NORRIS DESIGN
Planning | Landscape Architecture | Branding

December 21, 2018

Heather Lamboy
City of Aurora, Planning Department
15151 E. Alameda Parkway, 2nd Floor
Aurora, Colorado 80012

Re: Murphy Creek East (#1306748) Response to Pre-Application Comments – DA-1250-40, DA-1250-41, and DA-1250-42

Dear Mr. Geyer:

Thank you for your Pre-Application comments which we received on August 17, 2017. We have reviewed all the comments and have addressed them in the following pages.

Please feel free to contact me directly should you have any other comments, questions and/or special requests for additional information. We look forward to continuing to work with you and your colleagues at the City of Aurora.

Sincerely,
Norris Design

Bill Mahar

Bill Mahar, AICP
Senior Associate

STEP I – PLANNING PHASE

Planning Department

The Planning comments are numbered, when you submit your application, include a letter of introduction responding to each of the numbered comments including key issues from other departments.

 Due to the large number of changes that are being proposed for both the circulation and housing as well as the need to update the Master Drainage, Utility, and Traffic studies, a Framework Development Plan (FDP) Amendment will be required.

Response: The FDP Amendment was submitted in late November of 2018. The review/referral period began on December 3, 2018. First round of comments are due on December 28, 2018.

 The circulation plan, including automobile, bicycle, and pedestrian circulation, should provide connectivity and safe ways of travel for all modes. Additionally, consider locations of bus stops and designate potential stops as RTD extends service to this area.

Response: The FDP amendment and PIP plan that are currently under review as well as the submitted CSPs identify the location of the proposed trails, on-street bike lanes, and public sidewalks. The pedestrian connections have been thoughtfully designed to provide connections to the regional systems as well as throughout the Murphy Creek East development.

 By providing different housing types, the development provides housing opportunities for different housing budgets. As proposed, the development review staff have concerns with the site layout and distribution of housing types across the development. The various housing types (specifically the numerous small lots) are required by code to be interspersed and cannot be concentrated in single areas.

Response: Lots types have been dispersed throughout the development as recommended by staff The project team recognizes the distribution of lot sizes is a beneficial component of the proposed development and aligns with the City of Aurora's goals for diverse and attainable housing choices. This arrangement will provide lot choices and housing types that will be appealing to a large segment of the population. This will provide larger lots/homes that tend to be attractive for families, and smaller lots/homes for retired residents and younger professionals. Please see Sheet 1.2 Lot Type Key Plan as this plan identifies the location of the various lot types and sizes.

 The proposed plan includes a number of housing types that do not directly access a street. This has raised concern regarding access for first responders as well as water & sewer infrastructure. Also, residences that front streets, but still allowing for new housing options, will be more compatible with the existing Murphy Creek North neighborhood; provide safe access for residents, first responders, as well as utility providers; and provide for more "eyes on the street," which is the best form of community policing and safety.

Response: All roads have been designed to City standards and allow for emergency access. Alleys and motor courts have been designed to meet specifications as required by Fire Life Safety. The site layout for the townhome development that will be part of CSP 02 has been revised. During the pre-application meeting, the project planner commented on creating a design that provided more "eyes on the street" as noted above. We revised the site plan to move the detention to the north side near E. Jewell Avenue and brought the town homes closer to the public east/west road. This lot arrangement will result in an improved streetscape experience along the west/east public street and provide more "eyes on the street" as requested by city staff.

 Park spaces, both active and passive, should be provided throughout the development. Additional pocket parks should be considered to provide recreational opportunities to the adjoining homes.

Response: Pockets parks have been dispersed through out the development. A trail system connects the development providing access to amenities, parks, and open space. Based on comments from the project planner, we have revised the location of the pocket park to align with the east/west trail that will ultimately connect to the school/park area. Additional open space was included in the townhome area and can be programmed to include smaller scale park/active features.

 Please note that the bordering Murphy Creek neighborhoods will be engaged in the process and keeping them informed and conducting neighborhood meetings will be required.
Response: A neighborhood meeting was held on Tuesday December 11, 2018 at Murphy Creek K-8 School. Approximately 40 residents attended. The project team presented the proposed plans, elevations, and park concepts.

General Zoning Code Review of your Property:

- This property is zoned E-470 Medium Density Residential and is subject to the Murphy Creek South FDP.

- The uses you propose, residential housing, school, parks and a community center, are permitted by the various zoning classification, but subject to Contextual Site Plan and Plat approvals.

- The proposed new housing types and change in uses and infrastructure you propose will require a Framework Development Plan Amendment.

Response: Comment noted, thank you.

Standards and Issues:

1. Zoning and Land Use Issues

1A. Due to the large number of changes that will be required with this application, including significant updates to the Master Drainage, Utility, and Traffic studies as well as updates to the Public Improvement Plan, an FDP Amendment will be required. In addition, there are new housing types (cottage homes as well as garden court homes) that were not anticipated in the 2002 Murphy Creek South FDP. While the overall density requirement is being met, additional work is required on the design of the street network as well as updates to the design guidelines that incorporate the proposed cottage and townhome housing types.
Response: Noted. The FDP Amendment along with the Master Drainage, Master Traffic Study, and PIP have been submitted and currently under review as part of the FDP amendment application. We have worked with staff to address the layout of the cottage homes, townhomes, and distribution of the single family detached lots that are part of the CSPs.

Based on the discussion at the pre-application meeting, it was difficult to determine whether an FDP or CSP waiver would be required. Please remember that the code requires that the Planning Director may consider waivers when the application exceeds other standards.

Section 146-407 (F) - Waiver of FDP Development Standards.

1. *Criteria for FDP Waivers.* When an *FDP* proposes one or more waivers from design or development standards or other development requirements, the waivers may be granted by City Council. In return for the waiver, the *FDP* shall exceed other appropriate standards. City Council may grant the waiver if it finds that:

a. The requested waiver is necessary to compensate for some unique aspect of the land or some natural or man-made feature not generally shared by other properties in the zoning district;
b. The need for the waiver was not created by the size or shape of land parcels created or sold after the date on which the zoning district ordinance(s) were adopted;
c. The requested waiver will not reduce the degree to which the development is consistent with the comprehensive plan and the E-470 Corridor/Land Use Study;
d. The requested waiver will not reduce the degree of connectivity between major developments, the number or quality of focal points in the development, or the level of architectural quality in the development; and
e. The proposed waiver will not adversely affect the adjacent properties or surrounding neighborhood.

2. *Conditions on Waivers Allowed.* The City Council may establish conditions upon the granting of a waiver. A waiver shall have no effect if the conditions are not satisfied.

3. *Administrative Waivers.* At his or her election, an applicant may first request a waiver from the planning director. The director is authorized to grant waivers of design or development standards at his or her discretion when the application exceeds other standards to such an extent that the waiver is merited and will not adversely affect the adjacent properties or surrounding neighborhood. The director's waiver shall enumerate which standards have been exceeded and which have been waived, and shall be noted on the subject plan. If the director denies the waiver, an applicant may apply to city council for the waiver as provided in subsection 1 above. The director shall provide notice of approved waivers to the city council. At the next regular meetin g, the city council may call up the waiver application for consideration by the city council in accordance with the standards provided in this section. City council has the authority to overrule the decision of the director.

4. Criteria for CSP Waivers as per 146-410(E)

CSP Waivers. An applicant may request waivers from development standards or requirements. The planning department shall analyze the request and recommend which, if any, plan modifications are necessary to mitigate potential waiver impacts.
The planning director may approve a waiver of any height or setback requirements for any structure as long as the waiver does not result in the requirement being exceeded by more than 10 percent.
Response: Comment noted, thank you.

2. Traffic and Street Layout Issues

At the pre-application meeting there was substantial discussion regarding the street layout and design for Murphy Creek South. A grid, or a modified street grid, is highly recommended and gives multiple options to drivers as they travel through the subdivision. This dispersal of traffic aids in efficiency of circulation because everyone will not have to utilize Yale and Flatrock Trail Road. Additionally, dedicated roadway options enable more efficient emergency response times, consolidation of utilities and fire lanes, and reduces the need for the abundance of dedicated easements. See diagram below from the City of Aurora's Roadway Manual that outlines the manner in which street are to be laid out in new neighborhoods. As discussed in the pre-application meeting, it is recommended to provide at least one additional connection to Harvest Road from the development.

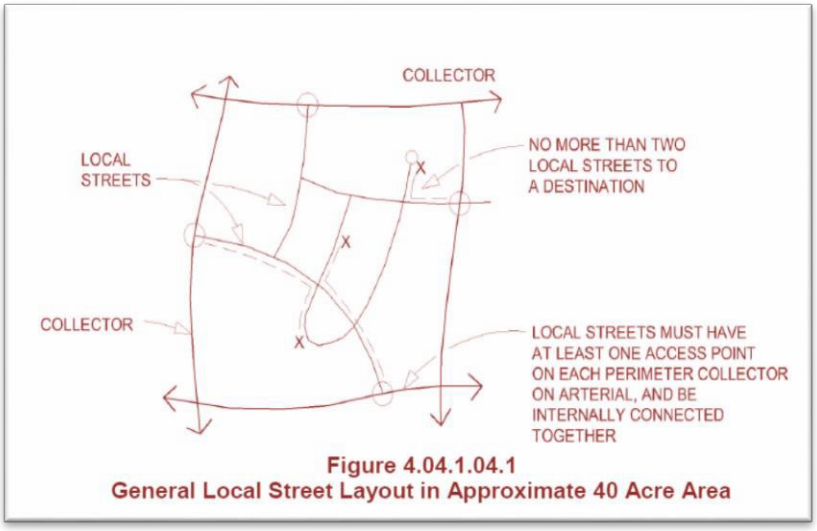


Figure 4.04.1.04.1
General Local Street Layout in Approximate 40 Acre Area

Response: The road network has been redesigned to create a more modified street grid. An additional connection has been made onto Harvest Road per the request of city staff.

All proposed streets, whether public or private, need to be labeled according to our street standard ordinance, Chapter 126-1 and 126-36 of the city code. City design standards call for detached sidewalks and tree lawns. Throughout the entire FDP street connectivity, pedestrian connectivity, and bicycle routes should be provided. The plan should address safe travel for all modes of transportation and mitigate where potential conflicts may exist. Alternative pedestrian and bicycle routes should be provided to the school sites, so that school-age children will not be forced to take busy streets.

Response: A interconnected trail network, consisting of regional, community, and neighborhood trails, provides pedestrian and bicycle access throughout the site. Also, pleaser refer to the PIP that was submitted with the FDP Amendment. The PIP provides detailed information about the pedestrian network, on-street bike lanes and future roadway improvements.

A circulation plan, including automobile, bicycle, and pedestrian circulation, should provide connectivity and safe ways of travel for all modes. Additionally, consider locations of bus stops and designate potential stops as RTD extends service to this area. Please contact RTD regarding the potential for extending bus service to this area, which is under-served.

Response: The pedestrian connections have been thoughtfully designed to provide connections to the regional systems as well as throughout the Murphy Creek East development.

This application may require some vacating of existing dedicated right-of-way. Remember that street vacations require City Council approval and consider that as part of the overall project timeline. A street vacation can run parallel to the other land entitlement processes.

Response: We will be contacting the project planner and representatives from Real Property to submit the street vacation documents for review.

3. Environmental Issues

The property falls within an Airport Influence District. If it hasn't already been done, an avigation easement will need to be conveyed to the city by any entity subdividing lands or initiating construction of any structure on already subdivided lands within the airport influence area.

Response: An avigation easement exists for this site, It was recorded in 1986. A copy of the recorded document has been submitted for both CSP applications.

There may be state requirements regarding development bordering the Denver/Arapahoe Disposal site (landfill). Please confer with the regulating agencies regarding this facility.

Response: Comment noted.

4. Site Design Issues

4A. *Density of Use.* The proposed development complies with the E-470 medium density zone district standards as well as the permitted densities outlined in the Murphy Creek East FDP. Through the use of urban design best practices, it is suggested not to segregate the different housing types, but provide for a more integrated neighborhood that affords a variety of housing opportunities. Additionally, one of the approval criteria includes compatibility with the existing Murphy Creek North neighborhood.

Response: Housing types and various lot sizes have been integrated throughout the development. The proposed architecture is consistent with the overall design concepts of the Murphy Creek neighborhood. Furthermore, the architectural designs of the proposed homes are similar to other residential developments within the E-470 corridor, such as Adonea and Blackstone neighborhoods.

The limitation for small lots within the Murphy Creek East FDP is 35%. The current code outlines the following criteria for single-family detached residential units:

Lotting Options for Single Family Detached Residential	**Requirements**
Minimum lot width 55' and 6000 square feet	Design standards should be included in the FDP and are required to follow Article 13 standards at a minimum.
55' frontage, 5,700 SF	The minimum lot size for a standard lot may be reduced to 5,700 sq. ft. where the lot's required frontage abuts a street with a detached 5-foot-wide sidewalk and minimum 8-foot tree lawn.
50' frontage, 5,700 SF	Standard lot frontages may be reduced to 50' for homes with attached or detached garages placed to the rear of the house. These lots must also abut streets with a 5' sidewalk and 8' tree lawn.

40' frontage, 5,700 SF	Where the subdivision will require homes with alley-loaded garages, the minimum frontage may be reduced to 40 feet for standard lots, or 45 feet for large lots. These lots must also abut a street with a 5' sidewalk and 8' tree lawn.

As noted in the table above, the smallest width permitted under the current code is 40 feet with alley-loaded garages. Both the cottages as well as the small 45'x110' lots do not comply with current code requirements, so waivers will be required.
Response: All small lots will conform to Zone District R-2 per the Medium-Density District and Subarea C design criteria as part of 146.2 (pending the code adoption).

As part of the Zoning Code update there has been much dialogue on small lot standards, which may help to inform consideration of waivers. As proposed, the waivers may not be granted by the Planning Director and Planning Commission review will be required.
Response: Comment noted, thank you.

The minimum lot size for garden/motor court is 4,200 square feet. As proposed, the cottage lots range from 2,470 square feet to 2,920 square feet. A waiver will be required for the proposed cottage lot sizes.
Response: Comment noted, thank you.

The minimum lot size for multi-family residential units (townhomes) is 3,960 square feet. No lot size was provided in the graphic provided for the pre-application meeting; however, it is likely that the proposed lots do not meet the square footage minimum and a waiver will be required.
Response: Noted. The submitted CSP 02 provides the lot sizes for the proposed townhomes.

4B. *Building Orientation*. Among housing types provided, many units are proposed to be accessed via a garage off a shared private drive or "motor court". The city has adopted standards for motor courts within the Roadway Manual and zoning code. It is essential that fire access and on street visitor parking be available. Some of proposed configurations significantly inhibits on-street parking availability. Also, please note that only single family detached dwellings can be located around a cul-de-sac. The proposed townhomes should only be located along street frontages. There is no approved motor court configuration that can accommodate this proposed layout. Other options include, green courts (accessed from a street) and loop lanes. The standards for these can be provided upon request.
Response: The proposed townhome development has been revised per early discussions with the project planner to provide internal green space and align the townhome units to front on the public street. The townhomes are organized to share common, activated green courts. They have been designed to meet the 150 foot fire access requirement. Parking for each housing unit is accommodated as is guest parking.

- ***The townhomes provide for two car garages and guest parking along the private drive.***
- ***The cottages provide for two car garages as well as two parking stalls within each on-lot driveway.***

Additionally, some of the layouts are isolated from the overall community, limiting its community interaction and their visibility and/or "eyes on the street" are decreased. Utilize design techniques to provide for homes that front on streets for better access for residents and first responders, as well as improve the overall character and connectivity

within the community – providing a more traditional gridded layout is the most efficient and intuitive way to accommodate your goal of providing proposed varying housing types for different income levels and budgets.
Response: The road network has been configured to allow for a modified grid network based on previous staff comments. This will improve overall auto and pedestrian connectivity. The townhome layout has been revised to include homes along E. Asbury Drive. This will result in an improved streetscape and address the staff comment about "eyes on the street."

4C. *On-Site Amenities and Use of Open Space*. On-site park amenities are available in the center of the project. However, amenities should be distributed throughout the project – small pocket parks should be provided both in the northern and southern portions of the development. While there are many trails proposed throughout the project, active open space amenities should be provided throughout the development.
Response: Pockets parks have been strategically located throughout the development. The project planner suggested that we revise the location of the pocket park to align with the east/west trail that will ultimately connect to the school/park area. Additional open space was included in the townhome area and can be programmed to include smaller scale park/active features.

4D. *Parking*
With the proposed motor court and attached homes, provision for guest parking is imperative. Please note that the maintenance requirements for snow removal and general care would be increased significantly as proposed. This may require specialized equipment and higher HOA fees. As per code, each single-family unit requires 2 parking spaces plus 2 guest parking spaces. Motor courts and the attached home configurations presented as part of the pre-application do not provide sufficient guest parking.
Response: Sufficient guest parking has been provided through a combination of off-street and on-street parking. All motor court homes have 2 car garages and 2 parking spots in the driveway. For a total of four parking spots for each housing unit. The townhomes provide for garage parking and additional on-street parking is provided.

4E. *Site Lighting*
Section 146-918 governs the design of site lighting for Contextual Site Plans in the E-470 zone. In general, sidewalks, internal pedestrian paths, and bicycle paths shall be lit with full cutoff lighting fixtures no more than 16 feet tall and providing consistent illumination of at least one foot- candle on the walking surface, except in Low Density Residential subareas. On-site streets and parking areas shall be lit with full cutoff type lighting fixtures no more than 25 feet tall. Fixtures shall be of a downcast type. It is suggested that a single light fixture be provided either by neighborhood or for the entire master planned development. Any proposed fixtures should be included the in the Urban Design Standards associated with your FDP and GDP.
Response: All lighted will be designed and conform to City standards.

5. Landscape Design Issues

For further information, please feel free to contact our Senior Landscape Architect, Kelly K. Bish, PLA, LEED AP. The general landscape comments on your proposal are listed below:

A. General Landscape Plan Comments. Prepare your landscape plans in accordance with the requirements found in the approved Murphy Creek East Framework Development Plant (FDP), the City of Aurora Zoning code, specifically Section 146-502 Residential Zone Districts – Development Standards, Article 14 Landscape Ordinance as well as the Landscape Reference Manual. Please

ensure that your landscape architect or designer has a copy of these documents as well as our project specific comments.
Response: Landscape plans have been prepared in accordance with the approved Murphy Creek East FDP and the City of Aurora zoning code.

Provide the necessary landscape tables in order to demonstrate compliance with code requirements. Tables shall be provided for each of the required landscape treatments i.e. street frontage and buffer tables etc.

- **Landscape Plan Preparation**: Please label all landscape sheets "Not For Construction". Landscape construction drawings are not required and therefore do not necessitate the signature, stamp and seal of a licensed landscape architect upon final approval by the City of Aurora. Landscape plans submitted with a site plan or redevelopment plan are used by the City to determine compliance with the landscape standards and for code enforcement purposes.
  Response: Not for Construction has been labeled on all landscape sheets.

Landscape plans submitted during the Development Application/Contextual Site Plan submittal process must be 24"x36", have plant symbols, plant labels with quantities, and a plant schedule upon first submission or a complete review will not be possible and may result in additional submittals and ultimately delays in approval of the plan set.
Response: Thank you, noted. The CSP landscape sheets are set up and designed to the above standards.

B. Murphy Creek East FDP

The following bullet points are not necessarily and all-inclusive list of the landscape requirements found within the FDP. The applicant is responsible for reviewing this document and determining all applicable landscape requirements.

- Based upon a review of the current approved FDP from 2002, there are no landscape standards. The applicant should therefore follow the landscape standards as required by Article 14 Landscape code.
  Response: The landscape has been designed to the standards found Article 14.

C. Article 14 Landscape Ordinance Requirements. The following bullet points are not necessarily and all-inclusive list of the landscape requirements found within Article 14. The applicant is responsible for reviewing the landscape code and determining all applicable landscape requirements.
Response: Comment noted, thank you.

- **Standard Right-of-Way Landscaping.** Provide one shade/street tree per 40 linear feet of street frontage along all streets. Refer to Section 146-1450 (B). Additional Requirements for Non-Residential Development. When a detached walk and tree lawn are provided according to Public Works street cross section requirements, street trees shall be provided within the designated tree lawn. When a detached walk and tree lawn are absent, street trees shall be located from four to five feet from the back of walk, curb or pavement. Avoid the use of blue grass sod and install a more xeric sod mixture for the tree lawn. In lieu of sod, consider the installation of shrubs, perennials and ornamental grasses at a ratio of .025 five gallon plants per square footage of so d.

Response: One shade tree per 40 linear feet has been provided along all streets. The ratio of .025 five gallon plants per square foot of sod has been applied where shrubs replace turf in the tree lawn.

- **Landscape Street Buffers.** All townhome developments shall provide a 15' wide landscape street frontage buffer along all public streets and a 12' wide landscape buffer along all private streets unless an urban or 16' wide attached sidewalk is provided, then no street frontage landscape buffer is required. All buffers are measured inward from the back of walk or from the right-of-way if no walk is provided. Landscape with one tree and ten shrubs per each forty linear feet of buffer length. All public street buffers may be reduced to 9' and all private street frontage buffers may be reduced to 5' when landscape incentive features are implemented in accordance with Table 14.4 Standard Buffer Widths and Allowed Reductions for Multi-Family and Single Family Attached Townhomes.
  Response: Noted, thank you. Street Buffers have been provided and have been planted at ratio of 1 tree and 10 shrubs per 40 lf.

Landscape street frontage buffers shall be installed along the exterior sides of proposed fencing or walls. A reduction in the buffer width does not mean a reduction in the quantity of plant material. The landscape consultant should consider the ultimate growth of the plant material when selecting a buffer reduction feature.
If utilizing tree equivalents, one tree equivalent is equal to 10 five gallon shrubs or 30 one gallon perennials or any combination of trees, shrubs, or perennials meeting equivalents. When over lapping landscape standards occur such as when building perimeter, parking lot landscape screening and/or detention and water quality pond landscaping fall within the buffer, they may be counted towards meeting the buffer requirements, however the more restrictive requirements shall be implemented. Refer to Section 146-1422.
Response: Noted, thank you.

- **Non Street Frontage Landscape Buffers**. A 20' wide non-street frontage landscape buffer is required along all non-street frontage lines relative to the townhome developments. A reduction in buffer widths to 14' is permitted with the use of xeriscape or landscape incentive features. Refer to Table 14.4 Standard Buffer Widths and Allowed Reductions for Multi-Family and Single Family Attached Townhomes as well as Table 14.2 Residential Buffers Between Uses. Buffers shall consist of one tree and five shrubs per twenty-five linear feet of buffer with fifty percent of the tree species being evergreen.
  Response: Noted, thank you. A 20' non-street buffer has been proposed and planted at a rate of 1 tree and 5 shrubs per 25 lf.

A landscape buffer should also be provided adjacent to the side yards of the cottage homes abutting the PSCO easement. A waiver request is necessary for the cottage lots due to the proposed lot sizes. Waiver requests are typically accompanied by mitigation measures to offset the impact of the waiver. In this case, a healthy buffer would break up the linear placement of the homes, provide some screening for the residences and help diminish the fence canyon appearance.
Response: A landscape buffer has been provided adjacent to the cottage homes abutting the PSCO easement.

- **Front Yard Landscape requirements for Single Family Detached and Duplex Residences.** All new single family detached, two family and single family attached duplex residences shall provide front and side yard (corner lots) and tree lawn landscaping in accordance Section 146- 1450 Additional Requirements for Residential Development (E) and

in accordance with Tables 14.3A and 14.3B Home Yard Landscaping Turf and Xeric Options. Shrub quantities vary depending upon the lot size. Landscaping shall be completed prior to issuance of a final certificate of occupancy. Temporary certificates may be granted at the discretion of the Building Department when certificates are requested outside of the normal landscaping season of April 1st through October 31.
Response: Noted, thank you. Single family detached, two family and single family attached duplex residences have been designed in accordance with Section 146-1450.

Builders may want to consider the new xeric front yard landscape option as a tap credit of $1,000.00 per lot is issued for each front yard utilizing these new requirements. Contact Aurora Water, Tim York at (303) 326-8819 for the specific landscape requirements.
Response: Noted, thank you.

- **Building Perimeter Landscape Requirements for Townhomes**. Refer to Section 146.1450 (F) 3. Additional Requirements for Residential Development for building perimeter landscaping requirements. Building Perimeter Landscaping shall consist of an average landscape bed width of 8' with a minimum of 1.25 plants per five linear feet of unit perimeter footage, Five percent shall be a mixture of evergreen and deciduous trees, 15% tall shrubs and 80% a mixture of evergreen and deciduous shrubs.
Response: Townhomes have been landscaped with perimeter landscaping in accordance with Section 146.1450. A lot typical has been provided.

- **Private Common Open Space** – Developers are required to landscape lands that have been disturbed during construction and will be preserved and protected from future development for non-public active and passive recreation, trails, wildlife habitats and view corridors with landscaping. This includes all areas not defined as street buffers. Landscaping shall consist of 1 tree and 10 shrubs per 4,000 sf of area or tracts. Refer to Section 146-1425 Private Common Open Space.
Response: All common open space has been landscaped at a rate of 1 tree and 10 shrubs per 4,000 square feet.

- **Special Landscape Features**. Provide a distinctive landscape feature at each site entrance. Distinctive landscape features should consist of specimen quality plant material that will provide visual interest during all seasons. Refer to Section 146-1451 Additional Requirements for Non-Residential Development (C) Special Landscape Requirements at Entryways and Intersections. This may be incorporated into your proposed signage, if any.
Response: Each site entrance has been landscaped with distinctive features that provide color, texture and interest for every season

- **Detention, Retention and Water Quality Ponds**. . In order to meet water quality objectives, the city encourages all applicants to utilize LID (Low Impact Development) principles as permanent best management practices (BMP's). Many of the LID practices have an integrated vegetative component which supports the treatment, evapotranspiration and infiltration functions so that storm water is treated at the source. With the implementation of LID techniques, landowners can benefit from the environmental quality and aesthetics of the area in which they live and work.
Response: LID principles and BMP's have been implemented on site through water quality ponds.

Applicants may propose their own BMPS's or refer to the Urban Drainage and Flood Control District's Storm Drainage Criteria Manual where multiple examples of BMP's are described such as grass buffers, grass swales, permeable pavements etc. Coordinate with our Public Work's and Aurora Water Departments staff on the implementation of BMPs.

All detention pond facilities shall not exceed 6' in depth. The area within the tract surrounding the pond shall contain a minimum of 1 tree and 10 shrubs or the approved tree and shrub equivalents per 4000 square feet above the 100 year water surface elevation. When overlapping landscape standards occur such as when buffers, detention/water quality and parking lot landscape requirements fall within the buffer, they may be counted towards meeting the buffer requirements, however the most restrictive requirements shall be met. Landscaping shall be provided in accordance with Section 146-1434 Detention, Retention and Water Quality Ponds.
Response: Noted, thank you. All detention areas have been planted in accordance with Section 146-1434.

- **Irrigation.** Refer to Section 146-1430. All developments shall install an automatic irrigation system for landscape areas. To assess irrigation tap fees, the City Water Dept. will require that the applicant divide their landscape into water conserving, non-water conserving and non-irrigated areas as part of the landscape submittal. A table summarizing these areas shall also be provided. Contact Timothy York at (303) 326-8819 in Aurora Water regarding irrigation plan requirements and application fees. An irrigation permit is required prior to the installation of an irrigation system..
  Response: An automatic irrigation system for all landscaped areas will be provided. A hydro-zone map has been included with this CSP with a table summarizing the areas listed above.

6. Architectural and Urban Design

6A. *Design Standards*
Design Standards are required as part of the Framework Development Plan. The FDP should address the overall design theme, including residential development, amenities, and wayfinding. Architectural style of residential development will be important to address, especially since the design vocabulary presented as part of the FDP will be implemented in all future Contextual Site Plans. Sufficient detail and clarity shall be incorporated to facilitate future plan review, both for residential developers as well as city staff. This will ensure predictability of development and high quality design for the future community of Murphy Creek South.
Response: During the development of the FDP amendment, members of the project team coordinated with city staff to identify the components of the FDP that were requested to be amended. Those discussions focused on addressing the road network, lot sizes, and overall density. The proposed CSPs include architectural and landscape design features and standards for the proposed development. The proposed architectural and landscape design features are compatible with the design concepts of the existing Murphy Creek neighborhood as well as similar residential developments within the E-470 corridor.

6B. Please refer to Special Design Standards within the E-470 code and to the FDP Manual to devise the required matrixes for Urban Design, Landscaping and Architecture. The standards should be represented with associated illustrations. Your standards must meet or exceed the code requirements.
Response: Comment noted, thank you.

6C. Additional architectural design standards for all small lots within the city are found within Article 11. Article 13 sets the additional standards for individual homes, doubles, townhomes and multifamily for all residential development, including the percentage of masonry required.

Section 146-405(F)8 of the zoning code establishes the approval criteria for building architecture and urban design.

Section 146-405(F)8 of the Zoning Code establishes the approval criteria for building architecture and urban design. Building elevations will need to be included as part of your site plan, and should call out dimensions, exterior finishes and color schemes. We will also ask for color and material samples with the initial submittal. As a general rule, "high quality of design" usually means that architectural details should be continued on all four sides of all buildings open to view.

Staff suggests that you incorporate material changes and architectural features such as glazing, textured surfaces, projections, color, overhangs and changes in parapet height to improve the façade and create an inviting and attractive street presence. Emphasis should be placed on ground floor design. Ground floor designs should support a pedestrian-friendly environment, provide visual interest, and help to create an atmosphere that promotes foot traffic. Use changes in the wall planes, both horizontally and vertically, a variety of durable materials, and quality architecture to create visually interesting buildings. Architectural details shall be continued on all four sides of the buildings to reduce the back of house appearance.
Response: The proposed architecture and landscape design concepts are compatible with the existing Murphy Creek neighborhood and other residential developments within the E-470 corridor. The proposed architecture includes a high level of building articulation and masonry features. When a side of a proposed home faces a road, additional architectural features have been considered, such as windows, masonry, and secondary entrances.

6D. *Residential Design Standards*
The Murphy Creek East FDP does not sufficiently address overall architectural design and themes. If your application will include specific single-family detached home models, your models will need to follow the styles and level of quality and detail shown in an approved FDP. If you do not plan to submit single-family home models with the CSP, explain this in your letter of introduction. You may submit actual models at a later date as Minor Amendments to your CSP once it has been approved. Be sure, however, that your CSP street layouts and lotting plans have been properly sized and configured to easily accommodate the typical home designs and other design requirements of your approved FDP.
Response: Architectural concepts will be submitted as a part of individual CSPs. Furthermore, the architectural concepts were presented to the neighborhood at the neighborhood meeting on December 11th.

6E. *Screening of Roof Top Mechanicals. [This section is usually not applicable to single-family detached homes. If applicable include the following standard language, other state "Not Applicable"]*
Show the location of any rooftop or mechanical equipment and vents greater than eight inches in diameter on the elevation drawings. All such equipment must be screened. Use drawings and notes to explain how this will be accomplished. Screening may be done either with an extended parapet wall, or a freestanding screen. In either case the screening must be at least as high as the equipment it hides. The following note to be labeled "Roof-Mounted Equipment Screening" must be added to the general notes section of all Site Plans: (click here for the specific note)
Response: Comment noted, thank you.

7. Signage
The total allowable square footage of signs is based on a zoning code formula tied to location of the property and building frontage. All ground signs should be at least 10 feet back from the property line and 21 feet back from the flow line. Residential neighborhood identification signs are limited to 96 square feet.
Response: Comment noted, thank you.

8. Waivers
Previous discussion in these pre-application notes as well as at the meeting has revealed that it is likely that waivers will be required. There will be the need for additional dialogue on the product types that are being proposed, the site layout, and the architectural design to determine whether the waivers will be considered as acceptable. Please be

aware that where waivers are being requested, including lot layout, size, and design standards, it is expected that the waiver's purpose is to provide high-quality design alternatives. As the design is refined, it is suggested that you have additional meetings with appropriate staff to discuss proposed waivers.
Response: Comment noted, thank you.

If you decide to request any waivers, you must clearly list them in your *Letter of Introduction* and justify them according to the criteria listed in Section 405 of the Zoning Code. You must also list them on the cover sheet of your Site Plan or other drawings on which they occur.

9. Mineral Rights Notification Requirements

Please fill out the Mineral Rights Affidavit / Severed Mineral Rights Notice and supply this document to your Case Manager at the time of site plan submittal.
Response: This will be provided with each submittal.

10. New CAD Standards

The City of Aurora has developed a CAD Data Submittal Standard for internal and external use to streamline the process of importing AutoCAD information into the City's Enterprise GIS. Digital Submission meeting the CAD Data Submittal Standard are required by consultants on development projects when submitting to the City for signature sets and on capital projects funded by the City. Details of the CAD Data Submittal Standard can be found on the CAD Standards web page.
Response: Noted.

Pre-submittal Meeting:
At least one week prior to submitting an application, you will be required to hold a Pre-submittal meeting with your assigned Case Manager to ensure that your entire application package is complete and determine your application fee. Please contact your Case Manager in advance to schedule.
Response: A pre-submittal meeting for the CSPs was held with city staff on December 13, 2018. The pre-submittal meeting for the FDP Amendment was held on November 19, 2018.

Community Participation:
You are encouraged to work proactively with neighborhood groups and adjacent property owners. Neighborhood groups within a mile radius will formally be notified of this project when submittal has been made to the Planning Department.
Response: A neighborhood meeting was held on Tuesday December 11, 2018 at Murphy Creek K-8 School.

Neighborhood Services Liaison:

- Your Neighborhood Services Liaison is Scott Campbell. He has put together a report attached to these notes listing the registered groups within one mile of your proposed project and can assist in scheduling and facilitating meetings with community members. It is recommended that you work with the neighborhood organizations that express interest in your project to mediate and mitigate concerns.

Response: We have reached out to the neighborhood organizations and held a neighborhood meeting. Moving forward, we are happy to answer questions and discus any comments. We look forward to providing a development plan that is compatible with the developments within the Murphy Creek neighborhood as well as improving the road network to benefit the larger community.

- All meetings with neighborhood associations should also include your Planning Department Case Manager so that questions concerning City Code or policies and procedures can be properly addressed. We will record any project-related commitments that you make to the community at these meetings.

Response: Comment noted, thank you.

- Additional information about the Neighborhood Liaison Program can be found on the Neighborhood Services page of the city website.

Response: Noted.

Parks, Recreation & Open Space Department (PROS)

Project Characterization:
Based on your proposal, the following information has relevance to the determination of PROS' requirements for this project:

- Your proposal includes 821 single family homes (269 single family attached townhomes and 552 single family detached homes).
  Response: The proposal now includes 810 single-family homes (269 single family attached townhomes and 541 single family detached homes).
- You are currently proposing open space and neighborhood park land dedication on site.
  Response: Yes.
- Your proposal is not consistent with the existing 2001 Murphy Creek East FDP, an amendment to the FDP will be needed to update all land dedication on site.
  Response: An FDP amendment has been submitted to the City.

Population Impact:
For single-family homes, population calculations for the project are based on an average household size multiplier of 2.65 persons per unit, resulting in an overall projected population of **2176** persons residing in **821** units.
Response: Based on 810 homes, the overall projected population will be 2,147.

Land Dedication:
To ensure that adequate park land and open space areas are available to meet the needs of the population introduced into the city by the new dwelling units, Section 147-48(b) of City Code specifies that land shall either be dedicated on-site within the project's limits or a cash payment in-lieu of land dedication shall be paid. The required dedication acreage is computed by applying the following standards to the projected population for the project:

- 3.0 acres for neighborhood park purposes per 1,000 persons
- 1.1 acres for community park purposes per 1,000 persons
- 7.8 acres for open space, other park uses and trails per 1,000 persons

The resulting acreage required is as follows:

	821 Single Family Detached Homes
Neighborhood Park Land	6.53 acres
Community Park Land	2.39 acres
Open Space Land	16.97 acres
Total Land Dedication	25.89 acres

Response: Based on 810 homes, see below:

	810 Single Family Detached Homes
Neighborhood Park Land	**6.44 acres**
Community Park Land	**2.36 acres**
Open Space Land	**16.75 acres**

Total Land Dedication **25.55 acres**

Cash-in-Lieu Payment –
The Cash in Lieu payment is calculated based on the amount of acreage dedicated on site. Since your proposal does not yet specify the amount of land dedication on site, this number will be updated upon submittal of your development application.
Response: Noted.

As previously agreed within the *incomplete* FDP Amendment in 2017, the 210' wide utility corridor on the east side of your site directly adjacent to Harvest Mile Road will be accepted as open space land dedication.
Response: Noted.

Park Development Fees:
In accordance with Section 146-306 of City Code, Park Development Fees shall be collected by the city to cover the cost of constructing new park facilities to serve the needs of the projected population. These fees apply to the project because park facilities are not currently proposed to be provided on-site. Fees are based on the park land dedication acreages and an annual cost per acre for construction of park facilities. The fees, which are computed and collected on a per-unit basis, shall be paid at time of building permit issuance. The current per-unit fee of $1,848.88 would apply if permits for construction of the residential units are pulled in 2018, and the total paid under either scenario would be as follows:

821 Single Family Homes
$1,517,927.07

Response: Fees will need to be recalculated for 810 homes.

Design Criteria:
For all design criteria standards including minimum acreage, park development, as well as process and timing, please review the Parks Dedication and Development Criteria Manual.
As per this manual, the following design criteria are required for dedication:
-All *neighborhood* parks must be a minimum of 5.0 acres up to 15.0 acres.
-All *community* parks must be a minimum of 40 acres. As this site does not reasonably allow for a 40-acre community park on site, a cash-in-lieu payment will be required for this portion of land dedication.
-All *open space* corridors must be a minimum of 25' in width in order to accommodate the minimum 5' neighborhood connection with 10' of open space on both sides.
Response: Comment noted, thank you.

Aurora Public Schools:
Based on your proposal and the existing 2001 Framework Development Plan for this site, there is a proposed neighborhood park directly adjacent to a school site. Please ensure that you clearly identify these as separate parcels and acreages upon submittal. If you decide to utilize open space land dedication through a pocket park or other means on the school site, please ensure a written agreement with the school is submitted with your application.
Response: Comment noted, thank you.

PROS Requirements Caveat:
The monetary calculations presented herein are estimates based on park construction costs at this point in time (current year 2018). The timing for implementation of the project may affect the ultimate amount of fees collected and other payments imposed to satisfy park-related obligations. Furthermore, if aspects of your project change, such as the number of dwelling units proposed, the park land dedication requirements may also change.

Response: Comment noted, thank you.

Aurora Public Schools

There will be a cash-in-lieu of school land obligation for residential units platted within the Quaker Parcel of Murphy Creek East in accordance with the 2002 school land agreement (attached) and Section 147-48 of the Aurora City Code. The district previously received cash-in-lieu for 120 single family detached units that were platted in this section. These units will be credited on any future school land obligation. Aurora Public Schools requests that current fair market value of zoned land with infrastructure in place be determined in order to establish the value of cash-in-lieu of land.

Response: Noted.

Aurora Water

Aurora Water will receive a referral of the Site Plan and Subdivision Plat for review and comment. Please respond to all Water Department comments with your initial submittal.

***Key Issues**:*

► A Master Utility Study (MUS) will be needed for this project. There exists a Murphy Creek MUS, but it refers to this area as 'offsite' (CP#970005).

Response: The MUS referenced during the Pre-App meeting is not the latest study. The latest study was completed in 2001 (#COA 201064). A revision to this report has been submitted to the city.

► It is likely there will be significant offsite utilities required to serve this development, particularly with regards to the sanitary sewer. This must be addressed in the MUS.

Response: This has been addressed in the MUS.

► If utility lines need to cross the golf course, these will need to be bored.

Response: We have confirmed that the manholes and pipe crossing the golf course have been installed.

► A phasing plan will be required with the MUS.

Response: A phasing plan has been provided as part of the MUS.

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► All units must be individually served with water and sewer.

Response: All units will be individually served with water and sewer.

► Irrigation meters will be needed for any/all common areas and/or tracts.

Response: Irrigation meters will be provided for all common areas and tracts.

***Utility Services Available**:*

- Water service may be provided in accordance with an approved Master Utility Study.
- Sanitary sewer service may be provided in accordance with an approved Master Utility Study.
- The project is located on Map Page 13V.

Response: Noted.

***Utility Service Requirements**:*

- A Site Plan is required for this project and must show existing and proposed utilities including:

  - Public/Private Mains
  - Service Lines
  - Water Meters
  - Fire Suppression Lines
  - Fire Hydrants necessary to service your development
  - Grease Interceptors are required for commercial kitchens
  - Sand/Oil Interceptors are required for vehicle maintenance facilities
  - All utility connections in the arterial roadway are required to be bores.

- General utility design criteria can be found in Section 5 of the Standards and Specifications Regarding Water, Sanitary Sewer and Storm Drainage Infrastructure (Utility Manual).

Response: A Site Plan has been submitted showing the existing and proposed utilities listed above.

***Utility Development Fees**:*

- The Sanitary Sewer Interceptor and Storm Drainage Development fees are required prior to the recording of the Subdivision Plat or at the time of building permit approval if a Plat is not required.

Response: Noted.

- The Water Transmission Development Fee has been combined into the water connection fee and is required to be paid after issuance of building permit and prior to issuance of the Certificate of Occupancy.

Response: Noted.

- For a full listing of Utility Fees, please see the Aurora Water Fee Schedules below:

  - Platted After January 1, 2017

Response: Noted.

Public Works Department

Traffic Engineering will receive a referral of the Site Plan and Subdivision Plat for review and comment.

***Key Issues**:*
► A Master Traffic Impact Study is required for the overall project. A detailed or CSP level Traffic Impact Study is required with each CSP. See below for additional details.
Response: The November 19, 2018 Master Traffic Impact Study was submitted as part of the FDP application. It was submitted with the overall package and emailed directly to Brianna Medema.

► Consistent with the last revision of the Master Traffic Impact Study, roundabouts need to be considered for internal intersections of Warren Pl & Flatrock Trail, Yale Ave & Flatrock Trail. Mini roundabout need to be considered

at the north/south road paralleling Harvest Rd & east/west roads (unnamed & Warren Pl). Ensure CSP level Traffic Impact Studies include a review of the DRAFT Traffic Calming Toolbox items and make recommendations.
Response: Comment acknowledged.
► Signal Escrow will be required at multiple intersections, these will be identified through the traffic studies completed for the project. Funding of the escrow will be defined as the boundaries for each CSP are they are submitted.

- Show all adjacent and opposing access points on the Site Plan.

Response: All adjacent and opposing access points will be shown on the Site Plan.

- Label the access movements on the Site Plan.

Response: Access movements are depicted as required.

- Traffic identified concerns of potential driveways on street with higher than 4,000 ADT or Collector Streets. Refer to City of Aurora code Section 4.04.2.02 for additional information on homes on or adjacent to these streets.

Response: Noted.

- Objects and structures shall not impede vision within these sight triangles. Landscaping shall be restricted to less than 26-inches in the sight triangles. Show sight triangles on the site plan and landscaping plan at all access points in accordance with City of Aurora Standard Traffic **Detail TE-13** In addition, street trees shall be set back from Stop signs and other Regulatory signs as detailed in City of Aurora Standard Traffic Detail TE-13.3.

Response: Site triangles are shown on the Landscape Plan and objects/structures will only be allowed in accordance with city standards.

Add the following note landscape plans: 'All proposed landscaping within the sight triangle shall be in compliance with COA Roadway Specifications, Section 4.04.2.10'
Response: Noted Added.

ROW/Plat:

- ROW dedication is required for any additional future right turn lane(s) identified as part of the Master Traffic Impact Study and City of Aurora Traffic Engineer reviews.

Response: Noted.

- A traffic signal easement shall be required at the intersections identified as future Traffic Signals per the Master Traffic Impact Study and City of Aurora Traffic Engineer, to accommodate the proposed traffic signal pole, underground conduits, pull boxes and signal control cabinet.

Response: Noted.

Improvements:

- The developer is required to construct a left turn bay on at appropriate locations identified per the Master Traffic Impact Study and City of Aurora Traffic Engineer. Coordinate with the Parks Department for relocating/removing median landscaping.

Response: Noted.

- A deceleration lane may be required per the Master Traffic Impact Study and City of Aurora Traffic Engineer.

Response: Comment acknowledged.

- Show existing stop signs and street name signs or the installation of new stop signs and street name signs by developer at the site access points onto public streets. 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.

Response: Noted.

- Show the installation, by developer, "Right Turn Only"/"Do Not Enter" signs at appropriate locations. Signs shall be installed per the most current editions of The Manual on Uniform Traffic Control Devices (MUTCD) and City Standards.
  Response: Noted.

- 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. Add a note to the Site Plan indicating this commitment.
  Response: Noted.

- Based on the review of the Master Traffic Study and the Detail Traffic Study, certain intersections may be candidates for future traffic signal if and when signal warrants are met. As an adjacent land owner/developer, you must participate in the cost of the traffic signal installation. When the CSPs are planned out, there will be a requirement for the following note to be added to the appropriate Site Plan:
  Response: Noted.

  - **(Applicant/owner name, address, phone)** shall be responsible for payment of___ 25/50/100% of the traffic signalization costs for the intersection of___and____, if and when traffic signal warrants are satisfied. Traffic signal warrants to consider shall be as described in the most recently adopted version of Manual on Uniform Traffic Control Devices, as of the date or dates of any such warrant studies. For warrant purposes, the minor street approach traffic shall typically be comprised of all through and left-turn movement and 50% of right turn movements unless otherwise determined by the traffic engineer. **Pursuant to 147-37.5 of city code, the percentage of the traffic signalization costs identified above shall be paid to the city by the applicant / owner, to be held in escrow for such purpose, prior to the issuance of a building permit for the related development or as otherwise required by city code.** The percentage above will be applied to the entire traffic signalization cost as estimated at the time of the escrow deposit to calculate specific dollar funding requirement.
    Response: The note has been added to the Site Plan.

- The Master Traffic Impact Study will be required to be completed for the FDP which shall include addressing the following specific items:
  1) Existing, buildout and 2040 average daily traffic counts.

2) Provide ADTs on all roadways to support proposed cross sections / classifications
3) Provide proposed intersection configurations (signal, roundabouts, etc.) with LOS
4) Include detailed analysis of:
   a) All site access points
   b) Intersections of all non-alley roads
5) Signal Warrant Analyses of all external intersections where both roads have more than 4,000 ADT– Warrant 1,2,3 all to be included
6) If a traffic signal or multiway stop warrant is met at an intersection, then a roundabout shall also be analyzed at the intersection.
7) Analysis of pedestrian connectivity/ trail system /crossing locations.
8) Discussion of the application of elements from the DRAFT Traffic Calming Toolbox to address any concerns for speeding, pedestrian crossings, etc. Techniques in the DRAFT Traffic Calming Toolbox may include: Advanced Yield Lines, Enhanced Crosswalk, High-Visibility Signs and Markings, In-Street Pedestrian Crossing Signs, Enhanced Pedestrian Crossing Sign Devices (HAWK or RFB), Mid-Block Lane Narrowing, Curb Extension, Angled Parking, Pedestrian Safety Island, Staggered Pedestrian Safety Island, Lane Narrowing, Mini Roundabout, Speed Cushions and Chicane.

Response: Comment acknowledged.

The Traffic Study shall be prepared in accordance with the City of Aurora Traffic Impact Study Guidelines.

Submitting the Traffic Study:

- The Traffic Study shall be sent directly to *Brianna Medema* at bmedema@auroragov.org as soon as possible.
  Response: The November 19, 2018 Master Traffic Impact Study was submitted as part of the FDP application. It was submitted with the overall package and email directly to Brianna Medema.

- The Traffic Study shall also be uploaded with the rest of the submittal.
  Response: The November 19, 2018 Master Traffic Impact Study was submitted as part of the FDP application. It was submitted with the overall package and email directly to Brianna Medema.

- A Detail Traffic Impact Study will be required for each CSP which will include addressing the following specific items:
  1) Trip Generation from the site and conformance with Master Traffic Study
  2) Include detailed analysis of:
     a) All site access points
  3) Site Circulation Plan
  4) Intersections along major access routes to/from the site
  5) Signal Warrant Analyses of internal intersections– Warrant 1,2,3 all to be included
  6) Analysis of pedestrian connectivity/ trail system /crossing locations.
  7) Discussion of the application of elements from the DRAFT Traffic Calming Toolbox to address any concerns for speeding, pedestrian crossings, etc. Techniques in the DRAFT Traffic Calming Toolbox may include: Advanced Yield Lines, Enhanced Crosswalk, High-Visibility Signs and Markings, In-Street Pedestrian Crossing Signs, Enhanced Pedestrian Crossing Sign Devices (HAWK or RFB), Mid-Block Lane Narrowing, Curb Extension, Angled Parking,

Pedestrian Safety Island, Staggered Pedestrian Safety Island, Lane Narrowing, Mini Roundabout, Speed Cushions and Chicane.

Response: Comment acknowledged.

The Traffic Study shall be prepared in accordance with the City of Aurora Traffic Impact Study Guidelines.

Submitting the Traffic Study:

- The Traffic Study shall be sent directly to *Brianna Medema* at bmedema@auroragov.org as soon as possible.
- The Traffic Study shall also be uploaded with the rest of the submittal.

Response: The November 19, 2018 Master Traffic Impact Study was submitted as part of the FDP application. It was submitted with the overall package and email directly to Brianna Medema.

- Based on our review of the Traffic Impact Study(s), additional improvements may be required.
  Response: Comment acknowledged

Engineering Division

The Engineering Division reviews the drainage and public improvement components of your project plans. Engineering reviews referrals of the Site Plan and Subdivision Plat from the Planning Department.

Key Issues:

 An updated Public Improvements Plan (PIP) shall be included in the FDP Amendment. The PIP shall address the public improvements required with each planning area as well as addressing any necessary offsite improvements.
Response: A PIP has been submitted to the city.

 With the update to the FDP, a Master Drainage Study for Murphy Creek East shall be submitted with the FDP amendment. It shall be in conformance with the Master Drainage Study for the overall Murphy Creek Development. Each CSP shall require a preliminary drainage report in conformance with the Master Drainage Study. Public Improvements in each CSP need to correspond to the Public Improvements Plan.
Response: A Master Drainage Study has been submitted to the city for review.

Improvements:

Sections and details referenced in the Improvements section refer to the City's Roadway Design and Construction Specifications (Roadway Manual).

- Typical roadway sections are specified in the City Code and summarized in Section 4.08 with details shown in the Standard Detail S1.
  Response: Noted.

- Mountable curb and gutter shall be used on all Type 1 and 2 streets. All other streets, including those within the Urban Centers and TODs shall use 6" vertical curb and gutter.
  Response: Noted.

- Curb ramps must be shown (located) on the plans at all curb returns, "T" intersections, residential mail kiosks or clustered mailboxes, and any other location of public necessity. Refer to Standard Detail S9. Any street grades in excess of three percent will require detailed grading of the curb ramps.

Response: Noted.

- Flared curb cuts, Standard Detail S7.4, are not permitted for commercial/industrial or residential driveways where traffic movements would be substantial. When the number of parking spaces exceeds 20, curb returns are required and the curb return radii shall be labeled on the plan.
  Response: Noted.

- Retaining walls shown on plans shall indicate material type and a height range or indicate a maximum height. Where appropriate, guard or hand rails may be required.
  Response: Noted

- Homes and drives are allowed to front collector streets if the average daily traffic volume is less than 4,000 and certain mitigation measures are provided. Indicate the mitigation measures on the Site Plan. See Section 4.04.2.02.4 of the *Roadway Design & Construction Specifications,* October 2016 edition.
  Response: Noted.

- Homes are allowed to front a local street within 75-feet of an arterial street if the average daily traffic volume is less than 2,000 and certain mitigation measures are provided. Indicate the mitigation measures on the Site Plan/Contextual Site Plan. See Section 4.07.7.02.5.04 of the *Roadway Design & Construction Specifications,* October 2016 edition.
  Response: Noted.

- If gates are incorporated into the design of the development they are required to be setback from the street flow line a minimum of 35-feet or one truck length, whichever is greater.
  Response: Noted.

- Street lights are required along adjacent roadways. Street light spacing, location, wattage, etc., information is contained in Section 4.10. See Section 2.12 for Street Lighting Plan submittal requirements. Street lights along public right-of-way shall become City owned and maintained once they have been installed and the final acceptance letter for the lights has been issued. The street lighting plan shall be included with the Civil Plan submittal.
  Response: Noted.

- The street standards require the construction of an entry island where local streets intersect arterial streets as shown in Standard Detail S14. Show this island on the plan. The island shall be constructed and the interior of the island shall be maintained by the developer/owner/metro district. Add a note to the site plan and civil plans indicating this responsibility. A license agreement will be required for construction/maintenance of the island within the ROW.
  Response: No local streets intersect arterial streets.

ROW/Easements/Plat:

- ROW dedication is required for proposed streets.
  Response: ROW will be dedicated where necessary and in accordance with the previously approved development plans and latest Traffic Impact Study.

- The dedication of a 25-foot lot corner radius is required at the intersection of arterial streets, a 20-foot lot corner radius is required at the intersection of collector streets, and a 15-foot lot corner radius is required at the intersection of local streets.
  Response: Noted.

- Please coordinate with the Real Property Division of Public Works for the dedication of any required easements. If a plat will be prepared for this development, the plat can cover the required easements.

    - Sidewalk easements may be required for new sidewalk installed outside of existing public right of way.
      Response: Noted.

    - A drainage easement shall be required for any detention/water quality facilities on site.
      Response: Noted.

    - Utility easements shall be required for any proposed water/sanitary sewer/public storm sewer located outside of public right-of-way.
      Response: Noted.

    - Public access/fire lane easement shall be required for fire lanes outside of public right-of-way. Please coordinate with Life Safety for their alignment.
      Response: Noted.

Drainage:
Drainage design standards can be found in the City's "Storm Drainage Design and Technical Criteria".

- Per Section 138-367 of the Aurora Municipal Code, a Preliminary Drainage plan and report is required prior to Site Plan or Plat approval. A Preliminary Drainage Plan and Report shall be submitted at the time of Planning Department application submittal. A review fee shall be paid to the City prior to acceptance of the preliminary drainage report. Full spectrum detention is be required for this project.
  Response: A Preliminary Drainage Plan and Report has been submitted with the Development Application.

  Per conversations with COA Engineering, the exemption in SDDTC 3.64 is appropriate for this development. It states that the development may be exempt from the detention requirement if "Runoff from single-family developments which have five dwelling units per acre or less, discharge to an improved publicly dedicated storm drain facility, and result in no adverse impacts." Therefore, with improvements to East Murphy Creek, EURV will be acceptable for runoff storage.

- Under the provisions of Colorado Revised Statute 37-92-602(8), any detention or infiltration facility that becomes operational after August 5, 2015, is required to notify downstream water rights holders prior to operation. Urban Drainage and Flood Control District (UDFCD) has created a spreadsheet form (called *SDI Design Data*) for determining compliance with the statute and a web portal that will send a weekly e-mail notification to downstream water rights holders, satisfying the notification requirements. The developer will be responsible for having a professional engineer, licensed in the State of Colorado, complete the *SDI Design Data* and uploading to the web portal. Public Works Engineering will verify the information matches the final drainage report. Notification must be made before Civil Plans will be approved or Stormwater Permits will be issued.
  Response: The SDI Design Data form will be completed and uploaded if required.

- Detention of storm drainage is required for this site and shall be incorporated on the site, unless other accommodations are approved by the City Engineer.
  Response: See response above. Per conversations with COA Engineering, only EURV storage will be required.

- Release rate for the detention pond shall be based upon the "Storm Drainage Design and Technical Criteria" Manual, latest revision.

Response: Noted.

- Storm water from concentrated points of discharge from a minor storm event shall not be allowed to flow over sidewalks, but shall drain to the roadway by the use of sidewalk chase sections. Sidewalk chase sections shall not be located within a curb cut, driveway, curb ramp, or curb return.
  Response: Noted.

- A public storm sewer system appears to be located near this site. Please have your Engineer or Surveyor verify and tie your site drainage into it.
  Response: The proposed storm sewer facilities will tie in to existing infrastructure as practicable.

- Extend storm sewer through the site, including inlets, pipes, manholes, etc., as needed.
  Response: Noted.

Fire/Life Safety Comments - Building Division

The Building Division will receive a referral of the Site Plan and Subdivision Plat for review and comment. They will review these documents for Life Safety (Fire Code) and Building Code issues.

Response: Noted.

Addressing Requirements:

All buildings or structures, except accessory buildings, shall display the proper building number in the manner provided in this article. It shall be the responsibility of the owner, occupant or any person obtaining a building permit to place such number in the manner provided in the Aurora City Code of Ordinance, Chapter 126 - Article VII - Numbering of Buildings.

Response: Noted.

Adopted Codes by the City of Aurora – Setbacks:

The site plan and civil plans must reflect the setback requirements of the 2015 International Building and Fire Code for placement of the structure(s) in relation to adjacent buildings, property lines, public ways, accessible walkways, etc. To view the 2015 International Codes please utilize the following hyperlink; ICC Codes Online.

Response: Noted.

Civil Plans:

Based on the discussion within the pre-application meeting the following information must be reflected within the Civil Plan package submitted to Public Works Department.

- Dead-End Fire Lane Detail
- Fire Lane Sign Detail
- Grading Plan
- Handicap Accessible Parking Signs
- Sign Package

- Signature Block
- Street Standards and Street Section Details

Response: The information listed above will be reflected in the Civil Plans.

Fire Department Access:
Based on the information presented so far, the type(s) of fire apparatus access road(s) needed for this particular site is:

- Fire Lane Easement
- Motor Courts and Looped Lanes – 146-1108

Response: Access roads will be provided per code.

Fire Hydrants:
The number and spacing of fire hydrants are determined using the 2015 IFC, Appendix B & C.
- In single-family detached residential sites the IFC reflects an exception in Section 507.5.1 that allows IRC R-3 dwellings to utilize a 600' on center spacing of fire hydrants.

Response: Noted.

Fire Sprinkled Structures:
The requirements for the installation of a fire sprinkler system are provided within the Chapter 9 of the 2015 IFC and IBC.

General Comments:

- Our jurisdiction has amended the IFC through a city ordinance that removes the requirement for fire sprinkling R-3 Single-Family residences. During the pre-application meeting it was stated that these units would be IRC R-3 Occupancy. If this is changed to IBC R-2 occupancy, then a fire sprinkler system will be required for these units.
  Response: Noted.

Handicap Accessibility Requirements:
The City of Aurora enforces handicapped accessibility requirements based on 2015 IBC, Chapter 11, the 2009 ICC/ANSI A117.1 and the 2003 Colorado State House Bill 03-1221, Article 5, Standards for Accessible Housing.

- Residential
  Response: Noted.

Legend:
The cover sheet must include a "Site Plan Legend" reflecting both existing and/or proposed site elements that are existing or proposed within site.
Response: Noted.

Petroleum and Gas Line Easements:
Please review either 49 CFR part 195, Transportation of Hazardous Liquids by Pipeline criteria or 49 CFR part 192, Transportation of Natural and Other Gas by Pipeline criteria to determine minimum distance criteria of a pipe line proximity of any private dwelling, industrial building, or place of public assembly in which persons work, congregate, or assemble. You can also gain assistance by obtaining a letter from the petroleum or gas line easement owner indicating the minimum distance they would allow the buried gas line and easement line to the proposed exterior wall. Submit this letter with your site plan amendment planning documents for recordation.
Response: Minimum setbacks have been accounted for.

Phasing Plans:

A phasing plan must be provided with the Planning Departments Site Plan and the Public Works Departments Civil Plans submittals.
Response: There is no phasing within the individual site plans.

***Site Plan, Civil Plan, Framework and General Development Plan and Plat Notes**:*
The notes being provided below must be included on the cover sheet of the indicated submittal type.

- (Plat Note) If Plat does not contain a Dedicated Fire Lane Easement
- (Plat Note) If Plat Contains Fire Lane Easement
- (Site Plan Note) Accessibility Note for Multi-Family Projects Built under the 2015 IBC/IRC and HB-1221
- (Site Plan Note) Addressing
- (Site Plan Note) Aircraft Noise Reduction (LDN)
- (Site Plan Note) Americans with Disabilities Act
- (Site Plan Note) Emergency Ingress and Egress
- (Site Plan Note) Fire Lane Easements
- (Site Plan Note) Fire Lane Signs

Response: The applicable notes will be added to the appropriate cover sheet.

Photometric Plan: (Townhome area only)

- Add the following note to the Photometric Site Plan:

ILLUMINATION WITHIN THE SITE MUST COMPLY WITH THE 2015 INTERNATIONAL BUILDING CODE REQUIREMENT FROM SECTION 1006 - MEANS OF EGRESS ILLUMINATION. SECTION 1006. ILLUMINATION REQUIRED: THE MEANS OF EGRESS, INCLUDING THE EXIT DISCHARGE, SHALL BE ILLUMINATED AT ALL TIMES THE BUILDING IS OCCUPIED. SECTION 1006.2 ILLUMINATION LEVEL. THE MEANS OF EGRESS ILLUMINATION LEVEL SHALL NOT BE LESS THAN 1 FOOT-CANDLE (11 LUX) AT THE FLOOR LEVEL, AND CONTINUING TO THE "PUBLIC WAY".

Response: Comment noted, thank you. The photometric plan will be included with the second submittal.

- Add the “accessible route” (heavy dashed line) to the photometric plan and verify minimum 1 foot-candle of illumination along its entire length.
  Response: Comment noted, thank you.

***Site Plan Data Block**:*
The site plan must include a “Data Block” on the cover sheet that reflects all items indicated within the “link” that apply to your project.
Response: A data block will be added that reflects the necessary information.

Special Design Considerations:
Based on the information presented in the pre-application meeting, these additional Life Safety criteria must be shown on the site plan, plat and civil plans.

- Abutting Fire Lane or Public Access Easement to Property
  - If an existing fire lane has to be removed or relocated for any reason, the fire lane must be replaced using the current fire lane specifications of the Public Works Department
    Response: Noted.

- Access to within 150 feet of Each Structure
  - The fire code official is authorized to increase the dimension of 150 feet reach requirement where the building is fire sprinkled in accordance with the 2015 IFC, Section 503.1.1 where allowed by code. If granted approval, a fire sprinkled structures may utilize a 200 foot reach criteria in place of the 150 foot standard requirement.
    Response: Noted.

- Access Road Width with a Hydrant
- Fire Apparatus Access Road Specifications
- Combined Fire Lane, Public Access and Utility Easements
- Construction of Fire Lane Easements and Emergency Access Easement
- Cul-De-Sac's
- Dead-end Fire Apparatus Access Roadways
- Dead-End Public Streets
- Encroachment into Emergency Access or Fire Lane Easements are Prohibited
- Grade
- Labeling of Easements on the Site Plan, Plat and Civil Plans
- Motor Courts - Where motor Courts and Looped Lanes are utilized please provide a dedicated Fire Lane Easement within the required width of each drive aisle (23' for Motor Courts and 18' for Looped Lanes) as depicted in Aurora Building and Zoning Code, Section 146-1108.
- No Parking is allowed within a Fire Lane Easement
- Private Streets Constructed to Public Street Standards
- Pocket Utility Easements for Fire Hydrants
- Public Street Systems Adjacent to Site
- Remoteness
- Speed Bumps
- Snow Removal Storage Areas
- Two points of Emergency Access
- Width and Turning Radius

Response: Noted.

Trash Enclosure:
Per the 2015 International Fire Code, Section 304.3.3, dumpsters and containers with an individual capacity of 1.5 cubic yards or more shall not be stored in buildings or placed within 5 feet of combustible walls, openings or combustible roof eave lines.
Response: Noted.

Real Property Division
The Real Property Division reviews the Site Plan and processes Subdivision Plats, Easements and License Agreements that may be necessary for development of property.

Key Issue:
► The developer must secure the right of way on behalf of the city for street right-of-way as it crosses Public Service Company property. Please contact Public Service Company as soon as possible to start this process.
Response: Noted.

Subdivision Plats:
- The property is currently platted but because of what you propose to do, it will need to be resubdivided (replatted) at this time in order to obtain a building permit. Plats must be prepared using City of Aurora

Response: Noted.

- A **pre-submittal meeting** with Real Property is required on all plat submittals so that we can make sure the basic elements have been addressed before they are submitted to Planning. This 30 minute meeting is for the 1st submittal of plats only and is by appointment only. Call *Darren Akrie* at 303.739.7300 to schedule your appointment. The person preparing the plat and your project manager should attend and bring two sets of the plat.
  Response: Noted.

***Site Plans**:*
A site plan will be required by the Planning Department. Real Property has items that need to appear on that site plan above and beyond what other departments may require. These items are listed on the Real Property Site Plan Checklist.
Response: The items on the checklist will be added to the site plan.

***Separate Documents**:*

- A separate document refers to a process to describe and record an encumbrance (easement, license etc.) or release of such on property when a subdivision plat already exists. The document usually consists of a legal description and drawing. Each are reviewed and approved by the City, signed by the property owner as well as the appropriate City officials and recorded with the County.
  Response: Noted.

- During the Pre-application meeting no requirement for separate documents were specifically identified for your site as proposed. However, review of your actual Site Plan when submitted may identify additional conditions that may require a separate document. Following are the links to additional information if needed later in your formal review process:

  – Dedications Packet
  – Easement Release
  – License Agreement Packet

  Response: Noted.

- **Off-site easement dedications** may be required in order to make your project work. It's up to the developer to obtain these easements for the City, pay compensation, etc. Dedication documents must be prepared using Real Property specifications which can be found in the Dedication Packet. Once complete and accurate easement dedication information is submitted to Real Property, it takes about 4-6 weeks to complete the process. They must be complete and ready to record before Real Property will record the plat and/or site plan.
  Response: The appropriate dedication documents will be submitted for off-site easements.

- If there are existing easements that are no longer needed, the City will require the developer to make application to the City to release those easements. Easement release documents must be prepared using Real Property specifications and are available in the Easement Release Packet. Once complete and accurate easement release information is submitted to Real Property, it takes about 4-6 weeks to complete the process. They must be complete and ready to record before Real Property will record the plat and/or site plan.
  Response: Easement release documents will be submitted as required.

- You may have items that encroach into city-owned property or easements (i.e. retaining walls, medians, stairs, etc.) If allowed, these types of encroachments require a **License Agreement**. Requirements can be found in the License Agreement Packet. It takes 4-6 weeks to complete the process after submittal. The License Agreement must be completed before the site plan is recorded.
  Response: A License Agreement will be submitted if required.

- There is an existing street right-of-way that needs to be vacated. **Street vacations** must go to City Council via ordinance. The process begins with the owner making application to the Planning Department. As part of that application, Real Property will need a legal description and exhibit for the portion of the street being vacated prepared to our specifications. The specifications on how to prepare the legal description and exhibit are available in the Dedications Packet.
  Response: Street vacation documents will be prepared as required. The project team will coordinate with the project planner and staff from Real Property regarding the submittal process for the Street vacation.