc3/PA-46.2 Acc2

Control Type:	Two-way stop	Delay (sec / veh):	18.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.051

Intersection Setup

Name							38th Parkway			38th Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+			+		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							38th Parkway			38th Parkway		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	293	0	0	128	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	0	9	12	0	17	5	90	5	3	72	4
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	79	0	0	30	0
Other Volume [veh/h]	0	0	0	0	0	0	0	40	0	0	16	0
Total Hourly Volume [veh/h]	13	0	9	12	0	17	5	502	5	3	246	4
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	2	3	0	5	1	136	1	1	67	1
Total Analysis Volume [veh/h]	14	0	10	13	0	18	5	546	5	3	267	4
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.00	0.02	0.05	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	18.86	17.73	12.50	18.55	17.57	10.29	7.80	0.00	0.00	8.54	0.00	0.00
Movement LOS	C	C	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.22	0.22	0.22	0.23	0.23	0.23	0.01	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.57	5.57	5.57	5.63	5.63	5.63	0.29	0.00	0.00	0.22	0.00	0.00
d_A, Approach Delay [s/veh]	16.21			13.75			0.07			0.09		
Approach LOS	C			B			A			A		
d_I, Intersection Delay [s/veh]	0.99											
Intersection LOS	C											



Intersection Level Of Service Report
Intersection 37: 38th Pkwy/PA-40.1 Acc4/PA 46.2 Acc3

Control Type:	Two-way stop	Delay (sec / veh):	19.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.052

Intersection Setup

Name							38th Parkway			38th Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+T			+T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							38th Parkway			38th Parkway		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	293	0	0	128	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	0	9	12	0	17	5	79	5	2	95	4
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	79	0	0	30	0
Other Volume [veh/h]	0	0	0	0	0	0	0	40	0	0	16	0
Total Hourly Volume [veh/h]	13	0	9	12	0	17	5	491	5	2	269	4
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	2	3	0	5	1	133	1	1	73	1
Total Analysis Volume [veh/h]	14	0	10	13	0	18	5	534	5	2	292	4
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.00	0.02	0.05	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	19.10	17.90	12.41	18.78	17.76	10.47	7.86	0.00	0.00	8.50	0.00	0.00
Movement LOS	C	C	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.22	0.22	0.22	0.23	0.23	0.23	0.01	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.62	5.62	5.62	5.76	5.76	5.76	0.30	0.00	0.00	0.15	0.00	0.00
d_A, Approach Delay [s/veh]	16.31			13.96			0.07			0.06		
Approach LOS	C			B			A			A		
d_I, Intersection Delay [s/veh]	0.98											
Intersection LOS	C											



Intersection Level Of Service Report
Intersection 38: 38th Pkwy/PA-40.1 Acc5

Control Type:	Two-way stop	Delay (sec / veh):	19.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.061

Intersection Setup

Name							38th Parkway			38th Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			T			T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							38th Parkway			38th Parkway		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	293	0	0	128	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	15	0	19	10	0	18	6	60	6	6	116	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	79	0	0	30	0
Other Volume [veh/h]	0	0	0	0	0	0	0	40	0	0	16	0
Total Hourly Volume [veh/h]	15	0	19	10	0	18	6	472	6	6	290	3
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	5	3	0	5	2	128	2	2	79	1
Total Analysis Volume [veh/h]	16	0	21	11	0	20	7	513	7	7	315	3
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.00	0.04	0.04	0.00	0.03	0.01	0.01	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	19.86	18.51	12.50	19.58	18.11	10.59	7.91	0.00	0.00	8.46	0.00	0.00
Movement LOS	C	C	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.33	0.33	0.33	0.23	0.23	0.23	0.02	0.00	0.00	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	8.17	8.17	8.17	5.65	5.65	5.65	0.43	0.00	0.00	0.51	0.00	0.00
d_A, Approach Delay [s/veh]	15.68			13.78			0.11			0.18		
Approach LOS	C			B			A			A		
d_I, Intersection Delay [s/veh]	1.22											
Intersection LOS	C											



Intersection Level Of Service Report
Intersection 39: 38th Pkwy/PA-46.2 Acc4/PA-46.1 Acc1

Control Type:	Two-way stop	Delay (sec / veh):	17.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.128

Intersection Setup

Name			38th Parkway		38th Parkway	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵↵		↵↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

Volumes

Name			38th Parkway		38th Parkway	
Base Volume Input [veh/h]	0	0	293	0	0	128
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	38	6	66	17	3	146
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	79	0	0	30
Other Volume [veh/h]	0	0	40	0	0	16
Total Hourly Volume [veh/h]	38	6	478	17	3	320
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	2	130	5	1	87
Total Analysis Volume [veh/h]	41	7	520	18	3	348
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.01	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	17.93	11.56	0.00	0.00	8.50	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.44	0.04	0.00	0.00	0.01	0.00
95th-Percentile Queue Length [ft/ln]	10.91	0.96	0.00	0.00	0.22	0.00
d_A, Approach Delay [s/veh]	17.00		0.00		0.07	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.90					
Intersection LOS	C					

**Intersection Level Of Service Report**
Intersection 40: 38th Parkway/Reserve Bl (W)

Control Type:	Signalized	Delay (sec / veh):	10.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.324

Intersection Setup

Name				Reserve Loop			38th Parkway			38th Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

**Volumes**

Name				Reserve Loop			38th Parkway			38th Parkway		
Base Volume Input [veh/h]	0	0	0	56	0	56	74	237	0	0	54	74
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	12	11	34	7	0	23	38	5	4	97	82
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	79	0	73	26	0	0	0	0	30
Other Volume [veh/h]	0	0	0	38	0	53	20	2	0	0	4	12
Right Turn on Red Volume [veh/h]	0	0	6	0	0	91	0	0	3	0	0	99
Total Hourly Volume [veh/h]	7	12	5	207	7	91	143	277	2	4	155	99
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	3	1	56	2	25	39	75	1	1	42	27
Total Analysis Volume [veh/h]	8	13	5	225	8	99	155	301	2	4	168	108
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Maximum Green [s]	0	24	0	0	24	0	0	28	0	0	28	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	7	0	0	14	0
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	0	37	0	0	37	0	0	23	0	0	23	0
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	C	L	C	R	L	C	L	C	R
C, Calculated Cycle Length [s]	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	12	12	12	12	40	40	40	40	40
g / C, Green / Cycle	0.20	0.20	0.20	0.20	0.67	0.67	0.67	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.02	0.16	0.00	0.06	0.14	0.16	0.00	0.09	0.07
s, saturation flow rate [veh/h]	1665	1394	1870	1589	1103	1868	1076	1870	1589
c, Capacity [veh/h]	415	353	378	321	763	1241	710	1243	1056
d1, Uniform Delay [s]	19.38	22.86	19.18	20.37	6.07	4.03	6.13	3.71	3.62
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.06	1.92	0.02	0.54	0.60	0.47	0.01	0.23	0.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.06	0.64	0.02	0.31	0.20	0.24	0.01	0.14	0.10
d, Delay for Lane Group [s/veh]	19.44	24.79	19.21	20.91	6.67	4.50	6.15	3.93	3.81
Lane Group LOS	B	C	B	C	A	A	A	A	A
Critical Lane Group	No	Yes	No	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	0.28	2.99	0.09	1.15	0.86	1.14	0.02	0.58	0.37
50th-Percentile Queue Length [ft/ln]	7.06	74.82	2.15	28.72	21.47	28.40	0.54	14.39	9.23
95th-Percentile Queue Length [veh/ln]	0.51	5.39	0.15	2.07	1.55	2.04	0.04	1.04	0.66
95th-Percentile Queue Length [ft/ln]	12.70	134.68	3.87	51.69	38.65	51.12	0.96	25.90	16.61

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	19.44	19.44	19.44	24.79	19.21	20.91	6.67	4.50	4.50	6.15	3.93	3.81
Movement LOS	B	B	B	C	B	C	A	A	A	A	A	A
d_A, Approach Delay [s/veh]	19.44			23.50			5.23			3.92		
Approach LOS	B			C			A			A		
d_I, Intersection Delay [s/veh]	10.77											
Intersection LOS	B											
Intersection V/C	0.324											

Emissions

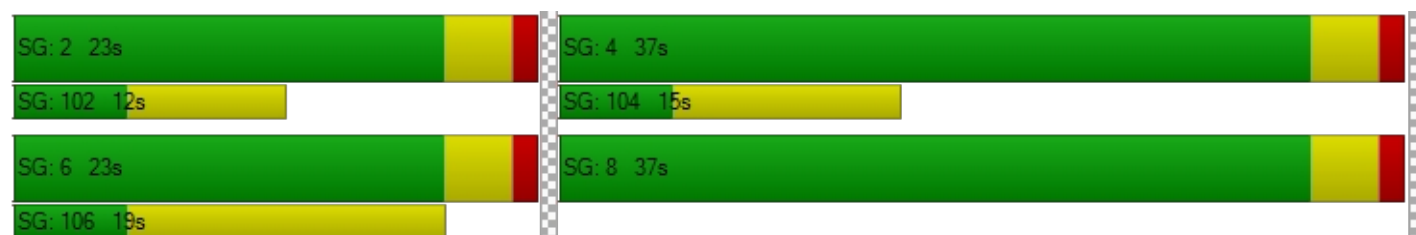
Vehicle Miles Traveled [mph]	0.68	28.30	1.01	12.45	10.20	19.93	0.30	12.58	8.09
Stops [stops/h]	16.93	179.57	5.17	68.92	51.53	68.16	1.28	34.53	22.15
Fuel consumption [US gal/h]	0.22	3.29	0.10	1.31	0.91	1.47	0.02	0.84	0.54
CO [g/h]	15.70	230.11	7.08	91.90	63.96	103.05	1.71	58.95	37.69
NOx [g/h]	3.05	44.77	1.38	17.88	12.44	20.05	0.33	11.47	7.33
VOC [g/h]	3.64	53.33	1.64	21.30	14.82	23.88	0.40	13.66	8.74

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	0.00
I_p,int, Pedestrian LOS Score for Intersectio	1.734	2.656	2.205	0.000
Crosswalk LOS	A	B	B	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1100	1100	633	633
d_b, Bicycle Delay [s]	6.08	6.08	14.01	14.01
I_b,int, Bicycle LOS Score for Intersection	1.612	2.258	2.320	2.185
Bicycle LOS	A	B	B	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





Intersection Level Of Service Report

Intersection 42: The Aurora Highlands Parkway/38th Parkway

Control Type:	Two-way stop	Delay (sec / veh):	14.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	38th Parkway			38th Parkway			Th Au			TAH Parkway (W)		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	38th Parkway			38th Parkway			Th Au			TAH Parkway (W)		
Base Volume Input [veh/h]	5	296	0	0	55	55	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	24	0	0	66	39	0	0	0	32	6	42
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	50	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	73	0	0	0	0	0	0	26
Other Volume [veh/h]	0	0	0	0	57	0	0	0	0	0	0	21
Total Hourly Volume [veh/h]	5	320	0	0	301	94	0	0	0	32	6	89
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	87	0	0	82	26	0	0	0	9	2	24
Total Analysis Volume [veh/h]	5	348	0	0	327	102	0	0	0	35	7	97
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.48	0.00	0.00	0.40	0.09	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	14.67	14.64	0.00	0.00	12.39	8.69	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS	B	B			B	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	2.67	0.00	0.00	1.96	0.31	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.01	66.69	0.00	0.00	48.96	7.81	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.64			11.51			0.00			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	10.97											
Intersection LOS	B											



Intersection Level Of Service Report

Intersection 43: The Aurora Highlands Parkway/38th Parkway

Control Type:	All-way stop	Delay (sec / veh):	12.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.552

Intersection Setup

Name				38th Parkway			TAH Parkway (E)					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				38th Parkway			TAH Parkway (E)					
Base Volume Input [veh/h]	0	5	5	70	0	0	296	50	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	8	0	68	30	0	16	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	73	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	57	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	13	5	268	30	0	312	50	0	0	0	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	1	73	8	0	85	14	0	0	0	0
Total Analysis Volume [veh/h]	0	14	5	291	33	0	339	54	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	854	714	792	614	671	671	
Degree of Utilization, x	0.02	0.41	0.04	0.55	0.04	0.04	

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.07	1.99	0.13	3.37	0.13	0.13	
95th-Percentile Queue Length [ft]	1.71	49.78	3.26	84.28	3.14	3.14	
Approach Delay [s/veh]	7.31	10.80		14.56		0.00	
Approach LOS	A	B		B		A	
Intersection Delay [s/veh]	12.72						
Intersection LOS	B						



Intersection Level Of Service Report
Intersection 47: 48th Avenue/Aerotropolis Pkwy

Control Type:	Signalized	Delay (sec / veh):	22.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.352

Intersection Setup

Name	Aerotropolis Pkwy			Aerotropolis Pkwy			48th Avenue			48th Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	3	0	0	2	0	1	2	0	0	2	0	1
Entry Pocket Length [ft]	200.00	100.00	100.00	200.00	100.00	200.00	200.00	100.00	100.00	200.00	100.00	200.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	300.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Aerotropolis Pkwy			Aerotropolis Pkwy			48th Avenue			48th Avenue		
Base Volume Input [veh/h]	200	1100	100	10	700	90	200	200	45	60	80	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	23	20	0	8	2	7	6	0	7	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	8	21	28	2	0	10	0
Other Volume [veh/h]	7	0	0	0	0	8	22	22	10	0	8	0
Right Turn on Red Volume [veh/h]	0	0	60	0	0	54	0	0	57	0	0	20
Total Hourly Volume [veh/h]	207	1123	60	10	708	54	250	256	0	67	100	20
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	56	305	16	3	192	15	68	70	0	18	27	5
Total Analysis Volume [veh/h]	225	1221	65	11	770	59	272	278	0	73	109	22
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	27	0	0	30	0	0	31	0	0	27	0
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	16	38	0	19	41	0	15	44	0	9	38	0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Calculated Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	72	72	1	64	64	11	16	16	4	10	10
g / C, Green / Cycle	0.08	0.66	0.66	0.01	0.59	0.59	0.10	0.14	0.14	0.04	0.09	0.09
(v / s)_i Volume / Saturation Flow Rate	0.07	0.24	0.04	0.00	0.15	0.04	0.08	0.08	0.00	0.02	0.03	0.01
s, saturation flow rate [veh/h]	3459	5094	1589	3459	5094	1589	3459	3560	1589	3459	3560	1589
c, Capacity [veh/h]	289	3338	1041	47	2981	930	331	517	231	140	321	143
d1, Uniform Delay [s]	49.41	8.60	6.82	53.70	11.15	9.83	48.81	43.58	0.00	51.72	46.97	46.17
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.53	0.31	0.12	2.57	0.21	0.13	5.07	0.87	0.00	2.96	0.62	0.49
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.37	0.06	0.24	0.26	0.06	0.82	0.54	0.00	0.52	0.34	0.15
d, Delay for Lane Group [s/veh]	53.94	8.91	6.93	56.27	11.36	9.96	53.88	44.45	0.00	54.68	47.60	46.67
Lane Group LOS	D	A	A	E	B	A	D	D	A	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.20	4.18	0.55	0.17	3.01	0.63	3.89	3.57	0.00	1.04	1.43	0.58
50th-Percentile Queue Length [ft/ln]	80.11	104.52	13.76	4.18	75.37	15.82	97.15	89.18	0.00	26.08	35.73	14.39
95th-Percentile Queue Length [veh/ln]	5.77	7.53	0.99	0.30	5.43	1.14	6.99	6.42	0.00	1.88	2.57	1.04
95th-Percentile Queue Length [ft/ln]	144.20	188.13	24.77	7.52	135.66	28.48	174.87	160.52	0.00	46.95	64.32	25.91

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	53.94	8.91	6.93	56.27	11.36	9.96	53.88	44.45	0.00	54.68	47.60	46.67
Movement LOS	D	A	A	E	B	A	D	D	A	D	D	D
d_A, Approach Delay [s/veh]	15.53			11.85			49.12			50.03		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	22.75											
Intersection LOS	C											
Intersection V/C	0.352											

Emissions

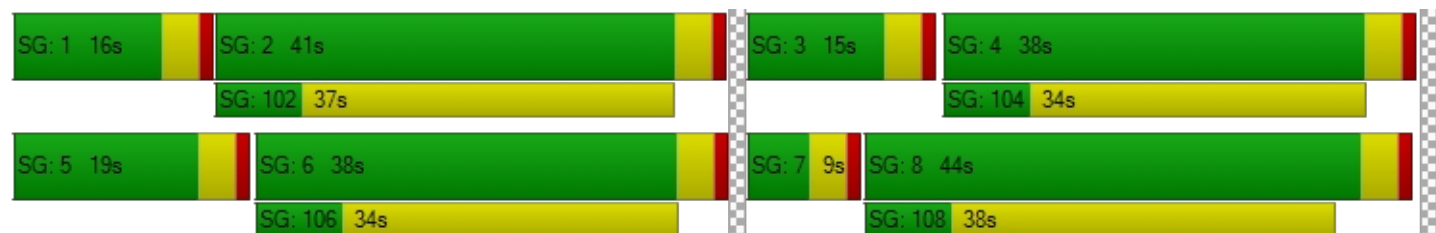
Vehicle Miles Traveled [mph]	211.01	1145.09	60.96	3.34	234.14	17.94	165.98	169.64	0.00	5.05	7.54	1.52
Stops [stops/h]	209.75	410.46	18.01	10.93	295.98	20.72	254.36	233.49	0.00	68.29	93.56	18.84
Fuel consumption [US gal/h]	12.31	51.62	2.70	0.32	13.05	0.97	11.22	10.79	0.00	1.40	1.88	0.38
CO [g/h]	860.82	3608.33	188.78	22.65	912.49	67.99	784.30	754.09	0.00	97.67	131.61	26.26
NOx [g/h]	167.48	702.05	36.73	4.41	177.54	13.23	152.60	146.72	0.00	19.00	25.61	5.11
VOC [g/h]	199.50	836.26	43.75	5.25	211.48	15.76	181.77	174.77	0.00	22.64	30.50	6.09

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	44.55			44.55			44.55			44.55		
I_p,int, Pedestrian LOS Score for Intersectio	3.221			3.199			3.050			2.721		
Crosswalk LOS	C			C			C			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	618			673			727			618		
d_b, Bicycle Delay [s]	26.25			24.22			22.27			26.25		
I_b,int, Bicycle LOS Score for Intersection	2.424			2.051			2.060			1.744		
Bicycle LOS	B			B			B			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





Intersection Level Of Service Report

Intersection 48: 38th Parkway/Aerotropolis Pkwy

Control Type:	Signalized	Delay (sec / veh):	20.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.400

Intersection Setup

Name	Aerotropolis Pkwy			Aerotropolis Pkwy			38th Parkway					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	2	0	1	1	0	1	2	0	1
Entry Pocket Length [ft]	150.00	100.00	150.00	150.00	100.00	150.00	200.00	100.00	200.00	200.00	100.00	200.00
No. of Lanes in Exit Pocket	0	0	0	0	0	2	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Aerotropolis Pkwy			Aerotropolis Pkwy			38th Parkway					
Base Volume Input [veh/h]	73	974	614	64	711	30	20	113	132	151	31	406
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	24	0	0	0	0	14	43	0	76	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	31	0	0	0	2	0	0	0	83	0	0	0
Other Volume [veh/h]	17	7	0	0	10	0	0	0	58	0	0	0
Right Turn on Red Volume [veh/h]	0	0	307	0	0	22	0	0	175	0	0	203
Total Hourly Volume [veh/h]	145	981	307	64	723	22	63	113	174	151	31	203
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	39	267	83	17	196	6	17	31	47	41	8	55
Total Analysis Volume [veh/h]	158	1066	334	70	786	24	68	123	189	164	34	221
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	14	0	0	27	0	0	34	0
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	16	30	0	12	26	0	10	36	0	22	48	0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Calculated Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	67	58	58	4	57	57	25	14	14	7	17	17
g / C, Green / Cycle	0.67	0.58	0.58	0.04	0.57	0.57	0.25	0.14	0.14	0.07	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.20	0.21	0.21	0.02	0.15	0.02	0.05	0.07	0.12	0.05	0.02	0.14
s, saturation flow rate [veh/h]	797	5094	1589	3459	5094	1589	1286	1870	1589	3459	1870	1589
c, Capacity [veh/h]	581	2971	927	149	2913	909	419	271	230	238	320	272
d1, Uniform Delay [s]	6.59	10.99	11.00	46.74	10.84	9.31	28.95	39.14	41.50	45.50	34.97	39.88
k, delay calibration	0.20	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.47	0.34	1.09	2.30	0.23	0.05	0.18	1.19	7.11	3.50	0.14	5.76
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.27	0.36	0.36	0.47	0.27	0.03	0.16	0.45	0.82	0.69	0.11	0.81
d, Delay for Lane Group [s/veh]	7.06	11.32	12.09	49.04	11.07	9.36	29.13	40.32	48.61	49.00	35.12	45.64
Lane Group LOS	A	B	B	D	B	A	C	D	D	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.18	4.00	3.95	0.89	2.85	0.23	1.28	2.84	4.93	2.09	0.71	5.61
50th-Percentile Queue Length [ft/ln]	29.54	99.89	98.82	22.36	71.17	5.82	32.07	70.94	123.30	52.36	17.76	140.15
95th-Percentile Queue Length [veh/ln]	2.13	7.19	7.12	1.61	5.12	0.42	2.31	5.11	8.57	3.77	1.28	9.49
95th-Percentile Queue Length [ft/ln]	53.17	179.81	177.88	40.24	128.11	10.47	57.73	127.69	214.35	94.25	31.96	237.22

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	7.06	11.32	12.09	49.04	11.07	9.36	29.13	40.32	48.61	49.00	35.12	45.64
Movement LOS	A	B	B	D	B	A	C	D	D	D	D	D
d_A, Approach Delay [s/veh]	11.06			14.04			42.44			46.10		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	20.09											
Intersection LOS	C											
Intersection V/C	0.400											

Emissions

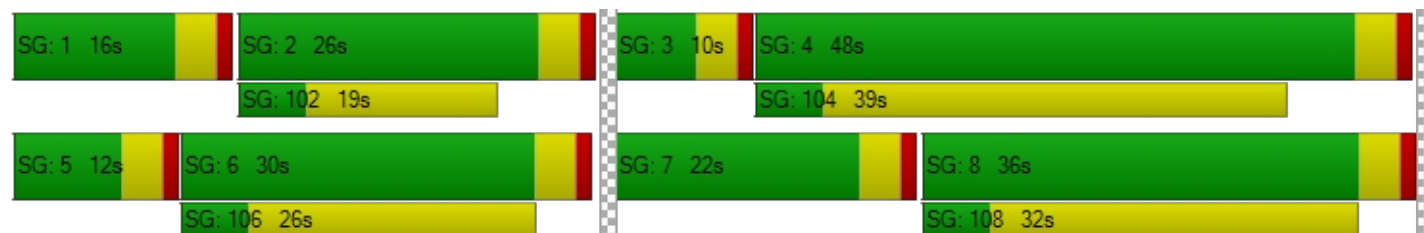
Vehicle Miles Traveled [mph]	30.49	205.72	64.46	65.65	737.14	22.51	34.02	61.54	94.56	14.10	2.92	19.00
Stops [stops/h]	42.54	431.54	142.30	64.39	307.46	8.38	46.19	102.15	177.55	150.80	25.57	201.81
Fuel consumption [US gal/h]	1.72	13.31	4.26	3.76	33.81	1.02	2.06	4.11	6.74	3.05	0.50	3.95
CO [g/h]	120.04	930.36	297.87	262.60	2363.62	71.20	143.91	287.08	471.33	213.13	35.27	276.10
NOx [g/h]	23.35	181.01	57.95	51.09	459.87	13.85	28.00	55.86	91.70	41.47	6.86	53.72
VOC [g/h]	27.82	215.62	69.03	60.86	547.79	16.50	33.35	66.53	109.24	49.39	8.17	63.99

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	41.41			41.41			41.41			41.41		
I_p,int, Pedestrian LOS Score for Intersectio	3.556			3.353			2.713			2.985		
Crosswalk LOS	D			C			B			C		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	520			440			640			880		
d_b, Bicycle Delay [s]	27.38			30.42			23.12			15.68		
I_b,int, Bicycle LOS Score for Intersection	2.585			2.056			2.475			2.586		
Bicycle LOS	B			B			B			B		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





Intersection Level Of Service Report
Intersection 82: TAH Pkwy/PA-46.1 Acc3

Control Type: Two-way stop
Analysis Method: HCM 7th Edition
Analysis Period: 15 minutes

Delay (sec / veh): 8.7
Level Of Service: A
Volume to Capacity (v/c): 0.037

Intersection Setup

Name			The Aurora Highlands Parkway		The Aurora Highlands Parkway	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↱				↱	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	435.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			The Aurora Highlands Parkway		The Aurora Highlands Parkway	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	35	0	0	19	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	26	0
Other Volume [veh/h]	0	0	0	0	21	0
Total Hourly Volume [veh/h]	0	35	0	0	66	6
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	10	0	0	18	2
Total Analysis Volume [veh/h]	0	38	0	0	72	7
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.04	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	8.65	0.00	0.00	0.00	0.00
Movement LOS		A			A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.12	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	2.89	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.65		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.81					
Intersection LOS	A					



Intersection Level Of Service Report
Intersection 83: TAH Pkwy/PA46.1 Access 4

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.033

Intersection Setup

Name			TAH Parkway (W)		The Aurora Highlands Parkway	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↱				↱↲	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			TAH Parkway (W)		The Aurora Highlands Parkway	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	30	0	0	49	5
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	26	0
Other Volume [veh/h]	0	0	0	0	21	0
Total Hourly Volume [veh/h]	0	30	0	0	96	5
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	8	0	0	26	1
Total Analysis Volume [veh/h]	0	33	0	0	104	5
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.03	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	8.72	0.00	0.00	0.00	0.00
Movement LOS		A			A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.10	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	2.55	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.72		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.03					
Intersection LOS	A					



Signal Warrants Report For Intersection 25: 48th Avenue/PA-31 Street

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	415	553	231
2	403	536	224
3	394	525	219
4	369	492	206
5	328	437	182
6	324	431	180
7	320	426	178
8	291	387	162
9	286	382	159
10	282	376	157
11	245	326	136
12	228	304	127
13	224	299	125
14	166	221	92
15	166	221	92
16	116	155	65
17	66	88	37
18	66	88	37
19	37	50	21
20	21	28	12
21	12	17	7
22	4	6	2
23	4	6	2
24	4	6	2



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	968	2	231	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
2	3	939	2	224	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
3	3	919	2	219	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
4	3	861	2	206	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
5	3	765	2	182	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
6	3	755	2	180	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
7	3	746	2	178	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
8	3	678	2	162	No	Yes	Yes	Yes	No	No	Yes	Yes	No	No
9	3	668	2	159	No	No	Yes	Yes	No	No	Yes	Yes	No	No
10	3	658	2	157	No	No	Yes	Yes	No	No	Yes	Yes	No	No
11	3	571	2	136	No	No	No	Yes	No	No	No	Yes	No	No
12	3	532	2	127	No	No	No	Yes	No	No	No	Yes	No	No
13	3	523	2	125	No	No	No	Yes	No	No	No	Yes	No	No
14	3	387	2	92	No	No	No	No	No	No	No	No	No	No
15	3	387	2	92	No	No	No	No	No	No	No	No	No	No
16	3	271	2	65	No	No	No	No	No	No	No	No	No	No
17	3	154	2	37	No	No	No	No	No	No	No	No	No	No
18	3	154	2	37	No	No	No	No	No	No	No	No	No	No
19	3	87	2	21	No	No	No	No	No	No	No	No	No	No
20	3	49	2	12	No	No	No	No	No	No	No	No	No	No
21	3	29	2	7	No	No	No	No	No	No	No	No	No	No
22	3	10	2	2	No	No	No	No	No	No	No	No	No	No
23	3	10	2	2	No	No	No	No	No	No	No	No	No	No
24	3	10	2	2	No	No	No	No	No	No	No	No	No	No
Hours Met					4	8	10	13	3	7	10	13	2	0

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	17.4
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach (h:mm)	1:07
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	231
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1199
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 26: Reserve Bl/PA-31 Street

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	N
1	55	115	54
2	53	112	52
3	52	109	51
4	49	102	48
5	43	91	43
6	43	90	42
7	42	89	42
8	39	81	38
9	38	79	37
10	37	78	37
11	32	68	32
12	30	63	30
13	30	62	29
14	22	46	22
15	22	46	22
16	15	32	15
17	9	18	9
18	9	18	9
19	5	10	5
20	3	6	3
21	2	3	2
22	1	1	1
23	1	1	1
24	1	1	1



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	170	2	54	No	No	No	No	No	No	No	No	No	No
2	2	165	2	52	No	No	No	No	No	No	No	No	No	No
3	2	161	2	51	No	No	No	No	No	No	No	No	No	No
4	2	151	2	48	No	No	No	No	No	No	No	No	No	No
5	2	134	2	43	No	No	No	No	No	No	No	No	No	No
6	2	133	2	42	No	No	No	No	No	No	No	No	No	No
7	2	131	2	42	No	No	No	No	No	No	No	No	No	No
8	2	120	2	38	No	No	No	No	No	No	No	No	No	No
9	2	117	2	37	No	No	No	No	No	No	No	No	No	No
10	2	115	2	37	No	No	No	No	No	No	No	No	No	No
11	2	100	2	32	No	No	No	No	No	No	No	No	No	No
12	2	93	2	30	No	No	No	No	No	No	No	No	No	No
13	2	92	2	29	No	No	No	No	No	No	No	No	No	No
14	2	68	2	22	No	No	No	No	No	No	No	No	No	No
15	2	68	2	22	No	No	No	No	No	No	No	No	No	No
16	2	47	2	15	No	No	No	No	No	No	No	No	No	No
17	2	27	2	9	No	No	No	No	No	No	No	No	No	No
18	2	27	2	9	No	No	No	No	No	No	No	No	No	No
19	2	15	2	5	No	No	No	No	No	No	No	No	No	No
20	2	9	2	3	No	No	No	No	No	No	No	No	No	No
21	2	5	2	2	No	No	No	No	No	No	No	No	No	No
22	2	2	2	1	No	No	No	No	No	No	No	No	No	No
23	2	2	2	1	No	No	No	No	No	No	No	No	No	No
24	2	2	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.3
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:08
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	54
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	224
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 31: Reserve Bl/PA-40.1 Acc1

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	47	41	28
2	46	40	27
3	45	39	27
4	42	36	25
5	37	32	22
6	37	32	22
7	36	32	22
8	33	29	20
9	32	28	19
10	32	28	19
11	28	24	17
12	26	23	15
13	25	22	15
14	19	16	11
15	19	16	11
16	13	11	8
17	8	7	4
18	8	7	4
19	4	4	3
20	2	2	1
21	1	1	1
22	0	0	0
23	0	0	0
24	0	0	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	1	88	1	28	No	No	No	No	No	No	No	No	No	No
2	1	86	1	27	No	No	No	No	No	No	No	No	No	No
3	1	84	1	27	No	No	No	No	No	No	No	No	No	No
4	1	78	1	25	No	No	No	No	No	No	No	No	No	No
5	1	69	1	22	No	No	No	No	No	No	No	No	No	No
6	1	69	1	22	No	No	No	No	No	No	No	No	No	No
7	1	68	1	22	No	No	No	No	No	No	No	No	No	No
8	1	62	1	20	No	No	No	No	No	No	No	No	No	No
9	1	60	1	19	No	No	No	No	No	No	No	No	No	No
10	1	60	1	19	No	No	No	No	No	No	No	No	No	No
11	1	52	1	17	No	No	No	No	No	No	No	No	No	No
12	1	49	1	15	No	No	No	No	No	No	No	No	No	No
13	1	47	1	15	No	No	No	No	No	No	No	No	No	No
14	1	35	1	11	No	No	No	No	No	No	No	No	No	No
15	1	35	1	11	No	No	No	No	No	No	No	No	No	No
16	1	24	1	8	No	No	No	No	No	No	No	No	No	No
17	1	15	1	4	No	No	No	No	No	No	No	No	No	No
18	1	15	1	4	No	No	No	No	No	No	No	No	No	No
19	1	8	1	3	No	No	No	No	No	No	No	No	No	No
20	1	4	1	1	No	No	No	No	No	No	No	No	No	No
21	1	2	1	1	No	No	No	No	No	No	No	No	No	No
22	1	0	1	0	No	No	No	No	No	No	No	No	No	No
23	1	0	1	0	No	No	No	No	No	No	No	No	No	No
24	1	0	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.9
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:04
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	28
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	116
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 32: Reserve Bl/PA-40.1 Acc2

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	37	50	28
2	36	49	27
3	35	48	27
4	33	45	25
5	29	40	22
6	29	39	22
7	28	39	22
8	26	35	20
9	26	35	19
10	25	34	19
11	22	30	17
12	20	28	15
13	20	27	15
14	15	20	11
15	15	20	11
16	10	14	8
17	6	8	4
18	6	8	4
19	3	5	3
20	2	3	1
21	1	2	1
22	0	1	0
23	0	1	0
24	0	1	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	1	87	1	28	No	No	No	No	No	No	No	No	No	No
2	1	85	1	27	No	No	No	No	No	No	No	No	No	No
3	1	83	1	27	No	No	No	No	No	No	No	No	No	No
4	1	78	1	25	No	No	No	No	No	No	No	No	No	No
5	1	69	1	22	No	No	No	No	No	No	No	No	No	No
6	1	68	1	22	No	No	No	No	No	No	No	No	No	No
7	1	67	1	22	No	No	No	No	No	No	No	No	No	No
8	1	61	1	20	No	No	No	No	No	No	No	No	No	No
9	1	61	1	19	No	No	No	No	No	No	No	No	No	No
10	1	59	1	19	No	No	No	No	No	No	No	No	No	No
11	1	52	1	17	No	No	No	No	No	No	No	No	No	No
12	1	48	1	15	No	No	No	No	No	No	No	No	No	No
13	1	47	1	15	No	No	No	No	No	No	No	No	No	No
14	1	35	1	11	No	No	No	No	No	No	No	No	No	No
15	1	35	1	11	No	No	No	No	No	No	No	No	No	No
16	1	24	1	8	No	No	No	No	No	No	No	No	No	No
17	1	14	1	4	No	No	No	No	No	No	No	No	No	No
18	1	14	1	4	No	No	No	No	No	No	No	No	No	No
19	1	8	1	3	No	No	No	No	No	No	No	No	No	No
20	1	5	1	1	No	No	No	No	No	No	No	No	No	No
21	1	3	1	1	No	No	No	No	No	No	No	No	No	No
22	1	1	1	0	No	No	No	No	No	No	No	No	No	No
23	1	1	1	0	No	No	No	No	No	No	No	No	No	No
24	1	1	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.9
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:04
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	28
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	115
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 33: Reserve Bl/PA-40.2 Acc1

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	N	S	W
1	60	31	22
2	58	30	21
3	57	29	21
4	53	28	20
5	47	24	17
6	47	24	17
7	46	24	17
8	42	22	15
9	41	21	15
10	41	21	15
11	35	18	13
12	33	17	12
13	32	17	12
14	24	12	9
15	24	12	9
16	17	9	6
17	10	5	4
18	10	5	4
19	5	3	2
20	3	2	1
21	2	1	1
22	1	0	0
23	1	0	0
24	1	0	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	1	91	1	22	No	No	No	No	No	No	No	No	No	No
2	1	88	1	21	No	No	No	No	No	No	No	No	No	No
3	1	86	1	21	No	No	No	No	No	No	No	No	No	No
4	1	81	1	20	No	No	No	No	No	No	No	No	No	No
5	1	71	1	17	No	No	No	No	No	No	No	No	No	No
6	1	71	1	17	No	No	No	No	No	No	No	No	No	No
7	1	70	1	17	No	No	No	No	No	No	No	No	No	No
8	1	64	1	15	No	No	No	No	No	No	No	No	No	No
9	1	62	1	15	No	No	No	No	No	No	No	No	No	No
10	1	62	1	15	No	No	No	No	No	No	No	No	No	No
11	1	53	1	13	No	No	No	No	No	No	No	No	No	No
12	1	50	1	12	No	No	No	No	No	No	No	No	No	No
13	1	49	1	12	No	No	No	No	No	No	No	No	No	No
14	1	36	1	9	No	No	No	No	No	No	No	No	No	No
15	1	36	1	9	No	No	No	No	No	No	No	No	No	No
16	1	26	1	6	No	No	No	No	No	No	No	No	No	No
17	1	15	1	4	No	No	No	No	No	No	No	No	No	No
18	1	15	1	4	No	No	No	No	No	No	No	No	No	No
19	1	8	1	2	No	No	No	No	No	No	No	No	No	No
20	1	5	1	1	No	No	No	No	No	No	No	No	No	No
21	1	3	1	1	No	No	No	No	No	No	No	No	No	No
22	1	1	1	0	No	No	No	No	No	No	No	No	No	No
23	1	1	1	0	No	No	No	No	No	No	No	No	No	No
24	1	1	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.9
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:03
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	22
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	113
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 34: 38th Parkway/Reserve BI (E)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	N
1	215	532	71
2	209	516	69
3	204	505	67
4	191	473	63
5	170	420	56
6	168	415	55
7	166	410	55
8	151	372	50
9	148	367	49
10	146	362	48
11	127	314	42
12	118	293	39
13	116	287	38
14	86	213	28
15	86	213	28
16	60	149	20
17	34	85	11
18	34	85	11
19	19	48	6
20	11	27	4
21	6	16	2
22	2	5	1
23	2	5	1
24	2	5	1



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	747	2	71	No	No	No	No	No	No	Yes	Yes	No	No
2	2	725	2	69	No	No	No	No	No	No	No	Yes	No	No
3	2	709	2	67	No	No	No	No	No	No	No	Yes	No	No
4	2	664	2	63	No	No	No	No	No	No	No	Yes	No	No
5	2	590	2	56	No	No	No	No	No	No	No	Yes	No	No
6	2	583	2	55	No	No	No	No	No	No	No	No	No	No
7	2	576	2	55	No	No	No	No	No	No	No	No	No	No
8	2	523	2	50	No	No	No	No	No	No	No	No	No	No
9	2	515	2	49	No	No	No	No	No	No	No	No	No	No
10	2	508	2	48	No	No	No	No	No	No	No	No	No	No
11	2	441	2	42	No	No	No	No	No	No	No	No	No	No
12	2	411	2	39	No	No	No	No	No	No	No	No	No	No
13	2	403	2	38	No	No	No	No	No	No	No	No	No	No
14	2	299	2	28	No	No	No	No	No	No	No	No	No	No
15	2	299	2	28	No	No	No	No	No	No	No	No	No	No
16	2	209	2	20	No	No	No	No	No	No	No	No	No	No
17	2	119	2	11	No	No	No	No	No	No	No	No	No	No
18	2	119	2	11	No	No	No	No	No	No	No	No	No	No
19	2	67	2	6	No	No	No	No	No	No	No	No	No	No
20	2	38	2	4	No	No	No	No	No	No	No	No	No	No
21	2	22	2	2	No	No	No	No	No	No	No	No	No	No
22	2	7	2	1	No	No	No	No	No	No	No	No	No	No
23	2	7	2	1	No	No	No	No	No	No	No	No	No	No
24	2	7	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	1	5	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	14.1
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach ([h]h:mm)	0:16
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	71
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	818
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 35: 38th Pkwy/PA-40.2 Acc2/PA-46.2 Acc1/PA-46.1 Acc4

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N, S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	N	S
1	233	523	22	22
2	226	507	21	21
3	221	497	21	21
4	207	465	20	20
5	184	413	17	17
6	182	408	17	17
7	179	403	17	17
8	163	366	15	15
9	161	361	15	15
10	158	356	15	15
11	137	309	13	13
12	128	288	12	12
13	126	282	12	12
14	93	209	9	9
15	93	209	9	9
16	65	146	6	6
17	37	84	4	4
18	37	84	4	4
19	21	47	2	2
20	12	26	1	1
21	7	16	1	1
22	2	5	0	0
23	2	5	0	0
24	2	5	0	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	756	1	22	No	No	No	No	No	No	No	No	No	No
2	2	733	1	21	No	No	No	No	No	No	No	No	No	No
3	2	718	1	21	No	No	No	No	No	No	No	No	No	No
4	2	672	1	20	No	No	No	No	No	No	No	No	No	No
5	2	597	1	17	No	No	No	No	No	No	No	No	No	No
6	2	590	1	17	No	No	No	No	No	No	No	No	No	No
7	2	582	1	17	No	No	No	No	No	No	No	No	No	No
8	2	529	1	15	No	No	No	No	No	No	No	No	No	No
9	2	522	1	15	No	No	No	No	No	No	No	No	No	No
10	2	514	1	15	No	No	No	No	No	No	No	No	No	No
11	2	446	1	13	No	No	No	No	No	No	No	No	No	No
12	2	416	1	12	No	No	No	No	No	No	No	No	No	No
13	2	408	1	12	No	No	No	No	No	No	No	No	No	No
14	2	302	1	9	No	No	No	No	No	No	No	No	No	No
15	2	302	1	9	No	No	No	No	No	No	No	No	No	No
16	2	211	1	6	No	No	No	No	No	No	No	No	No	No
17	2	121	1	4	No	No	No	No	No	No	No	No	No	No
18	2	121	1	4	No	No	No	No	No	No	No	No	No	No
19	2	68	1	2	No	No	No	No	No	No	No	No	No	No
20	2	38	1	1	No	No	No	No	No	No	No	No	No	No
21	2	23	1	1	No	No	No	No	No	No	No	No	No	No
22	2	7	1	0	No	No	No	No	No	No	No	No	No	No
23	2	7	1	0	No	No	No	No	No	No	No	No	No	No
24	2	7	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	13.4	16.1
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:04	0:05
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	22	22
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	800	800
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	



Signal Warrants Report For Intersection 36: 38th Pkwy/PA-40.1 Acc3/PA-46.2 Acc2

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	N
1	253	512	22	29
2	245	497	21	28
3	240	486	21	28
4	225	456	20	26
5	200	404	17	23
6	197	399	17	23
7	195	394	17	22
8	177	358	15	20
9	175	353	15	20
10	172	348	15	20
11	149	302	13	17
12	139	282	12	16
13	137	276	12	16
14	101	205	9	12
15	101	205	9	12
16	71	143	6	8
17	40	82	4	5
18	40	82	4	5
19	23	46	2	3
20	13	26	1	1
21	8	15	1	1
22	3	5	0	0
23	3	5	0	0
24	3	5	0	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	765	1	29	No	No	No	No	No	No	No	No	No	No
2	2	742	1	28	No	No	No	No	No	No	No	No	No	No
3	2	726	1	28	No	No	No	No	No	No	No	No	No	No
4	2	681	1	26	No	No	No	No	No	No	No	No	No	No
5	2	604	1	23	No	No	No	No	No	No	No	No	No	No
6	2	596	1	23	No	No	No	No	No	No	No	No	No	No
7	2	589	1	22	No	No	No	No	No	No	No	No	No	No
8	2	535	1	20	No	No	No	No	No	No	No	No	No	No
9	2	528	1	20	No	No	No	No	No	No	No	No	No	No
10	2	520	1	20	No	No	No	No	No	No	No	No	No	No
11	2	451	1	17	No	No	No	No	No	No	No	No	No	No
12	2	421	1	16	No	No	No	No	No	No	No	No	No	No
13	2	413	1	16	No	No	No	No	No	No	No	No	No	No
14	2	306	1	12	No	No	No	No	No	No	No	No	No	No
15	2	306	1	12	No	No	No	No	No	No	No	No	No	No
16	2	214	1	8	No	No	No	No	No	No	No	No	No	No
17	2	122	1	5	No	No	No	No	No	No	No	No	No	No
18	2	122	1	5	No	No	No	No	No	No	No	No	No	No
19	2	69	1	3	No	No	No	No	No	No	No	No	No	No
20	2	39	1	1	No	No	No	No	No	No	No	No	No	No
21	2	23	1	1	No	No	No	No	No	No	No	No	No	No
22	2	8	1	0	No	No	No	No	No	No	No	No	No	No
23	2	8	1	0	No	No	No	No	No	No	No	No	No	No
24	2	8	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	S	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	16.2	13.8
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:05	0:06
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	22	29
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	816	816
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	



Signal Warrants Report For Intersection 37: 38th Pkwy/PA-40.1 Acc4/PA 46.2 Acc3

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	N
1	275	501	22	29
2	267	486	21	28
3	261	476	21	28
4	245	446	20	26
5	217	396	17	23
6	215	391	17	23
7	212	386	17	22
8	193	351	15	20
9	190	346	15	20
10	187	341	15	20
11	162	296	13	17
12	151	276	12	16
13	149	271	12	16
14	110	200	9	12
15	110	200	9	12
16	77	140	6	8
17	44	80	4	5
18	44	80	4	5
19	25	45	2	3
20	14	25	1	1
21	8	15	1	1
22	3	5	0	0
23	3	5	0	0
24	3	5	0	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	776	1	29	No	No	No	No	No	No	No	No	No	No
2	2	753	1	28	No	No	No	No	No	No	No	No	No	No
3	2	737	1	28	No	No	No	No	No	No	No	No	No	No
4	2	691	1	26	No	No	No	No	No	No	No	No	No	No
5	2	613	1	23	No	No	No	No	No	No	No	No	No	No
6	2	606	1	23	No	No	No	No	No	No	No	No	No	No
7	2	598	1	22	No	No	No	No	No	No	No	No	No	No
8	2	544	1	20	No	No	No	No	No	No	No	No	No	No
9	2	536	1	20	No	No	No	No	No	No	No	No	No	No
10	2	528	1	20	No	No	No	No	No	No	No	No	No	No
11	2	458	1	17	No	No	No	No	No	No	No	No	No	No
12	2	427	1	16	No	No	No	No	No	No	No	No	No	No
13	2	420	1	16	No	No	No	No	No	No	No	No	No	No
14	2	310	1	12	No	No	No	No	No	No	No	No	No	No
15	2	310	1	12	No	No	No	No	No	No	No	No	No	No
16	2	217	1	8	No	No	No	No	No	No	No	No	No	No
17	2	124	1	5	No	No	No	No	No	No	No	No	No	No
18	2	124	1	5	No	No	No	No	No	No	No	No	No	No
19	2	70	1	3	No	No	No	No	No	No	No	No	No	No
20	2	39	1	1	No	No	No	No	No	No	No	No	No	No
21	2	23	1	1	No	No	No	No	No	No	No	No	No	No
22	2	8	1	0	No	No	No	No	No	No	No	No	No	No
23	2	8	1	0	No	No	No	No	No	No	No	No	No	No
24	2	8	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	S	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	16.3	14
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:05	0:06
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	22	29
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	827	827
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	



Signal Warrants Report For Intersection 38: 38th Pkwy/PA-40.1 Acc5

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	N
1	299	484	34	28
2	290	469	33	27
3	284	460	32	27
4	266	431	30	25
5	236	382	27	22
6	233	378	27	22
7	230	373	26	22
8	209	339	24	20
9	206	334	23	19
10	203	329	23	19
11	176	286	20	17
12	164	266	19	15
13	161	261	18	15
14	120	194	14	11
15	120	194	14	11
16	84	136	10	8
17	48	77	5	4
18	48	77	5	4
19	27	44	3	3
20	15	24	2	1
21	9	15	1	1
22	3	5	0	0
23	3	5	0	0
24	3	5	0	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	783	1	34	No	No	No	No	No	No	No	No	No	No
2	2	759	1	33	No	No	No	No	No	No	No	No	No	No
3	2	744	1	32	No	No	No	No	No	No	No	No	No	No
4	2	697	1	30	No	No	No	No	No	No	No	No	No	No
5	2	618	1	27	No	No	No	No	No	No	No	No	No	No
6	2	611	1	27	No	No	No	No	No	No	No	No	No	No
7	2	603	1	26	No	No	No	No	No	No	No	No	No	No
8	2	548	1	24	No	No	No	No	No	No	No	No	No	No
9	2	540	1	23	No	No	No	No	No	No	No	No	No	No
10	2	532	1	23	No	No	No	No	No	No	No	No	No	No
11	2	462	1	20	No	No	No	No	No	No	No	No	No	No
12	2	430	1	19	No	No	No	No	No	No	No	No	No	No
13	2	422	1	18	No	No	No	No	No	No	No	No	No	No
14	2	314	1	14	No	No	No	No	No	No	No	No	No	No
15	2	314	1	14	No	No	No	No	No	No	No	No	No	No
16	2	220	1	10	No	No	No	No	No	No	No	No	No	No
17	2	125	1	5	No	No	No	No	No	No	No	No	No	No
18	2	125	1	5	No	No	No	No	No	No	No	No	No	No
19	2	71	1	3	No	No	No	No	No	No	No	No	No	No
20	2	39	1	2	No	No	No	No	No	No	No	No	No	No
21	2	24	1	1	No	No	No	No	No	No	No	No	No	No
22	2	8	1	0	No	No	No	No	No	No	No	No	No	No
23	2	8	1	0	No	No	No	No	No	No	No	No	No	No
24	2	8	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	S	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	15.7	13.8
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:08	0:06
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	34	28
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	845	845
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	



Signal Warrants Report For Intersection 39: 38th Pkwy/PA-46.2 Acc4/PA-46.1 Acc1

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	323	495	44
2	313	480	43
3	307	470	42
4	287	441	39
5	255	391	35
6	252	386	34
7	249	381	34
8	226	347	31
9	223	342	30
10	220	337	30
11	191	292	26
12	178	272	24
13	174	267	24
14	129	198	18
15	129	198	18
16	90	139	12
17	52	79	7
18	52	79	7
19	29	45	4
20	16	25	2
21	10	15	1
22	3	5	0
23	3	5	0
24	3	5	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	818	2	44	No	No	No	No	No	No	No	No	No	No
2	2	793	2	43	No	No	No	No	No	No	No	No	No	No
3	2	777	2	42	No	No	No	No	No	No	No	No	No	No
4	2	728	2	39	No	No	No	No	No	No	No	No	No	No
5	2	646	2	35	No	No	No	No	No	No	No	No	No	No
6	2	638	2	34	No	No	No	No	No	No	No	No	No	No
7	2	630	2	34	No	No	No	No	No	No	No	No	No	No
8	2	573	2	31	No	No	No	No	No	No	No	No	No	No
9	2	565	2	30	No	No	No	No	No	No	No	No	No	No
10	2	557	2	30	No	No	No	No	No	No	No	No	No	No
11	2	483	2	26	No	No	No	No	No	No	No	No	No	No
12	2	450	2	24	No	No	No	No	No	No	No	No	No	No
13	2	441	2	24	No	No	No	No	No	No	No	No	No	No
14	2	327	2	18	No	No	No	No	No	No	No	No	No	No
15	2	327	2	18	No	No	No	No	No	No	No	No	No	No
16	2	229	2	12	No	No	No	No	No	No	No	No	No	No
17	2	131	2	7	No	No	No	No	No	No	No	No	No	No
18	2	131	2	7	No	No	No	No	No	No	No	No	No	No
19	2	74	2	4	No	No	No	No	No	No	No	No	No	No
20	2	41	2	2	No	No	No	No	No	No	No	No	No	No
21	2	25	2	1	No	No	No	No	No	No	No	No	No	No
22	2	8	2	0	No	No	No	No	No	No	No	No	No	No
23	2	8	2	0	No	No	No	No	No	No	No	No	No	No
24	2	8	2	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	17
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:12
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	44
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	862
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 42: The Aurora Highlands Parkway/38th Parkway

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E
Minor Approaches	N, S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets	Minor Streets	
	E	N	S
1	127	395	325
2	123	383	315
3	121	375	309
4	113	352	289
5	100	312	257
6	99	308	254
7	98	304	250
8	89	277	227
9	88	273	224
10	86	269	221
11	75	233	192
12	70	217	179
13	69	213	176
14	51	158	130
15	51	158	130
16	36	111	91
17	20	63	52
18	20	63	52
19	11	36	29
20	6	20	16
21	4	12	10
22	1	4	3
23	1	4	3
24	1	4	3



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	4	127	2	395	No	No	No	No	No	No	No	No	No	No
2	4	123	2	383	No	No	No	No	No	No	No	No	No	No
3	4	121	2	375	No	No	No	No	No	No	No	No	No	No
4	4	113	2	352	No	No	No	No	No	No	No	No	No	No
5	4	100	2	312	No	No	No	No	No	No	No	No	No	No
6	4	99	2	308	No	No	No	No	No	No	No	No	No	No
7	4	98	2	304	No	No	No	No	No	No	No	No	No	No
8	4	89	2	277	No	No	No	No	No	No	No	No	No	No
9	4	88	2	273	No	No	No	No	No	No	No	No	No	No
10	4	86	2	269	No	No	No	No	No	No	No	No	No	No
11	4	75	2	233	No	No	No	No	No	No	No	No	No	No
12	4	70	2	217	No	No	No	No	No	No	No	No	No	No
13	4	69	2	213	No	No	No	No	No	No	No	No	No	No
14	4	51	2	158	No	No	No	No	No	No	No	No	No	No
15	4	51	2	158	No	No	No	No	No	No	No	No	No	No
16	4	36	2	111	No	No	No	No	No	No	No	No	No	No
17	4	20	2	63	No	No	No	No	No	No	No	No	No	No
18	4	20	2	63	No	No	No	No	No	No	No	No	No	No
19	4	11	2	36	No	No	No	No	No	No	No	No	No	No
20	4	6	2	20	No	No	No	No	No	No	No	No	No	No
21	4	4	2	12	No	No	No	No	No	No	No	No	No	No
22	4	1	2	4	No	No	No	No	No	No	No	No	No	No
23	4	1	2	4	No	No	No	No	No	No	No	No	No	No
24	4	1	2	4	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	11.5	14.6
Number of Lanes on Minor Street Approach	2	2
VehicleHours of Stopped Delay on Minor Approach (h:mm)	1:15	1:19
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	395	325
High Minor Volume Condition Met	Yes	Yes
Total Entering Volume on All Approaches During Same Hour	847	847
Number of Approaches on Intersection	3	3
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	



Signal Warrants Report For Intersection 43: The Aurora Highlands Parkway/38th Parkway

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	W
Minor Approaches	N, S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets	Minor Streets	
	W	N	S
1	362	298	18
2	351	289	17
3	344	283	17
4	322	265	16
5	286	235	14
6	282	232	14
7	279	229	14
8	253	209	13
9	250	206	12
10	246	203	12
11	214	176	11
12	199	164	10
13	195	161	10
14	145	119	7
15	145	119	7
16	101	83	5
17	58	48	3
18	58	48	3
19	33	27	2
20	18	15	1
21	11	9	1
22	4	3	0
23	4	3	0
24	4	3	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	362	2	298	No	No	No	Yes	No	No	No	No	No	No
2	3	351	2	289	No	No	No	Yes	No	No	No	No	No	No
3	3	344	2	283	No	No	No	Yes	No	No	No	No	No	No
4	3	322	2	265	No	No	No	No	No	No	No	No	No	No
5	3	286	2	235	No	No	No	No	No	No	No	No	No	No
6	3	282	2	232	No	No	No	No	No	No	No	No	No	No
7	3	279	2	229	No	No	No	No	No	No	No	No	No	No
8	3	253	2	209	No	No	No	No	No	No	No	No	No	No
9	3	250	2	206	No	No	No	No	No	No	No	No	No	No
10	3	246	2	203	No	No	No	No	No	No	No	No	No	No
11	3	214	2	176	No	No	No	No	No	No	No	No	No	No
12	3	199	2	164	No	No	No	No	No	No	No	No	No	No
13	3	195	2	161	No	No	No	No	No	No	No	No	No	No
14	3	145	2	119	No	No	No	No	No	No	No	No	No	No
15	3	145	2	119	No	No	No	No	No	No	No	No	No	No
16	3	101	2	83	No	No	No	No	No	No	No	No	No	No
17	3	58	2	48	No	No	No	No	No	No	No	No	No	No
18	3	58	2	48	No	No	No	No	No	No	No	No	No	No
19	3	33	2	27	No	No	No	No	No	No	No	No	No	No
20	3	18	2	15	No	No	No	No	No	No	No	No	No	No
21	3	11	2	9	No	No	No	No	No	No	No	No	No	No
22	3	4	2	3	No	No	No	No	No	No	No	No	No	No
23	3	4	2	3	No	No	No	No	No	No	No	No	No	No
24	3	4	2	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	3	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	10.8	7.3
Number of Lanes on Minor Street Approach	2	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:53	0:02
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	298	18
High Minor Volume Condition Met	Yes	No
Total Entering Volume on All Approaches During Same Hour	678	678
Number of Approaches on Intersection	3	3
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	



Signal Warrants Report For Intersection 82: TAH Pkwy/PA-46.1 Acc3

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets	Minor Streets
	E	N
1	72	35
2	70	34
3	68	33
4	64	31
5	57	28
6	56	27
7	55	27
8	50	25
9	50	24
10	49	24
11	42	21
12	40	19
13	39	19
14	29	14
15	29	14
16	20	10
17	12	6
18	12	6
19	6	3
20	4	2
21	2	1
22	1	0
23	1	0
24	1	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	72	1	35	No	No	No	No	No	No	No	No	No	No
2	2	70	1	34	No	No	No	No	No	No	No	No	No	No
3	2	68	1	33	No	No	No	No	No	No	No	No	No	No
4	2	64	1	31	No	No	No	No	No	No	No	No	No	No
5	2	57	1	28	No	No	No	No	No	No	No	No	No	No
6	2	56	1	27	No	No	No	No	No	No	No	No	No	No
7	2	55	1	27	No	No	No	No	No	No	No	No	No	No
8	2	50	1	25	No	No	No	No	No	No	No	No	No	No
9	2	50	1	24	No	No	No	No	No	No	No	No	No	No
10	2	49	1	24	No	No	No	No	No	No	No	No	No	No
11	2	42	1	21	No	No	No	No	No	No	No	No	No	No
12	2	40	1	19	No	No	No	No	No	No	No	No	No	No
13	2	39	1	19	No	No	No	No	No	No	No	No	No	No
14	2	29	1	14	No	No	No	No	No	No	No	No	No	No
15	2	29	1	14	No	No	No	No	No	No	No	No	No	No
16	2	20	1	10	No	No	No	No	No	No	No	No	No	No
17	2	12	1	6	No	No	No	No	No	No	No	No	No	No
18	2	12	1	6	No	No	No	No	No	No	No	No	No	No
19	2	6	1	3	No	No	No	No	No	No	No	No	No	No
20	2	4	1	2	No	No	No	No	No	No	No	No	No	No
21	2	2	1	1	No	No	No	No	No	No	No	No	No	No
22	2	1	1	0	No	No	No	No	No	No	No	No	No	No
23	2	1	1	0	No	No	No	No	No	No	No	No	No	No
24	2	1	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:05
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	35
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	107
Number of Approaches on Intersection	2
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 83: TAH Pkwy/PA46.1 Access 4

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E
Minor Approaches	N
Speed > 40mph	Yes
Population < 10,000	No
Warrant Factor	70%

Warrant Analysis Traffic Volumes

Hour	Major Streets	Minor Streets
	E	N
1	101	30
2	98	29
3	96	29
4	90	27
5	80	24
6	79	23
7	78	23
8	71	21
9	70	21
10	69	20
11	60	18
12	56	17
13	55	16
14	40	12
15	40	12
16	28	8
17	16	5
18	16	5
19	9	3
20	5	2
21	3	1
22	1	0
23	1	0
24	1	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	101	1	30	No	No	No	No	No	No	No	No	No	No
2	2	98	1	29	No	No	No	No	No	No	No	No	No	No
3	2	96	1	29	No	No	No	No	No	No	No	No	No	No
4	2	90	1	27	No	No	No	No	No	No	No	No	No	No
5	2	80	1	24	No	No	No	No	No	No	No	No	No	No
6	2	79	1	23	No	No	No	No	No	No	No	No	No	No
7	2	78	1	23	No	No	No	No	No	No	No	No	No	No
8	2	71	1	21	No	No	No	No	No	No	No	No	No	No
9	2	70	1	21	No	No	No	No	No	No	No	No	No	No
10	2	69	1	20	No	No	No	No	No	No	No	No	No	No
11	2	60	1	18	No	No	No	No	No	No	No	No	No	No
12	2	56	1	17	No	No	No	No	No	No	No	No	No	No
13	2	55	1	16	No	No	No	No	No	No	No	No	No	No
14	2	40	1	12	No	No	No	No	No	No	No	No	No	No
15	2	40	1	12	No	No	No	No	No	No	No	No	No	No
16	2	28	1	8	No	No	No	No	No	No	No	No	No	No
17	2	16	1	5	No	No	No	No	No	No	No	No	No	No
18	2	16	1	5	No	No	No	No	No	No	No	No	No	No
19	2	9	1	3	No	No	No	No	No	No	No	No	No	No
20	2	5	1	2	No	No	No	No	No	No	No	No	No	No
21	2	3	1	1	No	No	No	No	No	No	No	No	No	No
22	2	1	1	0	No	No	No	No	No	No	No	No	No	No
23	2	1	1	0	No	No	No	No	No	No	No	No	No	No
24	2	1	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	8.7
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:04
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	30
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	131
Number of Approaches on Intersection	2
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No



Table of Contents

Intersection Level Of Service Report	3
Intersection 25: 48th Avenue/PA-31 Street	3
Intersection 26: Reserve Bl/PA-31 Street	5
Intersection 31: Reserve Bl/PA-40.1 Acc1	7
Intersection 32: Reserve Bl/PA-40.1 Acc2	9
Intersection 33: Reserve Bl/PA-40.2 Acc1	11
Intersection 34: 38th Parkway/Reserve Bl (E)	13
Intersection 35: 38th Pkwy/PA-40.2 Acc2/PA-46.2 Acc1/PA-46.1 Acc4	15
Intersection 36: 38th Pkwy/PA-40.1 Acc3/PA-46.2 Acc2	17
Intersection 37: 38th Pkwy/PA-40.1 Acc4/PA 46.2 Acc3	19
Intersection 38: 38th Pkwy/PA-40.1 Acc5	21
Intersection 39: 38th Pkwy/PA-46.2 Acc4/PA-46.1 Acc1	23
Intersection 40: 38th Parkway/Reserve Bl (W)	25
Intersection 42: The Aurora Highlands Parkway/38th Parkway	30
Intersection 43: The Aurora Highlands Parkway/38th Parkway	32
Intersection 47: 48th Avenue/Aerotropolis Pkwy	34
Intersection 48: 38th Parkway/Aerotropolis Pkwy	39
Intersection 82: TAH Pkwy/PA-46.1 Acc3	44
Intersection 83: TAH Pkwy/PA46.1 Access 4	46
Signal Warrants Report	48
Intersection 25: 48th Avenue/PA-31 Street	48
Intersection 26: Reserve Bl/PA-31 Street	50
Intersection 31: Reserve Bl/PA-40.1 Acc1	52
Intersection 32: Reserve Bl/PA-40.1 Acc2	54
Intersection 33: Reserve Bl/PA-40.2 Acc1	56
Intersection 34: 38th Parkway/Reserve Bl (E)	58



Intersection 35: 38th Pkwy/PA-40.2 Acc2/PA-46.2 Acc1/PA-46.1 Acc4	60
Intersection 36: 38th Pkwy/PA-40.1 Acc3/PA-46.2 Acc2	62
Intersection 37: 38th Pkwy/PA-40.1 Acc4/PA 46.2 Acc3	64
Intersection 38: 38th Pkwy/PA-40.1 Acc5	66
Intersection 39: 38th Pkwy/PA-46.2 Acc4/PA-46.1 Acc1	68
Intersection 42: The Aurora Highlands Parkway/38th Parkway	70
Intersection 43: The Aurora Highlands Parkway/38th Parkway	72
Intersection 82: TAH Pkwy/PA-46.1 Acc3	74
Intersection 83: TAH Pkwy/PA46.1 Access 4	76



Intersection Level Of Service Report

Intersection 25: 48th Avenue/PA-31 Street

Control Type:	Two-way stop	Delay (sec / veh):	26.8
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.380

Intersection Setup

Name	PA-31 Street		48th Avenue		48th Avenue	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↵↵		↵↵	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0
Entry Pocket Length [ft]	200.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	PA-31 Street		48th Avenue		48th Avenue	
Base Volume Input [veh/h]	20	73	445	0	0	370
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	35	7	0	55	12	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	7	2	32	5	3	52
Other Volume [veh/h]	30	22	15	51	38	25
Total Hourly Volume [veh/h]	92	104	492	111	53	447
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	28	134	30	14	121
Total Analysis Volume [veh/h]	100	113	535	121	58	486
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.38	0.15	0.01	0.00	0.06	0.00
d_M, Delay for Movement [s/veh]	26.84	10.83	0.00	0.00	9.14	0.00
Movement LOS	D	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.70	0.55	0.00	0.00	0.20	0.00
95th-Percentile Queue Length [ft/ln]	42.45	13.63	0.00	0.00	5.00	0.00
d_A, Approach Delay [s/veh]	18.34		0.00		0.97	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	3.14					
Intersection LOS	D					



Intersection Level Of Service Report
Intersection 26: Reserve Bl/PA-31 Street

Control Type:	Two-way stop	Delay (sec / veh):	10.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.090

Intersection Setup

Name	PA-31 Street		Reserve Loop		Reserve Loop	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	PA-31 Street		Reserve Loop		Reserve Loop	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	55	12	9	0	0	33
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	4	4	2	0	0	7
Other Volume [veh/h]	2	88	52	20	34	0
Total Hourly Volume [veh/h]	61	104	63	20	34	40
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	28	17	5	9	11
Total Analysis Volume [veh/h]	66	113	68	22	37	43
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.09	0.11	0.04	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.36	9.02	7.48	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.29	0.38	0.14	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	7.35	9.44	3.51	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.52		5.65		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.34					
Intersection LOS	B					



Intersection Level Of Service Report
Intersection 31: Reserve Bl/PA-40.1 Acc1

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name	Reserve Loop		Reserve Loop		Eastbound	
Approach	Northbound		Southbound			
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Reserve Loop		Reserve Loop			
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	23	39	16	10	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	7	0	0	0	0
Other Volume [veh/h]	0	34	21	0	0	0
Total Hourly Volume [veh/h]	16	64	60	16	10	10
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	17	16	4	3	3
Total Analysis Volume [veh/h]	17	70	65	17	11	11
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	7.39	0.00	0.00	0.00	9.59	8.75
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.00	0.00	0.08	0.08
95th-Percentile Queue Length [ft/ln]	0.71	0.71	0.00	0.00	1.91	1.91
d_A, Approach Delay [s/veh]	1.44		0.00		9.17	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.71					
Intersection LOS	A					



Intersection Level Of Service Report
Intersection 32: Reserve BI/PA-40.1 Acc2

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name	Reserve Loop		Reserve Loop		Eastbound	
Approach	Northbound		Southbound			
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Reserve Loop		Reserve Loop			
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	30	32	16	10	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	7	0	0	0	0
Other Volume [veh/h]	0	34	21	0	0	0
Total Hourly Volume [veh/h]	16	71	53	16	10	10
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	19	14	4	3	3
Total Analysis Volume [veh/h]	17	77	58	17	11	11
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results




V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	7.38	0.00	0.00	0.00	9.59	8.71
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.00	0.00	0.08	0.08
95th-Percentile Queue Length [ft/ln]	0.71	0.71	0.00	0.00	1.90	1.90
d_A, Approach Delay [s/veh]	1.33		0.00		9.15	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.71					
Intersection LOS	A					



Intersection Level Of Service Report
Intersection 33: Reserve Bl/PA-40.2 Acc1

Control Type:	Two-way stop	Delay (sec / veh):	9.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name	Reserve Loop		Reserve Loop		Eastbound	
Approach	Northbound		Southbound			
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Reserve Loop		Reserve Loop			
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	12	40	31	11	7	7
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	7	0	0	0	0
Other Volume [veh/h]	0	34	21	0	0	0
Total Hourly Volume [veh/h]	12	81	52	11	7	7
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	22	14	3	2	2
Total Analysis Volume [veh/h]	13	88	57	12	8	8
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	7.36	0.00	0.00	0.00	9.54	8.67
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.00	0.00	0.05	0.05
95th-Percentile Queue Length [ft/ln]	0.55	0.55	0.00	0.00	1.37	1.37
d_A, Approach Delay [s/veh]	0.95		0.00		9.11	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.30					
Intersection LOS	A					



Intersection Level Of Service Report
Intersection 34: 38th Parkway/Reserve BI (E)

Control Type:	Two-way stop	Delay (sec / veh):	22.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.128

Intersection Setup

Name	Reserve Loop		38th Parkway		38th Parkway	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Reserve Loop		38th Parkway		38th Parkway	
Base Volume Input [veh/h]	0	0	0	185	293	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	11	27	33	67	107	19
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	4	0	0	54	88	7
Other Volume [veh/h]	13	8	11	26	44	23
Total Hourly Volume [veh/h]	28	35	44	332	532	49
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	10	12	90	145	13
Total Analysis Volume [veh/h]	30	38	48	361	578	53
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.08	0.05	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	22.54	12.83	8.98	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.43	0.25	0.16	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	10.79	6.17	3.98	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	17.11		1.05		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.44					
Intersection LOS	C					



Intersection Level Of Service Report

Intersection 35: 38th Pkwy/PA-40.2 Acc2/PA-46.2 Acc1/PA-46.1 Acc4

Control Type:	Two-way stop	Delay (sec / veh):	24.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.052

Intersection Setup

Name							38th Parkway			38th Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+T			+T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							38th Parkway			38th Parkway		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	185	0	0	293	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	0	6	6	0	9	14	88	11	9	115	9
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	54	0	0	88	0
Other Volume [veh/h]	0	0	0	0	0	0	0	37	0	0	52	0
Total Hourly Volume [veh/h]	9	0	6	6	0	9	14	364	11	9	548	9
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	2	2	0	2	4	99	3	2	149	2
Total Analysis Volume [veh/h]	10	0	7	7	0	10	15	396	12	10	596	10
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.00	0.01	0.04	0.00	0.02	0.02	0.00	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	24.46	22.29	11.43	24.06	22.13	12.89	8.76	0.00	0.00	8.16	0.00	0.00
Movement LOS	C	C	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.20	0.20	0.20	0.18	0.18	0.18	0.05	0.00	0.00	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4.96	4.96	4.96	4.40	4.40	4.40	1.17	0.00	0.00	0.66	0.00	0.00
d_A, Approach Delay [s/veh]	19.09			17.49			0.31			0.13		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	0.78											
Intersection LOS	C											



Intersection Level Of Service Report
Intersection 36: 38th Pkwy/PA-40.1 Acc3/PA-46.2 Acc2

Control Type:	Two-way stop	Delay (sec / veh):	25.5
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.054

Intersection Setup

Name							38th Parkway			38th Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+T			+T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							38th Parkway			38th Parkway		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	185	0	0	293	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	0	6	8	0	11	20	99	16	9	110	13
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	54	0	0	88	0
Other Volume [veh/h]	0	0	0	0	0	0	0	37	0	0	52	0
Total Hourly Volume [veh/h]	9	0	6	8	0	11	20	375	16	9	543	13
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	2	2	0	3	5	102	4	2	148	4
Total Analysis Volume [veh/h]	10	0	7	9	0	12	22	408	17	10	590	14
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.00	0.01	0.05	0.00	0.02	0.02	0.00	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	25.53	23.11	11.62	25.18	23.13	13.11	8.78	0.00	0.00	8.20	0.00	0.00
Movement LOS	D	C	B	D	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.21	0.23	0.23	0.23	0.07	0.00	0.00	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.21	5.21	5.21	5.77	5.77	5.77	1.73	0.00	0.00	0.67	0.00	0.00
d_A, Approach Delay [s/veh]	19.80			18.29			0.43			0.13		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	0.91											
Intersection LOS	D											



Intersection Level Of Service Report
Intersection 37: 38th Pkwy/PA-40.1 Acc4/PA 46.2 Acc3

Control Type:	Two-way stop	Delay (sec / veh):	26.3
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.056

Intersection Setup

Name							38th Parkway			38th Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+T			+T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							38th Parkway			38th Parkway		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	185	0	0	293	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	0	6	8	0	11	20	120	18	9	109	13
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	54	0	0	88	0
Other Volume [veh/h]	0	0	0	0	0	0	0	37	0	0	52	0
Total Hourly Volume [veh/h]	9	0	6	8	0	11	20	396	18	9	542	13
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	2	2	0	3	5	108	5	2	147	4
Total Analysis Volume [veh/h]	10	0	7	9	0	12	22	430	20	10	589	14
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.00	0.01	0.05	0.00	0.02	0.02	0.00	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	26.31	23.72	11.87	25.94	23.76	13.15	8.78	0.00	0.00	8.27	0.00	0.00
Movement LOS	D	C	B	D	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.22	0.22	0.22	0.24	0.24	0.24	0.07	0.00	0.00	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.40	5.40	5.40	5.92	5.92	5.92	1.73	0.00	0.00	0.68	0.00	0.00
d_A, Approach Delay [s/veh]	20.36			18.63			0.41			0.13		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	0.90											
Intersection LOS	D											



Intersection Level Of Service Report
Intersection 38: 38th Pkwy/PA-40.1 Acc5

Control Type:	Two-way stop	Delay (sec / veh):	28.8
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.080

Intersection Setup

Name							38th Parkway			38th Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	+			+			+T			+T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							38th Parkway			38th Parkway		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	185	0	0	293	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	12	0	12	6	0	13	22	140	27	23	96	11
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	54	0	0	88	0
Other Volume [veh/h]	0	0	0	0	0	0	0	37	0	0	52	0
Total Hourly Volume [veh/h]	12	0	12	6	0	13	22	416	27	23	529	11
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	3	2	0	4	6	113	7	6	144	3
Total Analysis Volume [veh/h]	13	0	13	7	0	14	24	452	29	25	575	12
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.00	0.02	0.04	0.00	0.03	0.02	0.00	0.00	0.02	0.01	0.00
d_M, Delay for Movement [s/veh]	28.85	25.70	12.64	28.01	25.23	12.92	8.73	0.00	0.00	8.41	0.00	0.00
Movement LOS	D	D	B	D	D	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.34	0.34	0.34	0.23	0.23	0.23	0.07	0.00	0.00	0.07	0.00	0.00
95th-Percentile Queue Length [ft/ln]	8.43	8.43	8.43	5.63	5.63	5.63	1.87	0.00	0.00	1.77	0.00	0.00
d_A, Approach Delay [s/veh]	20.74			17.95			0.42			0.34		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	1.15											
Intersection LOS	D											



Intersection Level Of Service Report

Intersection 39: 38th Pkwy/PA-46.2 Acc4/PA-46.1 Acc1

Control Type:	Two-way stop	Delay (sec / veh):	22.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.113

Intersection Setup

Name	38th Parkway		38th Parkway		38th Parkway	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		Yes	

Volumes

Name	38th Parkway		38th Parkway		38th Parkway	
Base Volume Input [veh/h]	0	0	185	0	0	293
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	24	4	185	54	6	114
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	54	0	0	88
Other Volume [veh/h]	0	0	37	0	0	52
Total Hourly Volume [veh/h]	24	4	461	54	6	547
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	1	125	15	2	149
Total Analysis Volume [veh/h]	26	4	501	59	7	595
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.01	0.01	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	22.64	11.36	0.00	0.00	8.59	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.38	0.02	0.00	0.00	0.02	0.00
95th-Percentile Queue Length [ft/ln]	9.42	0.53	0.00	0.00	0.52	0.00
d_A, Approach Delay [s/veh]	21.13		0.00		0.10	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.58					
Intersection LOS	C					

**Intersection Level Of Service Report**
Intersection 40: 38th Parkway/Reserve Bl (W)

Control Type:	Signalized	Delay (sec / veh):	11.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.456

Intersection Setup

Name				Reserve Loop			38th Parkway			38th Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	1	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			No		

**Volumes**

Name				Reserve Loop			38th Parkway			38th Parkway		
Base Volume Input [veh/h]	0	0	0	54	0	54	73	131	0	0	220	73
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	8	7	120	21	0	17	113	15	15	64	59
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	54	0	47	82	0	0	0	0	88
Other Volume [veh/h]	0	0	0	26	0	32	55	11	0	46	7	0
Right Turn on Red Volume [veh/h]	0	0	4	0	0	67	0	0	8	0	0	110
Total Hourly Volume [veh/h]	6	8	3	254	21	66	227	255	7	61	291	110
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	2	1	69	6	18	62	69	2	17	79	30
Total Analysis Volume [veh/h]	7	9	3	276	23	72	247	277	8	66	316	120
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	4	0	0	2	0	0	6	0
Auxiliary Signal Groups												
Maximum Green [s]	0	21	0	0	21	0	0	31	0	0	31	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	7	0	0	14	0
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	0	37	0	0	37	0	0	23	0	0	23	0
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	0	10	0	0	10	0	0	10	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	C	L	C	R	L	C	L	C	R
C, Calculated Cycle Length [s]	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	14	14	14	14	38	38	38	38	38
g / C, Green / Cycle	0.24	0.24	0.24	0.24	0.63	0.63	0.63	0.63	0.63
(v / s)_i Volume / Saturation Flow Rate	0.01	0.20	0.01	0.05	0.26	0.15	0.06	0.17	0.08
s, saturation flow rate [veh/h]	1630	1402	1870	1589	952	1861	1094	1870	1589
c, Capacity [veh/h]	469	414	444	378	590	1171	670	1176	1000
d1, Uniform Delay [s]	17.62	21.78	17.66	18.27	10.39	4.87	7.89	4.97	4.46
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.03	1.86	0.05	0.24	2.18	0.49	0.29	0.56	0.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.04	0.67	0.05	0.19	0.42	0.24	0.10	0.27	0.12
d, Delay for Lane Group [s/veh]	17.66	23.64	17.70	18.51	12.56	5.37	8.18	5.53	4.71
Lane Group LOS	B	C	B	B	B	A	A	A	A
Critical Lane Group	No	Yes	No	No	Yes	No	No	No	No
50th-Percentile Queue Length [veh/ln]	0.19	3.60	0.24	0.77	2.20	1.26	0.43	1.43	0.49
50th-Percentile Queue Length [ft/ln]	4.84	90.08	5.88	19.19	55.09	31.60	10.82	35.75	12.34
95th-Percentile Queue Length [veh/ln]	0.35	6.49	0.42	1.38	3.97	2.28	0.78	2.57	0.89
95th-Percentile Queue Length [ft/ln]	8.71	162.15	10.58	34.55	99.15	56.88	19.47	64.35	22.22

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	17.66	17.66	17.66	23.64	17.70	18.51	12.56	5.37	5.37	8.18	5.53	4.71
Movement LOS	B	B	B	C	B	B	B	A	A	A	A	A
d_A, Approach Delay [s/veh]	17.66			22.28			8.71			5.68		
Approach LOS	B			C			A			A		
d_I, Intersection Delay [s/veh]	11.30											
Intersection LOS	B											
Intersection V/C	0.456											

Emissions

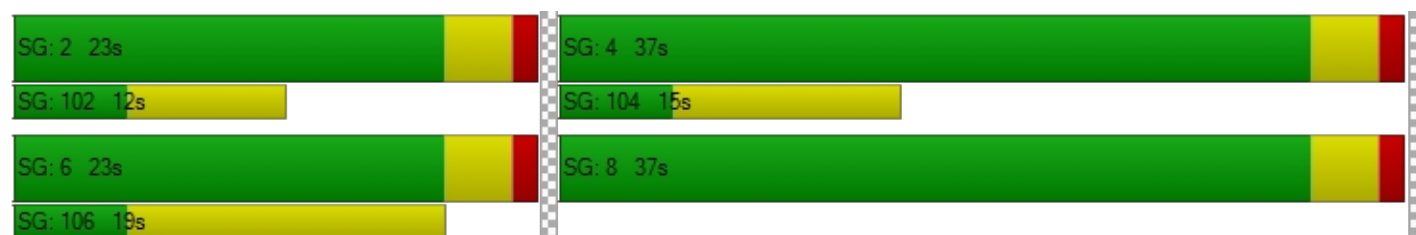
Vehicle Miles Traveled [mph]	0.50	34.72	2.89	9.06	16.25	18.75	4.94	23.67	8.99
Stops [stops/h]	11.61	216.20	14.11	46.06	132.21	75.84	25.96	85.80	29.62
Fuel consumption [US gal/h]	0.15	3.95	0.28	0.90	2.03	1.50	0.46	1.80	0.65
CO [g/h]	10.70	276.21	19.56	62.81	141.96	105.00	31.93	126.09	45.34
NOx [g/h]	2.08	53.74	3.81	12.22	27.62	20.43	6.21	24.53	8.82
VOC [g/h]	2.48	64.01	4.53	14.56	32.90	24.33	7.40	29.22	10.51

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	21.68	21.68	21.68	0.00
I_p,int, Pedestrian LOS Score for Intersectio	1.857	2.784	2.268	0.000
Crosswalk LOS	A	C	B	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1100	1100	633	633
d_b, Bicycle Delay [s]	6.08	6.08	14.01	14.01
I_b,int, Bicycle LOS Score for Intersection	1.598	2.282	2.451	2.569
Bicycle LOS	A	B	B	B

Sequence

Ring 1	-	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





Intersection Level Of Service Report

Intersection 42: The Aurora Highlands Parkway/38th Parkway

Control Type:	Two-way stop	Delay (sec / veh):	17.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.480

Intersection Setup

Name	38th Parkway			38th Parkway			Th Au			TAH Parkway (W)		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	1	0	0	0	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			30.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	38th Parkway			38th Parkway			Th Au			TAH Parkway (W)		
Base Volume Input [veh/h]	5	189	0	0	137	130	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	64	2	0	42	27	0	0	0	19	5	80
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	50	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	47	0	0	0	0	0	0	82
Other Volume [veh/h]	0	0	0	0	38	0	0	0	0	0	0	66
Total Hourly Volume [veh/h]	5	253	2	0	264	157	0	0	0	19	55	228
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	69	1	0	72	43	0	0	0	5	15	62
Total Analysis Volume [veh/h]	5	275	2	0	287	171	0	0	0	21	60	248
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

Priority Scheme	Stop	Stop	Free	Free
Flared Lane				
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.48	0.00	0.00	0.36	0.16	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	14.52	16.95	0.00	0.00	12.18	9.15	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS	B	C			B	A				A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	2.59	0.00	0.00	1.68	0.59	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.99	64.76	0.00	0.00	41.92	14.72	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	16.91			11.05			0.00			0.00		
Approach LOS	C			B			A			A		
d_I, Intersection Delay [s/veh]	9.18											
Intersection LOS	C											



Intersection Level Of Service Report

Intersection 43: The Aurora Highlands Parkway/38th Parkway

Control Type:	All-way stop	Delay (sec / veh):	11.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.429

Intersection Setup

Name				38th Parkway			TAH Parkway (E)					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	0	1	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				38th Parkway			TAH Parkway (E)					
Base Volume Input [veh/h]	0	5	5	152	0	0	189	50	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	11	0	37	24	0	53	0	0	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	47	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	38	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	16	5	274	24	0	242	50	0	0	0	2
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	1	74	7	0	66	14	0	0	0	1
Total Analysis Volume [veh/h]	0	17	5	298	26	0	263	54	0	0	0	2
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings****Lanes**

Capacity per Entry Lane [veh/h]	848	713	792	613	671	671	
Degree of Utilization, x	0.03	0.42	0.03	0.43	0.04	0.04	

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.08	2.07	0.10	2.15	0.13	0.13	
95th-Percentile Queue Length [ft]	2.00	51.77	2.54	53.71	3.14	3.14	
Approach Delay [s/veh]	7.36	11.01		12.12		0.00	
Approach LOS	A	B		B		A	
Intersection Delay [s/veh]	11.42						
Intersection LOS	B						

**Intersection Level Of Service Report**
Intersection 47: 48th Avenue/Aerotropolis Pkwy

Control Type:	Signalized	Delay (sec / veh):	23.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.357

Intersection Setup

Name	Aerotropolis Pkwy			Aerotropolis Pkwy			48th Avenue			48th Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	3	0	0	2	0	1	2	0	0	2	0	1
Entry Pocket Length [ft]	200.00	100.00	100.00	200.00	100.00	200.00	200.00	100.00	100.00	200.00	100.00	200.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	300.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Aerotropolis Pkwy			Aerotropolis Pkwy			48th Avenue			48th Avenue		
Base Volume Input [veh/h]	200	1100	100	10	700	90	200	200	45	60	80	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	11	16	0	16	6	3	4	0	27	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	23	14	20	0	0	32	0
Other Volume [veh/h]	11	0	0	0	0	26	15	15	7	0	26	0
Right Turn on Red Volume [veh/h]	0	0	58	0	0	73	0	0	52	0	0	20
Total Hourly Volume [veh/h]	211	1111	58	10	716	72	232	239	0	87	144	20
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	57	302	16	3	195	20	63	65	0	24	39	5
Total Analysis Volume [veh/h]	229	1208	63	11	778	78	252	260	0	95	157	22
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	27	0	0	30	0	0	31	0	0	27	0
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	16	38	0	19	41	0	15	42	0	11	38	0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Calculated Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9	73	73	1	65	65	10	15	15	5	10	10
g / C, Green / Cycle	0.08	0.66	0.66	0.01	0.59	0.59	0.09	0.14	0.14	0.04	0.09	0.09
(v / s)_i Volume / Saturation Flow Rate	0.07	0.24	0.04	0.00	0.15	0.05	0.07	0.07	0.00	0.03	0.04	0.01
s, saturation flow rate [veh/h]	3459	5094	1589	3459	5094	1589	3459	3560	1589	3459	3560	1589
c, Capacity [veh/h]	293	3358	1048	47	2996	935	313	494	221	149	325	145
d1, Uniform Delay [s]	49.35	8.37	6.65	53.70	11.02	9.81	49.08	44.01	0.00	51.78	47.50	46.04
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.56	0.30	0.11	2.57	0.21	0.18	4.88	0.87	0.00	4.47	1.11	0.48
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.36	0.06	0.24	0.26	0.08	0.81	0.53	0.00	0.64	0.48	0.15
d, Delay for Lane Group [s/veh]	53.90	8.67	6.76	56.27	11.23	9.99	53.96	44.88	0.00	56.25	48.61	46.52
Lane Group LOS	D	A	A	E	B	A	D	D	A	E	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.26	4.06	0.52	0.17	3.02	0.84	3.60	3.35	0.00	1.38	2.09	0.57
50th-Percentile Queue Length [ft/ln]	81.53	101.39	13.11	4.18	75.60	21.00	89.93	83.69	0.00	34.49	52.36	14.36
95th-Percentile Queue Length [veh/ln]	5.87	7.30	0.94	0.30	5.44	1.51	6.47	6.03	0.00	2.48	3.77	1.03
95th-Percentile Queue Length [ft/ln]	146.75	182.51	23.60	7.52	136.08	37.81	161.87	150.65	0.00	62.09	94.24	25.86

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	53.90	8.67	6.76	56.27	11.23	9.99	53.96	44.88	0.00	56.25	48.61	46.52
Movement LOS	D	A	A	E	B	A	D	D	A	E	D	D
d_A, Approach Delay [s/veh]	15.50			11.69			49.35			51.09		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	23.04											
Intersection LOS	C											
Intersection V/C	0.357											

Emissions

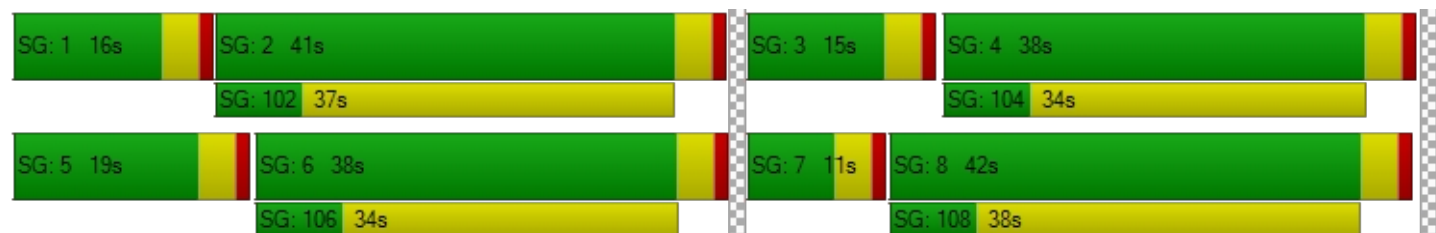
Vehicle Miles Traveled [mph]	211.33	1114.77	58.14	3.34	236.57	23.72	153.90	158.79	0.00	6.57	10.86	1.52
Stops [stops/h]	213.46	398.20	17.16	10.93	296.89	27.50	235.45	219.12	0.00	90.31	137.08	18.80
Fuel consumption [US gal/h]	12.39	50.22	2.57	0.32	13.16	1.29	10.40	10.12	0.00	1.86	2.76	0.37
CO [g/h]	866.11	3510.57	179.98	22.65	919.63	89.95	727.19	707.52	0.00	129.78	192.73	26.20
NOx [g/h]	168.51	683.03	35.02	4.41	178.93	17.50	141.48	137.66	0.00	25.25	37.50	5.10
VOC [g/h]	200.73	813.61	41.71	5.25	213.13	20.85	168.53	163.98	0.00	30.08	44.67	6.07

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	44.55			44.55			44.55			44.55		
I_p,int, Pedestrian LOS Score for Intersectio	3.219			3.227			3.045			2.727		
Crosswalk LOS	C			C			C			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	618			673			691			618		
d_b, Bicycle Delay [s]	26.25			24.22			23.56			26.25		
I_b,int, Bicycle LOS Score for Intersection	2.417			2.077			2.025			1.802		
Bicycle LOS	B			B			B			A		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report**
Intersection 48: 38th Parkway/Aerotropolis Pkwy

Control Type:	Signalized	Delay (sec / veh):	27.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.553

Intersection Setup

Name	Aerotropolis Pkwy			Aerotropolis Pkwy			38th Parkway					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	2	0	1	1	0	1	2	0	1
Entry Pocket Length [ft]	150.00	100.00	150.00	150.00	100.00	150.00	200.00	100.00	200.00	200.00	100.00	200.00
No. of Lanes in Exit Pocket	0	0	0	0	0	2	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Aerotropolis Pkwy			Aerotropolis Pkwy			38th Parkway					
Base Volume Input [veh/h]	152	974	168	64	711	30	20	78	83	597	111	406
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	82	0	0	0	0	43	27	0	51	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	95	0	0	0	0	0	0	0	58	0	0	0
Other Volume [veh/h]	67	11	0	0	7	0	0	0	39	0	0	0
Right Turn on Red Volume [veh/h]	0	0	84	0	0	37	0	0	116	0	0	203
Total Hourly Volume [veh/h]	396	985	84	64	718	36	47	78	115	597	111	203
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	108	268	23	17	195	10	13	21	31	162	30	55
Total Analysis Volume [veh/h]	430	1071	91	70	780	39	51	85	125	649	121	221
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing (Basic)

Control Type	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	14	0	0	27	0	0	34	0
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Advanced Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Phasing & Timing: Pattern 1

Split [s]	15	30	0	9	24	0	9	37	0	24	52	0
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

**Lane Group Calculations**

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Calculated Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	58	49	49	4	43	43	34	10	10	20	26	26
g / C, Green / Cycle	0.58	0.49	0.49	0.04	0.43	0.43	0.34	0.10	0.10	0.20	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.47	0.21	0.06	0.02	0.15	0.02	0.04	0.05	0.08	0.19	0.06	0.14
s, saturation flow rate [veh/h]	919	5094	1589	3459	5094	1589	1164	1870	1589	3459	1870	1589
c, Capacity [veh/h]	563	2515	785	148	2173	678	460	193	164	692	496	422
d1, Uniform Delay [s]	14.05	16.23	13.60	46.75	19.41	16.85	22.30	42.11	43.62	39.39	28.84	31.34
k, delay calibration	0.50	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.51	0.53	0.30	2.32	0.46	0.16	0.11	1.57	7.05	6.85	0.25	1.01
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.43	0.12	0.47	0.36	0.06	0.11	0.44	0.76	0.94	0.24	0.52
d, Delay for Lane Group [s/veh]	23.56	16.76	13.90	49.07	19.88	17.02	22.40	43.67	50.67	46.24	29.10	32.34
Lane Group LOS	C	B	B	D	B	B	C	D	D	D	C	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.51	5.17	1.14	0.89	4.09	0.55	0.82	2.05	3.31	8.38	2.30	4.62
50th-Percentile Queue Length [ft/ln]	162.71	129.23	28.57	22.36	102.31	13.78	20.51	51.17	82.80	209.58	57.59	115.49
95th-Percentile Queue Length [veh/ln]	10.69	8.90	2.06	1.61	7.37	0.99	1.48	3.68	5.96	13.13	4.15	8.14
95th-Percentile Queue Length [ft/ln]	267.31	222.44	51.43	40.25	184.16	24.81	36.92	92.10	149.03	328.29	103.66	203.61

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	23.56	16.76	13.90	49.07	19.88	17.02	22.40	43.67	50.67	46.24	29.10	32.34
Movement LOS	C	B	B	D	B	B	C	D	D	D	C	C
d_A, Approach Delay [s/veh]	18.43			22.05			42.87			41.05		
Approach LOS	B			C			D			D		
d_I, Intersection Delay [s/veh]	27.01											
Intersection LOS	C											
Intersection V/C	0.553											

Emissions

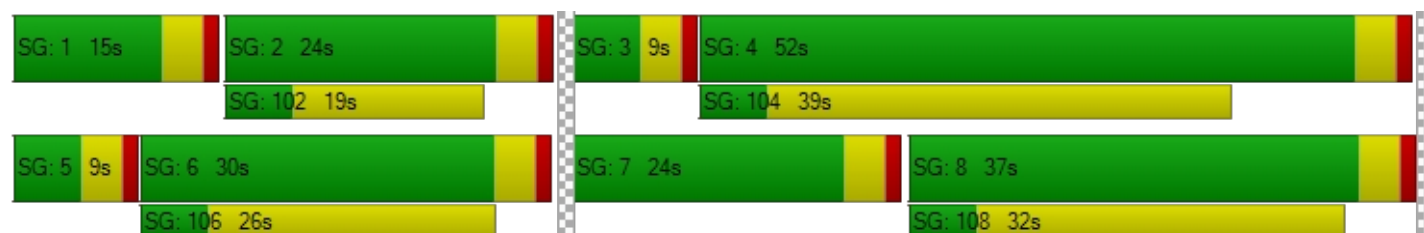
Vehicle Miles Traveled [mph]	82.98	206.69	17.56	64.60	719.80	35.99	25.52	42.53	62.54	55.81	10.41	19.00
Stops [stops/h]	234.30	558.27	41.15	64.40	441.99	19.85	29.54	73.68	119.23	603.58	82.92	166.31
Fuel consumption [US gal/h]	6.77	15.25	1.21	3.71	35.23	1.73	1.45	2.91	4.52	11.74	1.60	3.16
CO [g/h]	473.36	1065.69	84.41	259.61	2462.47	120.67	101.08	203.63	316.10	820.58	112.05	220.59
NOx [g/h]	92.10	207.35	16.42	50.51	479.11	23.48	19.67	39.62	61.50	159.66	21.80	42.92
VOC [g/h]	109.71	246.98	19.56	60.17	570.70	27.97	23.43	47.19	73.26	190.18	25.97	51.12

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	41.41			41.41			41.41			41.41		
I_p,int, Pedestrian LOS Score for Intersectio	3.259			3.377			2.821			2.996		
Crosswalk LOS	C			C			C			C		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	520			400			660			960		
d_b, Bicycle Delay [s]	27.38			32.00			22.45			13.52		
I_b,int, Bicycle LOS Score for Intersection	2.481			2.069			2.182			3.530		
Bicycle LOS	B			B			B			D		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-







Intersection Level Of Service Report
Intersection 82: TAH Pkwy/PA-46.1 Acc3

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.029

Intersection Setup

Name	The Aurora Highlands Parkway		The Aurora Highlands Parkway	
Approach	Southbound		Westbound	
Lane Configuration				
Turning Movement	Left	Right	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	435.00
No. of Lanes in Exit Pocket	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00
Speed [mph]	30.00		40.00	
Grade [%]	0.00		0.00	
Crosswalk	Yes		Yes	

Volumes

Name	The Aurora Highlands Parkway		The Aurora Highlands Parkway	
Base Volume Input [veh/h]	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0
Site-Generated Trips [veh/h]	0	24	2	73
Diverted Trips [veh/h]	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	82
Other Volume [veh/h]	0	0	0	66
Total Hourly Volume [veh/h]	0	24	2	221
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	7	1	60
Total Analysis Volume [veh/h]	0	26	2	240
Pedestrian Volume [ped/h]	0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.03	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	9.16	0.00	0.00	0.00	0.00
Movement LOS		A			A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.09	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	2.25	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.16		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.82					
Intersection LOS	A					



Intersection Level Of Service Report
Intersection 83: TAH Pkwy/PA46.1 Access 4

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.026

Intersection Setup

Name			TAH Parkway (W)		The Aurora Highlands Parkway	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↱				↱↲	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			TAH Parkway (W)		The Aurora Highlands Parkway	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	21	0	2	82	14
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	82	0
Other Volume [veh/h]	0	0	0	0	66	0
Total Hourly Volume [veh/h]	0	21	0	2	230	14
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	6	0	1	63	4
Total Analysis Volume [veh/h]	0	23	0	2	250	15
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.03	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	9.14	0.00	0.00	0.00	0.00
Movement LOS		A			A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.08	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	1.98	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.14		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.73					
Intersection LOS	A					



Signal Warrants Report For Intersection 25: 48th Avenue/PA-31 Street

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	500	603	196
2	485	585	190
3	475	573	186
4	445	537	174
5	395	476	155
6	390	470	153
7	385	464	151
8	350	422	137
9	345	416	135
10	340	410	133
11	295	356	116
12	275	332	108
13	270	326	106
14	200	241	78
15	200	241	78
16	140	169	55
17	80	96	31
18	80	96	31
19	45	54	18
20	25	30	10
21	15	18	6
22	5	6	2
23	5	6	2
24	5	6	2



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	1103	2	196	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
2	3	1070	2	190	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
3	3	1048	2	186	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
4	3	982	2	174	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
5	3	871	2	155	No	No	Yes	Yes	No	Yes	Yes	Yes	No	No
6	3	860	2	153	No	No	Yes	Yes	No	Yes	Yes	Yes	No	No
7	3	849	2	151	No	No	Yes	Yes	No	Yes	Yes	Yes	No	No
8	3	772	2	137	No	No	No	Yes	No	Yes	Yes	Yes	No	No
9	3	761	2	135	No	No	No	Yes	No	Yes	Yes	Yes	No	No
10	3	750	2	133	No	No	No	Yes	No	Yes	Yes	Yes	No	No
11	3	651	2	116	No	No	No	Yes	No	No	Yes	Yes	No	No
12	3	607	2	108	No	No	No	No	No	No	No	Yes	No	No
13	3	596	2	106	No	No	No	No	No	No	No	Yes	No	No
14	3	441	2	78	No	No	No	No	No	No	No	No	No	No
15	3	441	2	78	No	No	No	No	No	No	No	No	No	No
16	3	309	2	55	No	No	No	No	No	No	No	No	No	No
17	3	176	2	31	No	No	No	No	No	No	No	No	No	No
18	3	176	2	31	No	No	No	No	No	No	No	No	No	No
19	3	99	2	18	No	No	No	No	No	No	No	No	No	No
20	3	55	2	10	No	No	No	No	No	No	No	No	No	No
21	3	33	2	6	No	No	No	No	No	No	No	No	No	No
22	3	11	2	2	No	No	No	No	No	No	No	No	No	No
23	3	11	2	2	No	No	No	No	No	No	No	No	No	No
24	3	11	2	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	4	7	11	4	10	11	13	3	0

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	18.3
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:59
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	196
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	1299
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 26: Reserve Bl/PA-31 Street

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	N
1	74	83	165
2	72	81	160
3	70	79	157
4	66	74	147
5	58	66	130
6	58	65	129
7	57	64	127
8	52	58	115
9	51	57	114
10	50	56	112
11	44	49	97
12	41	46	91
13	40	45	89
14	30	33	66
15	30	33	66
16	21	23	46
17	12	13	26
18	12	13	26
19	7	7	15
20	4	4	8
21	2	2	5
22	1	1	2
23	1	1	2
24	1	1	2



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	157	2	165	No	No	No	No	No	No	No	No	No	No
2	2	153	2	160	No	No	No	No	No	No	No	No	No	No
3	2	149	2	157	No	No	No	No	No	No	No	No	No	No
4	2	140	2	147	No	No	No	No	No	No	No	No	No	No
5	2	124	2	130	No	No	No	No	No	No	No	No	No	No
6	2	123	2	129	No	No	No	No	No	No	No	No	No	No
7	2	121	2	127	No	No	No	No	No	No	No	No	No	No
8	2	110	2	115	No	No	No	No	No	No	No	No	No	No
9	2	108	2	114	No	No	No	No	No	No	No	No	No	No
10	2	106	2	112	No	No	No	No	No	No	No	No	No	No
11	2	93	2	97	No	No	No	No	No	No	No	No	No	No
12	2	87	2	91	No	No	No	No	No	No	No	No	No	No
13	2	85	2	89	No	No	No	No	No	No	No	No	No	No
14	2	63	2	66	No	No	No	No	No	No	No	No	No	No
15	2	63	2	66	No	No	No	No	No	No	No	No	No	No
16	2	44	2	46	No	No	No	No	No	No	No	No	No	No
17	2	25	2	26	No	No	No	No	No	No	No	No	No	No
18	2	25	2	26	No	No	No	No	No	No	No	No	No	No
19	2	14	2	15	No	No	No	No	No	No	No	No	No	No
20	2	8	2	8	No	No	No	No	No	No	No	No	No	No
21	2	4	2	5	No	No	No	No	No	No	No	No	No	No
22	2	2	2	2	No	No	No	No	No	No	No	No	No	No
23	2	2	2	2	No	No	No	No	No	No	No	No	No	No
24	2	2	2	2	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.5
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:26
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	165
High Minor Volume Condition Met	Yes
Total Entering Volume on All Approaches During Same Hour	322
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 31: Reserve Bl/PA-40.1 Acc1

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	80	76	20
2	78	74	19
3	76	72	19
4	71	68	18
5	63	60	16
6	62	59	16
7	62	59	15
8	56	53	14
9	55	52	14
10	54	52	14
11	47	45	12
12	44	42	11
13	43	41	11
14	32	30	8
15	32	30	8
16	22	21	6
17	13	12	3
18	13	12	3
19	7	7	2
20	4	4	1
21	2	2	1
22	1	1	0
23	1	1	0
24	1	1	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	1	156	1	20	No	No	No	No	No	No	No	No	No	No
2	1	152	1	19	No	No	No	No	No	No	No	No	No	No
3	1	148	1	19	No	No	No	No	No	No	No	No	No	No
4	1	139	1	18	No	No	No	No	No	No	No	No	No	No
5	1	123	1	16	No	No	No	No	No	No	No	No	No	No
6	1	121	1	16	No	No	No	No	No	No	No	No	No	No
7	1	121	1	15	No	No	No	No	No	No	No	No	No	No
8	1	109	1	14	No	No	No	No	No	No	No	No	No	No
9	1	107	1	14	No	No	No	No	No	No	No	No	No	No
10	1	106	1	14	No	No	No	No	No	No	No	No	No	No
11	1	92	1	12	No	No	No	No	No	No	No	No	No	No
12	1	86	1	11	No	No	No	No	No	No	No	No	No	No
13	1	84	1	11	No	No	No	No	No	No	No	No	No	No
14	1	62	1	8	No	No	No	No	No	No	No	No	No	No
15	1	62	1	8	No	No	No	No	No	No	No	No	No	No
16	1	43	1	6	No	No	No	No	No	No	No	No	No	No
17	1	25	1	3	No	No	No	No	No	No	No	No	No	No
18	1	25	1	3	No	No	No	No	No	No	No	No	No	No
19	1	14	1	2	No	No	No	No	No	No	No	No	No	No
20	1	8	1	1	No	No	No	No	No	No	No	No	No	No
21	1	4	1	1	No	No	No	No	No	No	No	No	No	No
22	1	2	1	0	No	No	No	No	No	No	No	No	No	No
23	1	2	1	0	No	No	No	No	No	No	No	No	No	No
24	1	2	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.2
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:03
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	20
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	176
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 32: Reserve Bl/PA-40.1 Acc2

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	S, N
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	S	N	W
1	87	69	20
2	84	67	19
3	83	66	19
4	77	61	18
5	69	55	16
6	68	54	16
7	67	53	15
8	61	48	14
9	60	48	14
10	59	47	14
11	51	41	12
12	48	38	11
13	47	37	11
14	35	28	8
15	35	28	8
16	24	19	6
17	14	11	3
18	14	11	3
19	8	6	2
20	4	3	1
21	3	2	1
22	1	1	0
23	1	1	0
24	1	1	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	1	156	1	20	No	No	No	No	No	No	No	No	No	No
2	1	151	1	19	No	No	No	No	No	No	No	No	No	No
3	1	149	1	19	No	No	No	No	No	No	No	No	No	No
4	1	138	1	18	No	No	No	No	No	No	No	No	No	No
5	1	124	1	16	No	No	No	No	No	No	No	No	No	No
6	1	122	1	16	No	No	No	No	No	No	No	No	No	No
7	1	120	1	15	No	No	No	No	No	No	No	No	No	No
8	1	109	1	14	No	No	No	No	No	No	No	No	No	No
9	1	108	1	14	No	No	No	No	No	No	No	No	No	No
10	1	106	1	14	No	No	No	No	No	No	No	No	No	No
11	1	92	1	12	No	No	No	No	No	No	No	No	No	No
12	1	86	1	11	No	No	No	No	No	No	No	No	No	No
13	1	84	1	11	No	No	No	No	No	No	No	No	No	No
14	1	63	1	8	No	No	No	No	No	No	No	No	No	No
15	1	63	1	8	No	No	No	No	No	No	No	No	No	No
16	1	43	1	6	No	No	No	No	No	No	No	No	No	No
17	1	25	1	3	No	No	No	No	No	No	No	No	No	No
18	1	25	1	3	No	No	No	No	No	No	No	No	No	No
19	1	14	1	2	No	No	No	No	No	No	No	No	No	No
20	1	7	1	1	No	No	No	No	No	No	No	No	No	No
21	1	5	1	1	No	No	No	No	No	No	No	No	No	No
22	1	2	1	0	No	No	No	No	No	No	No	No	No	No
23	1	2	1	0	No	No	No	No	No	No	No	No	No	No
24	1	2	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.2
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:03
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	20
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	176
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 33: Reserve Bl/PA-40.2 Acc1

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	N, S
Minor Approaches	W
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	N	S	W
1	63	93	14
2	61	90	14
3	60	88	13
4	56	83	12
5	50	73	11
6	49	73	11
7	49	72	11
8	44	65	10
9	43	64	10
10	43	63	10
11	37	55	8
12	35	51	8
13	34	50	8
14	25	37	6
15	25	37	6
16	18	26	4
17	10	15	2
18	10	15	2
19	6	8	1
20	3	5	1
21	2	3	0
22	1	1	0
23	1	1	0
24	1	1	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	1	156	1	14	No	No	No	No	No	No	No	No	No	No
2	1	151	1	14	No	No	No	No	No	No	No	No	No	No
3	1	148	1	13	No	No	No	No	No	No	No	No	No	No
4	1	139	1	12	No	No	No	No	No	No	No	No	No	No
5	1	123	1	11	No	No	No	No	No	No	No	No	No	No
6	1	122	1	11	No	No	No	No	No	No	No	No	No	No
7	1	121	1	11	No	No	No	No	No	No	No	No	No	No
8	1	109	1	10	No	No	No	No	No	No	No	No	No	No
9	1	107	1	10	No	No	No	No	No	No	No	No	No	No
10	1	106	1	10	No	No	No	No	No	No	No	No	No	No
11	1	92	1	8	No	No	No	No	No	No	No	No	No	No
12	1	86	1	8	No	No	No	No	No	No	No	No	No	No
13	1	84	1	8	No	No	No	No	No	No	No	No	No	No
14	1	62	1	6	No	No	No	No	No	No	No	No	No	No
15	1	62	1	6	No	No	No	No	No	No	No	No	No	No
16	1	44	1	4	No	No	No	No	No	No	No	No	No	No
17	1	25	1	2	No	No	No	No	No	No	No	No	No	No
18	1	25	1	2	No	No	No	No	No	No	No	No	No	No
19	1	14	1	1	No	No	No	No	No	No	No	No	No	No
20	1	8	1	1	No	No	No	No	No	No	No	No	No	No
21	1	5	1	0	No	No	No	No	No	No	No	No	No	No
22	1	2	1	0	No	No	No	No	No	No	No	No	No	No
23	1	2	1	0	No	No	No	No	No	No	No	No	No	No
24	1	2	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	W
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.1
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:02
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	14
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	170
Number of Approaches on Intersection	3
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 34: 38th Parkway/Reserve BI (E)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	N
1	581	376	63
2	564	365	61
3	552	357	60
4	517	335	56
5	459	297	50
6	453	293	49
7	447	290	49
8	407	263	44
9	401	259	43
10	395	256	43
11	343	222	37
12	320	207	35
13	314	203	34
14	232	150	25
15	232	150	25
16	163	105	18
17	93	60	10
18	93	60	10
19	52	34	6
20	29	19	3
21	17	11	2
22	6	4	1
23	6	4	1
24	6	4	1



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	957	2	63	No	No	No	No	No	No	No	Yes	No	No
2	2	929	2	61	No	No	No	No	No	No	No	Yes	No	No
3	2	909	2	60	No	No	No	No	No	No	No	Yes	No	No
4	2	852	2	56	No	No	No	No	No	No	No	Yes	No	No
5	2	756	2	50	No	No	No	No	No	No	No	No	No	No
6	2	746	2	49	No	No	No	No	No	No	No	No	No	No
7	2	737	2	49	No	No	No	No	No	No	No	No	No	No
8	2	670	2	44	No	No	No	No	No	No	No	No	No	No
9	2	660	2	43	No	No	No	No	No	No	No	No	No	No
10	2	651	2	43	No	No	No	No	No	No	No	No	No	No
11	2	565	2	37	No	No	No	No	No	No	No	No	No	No
12	2	527	2	35	No	No	No	No	No	No	No	No	No	No
13	2	517	2	34	No	No	No	No	No	No	No	No	No	No
14	2	382	2	25	No	No	No	No	No	No	No	No	No	No
15	2	382	2	25	No	No	No	No	No	No	No	No	No	No
16	2	268	2	18	No	No	No	No	No	No	No	No	No	No
17	2	153	2	10	No	No	No	No	No	No	No	No	No	No
18	2	153	2	10	No	No	No	No	No	No	No	No	No	No
19	2	86	2	6	No	No	No	No	No	No	No	No	No	No
20	2	48	2	3	No	No	No	No	No	No	No	No	No	No
21	2	28	2	2	No	No	No	No	No	No	No	No	No	No
22	2	10	2	1	No	No	No	No	No	No	No	No	No	No
23	2	10	2	1	No	No	No	No	No	No	No	No	No	No
24	2	10	2	1	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	4	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	17.1
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:17
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	63
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	1020
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 35: 38th Pkwy/PA-40.2 Acc2/PA-46.2 Acc1/PA-46.1 Acc4

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	N, S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	N	S
1	566	389	15	15
2	549	377	15	15
3	538	370	14	14
4	504	346	13	13
5	447	307	12	12
6	441	303	12	12
7	436	300	12	12
8	396	272	11	11
9	391	268	10	10
10	385	265	10	10
11	334	230	9	9
12	311	214	8	8
13	306	210	8	8
14	226	156	6	6
15	226	156	6	6
16	158	109	4	4
17	91	62	2	2
18	91	62	2	2
19	51	35	1	1
20	28	19	1	1
21	17	12	0	0
22	6	4	0	0
23	6	4	0	0
24	6	4	0	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	955	1	15	No	No	No	No	No	No	No	No	No	No
2	2	926	1	15	No	No	No	No	No	No	No	No	No	No
3	2	908	1	14	No	No	No	No	No	No	No	No	No	No
4	2	850	1	13	No	No	No	No	No	No	No	No	No	No
5	2	754	1	12	No	No	No	No	No	No	No	No	No	No
6	2	744	1	12	No	No	No	No	No	No	No	No	No	No
7	2	736	1	12	No	No	No	No	No	No	No	No	No	No
8	2	668	1	11	No	No	No	No	No	No	No	No	No	No
9	2	659	1	10	No	No	No	No	No	No	No	No	No	No
10	2	650	1	10	No	No	No	No	No	No	No	No	No	No
11	2	564	1	9	No	No	No	No	No	No	No	No	No	No
12	2	525	1	8	No	No	No	No	No	No	No	No	No	No
13	2	516	1	8	No	No	No	No	No	No	No	No	No	No
14	2	382	1	6	No	No	No	No	No	No	No	No	No	No
15	2	382	1	6	No	No	No	No	No	No	No	No	No	No
16	2	267	1	4	No	No	No	No	No	No	No	No	No	No
17	2	153	1	2	No	No	No	No	No	No	No	No	No	No
18	2	153	1	2	No	No	No	No	No	No	No	No	No	No
19	2	86	1	1	No	No	No	No	No	No	No	No	No	No
20	2	47	1	1	No	No	No	No	No	No	No	No	No	No
21	2	29	1	0	No	No	No	No	No	No	No	No	No	No
22	2	10	1	0	No	No	No	No	No	No	No	No	No	No
23	2	10	1	0	No	No	No	No	No	No	No	No	No	No
24	2	10	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	17.5	19.1
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:04	0:04
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	15	15
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	985	985
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	



Signal Warrants Report For Intersection 36: 38th Pkwy/PA-40.1 Acc3/PA-46.2 Acc2

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	N
1	565	411	15	19
2	548	399	15	18
3	537	390	14	18
4	503	366	13	17
5	446	325	12	15
6	441	321	12	15
7	435	316	12	15
8	396	288	11	13
9	390	284	10	13
10	384	279	10	13
11	333	242	9	11
12	311	226	8	10
13	305	222	8	10
14	226	164	6	8
15	226	164	6	8
16	158	115	4	5
17	90	66	2	3
18	90	66	2	3
19	51	37	1	2
20	28	21	1	1
21	17	12	0	1
22	6	4	0	0
23	6	4	0	0
24	6	4	0	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	976	1	19	No	No	No	No	No	No	No	No	No	No
2	2	947	1	18	No	No	No	No	No	No	No	No	No	No
3	2	927	1	18	No	No	No	No	No	No	No	No	No	No
4	2	869	1	17	No	No	No	No	No	No	No	No	No	No
5	2	771	1	15	No	No	No	No	No	No	No	No	No	No
6	2	762	1	15	No	No	No	No	No	No	No	No	No	No
7	2	751	1	15	No	No	No	No	No	No	No	No	No	No
8	2	684	1	13	No	No	No	No	No	No	No	No	No	No
9	2	674	1	13	No	No	No	No	No	No	No	No	No	No
10	2	663	1	13	No	No	No	No	No	No	No	No	No	No
11	2	575	1	11	No	No	No	No	No	No	No	No	No	No
12	2	537	1	10	No	No	No	No	No	No	No	No	No	No
13	2	527	1	10	No	No	No	No	No	No	No	No	No	No
14	2	390	1	8	No	No	No	No	No	No	No	No	No	No
15	2	390	1	8	No	No	No	No	No	No	No	No	No	No
16	2	273	1	5	No	No	No	No	No	No	No	No	No	No
17	2	156	1	3	No	No	No	No	No	No	No	No	No	No
18	2	156	1	3	No	No	No	No	No	No	No	No	No	No
19	2	88	1	2	No	No	No	No	No	No	No	No	No	No
20	2	49	1	1	No	No	No	No	No	No	No	No	No	No
21	2	29	1	1	No	No	No	No	No	No	No	No	No	No
22	2	10	1	0	No	No	No	No	No	No	No	No	No	No
23	2	10	1	0	No	No	No	No	No	No	No	No	No	No
24	2	10	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	S	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	19.8	18.3
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:04	0:05
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	15	19
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	1010	1010
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	



Signal Warrants Report For Intersection 37: 38th Pkwy/PA-40.1 Acc4/PA 46.2 Acc3

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	N
1	564	434	15	19
2	547	421	15	18
3	536	412	14	18
4	502	386	13	17
5	446	343	12	15
6	440	339	12	15
7	434	334	12	15
8	395	304	11	13
9	389	299	10	13
10	384	295	10	13
11	333	256	9	11
12	310	239	8	10
13	305	234	8	10
14	226	174	6	8
15	226	174	6	8
16	158	122	4	5
17	90	69	2	3
18	90	69	2	3
19	51	39	1	2
20	28	22	1	1
21	17	13	0	1
22	6	4	0	0
23	6	4	0	0
24	6	4	0	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	998	1	19	No	No	No	No	No	No	No	No	No	No
2	2	968	1	18	No	No	No	No	No	No	No	No	No	No
3	2	948	1	18	No	No	No	No	No	No	No	No	No	No
4	2	888	1	17	No	No	No	No	No	No	No	No	No	No
5	2	789	1	15	No	No	No	No	No	No	No	No	No	No
6	2	779	1	15	No	No	No	No	No	No	No	No	No	No
7	2	768	1	15	No	No	No	No	No	No	No	No	No	No
8	2	699	1	13	No	No	No	No	No	No	No	No	No	No
9	2	688	1	13	No	No	No	No	No	No	No	No	No	No
10	2	679	1	13	No	No	No	No	No	No	No	No	No	No
11	2	589	1	11	No	No	No	No	No	No	No	No	No	No
12	2	549	1	10	No	No	No	No	No	No	No	No	No	No
13	2	539	1	10	No	No	No	No	No	No	No	No	No	No
14	2	400	1	8	No	No	No	No	No	No	No	No	No	No
15	2	400	1	8	No	No	No	No	No	No	No	No	No	No
16	2	280	1	5	No	No	No	No	No	No	No	No	No	No
17	2	159	1	3	No	No	No	No	No	No	No	No	No	No
18	2	159	1	3	No	No	No	No	No	No	No	No	No	No
19	2	90	1	2	No	No	No	No	No	No	No	No	No	No
20	2	50	1	1	No	No	No	No	No	No	No	No	No	No
21	2	30	1	1	No	No	No	No	No	No	No	No	No	No
22	2	10	1	0	No	No	No	No	No	No	No	No	No	No
23	2	10	1	0	No	No	No	No	No	No	No	No	No	No
24	2	10	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	S	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	20.4	18.6
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:05	0:05
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	15	19
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	1032	1032
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	



Signal Warrants Report For Intersection 38: 38th Pkwy/PA-40.1 Acc5

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	N
1	563	465	24	19
2	546	451	23	18
3	535	442	23	18
4	501	414	21	17
5	445	367	19	15
6	439	363	19	15
7	434	358	18	15
8	394	326	17	13
9	388	321	17	13
10	383	316	16	13
11	332	274	14	11
12	310	256	13	10
13	304	251	13	10
14	225	186	10	8
15	225	186	10	8
16	158	130	7	5
17	90	74	4	3
18	90	74	4	3
19	51	42	2	2
20	28	23	1	1
21	17	14	1	1
22	6	5	0	0
23	6	5	0	0
24	6	5	0	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	1028	1	24	No	No	No	No	No	No	No	No	No	No
2	2	997	1	23	No	No	No	No	No	No	No	No	No	No
3	2	977	1	23	No	No	No	No	No	No	No	No	No	No
4	2	915	1	21	No	No	No	No	No	No	No	No	No	No
5	2	812	1	19	No	No	No	No	No	No	No	No	No	No
6	2	802	1	19	No	No	No	No	No	No	No	No	No	No
7	2	792	1	18	No	No	No	No	No	No	No	No	No	No
8	2	720	1	17	No	No	No	No	No	No	No	No	No	No
9	2	709	1	17	No	No	No	No	No	No	No	No	No	No
10	2	699	1	16	No	No	No	No	No	No	No	No	No	No
11	2	606	1	14	No	No	No	No	No	No	No	No	No	No
12	2	566	1	13	No	No	No	No	No	No	No	No	No	No
13	2	555	1	13	No	No	No	No	No	No	No	No	No	No
14	2	411	1	10	No	No	No	No	No	No	No	No	No	No
15	2	411	1	10	No	No	No	No	No	No	No	No	No	No
16	2	288	1	7	No	No	No	No	No	No	No	No	No	No
17	2	164	1	4	No	No	No	No	No	No	No	No	No	No
18	2	164	1	4	No	No	No	No	No	No	No	No	No	No
19	2	93	1	2	No	No	No	No	No	No	No	No	No	No
20	2	51	1	1	No	No	No	No	No	No	No	No	No	No
21	2	31	1	1	No	No	No	No	No	No	No	No	No	No
22	2	11	1	0	No	No	No	No	No	No	No	No	No	No
23	2	11	1	0	No	No	No	No	No	No	No	No	No	No
24	2	11	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	S	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	20.7	17.9
Number of Lanes on Minor Street Approach	1	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:08	0:05
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	24	19
High Minor Volume Condition Met	No	No
Total Entering Volume on All Approaches During Same Hour	1071	1071
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	



Signal Warrants Report For Intersection 39: 38th Pkwy/PA-46.2 Acc4/PA-46.1 Acc1

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets
	E	W	S
1	553	515	28
2	536	500	27
3	525	489	27
4	492	458	25
5	437	407	22
6	431	402	22
7	426	397	22
8	387	361	20
9	382	355	19
10	376	350	19
11	326	304	17
12	304	283	15
13	299	278	15
14	221	206	11
15	221	206	11
16	155	144	8
17	88	82	4
18	88	82	4
19	50	46	3
20	28	26	1
21	17	15	1
22	6	5	0
23	6	5	0
24	6	5	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	1068	2	28	No	No	No	No	No	No	No	No	No	No
2	2	1036	2	27	No	No	No	No	No	No	No	No	No	No
3	2	1014	2	27	No	No	No	No	No	No	No	No	No	No
4	2	950	2	25	No	No	No	No	No	No	No	No	No	No
5	2	844	2	22	No	No	No	No	No	No	No	No	No	No
6	2	833	2	22	No	No	No	No	No	No	No	No	No	No
7	2	823	2	22	No	No	No	No	No	No	No	No	No	No
8	2	748	2	20	No	No	No	No	No	No	No	No	No	No
9	2	737	2	19	No	No	No	No	No	No	No	No	No	No
10	2	726	2	19	No	No	No	No	No	No	No	No	No	No
11	2	630	2	17	No	No	No	No	No	No	No	No	No	No
12	2	587	2	15	No	No	No	No	No	No	No	No	No	No
13	2	577	2	15	No	No	No	No	No	No	No	No	No	No
14	2	427	2	11	No	No	No	No	No	No	No	No	No	No
15	2	427	2	11	No	No	No	No	No	No	No	No	No	No
16	2	299	2	8	No	No	No	No	No	No	No	No	No	No
17	2	170	2	4	No	No	No	No	No	No	No	No	No	No
18	2	170	2	4	No	No	No	No	No	No	No	No	No	No
19	2	96	2	3	No	No	No	No	No	No	No	No	No	No
20	2	54	2	1	No	No	No	No	No	No	No	No	No	No
21	2	32	2	1	No	No	No	No	No	No	No	No	No	No
22	2	11	2	0	No	No	No	No	No	No	No	No	No	No
23	2	11	2	0	No	No	No	No	No	No	No	No	No	No
24	2	11	2	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	21.1
Number of Lanes on Minor Street Approach	2
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:09
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	28
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	1096
Number of Approaches on Intersection	3
Total Volume Condition Met	Yes
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 42: The Aurora Highlands Parkway/38th Parkway

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E
Minor Approaches	N, S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets	Minor Streets	
	E	N	S
1	302	421	258
2	293	408	250
3	287	400	245
4	269	375	230
5	239	333	204
6	236	328	201
7	233	324	199
8	211	295	181
9	208	290	178
10	205	286	175
11	178	248	152
12	166	232	142
13	163	227	139
14	121	168	103
15	121	168	103
16	85	118	72
17	48	67	41
18	48	67	41
19	27	38	23
20	15	21	13
21	9	13	8
22	3	4	3
23	3	4	3
24	3	4	3



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	4	302	2	421	No	No	No	No	No	No	No	No	No	No
2	4	293	2	408	No	No	No	No	No	No	No	No	No	No
3	4	287	2	400	No	No	No	No	No	No	No	No	No	No
4	4	269	2	375	No	No	No	No	No	No	No	No	No	No
5	4	239	2	333	No	No	No	No	No	No	No	No	No	No
6	4	236	2	328	No	No	No	No	No	No	No	No	No	No
7	4	233	2	324	No	No	No	No	No	No	No	No	No	No
8	4	211	2	295	No	No	No	No	No	No	No	No	No	No
9	4	208	2	290	No	No	No	No	No	No	No	No	No	No
10	4	205	2	286	No	No	No	No	No	No	No	No	No	No
11	4	178	2	248	No	No	No	No	No	No	No	No	No	No
12	4	166	2	232	No	No	No	No	No	No	No	No	No	No
13	4	163	2	227	No	No	No	No	No	No	No	No	No	No
14	4	121	2	168	No	No	No	No	No	No	No	No	No	No
15	4	121	2	168	No	No	No	No	No	No	No	No	No	No
16	4	85	2	118	No	No	No	No	No	No	No	No	No	No
17	4	48	2	67	No	No	No	No	No	No	No	No	No	No
18	4	48	2	67	No	No	No	No	No	No	No	No	No	No
19	4	27	2	38	No	No	No	No	No	No	No	No	No	No
20	4	15	2	21	No	No	No	No	No	No	No	No	No	No
21	4	9	2	13	No	No	No	No	No	No	No	No	No	No
22	4	3	2	4	No	No	No	No	No	No	No	No	No	No
23	4	3	2	4	No	No	No	No	No	No	No	No	No	No
24	4	3	2	4	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	11	16.9
Number of Lanes on Minor Street Approach	2	2
VehicleHours of Stopped Delay on Minor Approach (h:mm)	1:17	1:12
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	421	258
High Minor Volume Condition Met	Yes	Yes
Total Entering Volume on All Approaches During Same Hour	981	981
Number of Approaches on Intersection	3	3
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	



Signal Warrants Report For Intersection 43: The Aurora Highlands Parkway/38th Parkway

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	W
Minor Approaches	N, S
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets	Minor Streets	
	W	N	S
1	292	298	21
2	283	289	20
3	277	283	20
4	260	265	19
5	231	235	17
6	228	232	16
7	225	229	16
8	204	209	15
9	201	206	14
10	199	203	14
11	172	176	12
12	161	164	12
13	158	161	11
14	117	119	8
15	117	119	8
16	82	83	6
17	47	48	3
18	47	48	3
19	26	27	2
20	15	15	1
21	9	9	1
22	3	3	0
23	3	3	0
24	3	3	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	292	2	298	No	No	No	No	No	No	No	No	No	No
2	3	283	2	289	No	No	No	No	No	No	No	No	No	No
3	3	277	2	283	No	No	No	No	No	No	No	No	No	No
4	3	260	2	265	No	No	No	No	No	No	No	No	No	No
5	3	231	2	235	No	No	No	No	No	No	No	No	No	No
6	3	228	2	232	No	No	No	No	No	No	No	No	No	No
7	3	225	2	229	No	No	No	No	No	No	No	No	No	No
8	3	204	2	209	No	No	No	No	No	No	No	No	No	No
9	3	201	2	206	No	No	No	No	No	No	No	No	No	No
10	3	199	2	203	No	No	No	No	No	No	No	No	No	No
11	3	172	2	176	No	No	No	No	No	No	No	No	No	No
12	3	161	2	164	No	No	No	No	No	No	No	No	No	No
13	3	158	2	161	No	No	No	No	No	No	No	No	No	No
14	3	117	2	119	No	No	No	No	No	No	No	No	No	No
15	3	117	2	119	No	No	No	No	No	No	No	No	No	No
16	3	82	2	83	No	No	No	No	No	No	No	No	No	No
17	3	47	2	48	No	No	No	No	No	No	No	No	No	No
18	3	47	2	48	No	No	No	No	No	No	No	No	No	No
19	3	26	2	27	No	No	No	No	No	No	No	No	No	No
20	3	15	2	15	No	No	No	No	No	No	No	No	No	No
21	3	9	2	9	No	No	No	No	No	No	No	No	No	No
22	3	3	2	3	No	No	No	No	No	No	No	No	No	No
23	3	3	2	3	No	No	No	No	No	No	No	No	No	No
24	3	3	2	3	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N	S
Total Stopped Delay Per Vehicle on Minor Approach (s)	11	7.4
Number of Lanes on Minor Street Approach	2	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:54	0:02
Delay Condition Met	No	No
Volume on Minor Street Approach During Same Hour	298	21
High Minor Volume Condition Met	Yes	No
Total Entering Volume on All Approaches During Same Hour	611	611
Number of Approaches on Intersection	3	3
Total Volume Condition Met	No	No
Warrant Met for Approach	No	No
Warrant Met for Intersection	No	



Signal Warrants Report For Intersection 82: TAH Pkwy/PA-46.1 Acc3

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets	Minor Streets
	E	N
1	244	24
2	237	23
3	232	23
4	217	21
5	193	19
6	190	19
7	188	18
8	171	17
9	168	17
10	166	16
11	144	14
12	134	13
13	132	13
14	98	10
15	98	10
16	68	7
17	39	4
18	39	4
19	22	2
20	12	1
21	7	1
22	2	0
23	2	0
24	2	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	244	1	24	No	No	No	No	No	No	No	No	No	No
2	2	237	1	23	No	No	No	No	No	No	No	No	No	No
3	2	232	1	23	No	No	No	No	No	No	No	No	No	No
4	2	217	1	21	No	No	No	No	No	No	No	No	No	No
5	2	193	1	19	No	No	No	No	No	No	No	No	No	No
6	2	190	1	19	No	No	No	No	No	No	No	No	No	No
7	2	188	1	18	No	No	No	No	No	No	No	No	No	No
8	2	171	1	17	No	No	No	No	No	No	No	No	No	No
9	2	168	1	17	No	No	No	No	No	No	No	No	No	No
10	2	166	1	16	No	No	No	No	No	No	No	No	No	No
11	2	144	1	14	No	No	No	No	No	No	No	No	No	No
12	2	134	1	13	No	No	No	No	No	No	No	No	No	No
13	2	132	1	13	No	No	No	No	No	No	No	No	No	No
14	2	98	1	10	No	No	No	No	No	No	No	No	No	No
15	2	98	1	10	No	No	No	No	No	No	No	No	No	No
16	2	68	1	7	No	No	No	No	No	No	No	No	No	No
17	2	39	1	4	No	No	No	No	No	No	No	No	No	No
18	2	39	1	4	No	No	No	No	No	No	No	No	No	No
19	2	22	1	2	No	No	No	No	No	No	No	No	No	No
20	2	12	1	1	No	No	No	No	No	No	No	No	No	No
21	2	7	1	1	No	No	No	No	No	No	No	No	No	No
22	2	2	1	0	No	No	No	No	No	No	No	No	No	No
23	2	2	1	0	No	No	No	No	No	No	No	No	No	No
24	2	2	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.2
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:03
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	24
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	268
Number of Approaches on Intersection	2
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 83: TAH Pkwy/PA46.1 Access 4

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	No
#2	Four Hour Vehicular Volume	No
#3	Peak Hour	No

Intersection Warrants Parameters

Major Approaches	E
Minor Approaches	N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets	Minor Streets
	E	N
1	244	21
2	237	20
3	232	20
4	217	19
5	193	17
6	190	16
7	188	16
8	171	15
9	168	14
10	166	14
11	144	12
12	134	12
13	132	11
14	98	8
15	98	8
16	68	6
17	39	3
18	39	3
19	22	2
20	12	1
21	7	1
22	2	0
23	2	0
24	2	0



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	2	244	1	21	No	No	No	No	No	No	No	No	No	No
2	2	237	1	20	No	No	No	No	No	No	No	No	No	No
3	2	232	1	20	No	No	No	No	No	No	No	No	No	No
4	2	217	1	19	No	No	No	No	No	No	No	No	No	No
5	2	193	1	17	No	No	No	No	No	No	No	No	No	No
6	2	190	1	16	No	No	No	No	No	No	No	No	No	No
7	2	188	1	16	No	No	No	No	No	No	No	No	No	No
8	2	171	1	15	No	No	No	No	No	No	No	No	No	No
9	2	168	1	14	No	No	No	No	No	No	No	No	No	No
10	2	166	1	14	No	No	No	No	No	No	No	No	No	No
11	2	144	1	12	No	No	No	No	No	No	No	No	No	No
12	2	134	1	12	No	No	No	No	No	No	No	No	No	No
13	2	132	1	11	No	No	No	No	No	No	No	No	No	No
14	2	98	1	8	No	No	No	No	No	No	No	No	No	No
15	2	98	1	8	No	No	No	No	No	No	No	No	No	No
16	2	68	1	6	No	No	No	No	No	No	No	No	No	No
17	2	39	1	3	No	No	No	No	No	No	No	No	No	No
18	2	39	1	3	No	No	No	No	No	No	No	No	No	No
19	2	22	1	2	No	No	No	No	No	No	No	No	No	No
20	2	12	1	1	No	No	No	No	No	No	No	No	No	No
21	2	7	1	1	No	No	No	No	No	No	No	No	No	No
22	2	2	1	0	No	No	No	No	No	No	No	No	No	No
23	2	2	1	0	No	No	No	No	No	No	No	No	No	No
24	2	2	1	0	No	No	No	No	No	No	No	No	No	No
Hours Met					0	0	0	0	0	0	0	0	0	0

Warrant 3 Condition A

Orientation	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	9.1
Number of Lanes on Minor Street Approach	1
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:03
Delay Condition Met	No
Volume on Minor Street Approach During Same Hour	21
High Minor Volume Condition Met	No
Total Entering Volume on All Approaches During Same Hour	265
Number of Approaches on Intersection	2
Total Volume Condition Met	No
Warrant Met for Approach	No
Warrant Met for Intersection	No



Signal Warrants Report For Intersection 40: 38th Parkway/Reserve BI (W)

Warrants Summary

Warrant	Name	Met?
#1	Eight Hour Vehicular Volume	Yes
#2	Four Hour Vehicular Volume	Yes
#3	Peak Hour	Yes

Intersection Warrants Parameters

Major Approaches	E, W
Minor Approaches	S, N
Speed > 40mph	No
Population < 10,000	No
Warrant Factor	100%

Warrant Analysis Traffic Volumes

Hour	Major Streets		Minor Streets	
	E	W	S	N
1	572	497	21	408
2	555	482	20	396
3	543	472	20	388
4	509	442	19	363
5	452	393	17	322
6	446	388	16	318
7	440	383	16	314
8	400	348	15	286
9	395	343	14	282
10	389	338	14	277
11	337	293	12	241
12	315	273	12	224
13	309	268	11	220
14	229	199	8	163
15	229	199	8	163
16	160	139	6	114
17	92	80	3	65
18	92	80	3	65
19	51	45	2	37
20	29	25	1	20
21	17	15	1	12
22	6	5	0	4
23	6	5	0	4
24	6	5	0	4



Warrant Analysis by Hour

Hour	Major Streets		Minor Street		Warrant 1 Condition A				Warrant 1 Condition B				Warrant 2	Warrant 3
	Number	Volume	Number	Volume	100%	80%	70%	56%	100%	80%	70%	56%		Condition B
1	3	1069	3	408	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	3	1037	3	396	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	3	1015	3	388	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	3	951	3	363	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
5	3	845	3	322	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
6	3	834	3	318	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
7	3	823	3	314	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
8	3	748	3	286	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
9	3	738	3	282	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
10	3	727	3	277	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
11	3	630	3	241	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No
12	3	588	3	224	No	Yes	Yes	Yes	No	No	No	Yes	No	No
13	3	577	3	220	No	Yes	Yes	Yes	No	No	No	Yes	No	No
14	3	428	3	163	No	No	Yes	Yes	No	No	No	No	No	No
15	3	428	3	163	No	No	Yes	Yes	No	No	No	No	No	No
16	3	299	3	114	No	No	No	No	No	No	No	No	No	No
17	3	172	3	65	No	No	No	No	No	No	No	No	No	No
18	3	172	3	65	No	No	No	No	No	No	No	No	No	No
19	3	96	3	37	No	No	No	No	No	No	No	No	No	No
20	3	54	3	20	No	No	No	No	No	No	No	No	No	No
21	3	32	3	12	No	No	No	No	No	No	No	No	No	No
22	3	11	3	4	No	No	No	No	No	No	No	No	No	No
23	3	11	3	4	No	No	No	No	No	No	No	No	No	No
24	3	11	3	4	No	No	No	No	No	No	No	No	No	No
Hours Met					11	13	15	15	4	10	11	13	7	3

Warrant 3 Condition A

Orientation	S	N
Total Stopped Delay Per Vehicle on Minor Approach (s)	50.7	550.1
Number of Lanes on Minor Street Approach	1	3
VehicleHours of Stopped Delay on Minor Approach (h:mm)	0:17	62:20
Delay Condition Met	No	Yes
Volume on Minor Street Approach During Same Hour	21	408
High Minor Volume Condition Met	No	Yes
Total Entering Volume on All Approaches During Same Hour	1498	1498
Number of Approaches on Intersection	4	4
Total Volume Condition Met	Yes	Yes
Warrant Met for Approach	No	Yes
Warrant Met for Intersection	Yes	

LEGAL DESCRIPTION:

3 PARCELS OF LAND BEING PORTIONS OF THAT CERTAIN PARCEL DESCRIBED IN SPECIAL WARRANTY DEED RECORDED SEPTEMBER 25, 2020 AT RECEPTION NO. 2020000096730, A PORTION OF THAT CERTAIN PARCEL DESCRIBED IN SPECIAL WARRANTY DEED RECORDED SEPTEMBER 25, 2020 AT RECEPTION NO. 2020000096872, AND A PORTION OF TRACTS A AND E, THE AURORA HIGHLANDS SUBDIVISION FILING NO. 1, RECORDED OCTOBER 17, 2019 AT RECEPTION NO. 2019000089309, ALL RECORDED IN THE OFFICIAL RECORD OF THE CLERK AND RECORDER'S, COUNTY OF ADAMS, STATE OF COLORADO, SITUATED WITHIN SECTION 20 AND THE NORTH HALF OF SECTION 29, ALL IN TOWNSHIP 3 SOUTH, RANGE 65 WEST, 6TH PRINCIPAL MERIDIAN, CITY OF AURORA, SAID COUNTY AND STATE, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

PARCEL 1:

BEGINNING AT THE SOUTHERLY TERMINUS OF THAT CERTAIN COURSE HAVING A BEARING AND DISTANCE OF NORTH 27°30'34" WEST, 369.57 FEET ON THE WESTERLY BOUNDARY OF SAID TRACT A, AND THE EASTERLY RIGHT-OF-WAY OF RESERVE BOULEVARD, ALL SHOWN ON SAID, THE AURORA HIGHLANDS SUBDIVISION FILING NO. 1;

THENCE ALONG SAID WESTERLY BOUNDARY AND SAID EASTERLY RIGHT-OF-WAY THE FOLLOWING 3 COURSES:

1. NORTH 27°30'34" WEST, A DISTANCE OF 369.57 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE EASTERLY HAVING A RADIUS OF 965.00 FEET;
 2. NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 12°43'58", AN ARC LENGTH OF 214.45 FEET TO THE BEGINNING OF A COMPOUND CURVE CONCAVE SOUTHEASTERLY HAVING A RADIUS OF 20.00 FEET;
 3. NORTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 93°09'16", AN ARC LENGTH OF 32.52 FEET;
- THENCE DEPARTING SAID WESTERLY BOUNDARY AND SAID EASTERLY RIGHT-OF-WAY NORTH 78°22'39" EAST, A DISTANCE OF 165.76 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE NORTHWESTERLY HAVING A RADIUS OF 682.00 FEET;
- THENCE NORTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 30°57'03", AN ARC LENGTH OF 368.41 FEET;
- THENCE SOUTH 34°03'52" EAST, A DISTANCE OF 108.98 FEET; THENCE SOUTH 24°41'49" EAST, A DISTANCE OF 327.10 FEET;
- THENCE SOUTH 07°45'41" EAST, A DISTANCE OF 243.01 FEET TO THE SOUTHERLY BOUNDARY OF SAID TRACT A AND THE NORTHERLY RIGHT-OF-WAY OF 38TH PARKWAY AS DEPICTED ON SAID THE AURORA HIGHLANDS SUBDIVISION FILING NO. 1, BEING THE BEGINNING OF A NON-TANGENT CURVE CONCAVE SOUTHERLY HAVING A RADIUS OF 1,543.00 FEET, THE RADIUS POINT OF SAID CURVE BEARS SOUTH 07°45'41" EAST;
- THENCE ALONG SAID SOUTHERLY BOUNDARY AND SAID NORTHERLY RIGHT-OF-WAY THE FOLLOWING 2 COURSES:
1. WESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 17°43'16", AN ARC LENGTH OF 477.24 FEET;
 2. NORTH 65°46'33" WEST, A DISTANCE OF 31.61 FEET TO THE **POINT OF BEGINNING**, CONTAINING AN AREA OF 7.840 ACRES, (341,531 SQUARE FEET), MORE OR LESS.

PARCEL 2:

BEGINNING AT THE EASTERLY TERMINUS OF THAT CERTAIN COURSE HAVING A BEARING AND DISTANCE OF NORTH 90°00'00" EAST, 923.12 FEET ON THE SOUTHERLY BOUNDARY OF SAID TRACT A, AND THE NORTHERLY RIGHT-OF-WAY OF 38TH PARKWAY, ALL SHOWN ON SAID, THE AURORA HIGHLANDS SUBDIVISION FILING NO. 1;

THENCE ALONG SAID SOUTHERLY BOUNDARY AND SAID NORTHERLY RIGHT-OF-WAY, NORTH 90°00'00" WEST, A DISTANCE OF 850.86 FEET;

THENCE DEPARTING SAID SOUTHERLY BOUNDARY AND SAID NORTHERLY RIGHT-OF-WAY, NORTH 00°00'00" EAST, A DISTANCE OF 76.80 FEET;

THENCE NORTH 07°35'41" EAST, A DISTANCE OF 57.23 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE EASTERLY HAVING A RADIUS OF 1,997.00 FEET, THE RADIUS POINT OF SAID CURVE BEARS SOUTH 88°21'31" EAST;

THENCE NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 01°05'27", AN ARC LENGTH OF 38.02 FEET;

THENCE NORTH 03°24'43" EAST, A DISTANCE OF 47.37 FEET; THENCE NORTH 04°50'48" EAST, A DISTANCE OF 52.64 FEET;

THENCE NORTH 06°21'24" EAST, A DISTANCE OF 52.64 FEET; THENCE NORTH 07°52'01" EAST, A DISTANCE OF 52.64 FEET;

THENCE NORTH 09°22'38" EAST, A DISTANCE OF 52.64 FEET; THENCE NORTH 10°53'15" EAST, A DISTANCE OF 52.64 FEET;

THENCE NORTH 12°23'51" EAST, A DISTANCE OF 52.64 FEET; THENCE NORTH 13°50'11" EAST, A DISTANCE OF 47.65 FEET;

THENCE NORTH 05°25'52" EAST, A DISTANCE OF 30.14 FEET; THENCE NORTH 00°00'00" EAST, A DISTANCE OF 540.00 FEET;

THENCE NORTH 90°00'00" EAST, A DISTANCE OF 115.00 FEET;

THENCE NORTH 00°00'00" EAST, A DISTANCE OF 2.26 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 15.00 FEET;

THENCE NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 66°38'23", AN ARC LENGTH OF 17.45 FEET TO THE BEGINNING OF A REVERSE CURVE CONCAVE NORTHEASTERLY HAVING A RADIUS OF 63.00 FEET; THENCE NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 71°09'52", AN ARC LENGTH OF 78.25 FEET; THENCE NORTH 73°30'26" WEST, A DISTANCE OF 283.58 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE EASTERLY HAVING A RADIUS OF 1,400.00 FEET, THE RADIUS POINT OF SAID CURVE BEARS SOUTH 72°28'41" EAST;

THENCE NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 00°32'28", AN ARC LENGTH OF 13.22 FEET TO THE BEGINNING OF A COMPOUND CURVE CONCAVE SOUTHEASTERLY HAVING A RADIUS OF 1,400.00 FEET; THENCE NORTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 13°32'10", AN ARC LENGTH OF 330.75 FEET; THENCE NORTH 32°12'41" EAST, A DISTANCE OF 29.91 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHEASTERLY HAVING A RADIUS OF 1,359.96 FEET; THENCE NORTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 41°02'28", AN ARC LENGTH OF 974.14 FEET TO THE BEGINNING OF A REVERSE CURVE CONCAVE NORTHERLY HAVING A RADIUS OF 3,235.87 FEET;

THENCE EASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 00°22'11", AN ARC LENGTH OF 20.88 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE SOUTHERLY HAVING A RADIUS OF 1,400.00 FEET, THE RADIUS POINT OF SAID CURVE BEARS SOUTH 16°30'19" EAST; THENCE EASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 25°24'40", AN ARC LENGTH OF 620.91 FEET TO THE BEGINNING OF A REVERSE CURVE CONCAVE NORTHERLY HAVING A RADIUS OF 1,000.00 FEET; THENCE EASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 09°13'25", AN ARC LENGTH OF 160.98 FEET; THENCE NORTH 89°40'56" EAST, A DISTANCE OF 107.19 FEET; THENCE NORTH 00°19'01" WEST, A DISTANCE OF 285.40 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 665.00 FEET; THENCE NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 90°00'00", AN ARC LENGTH OF 1,044.58 FEET; THENCE SOUTH 89°40'59" WEST, A DISTANCE OF 196.37 FEET; THENCE NORTH 00°19'01" WEST, A DISTANCE OF 78.00 FEET; THENCE NORTH 89°40'59" EAST, A DISTANCE OF 196.37 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 743.00 FEET; THENCE SOUTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 90°00'00", AN ARC LENGTH OF 1,167.10 FEET;

THENCE SOUTH 00°19'01" EAST, A DISTANCE OF 529.37 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE EASTERLY HAVING A RADIUS OF 707.00 FEET; THENCE SOUTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 26°07'59", AN ARC LENGTH OF 322.47 FEET;

THENCE SOUTH 26°27'00" EAST, A DISTANCE OF 328.36 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE WESTERLY HAVING A RADIUS OF 793.00 FEET; THENCE SOUTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 26°07'59", AN ARC LENGTH OF 361.69 FEET;

THENCE SOUTH 00°19'01" EAST, A DISTANCE OF 505.81 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE WESTERLY HAVING A RADIUS OF 1,043.00 FEET; THENCE SOUTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 41°17'48", AN ARC LENGTH OF 751.75 FEET;

THENCE SOUTH 40°58'47" WEST, A DISTANCE OF 288.41 FEET TO THE SOUTHERLY BOUNDARY OF SAID TRACT A AND THE NORTHERLY RIGHT-OF-WAY OF SAID 38TH PARKWAY;

THENCE ALONG SAID SOUTHERLY BOUNDARY AND SAID NORTHERLY RIGHT-OF-WAY, THE FOLLOWING 2 COURSES:

1. NORTH 49°01'13" WEST, A DISTANCE OF 168.94 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHERLY HAVING A RADIUS OF 993.00 FEET;
 2. WESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 40°58'47", AN ARC LENGTH OF 710.23 FEET TO THE **POINT OF BEGINNING**, CONTAINING AN AREA OF 102.178 ACRES, (4,450,856 SQUARE FEET), MORE OR LESS.
- PARCEL 3:**
- BEGINNING** AT THE WESTERLY TERMINUS OF THAT CERTAIN COURSE HAVING A BEARING AND DISTANCE OF SOUTH 49°01'13" EAST, 282.19 FEET, ON THE NORTHERLY BOUNDARY OF SAID TRACT E, AND THE SOUTHERLY RIGHT-OF-WAY OF 38TH PARKWAY, AS SHOWN ON SAID, THE AURORA HIGHLANDS SUBDIVISION FILING NO. 1, BEING THENCE ALONG SAID NORTHERLY BOUNDARY AND SAID SOUTHERLY RIGHT-OF-WAY, SOUTH 49°01'13" EAST, A DISTANCE OF 167.35 FEET; THENCE DEPARTING SAID NORTHERLY BOUNDARY AND SAID SOUTHERLY RIGHT-OF-WAY, SOUTH 40°58'47" WEST, A DISTANCE OF 63.25 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE EASTERLY HAVING A RADIUS OF 500.00 FEET; THENCE SOUTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 49°40'32", AN ARC LENGTH OF 433.50 FEET; THENCE SOUTH 08°41'45" EAST, A DISTANCE OF 388.35 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE EASTERLY HAVING A RADIUS OF 750.00 FEET; THENCE SOUTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 17°12'09", AN ARC LENGTH OF 225.18 FEET; THENCE SOUTH 25°33'53" EAST, A DISTANCE OF 25.41 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE NORTHERLY HAVING A RADIUS OF 735.00 FEET, THE RADIUS POINT OF SAID CURVE BEARS NORTH 25°53'53" WEST; THENCE WESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 29°28'52", AN ARC LENGTH OF 378.19 FEET TO THE BEGINNING OF A REVERSE CURVE CONCAVE SOUTHERLY HAVING A RADIUS OF 1,250.00 FEET; THENCE WESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 41°18'48", AN ARC LENGTH OF 901.32 FEET; THENCE SOUTH 52°16'11" WEST, A DISTANCE OF 658.40 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 1,634.05 FEET, THE RADIUS POINT OF SAID CURVE BEARS SOUTH 51°22'39" WEST; THENCE NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 10°27'04", AN ARC LENGTH OF 298.06 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 5,253.00 FEET, THE RADIUS POINT OF SAID CURVE BEARS SOUTH 40°59'39" WEST; THENCE NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 10°13'33", AN ARC LENGTH OF 937.52 FEET; THENCE NORTH 59°56'36" WEST, A DISTANCE OF 41.76 FEET TO THE NORTHERLY RIGHT-OF-WAY OF AURORA HIGHLANDS PARKWAY AS DEPICTED ON SAID THE AURORA HIGHLANDS SUBDIVISION FILING NO. 1, AND THE SOUTHWESTERLY BOUNDARY OF SAID TRACT E, BEING THE BEGINNING OF A NON-TANGENT CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 1,677.00 FEET, THE RADIUS POINT OF SAID CURVE BEARS SOUTH 29°22'39" WEST; THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY AND SAID SOUTHWESTERLY BOUNDARY THE FOLLOWING 2 COURSES:
1. WESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 12°14'04", AN ARC LENGTH OF 358.09 FEET;
 2. NORTH 28°35'24" WEST, A DISTANCE OF 24.42 FEET TO THE EASTERLY RIGHT-OF-WAY OF 38TH PARKWAY AND THE WESTERLY BOUNDARY OF SAID TRACT E;
- THENCE ALONG THE EASTERLY AND SOUTHERLY RIGHT-OF-WAY OF SAID 38TH PARKWAY, AND THE WESTERLY AND NORTHERLY BOUNDARY OF SAID TRACT E, THE FOLLOWING 4 COURSES:
1. NORTH 15°25'54" EAST, A DISTANCE OF 120.62 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHEASTERLY HAVING A RADIUS OF 1,465.00 FEET;
 2. NORTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 74°34'06", AN ARC LENGTH OF 1,906.65 FEET;
 3. SOUTH 90°00'00" EAST, A DISTANCE OF 923.12 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHERLY HAVING A RADIUS OF 915.00 FEET;
 4. EASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 40°58'47", AN ARC LENGTH OF 654.44 FEET TO THE **POINT OF BEGINNING**, CONTAINING AN AREA OF 100.733 ACRES, (4,387,906 SQUARE FEET), MORE OR LESS.

PARCEL 3:

BEGINNING AT THE WESTERLY TERMINUS OF THAT CERTAIN COURSE HAVING A BEARING AND DISTANCE OF SOUTH 49°01'13" EAST, 282.19 FEET, ON THE NORTHERLY BOUNDARY OF SAID TRACT E, AND THE SOUTHERLY RIGHT-OF-WAY OF 38TH PARKWAY, AS SHOWN ON SAID, THE AURORA HIGHLANDS SUBDIVISION FILING NO. 1, BEING THENCE ALONG SAID NORTHERLY BOUNDARY AND SAID SOUTHERLY RIGHT-OF-WAY, SOUTH 49°01'13" EAST, A DISTANCE OF 167.35 FEET; THENCE DEPARTING SAID NORTHERLY BOUNDARY AND SAID SOUTHERLY RIGHT-OF-WAY, SOUTH 40°58'47" WEST, A DISTANCE OF 63.25 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE EASTERLY HAVING A RADIUS OF 500.00 FEET; THENCE SOUTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 49°40'32", AN ARC LENGTH OF 433.50 FEET; THENCE SOUTH 08°41'45" EAST, A DISTANCE OF 388.35 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE EASTERLY HAVING A RADIUS OF 750.00 FEET; THENCE SOUTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 17°12'09", AN ARC LENGTH OF 225.18 FEET; THENCE SOUTH 25°33'53" EAST, A DISTANCE OF 25.41 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE NORTHERLY HAVING A RADIUS OF 735.00 FEET, THE RADIUS POINT OF SAID CURVE BEARS NORTH 25°53'53" WEST; THENCE WESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 29°28'52", AN ARC LENGTH OF 378.19 FEET TO THE BEGINNING OF A REVERSE CURVE CONCAVE SOUTHERLY HAVING A RADIUS OF 1,250.00 FEET; THENCE WESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 41°18'48", AN ARC LENGTH OF 901.32 FEET; THENCE SOUTH 52°16'11" WEST, A DISTANCE OF 658.40 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 1,634.05 FEET, THE RADIUS POINT OF SAID CURVE BEARS SOUTH 51°22'39" WEST; THENCE NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 10°27'04", AN ARC LENGTH OF 298.06 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 5,253.00 FEET, THE RADIUS POINT OF SAID CURVE BEARS SOUTH 40°59'39" WEST; THENCE NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 10°13'33", AN ARC LENGTH OF 937.52 FEET; THENCE NORTH 59°56'36" WEST, A DISTANCE OF 41.76 FEET TO THE NORTHERLY RIGHT-OF-WAY OF AURORA HIGHLANDS PARKWAY AS DEPICTED ON SAID THE AURORA HIGHLANDS SUBDIVISION FILING NO. 1, AND THE SOUTHWESTERLY BOUNDARY OF SAID TRACT E, BEING THE BEGINNING OF A NON-TANGENT CURVE CONCAVE SOUTHWESTERLY HAVING A RADIUS OF 1,677.00 FEET, THE RADIUS POINT OF SAID CURVE BEARS SOUTH 29°22'39" WEST; THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY AND SAID SOUTHWESTERLY BOUNDARY THE FOLLOWING 2 COURSES:

1. WESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 12°14'04", AN ARC LENGTH OF 358.09 FEET;
 2. NORTH 28°35'24" WEST, A DISTANCE OF 24.42 FEET TO THE EASTERLY RIGHT-OF-WAY OF 38TH PARKWAY AND THE WESTERLY BOUNDARY OF SAID TRACT E;
- THENCE ALONG THE EASTERLY AND SOUTHERLY RIGHT-OF-WAY OF SAID 38TH PARKWAY, AND THE WESTERLY AND NORTHERLY BOUNDARY OF SAID TRACT E, THE FOLLOWING 4 COURSES:
1. NORTH 15°25'54" EAST, A DISTANCE OF 120.62 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHEASTERLY HAVING A RADIUS OF 1,465.00 FEET;
 2. NORTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 74°34'06", AN ARC LENGTH OF 1,906.65 FEET;
 3. SOUTH 90°00'00" EAST, A DISTANCE OF 923.12 FEET TO THE BEGINNING OF A TANGENT CURVE CONCAVE SOUTHERLY HAVING A RADIUS OF 915.00 FEET;
 4. EASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 40°58'47", AN ARC LENGTH OF 654.44 FEET TO THE **POINT OF BEGINNING**, CONTAINING AN AREA OF 100.733 ACRES, (4,387,906 SQUARE FEET), MORE OR LESS.

NOTE:

1. IN ACCORDANCE WITH THE PUBLIC IMPROVEMENT PLAN, THE PORTIONS OF 48TH AVE AND 38TH PKWY SHOWN WITHIN THE PLANS RSN 165150 AND EDN 219205, RESPECTIVELY, ARE REQUIRED TO BE CONSTRUCTED AND A VEHICULAR CONNECTION FROM HARVEST ROAD AND POWHATON ROAD TO I-70 IS REQUIRED PRIOR TO COMMENCEMENT OF THIS SITE PLAN

BASIS OF BEARINGS:

THE NORTH LINE OF THE NORTHWEST QUARTER, SECTION 24, TOWNSHIP 3 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, TAKEN TO BEAR NORTH 89°36'22" EAST, A MODIFIED STATE PLANE DISTANCE OF 2,643.20 FEET.

PROJECT APPLICANT

AEROTROPOLIS AREA COORDINATING
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C/O PATRICK CHELIN, P.E.
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CIVIL ENGINEER

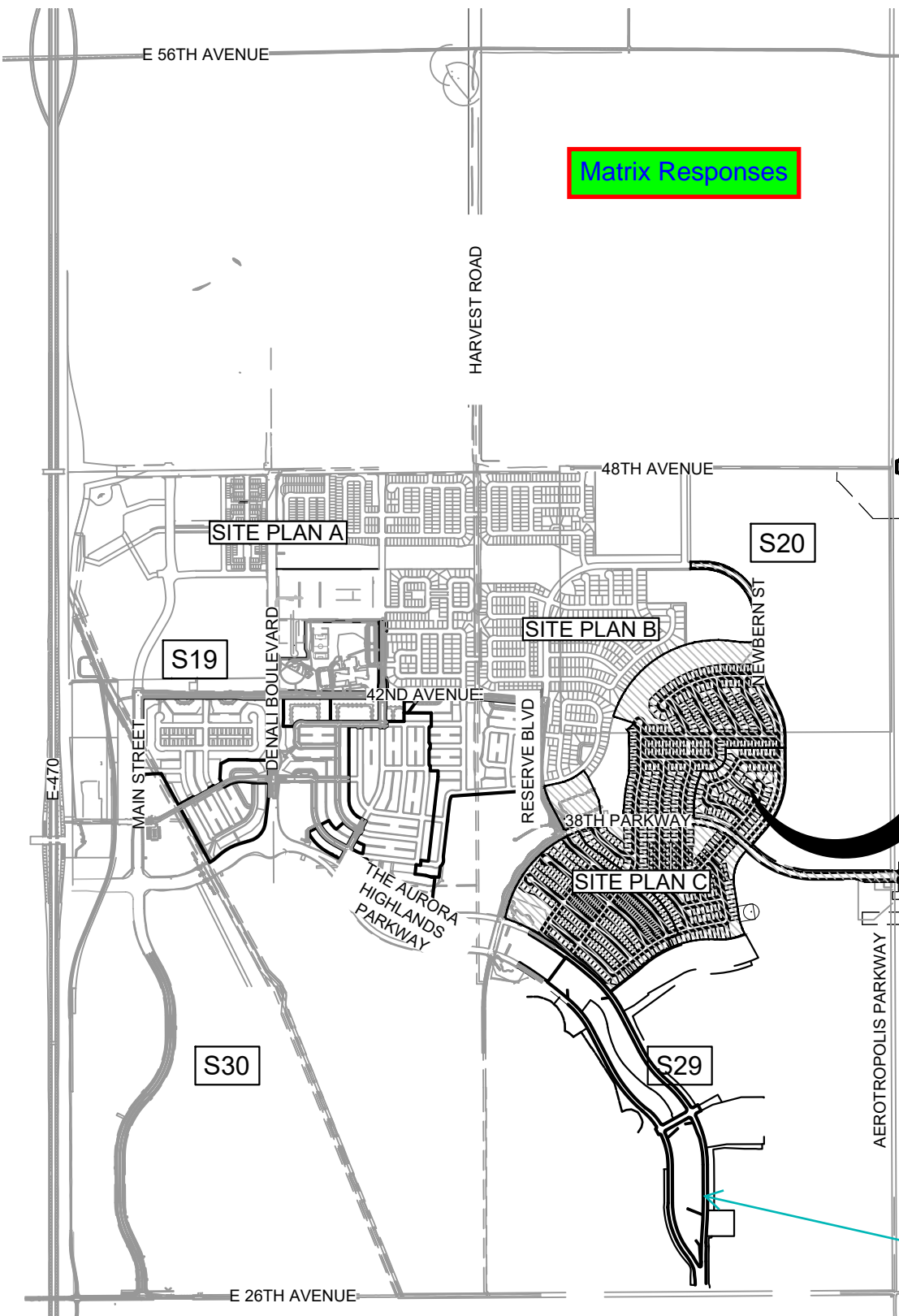
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DEVELOPER

AURORA HIGHLANDS, LLC
CARLO FERREIRA
250 S PILOT ROAD
LAS VEGAS, NV 89119

THE AURORA HIGHLANDS
NORTH - AREA C
SITE PLAN

CITY OF AURORA, COUNTY OF ADAMS, STATE OF COLORADO
SITUATED IN SECTION 20 AND THE NORTH HALF OF 29,
TOWNSHIP 3 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN,
CITY OF AURORA, COUNTY OF ADAMS, STATE OF COLORADO



LOCATION MAP

SCALE: 1" = 2,000'

SITE PLAN DATA BLOCK		
SITE DATA		AREA C
LAND AREA WITHIN PROPERTY LINES		210.7
NUMBER OF UNITS PROPOSED		819
MAXIMUM HEIGHT OF BUILDINGS		38
PRESENT ZONING CLASSIFICATION		R-2, MEDIUM DENSITY RESIDENTIAL
2021 IRC & 2021 IECC CONSTRUCTION TYPE & CLASSIFICATION		V-B (NON-FIRE SPRINKLED)
AVERAGE RESIDENTIAL DENSITY		3.9
LOT AREA		122.9
TRACT/OPEN SPACE AREA		42.6
ROAD/ROW AREA		45.2

INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
COVER SHEET	01
GENERAL NOTES & TYPICAL SECTIONS	02-04
CONTEXT MAP	05
SITE PLAN TRACKING CHART	06-07
OVERALL PHASING INDEX PLAN	08
PHASING PLANS	09-13
OVERALL SITE INDEX PLAN	14
SITE PLAN	15-34
FIRE HYDRANT SPACING PLAN	35
OVERALL GRADING & UTILITY INDEX PLAN	36
GRADING & UTILITY PLAN	37-57
EXISTING TREE PLAN	58
FENCING PLAN	59
LANDSCAPE NOTES & TABLES	60
PLANT SCHEDULE	61
LANDSCAPE LOT TYPICALS	62
LANDSCAPE PLAN	63-85
NAC ENLARGEMENT	86-87
LANDSCAPE DETAILS	90-93
MAIL KIOSK DETAILS	94-95
LIGHTING DETAILS	89

OWNERS SIGNATURES

THE AURORA HIGHLANDS NORTH, AREA C SITE PLAN, LEGAL DESCRIPTION: SEE THIS SHEET
THIS SITE PLAN AND ANY AMENDMENTS HERETO, UPON APPROVAL BY THE CITY OF AURORA AND RECORDING, SHALL BE BINDING UPON THE APPLICANTS THEREFORE, THEIR SUCCESSORS AND ASSIGNS. THIS PLAN SHALL LIMIT AND CONTROL THE ISSUANCE AND VALIDITY OF ALL BUILDING PERMITS, AND SHALL RESTRICT AND LIMIT THE CONSTRUCTION, LOCATION, USE, OCCUPANCY AND OPERATION OF ALL LAND AND STRUCTURES WITHIN THIS PLAN TO ALL CONDITIONS, REQUIREMENTS, LOCATIONS AND LIMITATIONS SET FORTH HEREIN. ABANDONMENT, WITHDRAWAL OR AMENDMENT OF THIS PLAN MAY BE PERMITTED ONLY UPON APPROVAL OF THE CITY OF AURORA.

OWNER

IN WITNESS THEREOF,

AURORA HIGHLANDS, LLC,
A NEVADA LIMITED LIABILITY COMPANY

BY: CGF MANAGEMENT, INC.,
A NEVADA CORPORATION

HAS CAUSED THESE PRESENTS TO BE EXECUTED THIS _____ DAY OF _____

BY: _____

NAME: _____

ITS: _____

STATE OF: _____

COUNTY OF: _____

ACKNOWLEDGES BEFORE ME ON _____, 2024 BY CARLO FERREIRA, PRESIDENT OF CGF MANAGEMENT, INC, A NEVADA CORPORATION, MANAGER OF AURORA HIGHLANDS, LLC, A NEVADA LIMITED LIABILITY COMPANY.

WITNESS MY HAND AND OFFICIAL SEAL

(NOTARY PUBLIC)

MY COMMISSION EXPIRES: _____

NOTARY BUSINESS ADDRESS: _____

OWNER

IN WITNESS THEREOF,

GVRE 470 LLC C/O
GEORGE MCELROY & ASSOCIATES INC

BY: CGF MANAGEMENT, INC.,
A NEVADA CORPORATION

HAS CAUSED THESE PRESENTS TO BE EXECUTED THIS _____ DAY OF _____ AD _____

NAME: _____

ITS: _____

STATE OF: _____

COUNTY OF: _____

ACKNOWLEDGES BEFORE ME ON _____, 2024 BY CARLO FERREIRA, PRESIDENT OF CGF MANAGEMENT, INC, A NEVADA CORPORATION, MANAGER OF AURORA HIGHLANDS, LLC, A NEVADA LIMITED LIABILITY COMPANY.

WITNESS MY HAND AND OFFICAL SEAL

(NOTARY PUBLIC)

MY COMMISSION EXPIRES: _____

NOTARY BUSINESS ADDRESS: _____

3rd SubmittalComments in green were made by Development Services reviewer Sergio Um. Please reach out to him at sum@auroragov.org for any comments or questions.

Noted

Please contact Steve DeKoskie to resolve comments regarding Water's comments in red. sdekoski@auroragov.org

Noted

PUBLIC SERVICE COMPANY OF COLORADO

PARCEL NO. 1819200000047
BOOK 1295, PAGE 405

COA attorney will need to verify this signature block is acceptable for PSCo

SIGNATURE

DATE

CITY OF AURORA APPROVALS

CITY ATTORNEY _____ DATE: _____

PLANNING DIRECTOR: _____ DATE: _____

PLANNING AND ZONING COMMISSION: _____ DATE: _____
(CHAIRPERSON)

CITY COUNCIL: _____ DATE: _____
(MAYOR)

ATTEST: _____ DATE: _____
(CITY CLERK)

DATABASE APPROVAL DATE: _____ THE AURORA HIGHLANDS NORTH -

AMENDMENTS

TITLE: COVER SHEET

DATE: AUGUST, 2024

PREPARED BY:

Matrix
Excellence by Design
707 17th Street, Suite 3150
Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com

811

delete all TYP

NOT FOR CONSTRUCTION

REQUIRED SITE PLAN NOTES

1. THE DEVELOPER, ITS SUCCESSORS AND ASSIGNS, INCLUDING THE HOMEOWNERS OR MERCHANTS ASSOCIATION SHALL BE RESPONSIBLE FOR INSTALLATION, MAINTENANCE AND REPLACEMENT OF ALL FIRE LANE SIGNS.
2. ALL SIGNS MUST CONFORM TO THE CITY OF AURORA SIGN CODE.
3. EMERGENCY INGRESS AND EGRESS - RIGHT-OF-WAY FOR INGRESS AND EGRESS FOR SERVICE AND EMERGENCY VEHICLES GRANTED OVER, ACROSS, ON AND THROUGH ANY AND ALL PRIVATE ROADS AND WAYS NOW OR HEREAFTER ESTABLISHED ON THE DESCRIBED PROPERTY, AND THE SAME ARE HEREBY DESIGNATED AS "SERVICE/EMERGENCY AND UTILITY EASEMENTS" AND SHALL BE POSTED "NO PARKING-FIRE LANE".
4. THE APPLICANT HAS THE OBLIGATION TO COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT.
5. THE DEVELOPER, ITS SUCCESSORS AND ASSIGNS, SHALL BE RESPONSIBLE FOR INSTALLATION, MAINTENANCE AND REPLACEMENT OF ALL LANDSCAPING MATERIALS SHOWN OR INDICATED ON THE APPROVED SITE PLAN OR LANDSCAPE PLAN ON FILE IN THE PLANNING DEPARTMENT. ALL LANDSCAPE WILL BE INSTALLED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
6. ALL CROSSINGS OR ENCROACHMENTS BY PRIVATE LANDSCAPE IRRIGATION LINES OR SYSTEMS AND/OR PRIVATE UTILITIES INTO EASEMENTS AND STREET RIGHTS-OF-WAY OWNED BY THE CITY OF AURORA ARE ACKNOWLEDGED BY THE UNDERSIGNED AS BEING SUBJECT TO CITY OF AURORA'S USE AND OCCUPANCY OF THE SAID EASEMENTS OR RIGHTS-OF-WAY. THE UNDERSIGNED, THEIR SUCCESSORS AND ASSIGNS, HEREBY AGREE TO INDEMNIFY THE CITY OF AURORA FOR ANY LOSS, DAMAGE OR REPAIR TO CITY FACILITIES THAT MAY RESULT FROM THE INSTALLATION, OPERATION OR MAINTENANCE OF SAID PRIVATE IRRIGATION LINES OR SYSTEMS AND/OR PRIVATE UTILITIES.THE APPROVAL OF THIS DOCUMENT DOES NOT CONSTITUTE FINAL APPROVAL OF GRADING, DRAINAGE, UTILITY, PUBLIC IMPROVEMENTS AND BUILDING PLANS. CONSTRUCTION PLANS MUST BE REVIEWED AND APPROVED BY THE APPROPRIATE AGENCY PRIOR TO THE ISSUANCE OF BUILDING PERMITS.
7. ALL BUILDING ADDRESS NUMBERS SHALL COMPLY WITH THE AURORA CITY CODE, ARTICLE VII - NUMBERING OF BUILDINGS.
8. NOTWITHSTANDING ANY SURFACE IMPROVEMENTS, LANDSCAPING, PLANTING OR CHANGES SHOWN IN THIS SITE OR CONSTRUCTION PLANS, OR ACTUALLY CONSTRUCTED OR PUT IN PLACE, ALL UTILITY EASEMENTS MUST REMAIN UNOBSTRUCTED AND FULLY ACCESSIBLE ALONG THEIR ENTIRE LENGTH TO ALLOW FOR ADEQUATE MAINTENANCE EQUIPMENT. ADDITIONALLY, NO INSTALLATION, PLANTING, CHANGE IN THE SURFACE, ETC., SHALL INTERFERE WITH THE OPERATION OF THE UTILITY LINES PLACED WITHIN THE EASEMENT. BY SUBMITTING THESE SITE OR CONSTRUCTION PLANS FOR APPROVAL, THE LANDOWNER RECOGNIZES AND ACCEPTS THE TERMS, CONDITIONS AND REQUIREMENTS OF THIS NOTE.
9. FINAL GRADE SHALL BE AT LEAST SIX (6) INCHES BELOW ANY EXTERIOR WOOD SIDING ON THE PREMISES.
10. ALL INTERESTED PARTIES ARE HEREBY ALERTED THAT THIS SITE PLAN IS SUBJECT TO ADMINISTRATIVE CHANGES AND AS SHOWN ON THE ORIGINAL SITE PLAN ON FILE. IN THE AURORA CITY PLANNING OFFICE AT THE MUNICIPAL BUILDING. A COPY OF THE OFFICIAL CURRENT PLAN MAY BE PURCHASED THERE. LIKEWISE, SITE PLANS ARE REQUIRED TO AGREE WITH THE APPROVED SUBDIVISION PLAT OF RECORD AT THE TIME OF A BUILDING PERMIT; AND IF NOT, MUST BE AMENDED TO AGREE WITH THE PLAT AS NEEDED, OR VICE VERSA.
11. ERRORS IN APPROVED SITE PLANS RESULTING FROM COMPUTATIONS OR INCONSISTENCIES IN THE DRAWINGS MADE BY THE APPLICANT ARE THE RESPONSIBILITY OF THE PROPERTY OWNER OF RECORD. WHERE FOUND, THE CURRENT MINIMUM CODE REQUIREMENTS WILL APPLY AT THE TIME OF BUILDING PERMIT. PLEASE BE SURE THAT ALL PLAN COMPUTATIONS ARE CORRECT.
12. ALL REPRESENTATIONS AND COMMITMENTS MADE BY APPLICANT'S AND PROPERTY OWNERS AT PUBLIC HEARINGS REGARDING THIS PLAN ARE BINDING UPON THE APPLICANT, PROPERTY OWNER, AND ITS HEIRS, SUCCESSORS, AND ASSIGNS.
13. ARCHITECTURAL FEATURES (I.E. BAY WINDOWS, FIREPLACES, ROOF OVERHANG, GUTTERS, EAVES, FOUNDATIONS, FOOTINGS, CANTILEVERED WALLS, ETC.) ARE NOT ALLOWED TO ENCROACH INTO ANY EASEMENT OR FIRE LANE.
14. THE VENDOR OF ANY FUTURE SALE OF THE REAL PROPERTY SHALL PROVIDE THE REQUIRED NOTICE PER CITY CODE SECTION 146-1587(C) TO BE RECORDED WITH THE COUNTY CLERK AND RECORDER AND SHALL PROVIDE SUCH NOTICE TO EACH PROSPECTIVE PURCHASER OF ANY AND ALL SAID PROPERTY. SEE EXHIBIT C4 UNDER THE AIRPORT RELATED LAND USE RESTRICTIONS SECTION OF THIS GUIDEBOOK.
15. STREET LIGHTING SHALL BE AT THE DEVELOPER'S EXPENSE AND BE INSTALLED PRIOR TO ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY.
16. ENTRY ISLANDS LOCATED WITHIN CITY RIGHT-OF-WAY WILL BE MAINTAINED BY THE METROPOLITAN DISTRICT.
17. IN LOCATIONS WHERE UTILITY EASEMENTS OVERLAP DRAINAGE EASEMENTS, ONLY SUBSURFACE UTILITIES SHALL BE PERMITTED WITHIN THE PORTION OF THE UTILITY EASEMENT THAT OVERLAPS THE DRAINAGE EASEMENT. INSTALLATION OF ABOVE GROUND UTILITIES WITHIN A DRAINAGE EASEMENT REQUIRES PRIOR WRITTEN APPROVAL BY CITY ENGINEER.
18. TRAFFIC SIGNS SHALL BE FURNISHED AND INSTALLED PER THE MOST CURRENT EDITIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND CITY STANDARDS, AND SHOWN ON THE SIGNING AND STRIPING PLAN FOR THE DEVELOPMENT.
19. THE STREETLIGHT OR PEDESTRIAN LIGHT INSTALLATION WITHIN THE PUBLIC RIGHT-OF WAY SHALL BE DESIGNED, FUNDED, AND CONSTRUCTED BY THE DEVELOPER/OWNER. OWNERSHIP AND MAINTENANCE OF THE STREET/PEDESTRIAN LIGHTS SHALL BE THE RESPONSIBILITY OF THE CITY OF AURORA ONCE THEY HAVE BEEN ACCEPTED. STREET LIGHT AND/OR PEDESTRIAN PHOTOMETRIC PLANS SHALL BE PREPARED AND SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL AND SHALL BECOME A PART OF THE APPROVED CIVIL CONSTRUCTION PLANS FOR THE PROJECT. AN ELECTRICAL PLAN SHOWING SITE LOCATION OF LIGHTS, ELECTRICAL ONE LINE AND GROUNDING DETAILS SHALL BE SUBMITTED TO THE PERMIT CENTER FOR REVIEW BY THE BUILDING DEPARTMENT. THE OWNER IS RESPONSIBLE FOR OBTAINING AN ADDRESS FOR THE METER(S) FROM THE PLANNING DEPARTMENT. A BUILDING PERMIT FOR THE METER AND A PUBLIC INSPECTIONS PERMIT FOR THE STREET LIGHTS ARE REQUIRED. CERTIFICATE OF OCCUPANCIES WILL NOT BE ISSUED UNTIL THE STREET AND/OR PEDESTRIAN LIGHTING PLANS ARE APPROVED, CONSTRUCTED, AND INITIALLY ACCEPTED.
20. THE DEVELOPER IS RESPONSIBLE FOR SIGNING AND STRIPING ALL PUBLIC STREETS. THE DEVELOPER IS REQUIRED TO PLACE TRAFFIC CONTROL, STREET NAME, AND GUIDE SIGNS ON ALL PUBLIC STREETS AND PRIVATE STREETS APPROACHING AN INTERSECTION WITH A PUBLIC STREET. SIGNS SHALL BE FURNISHED AND INSTALLED PER THE MOST CURRENT EDITIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND CITY STANDARDS, AND SHOWN ON THE SIGNING AND STRIPING PLAN FOR THE DEVELOPMENT.
21. FIRE LANE AND HANDICAPPED PARKING SIGNS, SIGN DETAILS, HANDICAPPED PARKING STALL DETAILS, AND LOCATIONS SHALL BE APPROVED WITH THE CIVIL PLANS, "SIGNAGE AND STRIPING" PACKAGE.

SYMBOLS

	EXISTING PAVED ROAD
	EXISTING UNDERGROUND UTILITY
	PROPOSED UNDERGROUND UTILITY
	DRAINAGE
	RIGHT OF WAY
	PROPOSED STORM DRAIN
	PROPOSED SANITARY SEWER
	PROPOSED WATER
	DECIDUOUS TREE
	CONIFEROUS TREE
	EXISTING RESIDENTIAL LIGHT
	PROPOSED RESIDENTIAL LIGHT
	EXISTING PEDESTRIAN LIGHT
	PROPOSED PEDESTRIAN LIGHT
	EXISTING MANHOLE
	PROPOSED MANHOLE
	EXISTING POWER POLE
	PROPOSED BEND W/ THRUST BLOCK
	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT
	PROPOSED GATE VALVE
	PROPOSED BUTTERFLY VALVE
	EXISTING VALVE
	PROPOSED CROSS W/THRUST BLOCK
	WATER SERVICE W/ METER
	FLOW ARROW
	PROPOSED STORM DRAIN/INLET
	EXISTING STORM DRAIN/INLET
	SANITARY SEWER SERVICE
	PLUG PIPE
	PROPOSED BLOWOFF ASSEMBLY
	PROPOSED TEE W/ THRUST BLOCK
	EXISTING SIGN
	PROPOSED SIGN

ABBREVIATIONS

AB	AS-BUILT	LP	LOW POINT
AE	ACCESS EASEMENT	MAX	MAXIMUM
ASSY	ASSEMBLY	MFGR	MANUFACTURER
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS	MH	MANHOLE
APPROX	APPROXIMATE OR APPROXIMATELY	MID	MIDDLE OR MIDPOINT
AVE	AVENUE	MIN	MINIMUM
B OR B/L	BASELINE BLVD BOULEVARD	MJ	MECHANICAL JOINT
CI	CAST IRON	MOD	MODIFIED
CEN	CENTER	MSL	MEAN SEA LEVEL
C OR C/L	CENTERLINE	NIC	NOT IN CONTRACT
CLR	CLEAR	NO	NUMBER
CMP	CORRUGATED METAL PIPE	NOM	NOMINAL
CONC	CONCRETE	NTS	NOT TO SCALE
CONST	CONSTRUCTION	OC	ON CENTER
CONT	CONTINUOUS	PR OR PP	PROPOSED
CFS	CUBIC FEET PER SECOND	PGL	PROFILE GRADE LINE
CY	CUBIC YARD	P OR P/L	PROPERTY LINE
DWMD	DENVER WASTEWATER MANAGEMENT DISTRICT	PVC	POINT OF VERTICAL CURVE
DIA	DIAMETER	PVC	POLYVINYL CHLORIDE
DN	DOWN	PVI	POINT OF VERTICAL INTERSECTION
DTL	DETAIL	PVMT OR PVT	PAVEMENT
DIP	DUCTILE IRON PIPE	R OR RAD	RADIUS
DWG	DRAWING	RCBC	REINFORCED CONCRETE BOX CULVERT
EA	EACH	RCP	REINFORCED CONCRETE PIPE
ELEV OR EL	ELEVATION	RED	REDUCER
EOP	EDGE OF PAVEMENT	REF	REFERENCE
ESMT	EASEMENT	REINF	REINFORCING
EW	EACH WAY	REQ	REQUIRED
EX. OR EXIST	EXISTING	REV	REVISION
FIN	FINISHED	RT	RIGHT
Q	FLOW (CFS)	SCH	SCHEDULE
F OR F/L	FLOWLINE	SD OR STM	STORM SEWER
FLG	FLANGE	SWK / SDWK / SW	SIDEWALK
FPS	FEET PER SECOND	SQ	SQUARE
FH	FIRE HYDRANT	ST	STREET
FT	FOOT/FEET	STA	STATION
FRP	FIBERGLASS REINFORCED PIPE	STD	STANDARD
FUT	FUTURE	STL	STEEL
GAL	GALLON	SS OR SAN	SANITARY SEWER
GALV	GALVANIZED	TB	THRUST BLOCK
GAU	GAUGE (MATERIAL)	THD	THREADED
GB	GRADE BREAK	THICK	THICKNESS
GE	GAS/ELECTRICAL EASEMENT	T.O.P.	TOP OF PIPE
GV	GATE VALVE	TYP	TYPICAL
GW	GROUNDWATER	UE	UTILITY EASEMENT
HBP	HOT BITUMINOUS PAVEMENT	VERT	VERTICAL
HDPE	HIGH DENSITY POLYETHYLENE	VGC	VERTICAL GRANITE CURB
HGL	HYDRAULIC GRADE LINE	w/	WITH
HP	HIGH POINT	WSE	WATER SURFACE ELEVATION
HORIZ	HORIZONTAL		
HCL	HORIZONTAL CONTROL LINE		
HR	HOOR		
IN	INCH		
INV	INVERT		
JT	JOINT		
LAT	LATERAL		
LBS	POUNDS		
LF	LINEAR FEET		
LT	LEFT		
BVCS	BEGINNING VERTICAL CURVE STATION		
BVCE	BEGINNING VERTICAL CURVE ELEVATION		
EVCS	ENDING VERTICAL CURVE STATION		
EVCE	ENDING VERTICAL CURVE ELEVATION		

THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: LEGEND - NOTES & ABBREVIATIONS

DATE: AUGUST, 2024

PREPARED BY:

Matrix
Excellence by Design

707 17th Street, Suite 3150

Denver, Colorado 80202

P 303.572.0200

www.matrixdesigngroup.com



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SHEET: 02 OF 96

Diagram illustrating the layout of a residential lot, showing setbacks and dimensions relative to the Public Street.

Setbacks and Dimensions:

- 10' REAR SETBACK LINE**
- 8' REAR D.U.E. ESMT**
- REAR LOT LINE**
- 6' U.E.**
- 10' SETBACK (TYP.)**
- 5' SIDE YARD SETBACK**
- 5' SIDE YARD SETBACK**
- 20' GARAGE SETBACK**
- 15' FRONT YARD SETBACK**
- 6' D.U.E.**
- LOT LINE (TYP.)**
- LOT LINE (TYP.)**
- 55' MIN**
- 50' MIN**
- PUBLIC STREET**
- 100' MIN VARIES**
- 20' CURB RETURN RADIUS (TYP.)**
- 5.5' CONCRETE SIDEWALK**
- MOUNTABLE CURB & GUTTER**

Diagram illustrating the layout of a residential lot, showing setbacks, lot lines, and street requirements.

Setbacks and Lot Lines:

- 10' REAR SETBACK LINE
- REAR LOT LINE
- 8' REAR D.U.E. ESMT
- 6' U.E.
- 10' SETBACK (TYP.)
- 5' SIDE YARD SETBACK
- 5' SIDE YARD SETBACK
- 18' GARAGE SETBACK
- 10' FRONT SETBACK
- 6' D.U.E.
- LOT LINE (TYP.)
- LOT LINE (TYP.)

Street and Lot Dimensions:

- 100' MIN VARIES
- 20' CURB RETURN RADIUS (TYP.)
- 5.5' CONCRETE SIDEWALK
- MOUNTABLE CURB & GUTTER (TYP.)
- 45' MIN
- PUBLIC STREET
- 45' MIN

Other Notes:

- 180 SF MINIMUM PRIVATE OPEN SPACE ON EACH SMALL LOT

55' MIN. 55' MIN.

8' UTILITY EASEMENT 10' REAR SETBACK

5' U.E. & SIDE YARD SETBACK

25' UTILITY & ACCESS EASEMENT

10' SEPARATION BETWEEN DWELLINGS (5' SETBACK) 10' SEPARATION BETWEEN DWELLINGS (5' SETBACK)

180 SF MINIMUM PRIVATE OPEN SPACE ON EACH MOTOR COURT LOT

5' U.E. & SIDE YARD SETBACK

50' MIN.

47' MIN.

30' MINIMUM GARAGE SEPARATION

5' PORCH SETBACK 10' FRONT SETBACK 10' FRONT SETBACK

5.5' SDWK 5.5' SDWK

8' TREE LAWN 6' GAS EASEMENT

FLOWLINE

SHARED DRIVE

MOTOR COURT 1. A FRONT TOWARD OPEN SPACE

MOTOR COURT LOT NOTES:

1. A FRONT YARD MAY BE COUNTED TOWARD THE 180 SQUARE FOOT OPEN SPACE REQUIREMENT IF THE FRONT YARD MEETS THE REQUIREMENTS DESCRIBED IN SECTION 146-4.2.3.A, MEETS THE MINIMUM LENGTH AND WIDTH DIMENSIONS OF 10' AND THE SPACE INCLUDES A FRONT PORCH, DECK, OR SIMILAR SPACE WITH MINIMUM DIMENSIONS OF SIX FEET BY EIGHT FEET.
2. SHARED DRIVES ARE CONCRETE AND WILL BE MAINTAINED BY THE HOA.
3. DWELLINGS ON LOTS ABUTTING A PUBLIC OR PRIVATE STREET SHALL HAVE FRONT DOORS FACING THAT STREET.

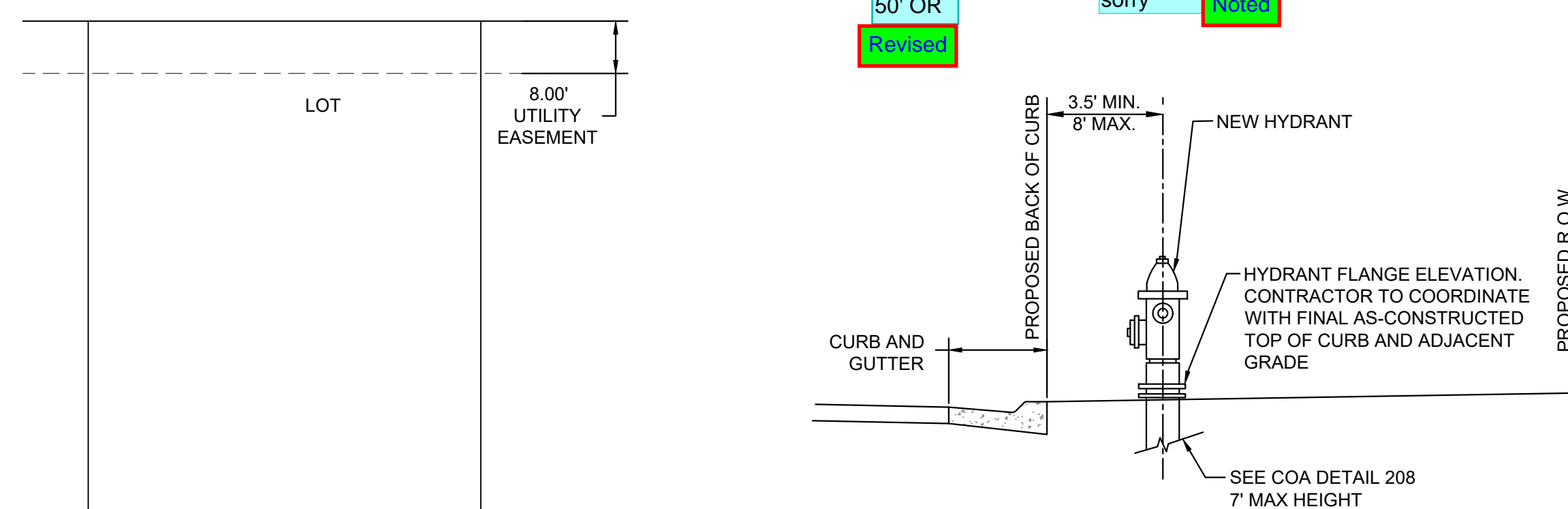


Diagram illustrating the layout of a meter pit. The diagram shows a cross-section of the pit with the following dimensions and components:

- Roof Overhang:** 2.5' (PER COA DETAIL 203-1)
- Center of Meter Pit:** Indicated by a vertical dashed line.
- Center of Meter Pit:** Indicated by a vertical dashed line.
- Building:** Indicated by a horizontal line on the left.
- Dimensions:**
 - 3.75' (from building to center of meter pit)
 - 9.00' (width of the pit)
 - 10.00' (width of the pit)
 - 3.75' (from center of meter pit to roof overhang)

The site plan illustrates a four-unit motor court layout. Key features include:

- Setbacks:** 5' U.E. & Side Yard Setback, 8' Utility Easement, 10' Rear Setback, 10' Separation Between Dwellings (5' Setback), 5' U.E. & Side Yard Setback, 10' Front Setback, 5' Porch Setback, 8' Tree Lawn, 5.5' Sidewalk.
- Easements:** 25' Utility & Access Easement, 6' Gas Easement, 8" PVC Water, 8" PVC San.
- Utilities:** Private Sanitary Sewer Service, Sanitary Clean Out, Shared Drive, Flowline.
- Other Features:** 180 SF Minimum Private Open Space on Each Motor Court Lot, 55' MIN. dimensions, 8" Tree Lawn, 5.5' Sidewalk.

Diagram illustrating a residential lot layout with various easements and setbacks:

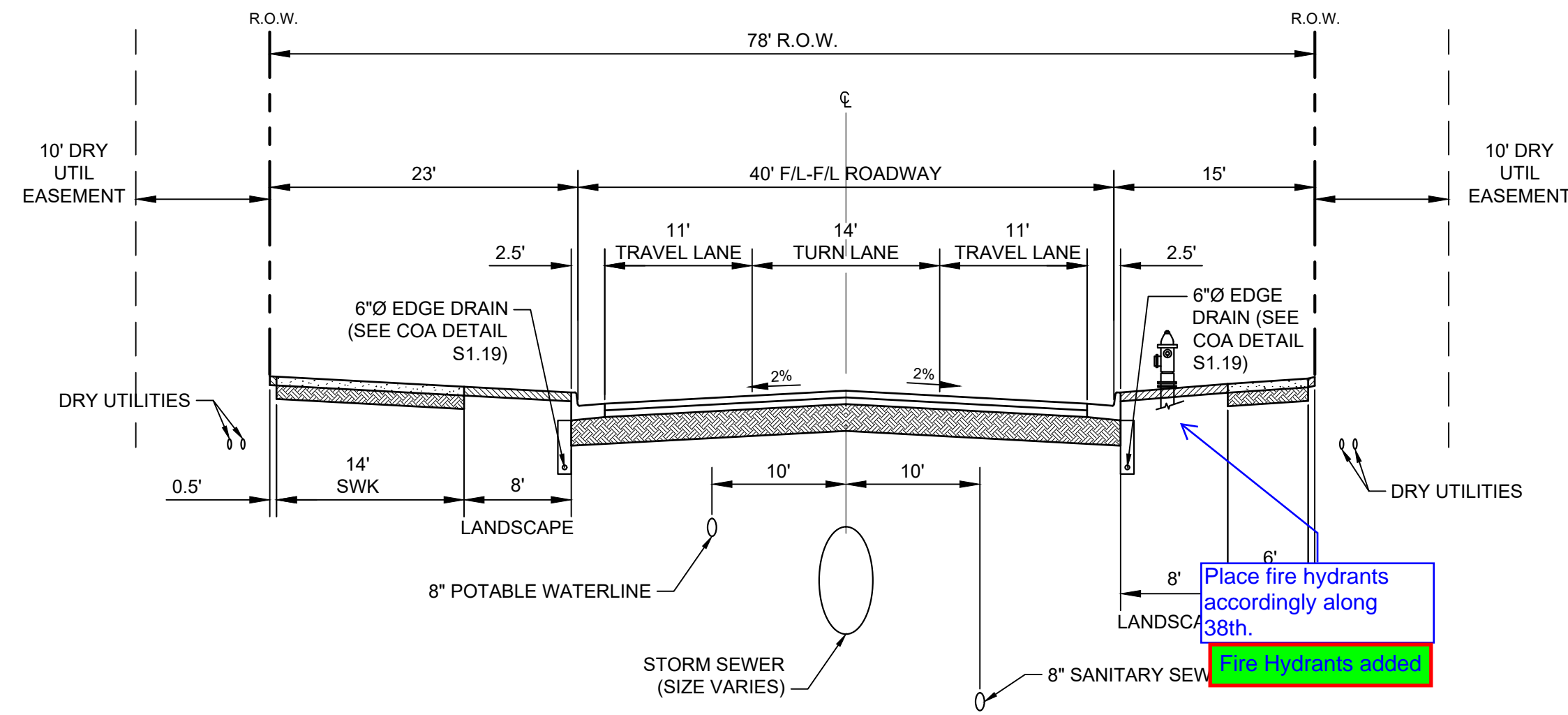
- 16' ALLEY (TYP)**: Located at the top of the lot.
- 8' UTILITY EASEMENT**: Located on the left side of the lot.
- 6' GAS EASEMENT**: Located on the right side of the lot.
- 5' MIN.**: Minimum setback from the front property line to the front of the house.
- 10' MIN.**: Minimum setback from the side property line to the side of the house.
- 5.5' SIDEWALK**: Located in front of the house.
- 8' TREE LAWN**: Located in front of the house.
- 8" PVC WATER**: Located in front of the house.
- 8" PVC SAN.**: Located in front of the house.
- FLOWLINE**: Indicated by a dashed line across the front of the lot.
- R.O.W.**: Right of Way line, indicated by a solid line across the front of the lot.

Lot Dimensions Table					
Lot Type	Min. Lot Size (SF)	Min. Lot Frontage	Minimum Setbacks		
			Front	Rear	Side
Small Lot - Alt. Load	1500	30'	10' House / 5' Porch	3'	5' / 10' Corners
Small Lot - Front Load	<4500	<50'	10' House / 18' Garage	10'	5' / 10' Corners
Motor Court	2500	50'	10' House / 5' Porch	10'	5' / 10' Corners
Standard Lot	4500	50'	15' House / 20' Garage	10'	5' / 10' Corners

include a lot typical for an alley loaded lot. Show min size and setbacks



SHEET: 03 OF 96



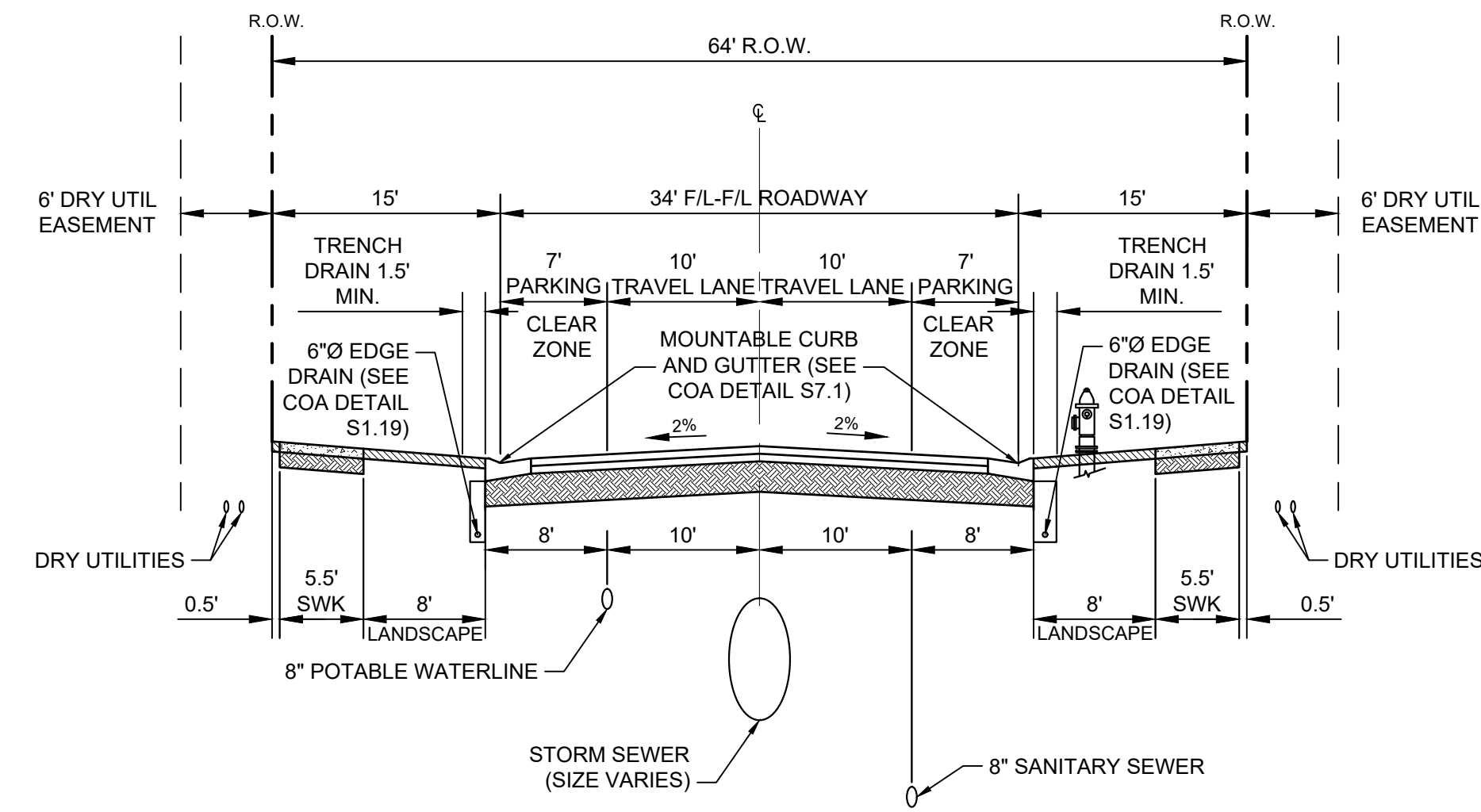
THREE LANE COLLECTOR
E. 38TH PARKWAY

NOTE:
PRIVATE UTILITIES TO BE PLACED OUTSIDE OF THE PUBLIC RIGHT-OF-WAY

CRITERIA AND NOTE FOR EACH TYPICAL SECTION (2.12.0.1)					
ROADWAY CLASSIFICATION	ADJACENT LAND USE CATEGORY	NUMBER OF LANES	BACK TO BACK CURB WIDTH	PEDESTRIAN ACTIVITY LEVEL	PAVEMENT TYPE
THREE LANE COLLECTOR	RESIDENTIAL	3	41'	LOW	R3

Delete. Not required with the site plan. TYP

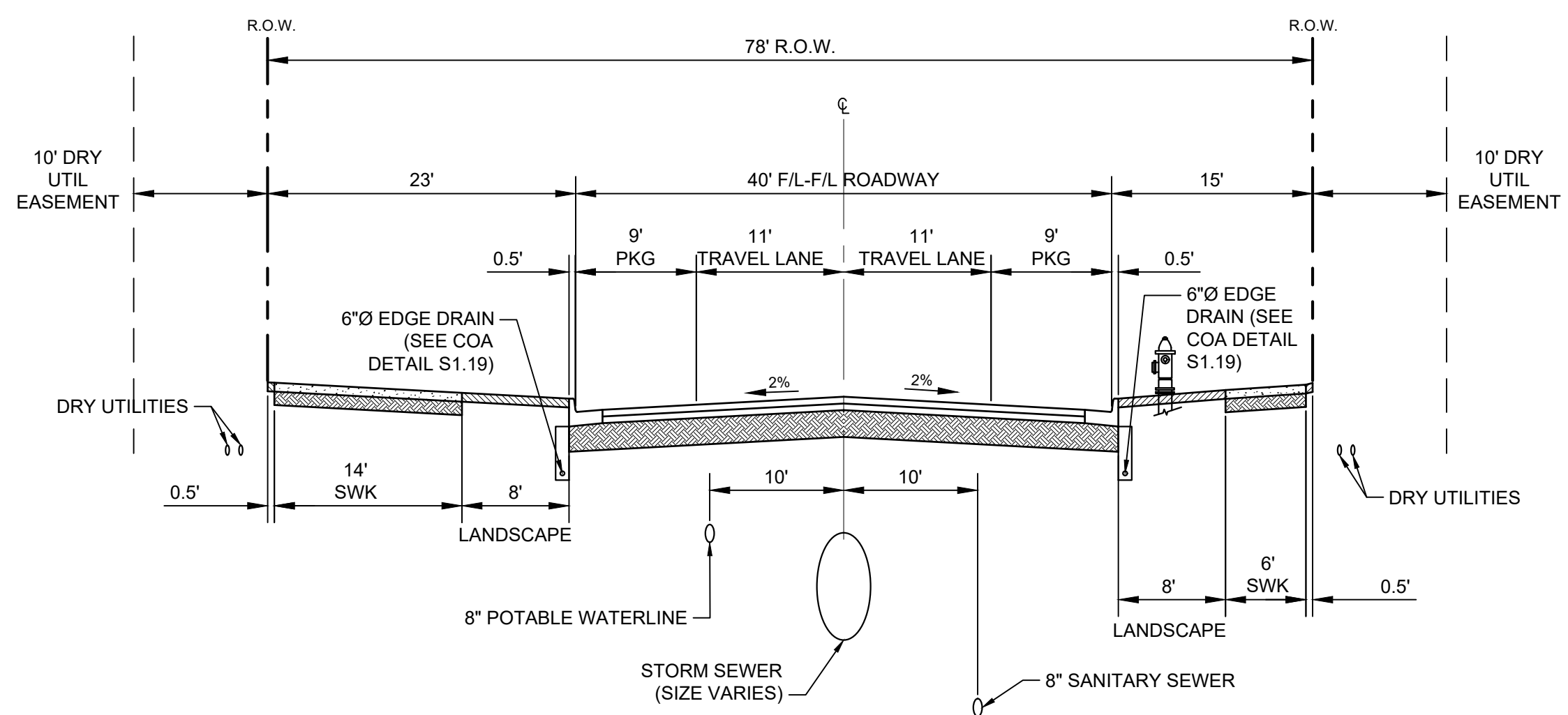
Per email from Sergio Um on Friday, October 4, 2024, these tables are to remain.



LOCAL STREET TYPE 1

NOTE:
PRIVATE UTILITIES TO BE PLACED OUTSIDE OF THE PUBLIC RIGHT-OF-WAY

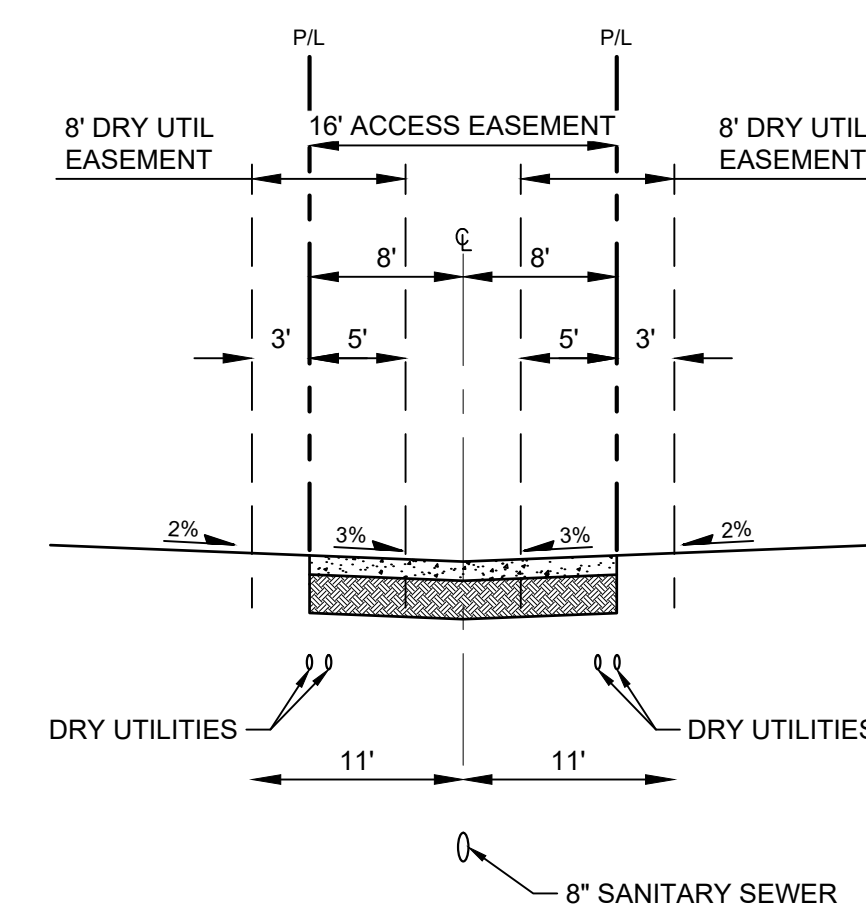
CRITERIA AND NOTE FOR EACH TYPICAL SECTION (2.12.0.1)					
ROADWAY CLASSIFICATION	ADJACENT LAND USE CATEGORY	NUMBER OF LANES	BACK TO BACK CURB WIDTH	PEDESTRIAN ACTIVITY LEVEL	PAVEMENT TYPE
THREE LANE COLLECTOR	RESIDENTIAL	2	36'	LOW	R3



TWO LANE COLLECTOR
N. NEWBERN STREET

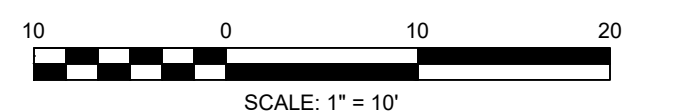
NOTE:
PRIVATE UTILITIES TO BE PLACED OUTSIDE OF THE PUBLIC RIGHT-OF-WAY

CRITERIA AND NOTE FOR EACH TYPICAL SECTION (2.12.0.1)					
ROADWAY CLASSIFICATION	ADJACENT LAND USE CATEGORY	NUMBER OF LANES	BACK TO BACK CURB WIDTH	PEDESTRIAN ACTIVITY LEVEL	PAVEMENT TYPE
THREE LANE COLLECTOR	RESIDENTIAL	2	41'	LOW	R3



TYPICAL 16' PRIVATE ALLEY
(ALLEY CC, DD, EE)

CRITERIA AND NOTE FOR EACH TYPICAL SECTION (2.12.0.1)					
ROADWAY CLASSIFICATION	ADJACENT LAND USE CATEGORY	NUMBER OF LANES	BACK TO BACK CURB WIDTH	PEDESTRIAN ACTIVITY LEVEL	PAVEMENT TYPE
THREE LANE COLLECTOR	RESIDENTIAL	N/A	N/A	LOW	R3



THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: TYPICAL SECTIONS

DATE: AUGUST, 2024

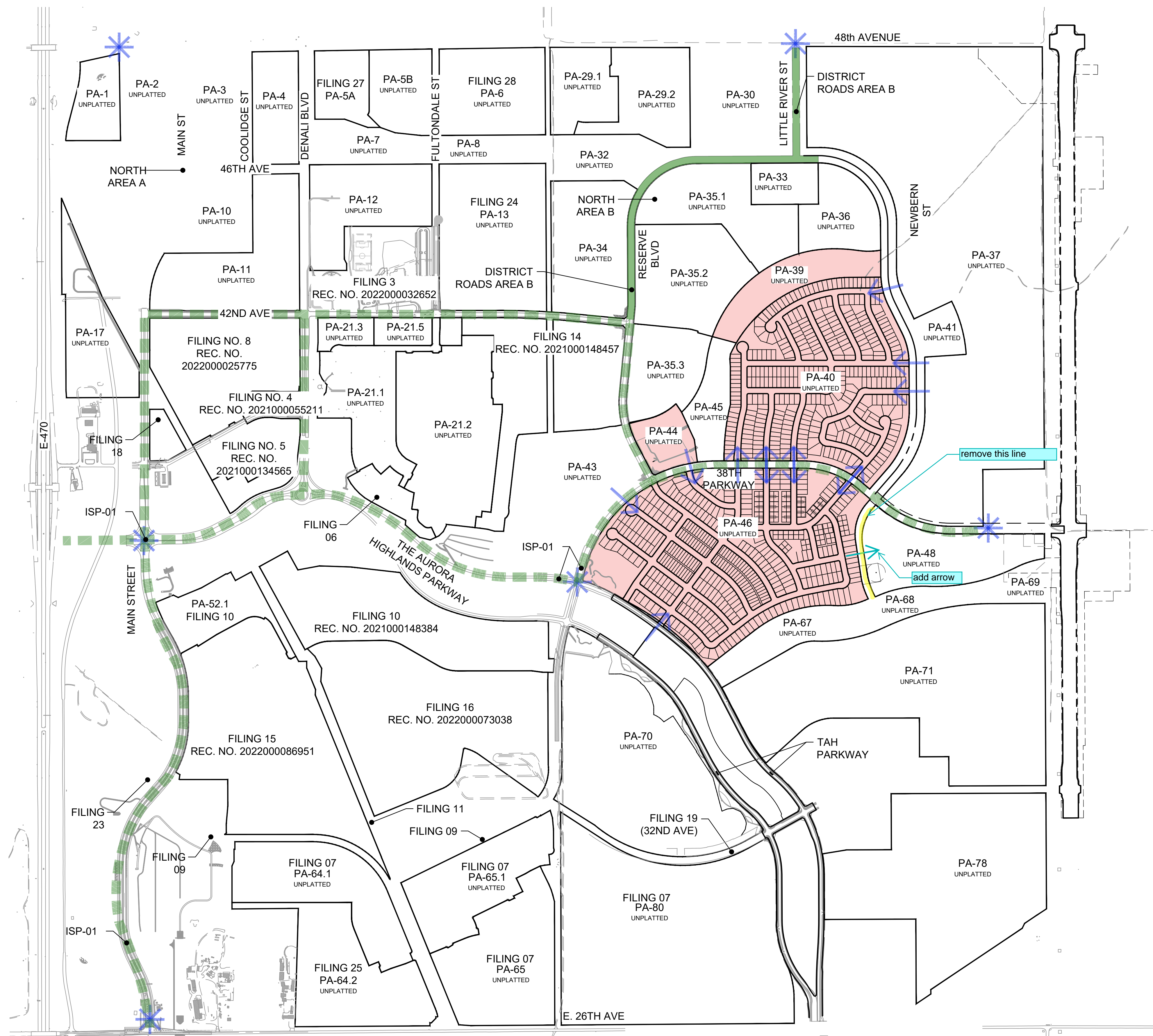
PREPARED BY:

Matrix
Excellence by Design
707 17th Street, Suite 3150
Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com



NOT FOR CONSTRUCTION

SHEET: 04 OF 96



REQUIRED INFRASTRUCTURE NOTES:

THE FOLLOWING REQUIREMENTS MUST BE MET PRIOR TO ISSUANCE OF BUILDING PERMIT:

- WATER:
1. ONSITE WATER LINES AND FIRE HYDRANTS
- SANITARY SEWER:
1. ONSITE SANITARY SEWER LINES
- STORM DRAINAGE:
1. OFFSITE INFRASTRUCTURE:
 - REGIONAL DETENTION AND WATER QUALITY FACILITIES LOCATED DOWNSTREAM OF SITE.

- ROADWAY:
1. ONSITE AGGREGATE BASE COURSE CAPABLE OF SUPPORTING LIFE SAFETY EQUIPMENT.

THE FOLLOWING REQUIREMENTS MUST BE MET PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY:

- WATER:
1. ONSITE INFRASTRUCTURE INITIALLY ACCEPTED BY CITY
- SANITARY SEWER:
1. ONSITE INFRASTRUCTURE INITIALLY ACCEPTED BY CITY
- STORM DRAINAGE:
1. OFFSITE INFRASTRUCTURE:
 - THE POND CERTIFICATE FOR THE REGIONAL DETENTION AND WATER QUALITY FACILITIES LOCATED DOWNSTREAM OF SITE MUST BE APPROVED.

- ROADWAY:
1. ONSITE INFRASTRUCTURE INITIALLY ACCEPTED BY CITY

ADDITIONAL NOTES:

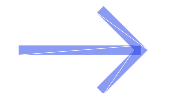
1. CONVEYANCE OF ALL RIGHT-OF-WAY AND EASEMENTS NEEDED TO ACCOMMODATE THE REFERENCED PUBLIC IMPROVEMENTS IS REQUIRED PRIOR TO CIVIL PLAN APPROVAL.

LEGEND:

DEVELOPMENT ACCESS LOCATIONS



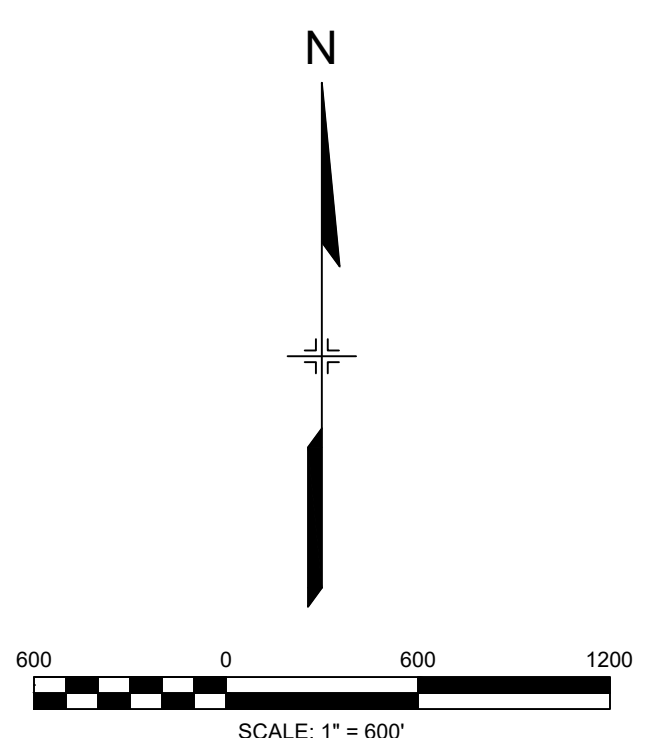
NORTH AREA C SITE ACCESS



DISTRICT INFRASTRUCTURE IMPROVEMENTS



EXISTING INFRASTRUCTURE



THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: CONTEXT MAP

DATE: AUGUST, 2024

PREPARED BY:

Matrix
Excellence by Design
707 17th Street, Suite 3150
Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com



NOT FOR CONSTRUCTION

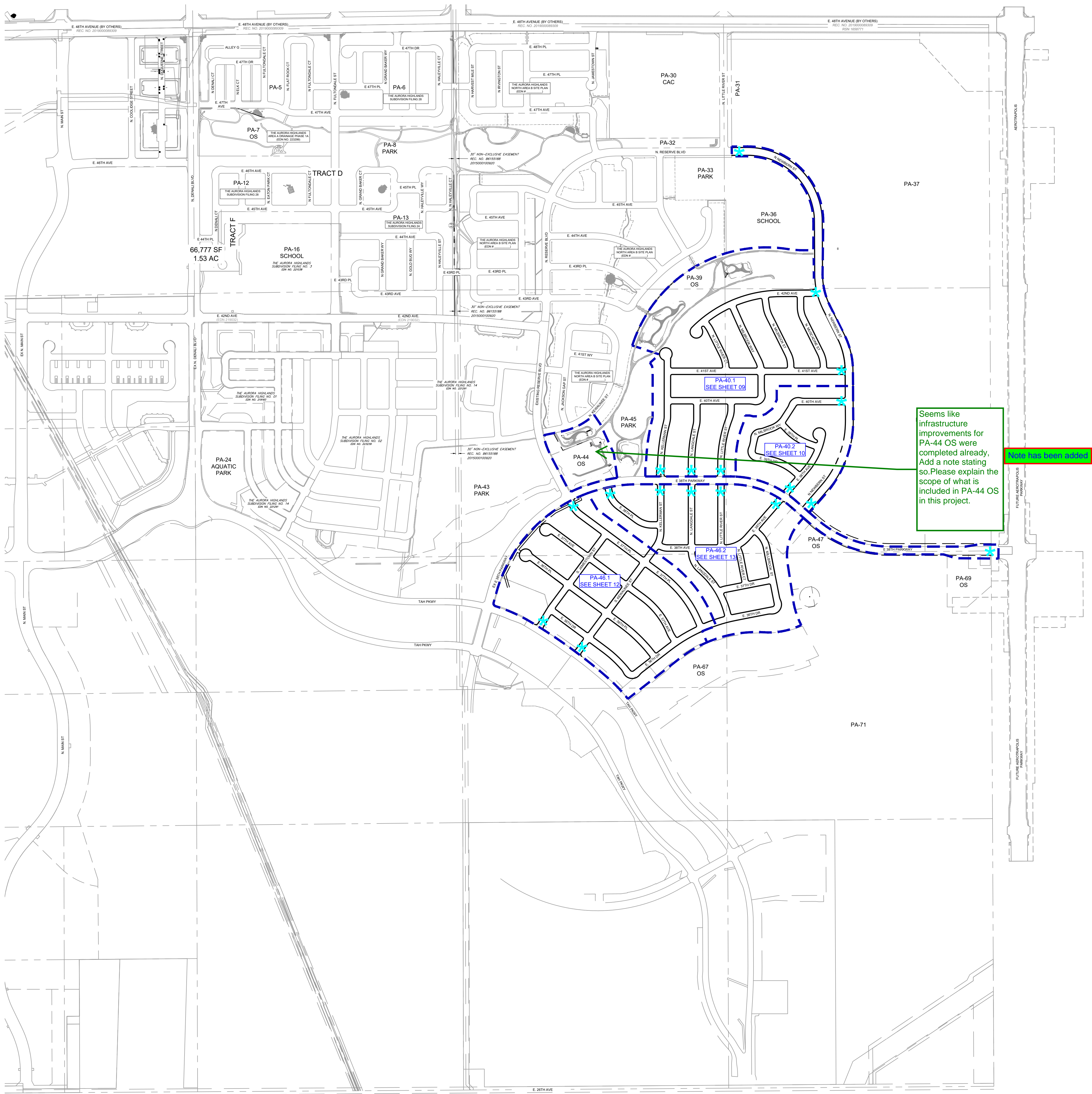
SHEET: 05 OF 96

		Lot Tracking Chart																							
		Product Types										Standard Lots (>50')													
		MF		Small Lots										Standard Lots (>50')											
		Traditional	Town Center	% of Total	Motor Court	Townhome	Paired Home				<50' Frontage				Small Lot Front-Load % of Total	Total Small Lot of Total	50'-59' Frontage	% of Total	60'-69' Frontage	70'+ Frontage	>60' Frontage % of Total	Standard Lots % of Total	Total		
Filing No	Site Plan No.						Front-Load	% of Total	Alt.-Load	% of Total	Front-Load	% of Total	Alt.-Load	% of Total											
1	CONTEXTUAL SITE PLAN #1	0	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00%	0.00%	54	64.29%	30	0	35.71%	100.00%	84		
2	CONTEXTUAL SITE PLAN #2	0	0	0.00%	0	0	0	0.00%	44	19.47%	0	0.00%	0	0.00%	0.00%	0.00%	73	32.30%	105	4	48.23%	80.53%	226		
3	HIGHLAND CREEK NEIGHBORHOOD PARK	0	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00%	0.00%	0	0.00%	0	0	0.00%	0.00%	0		
4	PRELIMINARY PLAT #4	0	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00%	0.00%	3	33.33%	6	0	66.67%	100.00%	9		
5	PRELIMINARY PLAT #5	0	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00%	0.00%	32	68.09%	15	0	31.91%	100.00%	47		
6	PRELIMINARY PLAT #6	0	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00%	0.00%	0	0.00%	26	0	100.00%	100.00%	26		
7	SITE PLAN #7	0	0	0.00%	0	0	0	0.00%	38	42.70%	18	20.22%	0	0.00%	20.22%	62.92%	22	24.72%	4	7	12.36%	37.08%	89		
8	PRELIMINARY PLAT #8	0	0	0.00%	72	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00%	41.38%	40	22.99%	62	0	35.63%	58.62%	174		
9	PRELIMINARY PLAT #9	0	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00%	0.00%	0	0.00%	0	0	0.00%	0.00%	0		
10	PRELIMINARY PLAT #10	0	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00%	0.00%	0	0.00%	92	84	100.00%	100.00%	176		
11	PRELIMINARY PLAT #11	0	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00%	0.00%	0	0.00%	0	0	0.00%	0.00%	0		
12	SITE PLAN #12	0	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00%	0.00%	0	0.00%	0	0	0.00%	0.00%	0		
13	SITE PLAN #13	0	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00%	0.00%	0	0.00%	13	0	100.00%	100.00%	13		
14	SITE PLAN #14	0	0	0.00%	0	0	0	0.00%	62	28.44%	0	0.00%	0	0.00%	0.00%	28.44%	81	37.16%	75	0	34.40%	71.56%	218		
15	SITE PLAN #15	0	0	0.00%	0	0	122	29.26%	0	0.00%	59	14.15%	207	49.64%	43.41%	93.05%	29	6.95%	0	0	0.00%	0.00%	417		
16	SITE PLAN #16	0	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	46	16.85%	0.00%	16.85%	113	41.39%	114	0	41.76%	83.15%	273		
17	SITE PLAN #17	0	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00%	0.00%	57	58.76%	40	0	41.24%	100.00%	97		
18	NEIGHBORHOOD PARK #2	0	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00%	0.00%	0	0.00%	0	0	0.00%	0.00%	0		
19	32ND AVENUE	0	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00%	0.00%	0	0.00%	0	0	0.00%	0.00%	0		
21	SITE PLAN #21	0	0	0.00%	96	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00%	0.00%	30	0.00%	42	10	0.00%	0.00%	178		
25	SITE PLAN #25	0	0	0.00%	0	0	0	0.00%	76	56.72%	12	8.96%	0	0.00%	0.00%	65.67%	28	20.90%	15	3	13.43%	34.33%	134		
PA-4	NORTH - AREA A	0	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	143	0.00%	0.00%	0.00%	0	0.00%	0	0	0.00%	0.00%	143		
PA-5	NORTH - AREA A	0	0	0.00%	0	0	98	58.68%	0	0.00%	0	0.00%	69	41.32%	58.68%	100.00%	0	0.00%	0	0	0.00%	0.00%	167		
PA-6	NORTH - AREA A	0	0	0.00%	0	0	0	0.00%	0	0.00%	51	38.64%	0	0.00%	0.00%	38.64%	78	59.09%	3	0	51.36%	100.00%	132		
PA-12	NORTH - AREA A	0	0	0.00%	0	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0.00%	0.00%	106	100.00%	0	0	0.00%	0.00%	106		
PA-13	NORTH - AREA A	0	0	0.00%	0	0	0	0.00%	0	0.00%	41	25.15%	0	0.00%	25.15%	25.15%	7	4.29%	111	4	70.55%	74.85%	163		
PA-29	NORTH - AREA B	0	0	0.00%	0	0	0	0.00%	0	0.00%	51	30.36%	0	0.00%	0.00%	30.36%	114	67.86%	2	1	1.79%	69.64%	168		
PA-34	NORTH - AREA B	0	0	0.00%	68	0	0	0.00%	0	0.00%	11	7.14%	0	0.00%	7.14%	51.30%	75	48.70%	0	0	0.00%	0.00%	154		
PA-35	NORTH - AREA B	0	0	0.00%	0	0	0	0.00%	0	0.00%	1	0.54%	0	0.00%	0.54%	0.54%	95	51.08%	66	24	48.39%	99.46%	186		
PA-35.3	NORTH - AREA B	0	0	0.00%	0	0	0	0.00%	0	0.00%	2	2.74%	0	0.00%	2.74%	2.74%	19	26.03%	49	3	71.23%	97.26%	73		
PA-40	NORTH - AREA C	0	0	0.00%	0	0	0	0.00%	0	0.00%	172	48.86%	0	0.00%	48.86%	48.86%	142	40.34%	21	17	10.80%	51.14%	352		
PA-46	NORTH - AREA C	0	0	0.00%	96	0	0	0.00%	0	0.00%	36	7.71%	91	19.49%	7.71%	47.75%	153	32.76%	60	31	19.49%	52.25%	467		
Total		0	0	0.00%	332	0	220	5.15%	220	18.07%	454	10.63%	556	13.01%	15.78%	41.71%	1351	31.62%	951	188	26.66%	58.29%	4272		

- Notes:
1. Total number of units shall not exceed 12,487.
 2. Percentages of total are subject to the minimum/maximums as written under the FDP Urban Design Standards - Lot Standards.
 3. If no more than 35% of the total number of lots are small, the increased small lot percentage below does not apply. (Excludes master plan communities of less than 100 lots)
Up to 50 % of the total number of lots may be Small Lots.
No more than 35% of the total number of lots may be small front loaded.
No more than 60% of the total number of lots may be a single type as described in the Product Mix Section of Tab 10.
Groupings of small lots should be distributed throughout a master plan and site plan.
A minimum of 40% of the total number of lots must be standard or larger.
If a master plan includes 200 lots or more, a minimum 10% of the total number of lots must have a 60' minimum frontage and 6,000 sf of lot area.
 4. A maximum of 32% Multi-family allowed.
4 A maximum of 32% Multi-family allowed.

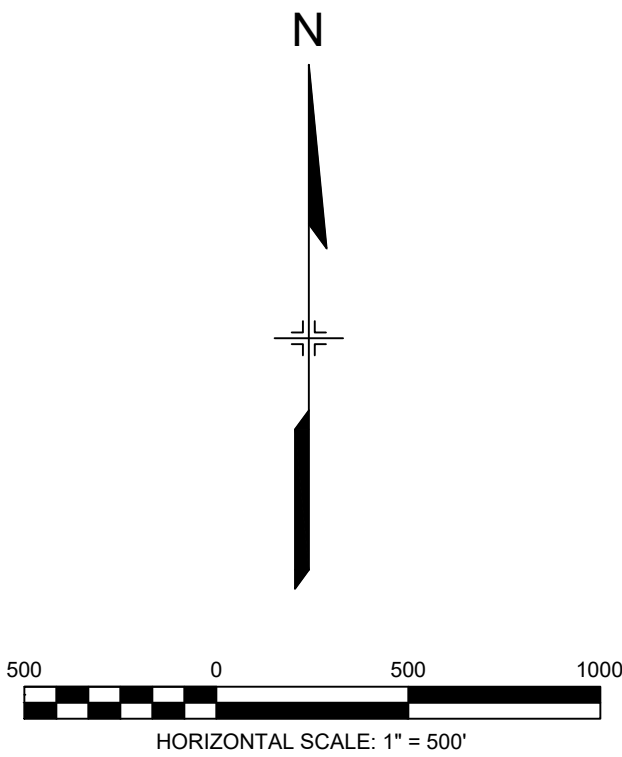
Filing/Site Plan Land Use Tracking Chart					Community Population Tracking Chart					Filing/Site Plan Land Use Tracking Chart				
Filing No.	Site Plan No.	Village	Acreage	No. Units	Filing	Site Plan	Population			Filing No.	Site Plan No.	Village	Acreage	No. Units
1	1	6	48.05	84	1	CONTEXTUAL SITE PLAN #1	223			1	1	6	48.05	84
2	2	6	61.6	226	2	CONTEXTUAL SITE PLAN #2	599			2	2	6	61.6	226
3	3	6	24.8	0	3	HIGHLAND CREEK NEIGHBORHOOD PARK	0			3	3	6	24.8	0
4	4	5	4.1	9	4	PRELIMINARY PLAT #4	24			4	4	5	4.1	9
5	5	5	17.68	47	5	PRELIMINARY PLAT #5	125			5	5	5	17.68	47
6	6	6	5.1	26	6	PRELIMINARY PLAT #6	69			6	6	6	5.1	26
7	7	3	16.7	89	7	SITE PLAN #7	236			7	7	3	16.7	89
8	8	5	37.66	174	8	PRELIMINARY PLAT #8	461			8	8	5	37.66	174
9	9	3	19.51	0	9	PRELIMINARY PLAT #9	0			9	9	3	13.57	0
10	10	4	61.98	176	10	PRELIMINARY PLAT #10	466			10	10	4	61.98	176
11	11	4	13.53	0	11	PRELIMINARY PLAT #11	0			11	11	4	13.53	0
12	12	4	66.04	0	12	SITE PLAN #12	0			12	12	4	84.39	0
13	13	5	2.14	13	13	SITE PLAN #13	34			13	13	5	2.14	13
14	14	7	49.1	218	14	SITE PLAN #14	578			14	14	7	49.1	218
15	15	4	43.14	417	15	SITE PLAN #15	1105			15	15	4	73.5	417
16	16	4	70.46	273	16	SITE PLAN #16	723			16	16	4	70.46	273
17	17	9	24.59	97	17	NEIGHBORHOOD PARK #2	0			17	17	9	24.59	97
18	18	9	4.46	0	18	32ND AVENUE	0			18	18	9	7.14	0
19	19	9	6.98	0	19	SITE PLAN #25	0			19	19	9	7.14	0
21	21	9	34.4	178	PA-4	NORTH - AREA A	355			PA-4	North - A	5	27.03	143
25	25	3	32.48	134	PA-5	NORTH - AREA A	379			PA-5	North - A	6	25.9	167
PA-4	North - A	5	14.8	143	PA-6	NORTH - AREA A	443			PA-6	North - A	6	25.59	132
PA-5	North - A	6	25.08	167	PA-12	NORTH - AREA A	0			PA-7	North - A	6	11.84	0
PA-6	North - A	6	24.75	132	PA-13	NORTH - AREA A	6	42.42	163	PA-12	North - A	6	25.28	106
PA-12	North - A	6	24.41	106	PA-29	NORTH - AREA B	7	34.77	168	PA-13	North - A	6	42.42	163
PA-13	North - A	6	41.53	163	PA-34	NORTH - AREA B	445			PA-29	North - B	7	34.77	168
AREA A ROADS, DRAINAGE & OPEN SPACE OUTSIDE OF RESIDENTIAL PLANNING AREAS	NORTH - A	1, 5, 6	26.33	0	PA-35	NORTH - AREA B	408			PA-32	North - B	7	2.78	0
					PA-40	NORTH - AREA C	1373			PA-34	North - B	7	30.05	154
					PA-46	NORTH - AREA C	933			PA-35	North - B	7	78.04	259
					Total		9691			PA-39	North - C	7	15.12	0
					Maximum Amount of Units Permitted				12487					
					Min./Max. Permitted				Total to Date	0				
					Multi-Family				3996	1782				
					Small Lot Total				6244	674				
					Small Lot Front-Loaded				4370	2490				
					Standard Total				4995					
Population Tracking Chart														
North Area C														
Product Type					Lot Totals		People Per Unit		Population					
Single-Family					4272		2.65		11321					
Multi-Family					0		2.50		0					
Transit Station Area					0		2.02		0					
Active Adult					0		1.58		0					
Total					4272				11321					

Parks, Recreation, and Open Space Tracking Chart (by Village)															
ISP No. / PA	Village	Site Plan No.	Filing No.	Total Population	Neighborhood Park			Community Park			Open Space				
					Dedication Required	Dedication Provided	Difference	Dedication Required	Dedication Provided	Difference	Dedication Required	Dedication Provided	Difference		
		ISP-01			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
		ISP-1 Am 01			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Subtotal					0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
9	1	OTHER - From FDP (Small Urban Park)			0	0.00	1.47	0.00	0.00	0.00	0.00	2.25	2.25		
1 & 2	1	OTHER - From FDP (Small Urban Park as measured for FDP); OS Unknown			0	0.00		0.00	0.00	0.00	0.00	2.89	2.89		
2	1	Mixed Use				2.11	0.00		0.00	0.00	0.00				
3	1	Placeholder, total population shown can be in all PAs in order to reach total units of 12,487, subject to individual planning area max; OS unknown				0.72									
10	1					3.00									
11	1			10465	31.40	2.27	19.26	11.51	0.00	-11.51	81.63	0.00	-81.63		
14	1					3.00									
17	1					1.17									
22	1	AAC			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Village 1 Subtotal - Future					10465	31.40	15.72	19.26	11.51	0.00	-11.51	81.63	5.14	-76.49	
2	2	Filing 23 - Warm Springs	23		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
57	2	Corporate - OS unknown			0	0.00	1.89	1.89	0.00	0.00	0.00	0.00	0.00		
63	2	Commercial - OS unknown			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
51	2	Open Space / Detention			0	0.00	0.00	0.00	0.00	0.00	0.00	5.65	5.65		
Village 2 Subtotal - Future					0	0.00	1.89	1.89	0.00	0.00	0.00	0.00	5.65	0.00	
PA-64.1	3	SITE PLAN #7	7	236	0.71	0.00	-0.71	0.26	0.00	-0.26	1.84	1.40	-0.44		
PA-64.1	3	PRELIMINARY PLAT #9	9	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
PA-64.1, 65.1	3	SITE PLAN #25	25	355	1.07	0.00	-1.07	0.39	0.00	-0.39	2.77	12.31	9.54		
Village 3 Subtotal - Current					591	1.77	0.00	-1.77	0.65	0.00	-0.65	4.61	13.71	9.10	
61.1	3	Open Space / Detention			0	0.00	0.00	0.00	0.00	0.00	0.00	14.07	14.07		
61.2	3	Open Space / Detention			0	0.00	0.00	0.00	0.00	0.00	0.00	4.54	4.54		
64.2	3	Future Residential			525	1.57	0.00	-1.57	0.58	0.00	-0.58	4.09	9.89	5.80	
65.2 & 65.3	3	Lennar Phase 1			599	1.80	0.00	-1.80	0.66	0.00	-0.66	4.67	6.91	2.24	
64.4	3	Included in Mixed Use above (PAs 2, 3, 10, 11, 14, 17); OS unknown			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
62	3	Trail Corridor			0	0.00	0.00	0.00	0.00	0.00	0.00	3.44	3.44		
Village 3 Subtotal - Future					1124	3.37	0.00	-3.37	1.24	0.00	-1.24	8.76	38.85	30.08	
PA-52.1, 55.1	4	PRELIMINARY PLAT #10	10	466	1.40	0.00	-1.40	0.51	0.00	-0.51	3.64	4.12	0.48		
	4	PRELIMINARY PLAT #11	11	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.86	9.86		
	4	SITE PLAN #12	12	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.18	57.18		
PA-52.2	4	SITE PLAN #15	15	1105	3.32	0.00	-3.32	1.22	0.00	-1.22	8.62	7.79	-0.83		
PA-52.2	4	SITE PLAN #16	16	723	2.17	0.00	-2.17	0.80	0.00	-0.80	5.64	3.27	-2.37		
Village 4 Subtotal - Current					2295	6.88	0.00	-6.88	2.52	0.00	-2.52	17.90	82.22	64.32	
60	4	PA 60 Neighborhood Park			0	0.00	8.09	8.09	0.00	0.00	0.00	0.00	0.00	0.00	
58	4	PA 58 Neighborhood Park			0	0.00	6.87	6.87	0.00	0.00	0.00	0.00	0.00	0.00	
53	4	Highlands Creek Open Space			0	0.00	0.00	0.00	0.00	0.00	0.00	17.04	17.04		
59	4	School			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
27.1	4	Highlands Creek Open Space / Detention			0	0.00	0.00	0.00	0.00	0.00	0.00	21.95	21.95		
56	4	Trail Corridor			0	0.00	0.00	0.00	0.00	0.00	0.00	3.03	3.03	0.00	
Village 4 Subtotal - Future					0	0.00	14.96	14.96	0.00	0.00	0.00	42.01	42.01	0.00	
PA-19.1	5	PRELIMINARY PLAT #4	4	24	0.07	0.00	-0.07	0.03	0.00	-0.03	0.19	0.00	-0.19		
PA-19.2, 19.3	5	PRELIMINARY PLAT #5	5	125	0.37	0.00	-0.37	0.14	0.00	-0.14	0.97	2.18	1.21		
PA-19.4	5	PRELIMINARY PLAT #8	8	461	1.38	0.00	-1.38	0.51	0.00	-0.51	3.60	1.23	-2.37		
	5	SITE PLAN #13	13	34	0.10	0.00	-0.10	0.04	0.00	-0.04	0.27	0.00	-0.27		
PA-26.1	5	NEIGHBORHOOD PARK #2	18	0	0.00	3.65	3.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
PA-4	5	NORTH - AREA A	NORTH - A	379	1.14	0.00	-1.14	0.42	0.00	-0.42	2.96	3.84	0.88		
Village 5 Subtotal - Current					1023	3.07	3.65	0.58	1.13	0.00	-1.13	7.98	7.25	-0.73	
23	5	Open Space			0	0.00	0.00	0.00	0.00	0.00	0.00	6.61	6.61	0.00	
26.2	5	Open Space			0	0.00	0.00	0.00	0.00	0.00	0.00	2.67	2.67	0.00	
Village 5 Subtotal - Future					0	0.00	0.00	0.00	0.00	0.00	0.00	9.28	9.28	0.00	
PA-21.1	6	CONTEXTUAL SITE PLAN #1	1	223	0.67	0.00	-0.67	0.24	0.00	-0.24	1.74	2.37	0.63		
PA-21.2	6	CONTEXTUAL SITE PLAN #2	2	599	1.80	0.00	-1.80	0.66	0.00	-0.66	4.67	6.60	1.93		
PA-15	6	HIGHLAND CREEK NEIGHBORHOOD PARK	3	0	0.00	7.50	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
PA-21.4	6	PRELIMINARY PLAT #6	6	69	0.21	0.00	-0.21	0.08	0.00	-0.08	0.54	0.00	-0.54		
PA-5	6	NORTH - AREA A	NORTH - A	443	1.33	0.00	-1.33	0.49	0.00	-0.49	3.45	3.27	-0.18		
PA-6	6	NORTH - AREA A	NORTH - A	350	1.05	0.00	-1.05	0.38	0.00	-0.38	2.73	1.91	-0.82		
PA-7	6	NORTH - AREA A	NORTH - A	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.58	9.58	0.00	
PA-12	6	NORTH - AREA A	NORTH - A	281	0.84	0.00	-0.84	0.31	0.00	-0.31	2.19	3.20	1.01		
PA-13	6	NORTH - AREA A	NORTH - A	432	1.30	0.00	-1.30	0.48	0.00	-0.48	3.37	4.14	0.77		
PA-24	6	AQUATIC CENTER PARK			0	0.00	3.78	3.78	0.00	0.00	0.00	0.00	0.00	0.00	
Village 6 Subtotal - Current					2396	7.19	11.28	4.09	2.64	0.00	-2.64	18.69	31.07	12.38	
8	6	PA 8			0	0.00	5.02	5.02	0.00	0.00	0.00	0.00	0.00	0.00	
20	6	Trail Corridor			0	0.00	0.00	0.00	0.00	0.00	0.00	2.37	2.37	0.00	
42	6	Trail Corridor			0	0.00	0.00	0.00	0.00	0.00	0.00	1.93	1.93	0.00	
28	6	Detention pond - OS unknown			0	0.00	0.00	0.00	0.00	0.00	0.00	3.16	3.16	0.00	
Village 6 Subtotal - Future					0	0.00	5.02	5.02	0.00	0.00	0.00	7.46	7.46	0.00	
PA-21.5, 21.6, 38	7	SITE PLAN #14	14	578	1.73	0.00	-1.73	0.64	0.00	-0.64	4.51	4.75	0.24		
PA-29	7	NORTH - AREA B	NORTH - B	445	1.34	0.00	-1.34	0.49	0.00	-0.49	3.47	4.36	0.89		
PA-32	7	NORTH - AREA B	NORTH - B	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.38	3.38	0.00	
PA-34	7	NORTH - AREA B	NORTH - B	408	1.22	0.00	-1.22	0.45	0.00	-0.45	3.18	6.00	2.82		
PA-35.1, 35.2	7	NORTH - AREA B	NORTH - B	493	1.48	0.00	-1.48	0.54	0.00	-0.54	3.84	4.00	0.16		
PA-35.3	7	NORTH - AREA B	NORTH - B	193	0.58	0.00	-0.58	0.21	0.00	-0.21	1.51	2.10	0.59		
PA-39	7	NORTH - AREA C	NORTH - C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.71	13.71	0.00	
PA-44	7	NORTH - AREA C	NORTH - C	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.50	7.50	0.00	
Village 7 Subtotal - Current					2117	6.35	0.00	-6.35	2.33	0.00	-2.33	16.52	45.80	29.29	
36	7	School			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
43	7	PA-43 Community Park			0	0.00	0.00	0.00	0.00	35.52	35.52	0.00	4.48	4.48	
45	7	PA-45 Neighborhood Park			0	0.00	10.09	10.09	0.00	0.00	0.00	0.00	0.00	0.00	
32	7	PA-32 Tract A			0	0.00	0.00	0.00	0.00	0.00	0.00	3.78	3.78	0.00	
Village 7 Subtotal - Future					0	0.00	10.09	10.09	0.00	35.52	35.52	0.00	8.26	8.26	0.00
PA-40	8	NORTH - AREA C	PA-40	933	2.80	0.00	-2.80	1.03	0.00	-1.03	7.28	6.81	-0.46		
PA-46	8	NORTH - AREA C	PA-46	1238	3.71	0.00	-3.71	1.36	0.00	-1.36	9.65	14.06	4.41		
Village 8 Subtotal - Current					2170	6.51	0.00	-6.51	2.39	0.00	-2.39	16.93	20.87	3.94	
PA-37.1	8	PA-37.1		685	2.06	0.00	-2.06	0.75	0.00	-0.75	5.34	3.61	-1.73		
PA-37.2	8	PA-37.2		1224	3.67	0.00	-3.67	1.35	0.00	-1.35	9.55	7.65	-1.90		
PA-37.3	8	PA-37.3		1373	4.12	0.00	-4.12	1.51	0.00	-1.51	10.71	7.70	-3.01		
PA-48	8	PA-48 Future Single Family	PA-48	188	0.56	0.00	-0.56	0.21	0.00	-0.21	1.47	0.00	-1.47		
68	8	PA 68 NP		0	0.00	6.21	6.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
33	8	PA 33 NP		0	0.00	7.66	7.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
31	8	Open Space		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.03	9.03	0.00	
47	8	Open Space		0	0.00	0.00</									



- LEGEND
- PLANNING AREA BOUNDARY
 - * ACCESS POINT AT PLANNING AREA

NOTE: PHASING PLANS PROVIDED TO INDICATE ALL OFFSITE INFRASTRUCTURE IMPROVEMENTS REQUIRED TO SUPPORT EACH PLANNING AREA. IMPROVEMENTS SHOWN ALLOW FOR FLEXIBILITY IN THE ULTIMATE PHASING OF THE DEVELOPMENT.



THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: OVERALL PHASING
INDEX PLAN
DATE: AUGUST, 2024

PREPARED BY:
Matrix
Excellence by Design
707 17th Street, Suite 3150
Denver, Colorado 80202
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www.matrixdesigngroup.com



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SHEET: 08 OF 96



- LEGEND
- OFFSITE SANITARY IMPROVEMENTS
 - OFFSITE WATER IMPROVEMENTS
 - OFFSITE STORM SEWER IMPROVEMENTS
 - PLANNING AREA BOUNDARY
 - OFFSITE ROADWAY IMPROVEMENTS
 - WATER QUALITY/DETENTION IMPROVEMENTS

REPEATED COMMENT FROM 2ND REVIEW: For this site plan to be approved, a PIP update will be required. See PIP pages 14-16 and plan sheet S20PER COMMENT RESPONSE: Acknowledged

PIP Amendment has been approved

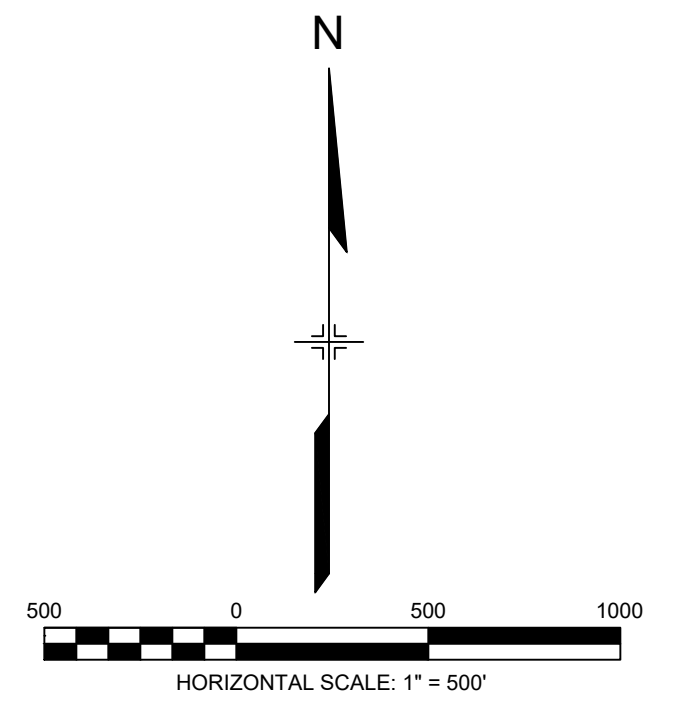
PA-44 is shown where Pond 8571 is on the previous sheet
PA-44 label has been relocated. It is both Pond 8571 and PA-44

Fire hydrants shall be included along with the construction of the water main and roadways. Please revise to include fire hydrants.

Fire Hydrants are now shown on Phasing Plan

- PA-40.1 OFFSITE INFRASTRUCTURE IMPROVEMENTS
- ROADWAY
CONSTRUCT E. 38TH PARKWAY FROM N. RESERVE BLVD TO AEROTROPOLIS PKWY.
CONSTRUCT N. NEWBERN STREET FROM E. 38TH PARKWAY TO THE INTERSECTION OF N. RESERVE BLVD AND N. LITTLE RIVER STREET.
CONSTRUCT N. RESERVE BLVD (RSN 1787534) FROM E. 42ND AVENUE TO N. NEWBERN STREET
CONSTRUCT N. LITTLE RIVER STREET FROM N. RESERVE BLVD TO E. 48TH AVENUE.
- STORM SEWER
POND 5713A, 5713B, 5717, 8571
- SANITARY SEWER
CONSTRUCT SANITARY SEWER IN E. 38TH PARKWAY FROM N. RESERVE BLVD TO N. NEWBERN STREET.
CONSTRUCT SANITARY SEWER IN N. NEWBERN STREET FROM E. 38TH PARKWAY TO THE INTERSECTION OF N. RESERVE BLVD AND N. LITTLE RIVER STREET.
- WATER MAIN
CONSTRUCT WATER MAIN IN E. 38TH PARKWAY FROM N. RESERVE BLVD TO AEROTROPOLIS PKWY.
CONSTRUCT WATER MAIN IN AEROTROPOLIS PKWY FROM 38TH PARKWAY TO E. 48TH AVENUE.
CONSTRUCT WATER MAIN IN E. 48TH AVENUE FROM AEROTROPOLIS PKWY TO N. LITTLE RIVER STREET
CONSTRUCT WATER MAIN IN N. RESERVE BLVD FROM E. 42TH AVENUE TO N. LITTLE RIVER STREET.
CONSTRUCT WATER MAIN IN N. NEWBERN STREET FROM E. 38TH PARKWAY TO THE INTERSECTION OF N. RESERVE BLVD AND N. LITTLE RIVER STREET.
CONSTRUCT WATER MAIN IN N. LITTLE RIVER STREET FROM N. RESERVE BLVD TO E. 48TH AVENUE.

NOTE: PHASING PLANS PROVIDED TO INDICATE ALL OFFSITE INFRASTRUCTURE IMPROVEMENTS REQUIRED TO SUPPORT EACH PLANNING AREA. IMPROVEMENTS SHOWN ALLOW FOR FLEXIBILITY IN THE ULTIMATE PHASING OF THE DEVELOPMENT.



THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: PHASING PLAN

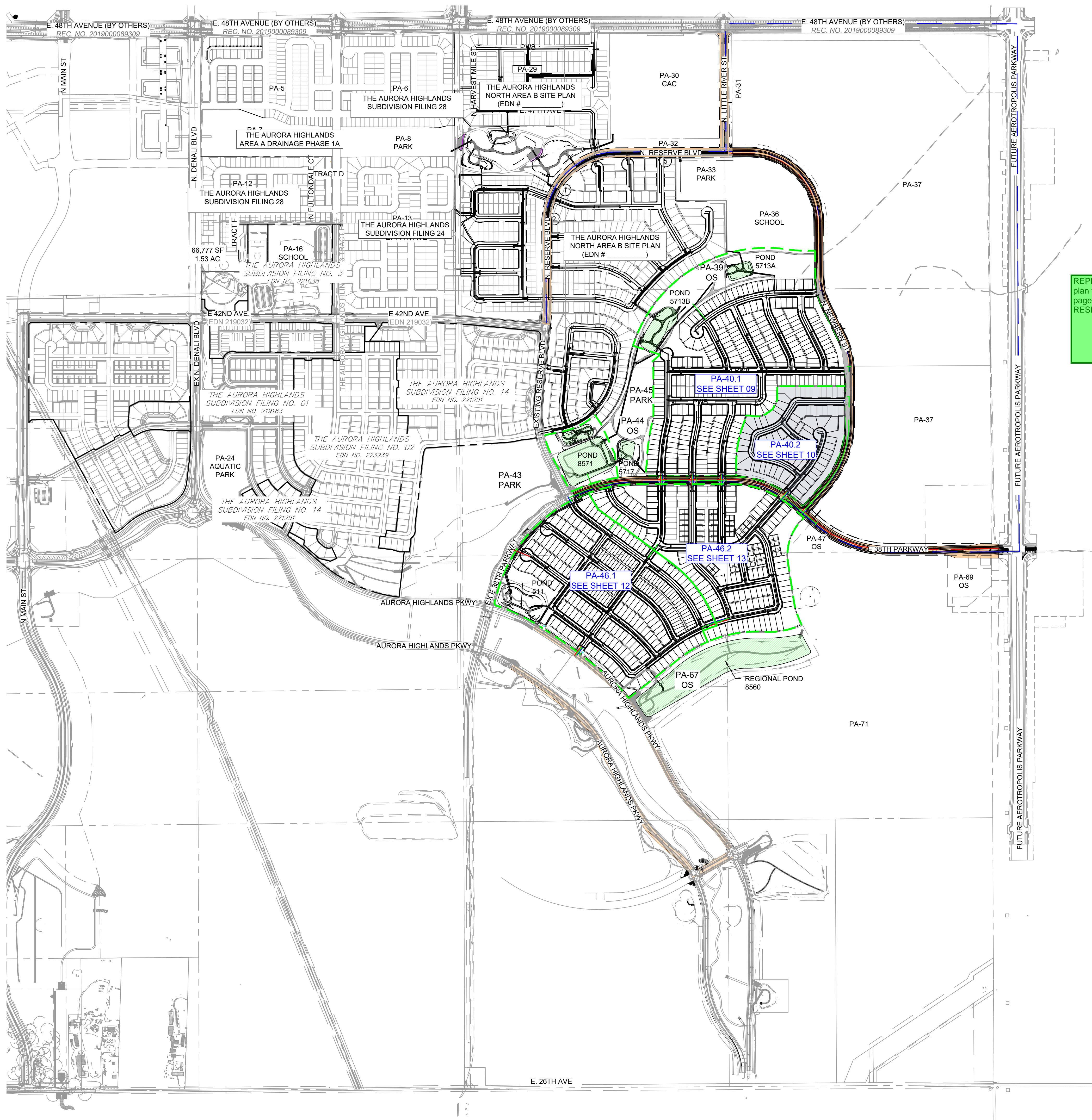
DATE: AUGUST, 2024

PREPARED BY:

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- LEGEND
- OFFSITE SANITARY IMPROVEMENTS
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REPEATED COMMENT FROM 2ND REVIEW: For this site plan to be approved, a PIP update will be required. See PIP pages 14-16 and plan sheet S20PER COMMENT RESPONSE: Acknowledged

PIP Acknowledged and PIP update required

PA-40.2 OFFSITE INFRASTRUCTURE IMPROVEMENTS

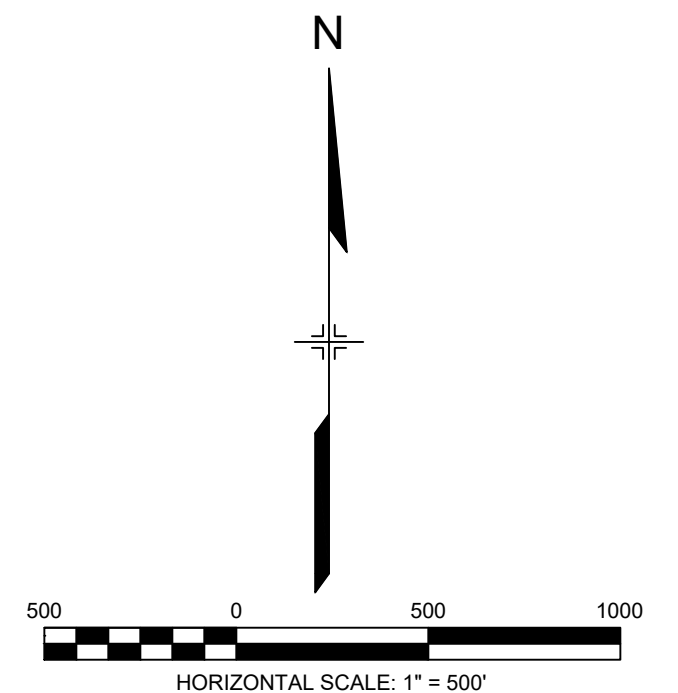
ROADWAY
CONSTRUCT E. 38TH PARKWAY FROM N. RESERVE BLVD TO N. NEWBERN STREET.
CONSTRUCT N. NEWBERN STREET FROM E. 38TH PARKWAY TO THE INTERSECTION OF N. RESERVE BLVD AND N. LITTLE RIVER STREET.
CONSTRUCT N. RESERVE BLVD (RSN 1787534) FROM E. 42ND AVENUE TO N. NEWBERN STREET

STORM SEWER
POND 5717, 8571, 8560

SANITARY SEWER
CONSTRUCT SANITARY SEWER IN E. 38TH PARKWAY FROM N. RESERVE BLVD TO N. NEWBERN STREET.
CONSTRUCT SANITARY SEWER IN N. NEWBERN STREET FROM E. 38TH PARKWAY TO THE INTERSECTION OF N. RESERVE BLVD AND N. LITTLE RIVER STREET.

WATER MAIN
CONSTRUCT WATER MAIN IN E. 38TH PARKWAY FROM N. RESERVE BLVD TO AEROTROPOLIS PKWY.
CONSTRUCT WATER MAIN IN AEROTROPOLIS PKWY FROM 38TH PARKWAY TO E. 48TH AVENUE.
CONSTRUCT WATER MAIN IN E. 48TH AVENUE FROM AEROTROPOLIS PKWY TO N. LITTLE RIVER STREET.
CONSTRUCT WATER MAIN IN N. RESERVE BLVD FROM E. 42ND AVENUE TO N. LITTLE RIVER STREET.
CONSTRUCT WATER MAIN IN N. NEWBERN STREET FROM E. 38TH PARKWAY TO THE INTERSECTION OF N. RESERVE BLVD AND N. LITTLE RIVER STREET.
CONSTRUCT WATER MAIN IN N. LITTLE RIVER STREET FROM N. RESERVE BLVD TO E. 48TH AVENUE.

NOTE: PHASING PLANS PROVIDED TO INDICATE ALL OFFSITE INFRASTRUCTURE IMPROVEMENTS REQUIRED TO SUPPORT EACH PLANNING AREA. IMPROVEMENTS SHOWN ALLOW FOR FLEXIBILITY IN THE ULTIMATE PHASING OF THE DEVELOPMENT.

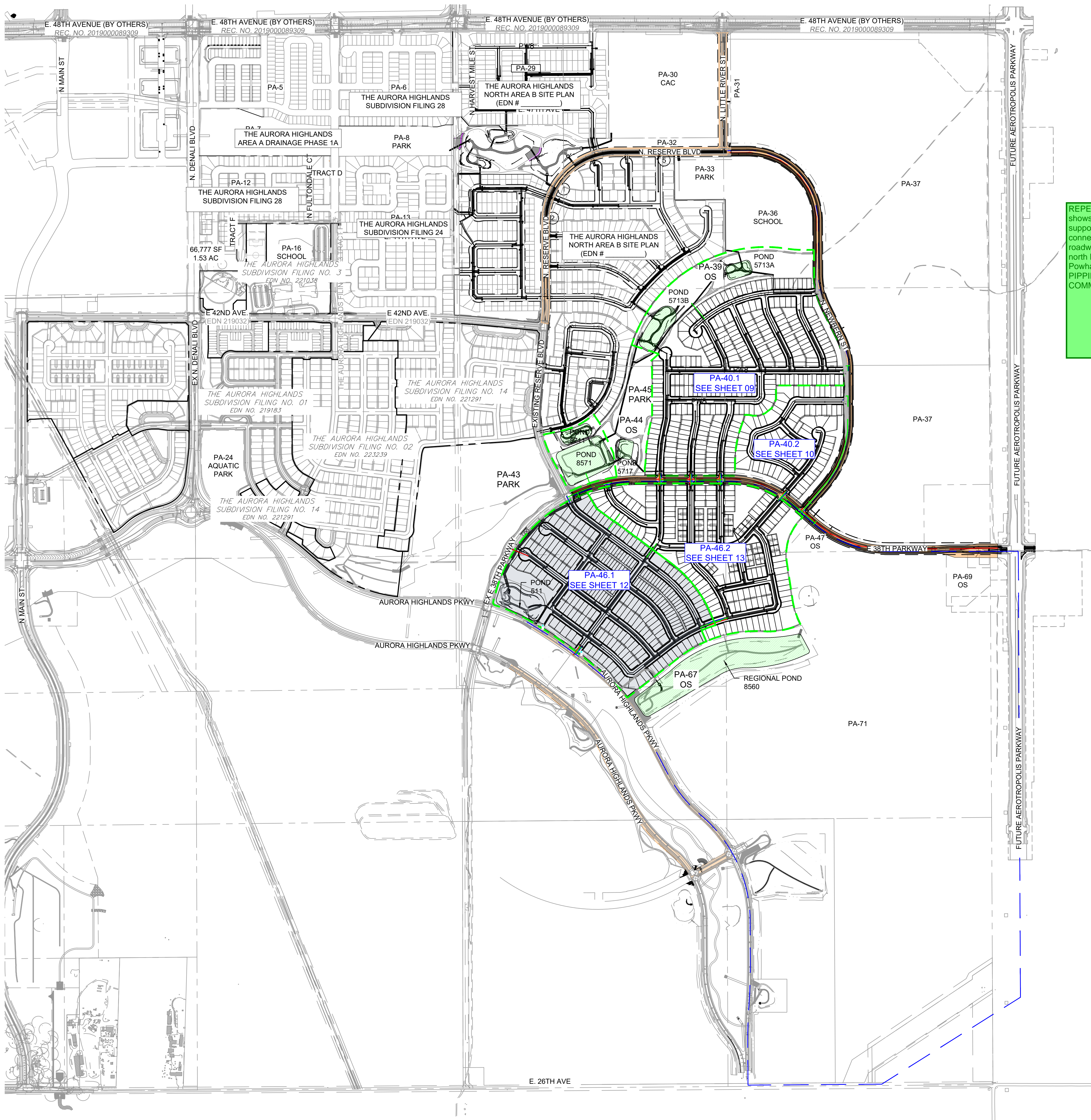


THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: PHASING PLAN
DATE: AUGUST, 2024
PREPARED BY:
Matrix
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Denver, Colorado 80202
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www.matrixdesigngroup.com



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LEGEND

- OFFSITE SANITARY IMPROVEMENTS
- OFFSITE WATER IMPROVEMENTS
- OFFSITE STORM SEWER IMPROVEMENTS
- PLANNING AREA BOUNDARY
- OFFSITE ROADWAY IMPROVEMENTS
- WATER QUALITY/DETENTION IMPROVEMENTS

REPEATED COMMENT FROM 2ND REVIEW. Current PIP shows section 29 includes PA 46. The roadways required to support development of section 29 includes the road connecting I-70 to 38th Ave via Powhatan Road, complete roadway section of TAH Parkway from 38th Ave to 26th Ave, north half of 26th from the line dividing sections 29 and 30 to Powhatan Rd. See pages 19-21 and plan sheet S29 of the PIPPIP will need to be updated for site plan approval. PER COMMENT RESPONSE: Acknowledged

PIP Amendment has been approved

PA-46.1 OFFSITE INFRASTRUCTURE IMPROVEMENTS

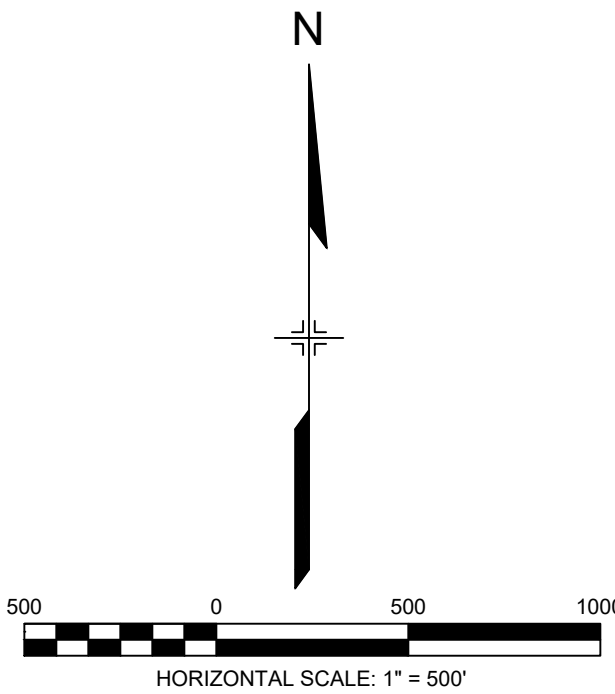
ROADWAY
CONSTRUCT THE AURORA HIGHLANDS PARKWAY PHASE 2 FROM E. 38TH PARKWAY TO E. 32 AVENUE.
CONNECT TO EXISTING E. 38TH PARKWAY ON THE WEST.

STORM SEWER
POND 511, 8571, 8560

SANITARY SEWER
CONNECT TO THE EXISTING SANITARY SEWER IN E. 38TH PARKWAY.
CONNECT TO THE EXISTING SANITARY SEWER IN THE AURORA HIGHLANDS PARKWAY.

WATER MAIN
CONSTRUCT WATER MAIN IN THE AURORA HIGHLANDS PARKWAY FROM E. 38TH PARKWAY TO E. 26TH AVENUE.
CONSTRUCT WATER MAIN IN E. 26TH AVENUE FROM THE AURORA HIGHLANDS PARKWAY TO AEROTROPOLIS PKWY.
CONSTRUCT WATER MAIN IN AEROTROPOLIS PKWY FROM E. 26TH AVENUE TO E. 38TH PARKWAY.
CONSTRUCT WATER MAIN IN E. 38TH PARKWAY FROM AEROTROPOLIS PKWY TO N. RESERVE BLVD.

NOTE: PHASING PLANS PROVIDED TO INDICATE ALL OFFSITE INFRASTRUCTURE IMPROVEMENTS REQUIRED TO SUPPORT EACH PLANNING AREA. IMPROVEMENTS SHOWN ALLOW FOR FLEXIBILITY IN THE ULTIMATE PHASING OF THE DEVELOPMENT.
PLANNING AREA 46.2 MUST BE CONSTRUCTED PRIOR TO PLANNING AREA 46.1.



THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: PHASING PLAN

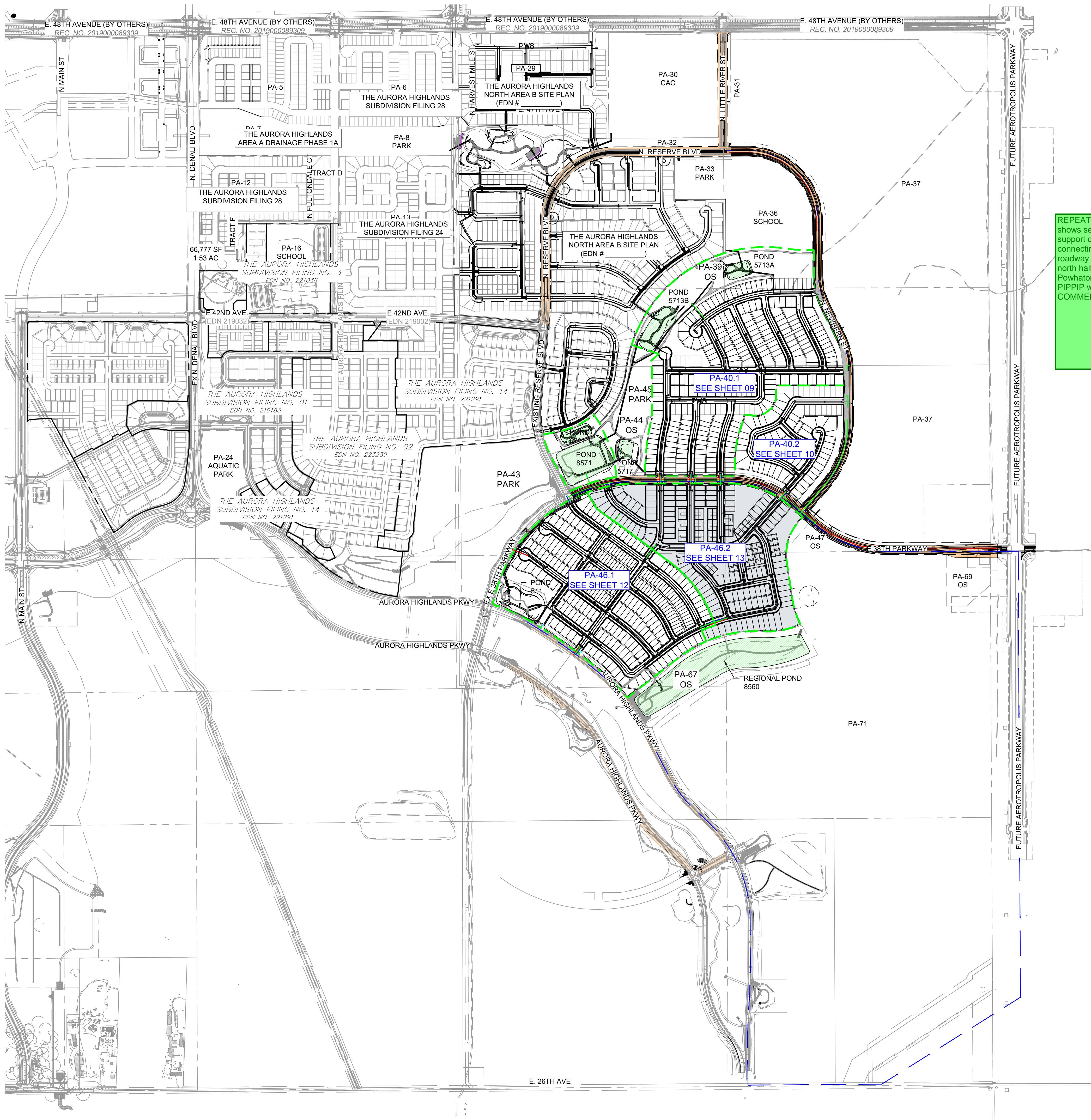
DATE: AUGUST, 2024

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PIP Amendment has been approved

PA-46.2 OFFSITE INFRASTRUCTURE IMPROVEMENTS

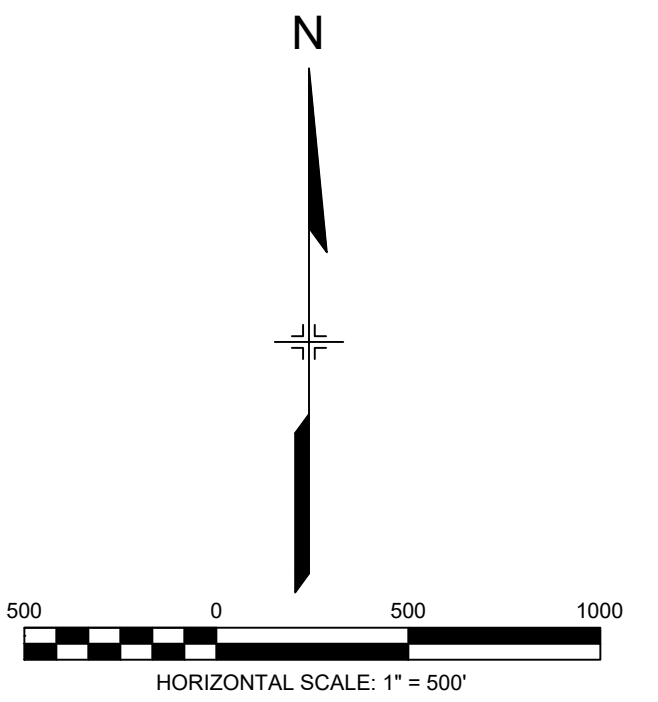
ROADWAY
CONSTRUCT E. 38TH PARKWAY FROM N. RESERVE BLVD TO N. NEWBERN STREET.
CONSTRUCT N. NEWBERN STREET FROM E. 38TH PARKWAY TO THE INTERSECTION OF N. RESERVE BLVD AND N. LITTLE RIVER STREET.
CONSTRUCT N. RESERVE BLVD (RSN 1787534) FROM E. 42ND AVENUE TO N. NEWBERN STREET.

STORM SEWER
POND 5717, 8571, 8560

SANITARY SEWER
CONSTRUCT SANITARY SEWER IN E. 38TH PARKWAY FROM N. RESERVE BLVD TO N. NEWBERN STREET.
CONSTRUCT SANITARY SEWER IN N. NEWBERN STREET FROM E. 38TH PARKWAY TO THE INTERSECTION OF N. RESERVE BLVD AND N. LITTLE RIVER STREET.

WATER MAIN
CONSTRUCT WATER MAIN IN THE AURORA HIGHLANDS PARKWAY FROM 38TH PARKWAY TO E. 26TH AVENUE.
CONSTRUCT WATER MAIN IN E. 26TH AVENUE FROM THE AURORA HIGHLANDS PARKWAY TO AEROTROPOLIS PKWY.
CONSTRUCT WATER MAIN IN AEROTROPOLIS PKWY FROM E. 26TH AVENUE TO 38TH PARKWAY.
CONSTRUCT WATER MAIN IN E. 38TH PARKWAY FROM AEROTROPOLIS PKWY TO N. RESERVE BLVD.

NOTE: PHASING PLANS PROVIDED TO INDICATE ALL OFFSITE INFRASTRUCTURE IMPROVEMENTS REQUIRED TO SUPPORT EACH PLANNING AREA. IMPROVEMENTS SHOWN ALLOW FOR FLEXIBILITY IN THE ULTIMATE PHASING OF THE DEVELOPMENT. PLANNING AREA 40.1/2 MUST BE CONSTRUCTED PRIOR TO PLANNING AREA 46.2



THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: PHASING PLAN

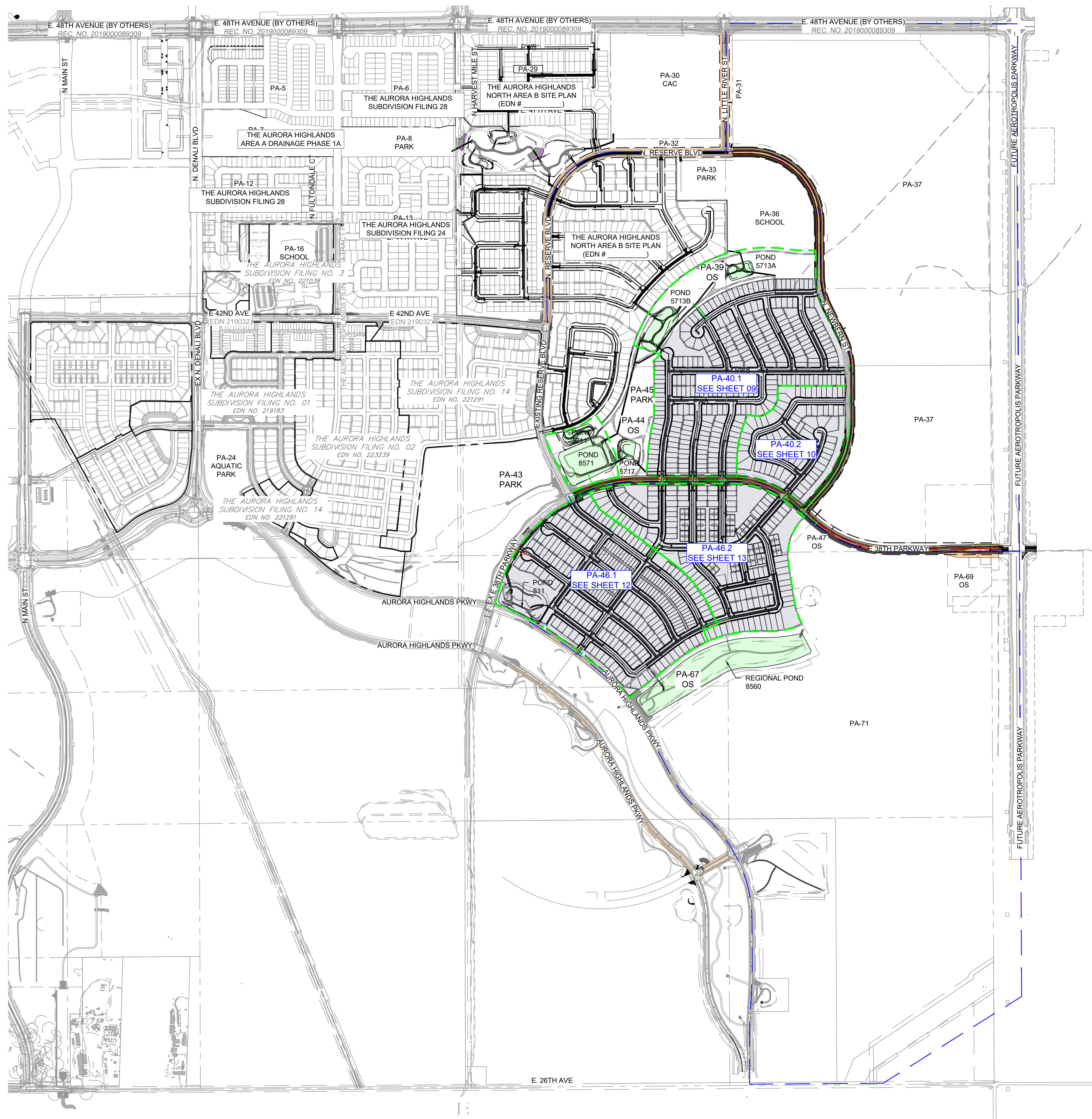
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LEGEND

- OFFSITE SANITARY IMPROVEMENTS
- OFFSITE WATER IMPROVEMENTS
- OFFSITE STORM SEWER IMPROVEMENTS
- PLANNING AREA BOUNDARY
- OFFSITE ROADWAY IMPROVEMENTS
- WATER QUALITY/DETENTION IMPROVEMENTS

NOTE: PHASING PLANS PROVIDED TO INDICATE ALL OFFSITE INFRASTRUCTURE IMPROVEMENTS REQUIRED TO SUPPORT EACH PLANNING AREA. IMPROVEMENTS SHOWN ALLOW FOR FLEXIBILITY IN THE ULTIMATE PHASING OF THE DEVELOPMENT.

N

500 0 500 1000

HORIZONTAL SCALE: 1" = 500'

THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: PHASING PLAN

DATE: AUGUST, 2024

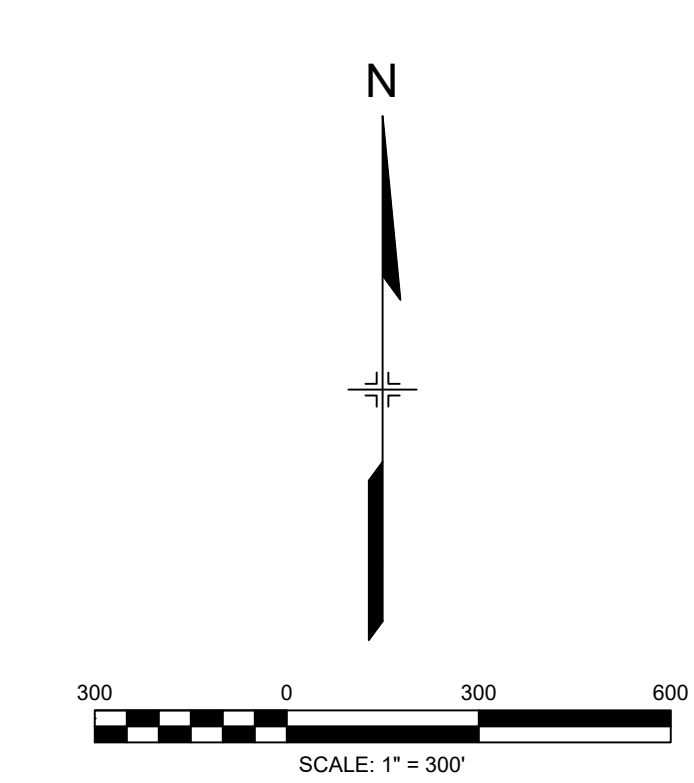
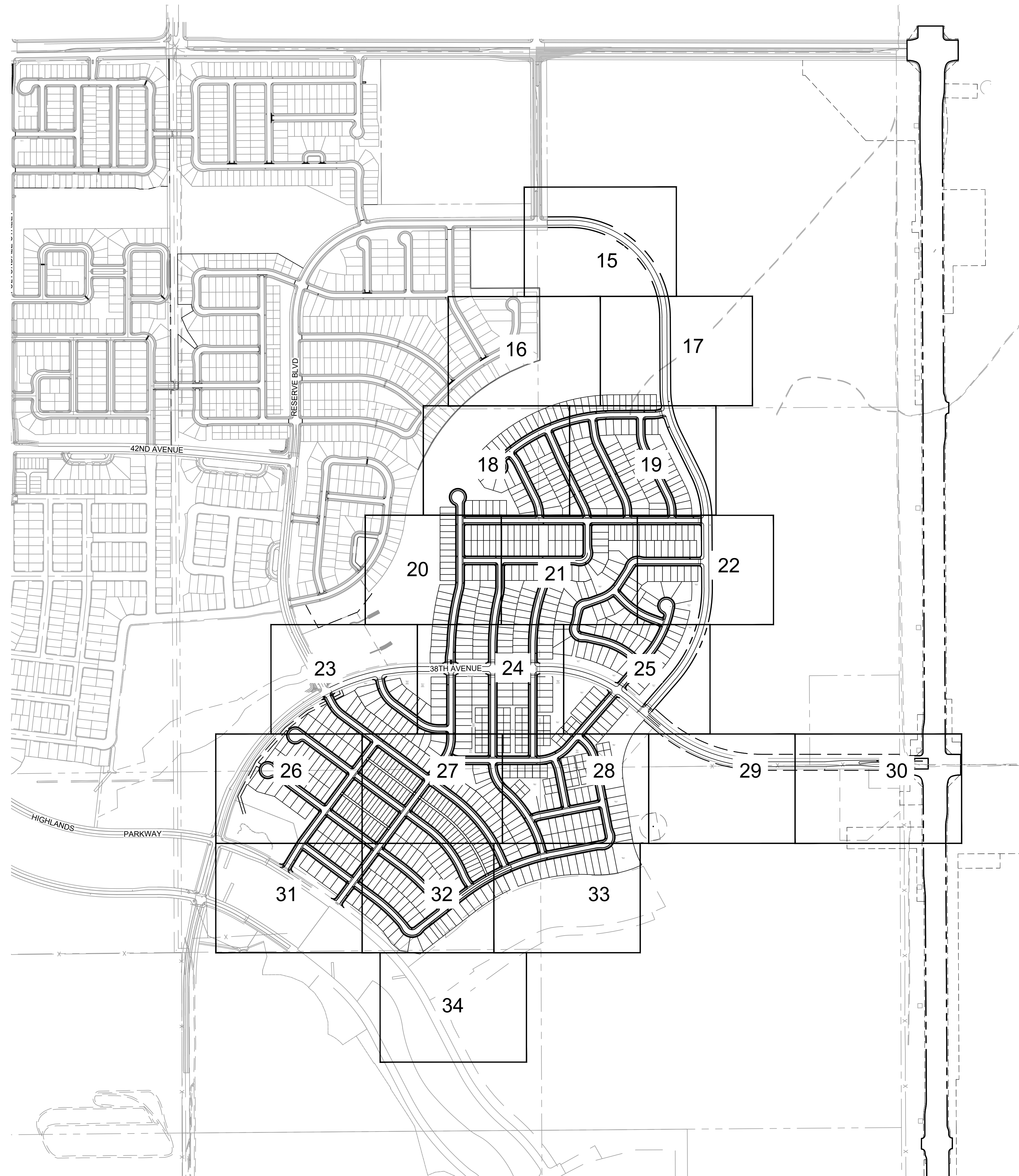
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Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com



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THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: OVERALL SITE INDEX PLAN
DATE: AUGUST, 2024

PREPARED BY:
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SHEET: 14 OF 96

N LITTLE RIVER ST

EXISTING FIRE HYDRANT

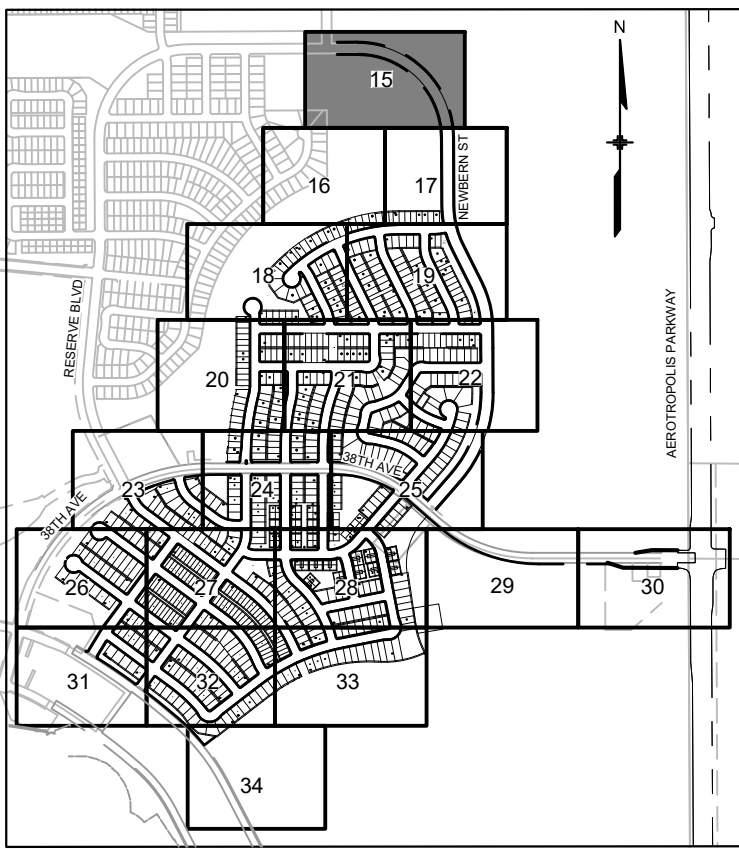
NOTE: THE AURORA HIGHLANDS
NORTH AREA B SITE PLAN
CASE # 2022-4027-00

N RESEVRE BULD

PA-37
RESIDENTIAL

R-2 ZONE
FUTURE
DEVELOPMENT

CENTERLINE CURVE TABLE		
CURVE #	ARC LENGTH	RADIUS
C18	1099.56	700.00'



KEY MAP
SCALE: 1" = 1200'

LEGEND

- PROPOSED RIGHT-OF-WAY
- PROPOSED CENTERLINE
- PROPOSED EASEMENT
- RIGHT SIGHT TRIANGLE
- LEFT SIGHT TRIANGLE
- SITE LIMITS
- 4' METAL SCREEN FENCE (DETAIL 07 / SHEET 70)
- 6' MASONRY WALL (DETAIL 08 / SHEET 70)
- 4' SPLIT RAIL FENCE (DETAIL 06 / SHEET 70)
- PROPOSED FIRE HYDRANT
- EXISTING FIRE HYDRANT
- PROPOSED SL1 PUBLIC STREET LIGHT (20' TAPERED POLE)
- PROPOSED SL3 PUBLIC STREET LIGHT (25' TAPERED POLE)
- UTILITY EASEMENT
- GAS EASEMENT
- ACCESS EASEMENT
- LOT NUMBER
- BLOCK NUMBER

- 1. 30"x30" R1-1 STOP SIGN WITH STREET NAME SIGN
- 2. 24"x30" R4-7 KEEP RIGHT SIGN
- 3. 24"x30" R2-1 SPEED LIMIT SIGN
- 4. WIDTH VARIES x 8" STREET NAME SIGN
- 5. 30"x30" R3-7R RIGHT LANE MUST TURN RIGHT SIGN
- 6. 36" W11-2 PEDESTRIAN CROSSING SIGN
- 7. 24"x12" W16-7P(L) DIAGONAL LEFT ARROW SIGN
- 8. 24"x12" W16-7P(R) DIAGONAL RIGHT ARROW SIGN
- 9. 36"x12" R6-1(R) ONE WAY RIGHT SIGN
- 10. 30"x36" R3-7R RIGHT LANE MUST TURN RIGHT SIGN

- NOTES:
- TANGENT LENGTHS AND CURVE RADII INFORMATION PROVIDED ONLY TO INDICATE MINIMUM DESIGN CRITERIA IS MET.
 - CURB CORNERS 20' FLOWLINE RADIUS UNLESS NOTED OTHERWISE.
 - ALL CUL-DE-SACS ARE TO BE LESS THAN 500' IN LENGTH. IF ANY CUL-DE-SAC EXCEEDS 500', A SECONDARY EMERGENCY ACCESS WILL BE PROVIDED.
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 - PUBLIC ACCESS EASEMENTS TO BE PROVIDED AT TIME OF PLAT FOR ALL PRIVATE ROADWAYS.
 - STREET LIGHT LOCATIONS ARE CONCEPTUAL. FINAL STREET LIGHT LOCATIONS WILL BE DETERMINED BY PHOTOMETRIC ANALYSIS SUBMITTED WITH THE LIGHTING PLAN SUBMITTED WITH THE CIVIL PLANS.

40 0 40 80
SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: SITE PLAN

DATE: AUGUST, 2024

PREPARED BY:

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SHEET: 15 OF 96

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MATCHLINE - SEE SHEET 16

MATCHLINE - SEE SHEET 17

NOTE: THE AURORA HIGHLANDS
NORTH AREA B SITE PLAN
CASE # 2022-4027-00

TRACT AA

35

PA-36
SCHOOL

R-2 ZONE
FUTURE
DEVELOPMENT

R=665.00'
L=1044.58'
Δ=90°00'00"

R=743.00'
L=1167.10'
Δ=90°00'00"

10' U.E.

6' SDWK

14' SDWK

10' U.E.

4" WHITE PARKING STRIPE

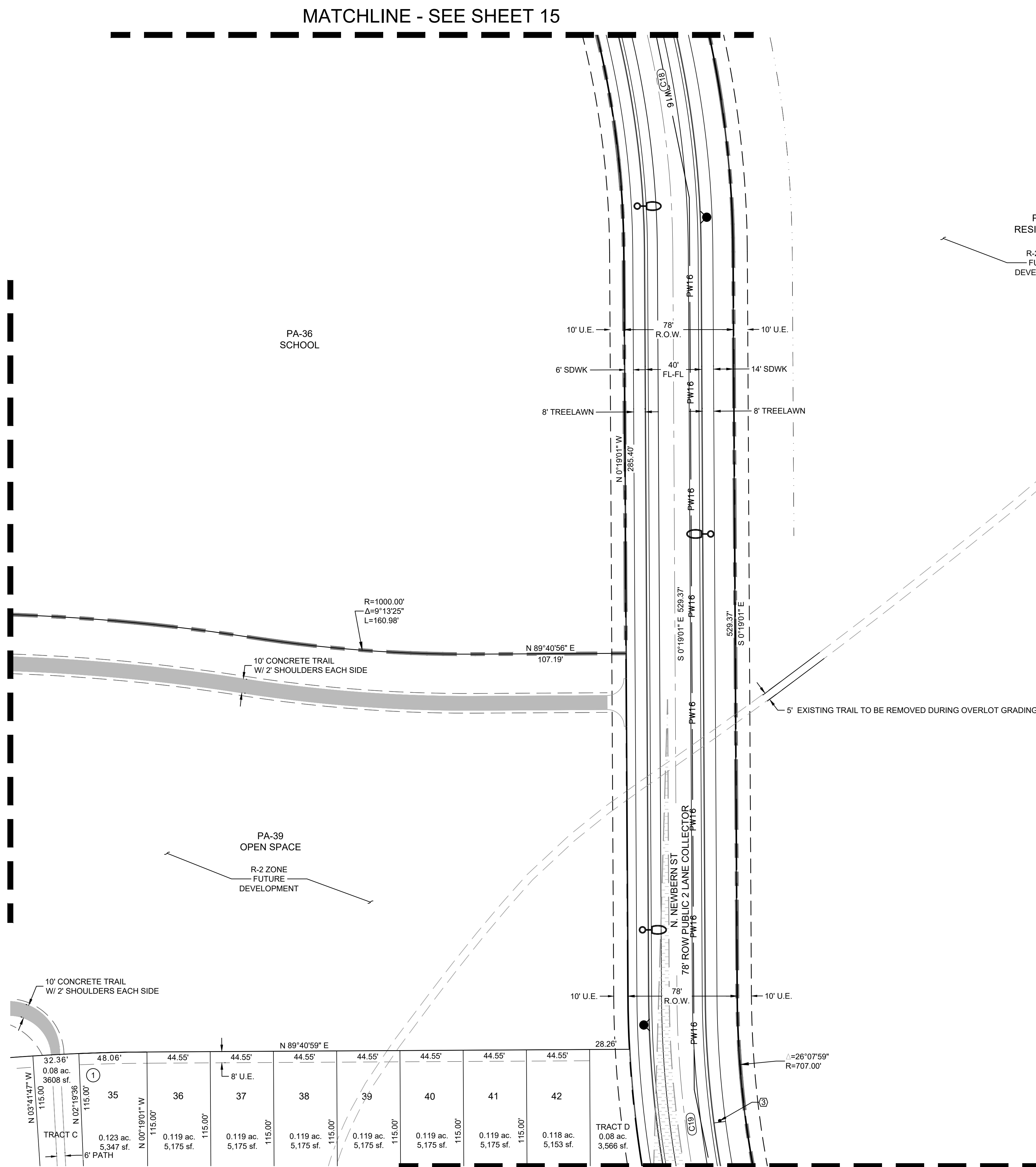
N NEWBERN ST
78' ROW PUBLIC 2 LANE COLLECTOR

N 89°40'59" E
156.03'

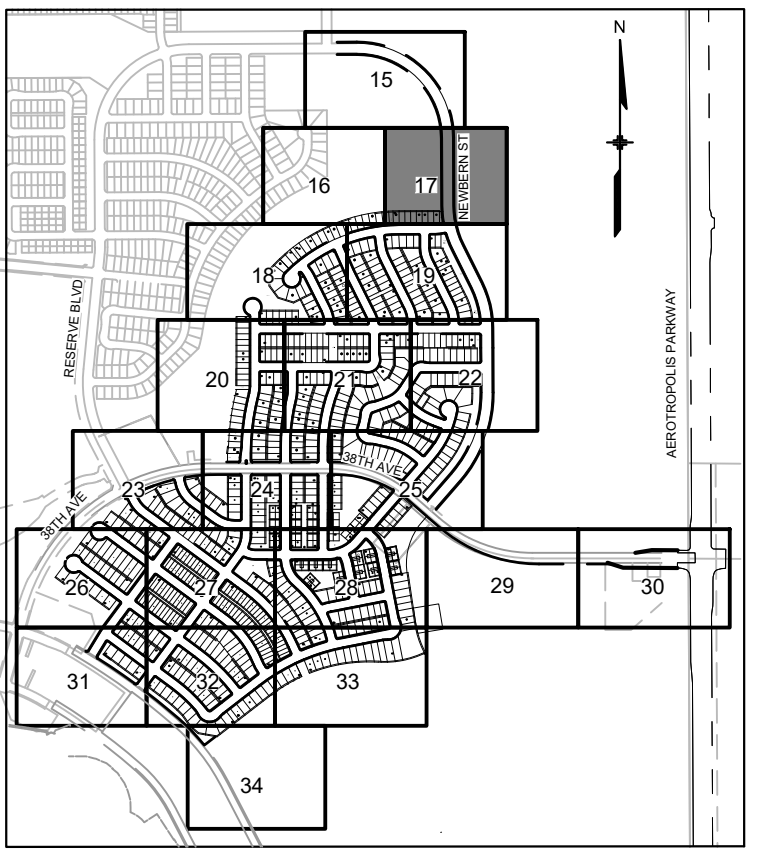
N 89°40'59" E
156.03'

S 89°40'59" W
156.03'

MATCHLINE - SEE SHEET 16



CENTERLINE CURVE TABLE		
CURVE #	ARC LENGTH	RADIUS
C18	1099.56	700.00'
C19	342.08	750.00'

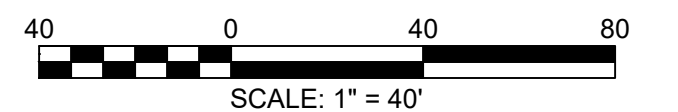


KEY MAP
SCALE: 1" = 1200'

- LEGEND**
- PROPOSED RIGHT-OF-WAY
 - PROPOSED CENTERLINE
 - PROPOSED EASEMENT
 - RIGHT SIGHT TRIANGLE
 - LEFT SIGHT TRIANGLE
 - SITE LIMITS
 - 4' METAL SCREEN FENCE (DETAIL 07 / SHEET 70)
 - 6' MASONRY WALL (DETAIL 08 / SHEET 70)
 - 4' SPLIT RAIL FENCE (DETAIL 06 / SHEET 70)
 - PROPOSED FIRE HYDRANT
 - EXISTING FIRE HYDRANT
 - PROPOSED SL1 PUBLIC STREET LIGHT (20' TAPERED POLE)
 - PROPOSED SL3 PUBLIC STREET LIGHT (25' TAPERED POLE)
 - UTILITY EASEMENT
 - GAS EASEMENT
 - ACCESS EASEMENT
 - LOT NUMBER
 - BLOCK NUMBER

- ① 30"x30" R1-1 STOP SIGN WITH STREET NAME SIGN
- ② 24"x30" R4-7 KEEP RIGHT SIGN
- ③ 24"x30" R2-1 SPEED LIMIT SIGN
- ④ WIDTH VARIES x 8" STREET NAME SIGN
- ⑤ 30"x30" R3-7R RIGHT LANE MUST TURN RIGHT SIGN
- ⑥ 36" W11-2 PEDESTRIAN CROSSING SIGN
- ⑦ 24"x12" W16-7P(L) DIAGONAL LEFT ARROW SIGN
- ⑧ 24"x12" W16-7P(R) DIAGONAL RIGHT ARROW SIGN
- ⑨ 36"x12" R6-1(R) ONE WAY RIGHT SIGN
- ⑩ 30"x36" R3-7R RIGHT LANE MUST TURN RIGHT SIGN

- NOTES:**
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THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: SITE PLAN

DATE: AUGUST, 2024

PREPARED BY:

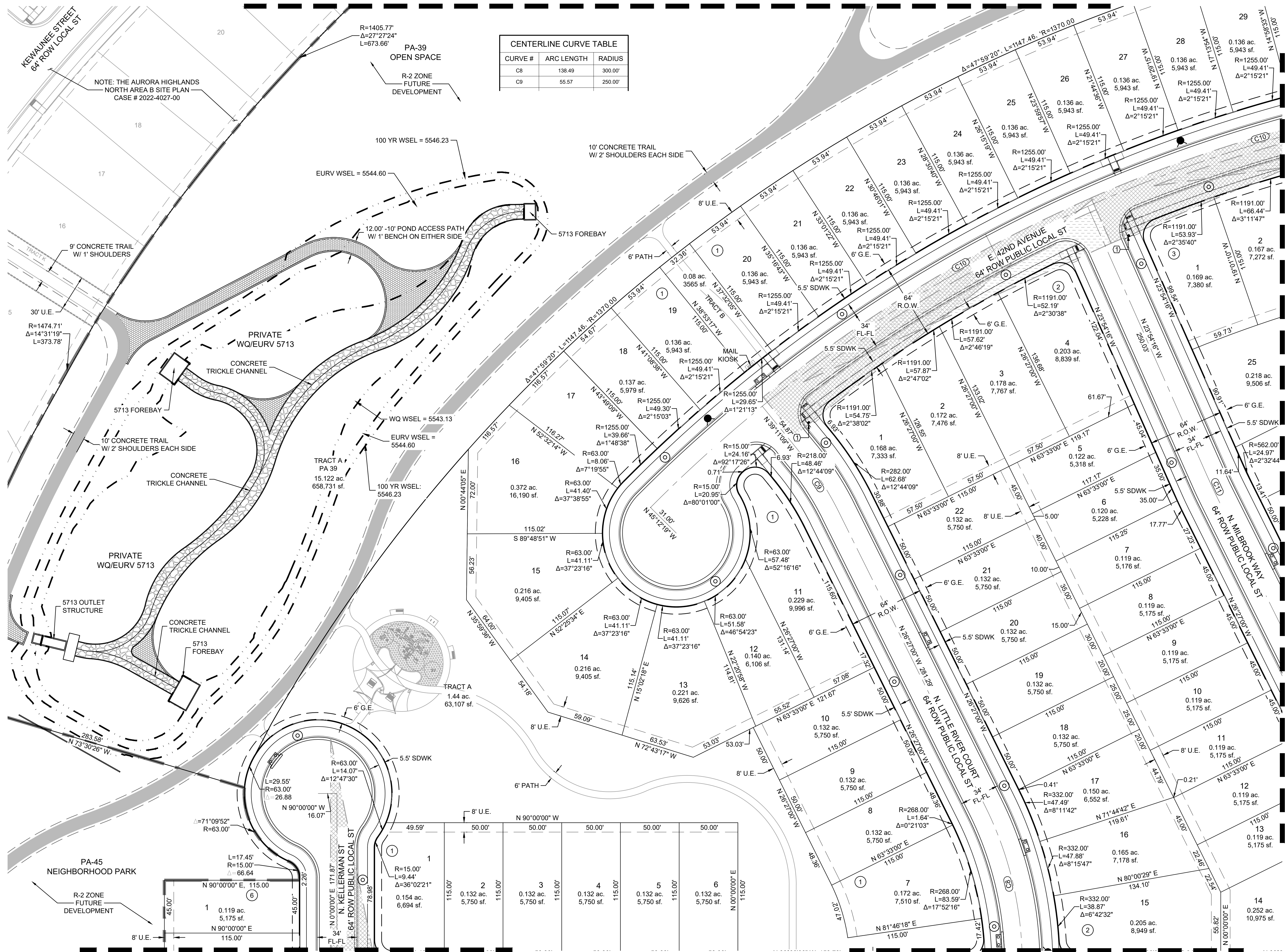
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P 303.572.0200
www.matrixdesigngroup.com



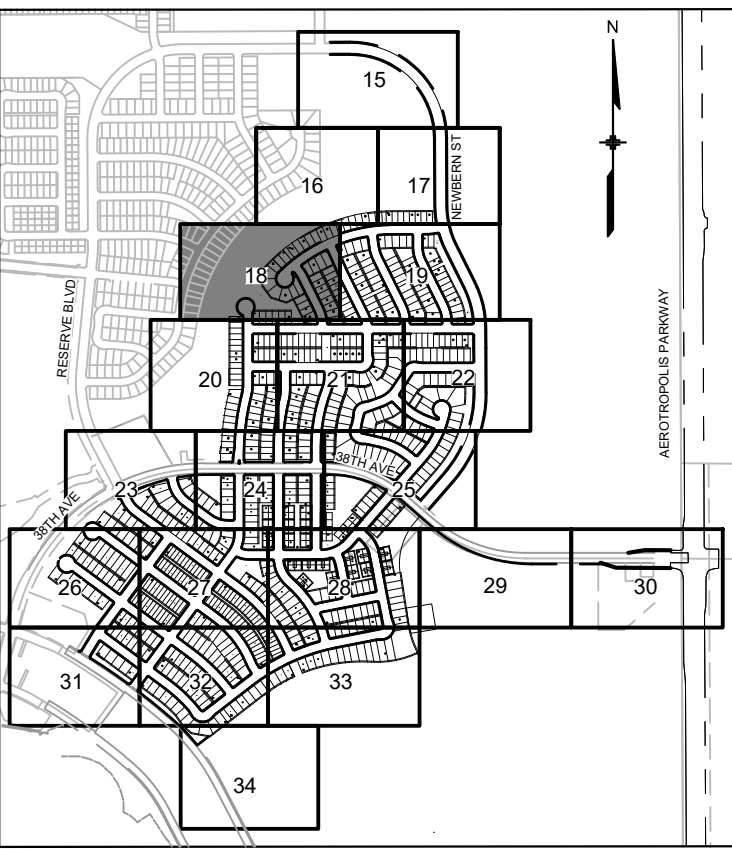
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SHEET: 17 OF 96

MATCHLINE - SEE SHEET 16



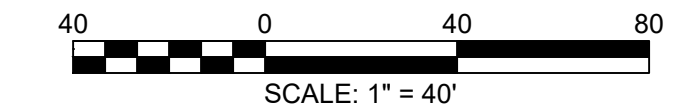
CENTERLINE CURVE TABLE		
CURVE #	ARC LENGTH	RADIUS
C8	138.49	300.00'
C9	55.57	250.00'



KEY MAP
SCALE: 1" = 1200'

- LEGEND**
- PROPOSED RIGHT-OF-WAY
 - PROPOSED CENTERLINE
 - PROPOSED EASEMENT
 - RIGHT SIGHT TRIANGLE
 - LEFT SIGHT TRIANGLE
 - SITE LIMITS
 - 4" METAL SCREEN FENCE (DETAIL 07 / SHEET 70)
 - 6" MASONRY WALL (DETAIL 08 / SHEET 70)
 - 4" SPLIT RAIL FENCE (DETAIL 06 / SHEET 70)
 - PROPOSED FIRE HYDRANT
 - EXISTING FIRE HYDRANT
 - PROPOSED SL1 PUBLIC STREET LIGHT (20' TAPERED POLE)
 - PROPOSED SL3 PUBLIC STREET LIGHT (25' TAPERED POLE)
 - UTILITY EASEMENT
 - GAS EASEMENT
 - ACCESS EASEMENT
 - LOT NUMBER
 - BLOCK NUMBER

- NOTES:**
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THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: SITE PLAN

DATE: AUGUST, 2024

PREPARED BY:

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www.matrixdesigngroup.com



NOT FOR CONSTRUCTION

SHEET: 18 OF 96

MATCHLINE - SEE SHEET 16

MATCHLINE - SEE SHEET 17

CURVE #	ARC LENGTH	RADIUS
C12	115.41	250.00'
C13	115.41	250.00'
C14	97.87	300.00'
C15	55.79	250.00'
C16	114.03	250.00'
C17	138.49	300.00'
C19	342.08	750.00'
C20	342.08	750.00'

- LEGEND**
- PROPOSED RIGHT-OF-WAY
 - PROPOSED CENTERLINE
 - PROPOSED EASEMENT
 - RIGHT SIGHT TRIANGLE
 - LEFT SIGHT TRIANGLE
 - SITE LIMITS
 - 4" METAL SCREEN FENCE (DETAIL 07 / SHEET 70)
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 - 4" SPLIT RAIL FENCE (DETAIL 06 / SHEET 70)
 - PROPOSED FIRE HYDRANT
 - EXISTING FIRE HYDRANT
 - PROPOSED SL1 PUBLIC STREET LIGHT (20' TAPERED POLE)
 - PROPOSED SL3 PUBLIC STREET LIGHT (25' TAPERED POLE)
 - UTILITY EASEMENT
 - GAS EASEMENT
 - ACCESS EASEMENT
 - LOT NUMBER
 - BLOCK NUMBER

1. 30"x30" R1-1 STOP SIGN WITH STREET NAME SIGN
2. 24"x30" R4-7 KEEP RIGHT SIGN
3. 24"x30" R2-1 SPEED LIMIT SIGN
4. WIDTH VARIES x 8" STREET NAME SIGN
5. 30"x30" R3-7R RIGHT LANE MUST TURN RIGHT SIGN
6. 36" W11-2 PEDESTRIAN CROSSING SIGN
7. 24"x12" W16-7P(L) DIAGONAL LEFT ARROW SIGN
8. 24"x12" W16-7P(R) DIAGONAL RIGHT ARROW SIGN
9. 36"x12" R6-1(R) ONE WAY RIGHT SIGN
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0 40 80
SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: SITE PLAN

DATE: AUGUST, 2024

PREPARED BY:

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www.matrixdesigngroup.com



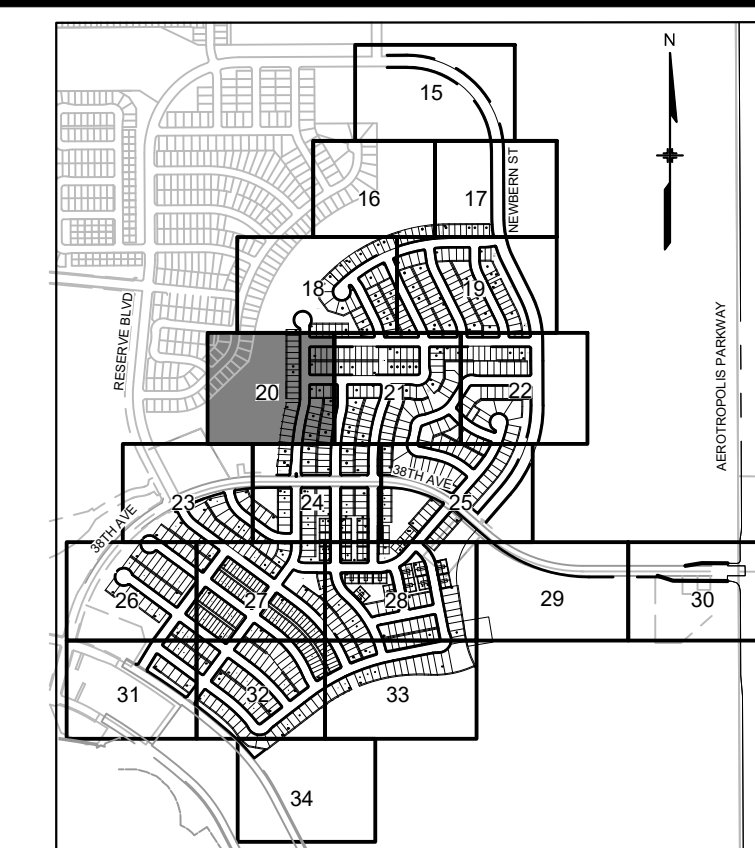
SHEET: 19 OF 96

NOT FOR CONSTRUCTION

MATCHLINE - SEE SHEET 18















MATCHLINE - SEE SHEET 21

MATCHLINE - SEE SHEET 22



KEY MAP
SCALE: 1" = 1200'

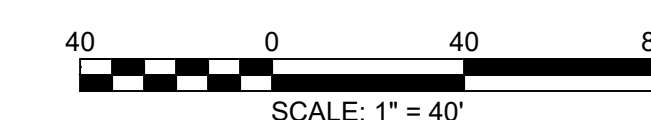
LEGEND

- | | |
|---|---|
|  | PROPOSED RIGHT-OF-WAY |
|  | PROPOSED CENTERLINE |
|  | PROPOSED EASEMENT |
|  | RIGHT SIGHT TRIANGLE |
|  | LEFT SIGHT TRIANGLE |
|  | SITE LIMITS |
|  | 4" METAL SCREEN FENCE
(DETAIL 07 / SHEET 70) |
|  | 6" MASONRY WALL
(DETAIL 08 / SHEET 70) |
|  | 4" SPLIT RAIL FENCE
(DETAIL 06 / SHEET 70) |
|  | PROPOSED FIRE HYDRANT |
|  | EXISTING FIRE HYDRANT |
|  | PROPOSED SL1 PUBLIC
STREET LIGHT
(20' TAPERED POLE) |
|  | PROPOSED SL3 PUBLIC
STREET LIGHT
(25' TAPERED POLE) |
|  | UTILITY EASEMENT |
| U.E. | GAS EASEMENT |
| G.E. | ACCESS EASEMENT |
| A.E. | LOT NUMBER |
| 1 | BLOCK NUMBER |

- (1) 30"x30" R1-1 STOP SIGN WITH STREET NAME SIGN
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THE AURORA HIGHLANDS NORTH
AREA C SITE PLAN

TITLE: *SITE PLAN*

DATE: AUGUST, 2024

PREPARED BY:



Excellence by Design

707 17th Street, Suite 3150

Denver, Colorado 80202

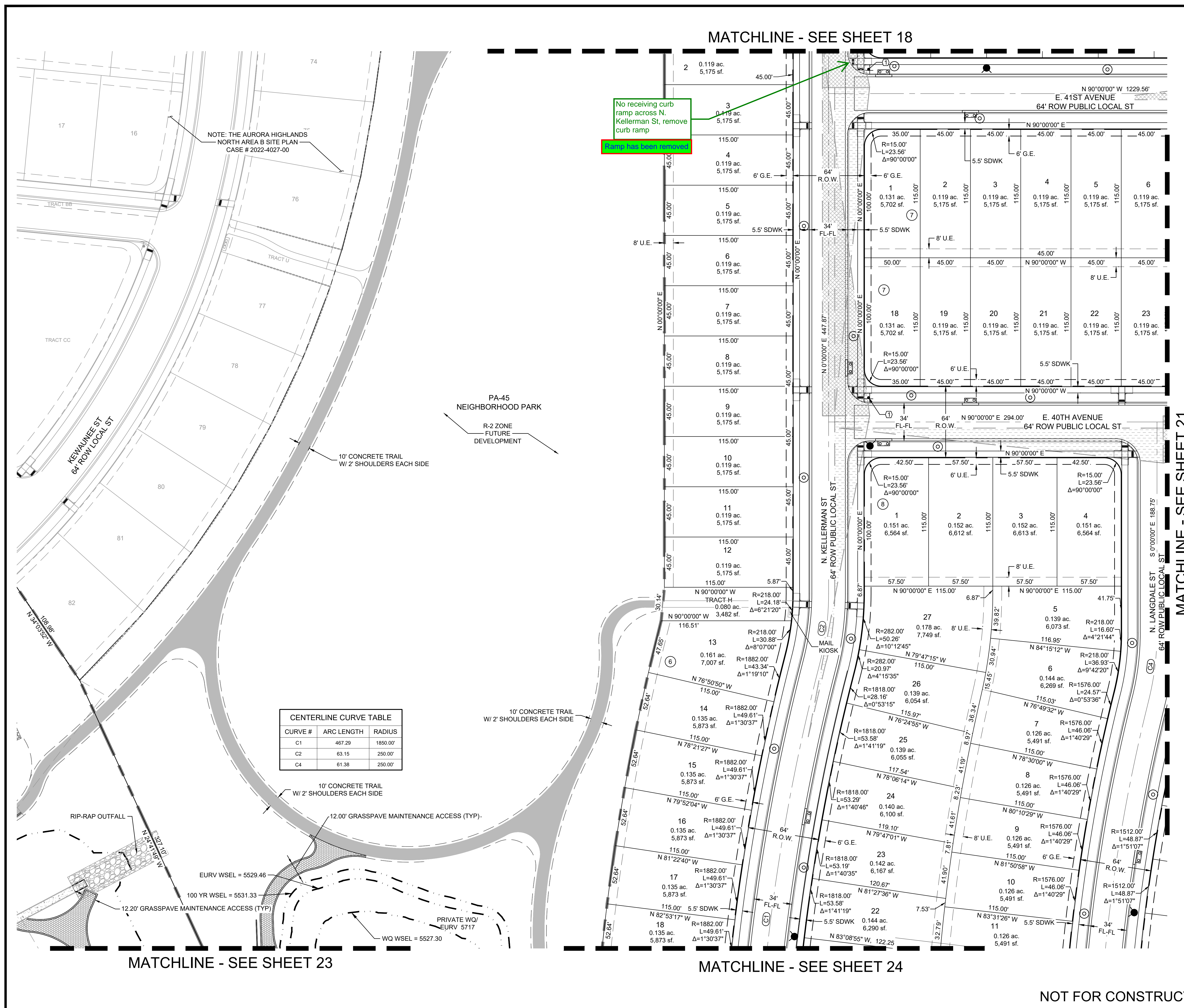
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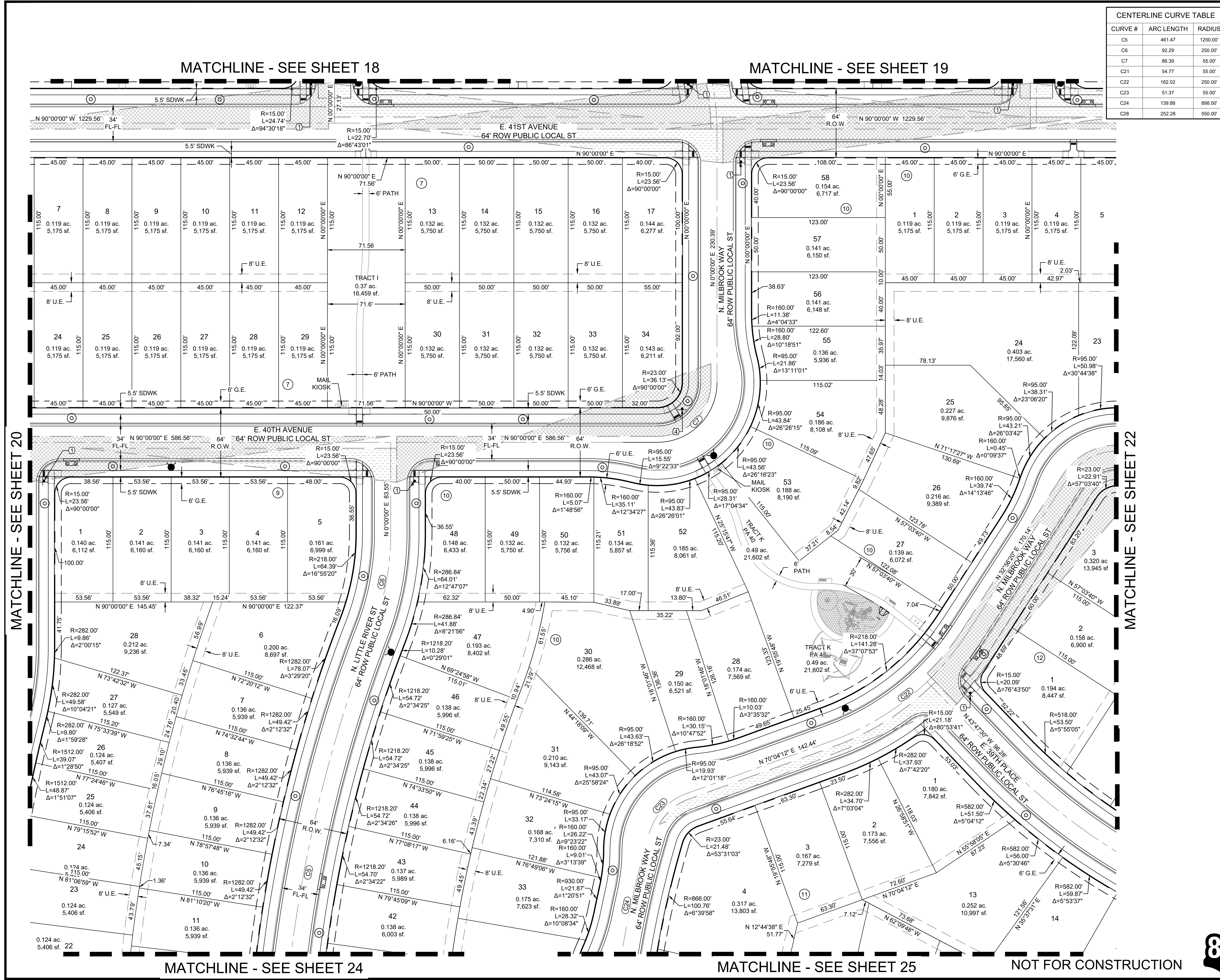
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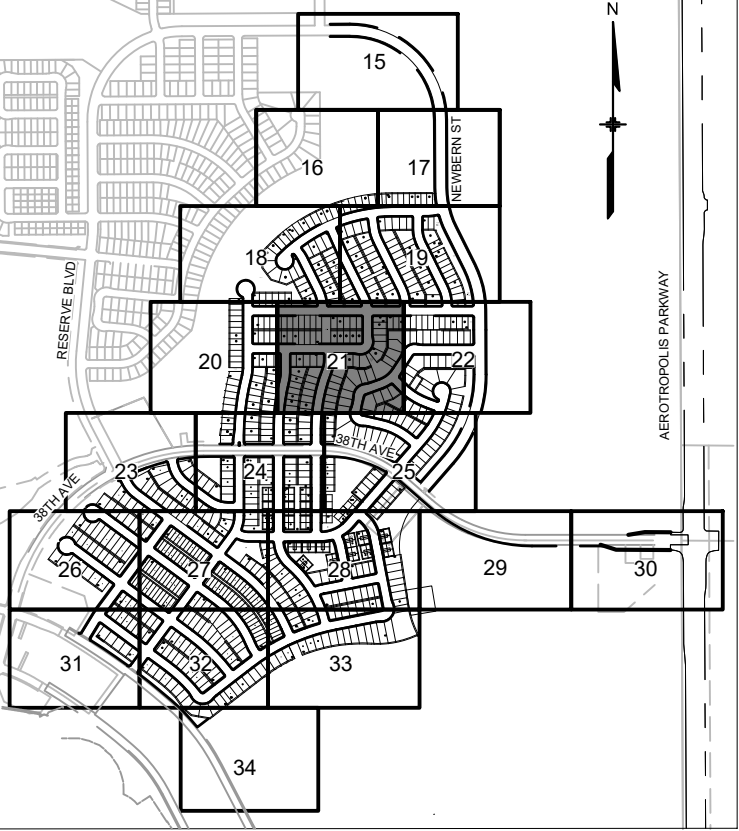
SHEET:20 OF 96

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CENTERLINE CURVE TABLE		
CURVE #	ARC LENGTH	RADIUS
C5	461.47	1250.00'
C6	92.29	250.00'
C7	86.39	55.00'
C21	54.77	55.00'
C22	162.02	250.00'
C23	51.37	55.00'
C24	139.88	898.00'
C28	252.28	550.00'

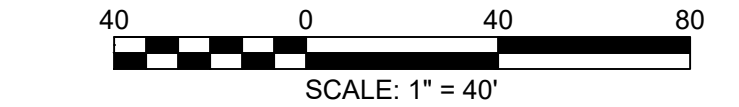


KEY MAP
SCALE: 1" = 1200'

- LEGEND**
- PROPOSED RIGHT-OF-WAY
 - PROPOSED CENTERLINE
 - PROPOSED EASEMENT
 - RIGHT SIGHT TRIANGLE
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 - 4" METAL SCREEN FENCE (DETAIL 07 / SHEET 70)
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 - EXISTING FIRE HYDRANT
 - PROPOSED SL1 PUBLIC STREET LIGHT (20' TAPERED POLE)
 - PROPOSED SL3 PUBLIC STREET LIGHT (25' TAPERED POLE)
 - UTILITY EASEMENT
 - GAS EASEMENT
 - ACCESS EASEMENT
 - LOT NUMBER
 - BLOCK NUMBER
- U.E.
G.E.
A.E.
1

- 1 30"x30" R1-1 STOP SIGN WITH STREET NAME SIGN
- 2 24"x30" R4-7 KEEP RIGHT SIGN
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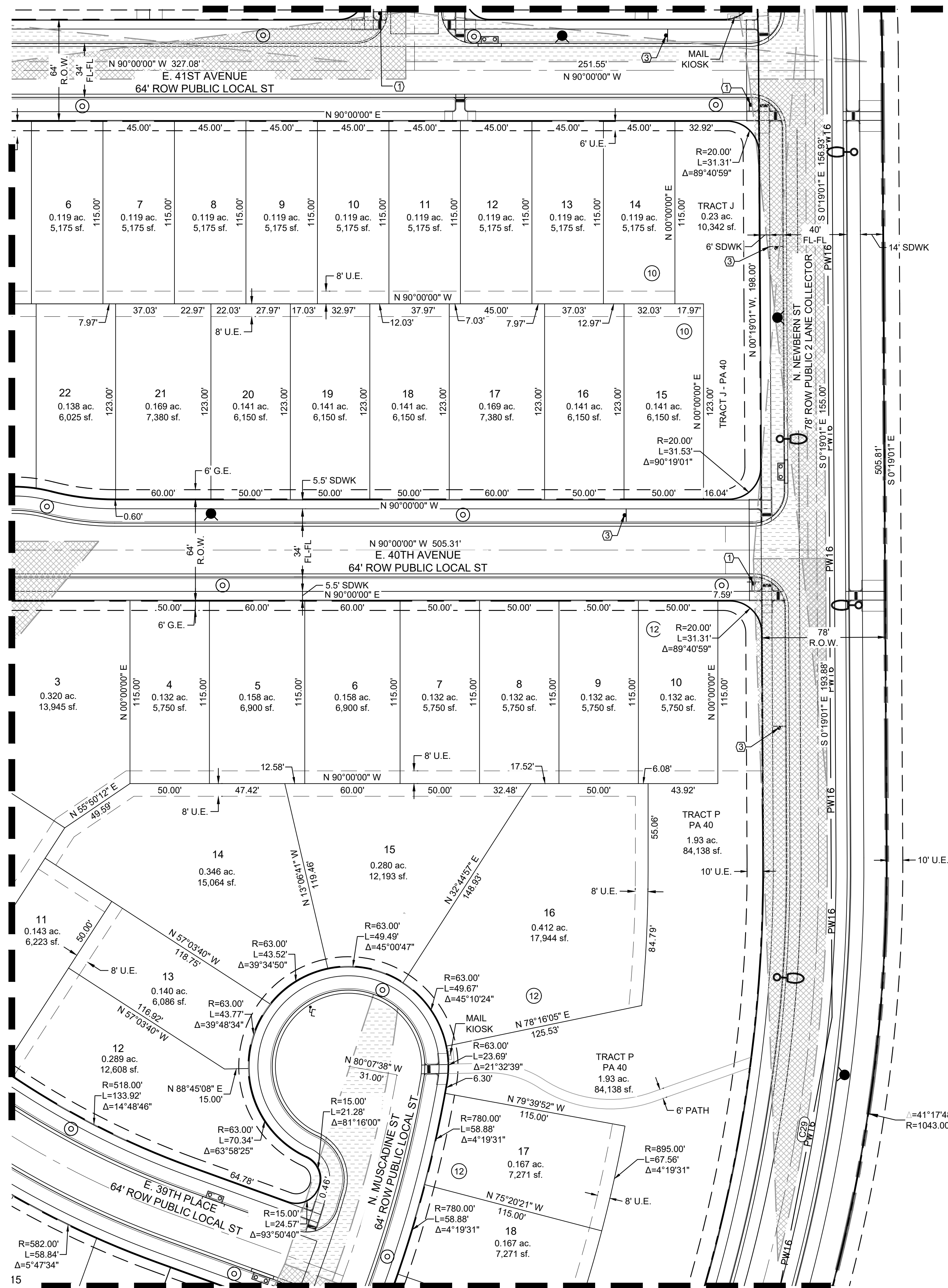
THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: SITE PLAN
DATE: AUGUST, 2024
PREPARED BY:
Matrix
Excellence by Design
707 17th Street, Suite 3150
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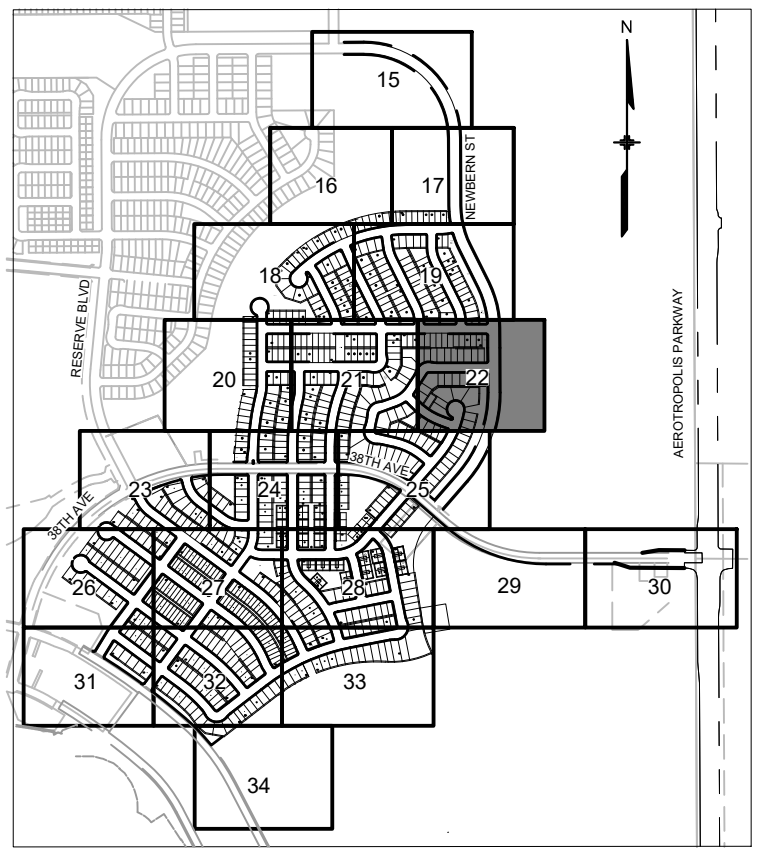
MATCHLINE - SEE SHEET 19

MATCHLINE - SEE SHEET 21



MATCHLINE - SEE SHEET 25

CENTERLINE CURVE TABLE		
CURVE #	ARC LENGTH	RADIUS
C20	342.08	750.00'
C29	720.76	1000.00'



KEY MAP
SCALE: 1" = 1200'

- LEGEND**
- PROPOSED RIGHT-OF-WAY
 - PROPOSED CENTERLINE
 - PROPOSED EASEMENT
 - RIGHT SIGHT TRIANGLE
 - LEFT SIGHT TRIANGLE
 - SITE LIMITS
 - 4" METAL SCREEN FENCE (DETAIL 07 / SHEET 70)
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 - PROPOSED FIRE HYDRANT
 - EXISTING FIRE HYDRANT
 - PROPOSED SL1 PUBLIC STREET LIGHT (20' TAPERED POLE)
 - PROPOSED SL3 PUBLIC STREET LIGHT (25' TAPERED POLE)
 - UTILITY EASEMENT
 - GAS EASEMENT
 - ACCESS EASEMENT
 - LOT NUMBER
 - BLOCK NUMBER

- 1. 30"x30" R1-1 STOP SIGN WITH STREET NAME SIGN
- 2. 24"x30" R4-7 KEEP RIGHT SIGN
- 3. 24"x30" R2-1 SPEED LIMIT SIGN
- 4. WIDTH VARIES x 8" STREET NAME SIGN
- 5. 30"x30" R3-7R RIGHT LANE MUST TURN RIGHT SIGN
- 6. 36" W11-2 PEDESTRIAN CROSSING SIGN
- 7. 24"x12" W16-7P(L) DIAGONAL LEFT ARROW SIGN
- 8. 24"x12" W16-7P(R) DIAGONAL RIGHT ARROW SIGN
- 9. 36"x12" R6-1(R) ONE WAY RIGHT SIGN
- 10. 30"x36" R3-7R RIGHT LANE MUST TURN RIGHT SIGN

- NOTES:**
- TANGENT LENGTHS AND CURVE RADII INFORMATION PROVIDED ONLY TO INDICATE MINIMUM DESIGN CRITERIA IS MET.
 - CURB CORNERS 20' FLOWLINE RADIUS UNLESS NOTED OTHERWISE.
 - ALL CUL-DE-SACS ARE TO BE LESS THAN 500' IN LENGTH. IF ANY CUL-DE-SAC EXCEEDS 500', A SECONDARY EMERGENCY ACCESS WILL BE PROVIDED.
 - ALL MOTOR COURT ACCESS EASEMENTS SHALL BE A MAXIMUM OF 150 FEET IN LENGTH AND AT LEAST 23 FEET WIDE.
 - ALL ROADWAY INTERSECTIONS SHALL BE AT 90 DEGREES, +/- 5 DEGREES.
 - ALL CURB RETURN RADII WILL ADHERE TO THE MINIMUMS AS DEFINED IN CITY OF AURORA ROADWAY DESIGN AND CONSTRUCTION SPECIFICATIONS TABLE 4.04.5.03.
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 - STREET LIGHT LOCATIONS ARE CONCEPTUAL. FINAL STREET LIGHT LOCATIONS WILL BE DETERMINED BY PHOTOMETRIC ANALYSIS SUBMITTED WITH THE LIGHTING PLAN SUBMITTED WITH THE CIVIL PLANS.

SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: SITE PLAN

DATE: AUGUST, 2024

PREPARED BY:

Matrix
Excellence by Design
707 17th Street, Suite 3150
Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com

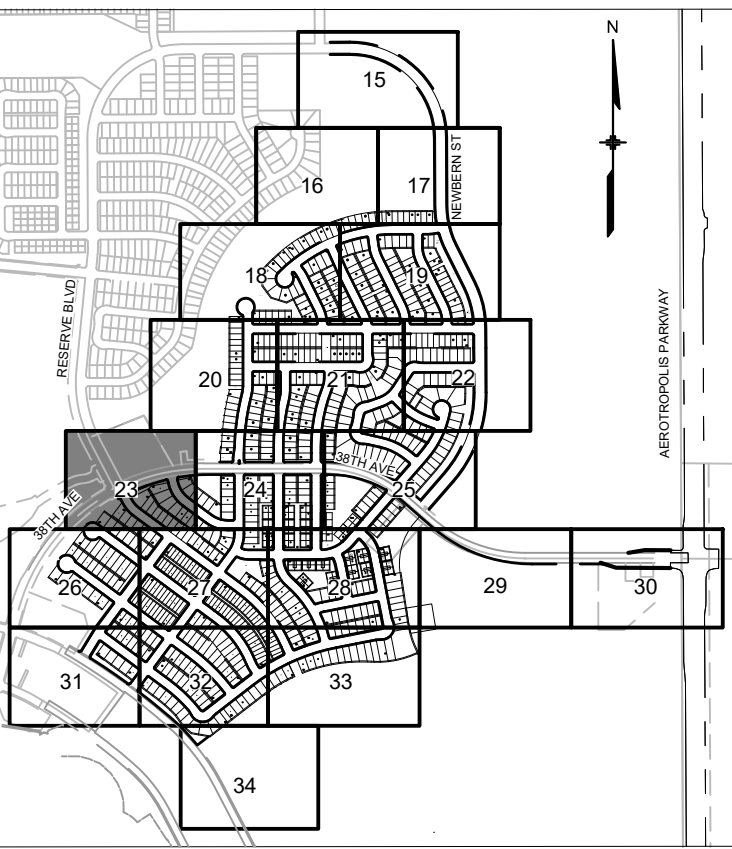
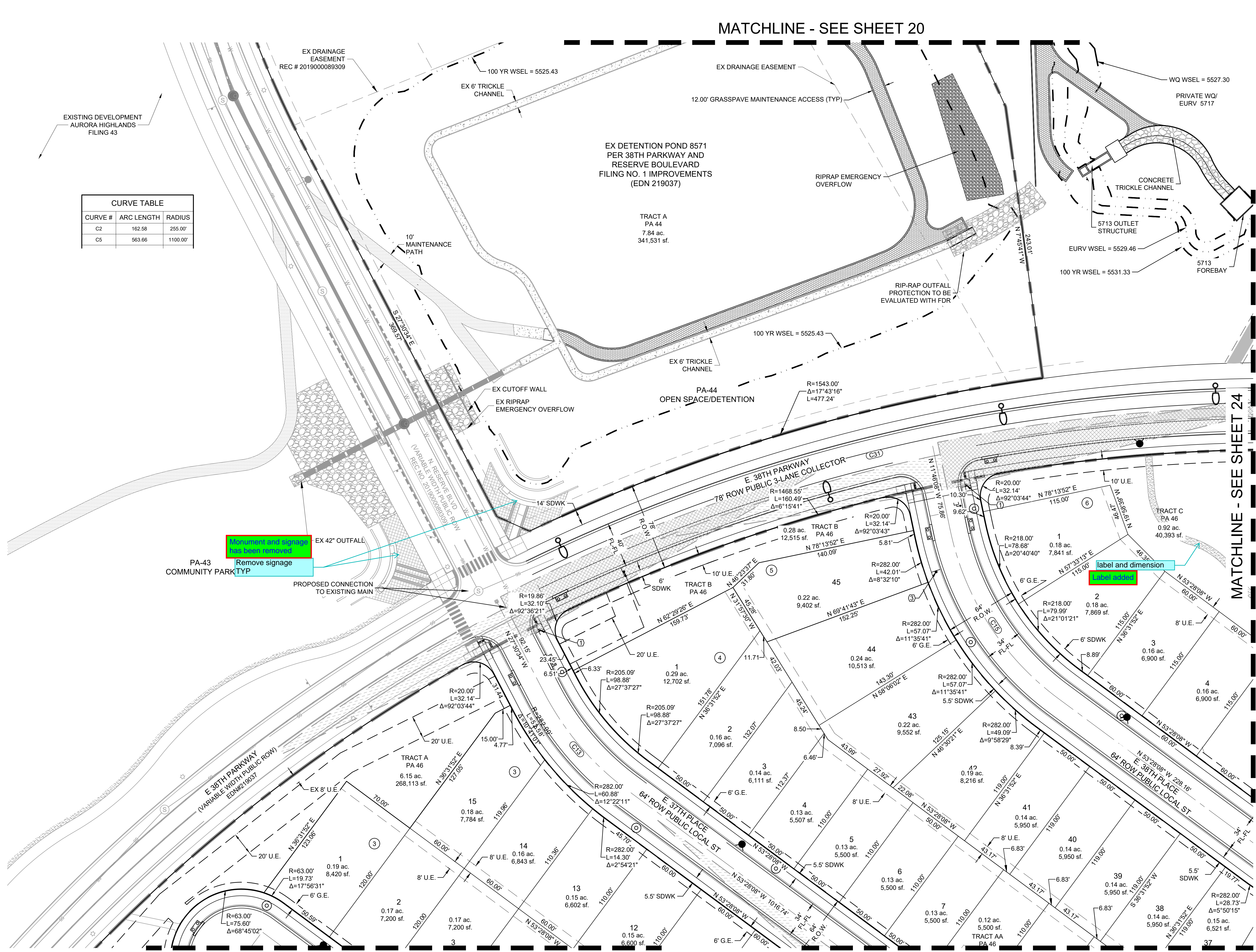


NOT FOR CONSTRUCTION

SHEET: 22 OF 96

MATCHLINE - SEE SHEET 20

CURVE TABLE		
CURVE #	ARC LENGTH	RADIUS
C2	162.58	255.00'
C5	563.66	1100.00'



KEY MAP
SCALE: 1" = 1200'

- LEGEND**
- PROPOSED RIGHT-OF-WAY
 - PROPOSED CENTERLINE
 - PROPOSED EASEMENT
 - RIGHT SIGHT TRIANGLE
 - LEFT SIGHT TRIANGLE
 - SITE LIMITS
 - 4" METAL SCREEN FENCE (DETAIL 07 / SHEET 70)
 - 6" MASONRY WALL (DETAIL 08 / SHEET 70)
 - 4" SPLIT RAIL FENCE (DETAIL 06 / SHEET 70)
 - PROPOSED FIRE HYDRANT
 - EXISTING FIRE HYDRANT
 - PROPOSED SL1 PUBLIC STREET LIGHT (20' TAPERED POLE)
 - PROPOSED SL3 PUBLIC STREET LIGHT (25' TAPERED POLE)
 - UTILITY EASEMENT
 - GAS EASEMENT
 - ACCESS EASEMENT
 - LOT NUMBER
 - BLOCK NUMBER

- NOTES:**
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 - CURB CORNERS 20' FLOWLINE RADIUS UNLESS NOTED OTHERWISE.
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SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: SITE PLAN
DATE: AUGUST, 2024
PREPARED BY:
Matrix
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Denver, Colorado 80202
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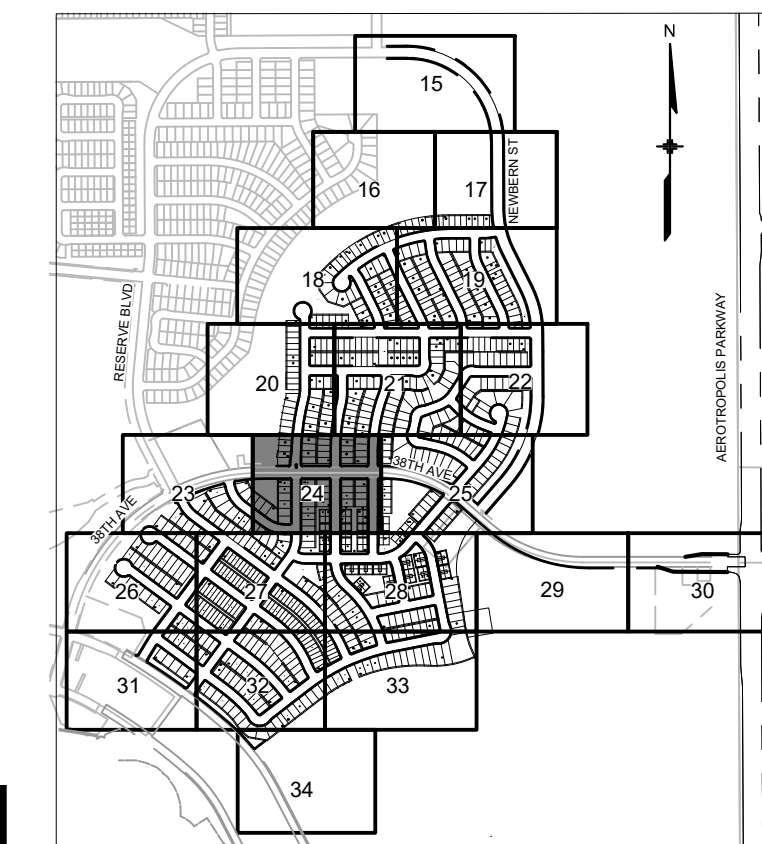
NOT FOR CONSTRUCTION

SHEET: 23 OF 96

CENTERLINE CURVE TABLE		
CURVE #	ARC LENGTH	RADIUS
C1	467.29	1860.00'
C3	379.10	1544.00'
C5	461.47	1250.00'
C32	679.47	950.00'

MATCHLINE - SEE SHEET 20

MATCHLINE - SEE SHEET 21



KEY MAP
SCALE: 1" = 1200'

- LEGEND**
- PROPOSED RIGHT-OF-WAY
 - PROPOSED CENTERLINE
 - PROPOSED EASEMENT
 - RIGHT SIGHT TRIANGLE
 - LEFT SIGHT TRIANGLE
 - SITE LIMITS
 - 4" METAL SCREEN FENCE (DETAIL 07 / SHEET 70)
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SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: SITE PLAN
DATE: AUGUST, 2024
PREPARED BY:
Matrix
Excellence by Design
707 17th Street, Suite 3150
Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com

811

SHEET: 24 OF 96

MATCHLINE - SEE SHEET 23

MATCHLINE - SEE SHEET 25

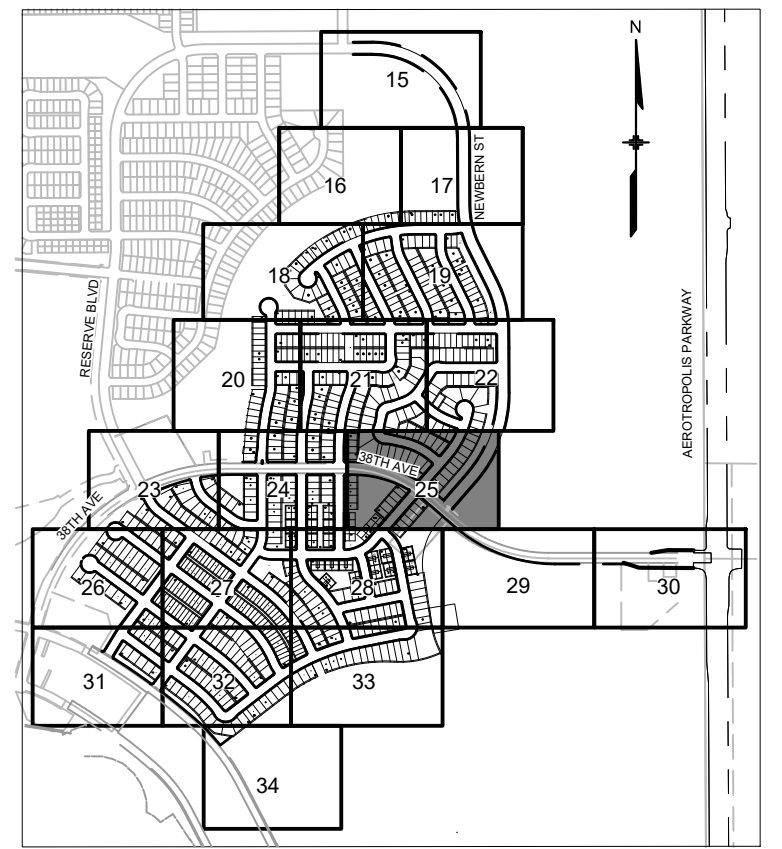
MATCHLINE - SEE SHEET 27

MATCHLINE - SEE SHEET 28

NOT FOR CONSTRUCTION

MATCHLINE - SEE SHEET 21

MATCHLINE - SEE SHEET 22



KEY MAP
SCALE: 1" = 1200'

- LEGEND**
- PROPOSED RIGHT-OF-WAY
 - PROPOSED CENTERLINE
 - PROPOSED EASEMENT
 - RIGHT SIGHT TRIANGLE
 - LEFT SIGHT TRIANGLE
 - SITE LIMITS
 - 4" METAL SCREEN FENCE (DETAIL 07 / SHEET 70)
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CENTERLINE CURVE TABLE		
CURVE #	ARC LENGTH	RADIUS
C25	81.48	55.00'
C26	262.17	532.00'
C27	406.10	748.00'
C29	720.76	1000.00'

REPEATED COMMENT FROM 2ND REVIEW. Remove ramp crossing E. 38th Ave, there is no receiving curb ramp and there is an inlet in the way. PER COMMENT RESPONSE: The ramp has been updated. PLEASE ADDRESS THE COMMENT.

Ramp has been removed

PA-37
SIDENTIAL
R-2 ZONE
FUTURE
VELOPMENT

SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: SITE PLAN

DATE: AUGUST, 2024

PREPARED BY:

Matrix
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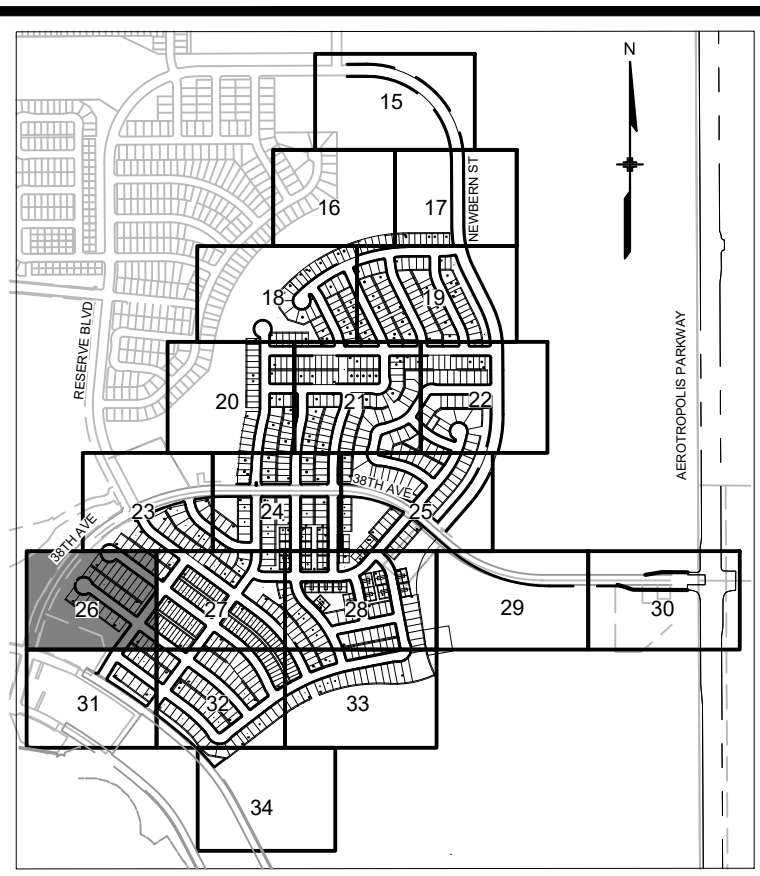
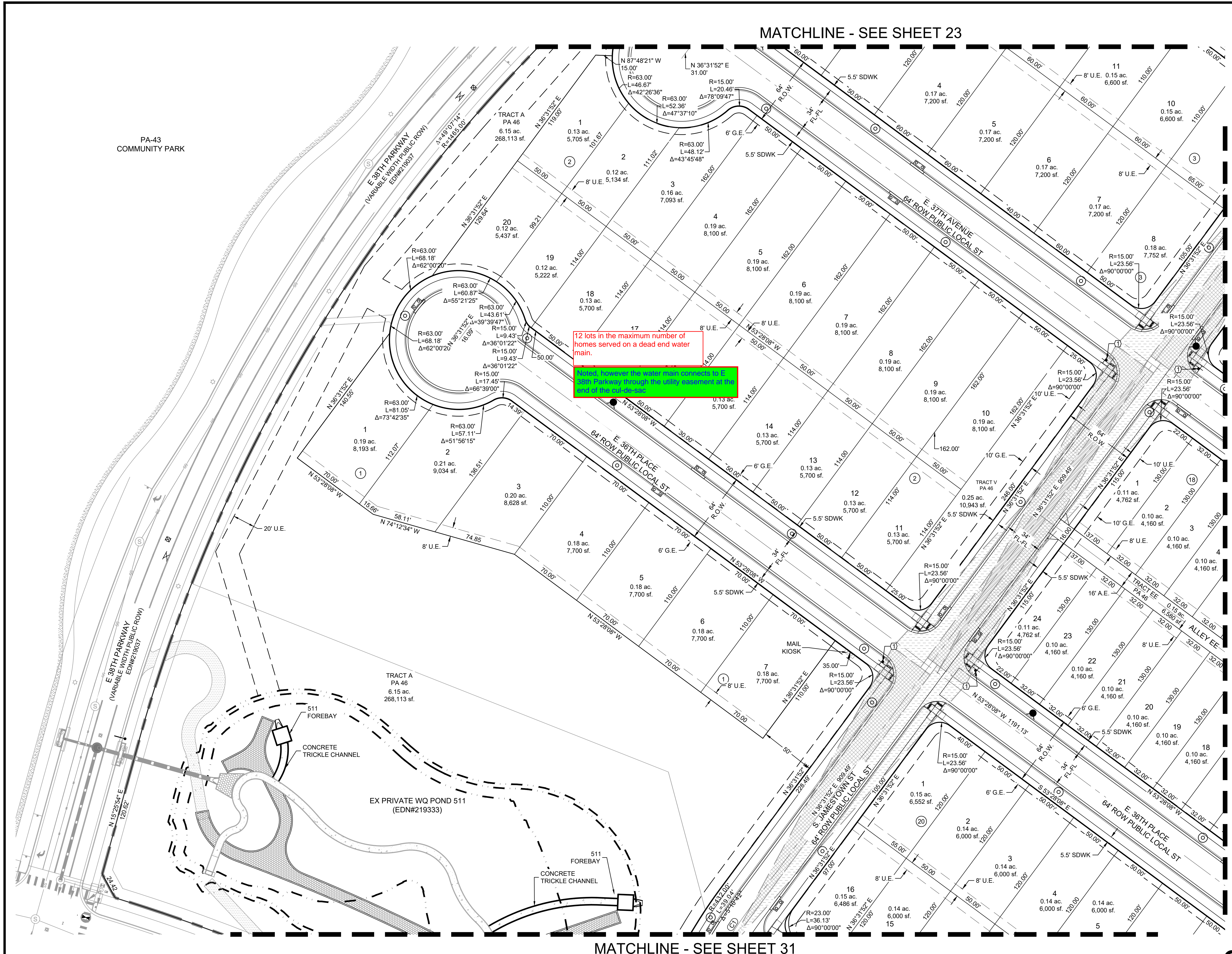
SHEET: 25 OF 96

NOT FOR CONSTRUCTION

MATCHLINE - SEE SHEET 28

MATCHLINE - SEE SHEET 29

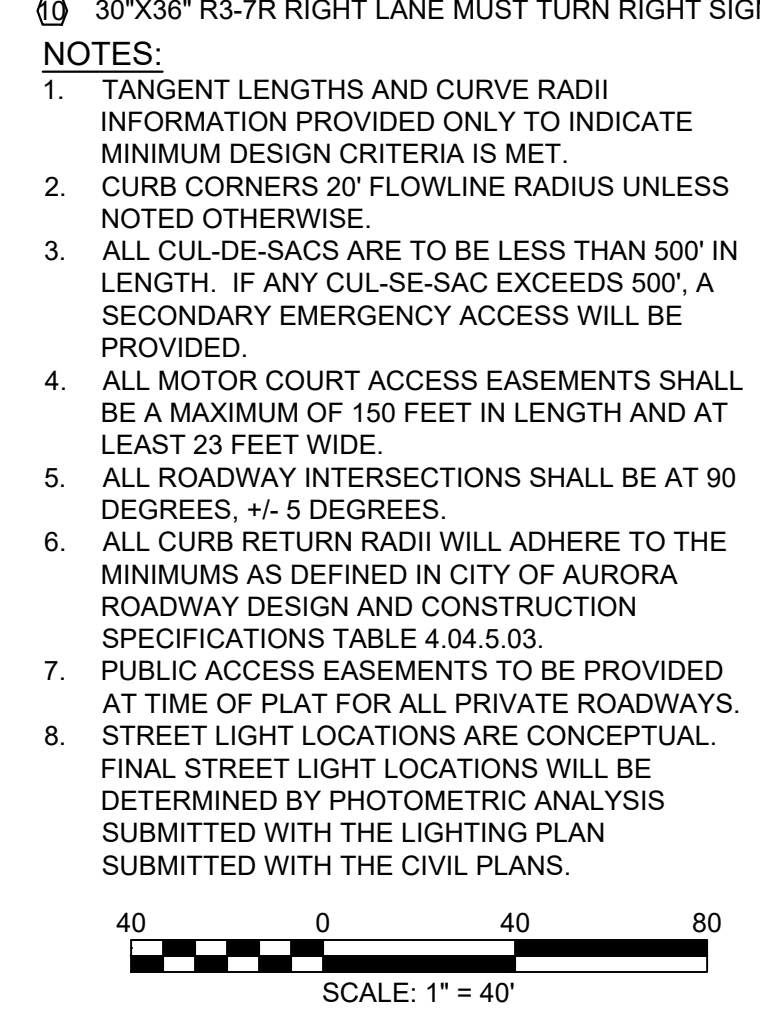
MATCHLINE - SEE SHEET 24



KEY MAP
SCALE: 1" = 1200'

- LEGEND**
- PROPOSED RIGHT-OF-WAY
 - PROPOSED CENTERLINE
 - PROPOSED EASEMENT
 - RIGHT SIGHT TRIANGLE
 - LEFT SIGHT TRIANGLE
 - SITE LIMITS
 - 4' METAL SCREEN FENCE (DETAIL 07 / SHEET 70)
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 - LOT NUMBER
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THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: SITE PLAN
DATE: AUGUST, 2024
PREPARED BY:
Matrix
Excellence by Design
707 17th Street, Suite 3150
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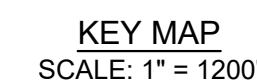
MATCHLINE - SEE SHEET 31

MATCHLINE - SEE SHEET 27

MATCHLINE - SEE SHEET 23




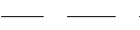














12 lots in the maximum number of homes served on a dead end water main.
Noted however the water main connects to E 38th Parkway through the utility easement at the end of the cul-de-sac

MATCHLINE - SEE SHEET 24



KEY MAP
SCALE: 1" = 1200'

LEGEND

- ### LEGEND
- | | |
|---|---|
|  | PROPOSED RIGHT-OF-WAY |
|  | PROPOSED CENTERLINE |
|  | PROPOSED EASEMENT |
|  | RIGHT SIGHT TRIANGLE |
|  | LEFT SIGHT TRIANGLE |
|  | SITE LIMITS |
|  | 4' METAL SCREEN FENCE
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|  | PROPOSED FIRE HYDRANT |
|  | EXISTING FIRE HYDRANT |
|  | PROPOSED SL1 PUBLIC
STREET LIGHT
(20' TAPERED POLE) |
|  | PROPOSED SL3 PUBLIC
STREET LIGHT
(25' TAPERED POLE) |
|  | UTILITY EASEMENT |
|  | GAS EASEMENT |
|  | ACCESS EASEMENT |
|  | LOT NUMBER |
|  | BLOCK NUMBER |

- ① 30"x30" R-1- STOP SIGN WITH STREET NAME SIGN
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THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: *SITE PLAN*

DATE: AUGUST, 2024

S PREPARED BY:



Excellence by Design

707 17th Street, Suite 3150

Denver, Colorado 80202

P 303.572.0200

www.matrixdesigngroup.com

CURVE TABLE		
CURVE #	ARC LENGTH	RADIUS
C7	165.73	250.00'
C19	215.78	250.00'
C20	529.04	850.00'
C21	81.83	250.00'
C22	52.93	250.00'



SHEET:27 OF 96

NOT FOR CONSTRUCTION

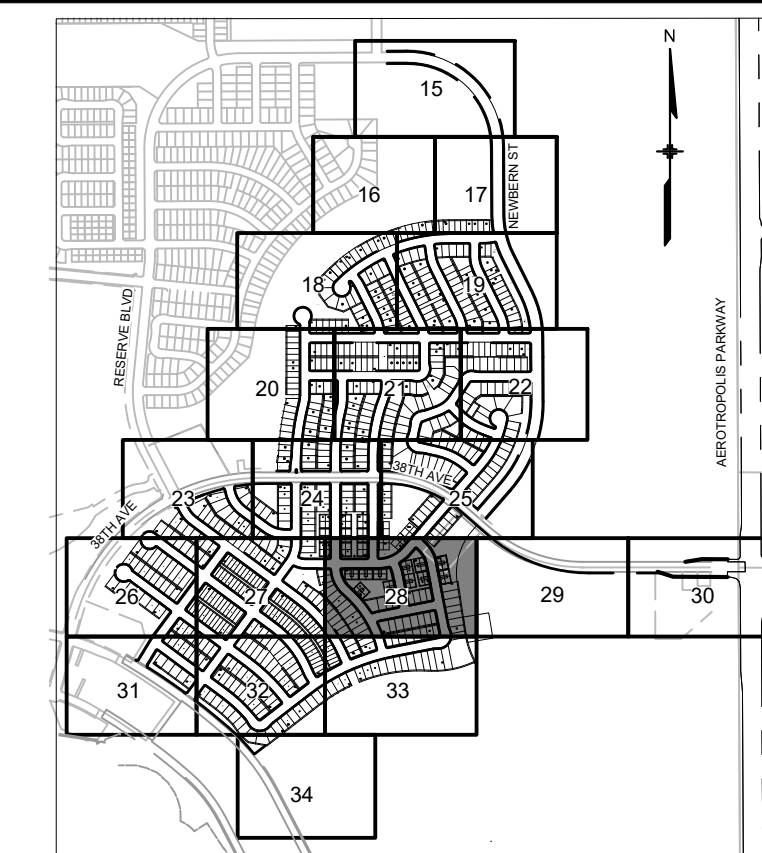
MATCHLINE - SEE SHEET 26

MATCHLINE - SEE SHEET 28

MATCHLINE - SEE SHEET 32

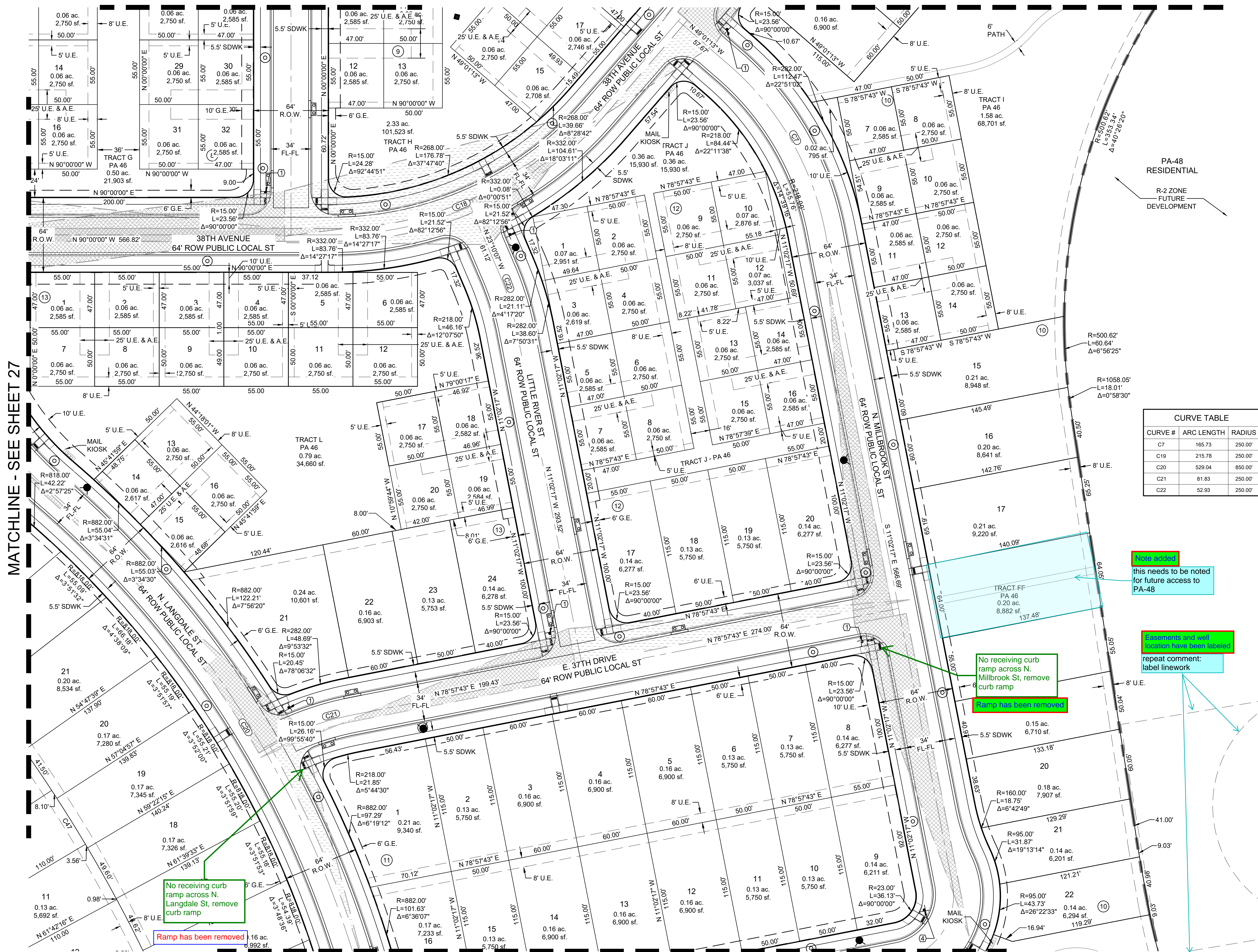
MATCHLINE - SEE SHEET 24

MATCHLINE - SEE SHEET 25



MATCHLINE - SEE SHEET 27

MATCHLINE - SEE SHEET 29



CURVE #	ARC LENGTH	RADIUS
C7	165.73	250.00'
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SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

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NOT FOR CONSTRUCTION

SHEET: 28 OF 96

MATCHLINE - SEE SHEET 33

MATCHLINE - SEE SHEET 28

MATCHLINE - SEE SHEET 25

PA-48
RESIDENTIAL

R-2 ZONE
FUTURE
DEVELOPMENT

Second request:
Fire hydrants shall be
included along with
the construction of the
water main and
roadways. Please
revise to include fire
hydrants.

Fire Hydrants have been
added to 38th Ave.

8' TREELAWN

8' TREELAWN

EX 78'

R.O.W.

E. 38TH PARKWAY
78' ROW PUBLIC 3-LANE COLLECTOR

4" DOUBLE YELLOW CENTERLINE

14" SDWK

40'

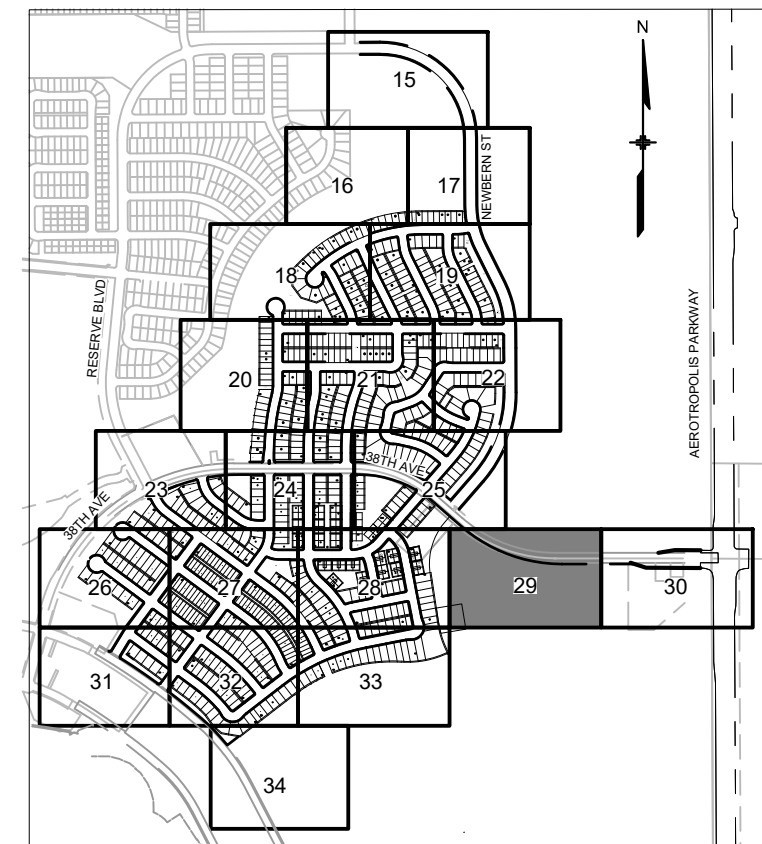
FL-FL

6.5' SDWK

show existing
and/or proposed
ROW

Dimension for Existing
ROW has been added

CENTERLINE CURVE TABLE		
CURVE #	ARC LENGTH	RADIUS
C33	822.52	1150.00'



KEY MAP
SCALE: 1" = 1200'

- LEGEND**
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 - PROPOSED CENTERLINE
 - PROPOSED EASEMENT
 - RIGHT SIGHT TRIANGLE
 - LEFT SIGHT TRIANGLE
 - SITE LIMITS
 - 4" METAL SCREEN FENCE (DETAIL 07 / SHEET 70)
 - 6" MASONRY WALL (DETAIL 08 / SHEET 70)
 - 4" SPLIT RAIL FENCE (DETAIL 06 / SHEET 70)
 - PROPOSED FIRE HYDRANT
 - EXISTING FIRE HYDRANT
 - PROPOSED SL1 PUBLIC STREET LIGHT (20' TAPERED POLE)
 - PROPOSED SL3 PUBLIC STREET LIGHT (25' TAPERED POLE)
 - UTILITY EASEMENT
 - GAS EASEMENT
 - ACCESS EASEMENT
 - LOT NUMBER
 - BLOCK NUMBER

- 30"x30" R1-1 STOP SIGN WITH STREET NAME SIGN
- 24"x30" R4-7 KEEP RIGHT SIGN
- 24"x30" R2-1 SPEED LIMIT SIGN
- WIDTH VARIES x 8" STREET NAME SIGN
- 30"x30" R3-7R RIGHT LANE MUST TURN RIGHT SIGN
- 36" W11-2 PEDESTRIAN CROSSING SIGN
- 24"x12" W16-7P(L) DIAGONAL LEFT ARROW SIGN
- 24"x12" W16-7P(R) DIAGONAL RIGHT ARROW SIGN
- 36"x12" R6-1(R) ONE WAY RIGHT SIGN
- 30"x36" R3-7R RIGHT LANE MUST TURN RIGHT SIGN

- NOTES:**
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 - CURB CORNERS 20' FLOWLINE RADIUS UNLESS NOTED OTHERWISE.
 - ALL CUL-DE-SACS ARE TO BE LESS THAN 500' IN LENGTH. IF ANY CUL-SE-SAC EXCEEDS 500', A SECONDARY EMERGENCY ACCESS WILL BE PROVIDED.
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 - ALL ROADWAY INTERSECTIONS SHALL BE AT 90 DEGREES, +/- 5 DEGREES.
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 - STREET LIGHT LOCATIONS ARE CONCEPTUAL. FINAL STREET LIGHT LOCATIONS WILL BE DETERMINED BY PHOTOMETRIC ANALYSIS SUBMITTED WITH THE LIGHTING PLAN SUBMITTED WITH THE CIVIL PLANS.

SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: SITE PLAN
DATE: AUGUST, 2024
PREPARED BY:
Matrix
Excellence by Design
707 17th Street, Suite 3150
Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com



NOT FOR CONSTRUCTION

SHEET: 29 OF 96

MATCHLINE - SEE SHEET 27

PUBLIC SERVICE COMPANY OF
COLORADO
PARCEL NO. 1819200000047
BOOK 1295, PAGE 405

4" DOUBLE YELLOW CENTERLINE

E. 38TH PARKWAY
78' ROW PUBLIC 3-LANE COLLECTOR

N 90°00'00" E 1181.35'

show existing
and/or proposed
ROW

Dimension for Existing
ROW has been added.

120' TAPER

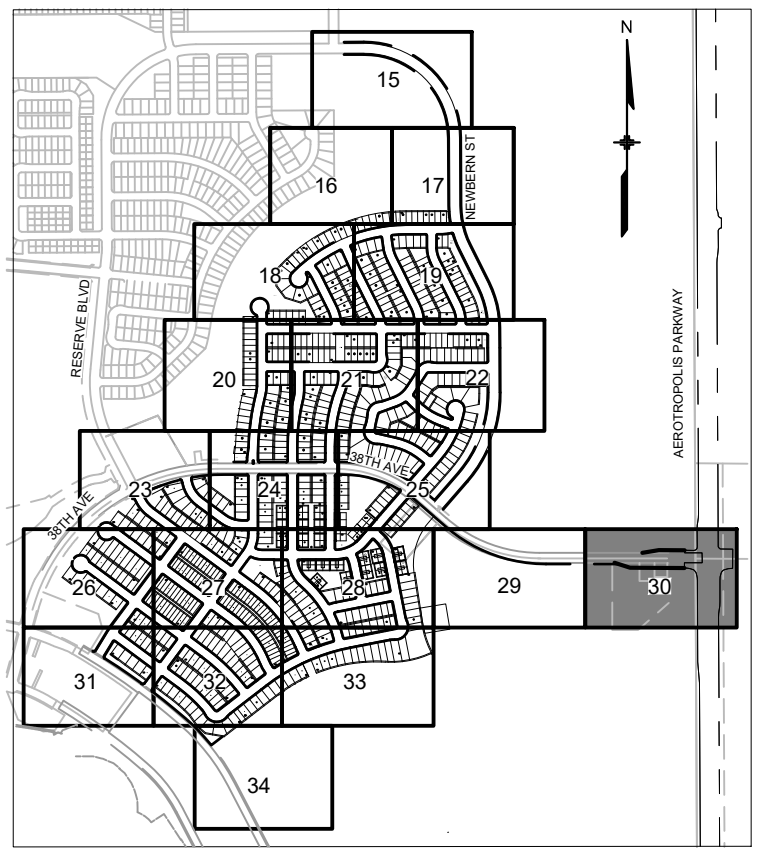
EX DRAINAGE
EASEMENT
REC # 2019000089309

FUTURE
DRAINAGE
EASEMENT

FUTURE DRAINAGE
EASEMENT
FUTURE
SIGNAL
EASEMENT

FUTURE
SIGNAL
EASEMENT
FUTURE
DRAINAGE
EASEMENT

FUTURE AEROTROPOLIS PARKWAY
144' ROW PUBLIC (MAJOR ARTERIAL)



KEY MAP
SCALE: 1" = 1200'

LEGEND	
	PROPOSED RIGHT-OF-WAY
	PROPOSED CENTERLINE
	PROPOSED EASEMENT
	RIGHT SIGHT TRIANGLE
	LEFT SIGHT TRIANGLE
	SITE LIMITS
	4" METAL SCREEN FENCE (DETAIL 07 / SHEET 70)
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	GAS EASEMENT
	ACCESS EASEMENT
	LOT NUMBER
	BLOCK NUMBER

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40 0 40 80
SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: SITE PLAN

DATE: AUGUST, 2024

PREPARED BY:

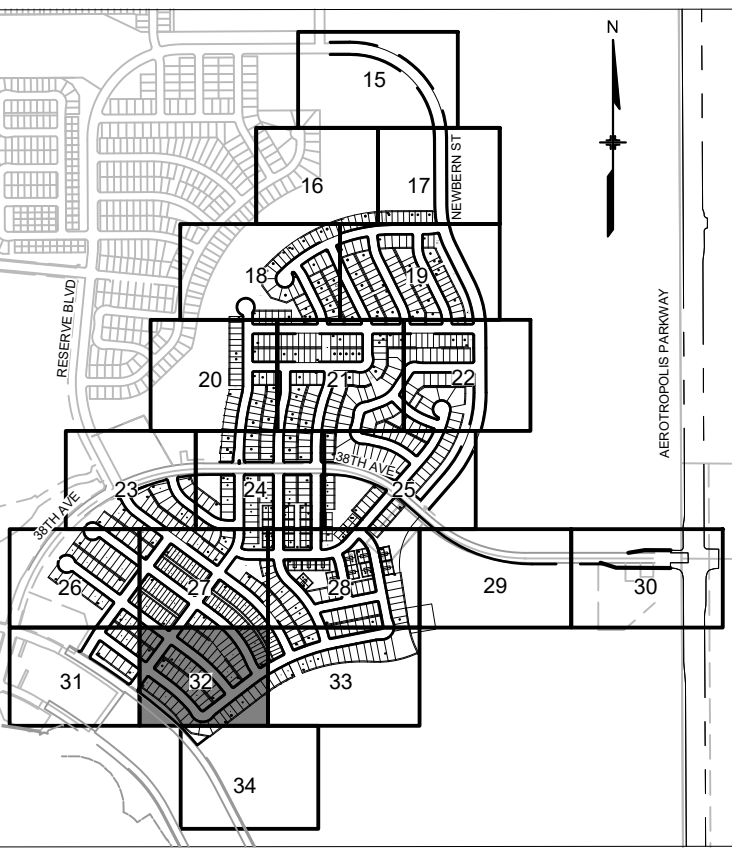
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Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com



NOT FOR CONSTRUCTION

SHEET: 30 OF 96

MATCHLINE - SEE SHEET 26

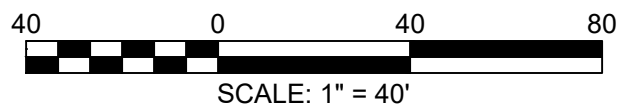


KEY MAP
SCALE: 1" = 1200'

- LEGEND**
- PROPOSED RIGHT-OF-WAY
 - PROPOSED CENTERLINE
 - PROPOSED EASEMENT
 - RIGHT SIGHT TRIANGLE
 - LEFT SIGHT TRIANGLE
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THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: SITE PLAN

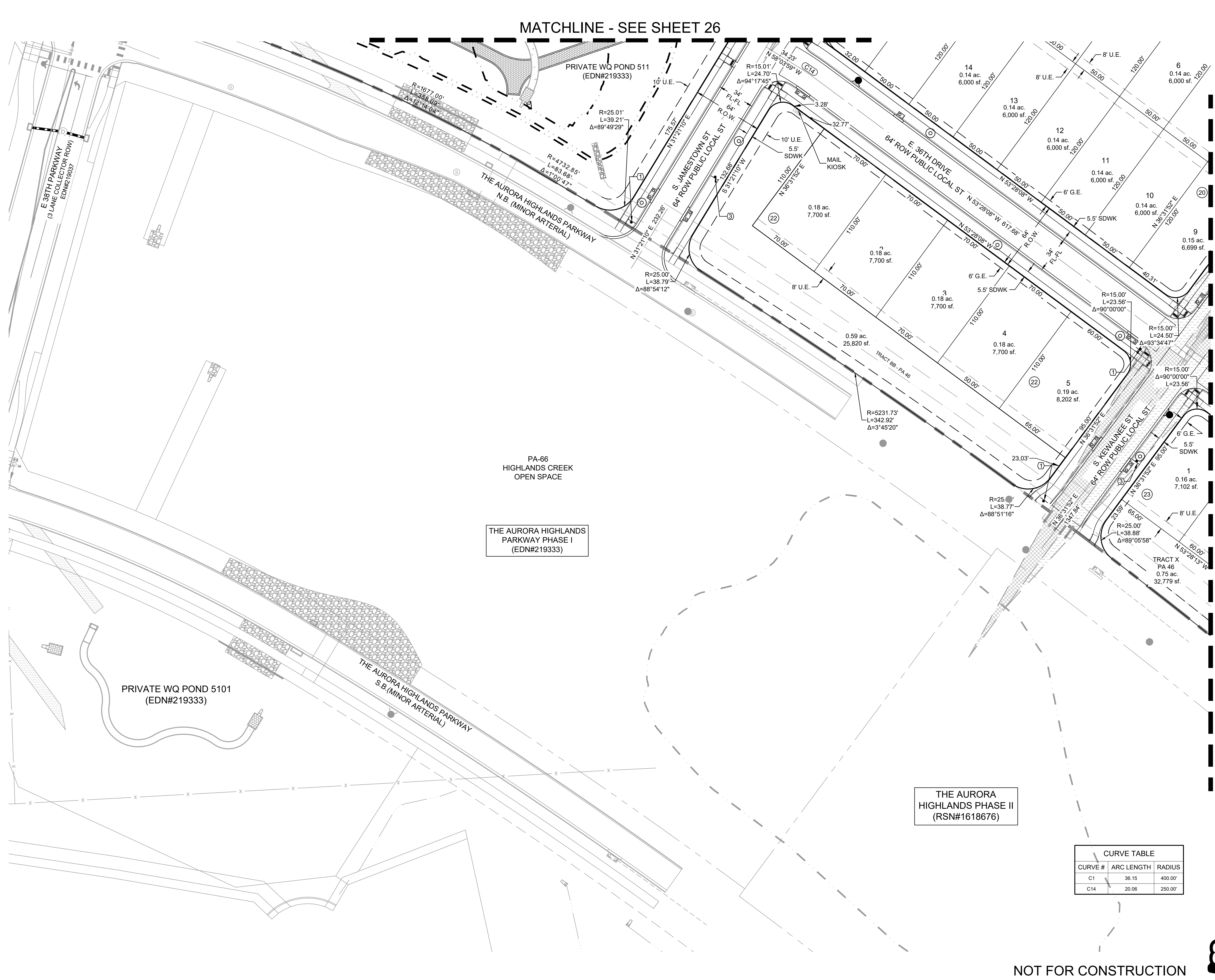
DATE: AUGUST, 2024

PREPARED BY:

Matrix
Excellence by Design
707 17th Street, Suite 3150
Denver, Colorado 80202
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www.matrixdesigngroup.com



CURVE TABLE		
CURVE #	ARC LENGTH	RADIUS
C1	38.15	400.00'
C14	20.06	250.00'

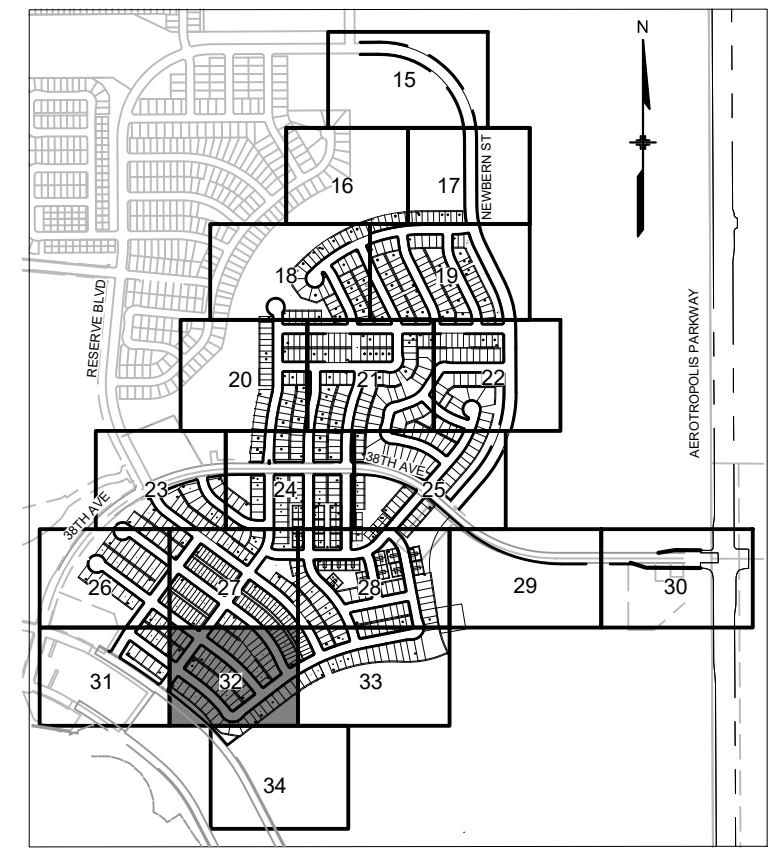


MATCHLINE - SEE SHEET 27

MATCHLINE - SEE SHEET 31

MATCHLINE - SEE SHEET 33

MATCHLINE - SEE SHEET 34



KEY MAP
SCALE: 1" = 1200'

- LEGEND**
- PROPOSED RIGHT-OF-WAY
 - PROPOSED CENTERLINE
 - PROPOSED EASEMENT
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 - UTILITY EASEMENT
 - GAS EASEMENT
 - ACCESS EASEMENT
 - LOT NUMBER
 - BLOCK NUMBER
- U.E.
G.E.
A.E.
1

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CURVE #	ARC LENGTH	RADIUS
C3	413.14	1504.00'
C4	437.63	800.00'
C6	67.60	300.00'
C11	86.27	55.00'
C12	327.03	1200.00'

SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: SITE PLAN

DATE: AUGUST, 2024

PREPARED BY:

Matrix
Excellence by Design
707 17th Street, Suite 3150
Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com



SHEET: 32 OF 96

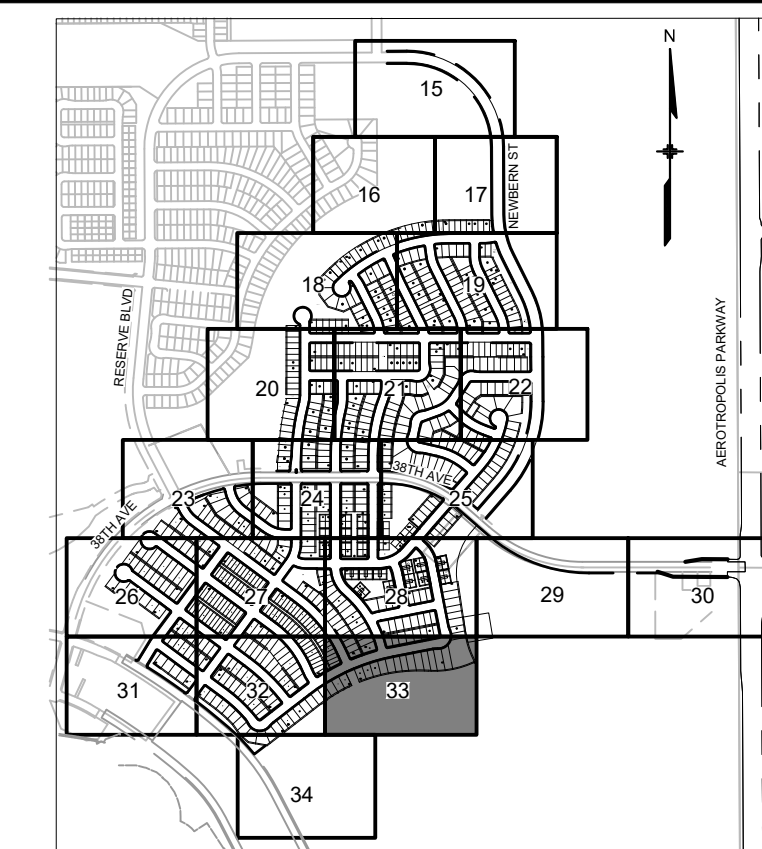
NOT FOR CONSTRUCTION

No receiving curb ramp across E. 36th Dr, remove curb ramp

what / when will this connect?
This will connect to a future trail that will be constructed with the adjacent PA-71 site plan. This plan has not started design. A note has been added

EXISTING REGIONAL DETENTION POND 8560
CASE # 2022-6020-00
PDR EDN 224051

MATCHLINE - SEE SHEET 28



KEY MAP
SCALE: 1" = 1200'

LEGEND

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- PROPOSED EASEMENT
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40 0 40 80
SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: SITE PLAN

DATE: AUGUST, 2024

PREPARED BY:

Matrix
Excellence by Design
707 17th Street, Suite 3150
Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com



SHEET: 33 OF 96

NOT FOR CONSTRUCTION

MATCHLINE - SEE SHEET 32

MATCHLINE - SEE SHEET 34

EXISTING REGIONAL DETENTION
POND 8560
CASE # 2022-6020-00
PDR EDN 224051

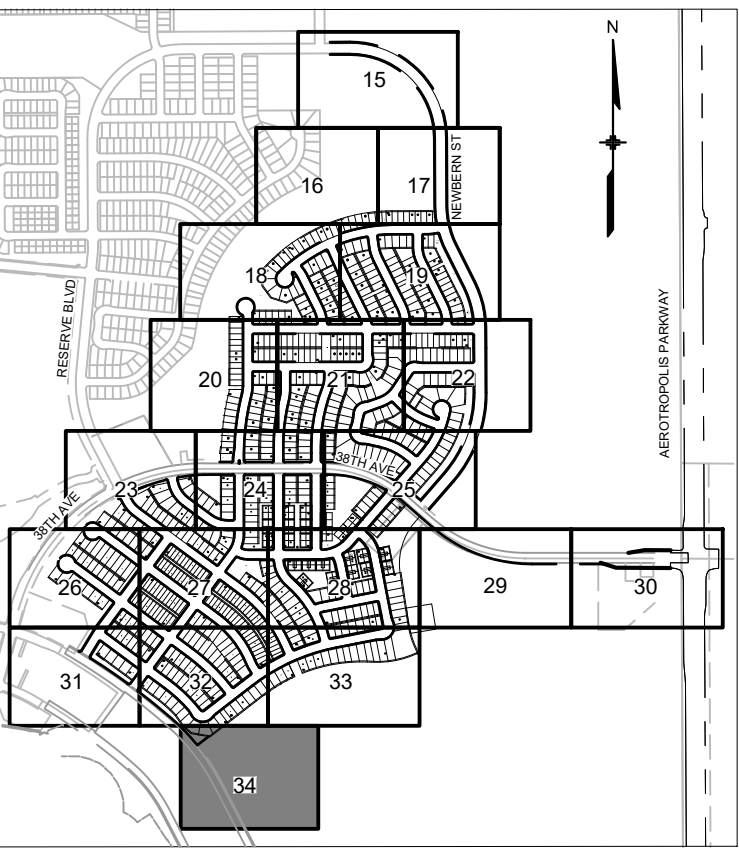
PA-71
RESIDENTIAL

R-2 ZONE
FUTURE
DEVELOPMENT

what will this connect
to and when?
TYP

This will connect to a future trail that will
be constructed with the adjacent PA-71
Site Plan. This plan has not started
design. A note has been added

PA-71
RESIDENTIAL
R-2 ZONE
FUTURE
DEVELOPMENT

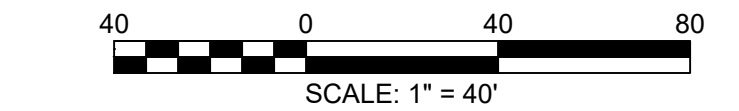


KEY MAP
SCALE: 1" = 1200'

LEGEND	
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	PROPOSED CENTERLINE
	PROPOSED EASEMENT
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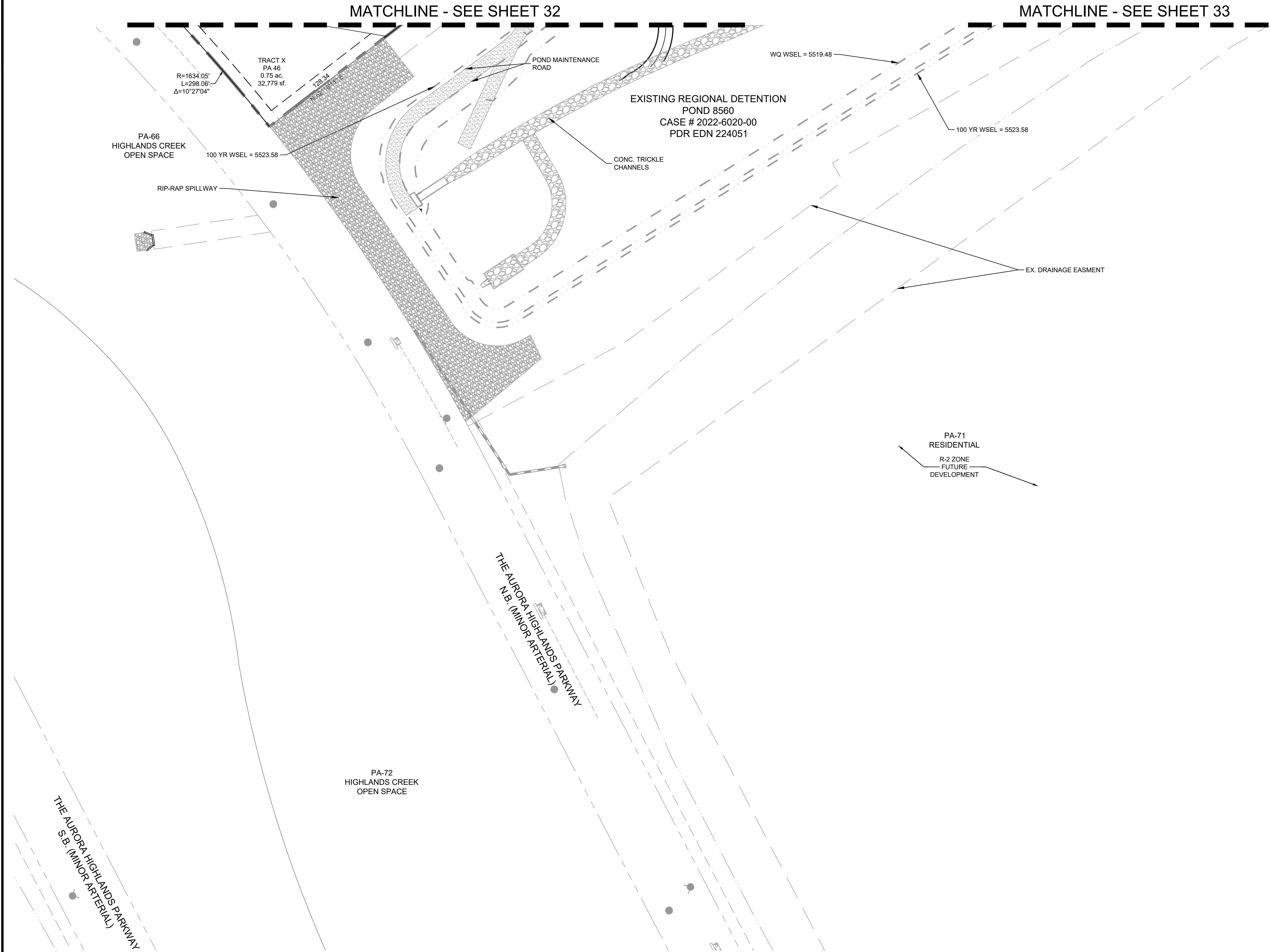
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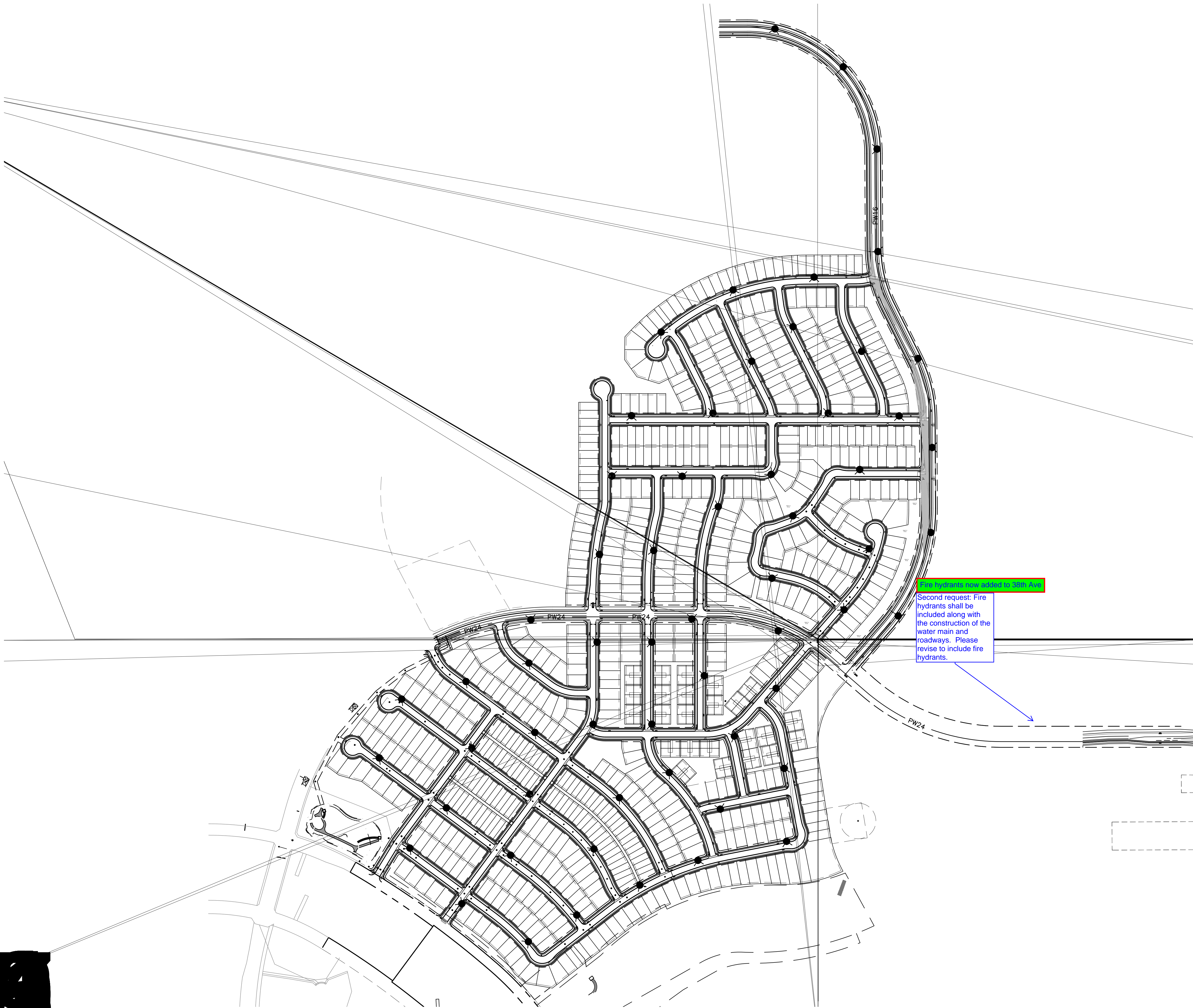


THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: SITE PLAN
DATE: AUGUST, 2024
PREPARED BY:

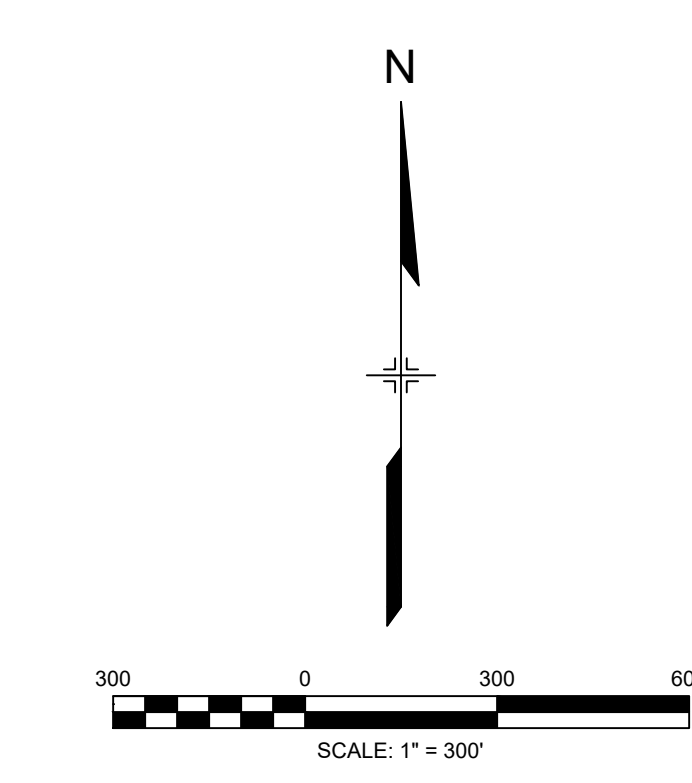
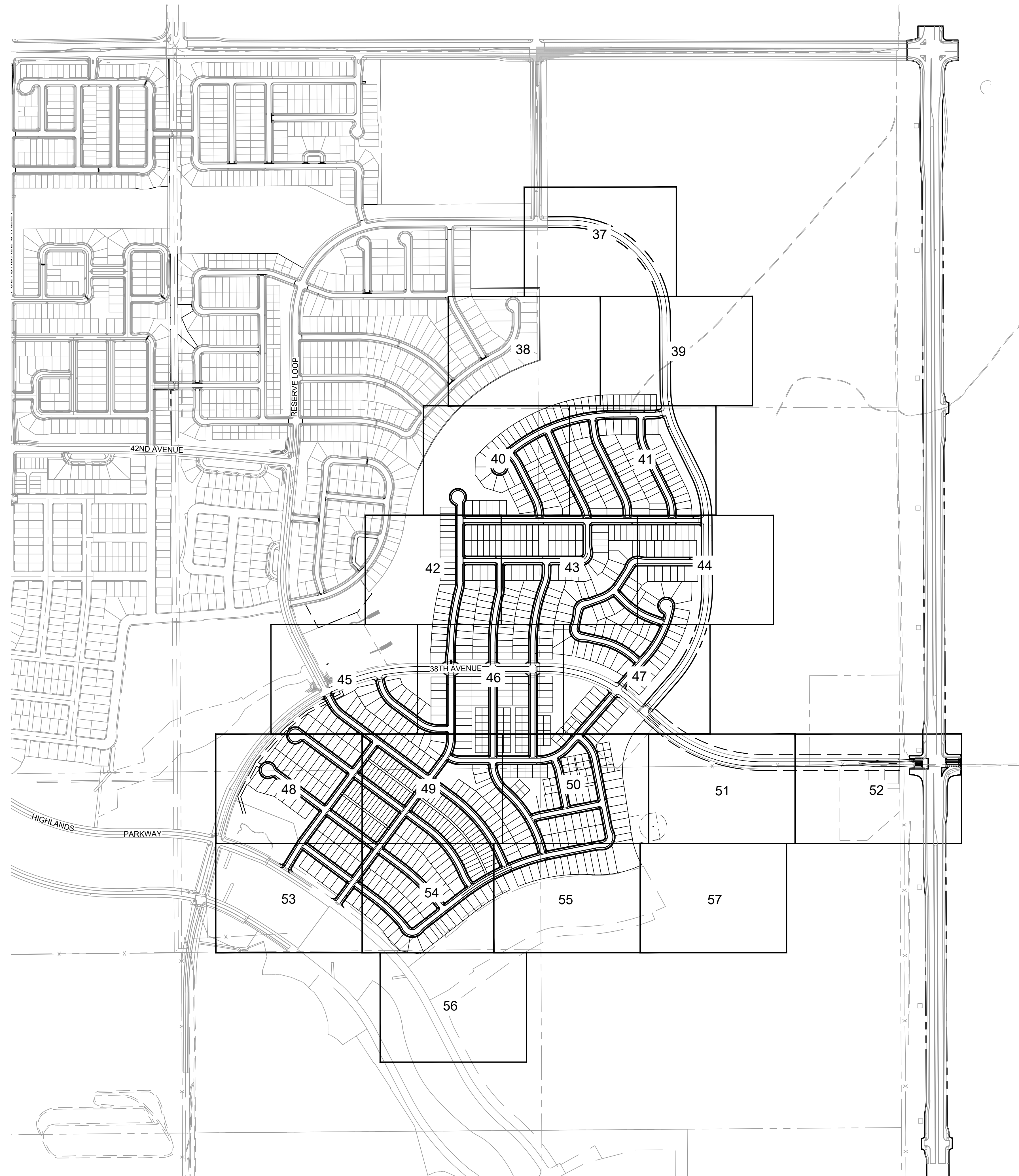
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707 17th Street, Suite 3150
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www.matrixdesigngroup.com





Fire hydrants now added to 38th Ave

Second request: Fire hydrants shall be included along with the construction of the water main and roadways. Please revise to include fire hydrants.



NOT FOR CONSTRUCTION

THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: OVERALL GRADING & UTILITY
INDEX PLAN

DATE: AUGUST, 2024

PREPARED BY:

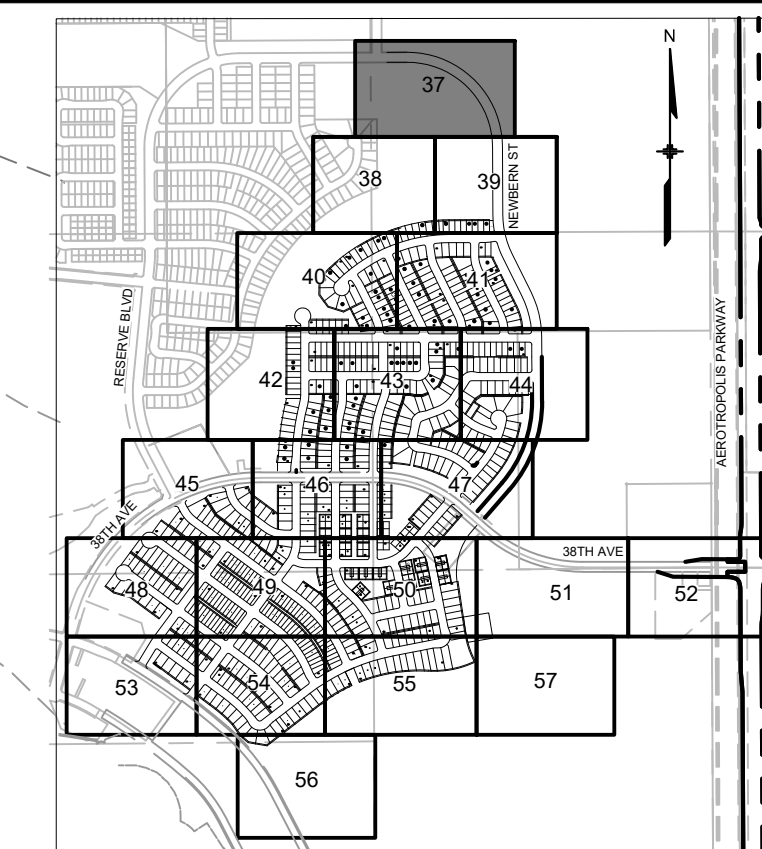
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SHEET:36 OF 96



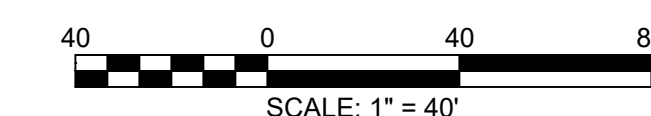
KEY MAP
SCALE: 1" = 1200'

LEGEND

	PROPOSED SANITARY
	PROPOSED STORM
	PROPOSED WATER
	PROPOSED INLET
	PROPOSED FIRE HYDRANT
	PROPOSED STORM MANHOLE
	PROPOSED SANITARY MANHOLE
	PROPOSED 5' CONTOUR
	PROPOSED 1' CONTOUR
	PROPOSED 5' CONTOUR (BY OTHERS)
	PROPOSED 1' CONTOUR (BY OTHERS)
	EXISTING 5' CONTOUR
	EXISTING 1' CONTOUR
	CSP NO. 1 BOUNDARY
	SANITARY SERVICE
	WATER SERVICE
	PROPOSED EASEMENT
	POND MAINTENANCE ACCESS PATH
	PROPOSED EMERGENCY OVERFLOW

NOTES:

1. STORM SEWER IS PUBLIC UNLESS NOTED OTHERWISE.
2. ALL WATERLINE IS 8" UNLESS NOTED OTHERWISE.
3. WATER SERVICE LINES ARE PUBLIC UP THROUGH THE METER AND ARE PRIVATE DOWNSTREAM OF THE METER.
4. ALL SANITARY SEWER IS 8" UNLESS NOTED OTHERWISE.
5. ALL SANITARY SERVICE CONNECTIONS ARE PRIVATE.
6. SEE SHEET 3 FOR TYPICAL SECTIONS.
7. MINIMUM SLOPE ON UNPAVED AREAS IS 2%, MINIMUM SLOPE ON ASPHALT IS 1%, AND MINIMUM SLOPE ON CONCRETE IS 0.5%.
8. THE MAXIMUM SLOPE WITHIN ROW IS 4:1, THE MAXIMUM SLOPE FOR PROPERTY OUTSIDE OF THE ROW IS 3:1.
9. THE SLOPE AWAY FROM THE BUILDING SHALL HAVE A MINIMUM GRADE OF FIVE (5) PERCENT FOR THE FIRST TEN FEET OR TO THE PROPERTY LINE, WHICHEVER OCCURS FIRST, THEN A MINIMUM OF TWO (2) PERCENT UNTIL THE SLOPE REACHES THE SWALE AROUND THE BUILDING. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT THE TEN FEET OF HORIZONTAL DISTANCE, A FIVE (5) PERCENT SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATIVE METHOD OF DIVERTING STORM RUNOFF AWAY FROM THE FOUNDATION. IMPERVIOUS SURFACES WITHIN TEN FEET OF THE BUILDING FOUNDATION SHALL BE SLOPED A MINIMUM OF TWO (2) PERCENT AWAY FROM THE BUILDING.
10. THE MAXIMUM PERMISSIBLE LONGITUDINAL GRADE FOR FIRE LANES IS 10%. THE MAXIMUM TRANSVERSE GRADE FOR A FIRE LANE IS FOUR PERCENT WITH A RESULTANT MAXIMUM SLOPE OF TEN PERCENT.
11. THE RESULTANT GRADE IN ANY DIRECTION WITHIN ACCESSIBLE PARKING AREAS SHALL NOT EXCEED TWO PERCENT.
12. THE MAXIMUM CROSS SLOPE IN AN ACCESSIBLE PATH SHALL NOT EXCEED TWO PERCENT. THE MAXIMUM LONGITUDINAL SLOPE IN AN ACCESSIBLE PATH SHALL NOT EXCEED FIVE PERCENT.



THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: GRADING AND UTILITY
PLAN

DATE: AUGUST, 2024

PREPARED BY:

Matrix

Excellence by Design

707 17th Street, Suite 3150

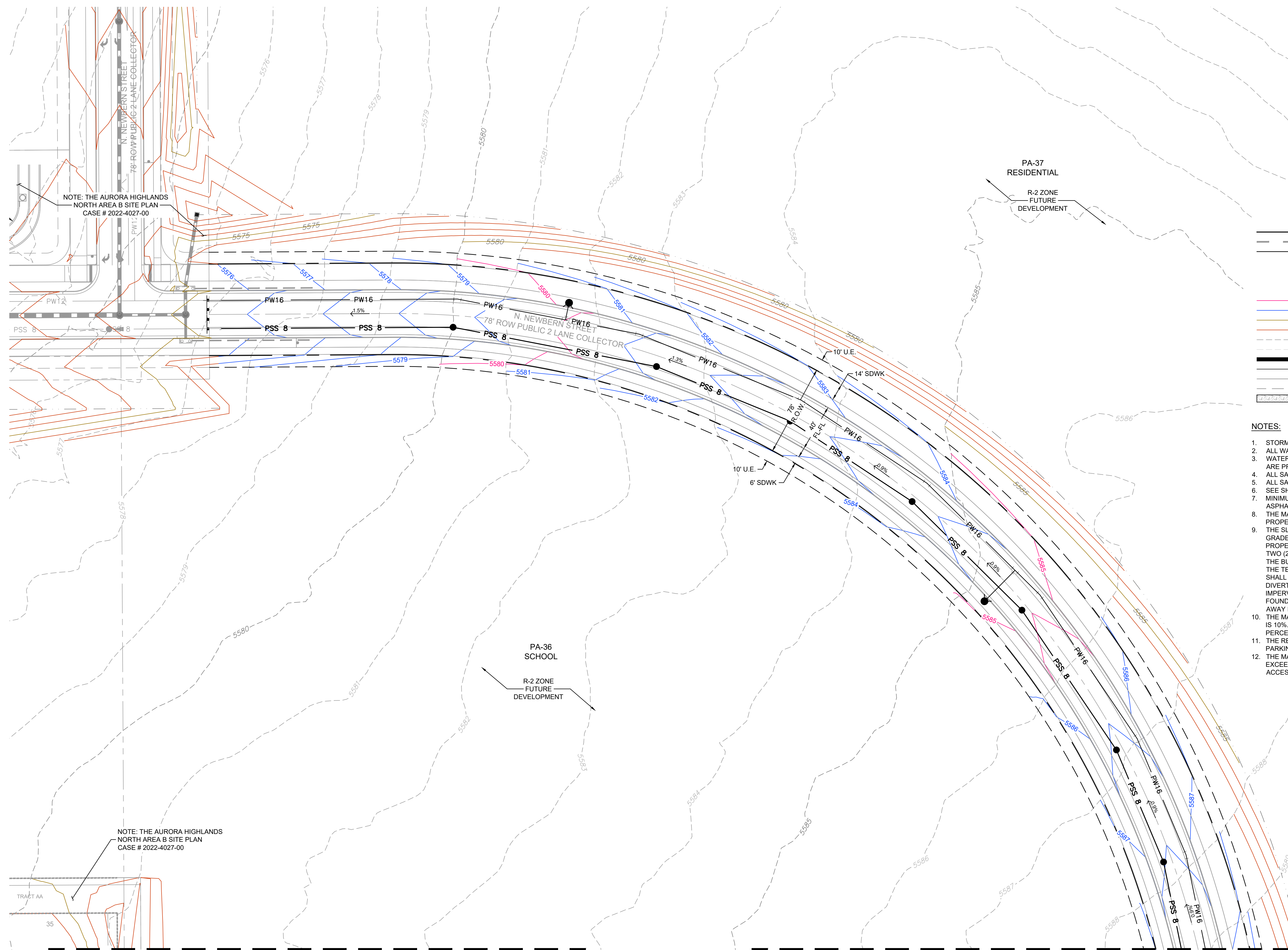
Denver, Colorado 80202

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SHEET: 37 OF 96



NOTE: THE AURORA HIGHLANDS
NORTH AREA B SITE PLAN
CASE # 2022-4027-00

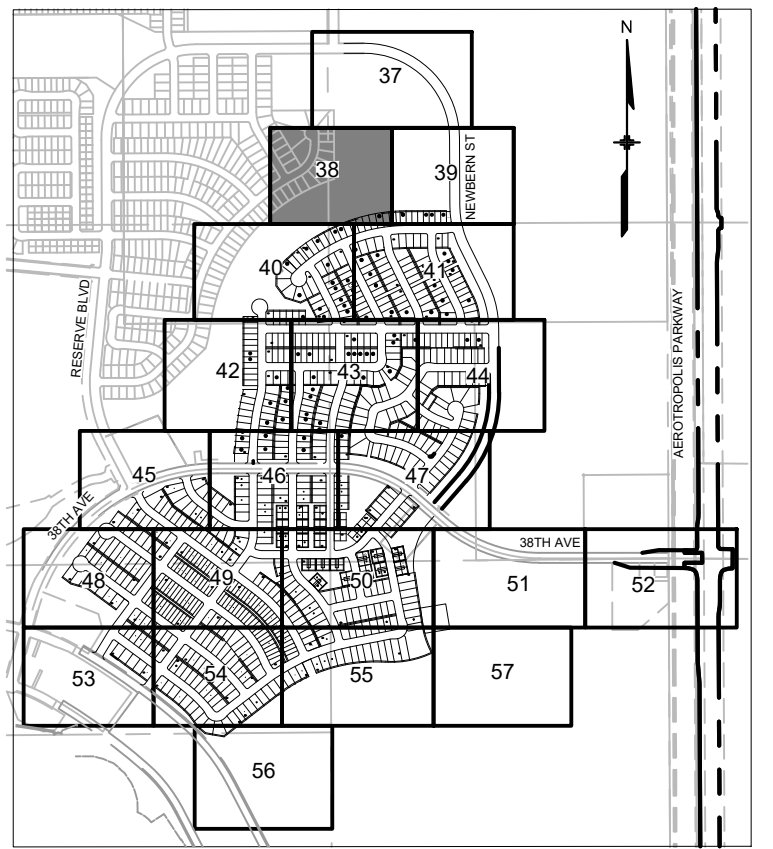
NOTE: THE AURORA HIGHLANDS
NORTH AREA B SITE PLAN
CASE # 2022-4027-00

MATCHLINE - SEE SHEET 38

MATCHLINE - SEE SHEET 39

NOT FOR CONSTRUCTION

MATCHLINE - SEE SHEET 37



KEY MAP
SCALE: 1" = 1200'

LEGEND

	PROPOSED SANITARY
	PROPOSED STORM
	PROPOSED WATER
	PROPOSED INLET
	PROPOSED FIRE HYDRANT
	PROPOSED STORM MANHOLE
	PROPOSED SANITARY MANHOLE
	PROPOSED 5' CONTOUR
	PROPOSED 1' CONTOUR
	PROPOSED 5' CONTOUR (BY OTHERS)
	PROPOSED 1' CONTOUR (BY OTHERS)
	EXISTING 5' CONTOUR
	EXISTING 1' CONTOUR
	CSP NO. 1 BOUNDARY
	SANITARY SERVICE
	WATER SERVICE
	PROPOSED EASEMENT
	POND MAINTENANCE ACCESS PATH
	PROPOSED EMERGENCY OVERFLOW

NOTES:

1. STORM SEWER IS PUBLIC UNLESS NOTED OTHERWISE.
2. ALL WATERLINE IS 8" UNLESS NOTED OTHERWISE.
3. WATER SERVICE LINES ARE PUBLIC UP THROUGH THE METER AND ARE PRIVATE DOWNSTREAM OF THE METER.
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9. THE SLOPE AWAY FROM THE BUILDING SHALL HAVE A MINIMUM GRADE OF FIVE (5) PERCENT FOR THE FIRST TEN FEET OR TO THE PROPERTY LINE, WHICHEVER OCCURS FIRST, THEN A MINIMUM OF TWO (2) PERCENT UNTIL THE SLOPE REACHES THE SWALE AROUND THE BUILDING. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT THE TEN FEET OF HORIZONTAL DISTANCE, A FIVE (5) PERCENT SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATIVE METHOD OF DIVERTING STORM RUNOFF AWAY FROM THE FOUNDATION. IMPERVIOUS SURFACES WITHIN TEN FEET OF THE BUILDING FOUNDATION SHALL BE SLOPED A MINIMUM OF TWO (2) PERCENT AWAY FROM THE BUILDING.
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12. THE MAXIMUM CROSS SLOPE IN AN ACCESSIBLE PATH SHALL NOT EXCEED TWO PERCENT. THE MAXIMUM LONGITUDINAL SLOPE IN AN ACCESSIBLE PATH SHALL NOT EXCEED FIVE PERCENT.

N

SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: GRADING AND UTILITY
PLAN

DATE: AUGUST, 2024

PREPARED BY:

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Denver, Colorado 80202

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SHEET: 38 OF 96

MATCHLINE - SEE SHEET 39

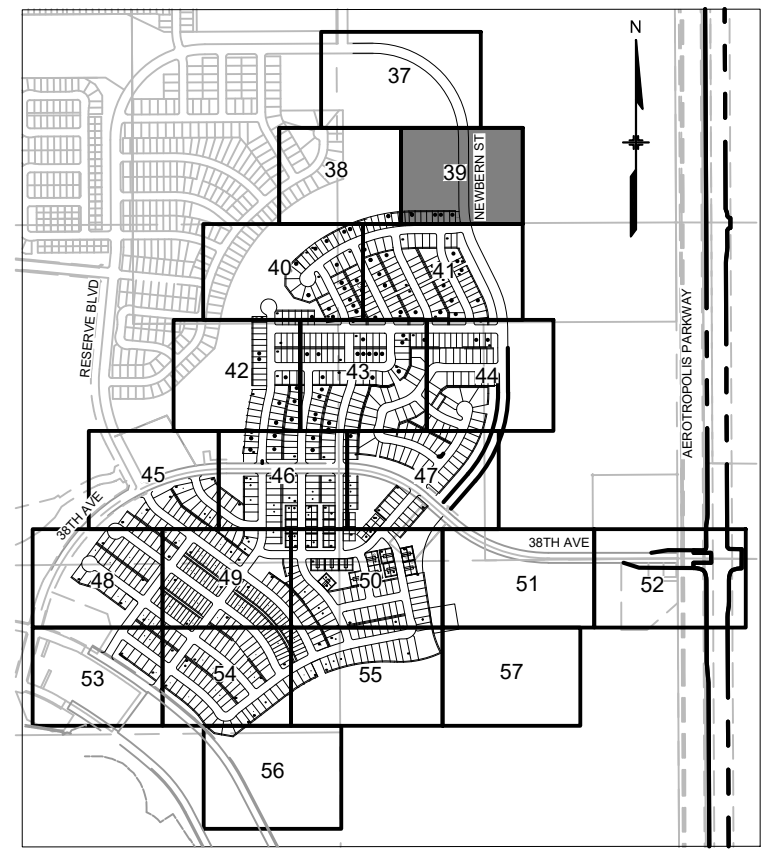
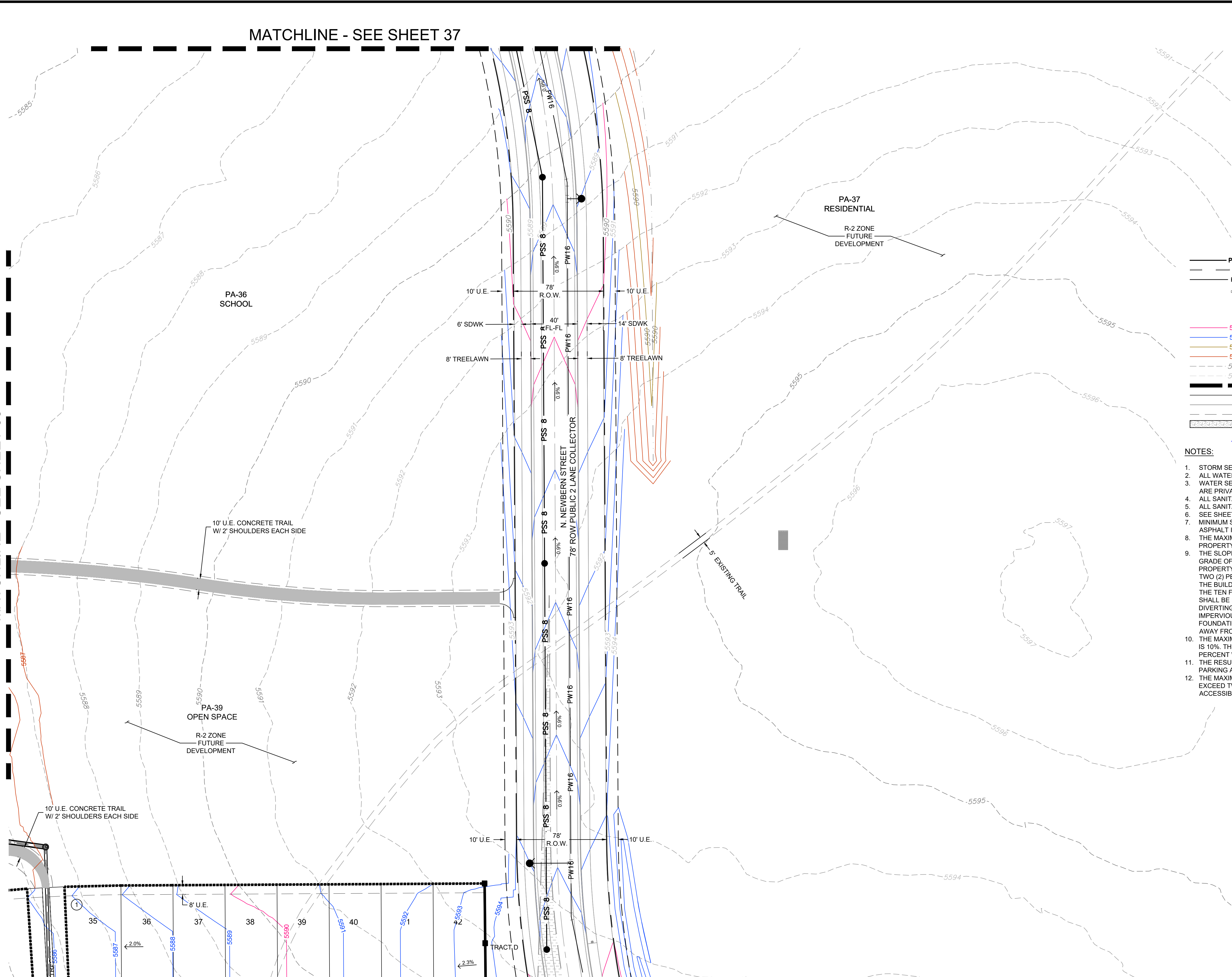
MATCHLINE - SEE SHEET 41

MATCHLINE - SEE SHEET 40

NOT FOR CONSTRUCTION

MATCHLINE - SEE SHEET 38

MATCHLINE - SEE SHEET 37



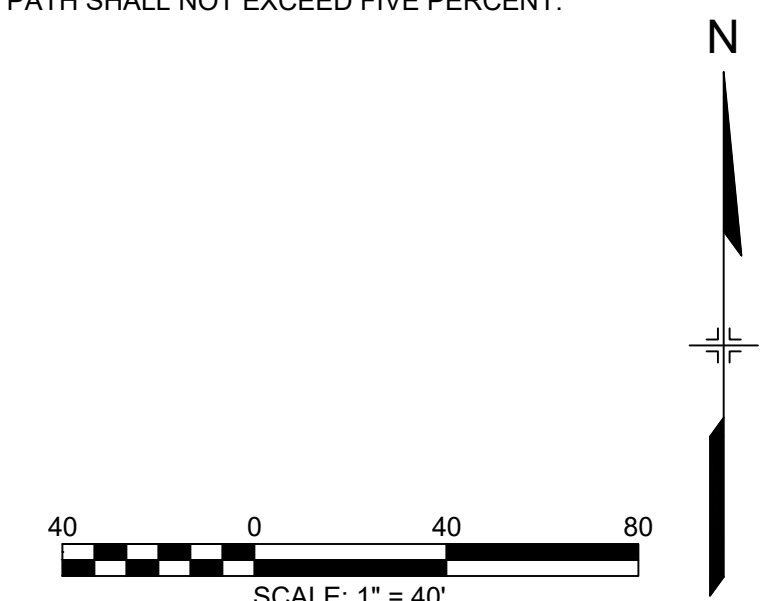
KEY MAP
SCALE: 1" = 1200'

LEGEND

	PROPOSED SANITARY
	PROPOSED STORM
	PROPOSED WATER
	PROPOSED INLET
	PROPOSED FIRE HYDRANT
	PROPOSED STORM MANHOLE
	PROPOSED SANITARY MANHOLE
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THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: GRADING AND UTILITY
PLAN

DATE: AUGUST, 2024

PREPARED BY:

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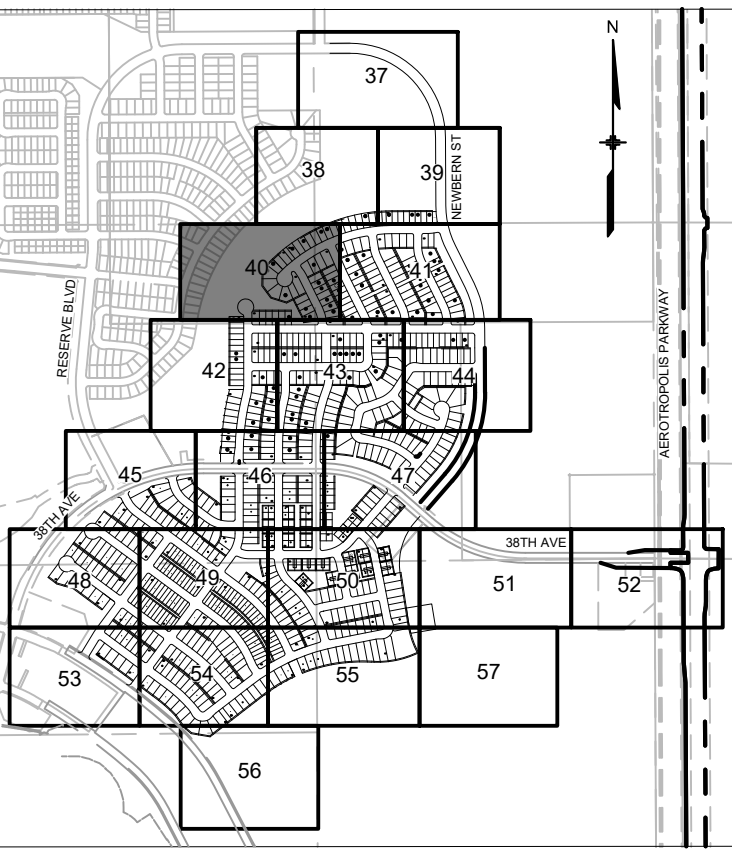
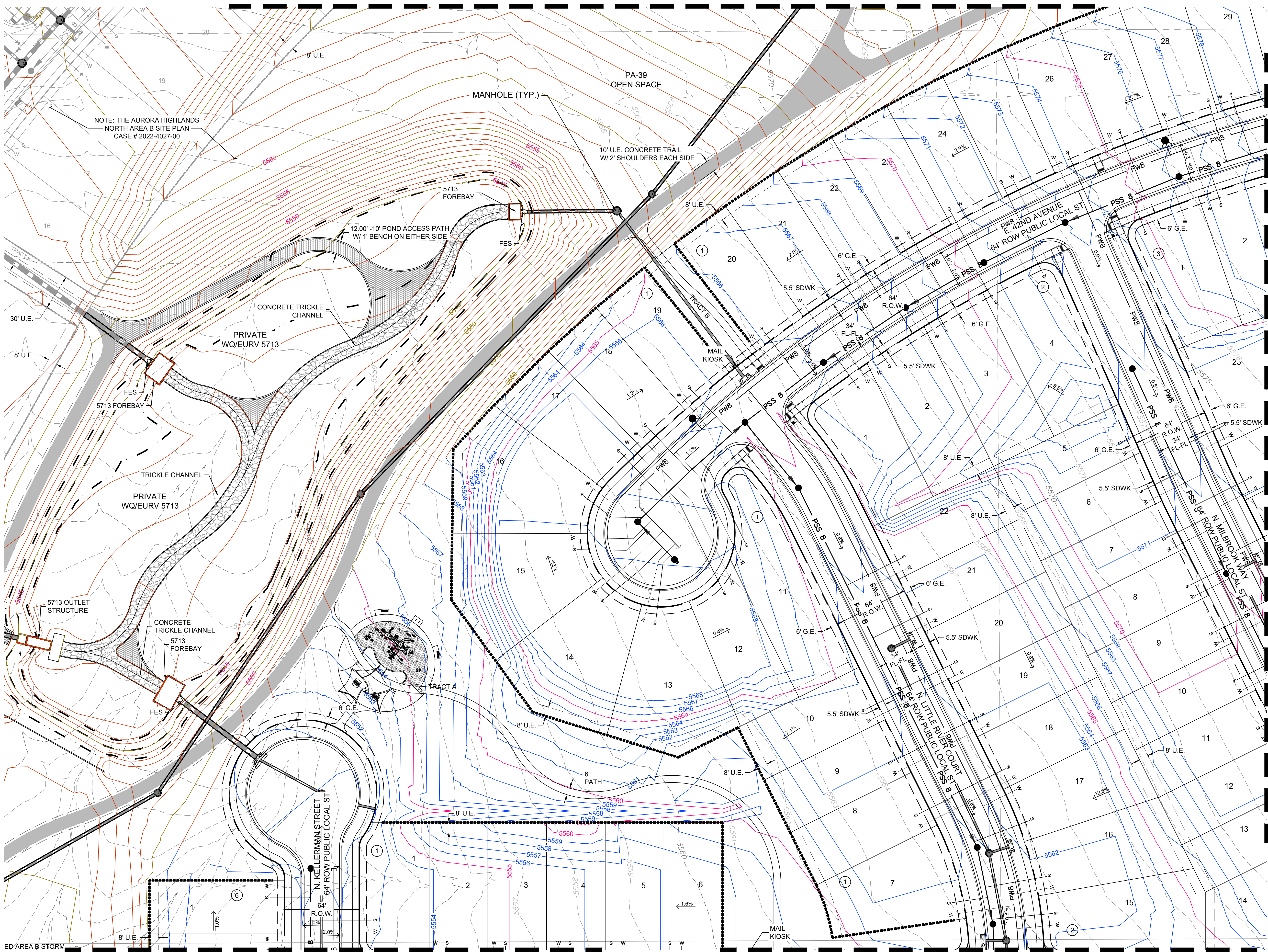


NOT FOR CONSTRUCTION

SHEET: 39 OF 96

MATCHLINE - SEE SHEET 41

MATCHLINE - SEE SHEET 38



KEY MAP
SCALE: 1" = 1200'

LEGEND

- PSS 8 PROPOSED SANITARY
- PW 8 PROPOSED WATER
- PROPOSED INLET
- PROPOSED FIRE HYDRANT
- PROPOSED STORM MANHOLE
- PROPOSED SANITARY MANHOLE
- PROPOSED 5' CONTOUR
- PROPOSED 1' CONTOUR
- PROPOSED 5' CONTOUR (BY OTHERS)
- PROPOSED 1' CONTOUR (BY OTHERS)
- EXISTING 5' CONTOUR
- EXISTING 1' CONTOUR
- CSP NO. 1 BOUNDARY
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- WATER SERVICE
- PROPOSED EASEMENT
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SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: GRADING AND UTILITY PLAN

DATE: AUGUST, 2024

PREPARED BY:

Matrix
Excellence by Design

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www.matrixdesigngroup.com

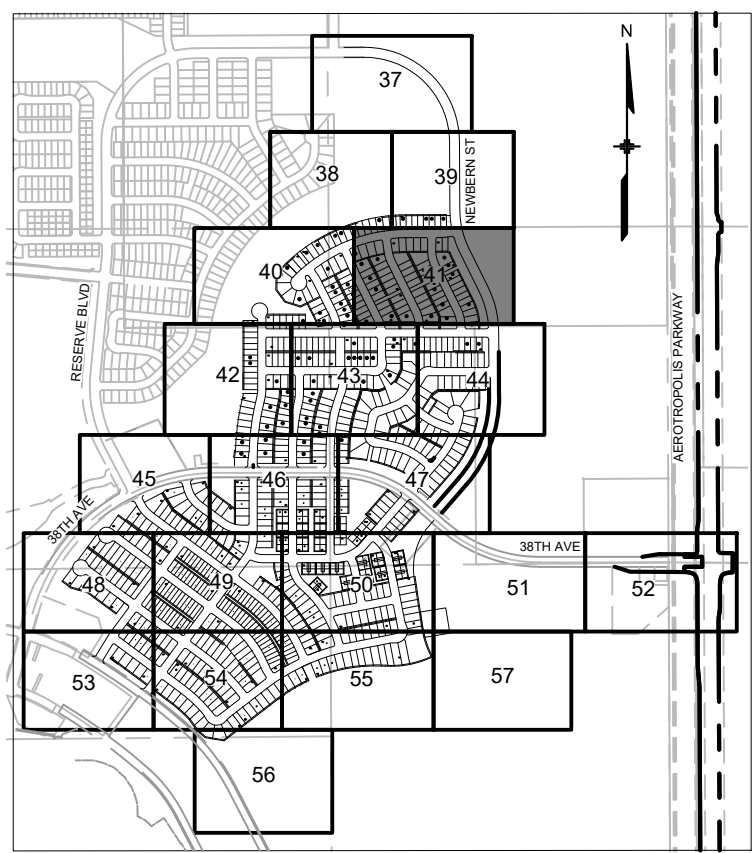


MATCHLINE - SEE SHEET 42

MATCHLINE - SEE SHEET 43

MATCHLINE - SEE SHEET 38

MATCHLINE - SEE SHEET 39



KEY MAP
SCALE: 1" = 1200'

LEGEND

	PROPOSED SANITARY
	PROPOSED STORM
	PROPOSED WATER
	PROPOSED INLET
	PROPOSED FIRE HYDRANT
	PROPOSED STORM MANHOLE
	PROPOSED SANITARY MANHOLE
	PROPOSED 5' CONTOUR
	PROPOSED 1' CONTOUR
	PROPOSED 5' CONTOUR (BY OTHERS)
	PROPOSED 1' CONTOUR (BY OTHERS)
	EXISTING 5' CONTOUR
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	CSP NO. 1 BOUNDARY
	SANITARY SERVICE
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	POND MAINTENANCE ACCESS PATH
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SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: GRADING AND UTILITY
PLAN

DATE: AUGUST, 2024

PREPARED BY:

Matrix

Excellence by Design

707 17th Street, Suite 3150

Denver, Colorado 80202

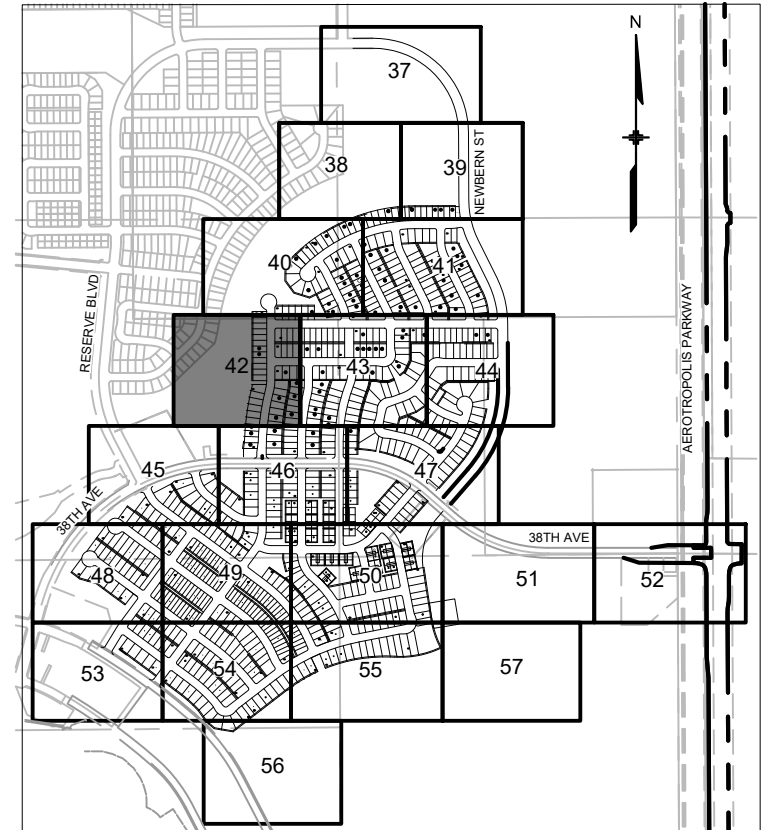
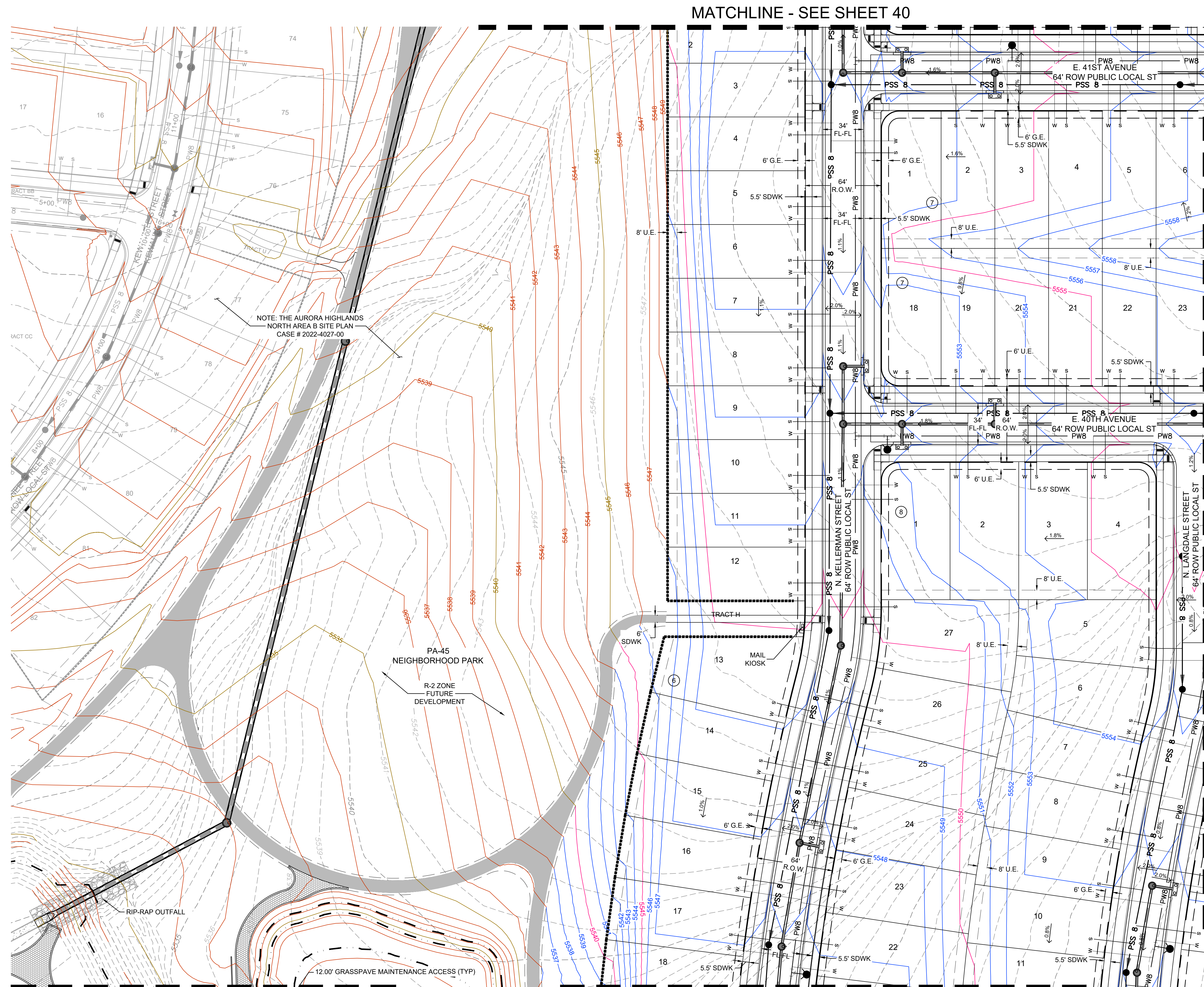
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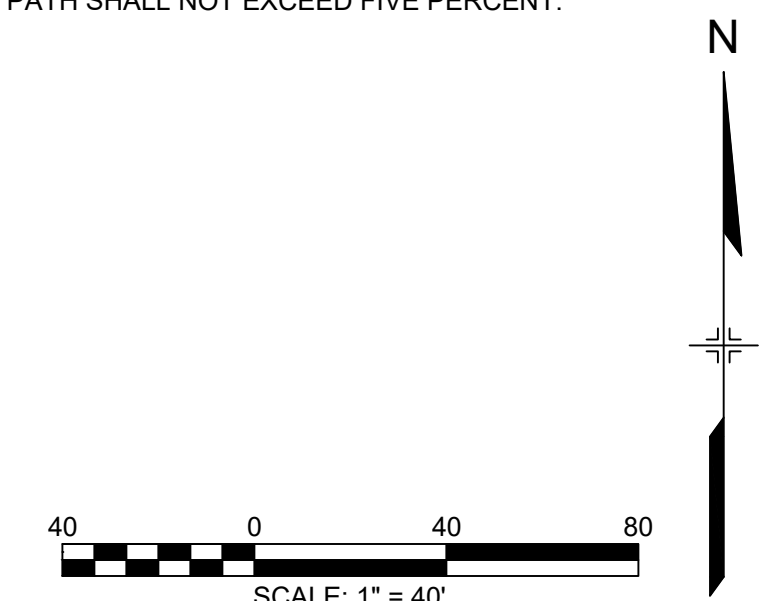
SHEET: 41 OF 96



KEY MAP
SCALE: 1" = 1200'

LEGEND	
	PROPOSED SANITARY
	PROPOSED STORM
	PROPOSED WATER
	PROPOSED INLET
	PROPOSED FIRE HYDRANT
	PROPOSED STORM MANHOLE
	PROPOSED SANITARY MANHOLE
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THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: GRADING AND UTILITY PLAN

DATE: AUGUST, 2024

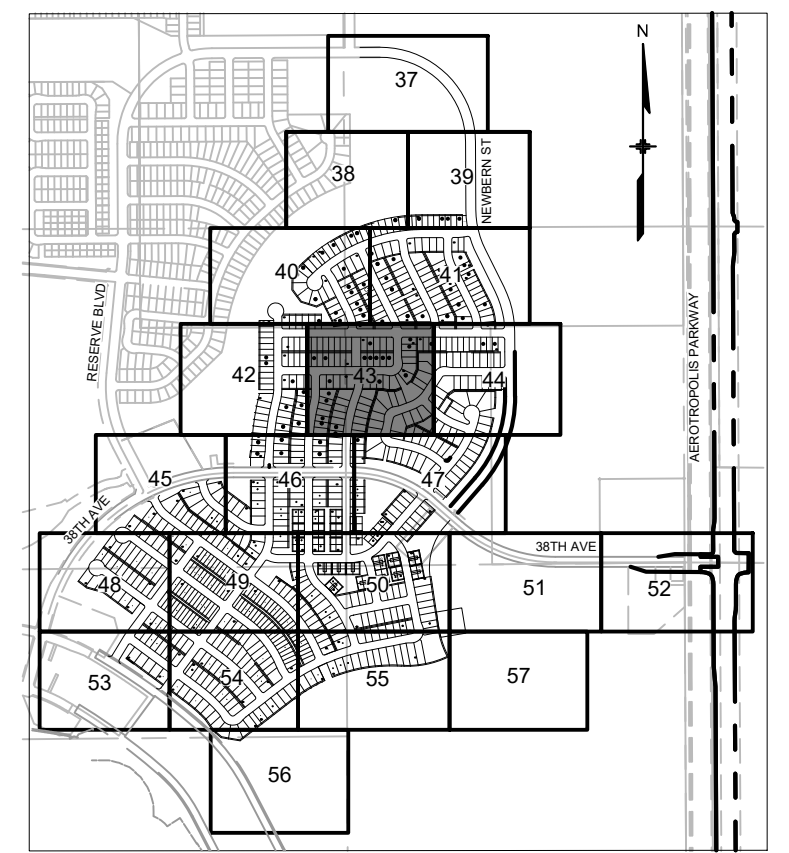
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MATCHLINE - SEE SHEET 40

MATCHLINE - SEE SHEET 41

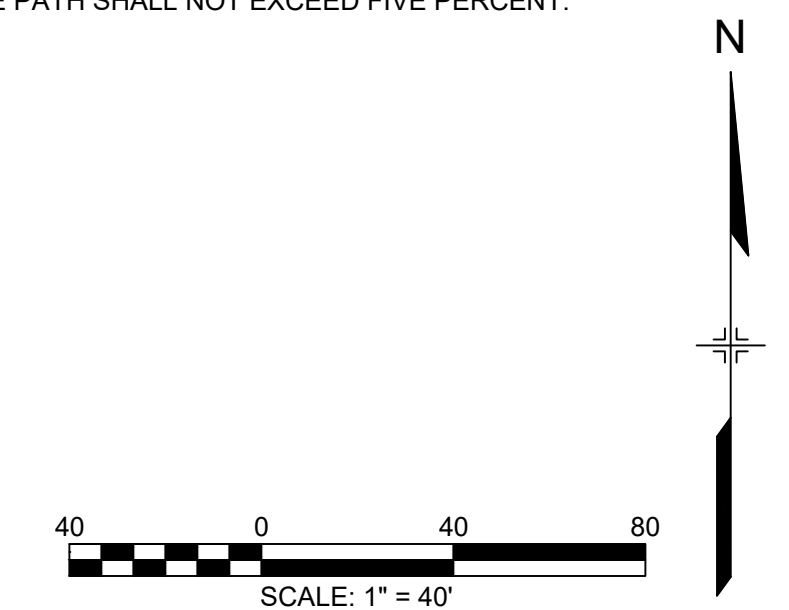
KEY MAP
SCALE: 1" = 1200'

LEGEND

	PROPOSED SANITARY
	PROPOSED STORM
	PROPOSED WATER
	PROPOSED INLET
	PROPOSED FIRE HYDRANT
	PROPOSED STORM MANHOLE
	PROPOSED SANITARY MANHOLE
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THE AURORA HIGHLANDS NORTH -
AREA C SITE PLANTITLE: GRADING AND UTILITY
PLAN

DATE: AUGUST, 2024

PREPARED BY:

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SHEET: 43 OF 96

NOT FOR CONSTRUCTION

MATCHLINE - SEE SHEET 46

MATCHLINE - SEE SHEET 47

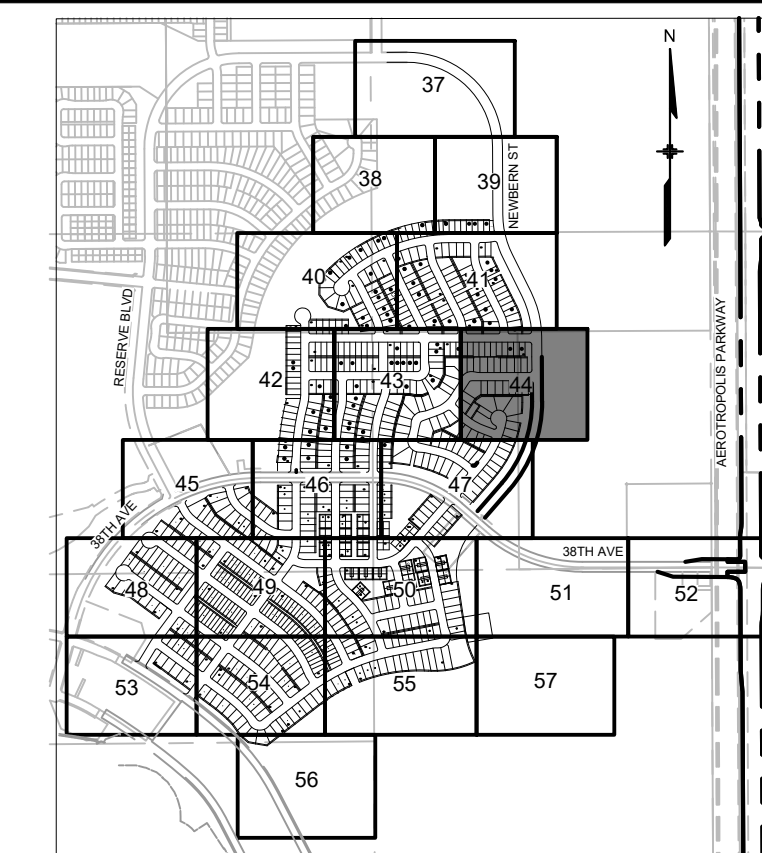
MATCHLINE - SEE SHEET 42

MATCHLINE - SEE SHEET 44

MATCHLINE - SEE SHEET 41

MATCHLINE - SEE SHEET 43

MATCHLINE - SEE SHEET 47



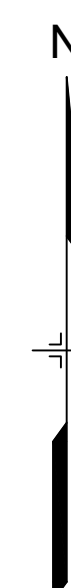
KEY MAP
SCALE: 1" = 1200'

LEGEND

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	PROPOSED STORM
	PROPOSED WATER
	PROPOSED INLET
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	PROPOSED SANITARY MANHOLE
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SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: GRADING AND UTILITY
PLAN

DATE: AUGUST, 2024

PREPARED BY:

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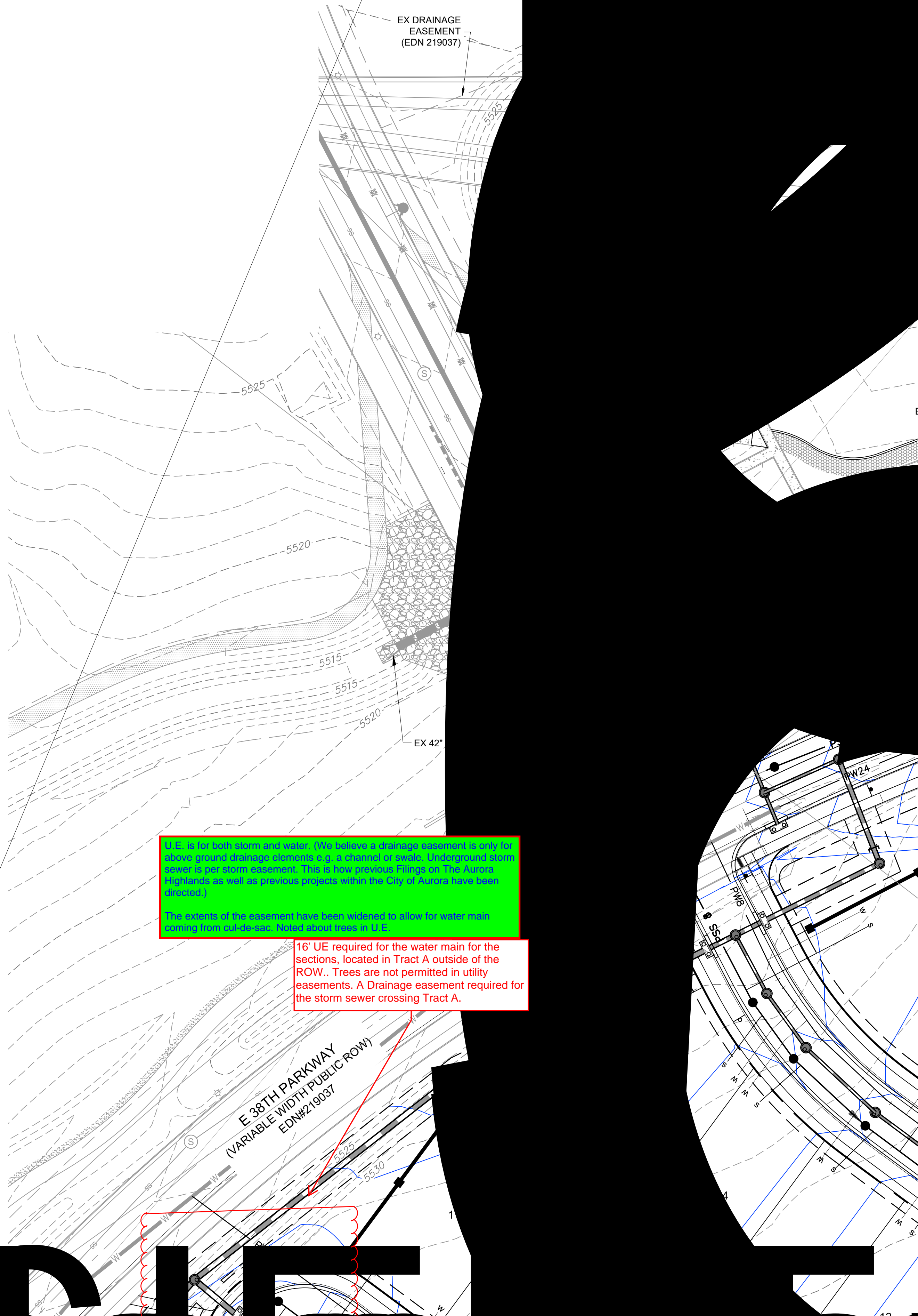
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SHEET: 44 OF 96

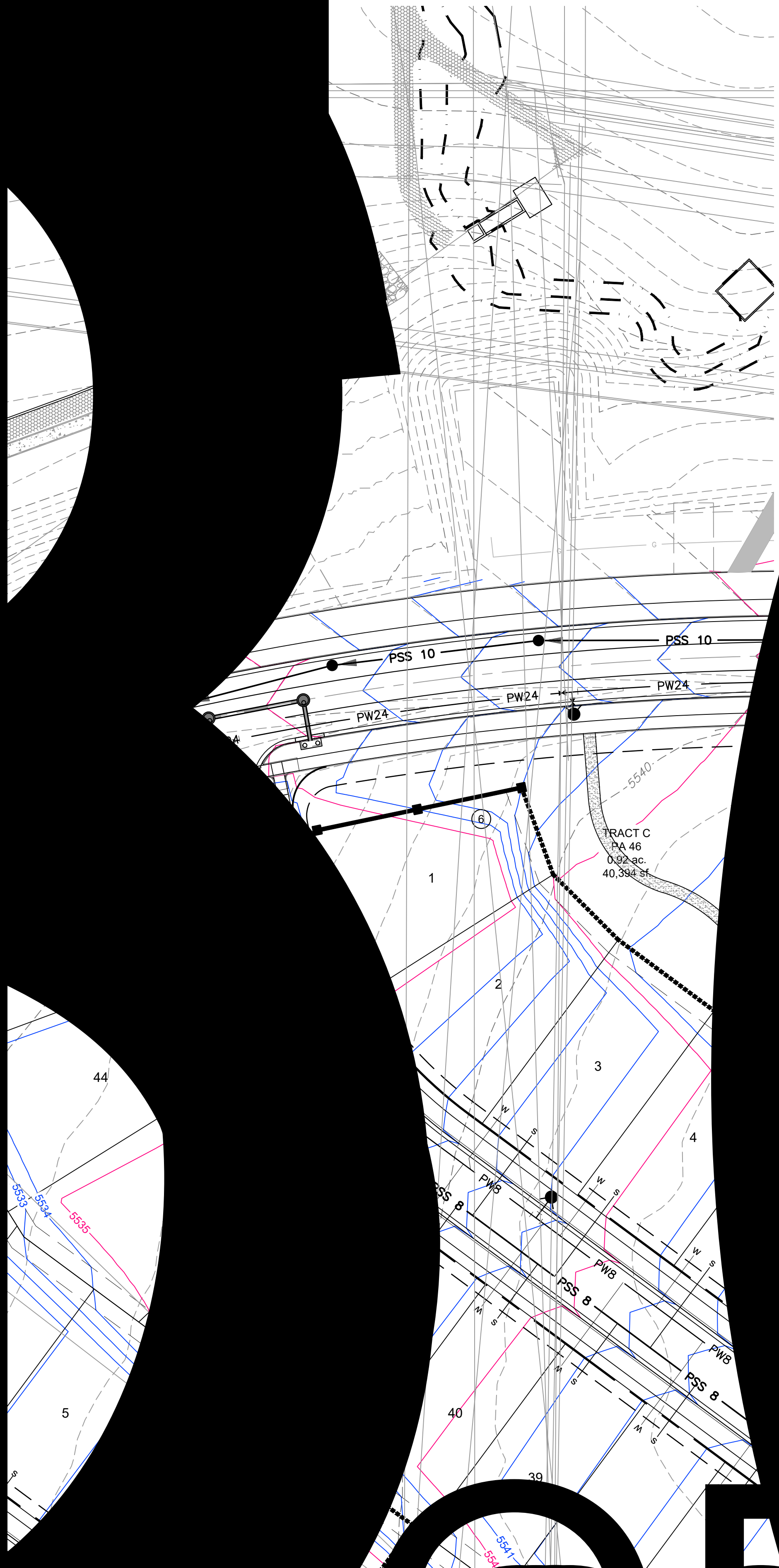
Can you remove the 2nd manhole? Center sanitary manhole and add a stub behind it for the n cul de sac connections, and try to avoid having 2 MH's.

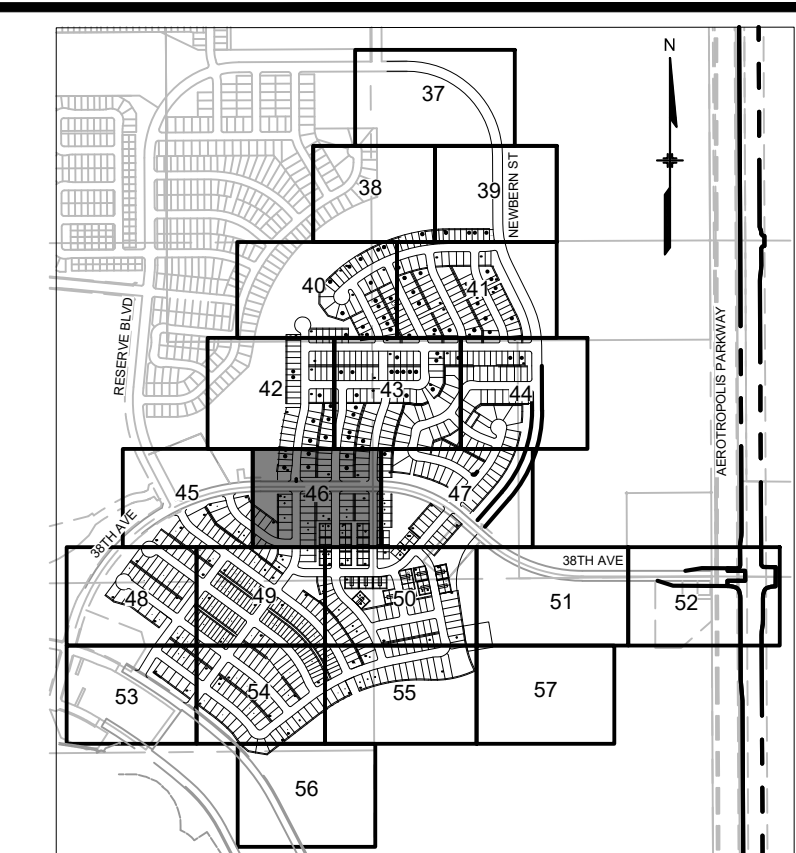
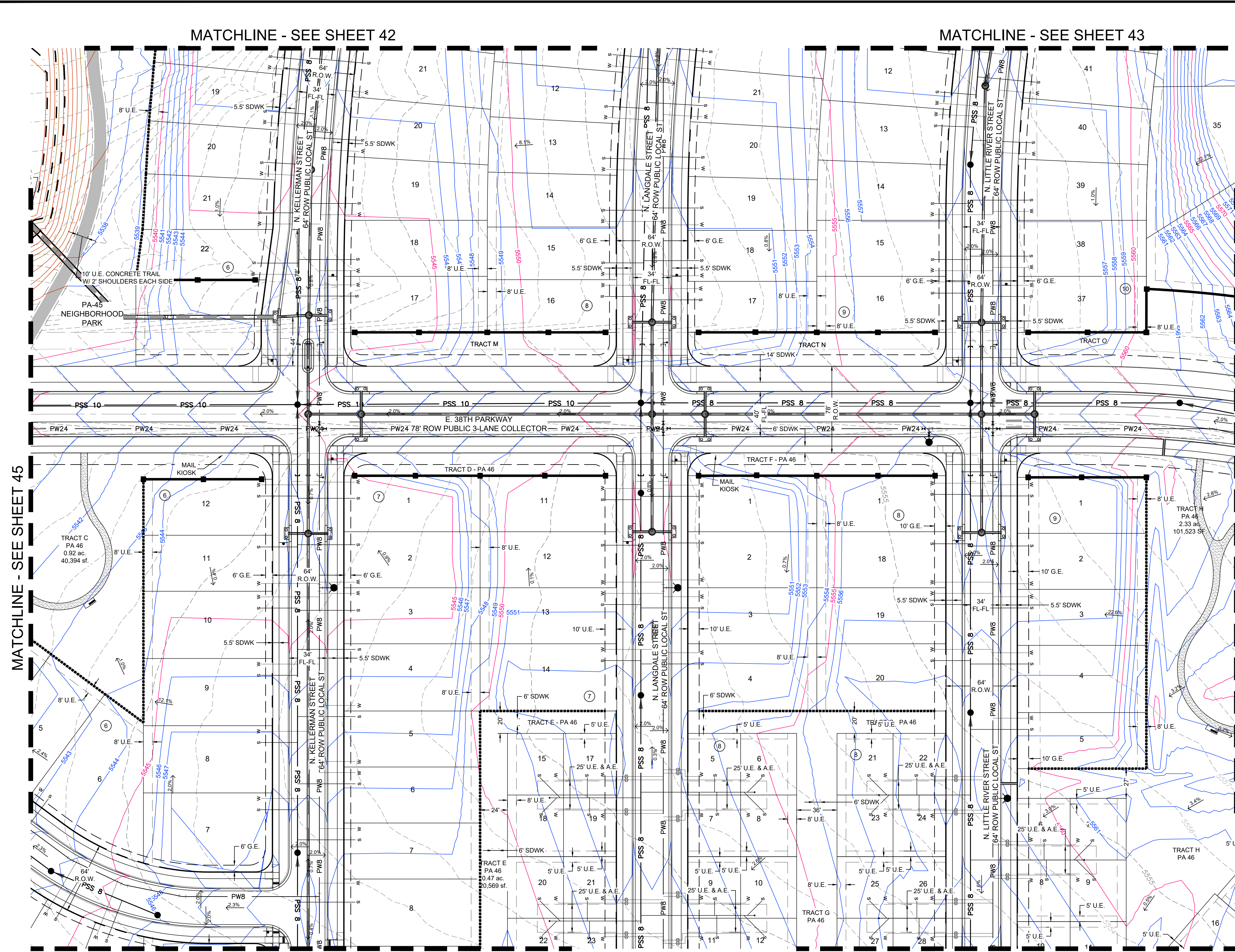


(U.E. is for both storm and water. (We believe a drainage easement is only for above ground drainage elements e.g. a channel or swale. Underground storm sewer is per storm easement. This is how previous Filings on The Aurora Highlands as well as previous projects within the City of Aurora have been directed.)

The extents of the easement have been widened to allow for water main crossing from cut-to-side. Noted about trees in U.E.

16' UE required for the water main for the sections, located in Tract A outside of the ROW.. Trees are not permitted in utility easements. A Drainage easement required for the storm sewer crossing Tract A.





- KEY MAP
SCALE: 1" = 200'
- LEGEND
- PSS 8 PROPOSED SANITARY
 - PSS 10 PROPOSED STORM
 - PW8 PROPOSED WATER
 - PSS 10 PROPOSED INLET
 - PSS 10 PROPOSED FIRE
 - PSS 10 PROPOSED HYDRANT
 - PSS 10 PROPOSED STORM
 - PSS 10 MANHOLE
 - PSS 10 PROPOSED SANITARY
 - PSS 10 MANHOLE
 - 5565 PROPOSED 5' CONTOUR
 - 5566 PROPOSED 1' CONTOUR
 - 5565 PROPOSED 5' CONTOUR (BY OTHERS)
 - 5566 PROPOSED 1' CONTOUR (BY OTHERS)
 - 5535 EXISTING 5' CONTOUR
 - 5535 EXISTING 1' CONTOUR
 - CSP NO. 1 BOUNDARY
 - S SANITARY SERVICE
 - W WATER SERVICE
 - E EASEMENT
 - P POND MAINTENANCE
 - A ACCESS PATH
 - O OVERFLOW

- NOTES:
1. STORM SEWER IS PUBLIC UNLESS NOTED OTHERWISE.
 2. ALL WATERLINE IS 8" UNLESS NOTED OTHERWISE.
 3. WATER SERVICE LINES ARE PUBLIC UP THROUGH THE METER AND ARE PRIVATE DOWNSTREAM OF THE METER.
 4. ALL SANITARY SEWER IS 8" UNLESS NOTED OTHERWISE.
 5. ALL SANITARY SERVICE CONNECTIONS ARE PRIVATE.
 6. SEE SHEET 3 FOR TYPICAL SECTIONS.
 7. MINIMUM SLOPE ON UNPAVED AREAS IS 2%.
 8. MINIMUM SLOPE ON ASPHALT IS 1%, AND MINIMUM SLOPE ON CONCRETE IS 0.5%.
 9. THE MAXIMUM SLOPE WITHIN ROW IS 4:1. THE MAXIMUM SLOPE FOR PROPERTY OUTSIDE OF THE ROW IS 3:1.
 10. THE SLOPE AWAY FROM THE BUILDING SHALL HAVE A MINIMUM GRADE OF FIVE (5) PERCENT FOR THE FIRST TEN FEET OR TO THE PROPERTY LINE, WHICHEVER OCCURS FIRST. THEN A MINIMUM OF TWO (2) PERCENT UNTIL THE SLOPE REACHES THE SWALE AROUND THE BUILDING. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT THE TEN FEET OF HORIZONTAL DISTANCE, A FIVE (5) PERCENT SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATIVE METHOD OF DIVERTING STORM RUNOFF AWAY FROM THE FOUNDATION. IMPERVIOUS SURFACES WITHIN TEN FEET OF THE BUILDING FOUNDATION SHALL BE SLOPED A MINIMUM OF TWO (2) PERCENT AWAY FROM THE BUILDING.
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SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: GRADING AND UTILITY PLAN

DATE: AUGUST, 2024

PREPARED BY:

Matrix
Excellence by Design
707 17th Street, Suite 3150
Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com

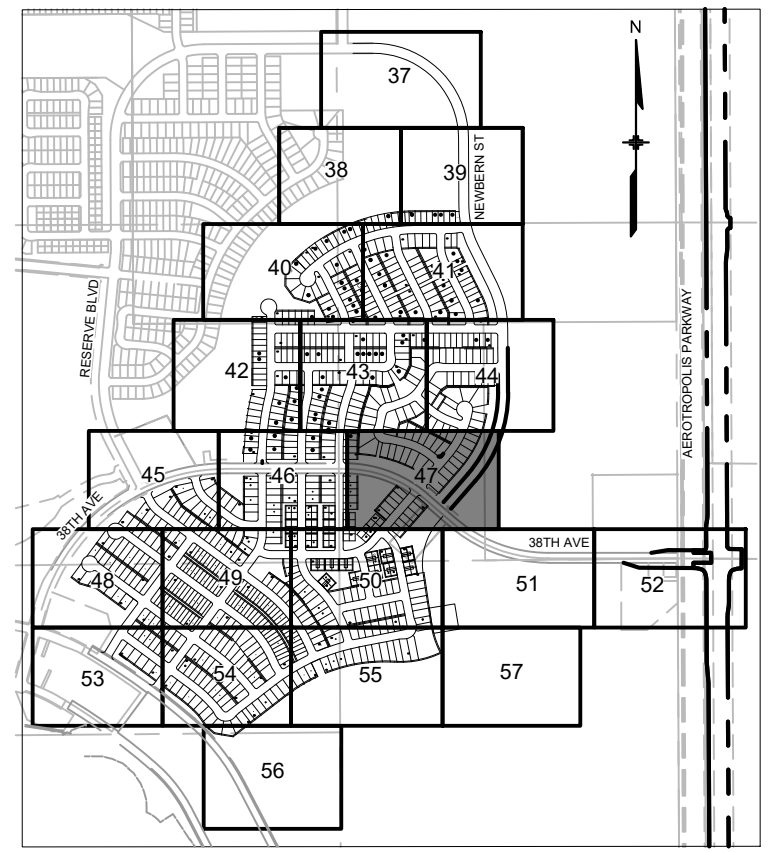
811

SHEET: 46 OF 96

NOT FOR CONSTRUCTION

MATCHLINE - SEE SHEET 43

MATCHLINE - SEE SHEET 44



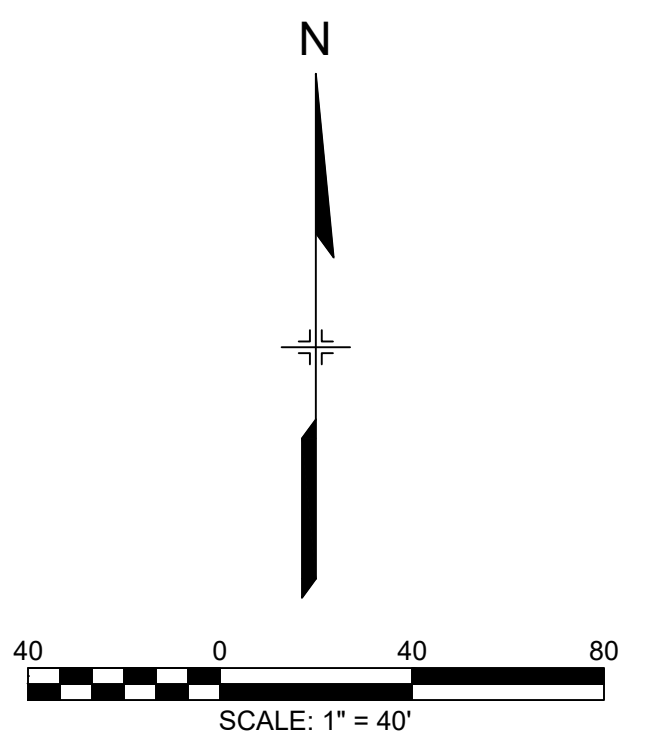
KEY MAP
SCALE: 1" = 1200'

- LEGEND**
- PSS 8 — PROPOSED SANITARY
 - PWB — PROPOSED STORM
 - — PROPOSED WATER
 - — PROPOSED INLET
 - — PROPOSED FIRE HYDRANT
 - — PROPOSED STORM MANHOLE
 - — PROPOSED SANITARY MANHOLE
 - — PROPOSED 5' CONTOUR
 - — PROPOSED 1' CONTOUR
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 - — PROPOSED 1' CONTOUR (BY OTHERS)
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 - — CSP NO. 1 BOUNDARY
 - — SANITARY SERVICE
 - — WATER SERVICE
 - — PROPOSED EASEMENT
 - — POND MAINTENANCE ACCESS PATH
 - — PROPOSED EMERGENCY OVERFLOW

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6. SEE SHEET 3 FOR TYPICAL SECTIONS.

N



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AREA C SITE PLAN

TITLE: GRADING AND UTILITY
PLAN

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NOT FOR CONSTRUCTION

SHEET: 47 OF 96

MATCHLINE - SEE SHEET 46

MATCHLINE - SEE SHEET 50

MATCHLINE - SEE SHEET 51

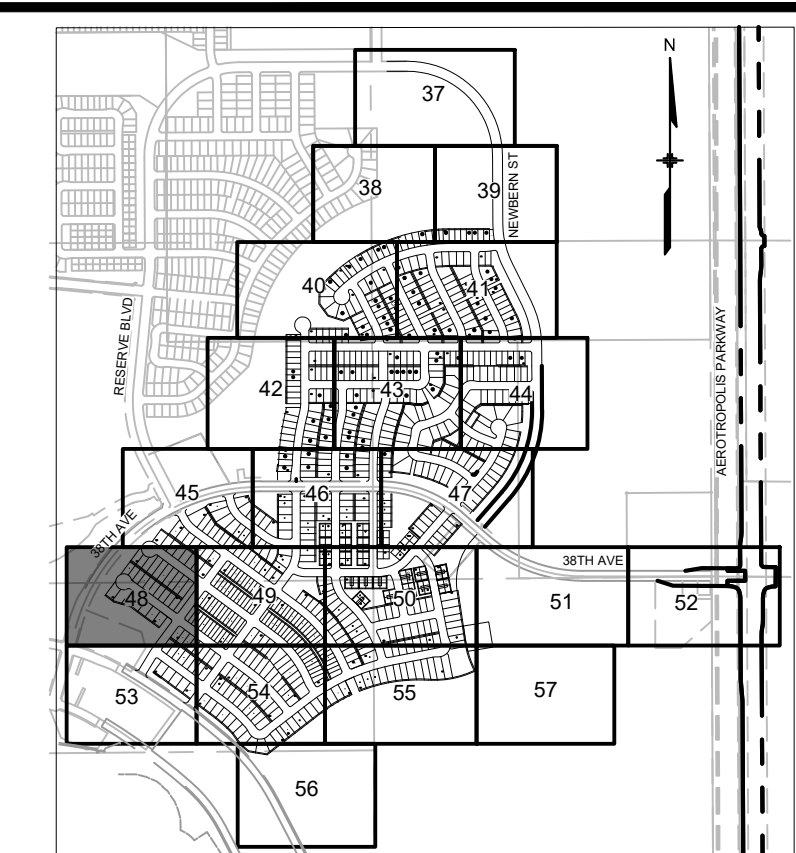
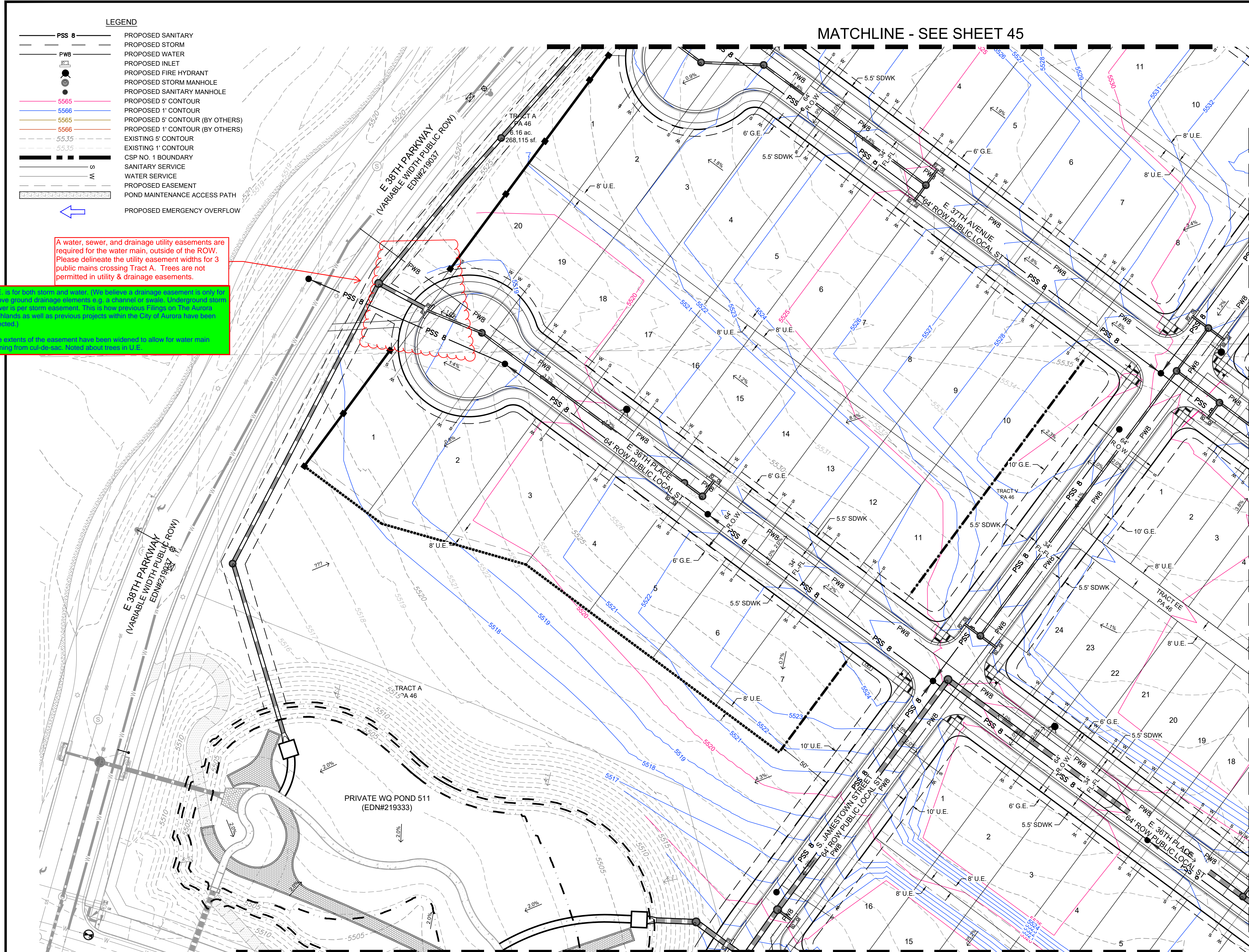
LEGEND

	PROPOSED SANITARY
	PROPOSED STORM
	PROPOSED WATER
	PROPOSED INLET
	PROPOSED FIRE HYDRANT
	PROPOSED STORM MANHOLE
	PROPOSED SANITARY MANHOLE
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	EXISTING 5' CONTOUR
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	CSP NO. 1 BOUNDARY
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	WATER SERVICE
	PROPOSED EASEMENT
	POND MAINTENANCE ACCESS PATH
	PROPOSED EMERGENCY OVERFLOW

A water, sewer, and drainage utility easements are required for the water main, outside of the ROW. Please delineate the utility easement widths for 3 public mains crossing Tract A. Trees are not permitted in utility & drainage easements.

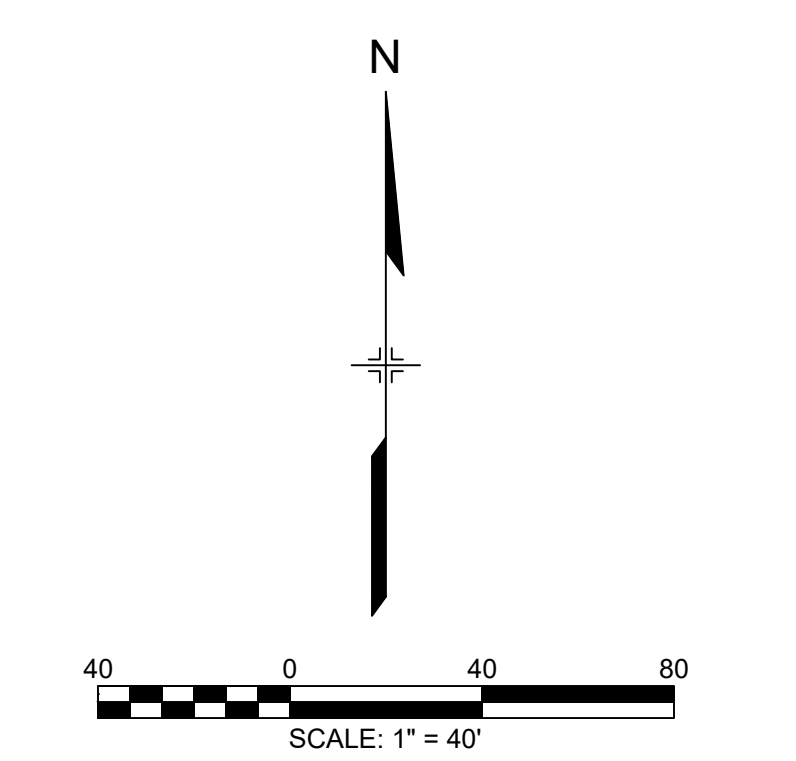
U.E. is for both storm and water. (We believe a drainage easement is only for above ground drainage elements e.g. a channel or swale. Underground storm sewer is per storm easement. This is how previous Plans on The Aurora Highlands as well as previous projects within the City of Aurora have been directed.)

The extents of the easement have been widened to allow for water main crossing from sub-deck. Noted about trees in U.E.



KEY MAP
SCALE: 1" = 1200'

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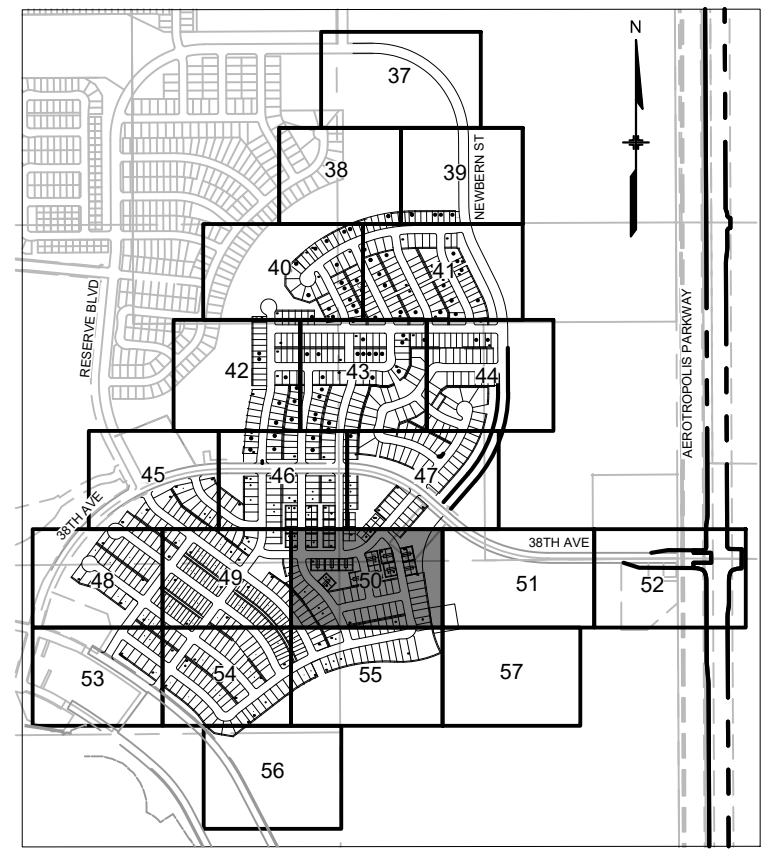
THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: GRADING AND UTILITY PLAN
DATE: AUGUST, 2024
PREPARED BY:
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Excellence by Design
707 17th Street, Suite 3150
Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com



MATCHLINE - SEE SHEET 45

MATCHLINE - SEE SHEET 46



KEY MAP
SCALE: 1" = 1200'

LEGEND

- PSS 8
- PWB
- PROPOSED SANITARY
- PROPOSED STORM
- PROPOSED WATER
- PROPOSED INLET
- PROPOSED FIRE HYDRANT
- PROPOSED STORM MANHOLE
- PROPOSED SANITARY MANHOLE
- PROPOSED 5' CONTOUR
- PROPOSED 1' CONTOUR
- PROPOSED 5' CONTOUR (BY OTHERS)
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40 0 40 80
SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

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PLAN

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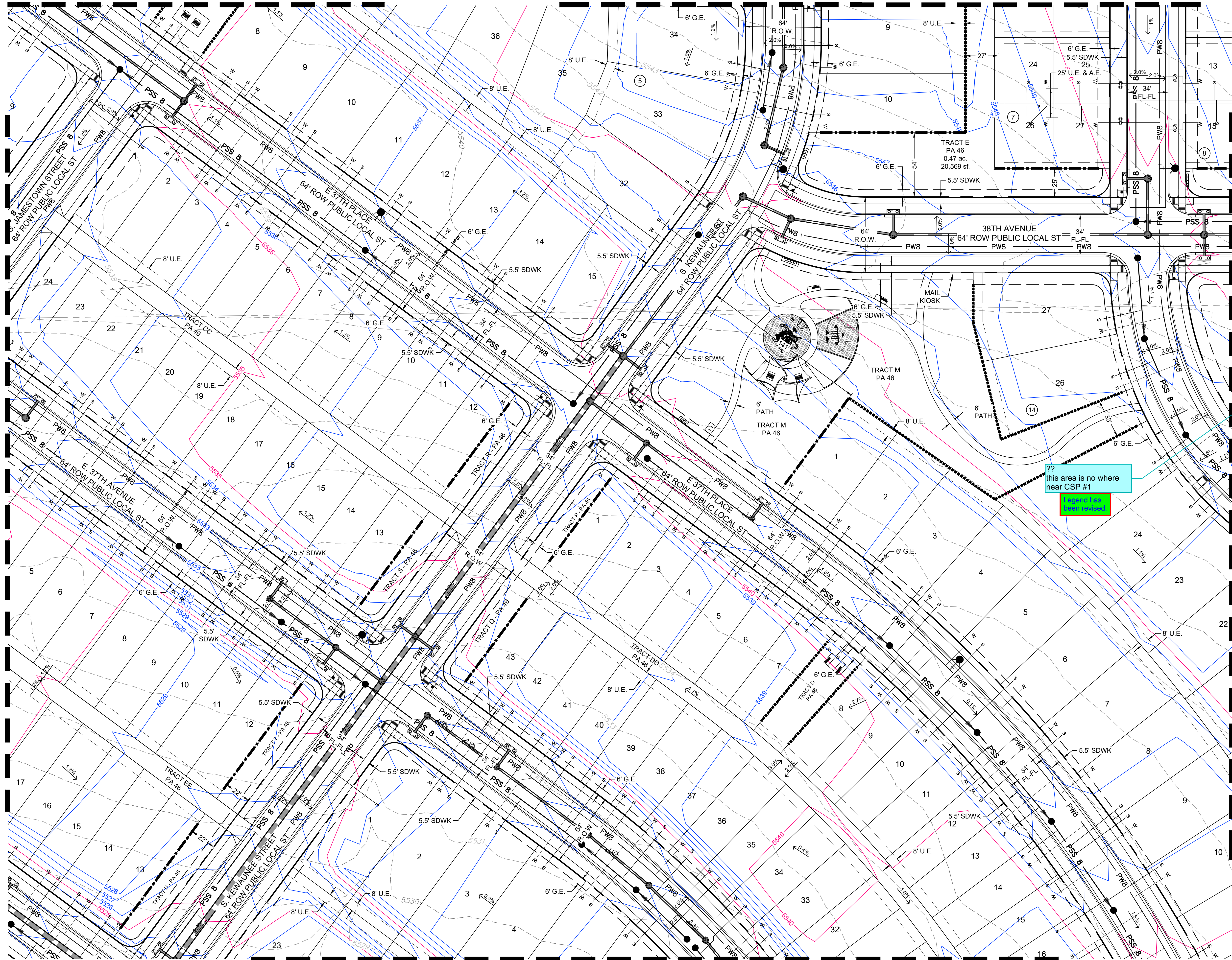
SHEET: 49 OF 96

NOT FOR CONSTRUCTION

MATCHLINE - SEE SHEET 54

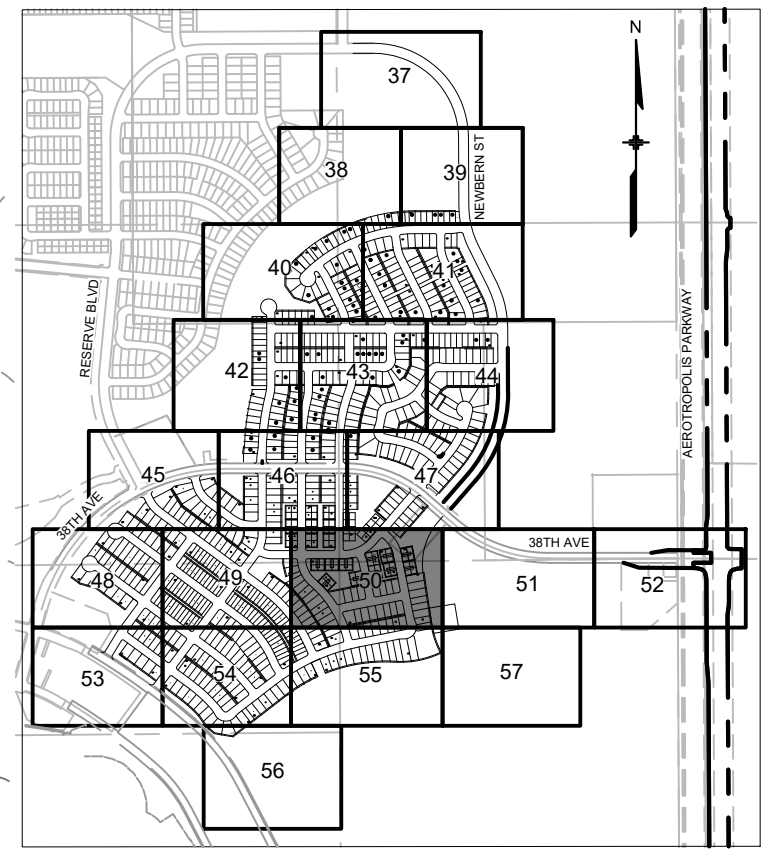
MATCHLINE - SEE SHEET 48

MATCHLINE - SEE SHEET 50



MATCHLINE - SEE SHEET 46

MATCHLINE - SEE SHEET 47



KEY MAP
SCALE: 1" = 1200'

LEGEND

- PROPOSED SANITARY
- PROPOSED STORM
- PROPOSED WATER
- PROPOSED INLET
- PROPOSED FIRE HYDRANT
- PROPOSED STORM MANHOLE
- PROPOSED SANITARY MANHOLE
- PROPOSED 5' CONTOUR
- PROPOSED 1' CONTOUR
- PROPOSED 5' CONTOUR (BY OTHERS)
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SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: GRADING AND UTILITY
PLAN

DATE: AUGUST, 2024

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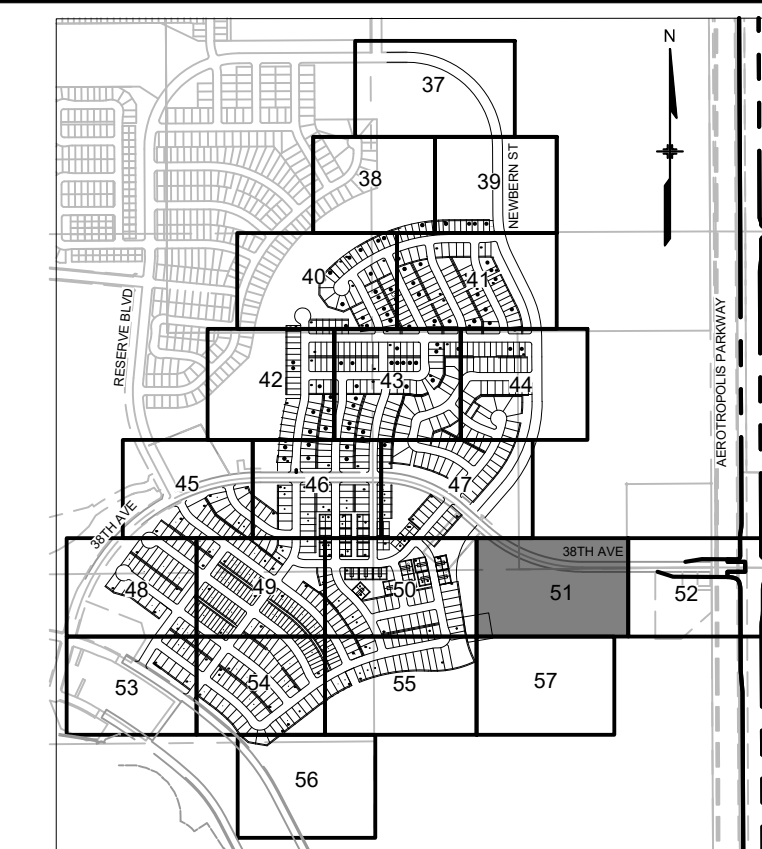
SHEET: 50 OF 96

MATCHLINE - SEE SHEET 47

MATCHLINE - SEE SHEET 50

MATCHLINE - SEE SHEET 52

MATCHLINE - SEE SHEET 57



KEY MAP
SCALE: 1" = 1200'

LEGEND	
	PROPOSED SANITARY
	PROPOSED STORM
	PROPOSED WATER
	PROPOSED INLET
	PROPOSED FIRE HYDRANT
	PROPOSED STORM MANHOLE
	PROPOSED SANITARY MANHOLE
	PROPOSED 5' CONTOUR
	PROPOSED 1' CONTOUR
	PROPOSED 5' CONTOUR (BY OTHERS)
	PROPOSED 1' CONTOUR (BY OTHERS)
	EXISTING 5' CONTOUR
	EXISTING 1' CONTOUR
	CSP NO. 1 BOUNDARY
	SANITARY SERVICE
	WATER SERVICE
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	POND MAINTENANCE ACCESS PATH
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40 0 40 80
SCALE: 1" = 40'

THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: GRADING AND UTILITY
PLAN

DATE: AUGUST, 2024

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Excellence by Design

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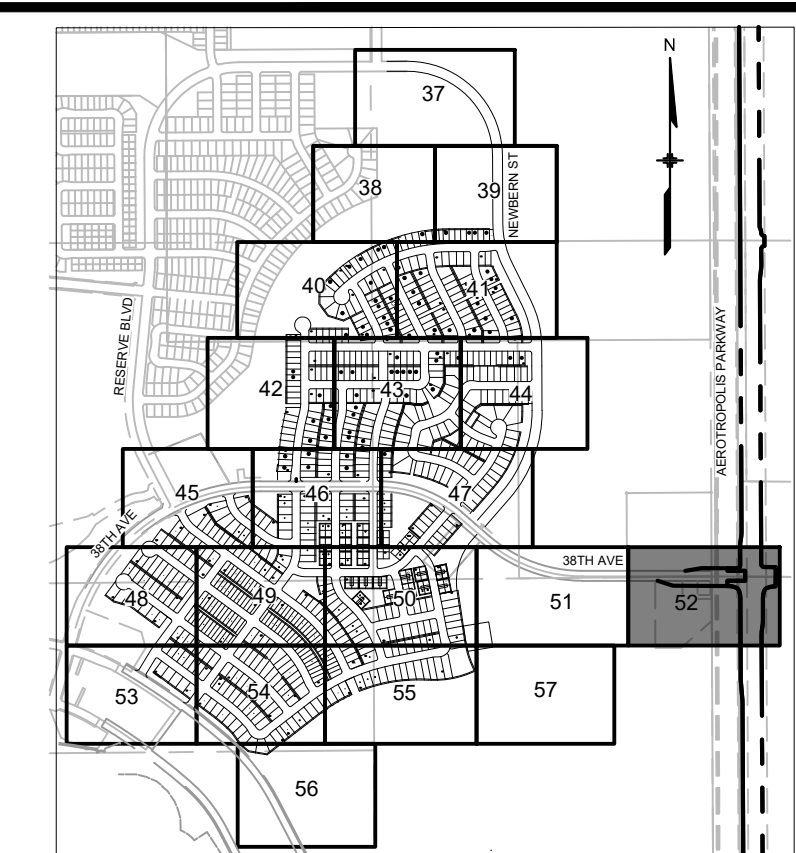
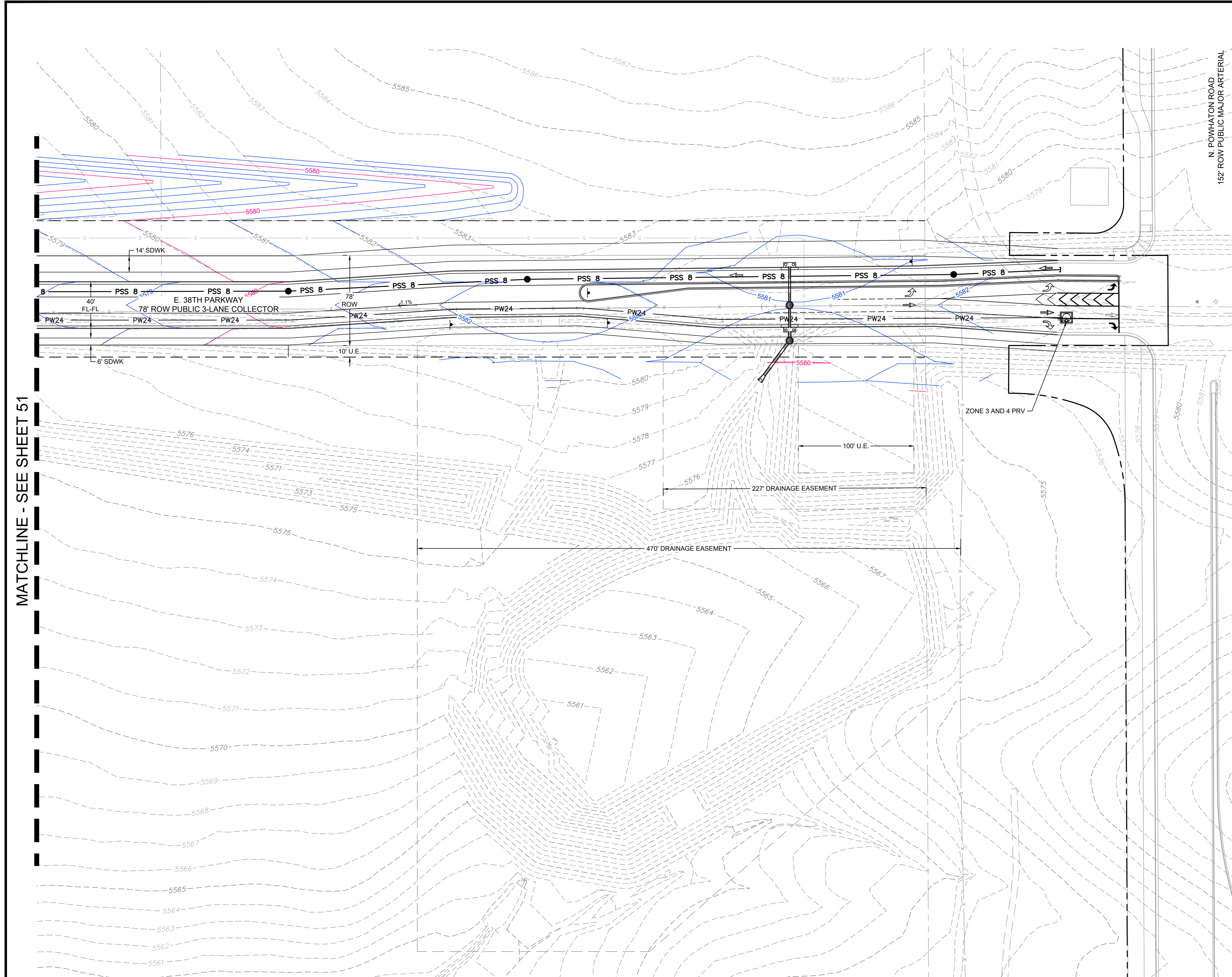
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SHEET: 51 OF 96

NOT FOR CONSTRUCTION

MATCHLINE - SEE SHEET 51

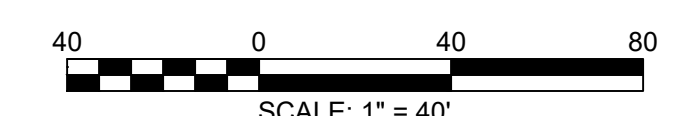


KEY MAP
SCALE: 1" = 1200'

LEGEND

PSS 8	PROPOSED SANITARY
PWB	PROPOSED STORM
PROPOSED INLET	PROPOSED WATER
PROPOSED FIRE HYDRANT	PROPOSED STORM MANHOLE
PROPOSED SANITARY MANHOLE	PROPOSED 5' CONTOUR
PROPOSED 5' CONTOUR	PROPOSED 1' CONTOUR
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PROPOSED 5' CONTOUR (BY OTHERS)	PROPOSED 1' CONTOUR (BY OTHERS)
EXISTING 5' CONTOUR	EXISTING 1' CONTOUR
EXISTING 1' CONTOUR	CSP NO. 1 BOUNDARY
CSP NO. 1 BOUNDARY	SANITARY SERVICE
SANITARY SERVICE	WATER SERVICE
WATER SERVICE	PROPOSED EASEMENT
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THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: GRADING AND UTILITY PLAN

DATE: AUGUST, 2024

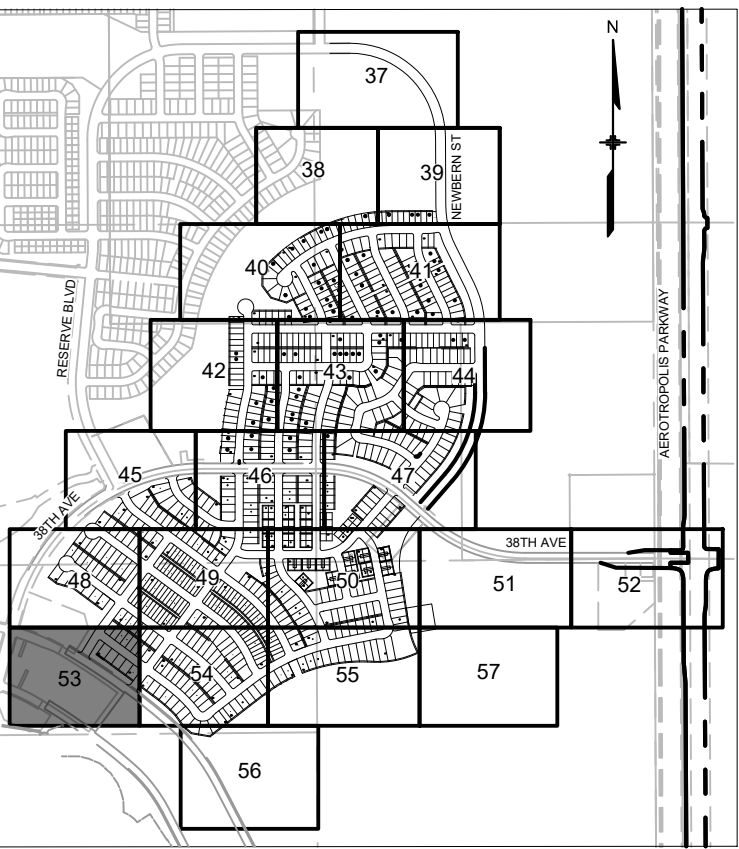
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NOT FOR CONSTRUCTION

MATCHLINE - SEE SHEET 48

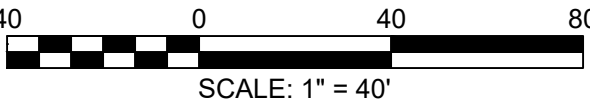


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11. THE RESULTANT GRADE IN ANY DIRECTION WITHIN ACCESSIBLE PARKING AREAS SHALL NOT EXCEED TWO PERCENT.
12. THE MAXIMUM CROSS SLOPE IN AN ACCESSIBLE PATH SHALL NOT EXCEED TWO PERCENT. THE MAXIMUM LONGITUDINAL SLOPE IN AN ACCESSIBLE PATH SHALL NOT EXCEED FIVE PERCENT.

MATCHLINE - SEE SHEET 54



THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: GRADING AND UTILITY PLAN

DATE: AUGUST, 2024

PREPARED BY:

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PRIVATE WQ POND 5101
(EDN#219333)

LEGEND

- | | |
|----------|---------------------------------|
| PSS 8 | PROPOSED SANITARY |
| PWB | PROPOSED STORM |
| WT 12 | PROPOSED WATER |
| WT 24 | PROPOSED INLET |
| WT 36 | PROPOSED FIRE HYDRANT |
| WT 48 | PROPOSED STORM MANHOLE |
| WT 60 | PROPOSED SANITARY MANHOLE |
| 5565 | PROPOSED 5' CONTOUR |
| 5566 | PROPOSED 1' CONTOUR |
| 5567 | PROPOSED 5' CONTOUR (BY OTHERS) |
| 5568 | PROPOSED 1' CONTOUR (BY OTHERS) |
| 5535 | EXISTING 5' CONTOUR |
| 5536 | EXISTING 1' CONTOUR |
| CS NO. 1 | CSP NO. 1 BOUNDARY |
| SS | SANITARY SERVICE |
| WS | WATER SERVICE |
| EA | PROPOSED EASEMENT |
| MA | POND MAINTENANCE ACCESS PATH |
| EO | PROPOSED EMERGENCY OVERFLOW |

PRIVATE WQ POND 511
(EDN#219333)

THE AURORA HIGHLANDS
PARKWAY N.B.

PA-66
HIGHLANDS CREEK
OPEN SPACE

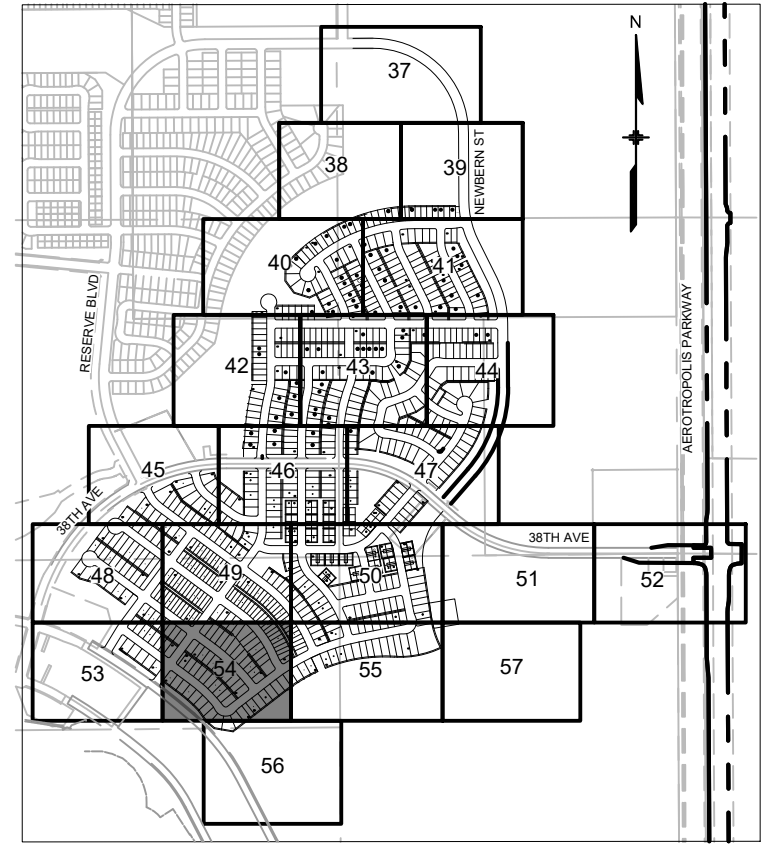
THE AURORA
HIGHLANDS PHASE II
(RSN#1618676)

MATCHLINE - SEE SHEET 49

MATCHLINE - SEE SHEET 53

MATCHLINE - SEE SHEET 55

MATCHLINE - SEE SHEET 56

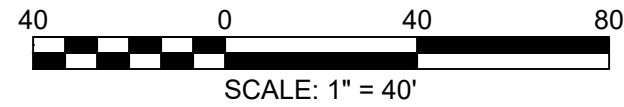


KEY MAP
SCALE: 1" = 1200'

LEGEND	
	PROPOSED SANITARY
	PROPOSED STORM
	PROPOSED WATER
	PROPOSED INLET
	PROPOSED FIRE HYDRANT
	PROPOSED STORM MANHOLE
	PROPOSED SANITARY MANHOLE
	PROPOSED 5' CONTOUR
	PROPOSED 1' CONTOUR
	PROPOSED 5' CONTOUR (BY OTHERS)
	PROPOSED 1' CONTOUR (BY OTHERS)
	EXISTING 5' CONTOUR
	EXISTING 1' CONTOUR
	CSP NO. 1 BOUNDARY
	SANITARY SERVICE
	WATER SERVICE
	PROPOSED EASEMENT
	POND MAINTENANCE ACCESS PATH
	PROPOSED EMERGENCY OVERFLOW

NOTES:

1. STORM SEWER IS PUBLIC UNLESS NOTED OTHERWISE.
2. ALL WATERLINE IS 8" UNLESS NOTED OTHERWISE.
3. WATER SERVICE LINES ARE PUBLIC UP THROUGH THE METER AND ARE PRIVATE DOWNSTREAM OF THE METER.
4. ALL SANITARY SEWER IS 8" UNLESS NOTED OTHERWISE.
5. ALL SANITARY SERVICE CONNECTIONS ARE PRIVATE.
6. SEE SHEET 3 FOR TYPICAL SECTIONS.
7. MINIMUM SLOPE ON UNPAVED AREAS IS 2%, MINIMUM SLOPE ON ASPHALT IS 1%, AND MINIMUM SLOPE ON CONCRETE IS 0.5%.
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THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: GRADING AND UTILITY PLAN

DATE: AUGUST, 2024

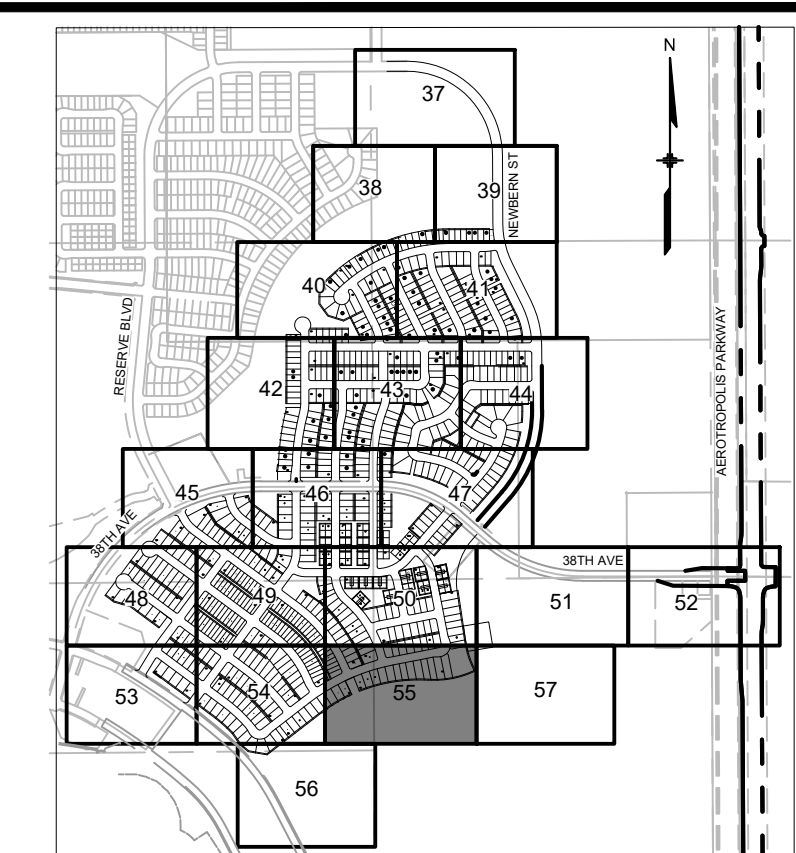
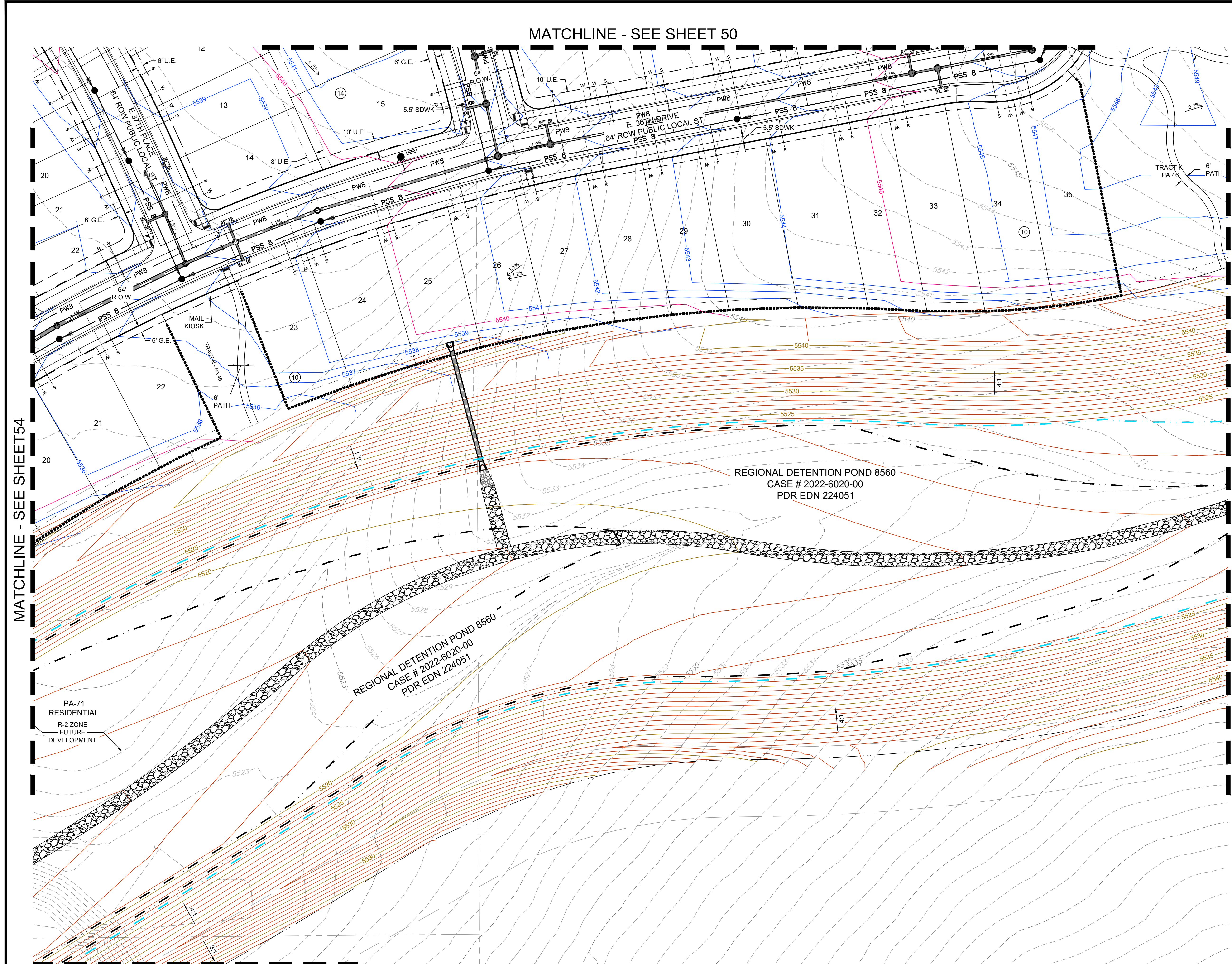
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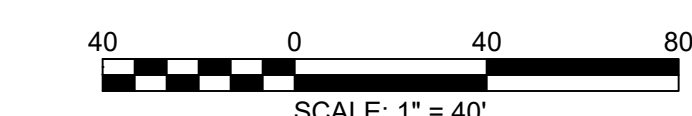
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KEY MAP
SCALE: 1" = 1200'

LEGEND	
	PROPOSED SANITARY
	PROPOSED STORM
	PROPOSED WATER
	PROPOSED INLET
	PROPOSED FIRE HYDRANT
	PROPOSED STORM MANHOLE
	PROPOSED SANITARY MANHOLE
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THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

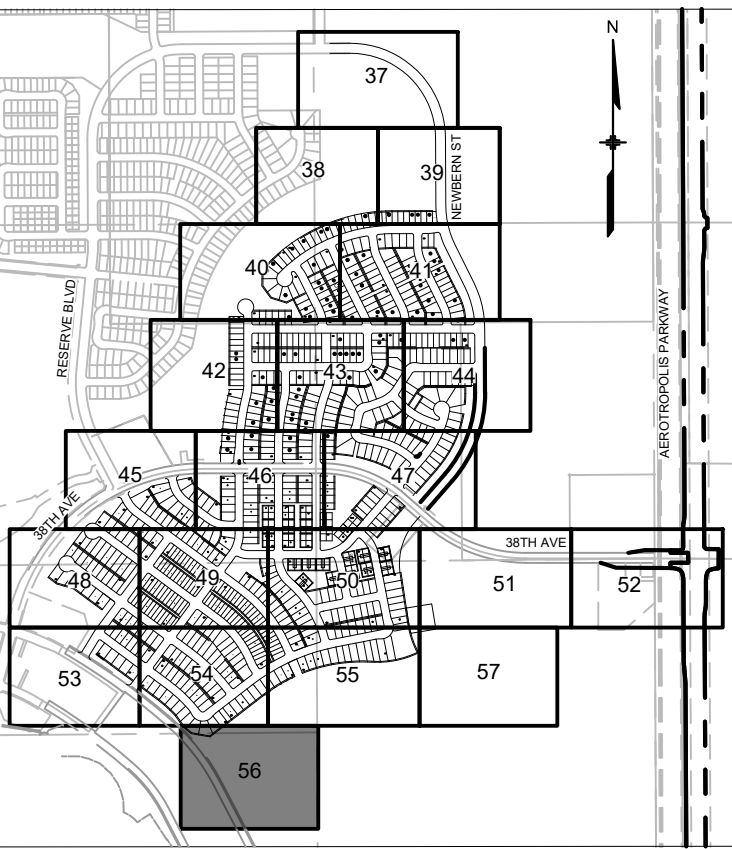
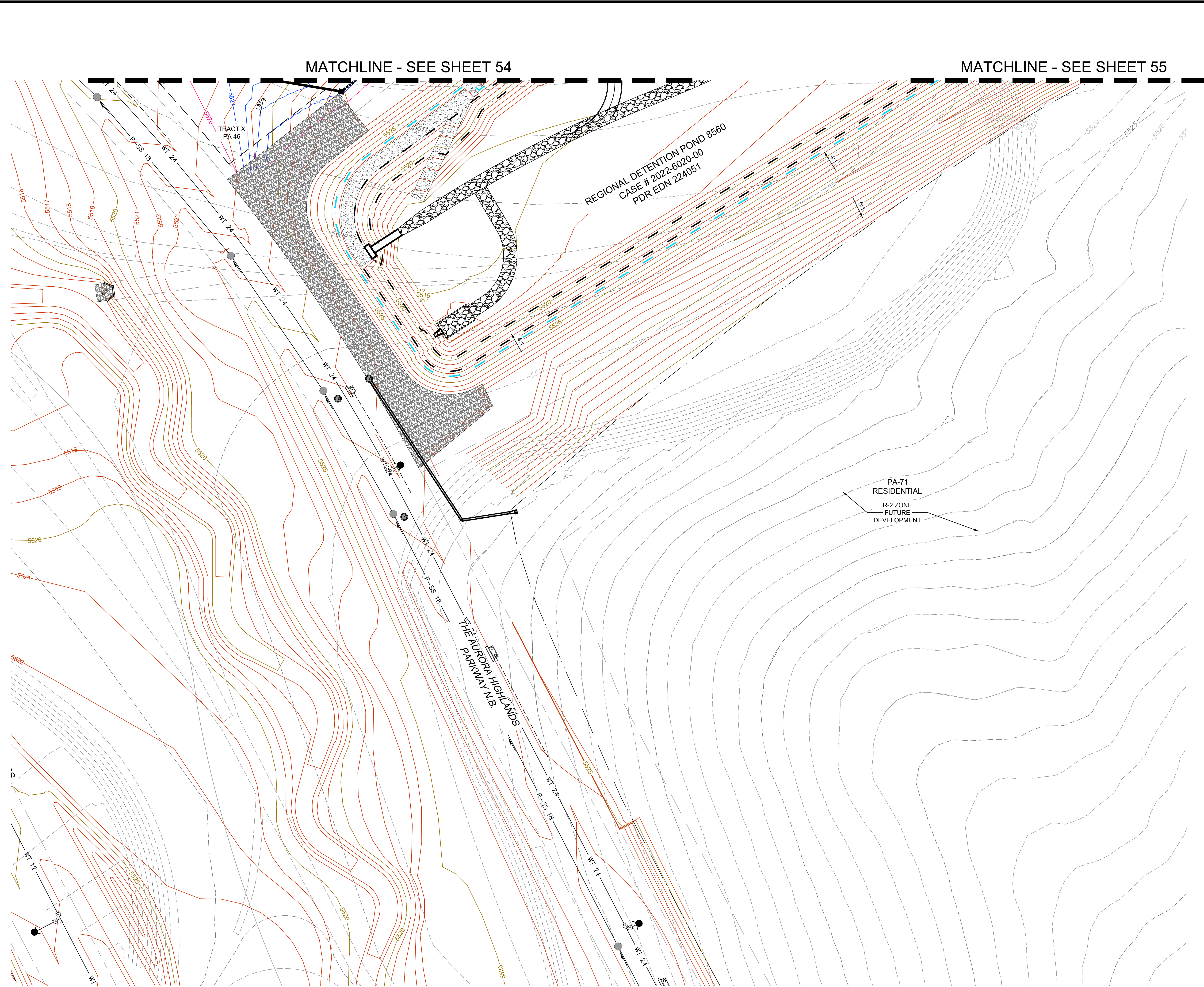
TITLE: GRADING AND UTILITY
PLAN

DATE: AUGUST, 2024

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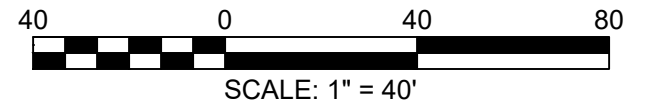


KEY MAP
SCALE: 1" = 1200'

LEGEND

PSS 8	PROPOSED SANITARY
PWB	PROPOSED STORM
WT 24	PROPOSED WATER
WT 12	PROPOSED INLET
WT 24	PROPOSED FIRE HYDRANT
WT 24	PROPOSED STORM MANHOLE
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 - 12.



THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

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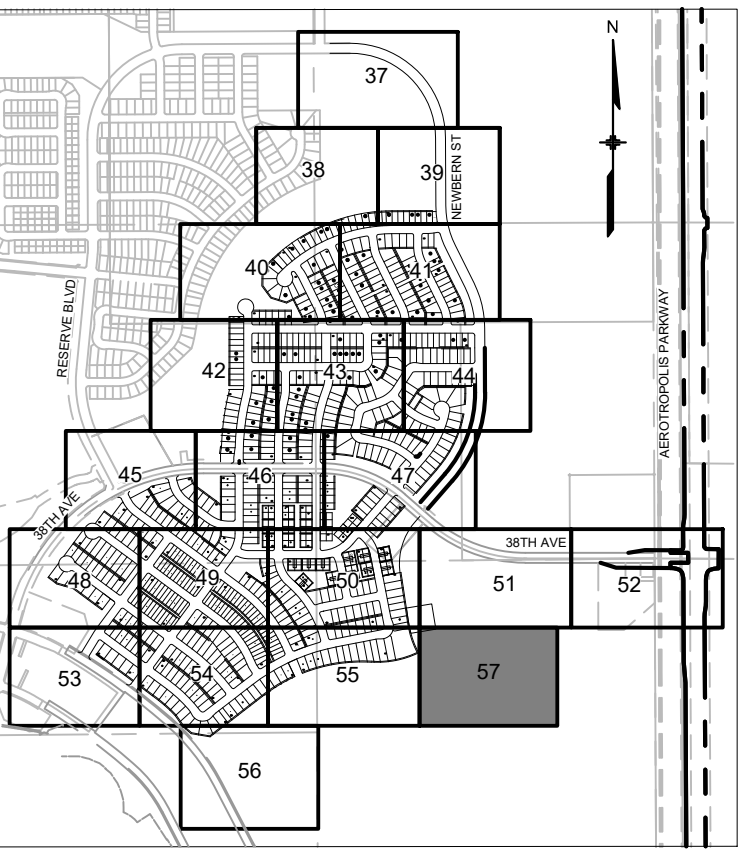
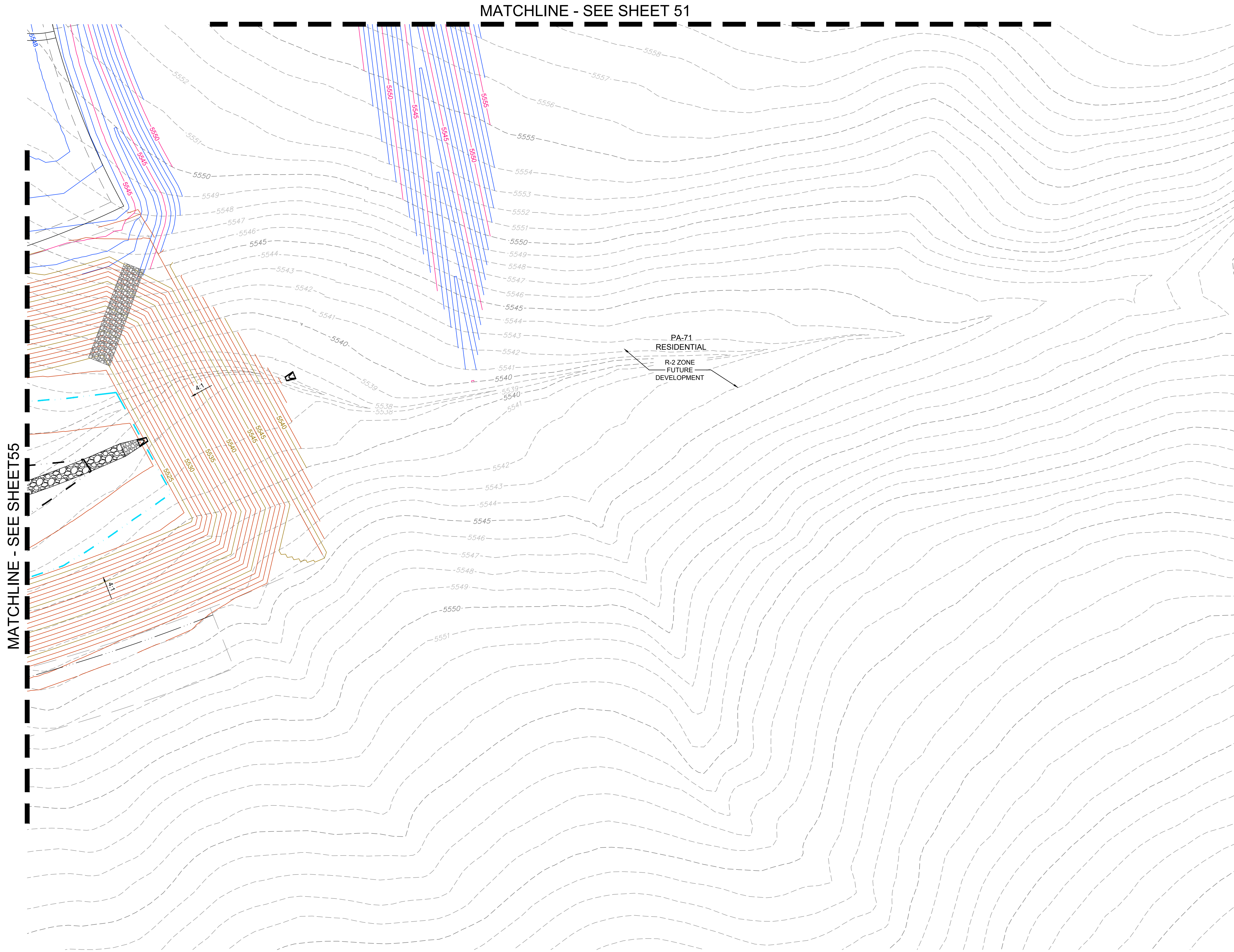
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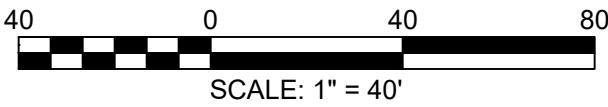
SHEET: 56 OF 96



LEGEND

	PROPOSED SANITARY
	PROPOSED STORM
	PROPOSED WATER
	PROPOSED INLET
	PROPOSED FIRE HYDRANT
	PROPOSED STORM MANHOLE
	PROPOSED SANITARY MANHOLE
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THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

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PLAN

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SHEET: 57 OF 96



NOTE: THERE ARE (0) EXISTING TREES WITHIN THIS SITE PLAN.

CALIPER INCHES REMOVED	CALIPER INCHES RELOCATED	CALIPER INCHES REPLACED FOR MITIGATION
0"	0"	0"

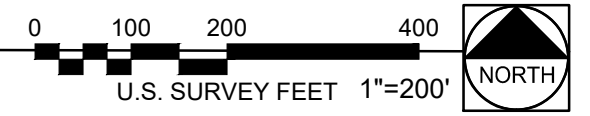




LEGEND	
---	LIMITS OF WORK
---	MATCHLINE
---	4" METAL FENCE (DETAIL 07 / SHEET 91)
---	6" MASONRY WALL (DETAIL 08 / SHEET 91)
---	4" SPLIT RAIL FENCE (DETAIL 06 / SHEET 91)
■	WALL COLUMN (DETAIL 09 / SHEET 91)

NOTES:
1. WALL COLUMNS WILL BE LOCATED EVERY 60 LF OR EVERY OTHER LOT, AS WELL AS AT ALL DIRECTION CHANGES AND ENDS.
2. SIDE YARD FENCING IS RESTRICTED WHEN THE REAR OF ONE LOT ABUTS THE FRONT OF AN ADJACENT LOT (CORNER AND REVERSE LOTS) PER SECTION 146-4.7.9.L. SIDE YARD FENCE SHALL BE SETBACK A MIN. OF 10' FROM THE BACK OF SIDEWALK ADJACENT TO THE STREET, BUT IN NO CASE LESS THAN 15' FROM THE STREET FLOWLINE.

FENCING PLAN
SCALE: 1"=200'



NOT FOR CONSTRUCTION



THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

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DATE: AUGUST, 2024

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SHEET 59 OF 96

STREET PERIMETER BUFFER TABLE

STREET NAME	BUFFER WIDTH REQUIRED	STREET LENGTH (LF)	TREE REQUIRED (1 / 40 LF)	TREES PROVIDED	SHRUBS REQUIRED (10 / 40 LF)	SHRUBS PROVIDED (5 gal)	PERENNIALS PROVIDED (1 gal)	GRASSES PROVIDED (5 gal)
N. NEWBERN STREET (W)	20 FT	2300	58	23	580	351	0	0
S. KEWAUNEE STREET (W)	20 FT	747	19	12	190	151	0	0
S. KEWAUNEE STREET (E)	20 FT	910	23	18	230	166	0	0
E. 38TH PARKWAY (N)	20 FT	2244	57	29	570	470	0	0
E. 38TH PARKWAY (S)	20 FT	2208	56	30	560	471	0	0
TOTAL		6201	100	53	1000	668	0	0

CURBSIDE LANDSCAPE TABLE

STREET NAME	STREET LENGTH (LF)	TREES REQUIRED (1/40 LF)	TREES PROVIDED	CURBSIDE LANDSCAPE AREA (SF)	SHRUBS REQUIRED (1/40 SF)	SHRUBS PROVIDED (5 gal)	PERENNIALS PROVIDED (1 gal)	GRASSES PROVIDED (5 gal)
PA 40								
N. NEWBERN STREET (W)	4131	104	104	33048	826	1438	0	319
N. NEWBERN STREET (E)	4394	110	110	35152	879	1450	0	334
E. 42ND AVENUE (N)	1391	35	35	11128	278	282	0	0
E. 42ND AVENUE (S)	1179	30	30	9429	236	246	0	0
N. LITTLE RIVER COURT (W)	478	12	12	3825	96	99	0	0
N. LITTLE RIVER COURT (E)	508	13	13	4065	102	106	0	0
N. MILBROOK WAY (W)	1680	42	43	13438	336	390	0	0
N. MILBROOK WAY (E)	1597	40	40	12777	319	320	0	0
N. MILBROOK STREET (E)	759	19	19	6069	152	155	0	0
N. MILBROOK STREET (W)	753	19	19	6021	151	162	0	0
N. MUSCADINE STREET (W)	1423	36	36	11387	285	357	0	0
N. MUSCADINE STREET (E)	1560	39	39	12479	312	336	0	0
N. KELLERMAN STREET (W)	1317	33	33	10536	263	343	0	0
N. KELLERMAN STREET (E)	1192	30	30	9536	238	268	0	0
E. 41ST AVENUE (N)	1505	38	38	12040	301	315	0	0
E. 41ST AVENUE (S)	1664	42	42	13316	333	432	0	0
E. 40TH AVENUE (N)	1375	35	35	10997	275	317	0	0
E. 40TH AVENUE (S)	1289	33	33	10310	258	258	0	0
N. LITTLE RIVER STREET (W)	735	19	19	5884	147	176	0	0
N. LITTLE RIVER STREET (E)	735	19	19	5884	147	147	0	0
N. LANGDALE STREET (W)	727	19	19	5819	145	164	0	0
N. LANGDALE STREET (E)	727	19	19	5819	145	160	0	0
E. 39TH PLACE (N)	388	10	10	3107	78	80	0	0
E. 39TH PLACE (S)	409	11	11	3268	82	94	0	0
E. 39TH DRIVE (N)	494	13	13	3951	99	108	0	0
E. 39TH DRIVE (S)	513	13	13	4102	103	106	0	0
PA 46								
E.38TH PARKWAY (N)	4247	107	107	33973	849	1260	0	349
E. 38TH PARKWAY (S)	4247	107	107	33979	849	1240	0	330
E. 36TH PLACE (N)	1591	40	40	12727	318	318	0	0
E. 36TH PLACE (S)	1591	40	40	12729	318	381	0	0
E. 37TH AVENUE (N)	1661	42	43	13287	332	396	0	0
E. 37TH AVENUE (S)	1700	43	43	13601	340	367	0	0
N. KELLERMAN STREET (W)	374	10	10	2989	75	75	0	0
N. KELLERMAN STREET (E)	434	11	11	3471	87	90	0	0
E. 37TH PLACE (N)	1759	44	44	14069	352	352	0	0
E. 37TH PLACE (S)	1699	43	43	13590	340	404	0	0
E. 38TH PLACE (N)	637	16	16	5093	127	129	0	0
E. 38TH PLACE (S)	697	18	18	5573	139	146	0	0
S. JAMESTOWN STREET (W)	982	25	26	7856	196	267	0	0
S. JAMESTOWN STREET (E)	895	23	23	7160	179	224	0	0
N. LANGDALE STREET (W)	1282	33	33	10258	256	264	0	0
N. LANGDALE STREET (E)	1188	30	30	9506	238	241	0	0
N. LITTLE RIVER STREET (W)	529	14	14	4232	106	107	0	0
N. LITTLE RIVER STREET (E)	554	14	14	4432	111	116	0	0
LITTLE RIVER STREET (E)	299	8	8	2390	60	60	0	0
LITTLE RIVER STREET (W)	315	8	8	2520	63	63	0	0
38TH AVENUE (N)	1201	31	31	9608	240	243	0	0
38TH AVENUE (S)	1180	30	30	9437	236	238	0	0
S. KEWAUNEE STREET (W)	1180	30	30	9440	236	278	0	46
S. KEWAUNEE STREET (E)	1185	30	30	9480	237	282	0	52
N. MILLBROOK STREET (W)	655	17	18	5244	131	136	0	0
N. MILLBROOK STREET (E)	815	21	21	6521	163	165	0	0
E. 36TH DRIVE (N)	936	24	24	7487	187	189	0	0
E. 36TH DRIVE (S)	963	25	25	7707	193	216	0	0
E. 36TH DRIVE (W)	1365	35	35	10920	273	265	0	0
E. 36TH DRIVE (E)	1643	42	42	13144	329	337	0	0
E. 37TH DRIVE (N)	435	11	11	3478	87	92	0	0
E. 37TH DRIVE (S)	484	13	13	3873	97	100	0	0
TOTAL	71645	1818	1822	573159	14329	17350	0	1430

SITE DATA TABLE

SITE DATA		AREA IN SF	%
TOTAL SITE AREA: (210.7 ac)		9,178,092	100.00
LOT AREA	sum of areas should equal total site area. Area should be consistent with site data block on cover sheet	5,353,524	58.33
HARD SURFACE AREA		1,836,991	20.01
LANDSCAPE AREA		1,984,414	21.62
MAXIMUM % OF COOL SEASON GRASSES ALLOWED		0	0.00
% OF COOL SEASON GRASSES PROVIDED	Site Areas have been updated to match cover sheet and sum of areas equals total site area	0	0.00

TRACT LANDSCAPE TABLE

PA AREA	TRACT NAME	TRACT AREA (SF)	TREES PROVIDED	SHRUBS REQUIRED (10 / 4,000 SF)	SHRUBS PROVIDED (5 gal)	PERENNIALS PROVIDED (1 gal)	GRASSES PROVIDED (5 gal)	
PA 39	Footnote tracts with drainage & identify full tract area							
	A	524057	132	132	1320	1436	0	113
PA 40								
	A	63107	16	16	160	156	46	18
	B	3565	1	3	10	11	0	0
	C	3608	1	3	10	10	0	0
	D	3566	1	10	10	22	0	0
	E	6900	2	3	20	20	0	0
	F	6900	2	3	20	20	0	0
	G	55710	14	53	140	454	0	0
	H	3482	1	2	10	12	0	0
	I	16459	5	6	50	50	0	0
	J	10342	3	17	30	162	0	0
	K	21602	6	21	60	60	0	0
	L	8564	3	9	30	94	0	0
	M	7113	2	8	20	103	0	0
	N	6728	2	9	20	135	0	0
	O	43676	11		110	519	0	0
	P	84138	22		220	491	0	0
TOTAL		345460	92	271	920	2319	46	18
PA 44	33?							
	A	133964	34	34	340	324	0	97
PA 46								
	A	268113	68	68	680	734	0	0
	B	12515	4	6	40	92	0	0
	C	40393	11	11	110	118	0	0
	D	4684	2	5	20	73	0	0
	E	20548	6	34	60	112	0	0
	F	4428	2	6	20	95	0	0
	G	21903	6	30	60	108	0	0
	H	101523	26	26	260	285	0	20
Footnote match plans	I	79775	20	27	200	192	26	57
Footnote tract area has been updated	J	15930	4	5	40	79	0	0
	K	35812	9	10	90	94	0	48
	L	34660	9	16	90	119	0	0
	M	43761	11	12	110	102	27	54
	N	8184	3	3	30	47	0	0
	O	3364	1	1	10	12	0	0
	P	2076	1	1	10	15	0	0
	Q	2467	1	1	10	15	0	0
	R	2329	1	1	10	15	0	0
	S	2329	1	1	10	15	0	0
	T	2840	1	1	10	15	0	0
	U	2840	1	1	10	15	0	0
	V	10943	3	3	30	76	0	0
	W	2617	1	1	10	15	0	0
	X	32779	9	30	90	133	0	0
	Y	4633	2	2	20	28	0	0
	Z	9194	3	3	30	53	0	0
	AA	5500	2	2	20	20	0	0
	BB	25820	7	30	70	116	0	0
	FF	8882	3	2	30	40	0	18
TOTAL		810842	218	339	2180	2833	53	197
GRAND TOTAL		1156302	310	610	3100	5152	99	215

CURBSIDE LANDSCAPE NOTES

- CURBSIDE LANDSCAPES SHALL PROVIDE NO LESS THAN ONE SHRUB PER 40 SQUARE FEET OF CURBSIDE LANDSCAPE AREA.
- ALL SHRUBS AND ORNAMENTAL GRASSES SHALL BE FIVE GALLON SIZE AT TIME OF INSTALLATION.
- ORNAMENTAL GRASSES MAY BE PROVIDED AT A MAXIMUM OF 40% OF THE SHRUB COUNT.
- NO MORE THAN FIVE PERCENT OF PERENNIALS MAY BE PROVIDED AS SHRUB EQUIVALENTS. PERENNIALS SHALL BE PROVIDED AT A RATIO OF THREE ONE-GALLON PERENNIALS TO ONE FIVE-GALLON SHRUB.
- THE CURBSIDE PLANTING BED THAT IS REMAINING SHALL BE COMPLETED WITH EITHER WOOD OR ROCK MULCH OR NATIVE SEED. CRUSHER FINES MAY NOT BE USED AS A MULCH TREATMENT.

WATER ZONES TABLE

PA AREA	TRACT NAME	TRACT AREA (SF)	NON-WATER CONSERVING	WATER CONSERVING	NON-WATER Z
PA 39					
	A	524057	0	57538	466519
PA 40					
	A	63107	0	3461	59646
	B	3565	0	417	3148
	C	3608	0	334	3274
	D	3566	0	975	2591
	E	6900	0	510	6390
	F	6900	0	861	6039
	G	55710	0	11446	44264
	H	3482	0	690	2792
	I	16459	0	1559	14900
	J	10342	0	3023	7319
	K	21602	0	1640	19962
	L	8564	0	2776	5788
	M	7113	0	2529	4584
	N	6728	0	2940	3788
	O	43676	0	11407	32269
	P	84138	0	14018	70120
TOTAL		345460	0	58586	286874
PA 44					
	A	133964	0	7742	126222
PA 46					
	A	268113	0	18496	249617
	B	12515	0	2035	10480
	C	40393	0	2827	37566
	D	4684	0	1693	2991
	E	20548	0	2695	17853
	F	4428	0	1961	2467
	G	21903	0	2224	19679
	H	101523	0	12285	89238
	I	79775	0	5741	74034
	J	15930	0	1848	14082
	K	35812	0	2705	33107
	L	34660	0	3137	31523
	M	43761	0	2593	41168
	N	8184	0	963	7221
	O	3364	0	265	3099
	P	2076	0	282	1794
	Q	2467	0	333	2134
	R	2329	0	315	2014
	S	2329	0	315	2014
	T	2840	0	315	2525
	U	2840	0	315	2525
	V	10943	0	1684	9259
	W	2617	0	315	2302
	X	32779	0	2931	29848
	Y	4633	0	587	4046
	Z	9194	0	1629	7565
	AA	5500	0	427	5073
	BB	25820	0	2197	23623
	FF	8882	0	910	7972
TOTAL		810842	0	74023	736819
GRAND TOTAL		1156302	0	132609	1023693

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	PLANT SIZE	WATER USE
DECIDUOUS TREES					
	ACE GRA	148	ACER GRANDIDENTATUM BIGTOOTH MAPLE	2.5" CAL.	Low - Medium
	AES HPP	172	AESCULUS HIPPOCASTANUM EUROPEAN HORSECHESTNUT	2.5" CAL.	Medium
	AES OHI	176	AESCULUS GLABRA OHIO BUCKEYE	2.5" CAL.	Medium
	CA-SP	222	CATALPA SPECIOSA WESTERN CATALPA	2.5" CAL.	Medium - High
	CEL OCC	212	CELTIS OCCIDENTALIS COMMON HACKBERRY	2.5" CAL.	Medium
	GL-TR	10	GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER' SHADEMASTER HONEY LOCUST	2.5" CAL.	Low - Medium
	GYM KEN	207	GYMNOCLADUS DIOICA KENTUCKY COFFEETREE	2.5" CAL.	Low - Medium
	QU-RU	10	QUERCUS RUBRA RED OAK	2.5" CAL.	Medium
	QUE MAC	232	QUERCUS MACROCARPA BURR OAK	2.5" CAL.	Low - Medium
	QUE ROB	178	QUERCUS ROBUR ENGLISH OAK	2.5" CAL.	Medium
	TI-AM	268	TILIA AMERICANA 'MCKSENTRY' TM AMERICAN SENTRY LINDEN	2.5" CAL.	Medium
ORNAMENTAL TREES					
	ACE TAT	84	ACER TATARICUM TATARIAN MAPLE	2" CAL.	Medium
	CR-CR	52	CRATAEGUS CRUS-GALLI INERMIS THORNLESS COCKSPUR HAWTHORN	2" CAL.	Medium
	CR-VI	40	CRATAEGUS VIRIDIS 'WINTER KING' WINTER KING HAWTHORN	2" CAL.	Low - Medium
	KO-PA	64	KOELREUTERIA PANICULATA GOLDEN RAIN TREE	2" CAL.	Low - Medium
	MA-SP	80	MALUS X 'SPRING SNOW' SPRING SNOW CRABAPPLE	2" CAL.	Medium
	PY-CA	52	PYRUS CALLERYANA CALLERY PEAR	2" CAL.	Medium
EVERGREEN TREES					
	PI-BA	2	PICEA PUNGENS 'BAKERI' BAKER COLORADO SPRUCE	6' HT.	Medium
	PI-DE	123	PICEA GLAUCA 'DENSATA' BLACK HILLS WHITE SPRUCE	6' HT.	Medium
	PI-NI	142	PINUS NIGRA AUSTRIAN PINE	6' HT.	Medium
	PI-PO	31	PINUS PONDEROSA PONDEROSA PINE	6' HT.	Very low - Medium
	PI-PU	96	PICEA PUNGENS COLORADO SPRUCE	6' HT.	Medium
	PI-ST	13	PINUS STROBIFORMIS SOUTHWESTERN WHITE PINE	6' HT.	Medium
SHRUBS					
	AME OBE	41	AMELANCHIER ALNIFOLIA 'OBELISK' STANDING OVATION® SERVICEBERRY	5 GAL.	Medium
	ARO OEC	151	ARONIA MELANOCARPA LOW SCAPE MOUND (ALS) LOW SCAPE MOUND BLACK CHOKEBERRY	5 GAL.	Medium
	BU-DA	431	BUTTERFLY BUSH	5 GAL.	Medium
	CA-CL	1,285	CARYOPTERIS X CLANDONENSIS 'BLUE MIST' BLUE MIST BLUEBEARD	5 GAL.	Low - Medium
	CA-FR	239	CARAGANA FRUTEX 'GLOBOSA' GLOBE RUSSIAN PEASHRUB	5 GAL.	Medium
	CHR NAU	6,919	CHRYSOTHAMNUS NAUSEOSUS NAUSEOSUS DWARF BLUE RABBITBRUSH	5 GAL.	Very low - Low
	CO-BA	165	CORNUS SERICEA 'BAILEY' BAYLEY'S RED TWIG DOGWOOD	5 GAL.	Medium - High
	CO-SE	328	CORNUS SERICEA 'FLAVIRAMEA' YELLOW TWIG DOGWOOD	5 GAL.	Medium - High
	COR KLS	2,345	CORNUS SERICEA 'KELSEY' KELSEY'S DWARF RED TWIG DOGWOOD	5 GAL.	Medium - High
	FO-IN	263	FORSYTHIA X INTERMEDIA 'SPRING GLORY' SPRING GLORY FORSYTHIA	5 GAL.	Low - Medium
	PH-OP	261	PHYSOCARPUS OPULIFOLIUS 'LUTEUS' GOLDEN NINEBARK	5 GAL.	Low - Medium
	PH-SN	669	PHILADELPHUS X 'SNOWBELLE' SNOWBELLE MOCK ORANGE	5 GAL.	Medium
	PHY CEN	43	PHYSOCARPUS OPULIFOLIUS 'CENTER GLOW' CENTER GLOW NINEBARK	5 GAL.	Low - Medium
	PR-AM	87	PRUNUS AMERICANA 'ROYALTY' AMERICAN PLUM	5 GAL.	Medium
	PR-BE	2,366	PRUNUS BESSEYI 'P011S' TM PAWNEE BUTTES SAND CHERRY	5 GAL.	Low
	PR-TO	74	PRUNUS TOMENTOSA NANKING CHERRY	5 GAL.	Medium
	RHU AUT	892	RHUS TRILOBATA 'AUTUMN AMBER' AUTUMN AMBER SUMAC	5 GAL.	Very low - Low
	RI-AU	241	RIBES AUREUM GOLDEN CURRANT	5 GAL.	Very low - Low
	SPI GO2	148	SPIRAEA JAPONICA 'GOLDMOUND' GOLDMOUND JAPANESE SPIREA	5 GAL.	Medium
	SY-OR	323	SYMPHORICARPOS ORBICULATUS CORALBERRY	5 GAL.	Low - Medium
	SY-PA	138	SYRINGA PATULA 'MISS KIM' MISS KIM KOREAN LILAC	5 GAL.	Medium
	SY-PR	168	SYRINGA X PRESTONIAE 'DONALD WYMAN' DONALD WYMAN LILAC	5 GAL.	Medium
	SY-VU	144	SYRINGA VULGARIS 'ALBA' WHITE COMMON LILAC	5 GAL.	Medium
	VI-BU	268	VIBURNUM X 'BURKWOODII' BURKWOOD VIBURNUM	5 GAL.	Medium
	VI-TR	445	VIBURNUM TRILOBUM 'COMPACTUM' COMPACT AMERICAN CRANBERRYBUSH	5 GAL.	Medium

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	PLANT SIZE	WATER USE
EVERGREEN SHRUBS					
	AR-PA	2,428	ARCTOSTAPHYLOS X COLORADENSIS 'PANCHITO' PANCHITO MANZANITA	5 GAL.	Low - Medium
	CY-PU	1,020	CYTISUS PURGANS 'SPANISH GOLD' SPANISH GOLD BROOM	5 GAL.	Very low - Medium
	EPH EQU	136	EPHEDRA EQUISETINA BLUESTEM JOINT FIR	5 GAL.	Very low - Low
	EU-KI	87	EUONYMUS KIAUTSCHOVICUS 'MANHATTAN' MANHATTAN EUONYMUS	5 GAL.	Low - Medium
	MAH REP	2,204	MAHONIA REPENS CREEPING MAHONIA	5 GAL.	Low
	PI-GL	47	PICEA PUNGENS 'GLOBOSA' DWARF GLOBE BLUE SPRUCE	5 GAL.	Medium
	PIN TA2	42	PINUS MUGO 'TANNENBAUM' TANNENBAUM MUGO PINE	5 GAL.	Low - Medium
ORNAMENTAL GRASSES					
	ACH LTI	138	ACHNATHERUM CALAMAGROSTIS 'PUND02S' UNDAUNTED® ALPINE PLUME GRASS	5 GAL.	Low - Medium
	BO-BL	660	BOUTELOUA GRACILIS 'BLONDE AMBITION' BLONDE AMBITION BLUE GRAMA	5 GAL.	Low
	CAL KAR	346	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' KARL FOERSTER FEATHER REED GRASS	5 GAL.	Low - Medium
	MUH UN3	399	MUHLENBERGIA REVERCHONII 'PUND01S' UNDAUNTED® RUBY MUHLY	5 GAL.	Very low - Low
	SC-SC	198	SCHIZACHYRIUM SCOPARIUM LITTLE BLUESTEM	5 GAL.	Very low - Low
	SPO WRI	138	SPOROBOLUS WRIGHTII BIG SACATON	5 GAL.	Very low
PERENNIALS					
	NEP LIT	21	NEPETA X 'PSFIKE' LITTLE TRUDY® CATMINT	1 GAL.	Low - Medium
	ZAU ORA	60	ZAUSCHNERIA GARRETTII HUMMINGBIRD TRUMPET	1 GAL.	Low
PERENNIALS					
	EPI HUM	196,975 SF	EPILOBIUM CANUM CALIFORNIA FUCHSIA		Low
TURF & SEED MIXES					
	TUR LOW	2,428,581 SF	LOW GROW NATIVE SEED MIX		

CITY OF AURORA STANDARD NOTES

- ALL LANDSCAPE AREAS ARE TO RECEIVE FOUR CUBIC YARDS OF ORGANIC MATERIAL PER 1,000 SF OF AREA.
- REFER TO SHEET 96 FOR LED STREET LIGHT AND LED POST TOP LIGHT DETAILS.
- SURFACE MATERIAL OF WALKS SHALL BE BROOM FINISH CONCRETE AND SOME TRAILS WILL BE CRUSHER FINES.
- ALL UTILITY EASEMENTS SHALL REMAIN UNOBSTRUCTED AND FULLY ACCESSIBLE ALONG THEIR ENTIRE LENGTH FOR THE MAINTENANCE EQUIPMENT ENTRY.
- THE DEVELOPER, HIS SUCCESSORS AND ASSIGNS, SHALL BE RESPONSIBLE FOR INSTALLATION, MAINTENANCE AND REPLACEMENT OF ALL LANDSCAPING MATERIALS SHOWN OR INDICATED ON THE APPROVED SITE PLAN OR LANDSCAPE PLAN ON FILE IN THE PLANNING DEPARTMENT. ALL LANDSCAPING WILL BE INSTALLED AS DELINEATED ON THE PLAN, PRIOR TO ISSUANCE OF CERTIFICATES OF OCCUPANCY
- ALL LANDSCAPED AREAS AND PLANT MATERIAL, EXCEPT FOR NON-IRRIGATED NATIVE, RESTORATIVE, AND DRYLAND GRASS AREAS MUST BE WATERED BY AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM. IRRIGATION SYSTEM DESIGN, INSTALLATION, OPERATION, AND MAINTENANCE SHALL CONFORM TO REQUIREMENTS FOUND IN THE CITY OF AURORA IRRIGATION ORDINANCE.
- PLANTING BEDS SHALL BE MULCHED WITH CEDAR MULCH TO A DEPTH OF 4". ALL BEDS ARE TO BE CONTAINED BY PLASTIC EDGER, SURE-LOC OR EQUAL. EDGER IS NOT REQUIRED WHERE BED IS ADJACENT TO CURBS, WALLS OR WALKS, OR AROUND TREE PITS.
- ALL SOD AREAS SHALL BE DROUGHT TOLERANT FESCUE BLEND, SUBJECT TO APPROVAL BY AURORA WATER PER NEW WATER ORDINANCE.
- ALL PROPOSED LANDSCAPING WITHIN THE SIGHT TRIANGLE SHALL BE IN COMPLIANCE WITH COA ROADWAY SPECIFICATIONS, SECTION 4.04.2 10'.
- TREES IN THE RIGHT-OF-WAYS MUST BE A MINIMUM OF 8-FEET AWAY FROM ANY WATER AND SANITARY SEWER MAIN.
- LANDSCAPE MATERIAL SHALL NOT BE PLACED OR KEPT NEAR FIRE HYDRANTS IN A MANNER THAT WOULD PREVENT SUCH EQUIPMENT FROM BEING IMMEDIATELY DISCERNIBLE. A 5-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS. LANDSCAPING MATERIAL SHOWN WITHIN THE SITE PLAN CANNOT ENCR OACH INTO ROADWAYS THAT ARE DESIGNATED) AS FIRE LANE EASEMENTS (OR CORRIDORS).

LEGEND	
	SMALL LOT - ALLEY LOAD (<50' FRONTAGE)
	SMALL LOT - FRONT LOAD (<50' FRONTAGE)
	MOTOR COURT
	STANDARD LOT (50-59' FRONTAGE)
	STANDARD LOT (60-69' FRONTAGE)
	STANDARD LOT (70'+ FRONTAGE)
	OPEN SPACE TRACTS

colors must match the map

Colors have been revised to match map

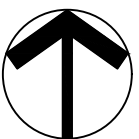
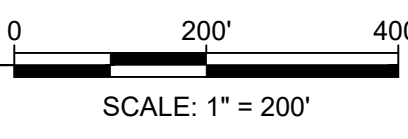
Colors have been revised to be consistent

make colors consistent TYP

FOR REFERENCE ONLY



LOT KEY MAP



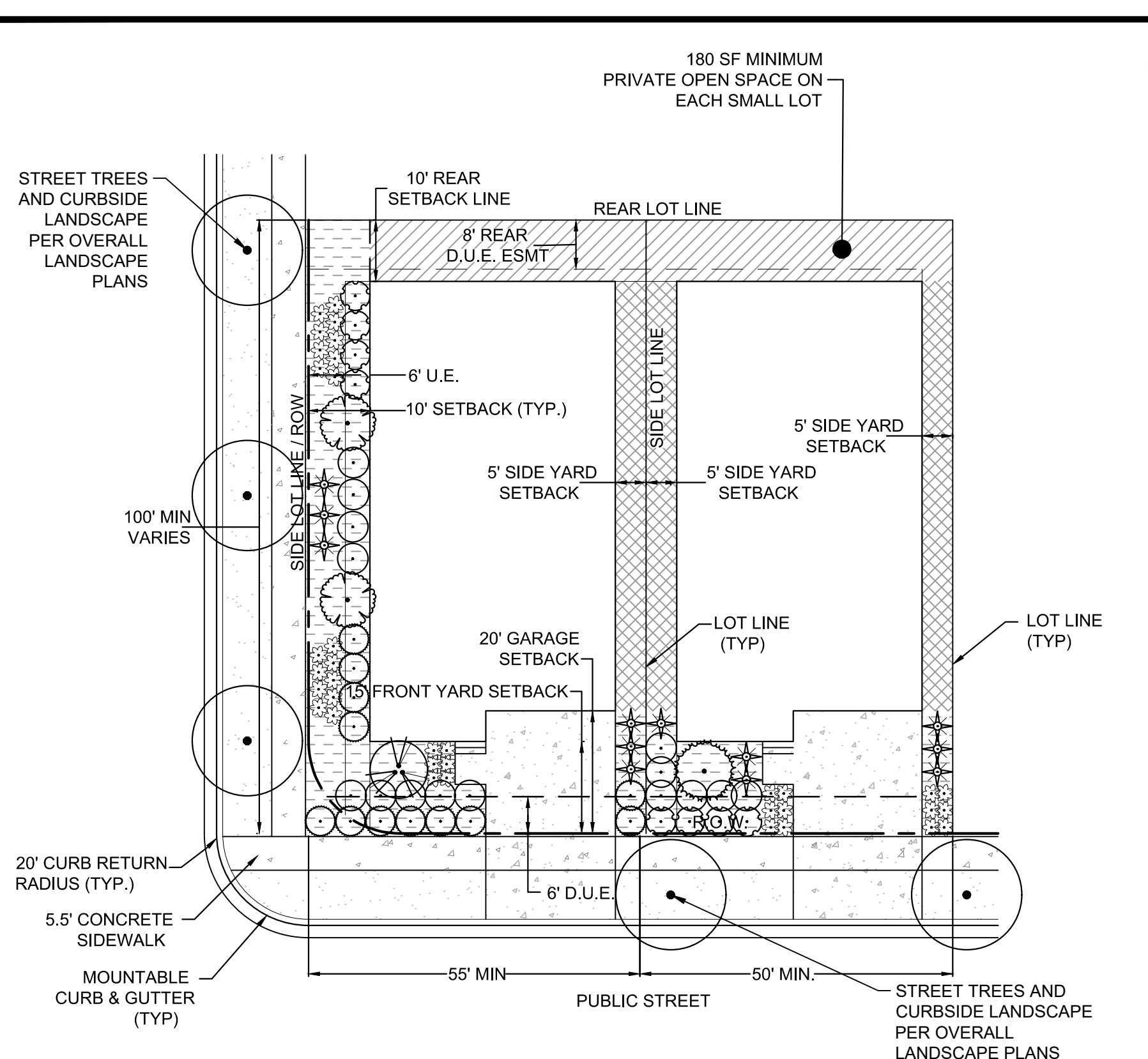
THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: PLANT SCHEDULE
DATE: AUGUST, 2024
PREPARED BY:
Matrix
Excellence by Design
707 17th Street, Suite 3150
Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com

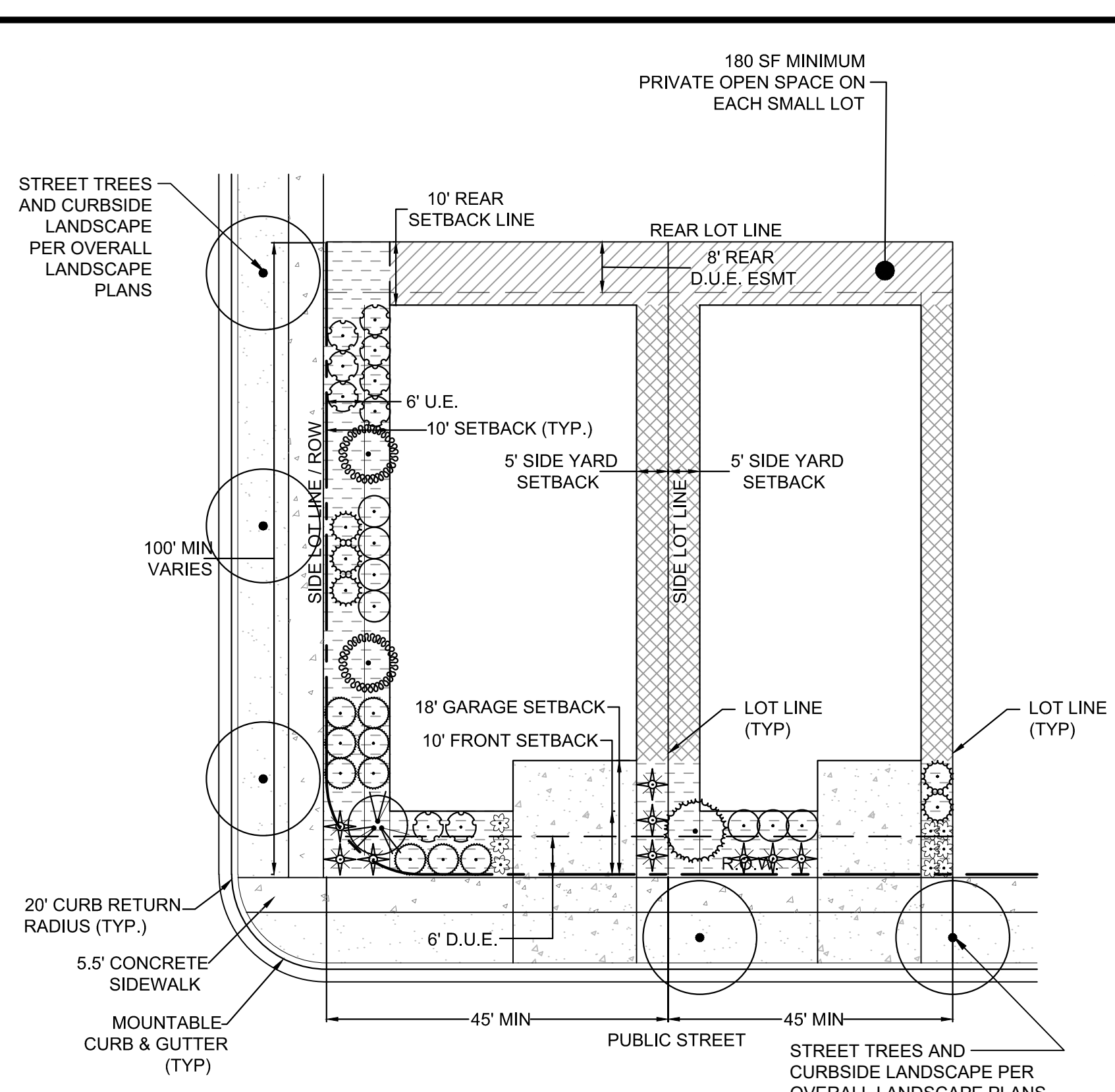


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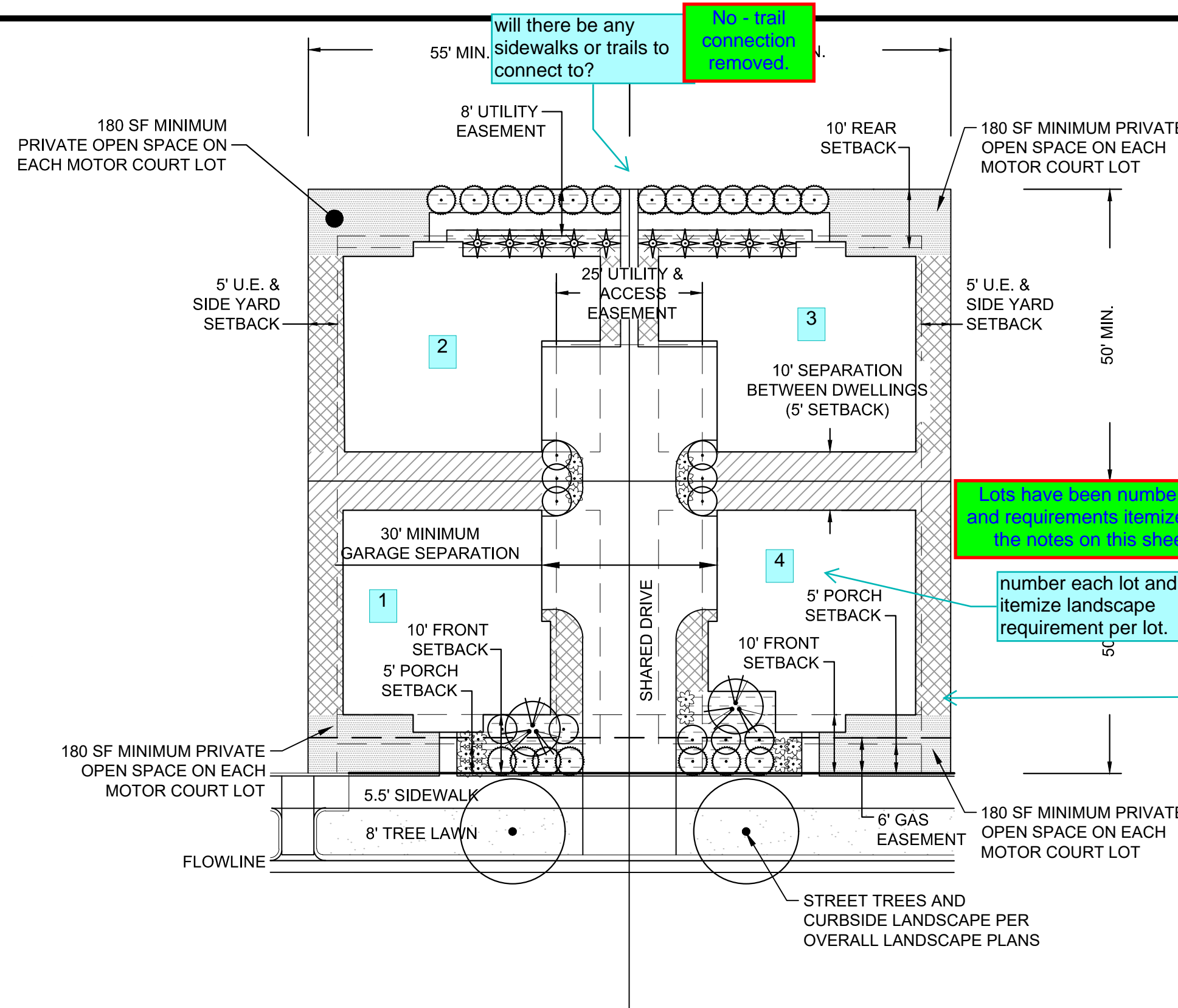
SHEET: 61 OF 96



TYPICAL STANDARD LOT (SINGLE FAMILY DETACHED - 50'-59' LOTS)



TYPICAL SMALL LOT (LESS THAN 50')



TYPICAL MOTOR COURT LOT

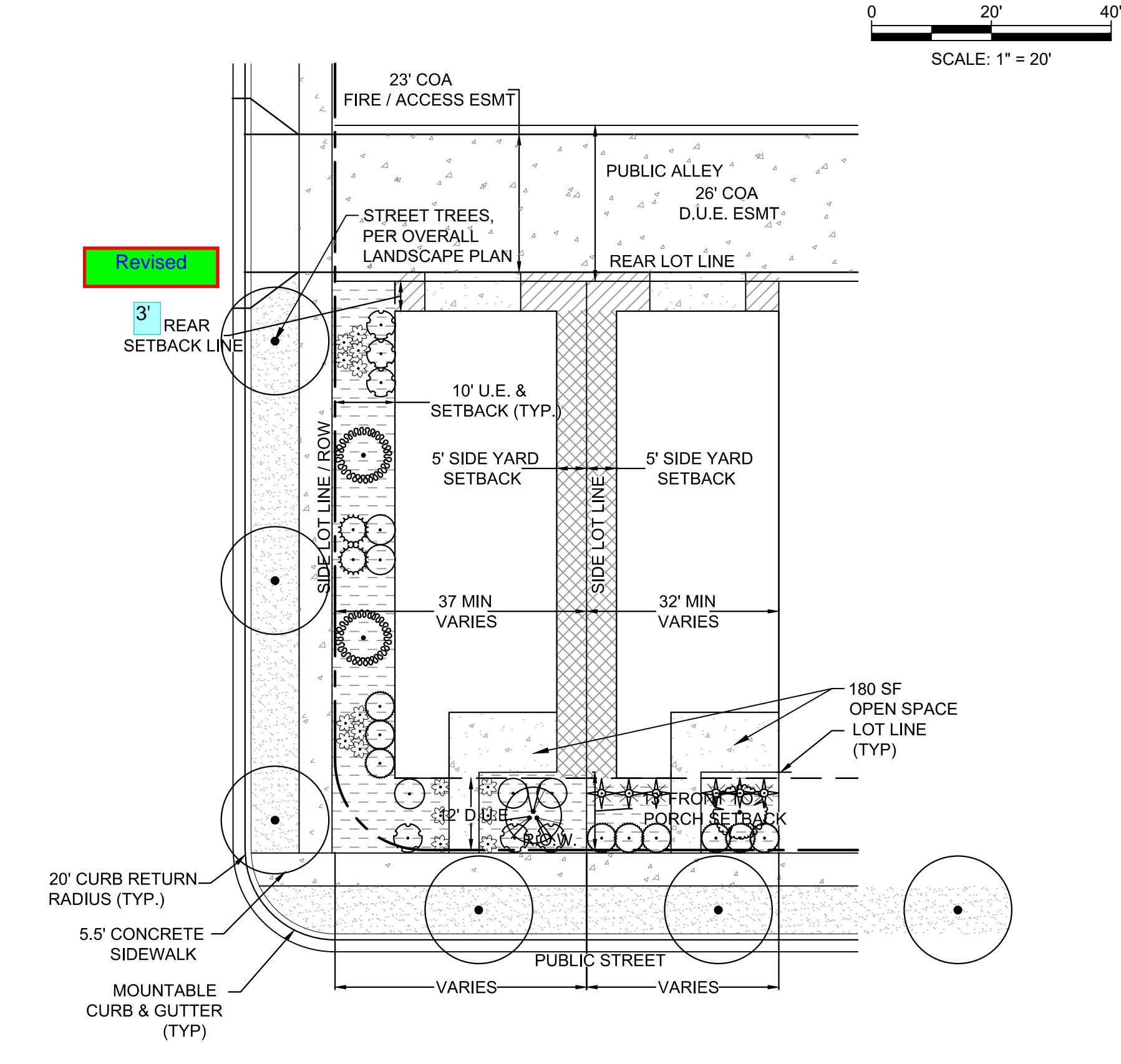
LEGEND

- RIGHT-OF-WAY
- LOT LINE
- BACKYARD LANDSCAPE, BY HOMEOWNER
- NO IRRIGATION ZONE
- CRUSHER FINES

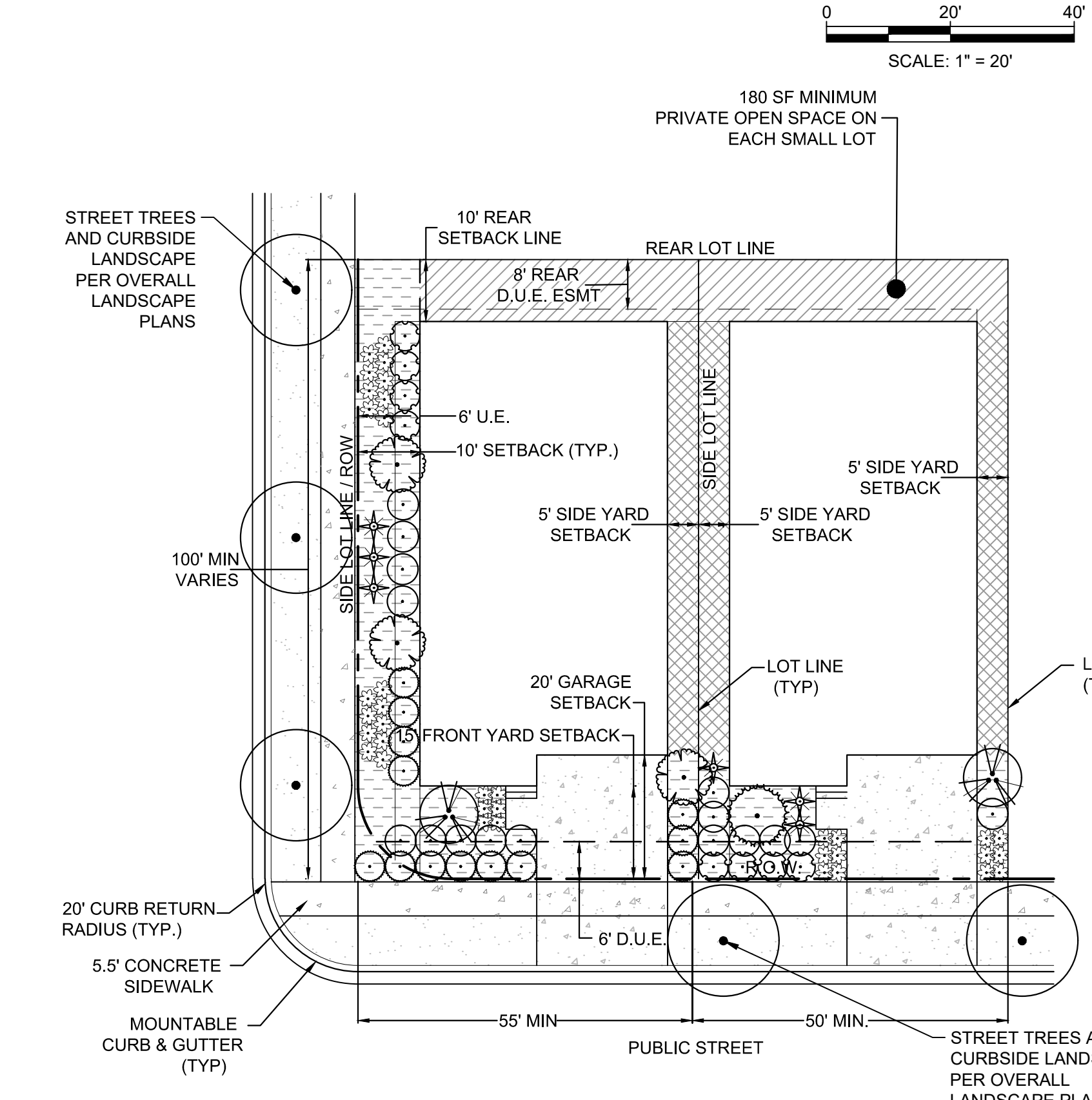
NOTES:
 U.E. - UTILITY EASEMENT
 D.U.E. - DRY UTILITY EASEMENT
 G.E. - GAS EASEMENT

PLANT LEGEND

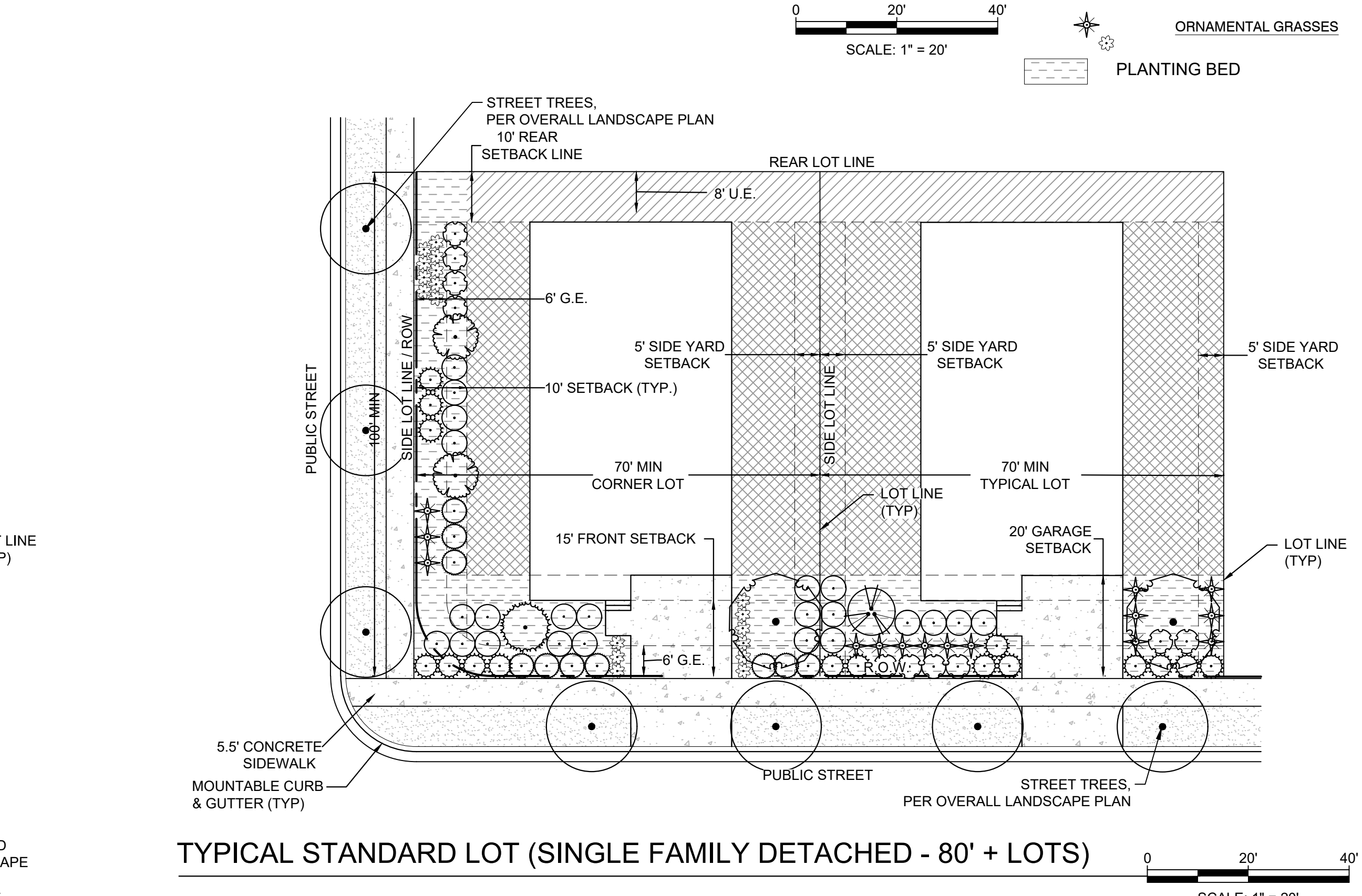
- DECIDUOUS CANOPY TREE
- EVERGREEN TREE
- ORNAMENTAL TREE
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- ORNAMENTAL GRASSES
- PLANTING BED



TYPICAL SMALL LOT (SINGLE FAMILY ALLEY LOAD - <50' LOT)



TYPICAL STANDARD LOT (SINGLE FAMILY DETACHED - 60'-79' LOTS)



TYPICAL STANDARD LOT (SINGLE FAMILY DETACHED - 80' + LOTS)

NOTES

- GENERAL**
- ALL CANOPY TREES TO BE 2.5" CALIPER, ALL ORNAMENTAL TREES TO BE 2" CALIPER OR 6' HEIGHT CLUMP, AND ALL EVERGREEN TREES TO BE 6' HEIGHT.
 - ALL SHRUBS TO BE #5 CONTAINERS AND ALL GRASSES TO BE #1 CONTAINERS.
 - GRASSES ARE COUNTED TOWARD REQUIRED SHRUBS AT A RATE OF (3) one-gallon SHRUBS PER (1) SHRUB - five-gallon.
 - RE-FDP FOR ALLOWED FENCE TYPES AND SETBACK - refer to fence exhibit.
 - FENCES SHALL BE A MIN. 18" BEHIND SIDEWALK UNLESS CRUSHER FINES BACK IS REQUIRED.
 - MATCHING LANDSCAPE DESIGNS SHALL BE NO CLOSER THAN EVERY 3RD LOT OR DIRECTLY ACROSS THE STREET FROM EACH OTHER. MATCHING SHALL MEAN THE SAME LAYOUT WITH 50% OR MORE OF THE SAME PLANT MATERIAL.
- FRONT YARD LANDSCAPING**
- ALL SMALL LOTS (<50') TO HAVE AT MINIMUM (1) SHADE TREE OR (1) ORNAMENTAL OR EVERGREEN TREE, (8) SHRUBS.
 - ALL STANDARD LOTS (50'-59') TO HAVE AT MINIMUM (1) SHADE TREE OR (1) ORNAMENTAL OR EVERGREEN TREE, (16) SHRUBS.
 - ALL STANDARD LOTS (60'-79') TO HAVE AT MINIMUM (1) SHADE TREE AND (1) ORNAMENTAL OR EVERGREEN TREE, (16) SHRUBS.
 - ALL STANDARD LOTS (80' +) TO HAVE AT MINIMUM (1) SHADE TREE AND (1) ORNAMENTAL OR EVERGREEN TREE, (26) SHRUBS.
 - ROCK MULCH SHALL COVER MORE THAN 50% OF THE AREA TO BE LANDSCAPED.
 - INTERNAL SIDE YARD, NOT EXPOSED TO PUBLIC VIEW - NO PLANT MATERIAL IS REQUIRED BUT MULCHES ARE REQUIRED FOR SOIL STABILITY.
- SIDE YARD LANDSCAPING**
- EXTERNAL SIDE YARDS ON CORNER LOTS EXPOSED TO PUBLIC VIEW - SHALL BE LANDSCAPED WITH SHRUBS AND TREES AT THE RATE OF 1 TREE AND 10 SHRUBS PER 40 LINEAR FEET OF SIDE YARD.

TYPICAL MOTOR COURT LOTS

- WHEN REAR LOTS ARE ADJACENT TO A STREET, THE UNIT WILL FRONT THE STREET.
- SHARED DRIVES ARE CONCRETE AND WILL BE MAINTAINED BY THE HOA.
- A FRONT YARD MAY BE COUNTED TOWARD THE 180 SQUARE FOOT OPEN SPACE REQUIREMENT IF THE FRONT YARD MEETS REQUIREMENTS DESCRIBED IN SECTION 146-4.2.3.A, IS A MINIMUM OF 10' WIDE AND THE SPACE INCLUDES A FRONT PORCH, DECK, OR SIMILAR SPACE WITH MINIMUM DIMENSIONS OF SIX FEET BY EIGHT FEET.

THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

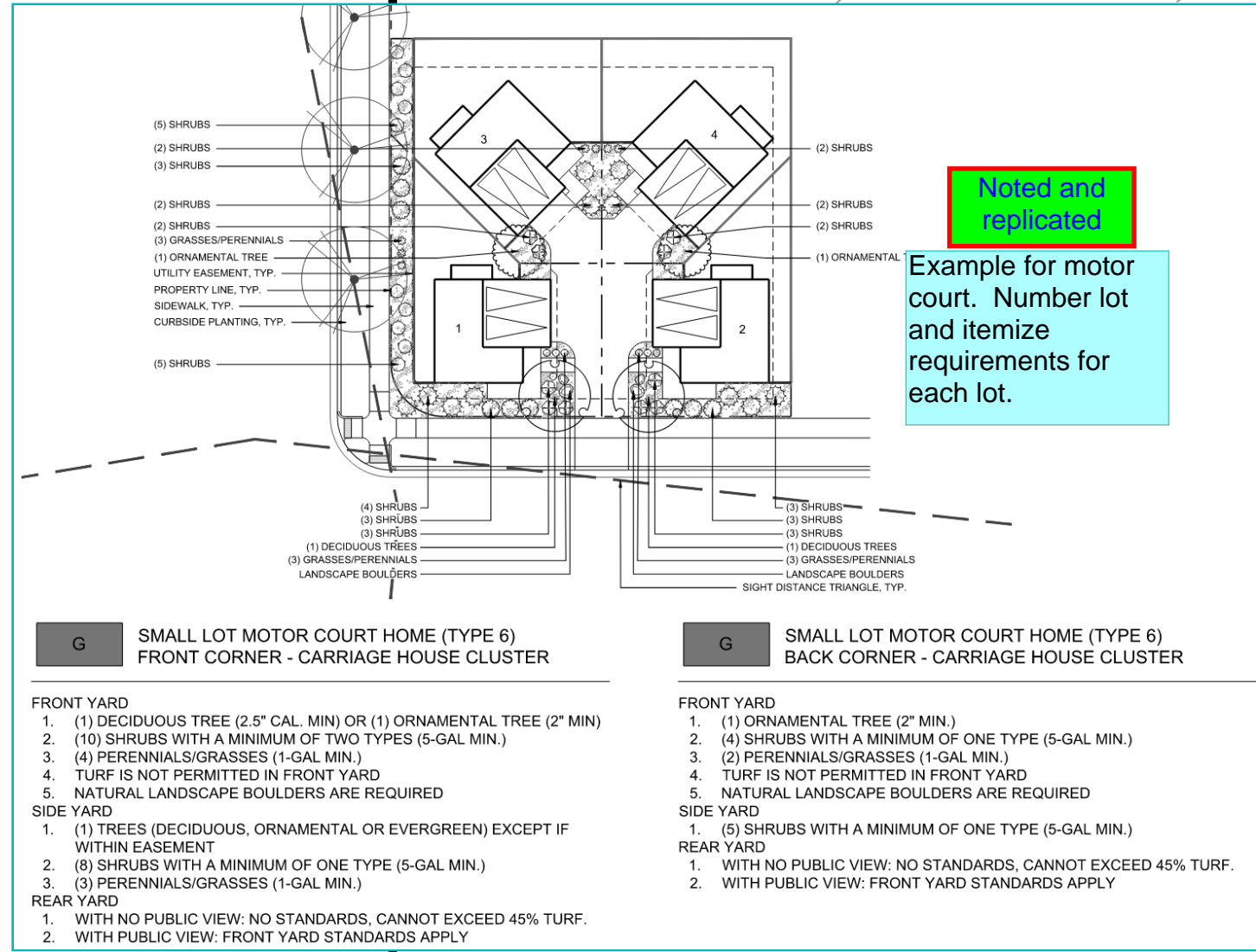
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 DATE: AUGUST, 2024

PREPARED BY:

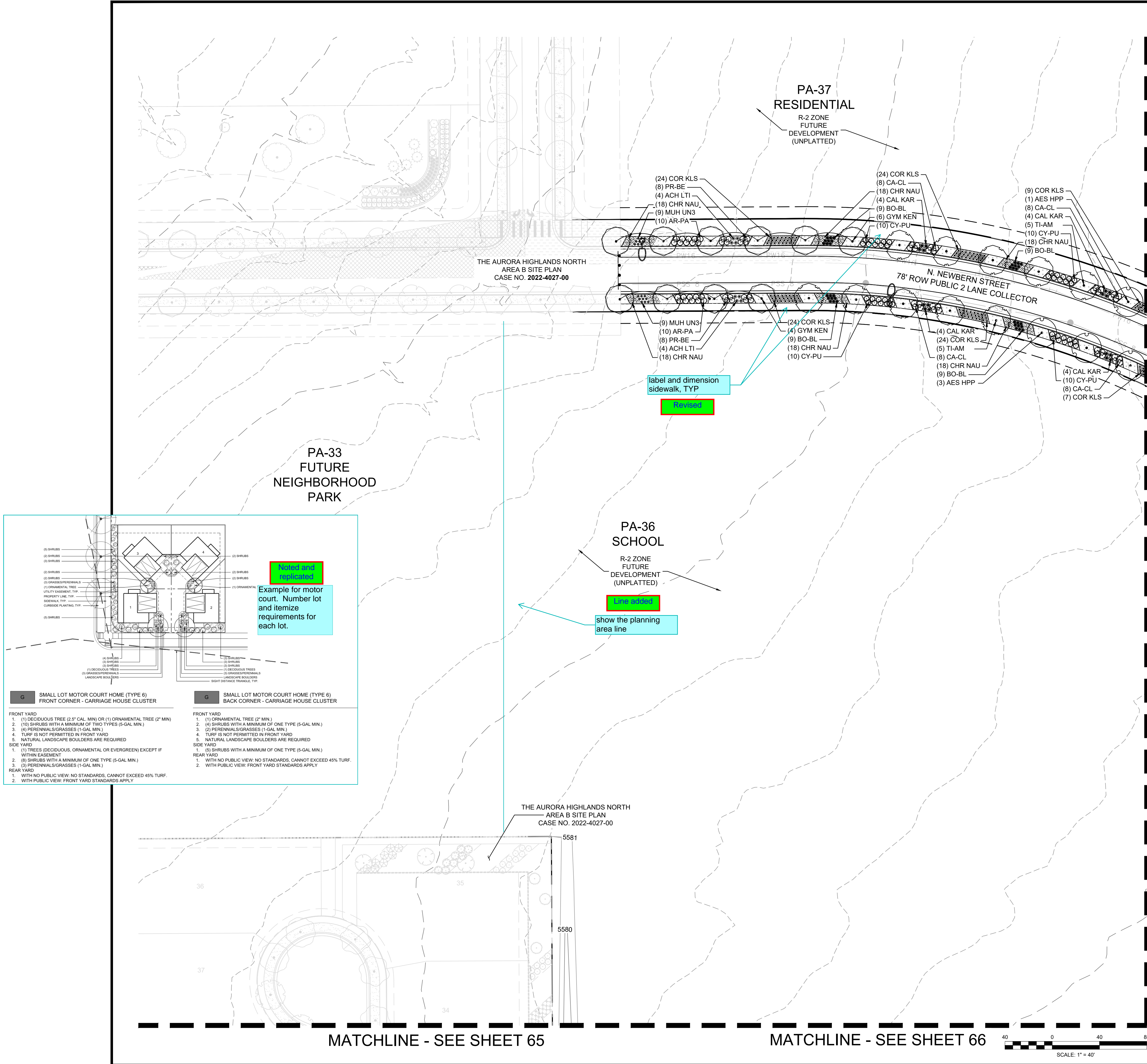
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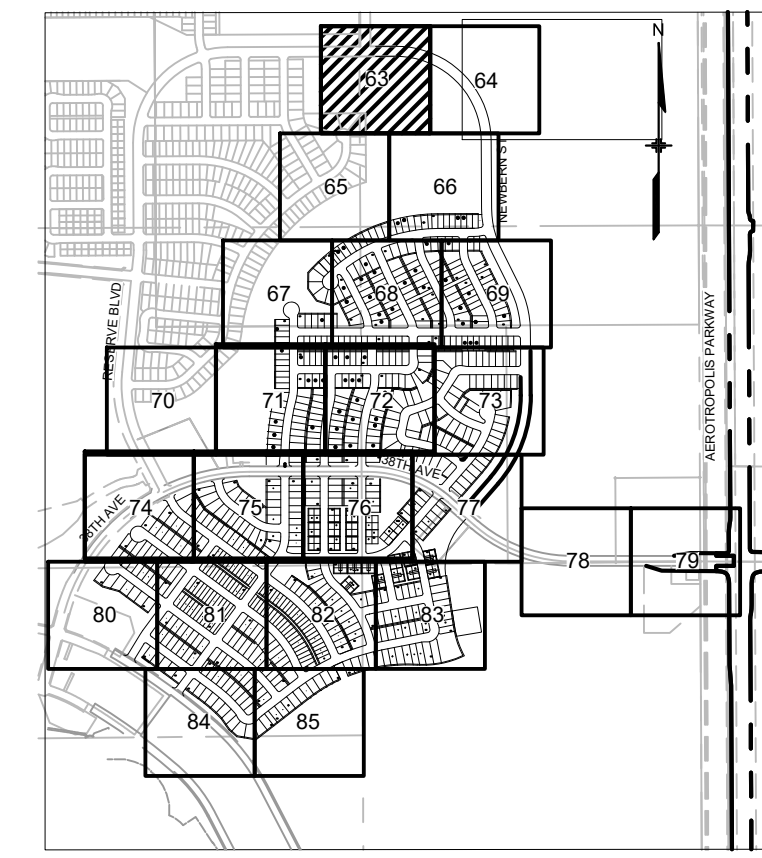
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- FRONT YARD**
- (1) DECIDUOUS TREE (2" CAL. MIN.) OR (1) ORNAMENTAL TREE (2" MIN.)
 - (2) SHRUBS WITH A MINIMUM OF TWO TYPES (5-GAL. MIN.)
 - (3) PERENNIALS/GRASSES (1-GAL. MIN.)
 - TURF IS NOT PERMITTED IN FRONT YARD
 - NATURAL LANDSCAPE BOULDERS ARE REQUIRED
- SIDE YARD**
- (1) TREES (DECIDUOUS, ORNAMENTAL OR EVERGREEN) EXCEPT IF WITHIN EASEMENT
 - (2) SHRUBS WITH A MINIMUM OF ONE TYPE (5-GAL. MIN.)
 - (3) PERENNIALS/GRASSES (1-GAL. MIN.)
 - WITH NO PUBLIC VIEW: NO STANDARDS, CANNOT EXCEED 45% TURF.
 - WITH PUBLIC VIEW: FRONT YARD STANDARDS APPLY
- REAR YARD**
- (1) ORNAMENTAL TREE (2" MIN.)
 - (2) SHRUBS WITH A MINIMUM OF ONE TYPE (5-GAL. MIN.)
 - (3) PERENNIALS/GRASSES (1-GAL. MIN.)
 - TURF IS NOT PERMITTED IN REAR YARD
 - NATURAL LANDSCAPE BOULDERS ARE REQUIRED
- SMALL LOT MOTOR COURT HOME (TYPE 6) BACK CORNER - CARRIAGE HOUSE CLUSTER**
- SMALL LOT MOTOR COURT HOME (TYPE 6) BACK CORNER - CARRIAGE HOUSE CLUSTER**



PLANT SCHEDULE					
SYMBOL	CODE	BOTANICAL / COMMON NAME	SYMBOL	CODE	BOTANICAL / COMMON NAME
DECIDUOUS TREES					
	ACE GRA	ACER GRANDIDENTATUM BIGTOOTH MAPLE		FO-IN	FORSYTHIA X INTERMEDIA 'SPRING GLORY'
	AES OHI	AESCULUS GLABRA OHIO BUCKEYE		PH-SN	PHILADELPHUS X 'SNOWBELLE'
	AES HPP	AESCULUS HIPPOCASTANUM EUROPEAN HORSECHESTNUT		PHY CEN	PHYSOCARPUS OPUILIFOLIUS 'CENTER GLOW'
	CA-SP	CATALPA SPECIOSA WESTERN CATALPA		PH-OP	CENTER GLOW NINEBARK PHYSOCARPUS OPUILIFOLIUS 'LUTEUS'
	CEL OCC	CELTIS OCCIDENTALIS COMMON HACKBERRY		PR-AM	GOLDEN NINEBARK PRUNUS AMERICANA 'ROYALTY'
	GL-TR	GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER'		PR-BE	AMERICAN PLUM PRUNUS BESSEYI 'P011S' TM
	GYM KEN	GYMNOCLADUS DIOICA KENTUCKY COFFEETREE		PR-TO	PAWNEE BUTTES SAND CHERRY PRUNUS TOMENTOSA
	QUE MAC	QUERCUS MACROCARPA BURR OAK		RHU AUT	NANKING CHERRY RHUS TRILOBATA 'AUTUMN AMBER'
	QUE ROB	QUERCUS ROBUR ENGLISH OAK		RI-AU	AUTUMN AMBER SUMAC RIBES AUREUM
	QU-RU	QUERCUS RUBRA RED OAK		SPI GO2	GOLDEN CURRANT SPIRAEA JAPONICA 'GOLDMOUND'
	TI-AM	TILIA AMERICANA 'MCKSENTRY' TM AMERICAN SENTRY LINDEN		SY-OR	GOLDMOUND JAPANESE SPIREA SYMPHORICARPOS ORBICULATUS
ORNAMENTAL TREES					
	ACE TAT	ACER TATARICUM TATARIAN MAPLE		SY-PA	CORALBERRY SYRINGA PATULA 'MISS KIM'
	CR-CR	CRATAEGUS CRUS-GALLI INERMIS THORNLESS COCKSPUR HAWTHORN		SY-VU	MISS KIM KOREAN LILAC SYRINGA VULGARIS 'BA'
	CR-VI	CRATAEGUS VIRIDIS 'WINTER KING' WINTER KING HAWTHORN		SY-PR	WHITE COMMON LILAC SYRINGA X PRESTONIAE 'DONALD WYMAN'
	KO-PA	KOELREUTERIA PANICULATA GOLDEN RAIN TREE		VI-TR	DONALD WYMAN LILAC VIBURNUM TRILOBUM 'COMPACTUM'
	MA-SP	MALUS X 'SPRING SNOW' SPRING SNOW CRABAPPLE		VI-BU	COMPACT AMERICAN CRANBERRYBUSH VIBURNUM X 'BURKWOOD'
	PY-CA	PYRUS CALLERYANA CALLERY PEAR			
EVERGREEN TREES					
	PI-DE	PICEA GLAUCA 'DENSATA' BLACK HILLS WHITE SPRUCE	EVERGREEN SHRUBS		
	PI-PU	PICEA PUNGENS COLORADO SPRUCE		AR-PA	ARCTOSTAPHYLOS X COLORADENSIS 'PANCHITO'
	PI-BA	PICEA PUNGENS 'BAKERI' BAKER COLORADO SPRUCE		CY-PU	PANCHITO MANZANITA CYTISUS PURGANS 'SPANISH GOLD'
	PI-NI	PINUS NIGRA AUSTRIAN PINE		EPH EQU	SPANISH GOLD BROOM EPHEDRA EQUSETINA
	PI-PO	PINUS PONDEROSA PONDEROSA PINE		EU-KI	BLUESTEM JOINT FIR EUONYMUS KIANTSCHOVICUS 'MANHATTAN'
	PI-ST	PINUS STROBIFORMIS SOUTHWESTERN WHITE PINE		MAH REP	MANHATTAN EUONYMUS MAHONIA REPENS
SHRUBS					
	AME OBE	AMELANCHIER ALNIFOLIA 'OBELISK' STANDING OVATION™ SERVICEBERRY		ACH LTI	ACHNATHERUM CALAMAGROSTIS 'PUND02S'
	ARO OEC	ARONIA MELANOCARPA LOW SCAPE MOUND (ALS)		BO-BL	UNDAUNTED® ALPINE PLUME GRASS BOUTELOUA GRACILIS 'BLONDE AMBITION'
	BU-DA	BUDDLEJA DAVIDII BUTTERFLY BUSH		CAL KAR	BLOONDE AMBITION BLUE GRAMA CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'
	CA-FR	CARAGANA FRUTEX 'GLOBOSA' GLOBE RUSSIAN PEASHRUB		MUH UN3	KARL FOERSTER FEATHER REED GRASS MUHLENBERGIA REVERCHONII 'PUND01S'
	CA-CL	CARYOPTERIS X CLANDONENSIS 'BLUE MIST' BLUE MIST BLUEBEARD		SC-SC	UNDAUNTED® RUBY MUHLY SCHIZACHYRIUM SCOPARIUM
	CHR NAU	CHRYSOETHAMNUS NAUSEOSUS NAUSEOSUS DWARF BLUE RABBITBRUSH		SPO WRI	LITTLE BLUESTEM SPOROBOLUS WRIGHTII
	CO-BA	CORNUS SERICEA 'BAILEY' BAYLEY'S RED TWIG DOGWOOD	PERENNIALS		
	CO-SE	CORNUS SERICEA 'FLAVIRAMEA' YELLOW TWIG DOGWOOD		NEP LIT	NEPETA X 'PSFIKE' LITTLE TRUDY® CATMINT
	COR KLS	CORNUS SERICEA 'KELSEY' KELSEY'S DWARF RED TWIG DOGWOOD		ZAU ORA	ZAUSCHNERIA GARRETTII HUMMINGBIRD TRUMPET
LEGEND					
			PERENNIALS		
				EPI HUM	EPILOBIUM CANUM CALIFORNIA FUCHSIA
			TURF & SEED MIXES		
				TUR LOW	LOW GROW NATIVE SEED MIX



NOTES:

- FENCES SHALL BE A MINIMUM OF 18" BEHIND THE SIDEWALK UNLESS A GREATER SETBACK IS REQUIRED.

THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: LANDSCAPE PLAN

DATE: AUGUST, 2024

PREPARED BY:

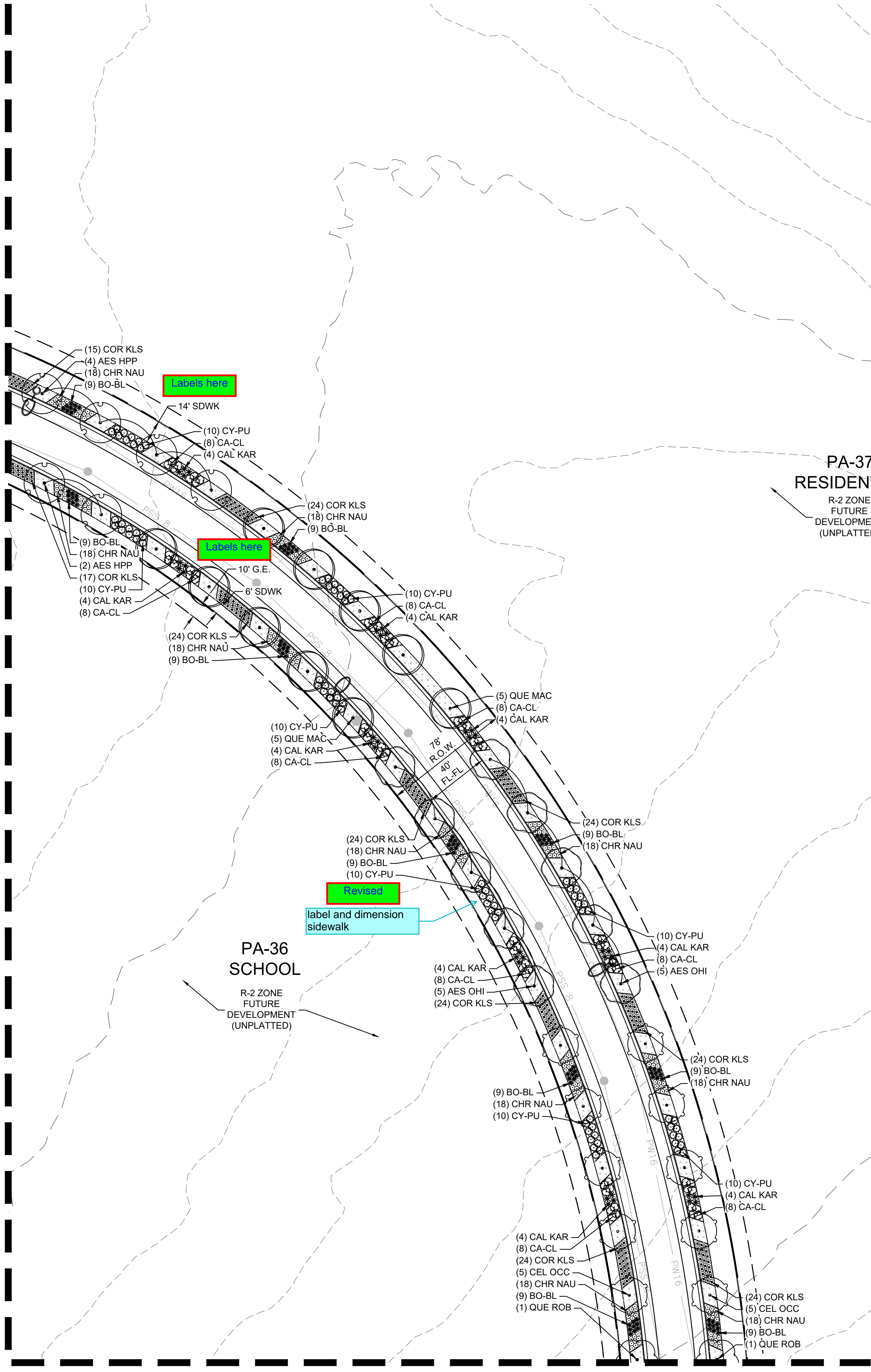
Matrix
Excellence by Design
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811













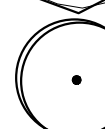













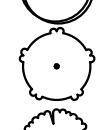

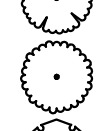



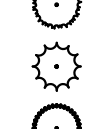

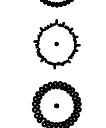
































SHEET:63 OF 96

NOT FOR CONSTRUCTION

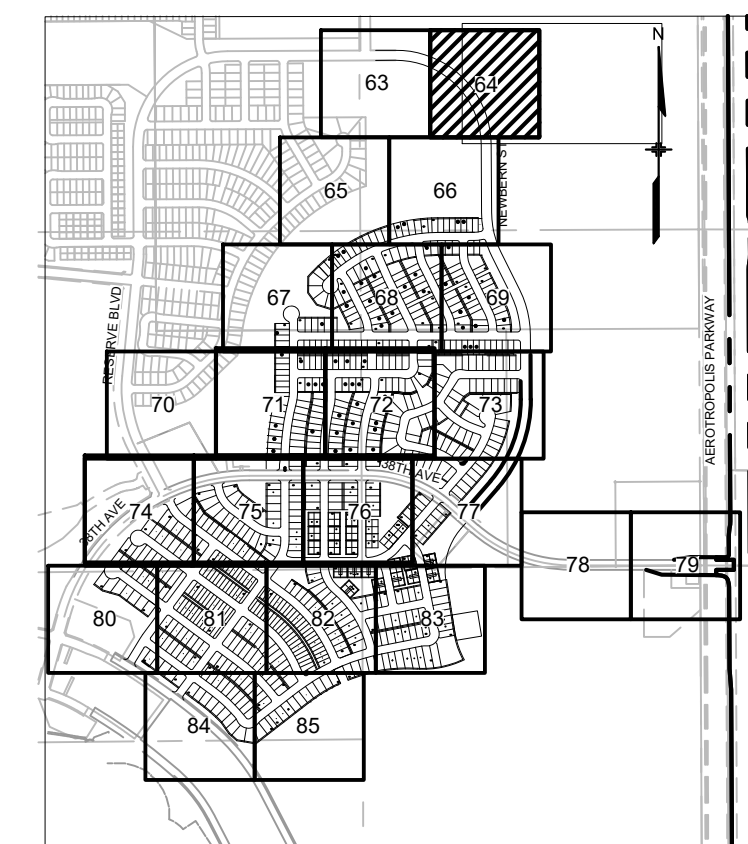
MATCHLINE - SEE SHEET 63



PLANT SCHEDULE

SYMBOL	CODE	BOTANICAL / COMMON NAME	SYMBOL	CODE	BOTANICAL / COMMON NAME
DECIDUOUS TREES					
	ACE GRA	ACER GRANDIDENTATUM BIGTOOTH MAPLE		FO-IN	FORSYTHIA X INTERMEDIA 'SPRING GLORY'
	AES OHI	AESCULUS GLABRA OHIO BUCKEYE		PH-SN	PHILADELPHUS X 'SNOWBELLE'
	AES HPP	AESCULUS HIPPOCASTANUM EUROPEAN HORSECHESTNUT		PHY CEN	PHYSOCARPUS OPULIFOLIUS 'CENTER GLOW'
	CA-SP	CATALPA SPECIOSA WESTERN CATALPA		PH-OP	PHYSOCARPUS OPULIFOLIUS 'LUTEUS'
	CEL OCC	CELTIS OCCIDENTALIS COMMON HACKBERRY		PR-AM	GOLDEN NINEBARK PRUNUS AMERICANA 'ROYALTY'
	GL-TR	GLEDTISIA TRIACANTHOS INERMIS 'SHADEMASTER'		PR-BE	PRUNUS BESSEYI 'P011S' TM
	GL-TR	SHADEMASTER HONEY LOCUST		PR-TO	PAWNEE BUTTES SAND CHERRY PRUNUS TOMENTOSA
	GYM KEN	GYMNOCLADUS DIOICA KENTUCKY COFFEETREE		RHU AUT	RHUS TRILOBATA 'AUTUMN AMBER'
	QUE MAC	QUERCUS MACROCARPA BURR OAK		RI-AU	AUTUMN AMBER SUMAC RIBES AUREUM
	QUE ROB	QUERCUS ROBUR ENGLISH OAK		SPI GO2	SPIRAEA JAPONICA 'GOLDMOUND'
	QU-RU	QUERCUS RUBRA RED OAK		SY-OR	GOLDMOUND JAPANESE SPIRAEA SYMPHORICARPOS ORBICULATUS
	TI-AM	TILIA AMERICANA 'MCKSENTRY' TM AMERICAN SENTRY LINDEN		SY-PA	CORALBERRY SYRINGA PATULA 'MISS KIM'
ORNAMENTAL TREES					
	ACE TAT	ACER TATARICUM TATARIAN MAPLE		SY-VU	MISS KIM KOREAN LILAC SYRINGA VULGARIS 'ALBA'
	CR-CR	CRATAEGUS CRUS-GALLI INERMIS THORNLISS CRACKSPUR HAWTHORN		SY-PR	WHITE COMMON LILAC SYRINGA X PRESTONIAE 'DONALD WYMAN'
	CR-VI	CRATAEGUS VIRIDIS 'WINTER KING' WINTER KING HAWTHORN		VI-TR	DONALD WYMAN LILAC VIBURNUM TRILOBUM 'COMPACTUM'
	KO-PA	KOELERIA PANICULATA GOLDEN RAIN TREE		VI-BU	COMPACT AMERICAN CRANBERRYBUSH VIBURNUM X 'BURKWOODI'
	MA-SP	MALUS X 'SPRING SNOW' SPRING SNOW CRABAPPLE		EVERGREEN SHRUBS	
	PY-CA	PYRUS CALLERYANA CALLERY PEAR		AR-PA	ARCTOSTAPHYLOS X COLORADENSIS 'PANCHITO'
EVERGREEN TREES					
	PI-DE	PICEA GLAUCA 'DENSATA' BLACK HILLS WHITE SPRUCE		CY-PU	PANCHITO MANZANITA CYTISUS PURGANS 'SPANISH GOLD'
	PI-PU	PICEA PUNGENS COLORADO SPRUCE		EPH EQU	SPANISH GOLD BROOM EPHEDRA EQUISETINA
	PI-BA	PICEA CANADENSIS 'BAKERI' BAKER COLORADO SPRUCE		EU-KI	BLUESTEM JOINT FIR EUONYMUS KIAUTSCHOVICUS 'MANHATTAN'
	PI-NI	PINUS NIGRA AUSTRIAN PINE		MAH REP	MAHONIA REPENS CREeping MAHONIA
	PI-PO	PINUS PONDEROSA PONDEROSA PINE		PI-GL	PICEA PUNGENS 'GLOBOSA'
	PI-ST	PINUS STROBFIFORMIS SOUTHWESTERN WHITE PINE		PIN TA2	DWARF GLOBE BLUE SPRUCE PINUS MUGO 'TANNENBAUM'
SHRUBS					
	AME OBE	AMELANCHIER ALNIFOLIA 'OBELISK' STANDING OVATION™ SERVICEBERRY		ORNAMENTAL GRASSES	
	ARO OEC	ARONIA MELANOCARPA LOW SCAPE MOUND (ALS)		ACH LTI	ACHNATHERUM CALAMAGROSTIS 'PUND02S'
	BU-DA	Buddleja davidii		BO-BL	UNDAUNTED® ALPINE PLUME GRASS BOUTELLOUA GRACILIS 'BLONDE AMBITION'
	CA-FR	CARYOPTERIS X 'BLUE MIST'		CAL KAR	BLONDE AMBITION BLUE GRAMA CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'
	CA-CL	CHRYSOTHAMNUS NAUSEOSUS NAUSEOSUS		MUH UN3	MUHLENBERGIA REVERCHONII 'PUND01S'
	CHR NAU	CHRYSOTHAMNUS NAUSEOSUS NAUSEOSUS		SC-SC	UNDAUNTED® RUBY MUHLY SCHIZACHYRIUM SCOPARIUM
	CO-BA	CORNUS SERICEA 'BAILEYI'		SPO WRI	LITTLE BLUESTEM SPOROBOLUS WRIGHTII
	CO-SE	CORYLUS ROSTRATA 'FLAYIRAMEA'		BIG SACATON	
	COR KLS	CORNUS SERICEA 'KELSEY'	PERENNIALS		
	KELSEY'S DWARF RED TWIG DOGWOOD			NEP LIT	NEPETA X 'PSFIKE'
LEGEND					
LIMITS OF WORK					
MATCHLINE					
4' METAL SCREEN FENCE (DETAIL 07 / SHEET 91)					
6' MASONRY WALL (DETAIL 08 / SHEET 91)					
4' SPLIT RAIL FENCE (DETAIL 06 / SHEET 91)					
WALL COLUMN (DETAIL 09 / SHEET 91)					
EDGER					
STOP SIGN					
PROPOSED FIRE HYDRANT					

NOTE: SEE SHEET 61 MASTER PLANT SCHEDULE FOR FULL SIZE LEGEND



NOTES:
1. FENCES SHALL BE A MINIMUM OF 18" BEHIND THE SIDEWALK
UNLESS A GREATER SETBACK IS REQUIRED.

THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: *LANDSCAPE PLAN*

DATE: AUGUST, 2024

PREPARED BY:



707 17th Street, Suite 3150
Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com



SHEET:64 OF 96

MATCHLINE - SEE SHEET 63

PLANT SCHEDULE

SYMBOL	CODE	BOTANICAL / COMMON NAME	SYMBOL	CODE	BOTANICAL / COMMON NAME
DECIDUOUS TREES					
	ACE GRA	ACER GRANDIDENTATUM BIGTOOTH MAPLE		FO-IN	FORSYTHIA X INTERMEDIA 'SPRING GLORY'
	AES OHI	AESCULUS GLABRA OHIO BUCKEYE		PH-SN	PHILADELPHUS X 'SNOWBELLE'
	AES HPP	AESCULUS HIPPOCASTANUM EUROPEAN HORSECHESTNUT		PHY CEN	PHYSOCARPUS OPULIFOLIUS 'CENTER GLOW'
	CA-SP	CATALPA SPECIOSA WESTERN CATALPA		PH-OP	CENTER GLOW NINEBARK PHYSOCARPUS OPULIFOLIUS 'LUTEUS'
	CEL OCC	CELTIS OCCIDENTALIS COMMON HACKBERRY		PR-AM	GOLDEN NINEBARK PRUNUS AMERICANA 'ROYALTY'
	GL-TR	GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER'		PR-BE	AMERICAN PLUM PRUNUS BESSEYI 'P011S' TM
	GYM KEN	GYMNOCLADUS DIOICA KENTUCKY COFFEETREE		PR-TO	PAWNEE BUTTES SAND CHERRY PRUNUS TOMENTOSA
	QUE MAC	QUERCUS MACROCARPA BURR OAK		RHU AUT	NANKING CHERRY RHUS TRILOBATA 'AUTUMN AMBER'
	QUE ROB	QUERCUS ROBUR ENGLISH OAK		RI-AU	AUTUMN AMBER SUMAC RIBES AUREUM
	QU-RU	QUERCUS RUBRA RED OAK		SPI GO2	GOLDEN CURRANT SPIRAEA JAPONICA 'GOLDMOUND'
	TI-AM	TILIA AMERICANA 'MCKSENTRY' TM AMERICAN SENTRY LINDEN		SY-OR	GOLDMOUND JAPANESE SPIREA SYMPHORICARPOS ORBICULATUS
ORNAMENTAL TREES					
	ACE TAT	ACER TATARICUM TATARIAN MAPLE		SY-PA	CORALBERRY SYRINGA PATULA 'MISS KIM'
	CR-CR	CRATAEGUS CRUS-GALLI INERMIS THORNLESS COCKSPUR HAWTHORN		SY-VU	MISS KIM KOREAN LILAC SYRINGA VULGARIS 'ALBA'
	CR-VI	CRATAEGUS VIRIDIS 'WINTER KING' WINTER KING HAWTHORN		SY-PR	WHITE COMMON LILAC SYRINGA X PRESTONIAE 'DONALD WYMAN'
	KO-PA	KOELREUTERIA PANICULATA GOLDEN RAIN TREE		VI-TR	DONALD WYMAN LILAC VIBURNUM TRILOBUM 'COMPACTUM'
	MA-SP	MALUS X 'SPRING SNOW' SPRING SNOW CRABAPPLE		VI-BU	COMPACT AMERICAN CRANBERRYBUSH VIBURNUM X 'BURKWOODII'
	PY-CA	PYRUS CALLERYANA CALLERY PEAR			BURKWOOD VIBURNUM
EVERGREEN TREES					
	PI-DE	PICEA GLAUCOA 'DENSATA' BLACK HILLS WHITE SPRUCE		AR-PA	ARCTOSTAPHYLOS X COLORADENSIS 'PANCHITO'
	PI-PU	PICEA PUNGENS COLORADO SPRUCE		CY-PU	PANCHITO MANZANITA CYTISUS PURGANS 'SPANISH GOLD'
	PI-BA	PICEA PUNGENS 'BAKERI' BAKER COLORADO SPRUCE		EPH EQU	SPANISH GOLD BROOM EPHEDRA EQUISETINA
	PI-NI	PINUS NIGRA AUSTRIAN PINE		EU-KI	BLUESTEM JOINT FIR EUONYMUS KIAUTSCHOVICUS 'MANHATTAN'
	PI-PO	PINUS PONDEROSA PONDEROSA PINE		MAH REP	MANHATTAN EUONYMUS MAHONIA REPENS
	PI-ST	PINUS STROBIFORMIS SOUTHWESTERN WHITE PINE		PI-GL	CREeping MAHONIA PICEA PUNGENS 'GLOBOSA'
SHRUBS					
	AME OBE	AMELANCHIER ALNIFOLIA 'OBELISK' STANDING OVATION™ SERVICEBERRY		PIN TA2	DWARF GLOBE BLUE SPRUCE PINUS MUGO 'TANNENBAUM'
	ARO OEC	ARONIA MELANOCARPA LOW SCAPE MOUND			TANNENBAUM MUGO PINE
	BU-DA	BUDDLEJA DAVIDII BUTTERFLY BUSH	ORNAMENTAL GRASSES		
	CA-FR	CARAGANA FRUTEX 'GLOBOSA' GLOBE RUSSIAN PEASHRUB		ACH LT1	ACHNATHERUM CALAMAGROSTIS 'PUND02S'
	CA-CL	CARYOPTERIS X CLANDONENSIS 'BLUE MIST' BLUE MIST BLUEBEARD		BO-BL	UNDAUNTED® ALPINE PLUME GRASS BOUTELOUA GRACILIS 'BLONDE AMBITION'
	CHR NAU	CHRYSOETHAMNUS NAUSEOSUS NAUSEOSUS DWARF BLUE RABBITBRUSH		CAL KAR	BLONDE AMBITION BLUE GRAMA CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'
	CO-BA	CORNUS SERICEA 'BAILEY' BAILEY'S RED TWIG DOGWOOD		MUH UN3	KARL FOERSTER FEATHER REED GRASS MUHLENBERGIA REVERCHONII 'PUND01S'
	CO-SE	CORNUS SERICEA 'FLAVIRAMEA' YELLOW TWIG DOGWOOD		SC-SC	UNDAUNTED® RUBY MUHLY SCHIZACHYRIUM SCOPARIUM
	COR KLS	KELSEY'S DWARF RED TWIG DOGWOOD		SPO WRI	LITTLE BLUESTEM SPINOBOLUS WRIGHTII
					BIG SACATON

LEGEND	
	LIMITS OF WORK
	MATCHLINE
	4' METAL SCREEN FENCE (DETAIL 07 / SHEET 91)
	6' MASONRY WALL (DETAIL 08 / SHEET 91)
	4' SPLIT RAIL FENCE (DETAIL 06 / SHEET 91)
	WALL COLUMN (DETAIL 09 / SHEET 91)
	EDGER
	STOP SIGN
	PROPOSED FIRE HYDRANT
	PROPOSED SL1 PUBLIC STREET LIGHT (20' TAPERED POLE)
	PROPOSED SL2 PUBLIC STREET LIGHT (25' TAPERED POLE)

NOTES:
1. FENCES SHALL BE A MINIMUM OF 18" BEHIND THE SIDEWALK UNLESS A GREATER SETBACK IS REQUIRED.

THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: LANDSCAPE PLAN

DATE: AUGUST, 2024

PREPARED BY:

Matrix
Excellence by Design
707 17th Street, Suite 3150
Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com



PA-36 SCHOOL

THE AURORA HIGHLANDS NORTH AREA B SITE PLAN NOT CASE NO. 2022-4027-00

R-2 ZONE FUTURE DEVELOPMENT (UNPLATTED)

PA-39 OPEN SPACE

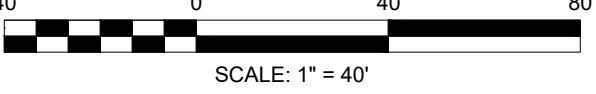
R-2 ZONE FUTURE DEVELOPMENT (UNPLATTED)

MATCHLINE - SEE SHEET 66

MATCHLINE - SEE SHEET 67

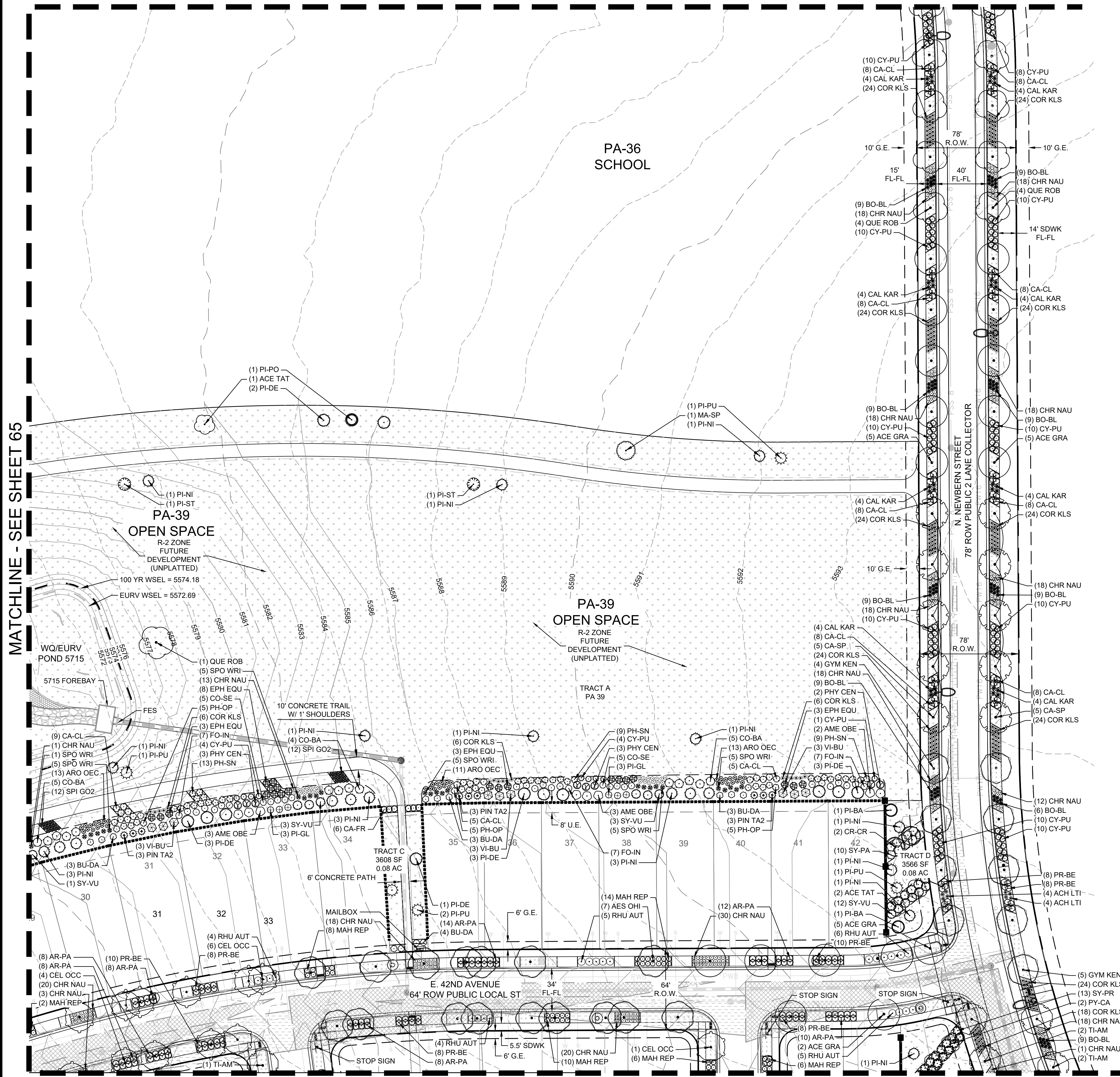
MATCHLINE - SEE SHEET 68

NOT FOR CONSTRUCTION



MATCHLINE - SEE SHEET 63

MATCHLINE - SEE SHEET 64



PLANT SCHEDULE

SYMBOL	CODE	BOTANICAL / COMMON NAME	SYMBOL	CODE	BOTANICAL / COMMON NAME
DECIDUOUS TREES					
	ACE GRA	ACER GRANDIDENTATUM BIGTOOTH MAPLE		FO-IN	FORSYTHIA X INTERMEDIA 'SPRING GLORY'
	AES OHI	AESCULUS GLABRA OHIO BUCKEYE		PH-SN	PHILADELPHUS X 'SNOWBELLE'
	AES HPP	AESCULUS HIPPOCASTANUM EUROPEAN HORSECHESTNUT		PHY CEN	PHYSOCARPUS OPULIFOLIUS 'CENTER GLOW'
	CA-SP	CATALPA SPECIOSA WESTERN CATALPA		PH-OP	CENTER GLOW NINEBARK PHYSOCARPUS OPULIFOLIUS 'LUTEUS'
	CEL OCC	CELTIS OCCIDENTALIS COMMON HACKBERRY		PR-AM	GOLDEN NINEBARK PRUNUS AMERICANA 'ROYALTY'
	GL-TR	GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER'		PR-BE	AMERICAN PLUM PRUNUS BESSEYI 'P011S' TM
	GYM KEN	GYMNOCLADUS DIOICA KENTUCKY COFFEETREE		PR-TO	PAWNEE BUTTES SAND CHERRY PRUNUS TOMENTOSA
	QUE MAC	QUERCUS MACROCARPA BURR OAK		RHU AUT	NANKING CHERRY RHUS TRILOBATA 'AUTUMN AMBER'
	QUE ROB	QUERCUS ROBUR ENGLISH OAK		RI-AU	AUTUMN AMBER SUMAC RIBES AUREUM
	QU-RU	QUERCUS RUBRA RED OAK		SPI GO2	GOLDEN CURRANT SPIRAEA JAPONICA 'GOLDMOUND'
	TI-AM	TILIA AMERICANA 'MCKSENTRY' TM AMERICAN SENTRY LINDEN		SY-OR	GOLDMOUND JAPANESE SPIREA SYMPHORICARPOS ORBICULATUS
ORNAMENTAL TREES					
	ACE TAT	ACER TATARICUM TATARIAN MAPLE		SY-PA	CORALBERRY SYRINGA PATULA 'MISS KIM'
	CR-CR	CRATAEGUS CRUS-GALLI INERMIS THORNLESS COCKSPUR HAWTHORN		SY-VU	MISS KIM KOREAN LILAC SYRINGA VULGARIS 'ALBA'
	CR-VI	CRATAEGUS VIRIDIS 'WINTER KING' WINTER KING HAWTHORN		SY-PR	WHITE COMMON LILAC SYRINGA X PRESTONIAE 'DONALD WYMAN'
	KO-PA	KOELREUTERIA PANICULATA GOLDEN RAIN TREE		VI-TR	DONALD WYMAN LILAC VIBURNUM TRILOBUM 'COMPACTUM'
	MA-SP	MALUS X 'SPRING SNOW' SPRING SNOW CRABAPPLE		VI-BU	COMPACT AMERICAN CRANBERRYBUSH VIBURNUM X 'BURKWOODII'
	PY-CA	PYRUS CALLERYANA CALLERY PEAR			BURKWOOD VIBURNUM
EVERGREEN TREES					
	PI-DE	PICEA GLAUCOA 'DENSATA' BLACK HILLS WHITE SPRUCE	EVERGREEN SHRUBS		
	PI-PU	PICEA PUNGENS COLORADO SPRUCE		AR-PA	ARCTOSTAPHYLOS X COLORADENSIS 'PANCHITO'
	PI-BA	PICEA PUNGENS 'BAKERI' BAKER COLORADO SPRUCE		CY-PU	PANCHITO MANZANITA CYTISUS PURGANS 'SPANISH GOLD'
	PI-NI	PINUS NIGRA AUSTRIAN PINE		EPH EQU	SPANISH GOLD BROOM EPHEDRA EQUISETINA
	PI-PO	PINUS PONDEROSA PUNEDERO PINE		EU-KI	BLUESTEM JOINT FIR EUONYMUS KIAUTSCHOVICUS 'MANHATTAN'
	PI-ST	PINUS STROBIFORMIS SOUTHWESTERN WHITE PINE		MAH REP	MANHATTAN EUONYMUS MAHONIA REPENS
SHRUBS					
	AME OBE	AMELANCHIER ALNIFOLIA 'OBELISK' STANDING OVATION™ SERVICEBERRY		PI-GL	CREeping MAHONIA PICEA PUNGENS 'GLOBOSA'
	ARO OEC	ARONIA MELANOCARPA LOW SCAPE MOUND (ALS)		PIN TA2	DWARF GLOBE BLUE SPRUCE PINUS MUGO 'TANNENBAUM'
	BU-DA	LOW SCAPE MOUND BLACK CHOKEBERRY BUDDLEJA DAVIDII			
	CA-FR	CARAGANA FRUTEX 'GLOBOSA' GLOBE RUSSIAN PEASHRUB	ORNAMENTAL GRASSES		
	CA-CL	CARYOPTERIS X CLANDONENSIS 'BLUE MIST' BLUE MIST BLUEBEARD		ACH LTI	ACHNATHERUM CALAMAGROSTIS 'PUND02S'
	CHR NAU	CHRYSOETHAMNUS NAUSEOSUS NAUSEOSUS DWARF BLUE RABBITBRUSH		BO-BL	UNDAUNTED® ALPINE PLUME GRASS BOUTELOUA GRACILIS 'BLONDE AMBITION'
	CO-BA	CORNUS SERICEA 'BAILEY' BAYLEY'S RED TWIG DOGWOOD		CAL KAR	BLONDE AMBITION BLUE GRAMA CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'
	CO-SE	CORNUS SERICEA 'FLAVIRAMEA' YELLOW TWIG DOGWOOD		MUH UN3	KARL FOERSTER FEATHER REED GRASS MUHLENBERGIA REVERCHONII 'PUND01S'
	COR KLS	KELSEY'S DWARF RED TWIG DOGWOOD		SC-SC	UNDAUNTED® RUBY MUHLY SCHIZACHYRIUM SCOPARIUM

NOTE: SEE SHEET 61 MASTER PLANT SCHEDULE FOR FULL SIZE LEGEND

LEGEND

	LIMITS OF WORK
	MATCHLINE
	4' METAL SCREEN FENCE (DETAIL 07 / SHEET 91)
	6' MASONRY WALL (DETAIL 08 / SHEET 91)
	4' SPLIT RAIL FENCE (DETAIL 06 / SHEET 91)
	WALL COLUMN (DETAIL 09 / SHEET 91)
	EDGER
	STOP SIGN
	PROPOSED FIRE HYDRANT
	PROPOSED SL1 PUBLIC STREET LIGHT (20' TAPERED POLE)
	PROPOSED SL2 PUBLIC STREET LIGHT (25' TAPERED POLE)

NOTES:
1. FENCES SHALL BE A MINIMUM OF 18" BEHIND THE SIDEWALK UNLESS A GREATER SETBACK IS REQUIRED.

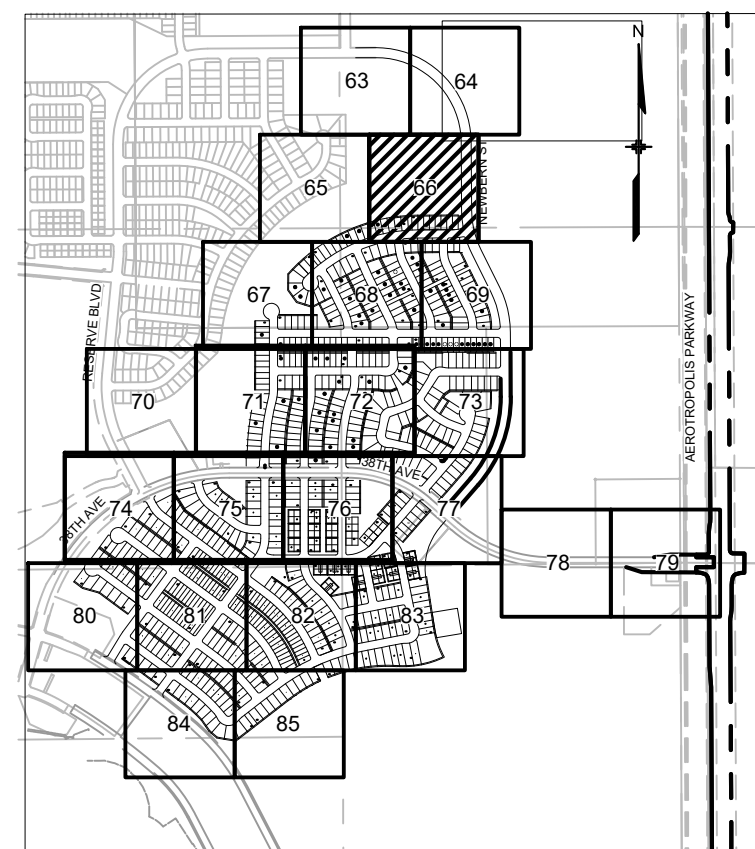
THE AURORA HIGHLANDS NORTH - AREA C SITE PLAN

TITLE: LANDSCAPE PLAN

DATE: AUGUST, 2024

PREPARED BY:

Matrix
Excellence by Design
707 17th Street, Suite 3150
Denver, Colorado 80202
P 303.572.0200
www.matrixdesigngroup.com



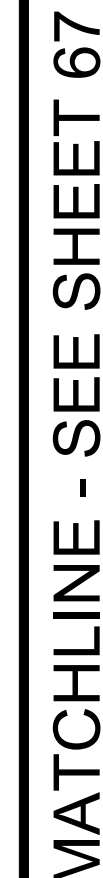
KEY MAP
SCALE: 1" = 1200'

NOT FOR CONSTRUCTION



SHEET:66 OF 96

MATCHLINE - SEE SHEET 66

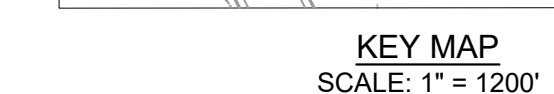


MATCHLINE - SEE SHEET 69

NOTES:
1. FENCES SHALL BE A MINIMUM OF 18" BEHIND THE SIDEWALK UNLESS A GREATER SETBACK IS REQUIRED.



SHEET:68 OF 96



NOT FOR CONSTRUCTION

MATCHLINE - SEE SHEET 66

MATCHLINE - SEE SHEET 68

MATCHLINE - SEE SHEET 73

PA-37
RESIDENTIAL
R-2 ZONE
FUTURE
DEVELOPMENT
(UNPLATTED)

PLANT SCHEDULE

SYMBOL	CODE	BOTANICAL / COMMON NAME	SYMBOL	CODE	BOTANICAL / COMMON NAME
DECIDUOUS TREES					
	ACE GRA	ACER GRANDIDENTATUM BIGTOOTH MAPLE		FO-IN	FORSYTHIA X INTERMEDIA 'SPRING GLORY' SPRING GLORY FORSYTHIA PHILADELPHUS X 'SNOWBELLE'
	AES OHI	AESCULUS GLABRA OHIO BUCKEYE		PH-SN	SNOWBELLE MOCK ORANGE PHYSOCARPUS OPULIFOLIUS 'CENTER GLOW'
	AES HPP	AESCULUS HIPPOCASTANUM EUROPEAN HORSECHESTNUT		PHY CEN	CENTER GLOW NINEBARK PHYSOCARPUS OPULIFOLIUS 'LUTEUS'
	CA-SP	CATALPA SPECIOSA WESTERN CATALPA		PH-OP	GOLDEN NINEBARK PRUNUS AMERICANA 'ROYALTY'
	CEL OCC	CELTIS OCCIDENTALIS COMMON HACKBERRY		PR-AM	AMERICAN PLUM PRUNUS BESSEYI 'P011S' TM
	GL-TR	GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER'		PR-BE	PAWNEE BUTTES SAND CHERRY PRUNUS TOMENTOSA
	GYM KEN	GYMNOCLADUS DIOICA KENTUCKY COFFEETREE		PR-TO	NANKING CHERRY RHUS TRILOBATA 'AUTUMN AMBER'
	QUE MAC	QUERCUS MACROCARPA BURR OAK		RHU AUT	AUTUMN AMBER SUMAC RIBES AUREUM
	QUE ROB	QUERCUS ROBUR ENGLISH OAK		RI-AU	GOLDEN CURRANT SPIRAEA JAPONICA 'GOLDMOUND'
	QU-RU	QUERCUS RUBRA RED OAK		SPI GO2	GOLDMOUND JAPANESE SPIREA SYMPHORICARPOS ORBICULATUS
	TI-AM	TILIA AMERICANA 'MCKSENTRY' TM AMERICAN SENTRY LINDEN		SY-OR	CORALBERRY SYRINGA PATULA 'MISS KIM'
EVERGREEN TREES					
	PI-DE	PICEA GLAUCOA 'DENSATA' BLACK HILLS WHITE SPRUCE		SY-PA	MISS KIM KOREAN LILAC SYRINGA VULGARIS 'ALBA'
	PI-PU	PICEA PUNGENS COLORADO SPRUCE		SY-VU	WHITE COMMON LILAC SYRINGA X PRESTONIAE 'DONALD WYMAN'
	PI-BA	PICEA PUNGENS 'BAKERI' BAKER COLORADO SPRUCE		SY-PR	DONALD WYMAN LILAC VIBURNUM TRILOBUM 'COMPACTUM'
	PI-NI	PINUS NIGRA AUSTRIAN PINE		VI-TR	COMPACT AMERICAN CRANBERRYBUSH VIBURNUM X 'BURKWOODII'
	PI-PO	PINUS PONDEROSA PONDEROSA PINE		VI-BU	BURKWOOD VIBURNUM
	PI-ST	PINUS STROBIFORMIS SOUTHWESTERN WHITE PINE	EVERGREEN SHRUBS		
ORNAMENTAL TREES					
	ACE TAT	ACER TATARICUM TATARIAN MAPLE		AR-PA	ARCTOSTAPHYLOS X COLORADENSIS 'PANCHITO'
	CR-CR	CRATAEGUS CRUS-GALLI INERMIS THORNLESS COCKSPUR HAWTHORN		CY-PU	PANCHITO MANZANITA CYTISUS PURGANS 'SPANISH GOLD'
	CR-VI	CRATAEGUS VIRIDIS 'WINTER KING' WINTER KING HAWTHORN		EPH EQU	SPANISH GOLD BROOM EPHEDRA EQUISETINA
	KO-PA	KOELREUTERIA PANICULATA GOLDEN RAIN TREE		EU-KI	BLUESTEM JOINT FIR EUONYMUS KLAUSCHOVICUS 'MANHATTAN'
	MA-SP	MALUS X 'SPRING SNOW' SPRING SNOW CRABAPPLE		MAH REP	MANHATTAN EUONYMUS MAHONIA REPENS
	PY-CA	PYRUS CALLERYANA CALLERY PEAR		PI-GL	CREeping MAHONIA PICEA PUNGENS 'GLOBOSA'
ORNAMENTAL GRASSES					
	PI-DE	PICEA GLAUCOA 'DENSATA' BLACK HILLS WHITE SPRUCE		PIN TA2	DWARF GLOBE BLUE SPRUCE PINUS MUGO 'TANNENBAUM'
	PI-PU	PICEA PUNGENS COLORADO SPRUCE	TANNENBAUM MUGO PINE		
	PI-BA	PICEA PUNGENS 'BAKERI' BAKER COLORADO SPRUCE	ACHNATHERUM CALAMAGROSTIS 'PUND02S'		
	PI-NI	PINUS NIGRA AUSTRIAN PINE	UNDAUNTED® ALPINE PLUME GRASS BOUETOLOUA GRACILIS 'BLONDE AMBITION'		
	PI-PO	PINUS PONDEROSA PONDEROSA PINE	BLONDE AMBITION BLUE GRAMA CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'		
	PI-ST	PINUS STROBIFORMIS SOUTHWESTERN WHITE PINE	KARL FOERSTER FEATHER REED GRASS MUHLENBERGIA REVERCHONII 'PUND01S'		
SHRUBS					
	AME OBE	AMELANCHIER ALNIFOLIA 'OBELISK' STANDING OVATION™ SERVICEBERRY	UNDAUNTED® RUBY MUHLY SCHIZACHYRIUM SCOPARIUM		
	ARO OEC	ARONIA MELANOCARPA LOW SCAPE MOUND (ALS)	LITTLE BLUESTEM SPOROBOLUS WRIGHTII		
	BU-DA	BUTTERFLY BUSH	BIG SACATON		
	CA-FR	CARAGANA FRUTEX 'GLOBOSA' GLOBE RUSSIAN PEASHRUB	ACHNATHERUM CALAMAGROSTIS 'PUND02S'		
	CA-CL	CARYOPTERIS X CLANDONENSIS 'BLUE MIST' BLUE MIST BLUEBEARD	UNDAUNTED® ALPINE PLUME GRASS BOUETOLOUA GRACILIS 'BLONDE AMBITION'		
	CHR NAU	CHRYSOETHAMNUS NAUSEOSUS NAUSEOSUS DWARF BLUE RABBITRUSH	BLONDE AMBITION BLUE GRAMA CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'		
	CO-BA	CORNUS SERICEA 'BAILEY' BAYLEY'S RED TWIG DOGWOOD	KARL FOERSTER FEATHER REED GRASS MUHLENBERGIA REVERCHONII 'PUND01S'		
	CO-SE	CORNUS SERICEA 'FLAVIRAMEA' YELLOW TWIG DOGWOOD	UNDAUNTED® RUBY MUHLY SCHIZACHYRIUM SCOPARIUM		
	COR KLS	CORNUS SERICEA 'KELSEY' KELSEY'S DWARF RED TWIG DOGWOOD	LITTLE BLUESTEM SPOROBOLUS WRIGHTII		
LEGEND					
NOTE: SEE SHEET 61 MASTER PLANT SCHEDULE FOR FULL SIZE LEGEND					
PERENNIALS					
	NEP LIT	NEPETA X 'PSFIKE'	LIMITS OF WORK		
	ZAU ORA	LITTLE TRUDY® CATMINT ZAUSCHNERIA GARRETTII HUMMINGBIRD TRUMPET	MATCHLINE		
PERENNIALS					
	EPI HUM	EPILOBIUM CANUM CALIFORNIA FUCHSIA	4' METAL SCREEN FENCE (DETAIL 07 / SHEET 91)		
Turf & Seed Mixes					
	TUR LOW	LOW GROW NATIVE SEED MIX	6' MASONRY WALL (DETAIL 08 / SHEET 91)		
LEGEND					
LIMITS OF WORK					
MATCHLINE					
4' METAL SCREEN FENCE (DETAIL 07 / SHEET 91)					
6' MASONRY WALL (DETAIL 08 / SHEET 91)					
4' SPLIT RAIL FENCE (DETAIL 06 / SHEET 91)					
WALL COLUMN (DETAIL 09 / SHEET 91)					
EDGER					
STOP SIGN					
PROPOSED FIRE HYDRANT					
PROPOSED SL1 PUBLIC STREET LIGHT (20' TAPERED POLE)					
PROPOSED SL2 PUBLIC STREET LIGHT (25' TAPERED POLE)					

NOTES:
1. FENCES SHALL BE A MINIMUM OF 18" BEHIND THE SIDEWALK UNLESS A GREATER SETBACK IS REQUIRED.

THE AURORA HIGHLANDS NORTH -
AREA C SITE PLAN

TITLE: LANDSCAPE PLAN

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811

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SHEET:69 OF 96

