



Aspen Business Park

TAB #5

Response to Pre-Application/ Other
Review Comments

Friday, March 11, 2022

Deborah Bickmire, Senior Planner
City of Aurora Planning Department
15151 E. Alameda Parkway, Ste 2300
Aurora, CO 80012
(Phone) 303.739.7250
(e-mail) dbickmir@auroragov.org

Re: Aspen Business Park Master Plan
Application Number: DA-2304-00
Case Number: 2022-7001-00

Dear Ms. Bickmire,

We have reviewed the planning review comments from February 17, 2022 and provide the following responses to the items. In addition, comments have been taken into consideration in the revised Master Plan.

Planning Department Comment Responses:

1A. *Comment: Referrals were sent to 7 adjacent property owners, 9 outside agencies, and 6 registered neighborhood organization within one mile of the site. Written comments were received from Arapahoe County, CDOT, E-470 Public Highway Authority and Mile High Flood District and can be found within or attached to this letter. Please respond to their comments within the response letter for your next submission. No other comments were received.*

Response: Referral Comment Responses from Arapahoe County, CDOT, E-470 Public Highway Authority, and Mile High Flood district are included in this letter.

Completeness and Clarify of the Application:

2A. *Comment: An invoice for the application fee of \$32,234.00 was sent on January 27, 2022. Please remit payment prior to the second submission.*

Response: We have paid the application fee.

2B. *Comment: The owner authorization is not signed. Please provide the form with all required signatures.*

Response: We have added the owner signature to the owner authorization form.

2C. *Comment: You have indicated there are severed mineral rights. Mineral Rights Notification must be sent to all mineral rights owners 30 days prior to approval of the Master Plan. Please see the attached example form. You are responsible for identifying the owners and sending the notice.*

Response: We will send out the mineral rights form to the appropriate mineral estate owners prior to 30 days before approval of the Master Plan.

2D. *Comment: An Avigation Easement is required for the entire site. Please complete the attached form and return it to your case manager along with a legal description with an illustration. The City will send it to the county for recordation.*

Response: We are working on getting this signed and will send this ASAP.

2E. *Comment: Please submit a legal description with an illustration. Include the monument records and closure sheet for the description.*

Response: Please see attached legal description with illustration.

Tab #1 Letter of Introduction:

3A. *Comment: Briefly discuss the proposed development consists of three Planning Areas.*

Response: We have updated the letter to include discussion on the 3 planning areas.

3B. *Comment: Include a discussion about the items that have not been included, ie. Landscape, Architecture, Urban Design Standards. You are strongly encouraged to include them with your next submittal. Please be advised, if you wait to submit the standards, it will require a major amendment to the Master Plan. The standards must be submitted prior to or concurrent with any proposed Site Plan.*

Response: We have included landscape, architecture, and urban design standards in this submittal.

Tab #3 Context Map:

3C. *Comment: Label Master Plans, Site Plans, Subdivision Plats and within ½ mile radius.*

Response: We have labeled these items on the Context Map.

3D. *Comment: Show and label dedicated right-of-way. Include the right-of-way width and street classification.*

Response: We have labeled these items on the Context Map.

3E. *Comment: Increase label sizes and make linework more distinctive. Consider using colored lines/symbols.*

Response: We have increased the font sizes of all labels, and we're using colored lines where possible.

3F. *Comment: Add labels shown on the redlines.*

Response: We have added the labels indicated on the redlines.

3G. *Comment: Add a bar scale.*

Response: We have added a bar scale.

Tab #4 Site Analysis Narrative, Existing Conditions, and Natural Features Map

3H. *Comment: Flatten the pdf so text is not selectable.*

Response: PDF text has been flattened.

3I. *Comment: Revise the narrative to be more specific. Why is a feature an asset or a restriction?*

Response: Narrative of site analysis text has been revised.

3J. *Comment: Include features around the site to a distance of approximately 500 feet.*

Response: Site plan expanded to include 500' around the site.

3K. *Comment: Show the Buckley Air Force Accident Potential Zone and the Airport Influence Area on the map. Clarify whether there will be any restrictions enforced by Buckley on the site development.*

Response: Buckley Air Force Accident Potential Zone added to plan. The entire site including surrounding lots are under the Airport Influence Zone. Note added to map indicating this. No comments from Buckley received.

3L. *Comment: Label major contours and identify the general slope on the site.*

Response: Major contours on site labeled. Arrows show direction of site flow.

3M. *Comment: Show underlying and/or adjacent lot lines and existing structures.*

Response: Lot lines added to site. There are no existing structures.

3N. *Comment: Show and label the overhead transmission lines southeast of the site.*

Response: Transmission lines linework extended south.

3O. *Comment: Label adjacent landfills.*

Response: Landfill is labeled.

Tab #6 Narrative

3P. *Comment: Flatten the pdf so text is not selectable.*

Response: Text is now flattened.

3Q. *Comment: How will the development have a unique character? Provide some details and/or description as to how that will be implemented.*

Response: We have included architecture, urban design, and landscape design standards to address the character of the Master Plan.

3R. *Comment: Identify the Comprehensive Plan designation, the zoning and subarea for the site. Outline how the proposed plan will be consistent with the vision for those areas.*

Response: The narrative has been revised to add this information.

3S. *Comment: Rephrase or expand on the narrative based on the redline comments*

Response: The redlined comments have been addressed. Please refer to separate letters from the civil team responding to outside agency comments.

Tab #8 Land Use Map, Matrix, and Standard Notes

3T. *Comment: Show existing/proposed uses around the site, including structures, lot lines, rights-of-way, and contours.*

Response: There are no existing structures around the site. We are showing contours and adjacent lot lines.

3U. *Comment: The alignment of "Future" Yale Ave. has not been reviewed or approved by the City or CDOT. The proposed alignment subject to approval.*

Response: Noted. We are showing the alignment of 'Future' Yale Avenue on the south side of the site.

3V. *Comment: Show access arrows that match the TIS for future driveways/private streets. Clarify how access will be provided to PA-3.*

Response: We have added access arrows that show future driveways / private streets. PA-3 will be accessed from an access road on the north side of the property.

4. Landscaping

4A. *Comment: No comments provided. You are encouraged to submit the Landscape Standards with your next submittal.*

Response: We have included landscape standards with this submittal.

5. Addressing

5A. *Comment: Please submit a preliminary digital addressing .SHP or a .DWG file as soon as possible. This digital file is used for street naming, addressing and preliminary GIS analysis. Include the following layers as a minimum:*

- *Parcels*
- *Street lines*
- *Building footprints (If available)*

Please ensure that the digital file is provided in a NAD 83 feet, State plane, Central Colorado projection so it will display correctly within our GIS system. Please provide a CAD .dwg file that is a 2013 CAD version. Please eliminate any line work outside of the target area. More information can be found at: tinyurl.com/3xe6ds46 or by contacting CADGIS@auroragov.org.

Response: We will submit this file separately.

Public Improvement Plan

6A. *The Master Plan will not be approved by Public Works until the Master Drainage Study is approved.*

6B. *Does the traffic study support only constructing the Gun Club improvements along the planning areas individually rather than the full frontage?*

6C. *The alignment for "Future" Yale has not been vetted or approved by the City.*

6D. *A cul-de-sac or adequate public turnaround is required for the dead-end street.*

6E. *Street curves need to meet COA standards*

6F. *Show required easements to be dedicated with private roads with the section on Sheet PIP-2.*

6G. *What is the "additional travel lane" shown on the Proposed Private Road Section?*

6H. *There was proposed storm for the private road shown on the overall exhibit. This would need to be constructed with this roadway.*

6I. *Include the required outfall for the detention pond.*

Response: See comments on plan

Public Improvement Plan

7E. Access restriction on Gun Club may be required in the interim condition pending Yale Ave. realignment timing.

7F. Provide a raised median in Gun Club Road per the City typical section.

7G. This site will be constructing the southbound lanes of Gun Club, typically shown on the left side of typical sections.

7H. Address comments and notations on redlines.

Response: See comments on plan

Detention can be PA-4 and Open Space PA-5.

Response: Detention and Open space are in one PA as they are comingled.

10E. Include Open Space Improvements and additional planning areas.

Response: Included in PIP narrative..

10F. Include PA-4 and 5. Include language noting Open Space improvements shall be completed at time of detention pond construction.

Response: Detention and Open space are in one PA as they are comingled.

Master Utility Report

8F. Provide a data table showing fire flow demands by land use type for the system modeling.

Response: See comments on plan

9A. Please contact Nina to attain MUS checklist at nkhanzad@auroragov.org.

9B. As a first-time reader, please provide all information to get a clear picture of the development and the different entities.

9C. Send all calculations in Excel format.

9D. Include a narrative on City requirements. Refer to the MUS checklist.

9E. Provide the City water demands information.

9F. Discuss coordination efforts with E-470.

9G. Include a table with the Conclusions to indicate the sizes of water and sanitary proposed and for which project areas.

9H. Address all comments and notations on the redlines.

Response: See comments on plan

10. PROS

Tab #8 Land Use Map

10A. Comment: Per the annexation agreement, 2% of non-residential land shall be dedicated for open space/public purposes. This can be noted as PA-5 (see Tab 9 comments for clarity) and include the detention area if the detention area can meet a 24-hour recovery period after a storm event and enhanced with open space features.

Response: We are using a combination of the detention area and additional open space around it to equal the required 2% total of open space. This is designated as PA-4 on the plan. The detention area meets the 24-hour recovery period requirement.

Tab #9 Open Space, Circulation, and Neighborhood Plan

10B. Comment: Per the Annexation (86-167 & 86-168) for this area, a minimum of 2% non-residential land shall be dedicated for public purpose/open space. This 2% of non-residential land can be included within the required detention for your site so long as the area is intended for Open Space, has a 24-hour recovery period after any storm event, and must be designed as a park-like feature. The detention area should be labeled as PA-4. You could also break the detention and open space into two different planning area for ease of reference and clarity. Detention can be PA-4 and Open Space PA-5.

Response: We are using a combination of the detention area and additional open space around it to equal the required 2% total of open space. This is designated as PA-4 on the plan. The detention area meets the 24-hour recovery period requirement.

10C. Comment: Form J is only for inventory of open space and recreation facilities. Fill in the form for PA4/5. See redlines.

Response: The form now only includes PA-4.

10D. Comment: Revise the signature block to state, "Director of Parks, Recreation and Open Space."

Response: Signature block revised to read as specified.

11. Real Property (Maurice Brooks / 303-739-7294 / mbrooks@auroragov.org / Comments in magenta)

11A. No comments at this time. We will review the legal description and illustration upon receipt.

Response: Legal and exhibit provided.

12. Public Art

12A. Comment: A Public Art Plan is required for the proposed development. Please see the attached ART Guidelines for an outline of our expectations. Please contact me directly with any questions.

Response: We have calculated that we can provide cash-in-lieu of \$586 / per acre or provide a physical art purchase. Please let us know your thoughts on this.

13. CDOT Region 1 (Marilyn Cross / 303-514-5992 / marilyn.cross@state.co.us)

13A. See attached comment letter.

Response: Most of these comments are procedural or boiler plate in nature. All Comments considered and will be followed

14. Mile High Flood District (Mark Schutte /submittals@udfcd.org)

14A. Please see the attached comment letter.

Response: The development will convey flows from the west through onsite storm and to the pond. Flows previously detained will be bypassed, others detained and treated.

16. E-470 Public Highway Authority (Chuck Weiss / 303-537-3420 / cweiss@E-470.com)

16A. Thank you for allowing the E-470 Public Highway Authority the opportunity to review and respond to the Aspen Business Park application. E-470 Public Highway Authority has the below listed comments with attached

AER-028-PLAN.

☐ Occupying space for utility work, access, and any construction within the E-470 ROW, Multi Use Easement (MUE), and property owned in fee is subject to and will be in compliance with the E-470 Public Highway Authority Permit Manual, April 2008, as may be amended from time to time (the "Permit Manual") and will require an E-470 Construction or Access Permit. The administration fee is \$75,000 per acre for construction, and \$750 for permitting. ☐ A permit will be required from E-470 for any encroachment or disturbance to E-470 ROW or MUE prior to construction.

☐ Here is a link to our permit: <https://www.e-470.com/Pages/WorkingWithUs/Permits.aspx>

☐ Clearly identify the E-470 ROW, MUE, and E-470 property on all applicable drawings.

☐ An ownership map is attached for reference.

☐ E-470 TBMS (fiber) is located along the ROW and MUE. This line is to be protected in place.

☐ A dig watch is required for construction near the TBMS.

☐ Survey monuments along and within the E-470 ROW/MUE which are disturbed shall be reset and conform to the E-470 coordinate system.

☐ The proposed sanitary sewer crossing shall extend from outside of ROW on each side of the highway.

☐ Provide details on deflection monitoring for both the pavement surface and utilities on the proposed sanitary sewer crossing.


Response: All comments above noted and considered.

GREY WOLF ARCHITECTURE

Best regards,

Kenneth W. Harshman, AIA
Principal

Grey Wolf Architecture



1543 CHAMPA STREET SUITE 200
DENVER, COLORADO 80202
303.292.9107 arch@greywolfstudio.com

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open space section
added to text and index

Include transitions

- Roadway improvements to Gun Club Road along the extents of the property to include construction of a half section with two additional paved travel transitions included required acceleration and deceleration lanes at access points.
- Existing East Yale Avenue alignment to be abandoned and relocated to the north. Intersection improvements at Future E. Yale Ave. and the Private Roadway site access points will be built when warranted.

Roadways will be constructed to service the planning areas immediately adjacent, however roadways may be required to be constructed to provide both vehicular and fire life safety access to planning areas not immediately adjacent. The construction of half roadway sections will be reviewed during the development of planning areas on a case by case basis.

Table 2.
Recommended Traffic Volume Thresholds

ROADWAY CLASSIFICATION	NUMBER OF LANES EACH DIRECTION	RECOMMENDED DAILY TRAFFIC VOLUME LOS THRESHOLDS (VEHICLES PER DAY)		
		C	D ⁽²⁾	E
Collector	1	> 9,500 to 10,500	> 10,500 to 12,000	> 12,000 to 13,500
Minor Arterial	2	> 22,500 to 25,500	> 25,500 to 28,500	> 28,500 to 32,000
Minor Arterial ⁽¹⁾	3	>30,000 to 34,500	>34,500 to 38,500	>38,500 to 43,000
Major Arterial	2	> 30,000 to 36,000	> 36,000 to 40,000	> 40,000 to 45,000
Major Arterial	3	> 46,000 to 53,000	> 53,000 to 60,000	> 60,000 to 67,000
Major Arterial ⁽¹⁾	4	> 56,000 to 64,000	> 64,000 to 72,000	> 72,000 to 80,000
Expressway	2	> 38,000 to 44,000	> 44,000 to 49,000	> 49,000 to 55,000
Expressway	3	> 56,000 to 64,000	> 64,000 to 72,000	> 72,000 to 80,000

⁽¹⁾ System performance evaluation only.

⁽²⁾ LOS D threshold volumes used for development roadway planning consistent with traffic impact study guidelines.

Table 2 - ADT Thresholds Table per NEATS 2018 Update

Add this note:

THE DEVELOPER IS RESPONSIBLE FOR CONSTRUCTION OF ALL ON-SITE AND OFF-SITE INFRASTRUCTURE NEEDED TO ESTABLISH TWO POINTS OF EMERGENCY ACCESS TO THE OVERALL SITE AND EACH INTERNAL PHASE OF CONSTRUCTION. THIS REQUIREMENT INCLUDES, BUT IS NOT LIMITED TO, THE CONSTRUCTION OF ANY EMERGENCY CROSSINGS IMPROVEMENTS, LOOPED WATER SUPPLY AND FIRE HYDRANTS AS REQUIRED BY THE ADOPTED FIRE CODE AND CITY ORDINANCES.

will be signalized when warranted.

note added to text

The internal private improvements for the Aspen development include:

- The construction of three east-west private roads connecting drive accesses at the north, south, and center of the site.
- The construction of one private road in the north-south direction through the center of the site connecting to the three east-west private roadways.

Specific Planning Area Improvement Description

Does the traffic study support only constructing the Gun Club improvements along the planning areas individually rather than the full frontage?

Planning Area 1 – Zone AD (22.94 Acres):

Prior to the development of PA 1 the following public improvements shall be designed and approved for construction:

- Gun Club Road public improvements from the south eastern side of the site, including a right turn lane junction to the Future East Yale Ave.
- Private road in the east-west direction at the center area of the site connecting to the Future East Yale Ave.
- Secondary Emergency Access roads adjacent to the proposed development to provide multiple access points from Gun Club Rd.
- Domestic water connection and fire loop will be provided from the existing 12-inch watermain north of the site within a private road of Murphy Creek Subdivision ROW to service PA 1 and future planning areas adjacent.
- Installation of an 18" sanitary main from the site to the existing Sanitary interceptor on the East side of E-470.
- Storm sewer to provide conveyance from the planning area to the onsite water quality and detention pond.
- An onsite water quality and detention pond will be constructed to service the entirety of the Aspen Business Park development and releases from the E470 Toll Plaza detention pond. The detention pond will be designed to COA standards. The water quality and detention pond will be fully constructed with the first planning area to be constructed.

Based on high level analysis of Traffic engineer. The phasing of gun club expansions should have no negative impacts.

Northern?

Planning Area 2 – Zone AD (18.17 Acres):

Prior to the development of PA 2 the following public improvements shall be designed and approved for construction:

- Gun Club Road public improvements from the southern property edge to the central proposed access point on the eastern side of the site.
- Private road in the east-west direction at the center area of the site connecting to the Future East Yale Ave.
- Secondary Emergency Access roads adjacent to the proposed development to provide multiple access points from Gun Club Rd.
- Domestic water connection and fire loop will be provided from the existing 12-inch watermain north of the site within a private road of Murphy Creek Subdivision ROW to service PA 2 and future planning areas adjacent.
- Installation of an 18" sanitary interceptor from the site to the existing Sanitary interceptor on the East side of E-470.
- Storm sewer to provide conveyance from the planning area to the onsite water quality and detention pond.
- An onsite water quality and detention pond will be constructed to service the entirety of the Aspen Business Park development and releases from the E470 Toll Plaza detention pond. The detention pond will be designed to COA standards. The water quality and detention pond will be fully constructed with the first planning area to be constructed.

typo corrected

Northern?

Planning Area 3 – Zone AD (14.02 Acres):

Prior to the development of the site, the following public improvements shall be designed and approved for construction:

typo corrected

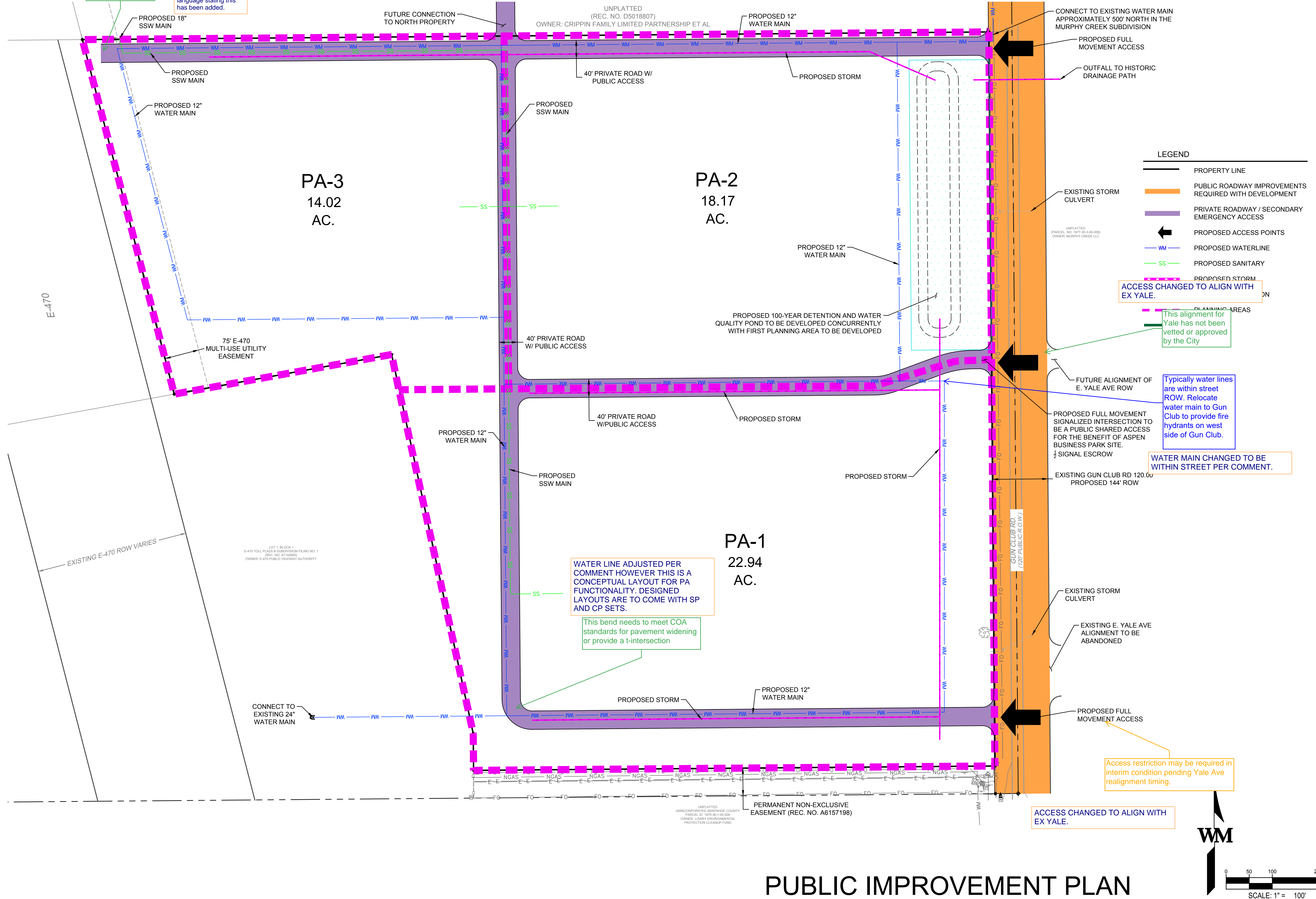
- Gun Club Road public improvements from the southern property edge to the central proposed access point on the eastern side of the site.
- Private road in the east-west direction at the center area of the site connecting to the Future East Yale Ave. intersection.
- Secondary Emergency Access roads adjacent to the proposed development to provide multiple access points from Gun Club Rd.
- Domestic water connection and fire loop will be provided from the existing 12-inch watermain north of the site within a private road of Murphy Creek Subdivision ROW to service PA 3 and future planning areas adjacent.
- Installation of an 18" sanitary interceptor from the site to the existing Sanitary interceptor on the East side of E-470.
- Storm sewer to provide conveyance from the planning area to the onsite water quality and detention pond.
- An onsite water quality and detention pond will be constructed to service the entirety of the Aspen Business Park development and releases from the E470 Toll Plaza detention pond. The detention pond will be designed to COA standards. The water quality and detention pond will be fully constructed with the first planning area to be constructed.

Include PA-4 & 5. Include language noting Open Space improvements shall be completed at time of detention pond construction

Language added to text

MASTER PLAN ASPEN BUSINESS PARK

SE QUARTER OF SECTION 25, TOWNSHIP 4 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO



WARE MALCOMB
LEADING DESIGN FOR COMMERCIAL REAL ESTATE

SUBMITTAL NO.:	DATE:
1ST SUBMITTAL	01.17.2022

ASPEN BUSINESS PARK
YALE AVE & S GUN CLUB RD.
AURORA

JOB NO.:
DRAWN BY:
CHECKED BY:
SHEET NO. & NAME:

SHEET NAME:

PIP-1

PUBLIC IMPROVEMENT PLAN

MASTER PLAN
ASPEN BUSINESS PARK

SE QUARTER OF SECTION 25, TOWNSHIP 4 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO

NOTES:

1.) PERMANENT FIRE STATION REQUIREMENTS: THE AURORA FIRE DEPARTMENT MAY REQUIRE THAT A PERMANENT STATION BE OPENED WHEN, AS A RESULT OF THE DEPARTMENT'S RISK ANALYSIS, SUCH PERMANENT STATION IS DEEMED NECESSARY BY ANY ONE OF THE FOLLOWING BENCHMARK CRITERIA. CRITERIA INCLUDE, BUT MAY NOT BE LIMITED TO, THE FOLLOWING: O THE NUMBER OF TOTAL RESPONSES IN THE FIRST DUE AREA, FOR THE PROJECTED FIRE STATION, EXCEEDS AN ANNUAL RATE OF 400 PER YEAR. O THE TOTAL RESPONSE TIME OF THE FIRST DUE COMPANY EXCEEDS 8 MINUTES 90% OF THE TIME, AND THE RESPONSE TIME OF THE NEXT DUE ENGINE COMPANY, TRUCK COMPANY AND BATTALION CHIEF EXCEEDS 12 MINUTES 90% OF THE TIME. O THE NUMBER OF SINGLE FAMILY UNITS EXCEEDS 500, OR THE AMOUNT OF COMMERCIAL/INDUSTRIAL SQUARE FOOTAGE EXCEEDS 4 MILLION SQUARE FEET.

2.) TEMPORARY FIRE STATION REQUIREMENTS: IN THE EVENT THAT A PERMANENT FIRE STATION IS NOT OPERATIONAL, THE AURORA FIRE DEPARTMENT MAY REQUIRE THAT A TEMPORARY FIRE STATION BE OPENED WHEN, AS A RESULT OF THE DEPARTMENT'S RISK ANALYSIS, SUCH TEMPORARY STATION IS DEEMED NECESSARY BY ANY ONE OF THE FOLLOWING BENCHMARK CRITERIA. CRITERIA INCLUDE, BUT MAY NOT BE LIMITED TO, THE FOLLOWING: O THE NUMBER OF ALARMS IN THE FIRST DUE AREA, FOR THE PROJECTED FIRE STATION, EXCEEDS AN ANNUAL RATE OF 100 PER YEAR. O THE TOTAL RESPONSE TIME OF THE FIRST DUE COMPANY EXCEEDS 8 MINUTES, 90% OF THE TIME. THE NUMBER OF FAMILY DWELLING UNITS EXCEEDS 100 OR THE AMOUNT OF COMMERCIAL/INDUSTRIAL SQUARE FOOTAGE EXCEEDS 2 MILLION SQUARE FEET. IF AND WHEN A TEMPORARY STATION IS DEEMED NECESSARY, THE DEVELOPER HAS AGREED TO PROVIDE A 1 ¼ ACRE SITE FOR A TEMPORARY FIRE STATION WITHIN CLOSE PROXIMITY TO THE (SITE NAME) DEVELOPMENT. THIS SITE WOULD BE SEPARATE FROM THE SITE DESIGNATED FOR THE PERMANENT STATION. THE TEMPORARY FIRE STATION WILL BE AVAILABLE FOR USE BY THE AURORA FIRE DEPARTMENT FOR 10 YEARS, OR AS OTHERWISE DETERMINED BY AN AGREEMENT BETWEEN THE AURORA FIRE DEPARTMENT AND THE DEVELOPER(S).

3.) WHELEN WARNING SYSTEM REQUIREMENTS: THE FEMA REQUIREMENT FOR OUTDOOR EMERGENCY WARNING SYSTEMS IS A 60-70 FOOT MONOPOLE TOWER USING AN ALERT SIREN. THE CITY OF AURORA USES THE WHELEN SIREN SYSTEM. THE LAND REQUIREMENT FOR THE TOWER IS A 10' X 10' EASEMENT. EACH SIREN COVERS APPROXIMATELY 3,000 RADIAL FEET AT 70 DB AND IS TYPICALLY SPACED ONE SIREN PER SQUARE MILE. IN NEWLY ANNEXED/DEVELOPING AREAS OF THE CITY, SIRENS SHOULD BE SITED ON EVERY ½ SECTION OF GROUND (320 ACRES) OR 6000 FEET APART TO PROVIDE EDGE TO EDGE COVERAGE. THE EXACT PLACEMENT OF SIRENS WILL BE DETERMINED BY THE CITY OF AURORA'S OFFICE OF EMERGENCY MANAGEMENT TO INSURE THAT COORDINATED COVERAGE IS PROVIDED ON A SYSTEM-WIDE BASIS. FOR SPECIFIC QUESTIONS, THE OFFICE OF EMERGENCY MANAGEMENT CAN BE REACHED AT 303-739-7636 (PHONE), 303-326-8986 (FAX), OR (EMAIL) AFD_OEM@AURORAGOV.ORG.

4.) PER FIRE LIFE SAFETY, EACH PLANNING AREA IS REQUIRED TO HAVE (2) POINTS OF ACCESS AND A LOOPED WATER SUPPLY. FURTHERMORE; PER THE 2015 IFC, SECTION D104.3 IT STATES THAT WHERE (2) FIRE APPARATUS ACCESS ROADS ARE REQUIRED, THEY SHALL BE PLACED A DISTANCE APART EQUAL TO NOT LESS THAN ONE HALF OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE LOT BEING SERVED, MEASURED IN A STRAIGHT LINE BETWEEN ACCESSES.

5.) AS EACH SUB-SITE OR PLANNING AREA IS DEVELOPED, THE SITES WILL MAINTAIN THE HISTORIC FLOW PATTERN VIA OVERLAND FLOW OR PRIVATE STORM SEWER INFRASTRUCTURE INTO THE PROPOSED DRAINAGE CHANNEL. STORMWATER DETENTION AND WATER QUALITY WILL BE PROVIDED FOR EACH PLANNING AREA WITHIN THE REGIONAL STORMWATER FACILITY TO BE INSTALLED DURING CONSTRUCTION OF FIRST PLANNING AREA AND ONSITE WATER QUALITY POND..

6.) THE PIP HAS BEEN PREPARED IN COORDINATION WTH THE TRAFFIC IMPACT STUDY PREPARED BY FELSBURG HOLT & ULLEVIG PREPARED FOR THE ASPEN BUSINESS PARK.

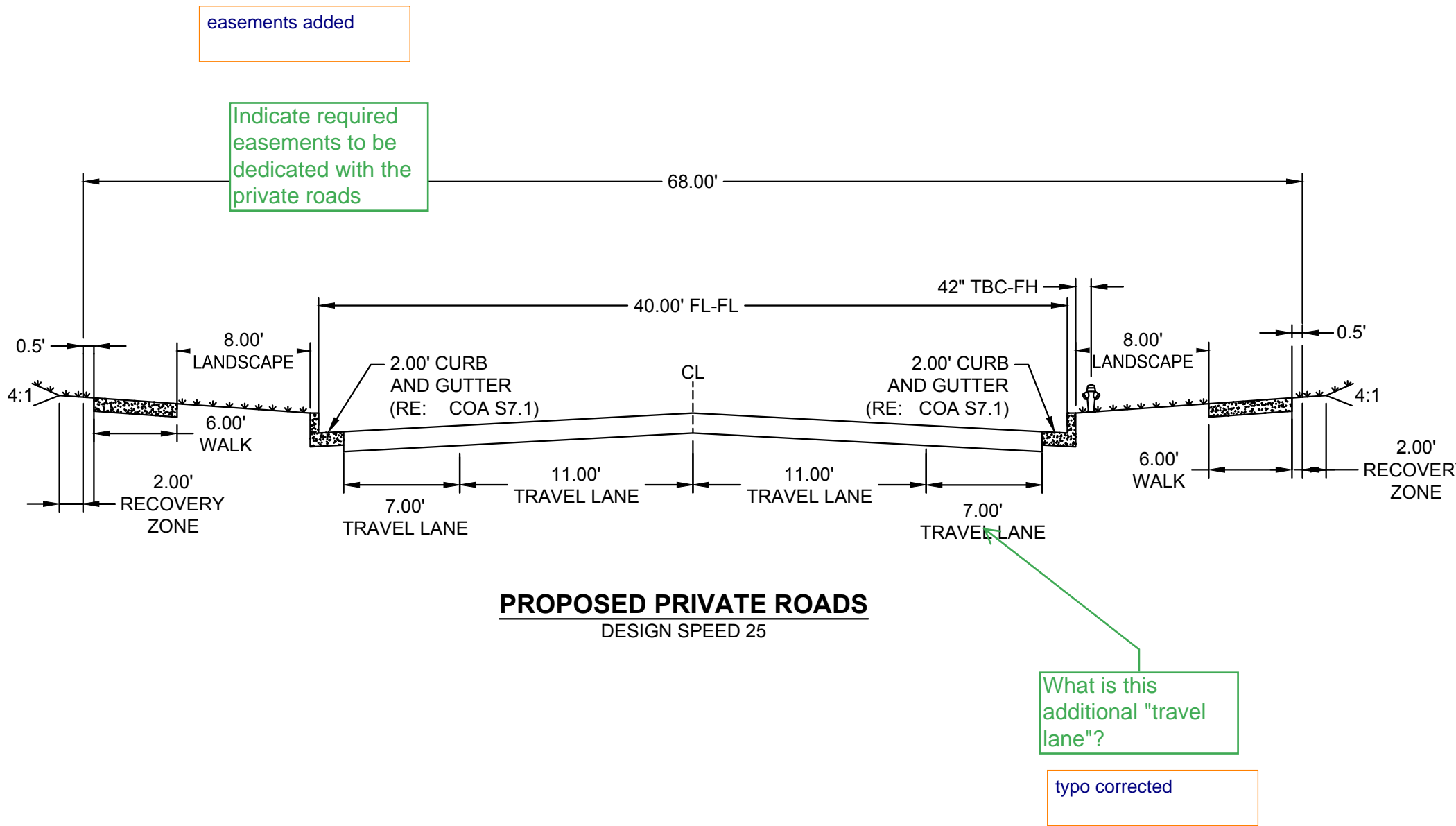
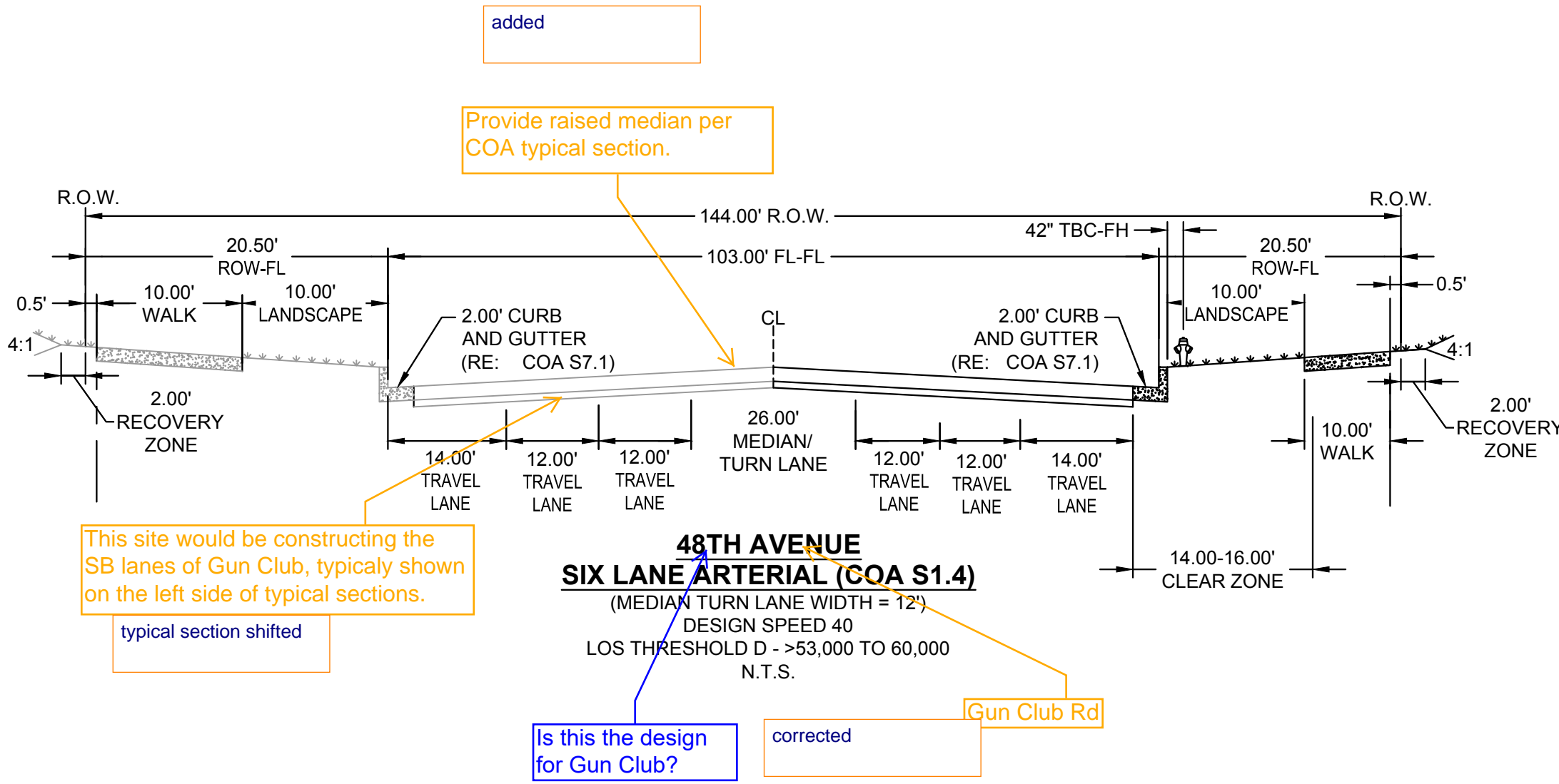


Table 2.
Recommended Traffic Volume Thresholds

ROADWAY CLASSIFICATION	NUMBER OF LANES EACH DIRECTION	RECOMMENDED DAILY TRAFFIC VOLUME LOS THRESHOLDS (VEHICLES PER DAY)		
		C	D ⁽²⁾	E
Collector	1	> 9,500 to 10,500	> 10,500 to 12,000	> 12,000 to 13,500
Minor Arterial	2	> 22,500 to 25,500	> 25,500 to 28,500	> 28,500 to 32,000
Minor Arterial ⁽¹⁾	3	>30,000 to 34,500	>34,500 to 38,500	>38,500 to 43,000
Major Arterial	2	> 30,000 to 36,000	> 36,000 to 40,000	> 40,000 to 45,000
Major Arterial	3	> 46,000 to 53,000	> 53,000 to 60,000	> 60,000 to 67,000
Major Arterial ⁽¹⁾	4	> 56,000 to 64,000	> 64,000 to 72,000	> 72,000 to 80,000
Expressway	2	> 38,000 to 44,000	> 44,000 to 49,000	> 49,000 to 55,000
Expressway	3	> 56,000 to 64,000	> 64,000 to 72,000	> 72,000 to 80,000

⁽¹⁾ System performance evaluation only.

⁽²⁾ LOS D threshold volumes used for development roadway planning consistent with traffic impact study guidelines.

ADT THRESHOLDS PER OCTOBER 2018 NEATS REFRESH

WARE MALCOMB
LEADING DESIGN FOR COMMERCIAL REAL ESTATE

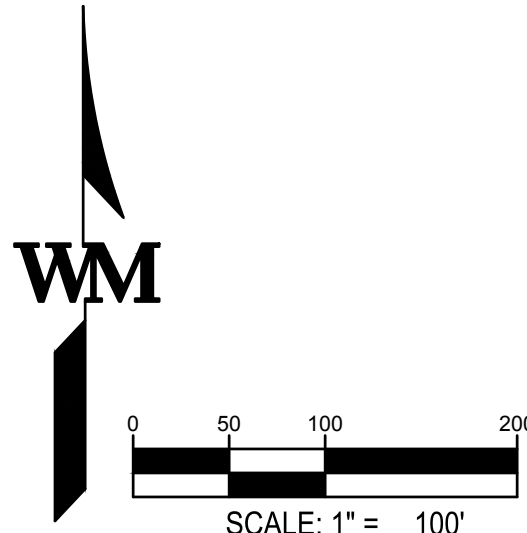
DATE:	01.17.2022					
SUBMITTAL NO.:	1ST SUBMITTAL					

ASPEN BUSINESS PARK
YALE AVE & S GUN CLUB RD.
AURORA

JOB NO.:
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SHEET NO. & NAME:

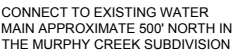
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PIP-2



PUBLIC IMPROVEMENT PLAN

SE QUARTER OF SECTION 25, TOWNSHIP 4 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO



Include the required outfall with the detention

added

corrected

There was proposed storm shown on the overall exhibit. This would need to be constructed with this roadway

D 100-YEAR DETENTION AND WATER
TO BE DEVELOPED CONCURRENTLY
PLANNING AREA TO BE DEVELOPED

FUTURE ALIGNMENT OF
E. YALE AVE ROW

PROPOSED FULL MOVEMENT
SIGNALIZED INTERSECTION TO
BE A PUBLIC SHARED ACCESS
FOR THE BENEFIT OF ASPEN
BUSINESS PARK SITE.
1/2 SIGNAL ESCROW

EXISTING GUN CLUB RD 120.00'
PROPOSED 144' ROW

EXISTING STORM
CULVERT

EXISTING E. YALE AVE
ALIGNMENT TO BE
ABANDONED

— PROPOSED FULL
MOVEMENT ACCESS

WARE MALCOMB
LEADING DESIGN FOR COMMERCIAL REAL ESTATE

DATE: 01.17.2022

SUBMITTAL NO.:
1ST SUBMITTAL

ASPEN BUSINESS PARK
YALE AVE & S GUN CLUB RD.
AURORA

JOB NO.: DCS21-4114

DRAWN BY: JZ

CHECKED BY: JKC

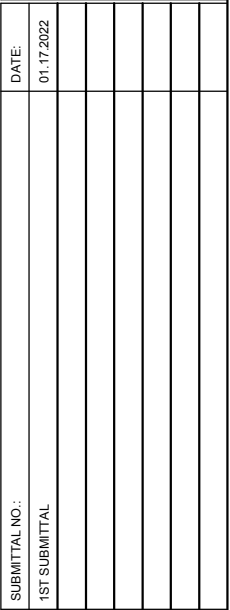
SHEET NO. & NAME:

SHEET NAME:

PA-1

corrected

Include the proposed storm sewer



JOB NO.: DCS21-4114
DRAWN BY: JZ
CHECKED BY: JKC
SHEET NO. & NAME:

SHEET NAME:

PA-2

Please contact Nina to attain
MUS checklist at
nkhanzad@auroragov.org

Send all
calculations (in
excel format to
nkhanzad@auroragov.org)

MASTER UTILITY REPORT

SECTION 25, TOWNSHIP 4 SOUTH, RANGE 66
EAST OF THE SIXTH PRINCIPAL MERIDIAN
CITY OF AURORA, COUNTY OF ARAPAHOE,
STATE OF COLORADO

ASPEN BUSINESS PARK

AURORA, CO

12/17/2021
JN: DCS21-4114

Prepared by:
Ware Malcomb
990 South Broadway Suite 230
Denver, CO 80209
P: 303.561.3333
F: 303.561.3339

Approved for One Year From this Date	

City Engineer	Date
Fire Department	Date
Water Department	Date

Christopher S. Strawn, PE No. 36328

WARE MALCOMB

ARCHITECTURE | PLANNING | INTERIORS
BRANDING | CIVIL ENGINEERING

CERTIFICATION

I hereby certify that this Master Utility Report for Sun Empire Industrial was prepared by me (or under my direct supervision) in accordance with the provisions of the City of Aurora Standard Specifications regarding Water, Sanitary, and Storm Drainage Infrastructure.

Christopher S. Strawn, PE
State of Colorado Registration No. 36328
Ware Malcomb

Date

TABLE OF CONTENTS

I. GENERAL LOCATION AND DESCRIPTION.....	4
II. WATER	5
III. SANITARY SEWER	5
IV. CONCLUSION	6
V. REFERENCES	7

APPENDICES

APPENDIX A

Vicinity Map

APPENDIX B

Aurora Pre-Submittal Checklist
Overall and Detailed Utility Plans
Preliminary Water Demand Calculations
Preliminary Sanitary Demand Calculations

APPENDIX C

Referenced Material

I. GENERAL LOCATION AND DESCRIPTION

A. Site Location

5.02.1 Master Water Plan and Report

A master water plan (minimum scale 1"=100') shall be submitted for each major development with the Framework Development Plan (FDP) or Contextual Site Plan (CSP) prior to approval of any portion of the water system as required by Aurora Water Engineering. Master water plans shall otherwise conform to the drafting guidelines outlined in the Roadway Design and Construction Specifications latest edition. A Master Water Report shall have a narrative identifying the scope, intent, criteria, water system requirements, and phasing of improvements. Furthermore, the report must analyze the proposed distribution system for Average Day, Maximum Hour and Maximum Day plus Fire Flow per currently adopted fire code. Water master plans shall be evaluated relative to the City-wide master plan, and all phases of construction must meet minimum criteria established by the City's master plan to ensure regional water transmission goals.

ad in
Gun
site

Nest

3.23 MASTER UTILITIES REPORT

The developer shall submit a Master Utility Report with the Development Application. The Master Utility Report must meet all requirements in the Public Utility Improvements Rules & Regulations Regarding Standards & Specifications. The Master Utility Report must be prepared in accordance with the City of Aurora Capital Improvement Plans and by a licensed professional engineer in the State of Colorado. The report must include the following:

- A narrative identifying the scope, intent, criteria, system requirements and proposed phasing
- A narrative shall be included that discusses the intent to enter into cost reimbursement agreements with the City for regional improvements
- Overall layout for water and sanitary sewer mains necessary to provide service to the proposed development. (minimum scale 1"=100')
- Offsite demands necessary for adjacent properties and utility extensions must be included in the report and shown on the plan
- Phasing of utilities infrastructure must be shown on development plan or within the report
- Sanitary sewer flow shall be calculated in tabular form for each sewer basin within the development
- Sanitary sewer calculations must include pipe calculation for all proposed sewer lines. Pipe calculations shall include diameter of pipe, minimum slope of pipe, flow, depth of flow and velocity
- Water demands must be listed for the proposed system at an average day rate, maximum hour, and maximum day plus fire flows
- Fire flows shall be calculated in accordance with ISO criteria, or AWWA Manual 31

B. Site Description

The proposed Aspen Business Park site is approximately 55-acre undeveloped vacant land covered with native grass.

All of this information was provided.

The proposed development calls for the construction of (3) light industrial buildings that vary in size depending on the lot delineation and sizing. These Planning Areas (PA's) have been broken out in this FDP and are the relative phases of development Proposed with this preliminary Master analysis.

We have corresponded with E470 on several matters none of which have raised concerns including drainage and the alignment of the SSW main north through the MUE east of E470

If a specific document is requested to follow please provide a link to it. We looked through the Pre-app notes, the master plan manual, the water and sanitary manual, the roadway manual and the CoA website searching for the checklist noted, unsuccessfully. Please provide if required.

MAL
PLANNING | INTERIO
L ENGINEERING

COA requirements- refer to MUS checklist-typ for water and sanitary

Efforts needed/ coordinated with the E470 entity?

Extents of this area? As a first time reader, please provide all information to get a clear picture of the development and the different

Elaborate on this. What phases include what planning areas and what are the expected construction dates? Include as a table

Phasing detail added and referenced to PIP. Construction dates are not appropriate for this document as master / planning /CD review time frames and responses are speculative at best.

available along the s
pment. A 12" water
is available within
the property lies with
of 56-84 psi at the
pressure used in w

Keep pressures in feet

PSF added to text though no calcs are done in PSF so it's unclear why this was requested. Pressure from CoA is provided in PSI and all criteria in the manual is in PSI

t come
the Ri
ment t
essure
site. N
dated

Proposed Infrastructure

water mains are proposed within the public acc
development. These water mains will provide both
as within the development. Two connections are proposed which will support
tire site as well as the domestic use of all planning areas proposed with the A
ark development.

typo corrected

ways in the SurV Empire

Along the existing 12" water main in Gun Club?

C. Proposed Improvement Timing

The site has

Figure including planning areas added to text body

Include a basic figure here depicting the planning areas instead of having to flip back and forth to appendix

details of connections to ex added

As the proposed planning areas are developed, a looped water main will be provided to provide fire protection for the Aspen Business Center site. These loops will be designed and installed per City of Aurora criteria.

Which is?

If specific information is needed please specify. Otherwise this is why specific manuals are cited and provided by the city.

D. Anticipated Demand & Design Criteria

The water demand for the 55 acre Aspen Business Center is bas
(Industrial). Water demand loads for the industrial construction ty
Sanitary Sewer and Storm Drainage Infrastructure Manual, City of Aurora, CO, effective January 2012, updated in 2020. Section 5.02 was referenced for all design criteria. The proposed water demands are broken down in Appendix B and taken from Section 5.02.3 Domestic Water Demand per Zoning Classification, City of Aurora Standards and Specifications. The scenarios modeled include maximum day plus fire flow, maximum day, maximum hour, and average day demands. Residual pressures and velocities conform the requirements within Section 5.02 of the City of Aurora Standards and Specifications.

Include the COA water demands information in table formation or list out in bullet points.

Fire flow demands table added

Existing Infrastructure

30" Sanitary Main that runs along the west edge of E-470 will convey the sanitary flows from this development. The existing sanitary lines within the Murphy Creek development were also analyzed

Provide data table showing fire flow demands by land use type for the system modeling. (Residential, Commercial, (Multi-family) & Industrial.)

as an option but do not have sufficient capacity for the Aspen Business Park development. The 30" main along E-470 has sufficient depth and capacity to service the

Discuss the coordination efforts with E470 and if there are any concerns..potential delays?

B. Proposed Infrastructure

An 8" sanitary sewer will be provided in private drives within the s provided within a multi-use utility easement that runs adjacent to of sewer is proposed to run South to North in the Utility Easement sewer will then be bored under E-470 and will tie into the 30" inte ice to all developments within the Aspen Business Center sit posed Aspen Business development will be 8" and 12". Neces de of the Right of Way will be obtained as the Planning Area de of the existing multi-use utility easement. The proposed c a added be made at an existing manhole no enue and E-470. Sanitary lines that will be d as public. The proposed sewer al proposed buildings as shown in the Utility Plans within Appendix

E470 is aware of this project and we have discussed it with them. Discussion information added to text.

But, again this project is in its infancy. Details of how the alignment and boring under E470 will work would be forthcoming as the design develops. This is an overarching document to confirm that the site works with its surrounding infrastructure.

Discuss how Murphy Creek ties into this project

There are no known off-site improvements that will impact the pro

C. Proposed Improvement Timing

The site has been divided into multiple Planning Areas as shown in the O Appendix B. The site will be developed sequentially starting with Planning Areas are developed the sewer main will be constructed as shown on the Appendix B.

Actually list out these design standards in the report

D. Design Standards

The Water, Sanitary Sewer and Storm Drainage Infrastructure Manual, City of Aurora, CO, effective January 2012, updated in 2020, Section 5.03 was referenced for average and peak demands, design slopes, pipe sizes, and pipe cap within Appendix B.

specific criteria added

IV. CONCLUSION

A. Conclusions

As described above, there is adequate existing infrastructure to provide utility services for the Aspen Business Park development per the City of Aurora. The existing 12" and 24" connections to the proposed 12" have the capacity and ability to allow each potential new development to connect and build water loops for adequate water service. The existing sanitary sewer to the Northwest of the overall property has the depth and capacity to service the proposed development with the Sanitary infrastructure proposed.

the ssw services are 6"8", the ssw main is 12", the water main is 12". SSW services are not specifically in master documents. Is a table needed to show this when it is in the text and calcs?

Include a table indicating the sizes of water/sanitary proposed and for what project areas

V. REFERENCES

1. *Aurora Storm Drainage and Technical Criteria*, City of Aurora, CO, effective January 2012
2. *Water, Sanitary Sewer and Storm Drainage Infrastructure Manual*, City of Aurora, CO, effective January 2012, Updated 2020.
3. *Water Maps – Aurora Water*, City of Aurora, CO, Plotted Date June 11, 2017.
4. *Amendment to the Master Utility Report For Murphy Creek East Development*, prepared by CVL dated May 29, 2020.

Need to include a narrative explaining how the this report relates to this MUS. Also need to discuss if this affects the Murphy Creek MUS at all

comments on this have been added to report body

SE QUARTER OF SECTION 25, TOWNSHIP 4 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO

PROPOSED 12

size added

PROPERTY LINE

WM
PROPOSED WATERLINE

PROPOSED DETENTION

PLANNING AREAS

PROPOSED WATER CONNECTION

FOR AND ON BEHALF
OF WARE MALCOMB

ASPEN BUSINESS PARK
YALE AVE & S GUN CLUB RD.
AURORA, CO
OVERALL UTILITY PLAN (WATER)

[illegible]

JOB NO.:	DCS21-4114
PA / PM:	JKC
DESIGNED:	JRR
DATE:	01/17/2021
PLOT DATE:	

SHEET
C1

\\wma-arch.com\WMIDCS21\4114\00\Civil\Sheets\Planning\Overall Util\DCS21-4114_Overall Wat Util Plan.dwg 1/17/2022 2:51 PM JROSS 1:1

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WARE MALCOMB
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900 south broadway
suite 320
denver, co 80209
p 303.561.3333
waremalcomb.com

FOR AND ON BEHALF
OF WARE MALCOMB

ASPEN BUSINESS PARK
YALE AVE & S GUN CLUB RD.
AURORA, CO
OVERALL UTILITY PLAN (WATER)

[illegible]

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PLOT DATE:	

SHEET
C1

Sheet

Expand on this to show the connection

an exhibit was previously included in this report to show the extents of this connection but was reviewed to be inappropriate because it was an exhibit that was also included in the PIP. The title of this exhibit has been revised to not include "pip"

Include a key map

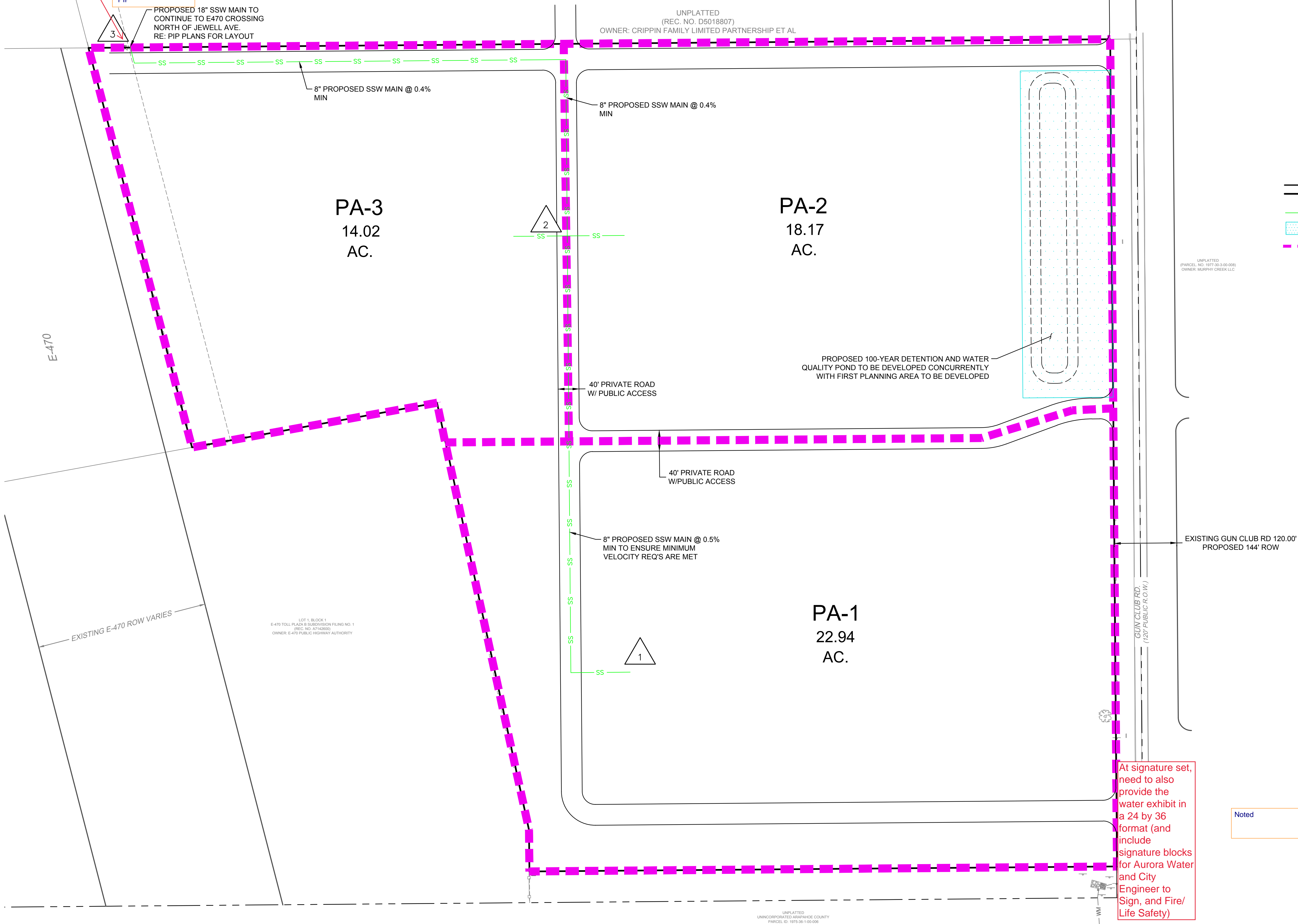
Include a note on all exhibits that this site is for industrial - typ.

Key map added

Note added

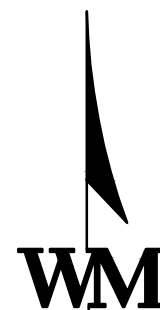
MASTER PLAN ASPEN BUSINESS PARK

SE QUARTER OF SECTION 25, TOWNSHIP 4 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO



LEGEND

- PROPERTY LINE
- PROPOSED SANITARY
- PROPOSED DETENTION
- PLANNING AREAS



0 50 100 200
SCALE: 1" = 100'

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900 south broadway
suite 320
denver, co 80209
p 303.561.3333
waremalcomb.com

FOR AND ON BEHALF
OF WARE MALCOMB

ASPEN BUSINESS PARK
YALE AVE & S GUN CLUB RD.
AURORA, CO
OVERALL UTILITY PLAN (SANITARY)

REMARKS

JOB NO.: DCS21-4114
PA / PM: JKC
DESIGNED: JRR
DATE: 01/17/2021
PLOT DATE:

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SE QUARTER OF SECTION 25, TOWNSHIP 4 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO

PROPOSED 12

Size has been added per comment.

PROPERTY LINE

PROPOSED WATERLINE

PROPOSED DETENTION

PLANNING AREAS

PROPOSED WATER CONNECTION

PROPOSED 12"
WATER MAIN

PROPOSED 12"
WATER MAIN

40' PRIVATE ROAD
W/PUBLIC ACCESS

CONNECT TO
EXISTING 24"
WATER MAIN

PROPOSED 12"
WATER MAIN

GUN CLUB RD.
(120' PUBLIC R.O.W.)

0 50 100 200

SCALE: 1" = 100'

FOR AND ON BEHALF
OF WARE MALCOMB

AURORA, CO
OVERALL UTILITY PLAN (WATER)

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FlexTable: Pipe Table
Active Scenario: Max Day + Fire Flow

ID	Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Minor Loss Coefficient (Local)	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)
46	P-2	127	J-3	J-4	12.0	PVC	150.0	0.011	851	2.41	0.001	948
47	P-3	87	J-4	J-2	12.0	PVC	150.0	0.011	851	2.41	0.001	717
48	P-4	23	J-2	J-5	12.0	PVC	150.0	0.011	851	2.41	0.001	96
50	P-5	87	J-1	J-3	12.0	PVC	150.0	0.011	-1,304	3.70	0.003	718
51	P-6	27	J-1	J-9	12.0	PVC	150.0	0.011	-524	1.49	0.001	145
53	P-7	105	J-7	J-6	12.0	PVC	150.0	0.011	-599	1.70	0.001	803
54	P-8	87	J-6	J-5	12.0	PVC	150.0	0.011	875	2.48	0.002	734
56	P-9	118	J-7	J-10	12.0	PVC	150.0	0.011	213	0.60	0.000	797
57	P-10	152	J-10	J-9	12.0	PVC	150.0	0.011	213	0.60	0.000	685
65	P-12	46	J-5	J-11	12.0	PVC	150.0	0.011	1,726	4.90	0.005	429
66	P-13	58	J-11	J-1	12.0	PVC	150.0	0.011	-1,828	5.19	0.006	429
68	P-14	32	J-9	J-12	12.0	PVC	150.0	0.011	-311	0.88	0.000	295
69	P-15	28	J-12	J-7	12.0	PVC	150.0	0.011	-386	1.10	0.000	295
70	P-16	30	J-12	PA3	12.0	PVC	150.0	0.011	33	0.09	0.000	100
71	P-17	32	J-12	PA2	12.0	PVC	150.0	0.011	42	0.12	0.000	100
72	P-18	29	J-11	PA1	12.0	PVC	150.0	0.011	3,554	10.08	0.021	100
76	P-1(1)	10	R-1	J-18	12.0	PVC	150.0	0.011	2,155	6.11	0.015	1
77	P-1(2)	113	J-18	J-3	12.0	PVC	150.0	0.011	2,155	6.11	0.008	387
79	P-11(1)	10	R-2	J-19	12.0	PVC	150.0	0.011	1,474	4.18	0.007	1
80	P-11(2)	84	J-19	J-6	12.0	PVC	150.0	0.011	1,474	4.18	0.004	186

Model represents field conditions as close as possible. Downsizing of water main and Fire flow demand at building are causing the high velocity with pipes connecting to building. Flow tests to be conducted at each water connection to determine actual pressures at each location. High localized velocities are not uncommon with Max Day + Fire flow tests, and have had MUS approved with similar velocities in the past.

Not per Aurora Water standards as listed in section. Ensure all velocities are per standards and limits.

SE QUARTER OF SECTION 25, TOWNSHIP 4 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO

ASPEN BUSINESS PARK
YALE AVE & S GUN CLUB RD.
AURORA, CO
OVERALL UTILITY PLAN (SANITARY)

[illegible]

JOB NO.:	DCS21-4114
PA / PM:	JKC
DESIGNED:	JRR
DATE:	01/17/2021
PLOT DATE:	

SHEET
EX-1

Sheet

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BRANDING | CIVIL ENGINEERING

Aspen Business Park

DCS21-4114

DATE: 1/17/2022

BY: JRR

send all excel calculations
for water and sanitary to
nkhanzad@auroragov.org

Excel sheets to be
provided per comment.

SANITARY FLOW SUMMARY (LOCAL)									
PLANNING AREA	ZONING	AVG. DAY FLOW	TOTAL AREA	LOCAL AVG. FLOW	EQUIVALENT POPULATION PER ACRE	TOTAL POPULATION (P)	I/I	TOTAL LOCAL AVERAGE FLOW	
		GPD/ACRE	ACRES	GPD			0.1* LOCAL AVG FLOW	GPD	CFS
PA-1	M-O	1,200	22.9	27,528	18	413	2,753	30,281	0.05
PA-2	M-O	1,200	18.2	21,804	18	327	2,180	23,984	0.04
PA-3	M-O	1,200	14.0	16,824	18	252	1,682	18,506	0.03

$$Avg Flow = AREA (AC) \times AVG. DAY FLOW \left(\frac{GDP}{AC} \right) =$$

$$Peak Factor (PF) = \frac{5}{P^{0.167}} =$$

where P=Population in thousands

$$Peak Flow = Peak Factor \times Avg Flow =$$

$$I/I = Avg Flow \times 0.1 =$$

$$TOTAL AVERAGE FLOW = Avg Flow + (Avg Flow \times 0.1) =$$

$$TOTAL PEAK FLOW = Peak Flow + (Avg Flow \times 0.1) =$$

MASTER PLAN
ASPEN BUSINESS PARK

SE QUARTER OF SECTION 25, TOWNSHIP 4 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,
CITY OF AURORA, COUNTY OF ARAPAHOE, STATE OF COLORADO



Alternate plan has been provided in lieu of the PIP Utility Exhibit.

Do not duplicate PIP in this report- if needed make a reference to it

PUBLIC IMPROVEMENT PLAN-UTILITY EXHIBIT



WARE MALCOMB
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SUBMITTAL NO.:	DATE:						
	1ST SUBMITTAL	01.12.2022					

ASPEN BUSINESS PARK
YALE AVE & S GUN CLUB RD.
AURORA

JOB NO.:	
DRAWN BY:	
CHECKED BY:	

SHEET NO. & NAME:

SHEET NAME:
P.I.P-EX

Pre-Application Comment Responses

Comment: Gun Club Road: The Southeast Area Transportation Study (SEATS 2007) identifies Gun Club Road as a six-lane arterial. Gun Club Road is a state highway within the jurisdiction of the Colorado Department of Transportation (CDOT) and all access to Gun Club Road must be approved and permitted through CDOT.

Response: Understood. Gun Club Rd will be designed as a 6 lane arterial with 144' ROW and expanded as such for the half roadway section abutting this site.

Comment: E-470 Setback: Buildings in the Airport District (AD) zoning district shall have a setback of 25-feet from public streets and 100-feet from the E-470 Highway.

Response: Understood.

Comment: Traffic and Vehicular Circulation: The Master Plan and Traffic Impact Analysis must identify the future roadway network. The expectation is that the development will include an internal street network that will provide both north/south and east/west connectivity through the site. Additionally, the north/south access should align so access can be extended to the north for future development.

Response: Understood. Connections and access will be maintained as required.

Comment: Pedestrian Circulation: Pedestrian access should be provided into and around the property, between individual sites and/or buildings. Accessible routes are required between parking areas, buildings and to the public right-of-way.

Response: Understood.

Comment: Master Utility Study: A Master Utility Study (MUS) is required for this development. All utilities must be installed in accordance with an approved MUS. A looped water supply is required for each planning area of development.

Response: Understood. A master utility study has been prepared with looped water supplies for each planning area.

Comment: Traffic Signal Escrow: The Gun Club Road and Yale Avenue intersection has been identified to be signalized in the future. Traffic signal escrow will be required for the traffic signal. Additionally, there is the potential for other site access intersections that may require and warrant signalization in the future. Traffic signal escrow will be required for these traffic signals.

Response: Understood. A traffic signal escrow will be provided where required.

Comment: Public Improvements: A Public Improvement Plan (PIP) shall be submitted with the master plan documents. Public improvements shall include the western half of Gun Club Road including necessary auxiliary lanes and transitions. Internal roadways shall be private streets.

Response: Understood. A PIP has been provided with this submittal and will included all required above.

Comment: *Streetscapes:* Hierarchy of streetscape aesthetic treatments for internal vs. external streets. Tree spacing shall meet current city standards, but alternative design options can be proposed that

exceed current code requirements. Address any proposed street furnishings such as benches, trash receptacles, planters, signage, banners, lighting etc. in terms of their style and use throughout the development.

Response: This will be addressed with a future submittal as part of the urban design and landscape standards.

Comment: *Public gathering spaces:* Incorporate design standards for any proposed plaza spaces associated with retail and/or commercial areas of the development and the integration of pedestrian public spaces associated with residential development. Amenity spaces might be located between building entrances and the street. For residential units, spaces should be centrally located to the site. Describe how the interconnection of public spaces with walkways and trails will be designed

Response: We are not proposing any retail, commercial, or residential development.

Comment: *Views:* Explain how building placement will be oriented to address what people see when looking into the development from the external streets surrounding the site. What views, if any, are highlighted or captured from within the development looking out? Amenity spaces, buildings, public art, and principal entrances are encouraged to be located to create interesting views from the street and from within the site.

Response: We are orienting the buildings to not block the views to the west into the Plains Conservation Center. We are not providing amenity spaces or public art.

Comment: *Public Art:* Will a public art component theme get carried throughout the development within the architecture or public accoutrements? Is there only one larger public art piece provided in a central location? Public art can act as a gateway entrance into the site or building and can serve multiple purposes if designed and sited properly.

Response: We will not be providing any public art.

Comment: *Landscaping:* The MP should address the streetscape including street frontage buffers that detail proposed widths, berming, plant quantities and plant types. Street buffers should reflect the hierarchy of the street in addition to the proposed land development associated with that frontage. The MP should include landscape design standards for screening of loading areas, detention basin landscaping, building perimeters, parking lot landscaping, non-street frontage buffers and enhanced site entrances. The proposed landscape standards should meet the current UDO, but where landscape standards are missing or silent, they shall defer to the requirements found within the UDO.

Response: This will be addressed in a future submittal as part of the landscape design standards.

Comment: *Entry Monumentation:* Will there be multiple primary entrances into the development and how will they be treated aesthetically with landscape, monumentation/signage, hardscape, etc.?

Response: There will be one entrance into the development. Aesthetic treatments will be covered in a future submittal as part of the architectural and urban design standards.

Comment: *Hardscapes:* How do hardscape materials, patterns and colors relate to the public areas within the development? Where are they used relative to traditional concrete?

Response: This will be addressed in a future submittal as part of the urban design standards.