



STAFF REPORT

To: University Heights Zoning

Prepared by: MPOJC Staff

Date: July 28, 2017

GENERAL INFORMATION:

Applicant: University Lake Partners II, LLC (ULP II)
340 Herky Street
North Liberty, IA 52317

Property Owners: Michael Flaum
901 Melrose Avenue
Iowa City, IA 52246

University Lake Partners II, LLC
905 Melrose Avenue
Iowa City, IA 52246

Kinnick Yacht Club LLC
909 Melrose Avenue
Iowa City, IA 52246

Requested Action: Rezone 901, a portion of 905 and 909
Melrose Avenue from Single-Family
Residential (R-1) to Planned Unit
Development (PUD)

Purpose: To allow for a hotel consisting of 140 rooms

Location: 901, 905 and 909 Melrose Avenue

Size: 901 Melrose Ave - 3.75 Acres (163,350 S.F.)
905 Melrose Ave - 0.233 Acres (10,187 S.F.)
909 Melrose Ave - 0.232 Acres (10,136 S.F.)

Existing Land Use and Zoning: 901 Melrose Avenue - One residential house,
barn, shed with arbor & tennis court

905 and 909 Melrose Avenue – One
residential house on each lot

	All lots currently zoned; Single-Family Residential (R-1)
Surrounding Land Use and Zoning:	North: Commercial & Professional Offices; Business (B) South: Apartments located in Iowa City; Medium Density Single-Family Residential (OPD8) East: Iowa Interstate Railroad West: Single-Family Residential Homes; (R1)
Requested Zoning:	Planned Unit Development

INTRODUCTION:

This report was created by the Metropolitan Planning Organization of Johnson County (MPOJC) planning Staff at the request of the City of University Heights. This report is intended to provide general guidance to the City during review of the Planned Unit Development (PUD) submittal (dated June 4, 2017) for 901 Melrose Avenue.¹

What is a Planned Unit Development? According to University Heights Ordinances, the PUD zone is intended to accommodate projects for which the specific design of individual buildings and elements may be determined. Development may occur provided that it is consistent with the overall design and development elements reviewed and approved by the University Heights City Council.

According to the City's Comprehensive Plan (amended May 2010), PUD's should be used to: provide flexibility in the design of buildings, encourage the preservation of natural features, promote energy efficiency, provide attractive living environments, and encourage infill development.

BACKGROUND INFORMATION:

The City of University Heights received a Planned Unit Development submittal from University Lake Partners II, LLC (ULP II) with interest in developing the property at 901 Melrose Avenue and neighboring properties, which would provide access. The applicant has been communicating with the City since November 2016 and wishes to redevelop the property for the use of a five-story hotel, *by Marriott International, Inc.*, consisting of 140 hotel rooms. The applicant is requesting the property be rezoned from Single-Family Residential (R-1) to PUD.

901 Melrose Avenue is approximately 3.75 acres and currently contains one principal house, a barn, a shed with arbor and a tennis court. The remainder of the property exists as undeveloped land. This property is currently under contract with ULP II. ULP II owns 905 Melrose Avenue and a 22-foot wide gravel path adjacent to 901 Melrose Avenue. The property at 909 Melrose Avenue is also under contract with ULP II and will serve as the access to the proposed development.

901 Melrose Avenue abuts the Iowa Interstate Railroad to the east, medium-density apartments to the south, single-family residential homes to the west, and commercial and professional offices to the north. The medium-density apartments to the south are located in the Iowa City (901 Melrose

¹ The proposed development also concerns a portion of 905 Melrose Avenue and 909 Melrose Avenue. These additional properties comprise access areas for the proposed hotel at 901 Melrose Avenue. Unless otherwise noted, references to "the subject property" or similar designations in this report refer to 901 Melrose Avenue.

Avenue forms a portion of the south corporate boundary (City limits) of University Heights.

The applicant held a good neighbor meeting on March 2, 2017, to discuss the proposed development with residents of University Heights.

ANALYSIS:

Comprehensive Plan: University Heights predominately comprises single-family homes (approximately 91%, 2010). The Comprehensive Plan states that with redevelopment, it is important that the community retains its sense of place.

Amendments to the Plan were adopted in May 2010 and included a set of criteria that should be considered by the City Council and Zoning Commission when considering any rezoning or Planned Unit Development proposal. With few parcels prime for redevelopment, it's important that the City consider this PUD in the context of the criteria listed below:

- Land-use and general site layout
- Building materials and design
- Building mass and scale
- Lot density
- Streetscaping
- Environmental issues
- Transportation issues and traffic generation
- Negative externalities such as, noise, lighting, signage, and business hours of operation
- Utility provisions
- Fire and police protection

There are currently three Planned Unit Developments (PUDs) in University Heights. These consist of Birkdale Court, a 1.6-acre development of semi-detached single-family units, Grandview Court, a 5.6-acre multiple-family complex; and One University Place, a 6.5-acre neighborhood commercial and multiple-family residential development.

Zoning: The subject property is currently zoned Single-Family Residential (R-1) according to the City's Zoning Ordinance, Ordinance 79. The applicant is requesting the property be rezoned to Planned Unit Development (PUD) to accommodate a five-story hotel with a building footprint of 19,749.47 S.F. The building will consist of 140 hotel rooms, a lobby space, a bistro, meeting space and a fitness center. For reference, the building footprint is approximately 3,000 S.F. smaller than the north building for One University Place and approximately 3,750 S.F. larger than the south building.

Number of Rooms: The applicant has proposed a five-story hotel to accommodate 140 hotel rooms. As hotel rooms are not defined in the existing Ordinance 79, the maximum number of hotel rooms in this PUD zone will need to be defined by the City.

Setbacks: The applicant provided the front, rear and side building setbacks as follows:

- Front Setback – 415 feet from Melrose Avenue to the building
- Rear Setback – 50.6 feet from the south property line to the building
- Side Setbacks – 76 feet from the west property line to the building and 51 feet from the east property line to the building

According to Ordinance 79, "Front Setback" identifies the area between the front lot line adjacent to the street right-of-way and the Front Setback Line, whereas the applicant's measurement for the front setback was measured from Melrose Avenue to the proposed building. That said, the initial setback measurements appear reasonable when compared to the minimum setbacks for all

zones, including existing PUD Zones, as set forth in Ordinance 79. While these setbacks appear reasonable, the front setback is much greater when compared to the setbacks of surrounding land uses, as the property does not have typical street frontage. The City will have to determine if the proposed building setbacks for the PUD are acceptable and what (if any) parking setbacks will be required.

Building Height: As submitted, the proposed maximum building height is 65 feet. This is 30 feet taller than the maximum Structure Height (35 feet) and 35 feet taller than the maximum Building Height (30 feet) in University Heights. Per Ordinance 79, Section 7, "Building Height means the vertical distance from grade to the roofline"; "Structure Height means the vertical distance from grade to ridge". Ordinance 79 further defines "Grade", "Roofline", and "Ridge", among other terms.

For comparison, the proposed building height is 27 feet taller than the front building at One University Place and 4 feet taller than the rear building. The front building, as measured, is approximately 200 feet from adjacent residences to the west and approximately 175 feet from the closest residences to the east.

Building Coverage: The building coverage is approximately 12% (19,749.47 S.F. building footprint / 163,350 S.F. property area of 901 Melrose Avenue). For reference, as defined in Ordinance 209, the maximum building coverage for Single-Family Residential, Business, and Commercial zones is 40%.²

Unencumbered Space: The applicant has noted that 28,233 S.F. of the property will not be encumbered by buildings, parking areas, or walkways. This area will be maintained as green space consisting of grass, trees, shrubs, or other living vegetation. This equates to approximately 17% of the property.

Parking: The applicant has proposed both 154 and 156 surface parking spaces for this development. The existing Zoning Ordinance does not address hotel parking but the number of spaces does meet the industry standard which is a 1:1 ratio of hotel rooms to parking spaces. The City will need to determine the appropriate number of parking spaces to accommodate hotel patrons and employees.

Staff recommends the City require a permit parking system to regulate parking onsite. For example, parking permit hang tags could be issued to hotel guests to easily identify authorized versus unauthorized vehicles. A permit parking system is intended to help control commuter or sporting event parking, which could otherwise limit available parking for patrons.

Proposed Rezoning: Hospitality businesses, such as hotels, are principally allowed in commercial zones in both Iowa City and Coralville. We recommend the City further discuss the proposed rezoning to determine which zone would be the most appropriate to accommodate the proposed development.

Likewise, we recommend the City and the applicant discuss the possibility of rezoning the property at 909 Melrose Avenue as well as the portion of 905 Melrose Avenue involved in the proposed development to match the zoning at 901 Melrose Avenue, forming an assemblage to create one parcel, or rezoning a portion of 909 Melrose Avenue as public to accommodate the proposed parkland. As 905 and 909 Melrose Avenue will serve primarily as an access point and secondarily as City parkland, a rezoning will allow for consistency and prohibit other conflicting

² Proposed Ordinance 209 has been considered by the Zoning Commission and forwarded to the City Council with a recommendation for approval. The Council has not yet adopted the Ordinance, but the applicant has indicated to the Zoning Commission that they intend to abide by this and several other proposed Ordinances.

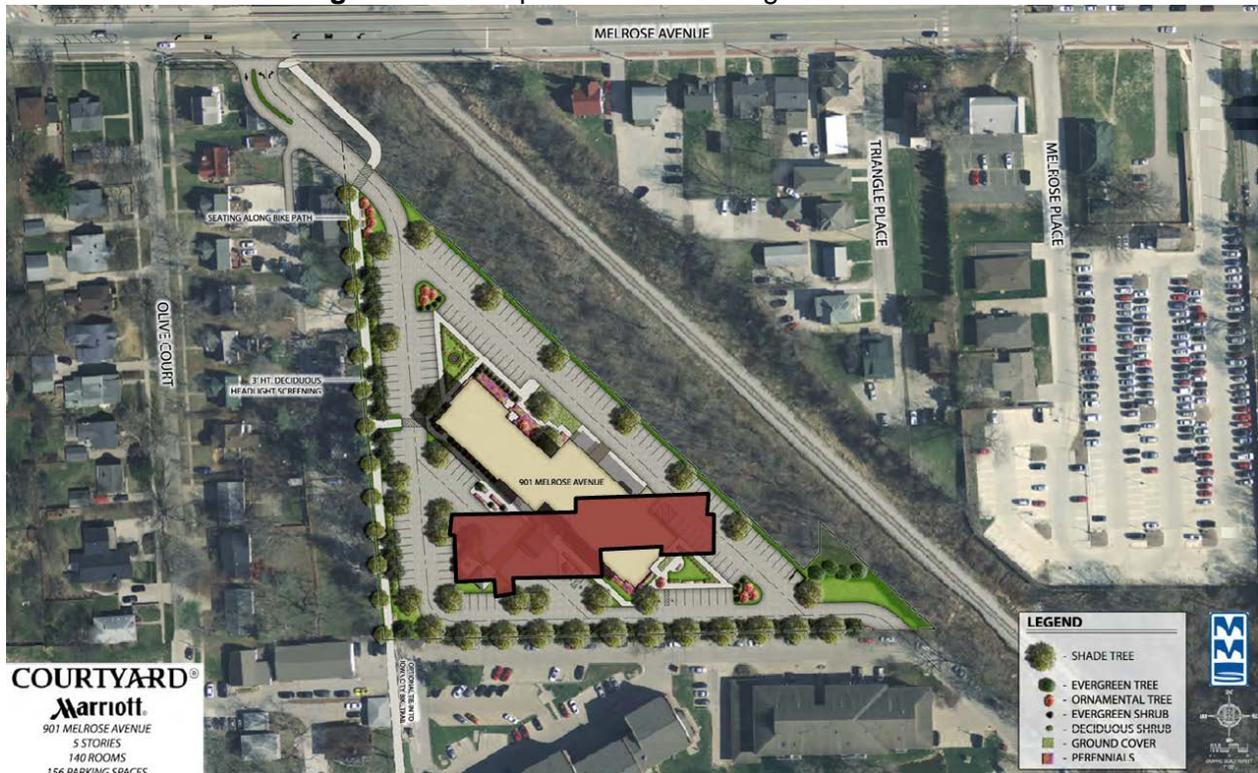
uses in the future.

Should this 'upzoning' occur on the subject property, the City should take advantage of establishing a 'Conditional Zoning Agreement' (CZA) with the developer. CZA's can be established to ensure that the City's desires in terms of appropriate screening, site development, building materials, and other factors are met. A CZA should only be used to articulate criteria for factors directly attributable to the development.

Land Use and General Layout: The orientation and general layout of the proposed hotel should minimize any aspect of development that would place an undue burden on the existing developed residential neighborhood. Such issues could be related to noise, light, traffic, safety, or otherwise.

The proposed building is situated to the south side of the property, oriented parallel with the east property line, with the hotel entrance facing single-family residential properties to the west. This orientation may create unnecessary negative externalities, such as noise and light, for the single-family residences on Olive Court. The City and the applicant should discuss reorienting the building so that the back of the hotel is facing the medium-density apartments to the south and the front is facing Melrose Avenue. The proposed use of the property is similar to the medium-density apartments to the south in that it has a comparable physical characteristic (multiple-story building, large parking lot, etc.). Reorienting the hotel in this way would improve the presentation of the entrance and may reduce some of the negative externalities associated with a hotel entrance experienced by the single-family residences to the west. For reference, Staff reoriented the building to scale on the concept plan as shown in **Figure 1**. With this configuration, a continuous access along the eastern property line would not be available and the site layout (landscaping, parking stalls, etc.) would need to be reconfigured.

Figure 1: Concept Plan with building reorientation



As there is no grading plan, it is unclear what the grades and elevations would be of the proposed building and surrounding parking areas. According to the existing conditions drawing,

there is more than 20-feet of vertical difference across the site, and 10 to 12-feet of vertical difference from one end of the proposed building footprint to the other. Conceptually, if the intent is to have level parking lot areas surrounding the building similar to the sample hotel images provided, then there will be need for retaining walls to be built on several sides of the proposed site to make up this elevation difference. As currently configured, these walls would have to be constructed along the perimeter of the property. The likely presence of retaining walls could significantly impact the layout on the site, as well as the ability to plant or retain trees around the perimeter as is currently shown on the site plan.

The current location identified for pedestrians and bicyclists to cross the access road, as shown on the concept plan, should be designed to provide a safe, comfortable environment for pedestrians and bicyclists. Important elements include advanced pedestrian crossing signage, pavement markings, and/or a raised crosswalk. Staff recommends that the City require these elements in PUD documents.³

The property located at 909 Melrose Avenue is under contract with ULP II and is necessary to provide an adequate access to the proposed development. A public access easement will need to be obtained as this road is the only entrance/exit onto Melrose Avenue for the properties just west of 901 Melrose Avenue and to the garages of homes on Olive Court. Similarly, if a portion of 905 Melrose Avenue, which is owned by ULP II, is necessary to provide adequate access, a public access easement should also be required.

Building Materials and Design: As the applicant has not provided information regarding building materials and composition for the primary structure, we are unable to determine their compatibility with the surrounding land uses. Perimeter fences are not proposed as a part of this development, although Staff recommends the City consider requiring the installation of a six-foot privacy fence, at minimum, along the west and south property lines. In addition to the fence, the City should discuss whether equivalent vegetation screening will be required.

University Heights will want to request a set of detailed landscape plans as the proposed development is finalized to ensure that adequate landscaping is provided around the proposed development to buffer the surrounding neighborhood and help mitigate externalities such as noise and light.

The City should discuss whether the architectural features and general building design of the proposed structure are acceptable for the location. Aspects of the building design to consider include the location of the doorways, the number and size of the windows, the roof line, and building articulation, awnings, and other exterior elements of the building. The City should request to see examples of the building materials for all structures before finalizing and approving the final PUD documents. As outlined in the City's Comprehensive Plan, these materials should be compatible with the surrounding community. The applicant notes that both City and community input would be welcomed regarding the type of building materials and design.

Regarding energy efficiency, information provided by the applicant specifies that the hotel will be 40-50% more efficient than comparable hotels. We recommend the applicant further quantify this information in order for the City to fully comprehend this efficiency. As the Comprehensive Plan encourages energy-efficient construction when possible, we recommend the City discuss what LEED principles may be recommended or required as part of the PUD documents.

³ Staff anticipates the PUD documents will include a developer's agreement and may include others (for example, easements, restrictive covenants, etc.)

Building Mass and Scale: The mass and scale of a building are important determining factors of how a building will blend in with the surrounding neighborhood. Tall buildings can appear to loom over the surrounding neighborhood due to their bulk. This effect can be mitigated through the use of design strategies such as those shown for One University Place that attempt to break up the mass by using setbacks, offsets, and other methods to articulate both the horizontal and vertical planes of the building.

The proposed front setback of the building will decrease the perceived mass of the building and provide more continuity with the surrounding neighborhood. That being said, with a height of 65 feet, the top two or three stories of the building will likely be visible from surrounding residences. The City should consider what scale of building is appropriate for this site given the height, character, and setback of the building. It may be helpful for the applicant to produce computer-generated simulations of how the proposed buildings may appear from north, south, east and west so the City can grasp the scale and bulk of the building in the proposed setting. For instance, if the building is obscured by tall trees that are preserved during the development process, the building may not be as visible from the adjacent properties as it would be if these trees were removed.

Streetscaping: The perimeter of the site is an important element to consider in that it serves as the transition from the proposed development to the existing neighborhood. Although the proposed building has generous setbacks, elements like signage, benches, bike racks, lighting, stamped or colored walkways and extensive landscaping will contribute to the overall appearance of the development and establish a clear transition between the commercial use and surrounding residential properties.

Although the applicant has provided a concept illustration, the City should request additional details on street furniture and landscaping plans.

Environmentally Sensitive Areas including Slopes and Drainage: Proposed environmentally sensitive areas Ordinance 212 regulates the development of properties containing environmentally sensitive areas such as slopes, woodlands, and wetlands/stream corridors. According to the Ordinance, a Level II sensitive areas review is required in order to evaluate the development's potential impacts to the protected slopes on the Iowa Interstate Railroad property to the east, and due to the proposed removal of woodlands on the subject property.

Steep Slopes: Ordinance 212 states all slopes over 18% in an effort to promote safety in the design and construction of developments; minimize flooding, landslides and mudslides; minimize soil instability, erosion, and downstream siltation; and preserve the scenic character of hillside areas, particularly wooded hillsides.

Although there are no protected slopes identified on the subject property, protected slopes are located adjacent to the subject property in the Iowa Interstate Railroad right-of-way. According to Ordinance 212, a two foot buffer between the construction limits and the top of the slope must be provided for each foot of any such slope's vertical rise -- 8' at minimum and 50' at maximum. The protected slopes buffer and the construction limits/areas are not currently indicated on the sensitive areas plan; therefore it is unclear whether this requirement is met.

Woodlands: As stated in Ordinance 212, the purpose of regulating development in and around woodlands is to reduce damage to woodlands, regulated slopes, and municipally regulated stream corridors; reduce erosion and siltation; minimize destruction of wildlife habitat; and encourage subdivision and site plan design that incorporate woodlands as amenities within a development.

The subject property includes .81 acres (35,296 S.F.) of woodlands comprising walnut, elm, mulberry, hackberry, and ash trees. The site plan indicates that the majority of trees will be removed except for a row along the west property line, which will be retained to provide a buffer between the proposed development and the adjacent residential properties. Construction limit lines must be established at least 8' beyond the designated critical root zone for all trees located within the parts of the woodlands to be retained. Neither the construction limits nor the critical root zones are indicated on the site plan. Therefore it is not clear if this requirement is met. It appears as if the proposed trail and parking lot may fall within the critical root zone along the western edge of the subject property.

The applicants have indicated that 176 native trees would be required to replace the trees slated for removal, which is in accordance with Ordinance 212. 65 trees will be located on site and the remainder must be planted on publicly owned property or property subject to a conservation easement as directed by the City Tree Board or its designee.

Potential Wetlands: The applicant has included the location of potential wetlands on the environmentally sensitive areas site plan. All potential wetlands indicated on the site plan are less than 1/10th an acre in size and therefore not regulated under Ordinance 212.

Grading and Erosion Control: Proposed grading and erosion control plans have not been provided and it is unclear how the storm water management will be handled. The City Engineer will want to review the applicant's storm water management plans to ensure the storm water management system meets the City's Stormwater management ordinances.

Soils: The applicant will need to ensure the development plan considers the topography and soils of the site to achieve the lowest potential for erosion. The City Engineer will want to review the design of the proposed development as it must comply with the standards and City Ordinances for erosion and sediment control in order to protect adjoining or surrounding properties.

Community Parkland or Fees in Lieu: University Heights' Ordinance 191 establishes requirements and procedures for development entities to ensure that in, or within reasonable proximity to new developments, there will be sufficient park and recreation areas. The Zoning Ordinance specifies that for any rezoning of land that would increase density, the minimum amount dedicated for park, recreational, or open space shall be one-half of an acre for every one hundred (100) dwelling units OR cash payment in lieu of such dedication. Furthermore, no land dedicated shall have dimensions smaller than 150 feet in width and 200 feet in depth.

University Heights Ordinance 191 does not include a minimum parkland requirement based on hotel rooms. As the only unit of measurement is a dwelling unit, it is unclear if 1 dwelling unit should be equal to 1 hotel room. Furthermore, the proposed dedicated parkland has not been clearly shown on the face of a PUD Application submitted by ULP II.

As proposed, the applicant intends to dedicate a trail (11,950 S. F.) to the west of 901 Melrose Avenue and a portion of 909 Melrose Avenue (7,001 S. F.) toward the parkland requirement. The total proposed dedication equals 18,951 S.F. (contrary to 18,952 S.F. as listed by the applicant). If 1 dwelling unit is equal to 1 hotel room, the proposed dedication is 11,540 S.F. less than the required dedication of 30,492 S.F. In addition, neither portion of dedicated land meets the required dimensions of 150 feet in width by 200 feet in depth.

The City will need to further define the parkland requirement for the PUD to determine compliance with Ordinance 191. Once the amount of parkland to be dedicated is determined, the following items will need to be considered by the City:

- Will the City allow the trail (11,950 S.F.) and the portion of 909 Melrose Avenue (7,001 S.F.) to be dedicated toward the parkland requirement even though they are smaller than the specified

minimum dimensions?

- As it exists today, the proposed trail would need to be built south of this property to connect to a wide sidewalk that serves Marietta Avenue. The applicant will need to contact all affected parties to ensure they wish to have the trail connection completed.
- If the City will not allow one or both of the proposed dedications, the City shall request cash to be paid in lieu of the parkland dedication. A market analysis may be needed to determine the fair market value of the area of the land that would be required for dedication (whether 18,951 S.F. as shown in the application, 30,492 S.F. if 1 hotel room equals 1 “dwelling unit”, or some other amount).

Transportation Issues and Traffic Circulation: Melrose Avenue (near the subject property) experienced an Average Daily Traffic (ADT) of 11,800 vehicles per day in 2014 (Iowa DOT). In 2014, the same section of Melrose Avenue operated at a level-of-service (LOS) ‘D’ during peak travel periods. A LOS of ‘D’ during peak periods is considered somewhat congested, but not in need of additional capacity (2017 MPOJC Long Range Transportation Plan). In addition, it is not uncommon for intersections in the urbanized area to operate at a LOS of E/F for short periods during peak hours. Also worthy of note is that there has been a general downward trend in Average Daily Traffic (ADT) figures on Melrose Avenue since 2006 as shown in **Table 1**.

Table 1: Average Daily Traffic (ADT) Figures Iowa DOT

	1998	2002	2006	2010	2014
At Birkdale	10,600	14,400	13,800	13,000	12,800
Before Sunset			13,500		12,900
Sunset to Koser			15,500	11,100	11,400
After Koser			11,200		11,800

Produced by Pat Bauer; source: <http://www.university-heights.org>

Based on information provided in the PUD materials, the amount of traffic generated by the proposed development could exceed 1,100 vehicles per day. This number is based on the assumption that the development will include a 140 room hotel with typical amenities (open lobby space, fitness room, small cafeteria/bistro, and meeting room). During AM and PM Peak travel hours, the development is expected to generate 78 and 83 trips respectively. The current residential land uses (properties just west of 901 Melrose Avenue and the garages of homes on the east side of Olive Court) produce approximately 20 vehicle trips during peak hours.

For comparison, the One University Place Development is estimated to generate a similar volume of vehicle trips per day, but much higher peak hour volumes (5/23/14 One University Place – Updated Traffic Analysis). As illustrated in **Table 2**, the residential and commercial land uses in the One University Place development produce much higher peak hour traffic volumes than the proposed hotel. Hotels (generally) are not peak hour generators and have a more balanced trip generation throughout the day.

Table 2: Peak Hour Trip Generation Comparison
One University Place & University Lake Partners PUD

Development	Peak AM Trips	Peak PM Trips	Total
One University Place	210	236	446
University Lake Partners	78	83	161

Staff also believes that the peak hour trips estimated for the proposed development are likely on the high-end given that no discount was applied for those patrons who may choose to walk to the hospital, sporting events, or other nearby destinations. Although difficult to predict, it seems likely that the location of the hotel will cater to individuals seeking these destinations and may reduce the overall estimated daily trip generation for the proposed development. The

estimates may also be inflated given that a discount was not applied for employees and delivery vehicles, which will access the property using the south 'keyed' entrance as described in the PUD Application. Since the rear entrance has not been approved by the City of Iowa City, Staff did not allocate 'trips' to the proposed access.

As indicated in the *Preliminary Trip Generation & Traffic Impact Analysis* completed by the Metropolitan Planning Organization of Johnson County (MPOJC) dated June 29, 2017 (**Attachment 1**), Staff does not expect the additional traffic generated from the proposed development to have a major impact on overall traffic operations in the study area. The analysis further shows that it does not appear that the traffic utilizing the new development would experience undue delays entering/exiting the property.

At the June 29 University Heights Zoning Commission meeting, several questions were raised related to the timing of the data collection used in the preliminary study – specifically the data for the 'gap study' were collected during summer break for the University of Iowa and Iowa City public schools. While true, after comparing the counts that were taken while schools (UI and ICCSD) were in session versus those taken when schools were not in session, this yields only an approximate 2% difference in the AM peak volumes and a 7-14% difference in the PM peak volumes in terms of absolute vehicle numbers. The data collection locations and dates are as follows:

- Koser - Data collected February 2016 (PM) and November 2016 (AM) (school in session)
- Olive - Data collected June 2017 (school not in session)
- Evashevski - Data collected June 2017 (school not in session)
- Hawkins - Data collected April 2016 (PM) and March 2017 (AM) (school in session)
- Gap Analysis at PUD Access – Data collected June 2017 (school not in session)

Further, the gap study is only one tool to gauge the overall experience at an intersection. Our traffic modeling software used in the preliminary analysis also takes into account the through (conflicting) movements on Melrose Avenue and shows that northbound traffic exiting the proposed development will experience a level-of-service (LOS) E during peak hours when turning left (**Attachment 1 – Table 8**). A LOS E during peak hours is not at all unusual for the urbanized area and would likely not cause undue delay for northbound traffic exiting the proposed development. In fact, when looking at the Evashevski Drive and Melrose Avenue intersection (southwest corner of Kinnick Stadium), southbound left-turns currently experience a LOS F (**Attachment 1 – Table 9**).

LOS describes operating conditions based on a number of factors including speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. LOS is measured in average delay per vehicle (in seconds), and ranges from letters A-F – LOS A being the best operating conditions and LOS F representing the worst conditions with extreme congestion and stop-and-go conditions.

Turn Lanes: As proposed in the PUD submittal, Staff agrees that a shared left-turn lane for westbound traffic at the main entrance is necessary. This turn-lane will remove turning traffic from the through travel lane and minimize delay to westbound through motorists.

The turn lane on Melrose Avenue as proposed in the concept plan (**Figure 2**) only shows a left-turn lane for the proposed development and appears to have removed the existing left-turn lane for Evashevski Drive which is not suitable. As the Evashevski Drive and Melrose Avenue intersection is in Iowa City, the City of University Heights does not have authority to alter the center left-turn lane and the applicant has not submitted documentation from Iowa City indicating authorization for this configuration. The left-turn lane for the proposed development should be developed as a 'shared' left-turn as it is currently striped. The concept also appears

to include a westbound left-turn lane at Olive Court and dedicated bike lanes on Melrose as recommended in the Melrose Avenue Streetscape Improvement Plan which should be viewed favorably. The applicant is proposing a full-service access where left and right turning movements into and out-of the development are permitted. The final design and specifications for the access will need to be reviewed and approved by the City Engineer.

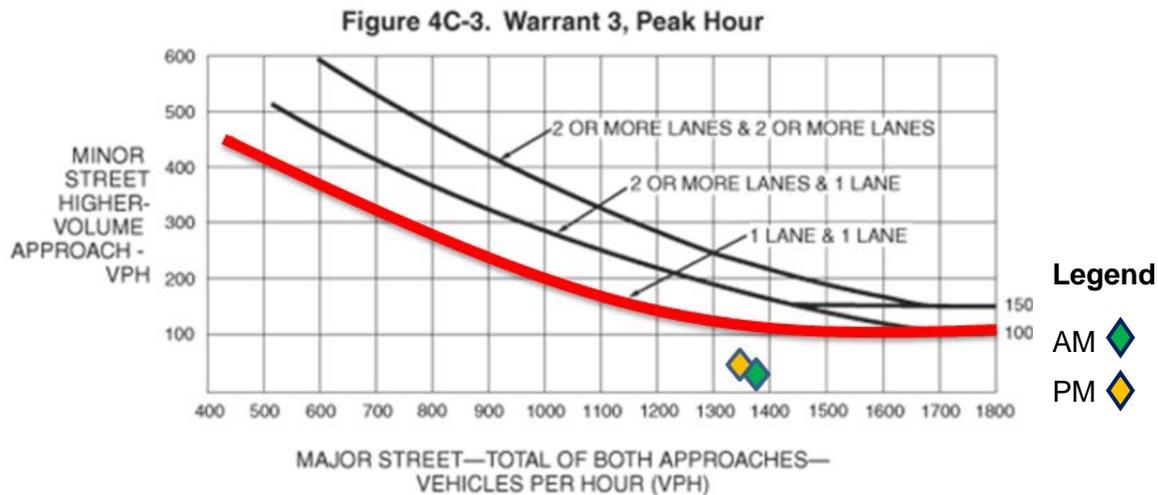
Figure 2: Hotel Concept Plan



Access Points: The submittal indicates that a rear access at the southeast corner of the property will be used for emergency access, employees, grounds-keepers, garbage collection, deliveries and other service vehicles. The access would ultimately connect with Woodside Drive via a portion of private property. Easements for the public access will need to be obtained from the property owner and properly recorded. Since Woodside Drive is located in Iowa City, the applicant will need to obtain permission from the City of Iowa City to make the proposed connection.

Although the developer indicates that the access will be gated and only accessible by passcode, vehicles that would be permitted to use the access should be clearly identified in the PUD documents after discussion/agreement with the City of Iowa City.

Traffic Signal Analysis: A planning-level traffic signal warrant analysis was completed for peak hour traffic and shows that a traffic signal at the proposed entrance to the development is not warranted (**Figure 3**). To meet the peak hour warrant, it was determined that an additional 90 vehicles would need to exit the development during the AM Peak and an additional 81 vehicles would need to exit during the PM Peak hour to satisfy the requirements for traffic signal installation. Current estimates only project a total of 30 and 39 vehicles exiting the development during peak travel hours.

Figure 3: Manual on Uniform Traffic Control Devices Figure 4C-3

Sidewalks: Constructing a 5' sidewalk on the north frontage of the proposed development (as shown in the PUD Application) should be viewed as a minimum standard. A wider sidewalk could be considered as part of the 'passive open space' proposed in the PUD materials. The sidewalk should ultimately be consistent with the larger Melrose Avenue streetscape project envisioned by University Heights. The PUD materials state that the developer will donate land and provide easements at the northwest corner of the site to assist with the streetscape project.

The PUD Application indicates that a trail will be constructed along the west side of the property in the 22' wide parcel currently owned by the developer – crossing to the east side of the proposed access driveway near Melrose Avenue. The PUD Application states that the trail would include pedestrian-scale lighting wind around existing mature trees and include two rest areas with seating. The width of the trail is not explicitly noted. An optional connection across the property to the south is also shown, which could provide a connection to the existing trail located between Leamer Court and Marietta Avenue (this connection would need to be approved by the Lytham Condominium HOA and may require an additional easement). The connection should be viewed positively as it would provide pedestrians from the developments to the south direct access to Melrose Avenue. While pedestrians are currently permitted to use the existing gravel drive, this would improve upon the access and ensure that the proposed development does not disrupt this important connection.

Transit: The nearest Iowa City transit stops are located at the Koser/Melrose and Hawkins/Melrose intersections. While not far from the proposed development, if desired, the City could discuss the possibility of adding an additional bus stop near the PUD access with the Iowa City Transit Department. If deemed necessary, the open space at the northwest corner of the development could also include a bus shelter or other pedestrian amenities. These amenities could become part of the larger University Heights streetscaping project. Plans for such amenities, and the agreement for cost/maintenance, could be included in the PUD documents.

Lighting: Exterior lighting should relate to the scale and location of the development in order to maintain adequate security while preventing a nuisance to adjacent properties. The applicant has indicated that exterior lighting will be downcast LED, in the 3,000 or less Kelvin range (warm colors towards gold). The City should request example building designs that articulate these standards as the examples submitted by the applicant show up-lighting along the periphery of the building.

It was also specified that "Dark-Sky" standards will be considered to reduce light pollution and reduce energy consumption. "Dark-Sky" lighting consists of fully shielded fixtures that direct light where it is needed, providing quality lighting without glare, light pollution, and light "trespass" onto

adjacent properties. The *International Dark-Sky Association* recommends lighting:

- only be on when needed,
- only lights the area that needs it,
- be no brighter than necessary,
- minimize blue light emissions, and
- be fully shielded (pointing downward).

The City should require that any and all light fixtures on the site be LED, less than 3,000 Kelvin, downcast and shielded to not allow more than one foot-candle of light spillage beyond the property line. One foot-candle is a widely used measurement of light, and is approximately the amount of light given by a full moon at night. Plainmetric maps showing the amount of lighting on the property should be requested of the applicant. The exterior lighting concepts should be included in the PUD documents. The lighting agreement proposed for One University Place reads as follows:

“Design exterior lighting so that all site and building-mounted luminaires produce a maximum initial illuminance value no greater than 0.10 horizontal and vertical footcandles at the site boundary and no greater than 0.01 horizontal footcandles 10 feet beyond the site boundary. Document that no more than 2% of the total initial designed fixture lumens (sum total of all fixtures on site) are emitted at an angle of 90 degrees or higher from nadir (straight down).”
(U.S. Green Building Council)

Specifics regarding the proposed exterior lighting along the trail will also need to be evaluated and approved by the City. The applicant has also specified that community input is welcome and all final lighting recommendations will need to meet *Marriott International, Inc.* standards.

Signage: The applicant has proposed an entry monument sign on the northwest corner of the property at a size of 5 feet in height and 8 feet in width. The City should confirm the precise location of the monument on the site plan. Staff is uncertain if the sign will be placed on the property of 901 or 909 Melrose Avenue. For comparison, the size of the proposed sign is 3 feet wider than the existing sign at One University Place.

There will also be a sign on the hotel building that is required by *Marriott International, Inc.* The City should request the applicant submit sign dimensions and the location to determine if they are acceptable. If signage is a concern for the City, a conditional zoning agreement covenant on the land, and/or provisions in the PUD documents could restrict the size, illumination, location and animation of any signs.

Hours of Operation: Hotels, by *Marriott International, Inc.*, operate 24 hours a day, 7 days a week. These hours of operation are consistent with other hotels in the area. However, the City may want to limit the hours for deliveries, outdoor seating for the bistro, and/or any exterior loudspeakers to minimize negative externalities (noise, light) for neighboring residents.

SPECIAL INFORMATION:

Employees: The applicant anticipates the hotel will employ two (2) full-time management staff, ten (10) full-time staff equivalents in housekeeping, laundry, and maintenance, and ten (10) full-time staff equivalents in food and beverage and front desk positions. It is unclear if additional part-time staff will be employed by the hotel.

Economic Impact: The applicant has submitted an estimated hotel/motel tax of \$427,000/year and estimated property taxes at \$220,000/year. These calculations are solely based on informal appraiser feedback as compared to similar sized hotels in the market.

Utilities: The City Engineer will need to ensure the utilities are adequate for the proposed development. Adequate water pressure, sewer capacity, storm sewer capacity and electrical and gas services should all be included in such a review. If existing utilities are not adequate, the City will need to discuss what upgrades to the system, if any, will be required of the applicant.

Fire and Police Protection: The City of Iowa City currently has a contract with University Heights for fire protection and therefore, emergency services will be provided to this property. An email was submitted by Iowa City Engineer Josh Slattery indicating the Iowa City Fire Department is able to provide adequate service to the proposed development.

The University Heights Police Department has been consulted regarding the proposed development and provided a written letter indicating they are able to provide adequate service and general patrol to this property.

Developer's Agreement: A developer's agreement is a legally binding document that typically includes items such as these: descriptions of property (including covenants, easements, and restrictions), final plans and specs, construction/phasing timelines, dedications, maintenance agreements, agreements for costs to be incurred by the developer, environmental requirements, assurances against damage to publically owned property, and other items related to the development.

The City should require that the developer prepare the agreement for review by the City Attorney.

SUMMARY:

In summary, the City should consider the following items as part of the review process for the proposed development.

1. It will be essential for the City to articulate to the applicant what elements of the proposal are suitable.
2. The adopted University Heights zoning map indicates that the subject property is Single-Family Residential.
3. The maximum number of hotel rooms allowed for this PUD will need to be defined by the City.
4. The City will have to determine if the proposed building and parking setbacks for the PUD are acceptable.
5. The City will have to approve a maximum Building Height and maximum Structure Height for the proposed development.
6. The City will have to determine the minimum number of parking spaces for this PUD.
7. We recommend the City further discuss the proposed rezoning to identify and name the zone most appropriate to accommodate the proposed development.
8. The City should take advantage of establishing a 'Conditional Zoning Agreement' (CZA) with the applicant.
9. The City may want to ask the applicant to investigate the possibility of reorienting the building so that the back of the hotel is facing the medium-density apartments to the south and the front is facing Melrose Avenue.
10. Perimeter fences are not proposed as a part of this development. Staff recommends the City consider requiring the installation of a six-foot privacy fence, at minimum, along the west and south property lines. In addition to the fence, the City should discuss whether equivalent vegetation screening will be required.
11. University Heights will want to request a set of detailed landscape plans that include street furniture.

12. A public access easement will need to be obtained as the identified access for the proposed development is the only entrance/exit onto Melrose Avenue for properties just west of 901 Melrose Avenue and to the garages of homes on the east side of Olive Court.
13. The City should discuss whether the scale, architectural features and general building design of the proposed structure are acceptable for the location.
14. The City will want to see examples of building materials for all structures before finalizing and approving PUD documents.
15. We recommend the applicant further quantify the 40-50% energy efficiency noted and that the City discuss what LEED principles are recommended or required as part of the PUD documents.
16. The parkland requirement for hotel rooms will need to be considered.
17. Constructing a 5-foot sidewalk on the north frontage of the development (as shown in the PUD Application) should be viewed as a minimum standard.
18. If desired, the City could discuss with the Iowa City Transit Department the possibility of adding an additional bus stop near the access to the proposed development.
19. The City should require all exterior light fixtures on the site to be LED, less than 3,000 Kelvin, downcast and shielded to not allow more than one foot-candle of light spillage beyond the property line; these requirements may be expressed in the PUD documents.
20. The City may want to limit the hours for deliveries, outdoor seating for the bistro, and/or any exterior loudspeakers to minimize negative externalities for neighboring residents; these considerations may be expressed in the PUD documents.

DEFICIENCIES AND DISCREPANCIES:

1. The applicant listed the size of the property at 901 Melrose Avenue to be 3.74 Acres (163,092 S.F.), although the Johnson County Recorder's online records (Beacon) indicate that recorded documents show the land area to be 3.75 Acres (163,350 S.F.).
2. It is unclear if the applicant is also asking to rezone 909 Melrose Avenue and a portion of 905 Melrose Avenue. The City and the applicant should discuss the possibility of rezoning the property at 909 Melrose Avenue to match 901 Melrose Avenue and any portion of 905 Melrose Avenue involved in the proposed development to match the zoning for 901 Melrose Avenue, forming an assemblage to create one parcel, or rezoning a portion of 909 Melrose Avenue as public to accommodate the proposed parkland.
3. To our knowledge, the concept plan submitted does not show existing or proposed easements.
4. The protected slopes buffer and the construction limits/area are not currently shown on the sensitive areas plan; therefore it is unclear whether sensitive areas requirements are met.
5. It is not explicitly clear if the construction limits are at least 8 feet beyond the designated critical root zone for all trees located within the parts of woodlands to be retained.
6. A proposed grading plan at one-foot contours has not been submitted.
7. An erosion control plan has not been submitted.
8. The design elevations showing all sides of the building and roofline have not been submitted.
9. The description of materials for all exterior building surfaces has not been submitted.
10. An example floor plan for the main floor was submitted but the square footage of each room was not included. Only a range of 300-600 S.F. was provided.
11. The applicant estimated the trail (11,950 S. F.) to the west of 901 Melrose Avenue and a portion of 909 Melrose Avenue (7,001 S. F.) to equal 18,952 S.F. These two pieces of land, in total, equal 18,951 S.F. The City will need to consider if they will accept these properties as dedicated parkland or otherwise.
12. The left-turn lane on Melrose Avenue as proposed in the concept plan only shows a left-turn lane for the proposed development and appears to have removed the existing left-turn lane for Evashevski Drive which is not acceptable. The left-turn lane should be developed as a 'shared' left-turn as it is currently striped.

13. The City should verify the location of the entry monument sign.

ATTACHMENTS:

1. MPOJC Preliminary Trip Generation and Traffic Analysis



Date: June 29, 2017

To: Louise From; Mayor of University Heights

From: Kent Ralston; Executive Director
Emily Bothell; Assistant Transportation Planner

Re: Preliminary Trip Generation and Traffic Impact Analysis for the Planned Unit Development at 901 Melrose Avenue in University Heights

As requested by University Heights, Staff conducted a preliminary trip generation and traffic impact analysis for the proposed Planned Unit Development at 901 Melrose Avenue in University Heights, which is comprised of a 140 unit hotel.

Trip Generation Estimates

The following table provides estimates of future peak hour traffic volumes generated by the proposed hotel development. The estimates are based on information provided in the Planned Unit Development (PUD) application submitted by University Lake Partners II LLC. Estimates are provided with 100% of the estimated trips loading onto the south side of Melrose Avenue at a point immediately west of the railroad bridge. The following estimates shown in **Table 1** are based on the best available data and should be revised if any land-use or intensity changes are proposed.

Table 1: PUD Trip Generation Estimates

Land Use	ITE Code	Time of Day	Trip Generation Figure	Number of Hotel Rooms	Total Trips Generated	Entering	Exiting
Hotel	310	AM Peak Hour	0.56 trips/room	140 Rooms	78	48 (61%)	30 (39%)
	310	PM Peak Hour	0.59 trips/room		83	44 (53%)	39 (47%)

Source: Institute of Transportation Engineers – 7th Edition

It is estimated that the proposed hotel with 140 guest rooms would generate 78 new vehicle trips in the AM peak hour and 83 in the PM peak hour. During the AM peak hour, it is estimated that approximately 48 vehicles will enter the development while 30 will exit. In the PM peak hour, the volume of entering traffic is estimated at 44 vehicles, with exiting traffic estimated at 39 vehicles.

Assumptions

- The direction (east or west) of vehicle trips entering and exiting the development was generated by taking an average of the peak hour directional flow of existing traffic on Melrose Avenue and applying the average percentage to the trip generation estimates at the proposed intersection.
 - 70% of AM peak hour trips are traveling to/from the east and 30% are traveling to/from the west.
 - 30% of PM peak hour trips are traveling to/from the east and 70% are traveling to/from the west.

Gap Analysis

A gap analysis was conducted at the proposed development access location to determine the availability of gaps, of a particular size on Melrose Avenue, offered to the driver exiting the development. According to the *Highway Capacity Manual* (2010), the critical gap for the left-turn movement from the proposed access is 11 seconds/vehicle. The critical gap for the right-turn movement is approximately 10 seconds/vehicle. There should be at least one gap of adequate size for a vehicle to make a right- or left-turning movement during each minute of the peak hour. If the number of adequate gaps in the traffic stream on Melrose Avenue are less than these values, vehicles may be inclined to select inadequate gaps.

Table 2: Right- and Left-Turn Gap Analysis

	Right-Turn Movement			Left-Turn Movement	
	Total gaps	Total gaps 10+ sec	Gaps per minute	Total gaps 11+ sec	Gaps per minute
AM	192	51	0.85	47	0.78
PM	226	99	1.65	90	1.5

Staff collected gap counts from 7:15 – 8:15 a.m. and 4:45 – 5:45 p.m. in June 2017.¹ The number of acceptable gaps during both AM and PM peak hours are shown in **Table 2**. During the AM peak hour, the right-turn movement experiences .85 gaps per minute while the left-turn movement experiences .78 gaps per minute. During the PM peak hour, the right-turn movement is provided 1.65 gaps per minute whereas the left-turn movement is offered 1.5 gaps per minute. Based on these results, there are not adequate gaps for vehicles making a left- or right-turning movement during the AM peak hour but there are acceptable gaps during the PM peak hour.

Sight Distance

At a design speed of 25 mph, the recommended intersection sight distance for passenger cars turning left onto Melrose Avenue is 280 feet, and for cars turning right is 240 feet. Research suggests that when making right turns, drivers generally accept gaps that are slightly shorter than those accepted when making left turns.²

Sight distance was measured at the intersection of Melrose Avenue and the proposed development access on June 15th, 2017. Visibility to the west of the intersection is unlimited, whereas visibility to the east of the intersection is also unlimited but visually cluttered. The utility pole on the southeast corner of the intersection and the railing on the bridge are objects motorists have to look past and through. As westbound vehicles reach the bridge on Melrose Avenue they should be continuously visible to motorists exiting the proposed development.

While visibility to the east should be adequate for motorists exiting the proposed driveway, staff recommends exploring the possibility of relocating the utility pole at the southwest corner of the bridge to further reduce clutter and improve visibility.

¹ The gap counts were collected when the University of Iowa and the Iowa City Community School District were not in session. The additional traffic volumes generated by these education facilities may decrease the availability of gaps of a particular size at this intersection.

² American Association of State Highway and Transportation Officials. (AASHTO) *Geometric Design of Highways and Streets*. (2004).

Collisions

Staff reviewed collision data on Melrose Avenue at the intersections with Olive Court and Evashevski Drive as these existing intersections should perform similarly to the proposed access (both are tee intersections where traffic would exit onto Melrose Avenue and experience very similar gaps in traffic). As shown in **Table 3**, there is not a significant safety concern at these intersections. Between 2012 and 2016 there have been two collisions at the intersection of Melrose Avenue and Olive Court and one collision at the intersection of Evashevski Drive and Melrose Avenue.

Table 3: Collision Analysis

Intersection Location	Type of Crash	Number of Collisions	Year
Olive Ct & Melrose Ave	Driving too fast for conditions	1	2012
	Animal	1	2013
Evashevski Dr & Melrose Ave	Lost Control	1	2012

Capacity Analysis

Using peak hour counts collected in 2016 and 2017, intersection capacity analysis was analyzed for the following intersections with Melrose Avenue:

1. **Koser Avenue** – signalized
2. **Olive Court** – stop controlled
3. **PUD Access** – stop controlled
4. **Evashevski Drive** – stop controlled
5. **Hawkins Drive** – signalized

Intersection capacity was analyzed using unsignalized and signalized intersection capacity analysis methods outlined in the latest edition of the *Highway Capacity Manual* (HCM) and using *Synchro* software. When using HCM methods, control delay is calculated as seconds of delay per vehicle (s/veh) and a corresponding level of service (LOS) is also shown. Level of service describes operating conditions based on a number of factors including speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. **Table 4** (*Synchro* Exhibit 17-2) displays the LOS with control delay ranges at unsignalized stop-controlled intersections. A LOS A represents the best operating conditions (free-flow movement) and LOS F represents the worst conditions, i.e. extreme congestion and stop-and-go conditions.

Table 4: Level of Service Criteria for Stop-Controlled Intersections

Level of Service	Average Control Delay (s/veh)
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

At signalized intersections, delay and LOS are calculated using the same methodology but the delay parameters are a little longer. Longer delays are acceptable at signalized intersections because the driver has longer delay expectancy than at unsignalized intersections. **Table 5** (*Synchro* Exhibit 16-2) displays the LOS with its control delay ranges at signalized intersections.

Table 5: Level of Service Criteria for Signalized Intersections

Level of Service	Average Control Delay (s/veh)
A	< 10
B	> 10 - 20
C	> 20 - 35
D	> 35 - 55
E	> 55 - 80
F	> 80

1. Koser Avenue & Melrose Avenue

Table 6 exhibits average delays and LOS under existing and proposed conditions. This intersection currently performs well at LOS B during the AM and PM peak periods. The north and southbound movements experience the greatest delay, however these movements only make-up 13% of total vehicles at this intersection.

Under proposed conditions, accounting for the additional trips generated from the PUD, the intersection experiences a marginal increase in delay. Delay increases by 1.0 s/veh during the AM peak period for the eastbound through movement and approximately 2 s/veh for the westbound through movement during the PM peak period. The north and southbound movements are virtually unaffected by the proposed development.

Table 6: Koser Avenue & Melrose Avenue

Direction	Existing Conditions				Proposed Conditions with PUD Trips			
	Control Delay (s/veh)		LOS		Control Delay (s/veh)		LOS	
	AM	PM	AM	PM	AM	PM	AM	PM
Melrose Avenue								
Eastbound								
- Left	6.3	6.7	A	A	6.3	6.7	A	A
- Through	15.5	8.5	B	A	16.9	8.6	B	A
- Right	0.0	0.0	A	A	0.0	0.0	A	A
Westbound								
- Left	17.0	10.2	B	B	16.5	10.8	B	B
- Through	18.1	17.0	B	B	16.4	19.0	B	B
- Right	0.0	0.0	A	A	0.0	0.0	A	A
Koser Avenue								
Northbound								
- Left	0.0	0.0	A	A	0.0	0.0	A	A
- Through	29.5	28.8	C	C	29.5	28.8	C	C
- Right	0.0	0.0	A	A	0.0	0.0	A	A
Southbound								
- Left	28.2	28.3	C	C	28.2	28.3	C	C
- Through/Right	0.0	0.0	A	A	0.0	0.0	A	A
Intersection	17.9	15.0	B	B	18.3	16.3	B	B

2. Olive Court & Melrose Avenue

Under existing conditions, the Olive Court and Melrose Avenue intersection performs very well at LOS A as shown in **Table 7**. The northbound movement experiences the greatest delay during the AM peak period at LOS C. Approximately, 70% of vehicles at this intersection are traveling eastbound during the AM peak period, which makes it difficult for northbound vehicles to find a gap, which increases delay. It should be noted that northbound vehicles make-up less than 1% of total traffic at the intersection.

Under proposed conditions, the intersection continues to perform at LOS A during both peak periods. The northbound and westbound movements experience a minor increase in delay as a result of the proposed development, with northbound Olive Court experiencing an acceptable LOS D during the AM peak period.

Table 7: Olive Court & Melrose Avenue

Direction	Existing Conditions				Proposed Conditions with PUD Trips ³			
	Control Delay (s/veh)		LOS		Control Delay (s/veh)		LOS	
	AM	PM	AM	PM	AM	PM	AM	PM
Melrose Avenue								
Eastbound								
- Right/Through	0.0	0.0	A	A	0.0	0.0	A	A
Westbound								
- Left/Through	0.2	0.1	A	A	12.0	8.2	B	A
Olive Court								
Northbound								
- Left/Right	24.6	15.4	C	C	28.1	16.0	D	C
Intersection	0.2	0.2	A	A	0.1	0.2	A	A

³ A 100' westbound left-turn lane on Melrose Avenue at Olive Court was included in the analysis as shown in the University Heights - Melrose Avenue Streetscape Improvements Plan.

3. PUD Access & Melrose Avenue

As shown in [Table 8](#), delay at the proposed PUD access at Melrose Avenue is the greatest for the northbound left-turning movement during both peak periods when LOS E is expected. Overall, the intersection remains at LOS A as the percentage of vehicles traveling northbound make-up less than 1% of total traffic at the intersection.

Table 8: PUD Access & Melrose Avenue

Direction	Proposed Conditions with PUD Trips			
	Control Delay (s/veh)		LOS	
	AM	PM	AM	PM
Melrose Avenue				
Eastbound	0.0	0.0	A	A
Westbound				
-Left	12.3	8.3	B	A
-Through	0.0	0.0	A	A
PUD Access				
Northbound				
-Left	43.1	38.7	E	E
-Right	20.7	10.5	C	B
Intersection	0.7	1.2	A	A

4. Evashevski Drive & Melrose Avenue

The intersection of Evashevski Drive and Melrose Avenue currently performs at LOS A during both peak periods however during the AM peak hour the southbound left-turning movement fails with 60.1 s/veh of delay as shown in [Table 9](#).

Under proposed conditions, the additional trips generated from the PUD will not significantly increase delay at this intersection. During the AM peak period, the southbound left-turning movement continues to operate at LOS F with an increase in delay of approximately 6 seconds per vehicle.

Table 9: Evashevski Drive & Melrose Avenue

Direction	Existing Conditions				Proposed Conditions with PUD Trips			
	Control Delay (s/veh)		LOS		Control Delay (s/veh)		LOS	
	AM	PM	AM	PM	AM	PM	AM	PM
Melrose Avenue								
Eastbound								
- Left	9.6	10.1	A	B	9.7	10.4	A	B
- Through	0.0	0.0	A	A	0.0	0.0	A	A
Westbound								
- Right/Through	0.0	0.0	A	A	0.0	0.0	A	A
Evashevski Drive								
Southbound								
- Right	11.0	35.8	B	E	11.1	41.0	B	E
- Left	60.1	36.0	F	E	66.3	42.2	F	E
Intersection	2.7	8.6	A	A	2.7	9.6	A	A

5. Hawkins Drive & Melrose Avenue

Under existing conditions at Hawkins Drive and Melrose Avenue, the intersection performs at LOS B during the AM peak period and LOS C during the PM peak period as shown in [Table 10](#). The southbound left-turning movement experiences the greatest delay with 35.4 s/veh at LOS D.

Under proposed conditions, the intersection experiences minimal increases in delay. The additional trips generated from the PUD do not significantly impact this intersection.

Table 10: Hawkins Drive & Melrose Avenue

Direction	Existing Conditions				Proposed Conditions with PUD Trips			
	Control Delay (s/veh)		LOS		Control Delay (s/veh)		LOS	
	AM	PM	AM	PM	AM	PM	AM	PM
Melrose Avenue								
Eastbound								
- Left	12.2	10.4	B	B	12.1	11.2	B	B
- Through	11.5	7.9	B	A	11.6	8.0	B	A
Westbound								
- Through	30.7	25.7	C	C	28.2	27.0	C	C
- Right	25.2	17.1	C	B	23.1	16.9	C	B
Hawkins Drive								
Southbound								
- Left	27.8	35.4	C	D	29.8	35.4	C	D
- Right	23.5	29.6	C	C	24.8	29.6	C	C
Intersection	19.8	23.3	B	C	19.6	23.6	B	C

Left-Turn Lane Queuing

SimTraffic was used in order to generate queue lengths for the eastbound left-turning movement at Evashevski Drive and Melrose Avenue; and the westbound left-turning movement at the PUD and Melrose Avenue. *SimTraffic* is a simulation program that actually “observes” the queues. The model simulates the vehicle and reports whenever a vehicle is travelling less than 10 ft/s and is behind a queue of vehicles. At the end of the period, *SimTraffic* determines the maximum queue, the average of 2 minute maximum queues, and the 95th percentile queue.⁴

As shown in [Table 11](#), the queue lengths do not exceed the available storage length of the center left-turn lane between Evashevski and the proposed PUD access which was calculated at approximately 300 feet. The simulation also indicates that the 300’ center turn lane would simultaneously accommodate both left-turn maximum queues.

⁴ The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes.

Table 11: Queue Lengths

	Evashevski Dr & Melrose Ave		PUD & Melrose Ave	
	EB Left-Turn Lane		WB Left-Turn Lane	
	AM	PM	AM	PM
<i>95th % Queue (feet)</i>	116	51	31	68
<i>Average Queue (feet)</i>	82	23	12	14
<i>Maximum Queue (feet)</i>	132	55	37	59

Summary of Findings

- It is estimated that the proposed hotel with 140 guest rooms would generate 161 total new trips during the AM and PM peak periods.
- During the AM peak hour today, there is a less than ideal number of adequate gaps for northbound vehicles exiting the proposed PUD access; however collision data at adjacent (similarly performing) intersections indicates there may not be a significant safety issue as a result.
- During the PM peak hour today, there are an acceptable number of adequate gaps for northbound vehicles exiting the proposed PUD access.
- Visibility to the west and east of the intersection appears to be unlimited, although there are some objects to the east that cause “visual clutter”. This should be rectified as the project develops to the extent possible.
- Under existing and proposed conditions, all intersections within the study area operate at LOS C or better.
- Under proposed conditions, northbound traffic exiting the PUD access is expected to perform at LOS E during both peak periods. A LOS E at peak periods is not uncommon for an access onto an arterial street.
- Under proposed conditions, the queue lengths for turning motorists at Evashevski Drive and the proposed PUD access will not exceed the available storage length of the shared center left-turn lane on Melrose Avenue.

Given these findings, staff does not expect the proposed development to have a detrimental effect on overall traffic operations in the study area, nor does it appear that traffic generated by the development will experience undue delays entering/exiting the property.