BERK

PHONE ■ 206.324.8760
2025 First Avenue, Suite 800
Seattle, WA 98121
www.berkconsulting.com

MEMORANDUM

DATE: March 9, 2015

TO: Dan Eernissee, Economic Development Director – City of Shoreline

FROM: Kevin Gifford, AICP – Senior Planner
Aaron Raymond – Associate Planner
Lisa Grueter, AICP – Planning Manager

RE: Aurora Square Transition Standards – Supplemental Height and Bulk Analysis

INTRODUCTION AND PURPOSE

This memorandum presents supplemental analysis of height and bulk associated with proposed modifications to the City of Shoreline's transitional area development regulations for the Mixed Business (MB) zone, as established in Chapter 20.50.021 of the Shoreline Municipal Code. The analysis presented in this memorandum responds to comments received on the Draft Planned Action Environmental Impact Statement (EIS) published for the Aurora Square Community Renewal Area (CRA) in December 2014 and can be incorporated into the Final EIS that will be published this spring, following Planning Commission direction on a Preferred Alternative. Alternatively or in addition, it can be folded into a separate code amendment process addressing Transition standards more generally.

The purpose of this analysis is to address comments received by two property owners within the CRA, requesting elimination or modification of the current development regulations that govern building heights in the MB zone when adjacent to, or directly across a street from, low-density residential zones (R-4, R-6, and R-8). The current standards require the application of upper-story setbacks at defined height intervals to minimize impacts associated with height, bulk, and scale. The commenters noted that, due to the large right-of-way widths in the CRA, up to nearly 200 feet in some locations, additional upper-story setbacks would be unnecessary and could be a burden on property owners. While the comments received were from two specific property owners, this analysis tests the potential impacts of this request, as well as an intermediate modification of the standards, compared with the current standards on all properties in the Aurora Square CRA that lie adjacent to R-4, R-6, and R-8 zones.

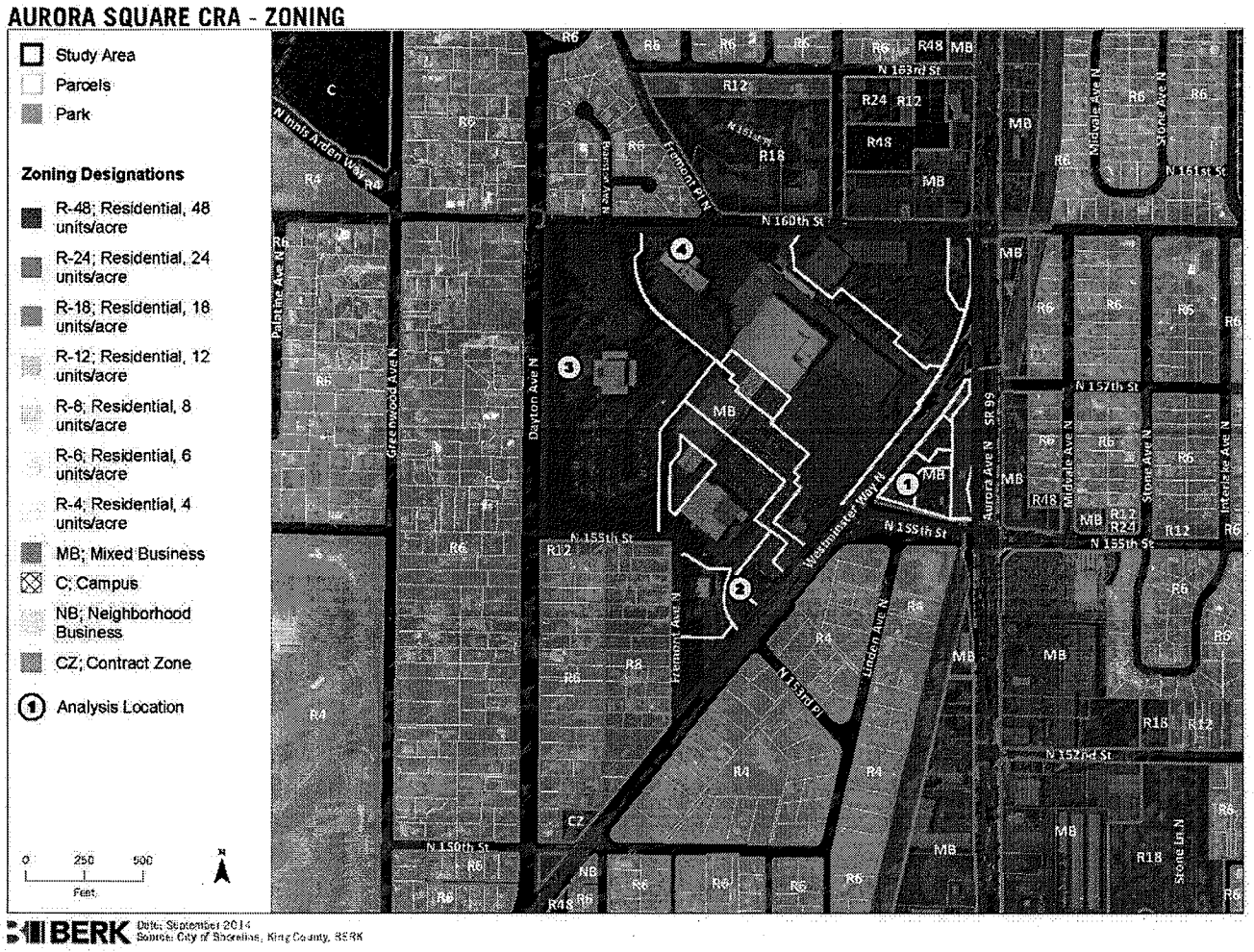
METHODOLOGY

Modeling Scenarios

Using available GIS data, BERK created a three-dimensional digital model of the Aurora Square CRA and surrounding areas, including parcel boundaries, site topography, and existing building footprints. Existing building heights were estimated based on Light Detection and Ranging (LIDAR) data collected by City of Shoreline.

As shown in Figure 1, low-density residential zoning surrounds the Aurora Square CRA to the northwest, west, and south. BERK selected four locations in the CRA for analysis to test varying topographical conditions and street right-of-way widths.

Figure 1. Current Zoning Map



Source: City of Shoreline, BERK Consulting 2015

At each of the identified locations, BERK constructed digital models of the maximum building envelope allowed under each analysis scenario, based on existing and proposed development regulations, incorporating required building setbacks, as wells upper-story stepbacks and height limits. The three test scenarios are summarized in the following sections.

Existing Regulations

This scenario modeled maximum building envelope allowed under adopted development regulations for the MB zone established in SMC Table 20.50.020(2) and the Transition Area requirements established in SMC 20.50.021. These included the following:

- Maximum building height of 65 feet;

- Minimum front yard setbacks of 15 feet where buildings would be located across rights-of-way from R-4, R-6, or R-8 zones, with the following exceptions:
    - Exception 2 to SMC Table 20.50.020(2) indicates that a 15-foot front setback is not required along rights-of-way classified as Principal Arterials. Analysis Locations 1 and 2 are located along segments of N 155th Street and Westminster Way N that are classified as Principal Arterials. Front yard setbacks along these streets were modeled as zero feet.
- Upper-Story Setbacks per SMC 20.50.021(A)
    - When R-4, R-6, or R-8 zoning is across a street right-of-way, maximum building height of 35 feet within the first 10 feet horizontally from the required setback line;
    - Additional upper-story setbacks of 10 feet each for every additional 10 feet in height, up to the allowed maximum height of 65 feet.

Transition Standard Elimination

This scenario modeled maximum building envelope using the same ground-level building setback requirements and height limits as Existing Regulations, but with no requirement for upper-story setbacks under SMC 20.50.021 (see Attachment 1).

Limited Transition Modifications

This scenario modeled an intermediate condition between existing regulations and complete elimination of the Transition Area standards. This scenario includes the same ground-level building setback requirements and height limits as Existing Regulations, as well as the following requirements:

- Maximum building height of 35 feet within the first 10 feet horizontally from the front-yard setback line.
- No additional upper-story setbacks required.

Modeling Assumptions

The digital models depicted in the Analysis Results section do not represent any proposed or approved building design. Rather, these massing models show maximum building envelope allowed by City development regulations. As such, these should be considered conservative projections.

ANALYSIS RESULTS

The results of digital modeling for each of the three scenarios are presented in the following sections. Each section provides figures showing maximum building envelope allowed at each analysis location, as well as models of nearby existing buildings. To estimate the potential for height and bulk impacts on surrounding residential development, each figure also illustrates shade and shadow conditions, based on early spring sun angles for the Puget Sound region. Due to seasonal variation in sun angles, shadows would be longer in winter months and shorter during the summer; because most out-of-door time would be between spring and fall, the spring timeframe was chosen as a conservative representation of shade and shadow effects.

Existing Regulations

As shown in Figure 2 through Figure 5, the combination of setbacks, upper-story stepbacks, and right-of-way widths are sufficient to minimize shading effects under existing regulations. In particular, R-4 properties along N 155th Street and Westminster Way N, near Analysis Locations 1 and 2, would benefit from wide rights-of-way and prevailing sun angles and would receive no shading from MB development.

R-6 development near Analysis Locations 3 and 4 would likewise receive very limited shading from MB development in the Aurora Square CRA. R-6 development across Dayton Avenue N would also benefit from a sharp grade change at the western edge of the CRA, which reduces the relative height of buildings on the Aurora Square site.

Figure 2. Existing Regulations – Analysis Location 1

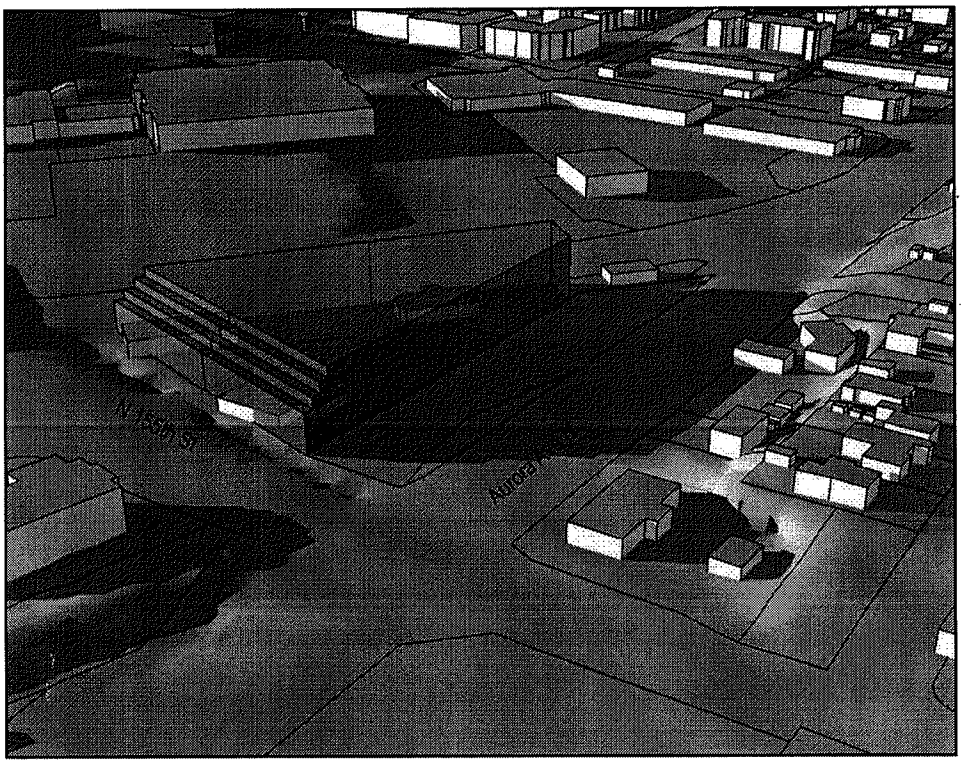


Figure 3. Existing Regulations – Analysis Location 2

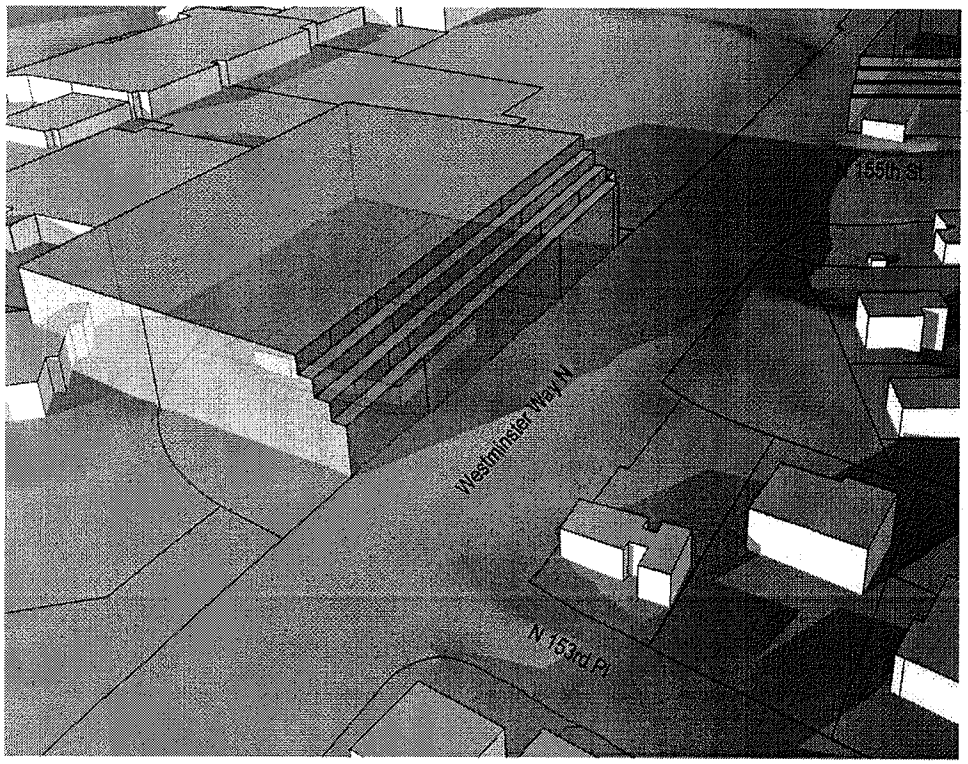


Figure 4. Existing Regulations – Analysis Location 3

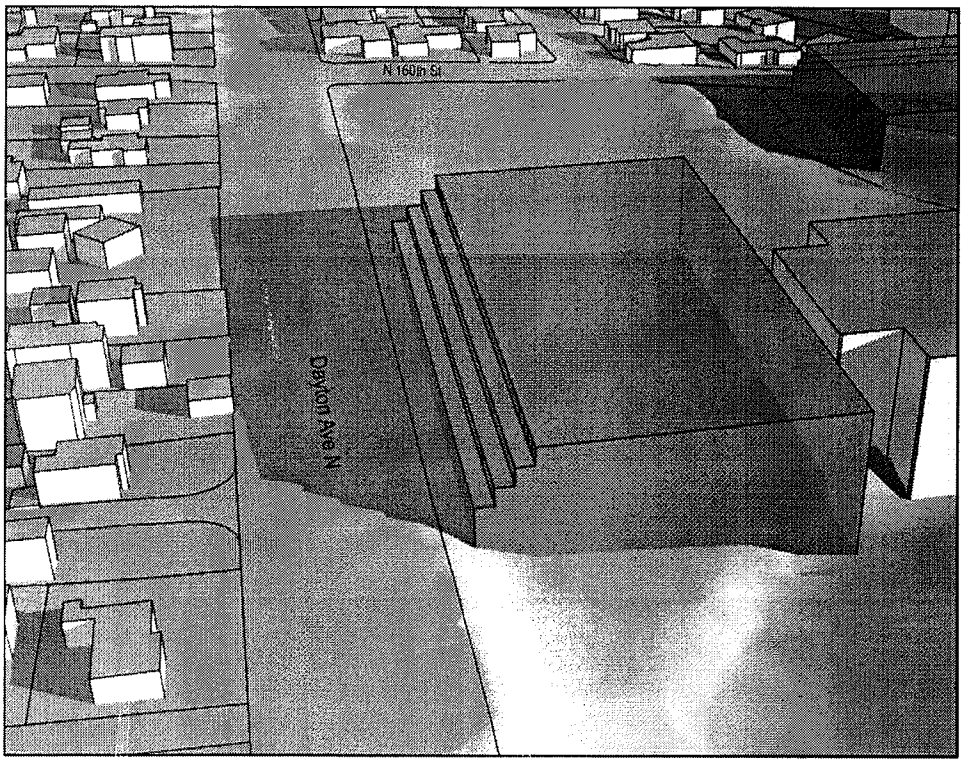
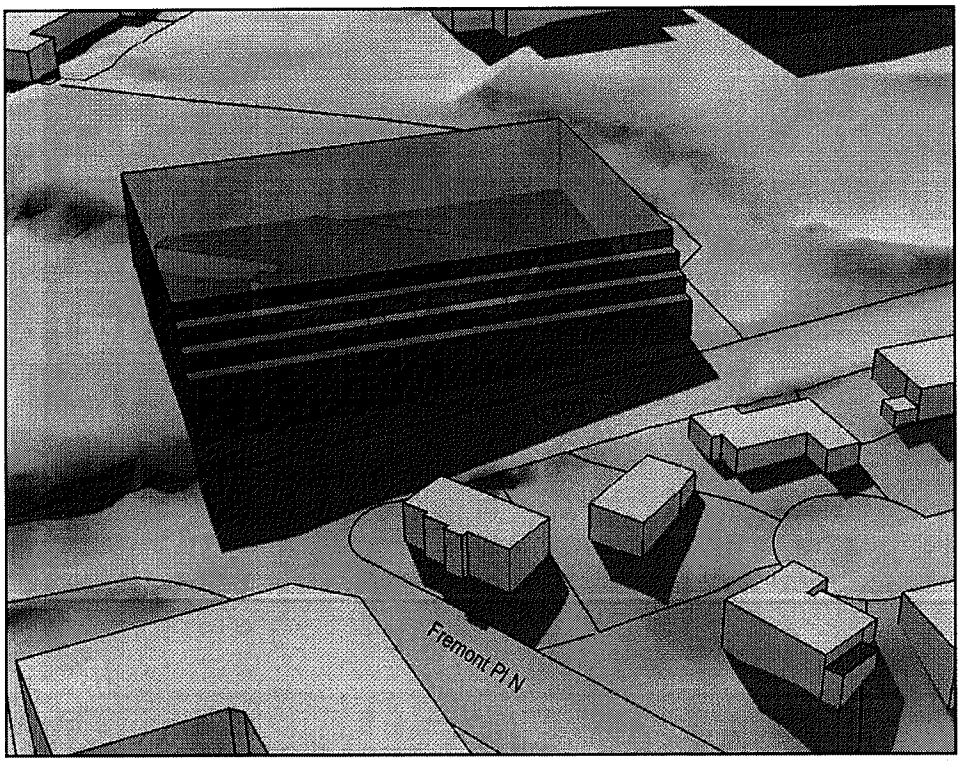


Figure 5. Existing Regulations – Analysis Location 4



Transition Standard Elimination

Eliminating the Transition Standard requirement for upper-story setbacks would slightly increase shading effects relative to existing regulations, as shown in Figure 6 through Figure 9. This increase would be most pronounced at Analysis Locations 3 and 4, where street rights-of-way are narrower than at Analysis Locations 1 and 2. The right-of-way of Dayton Avenue N at Analysis Location 3 is approximately 95 feet, and the right-of-way of N 160th Street at Analysis Location 4 is approximately 60 feet. Residential development near Analysis Locations 1 and 2 would experience no significant increase in shading under this scenario, primarily due to the large right-of-way widths associated with Westminster Way N and N 155th Street. However, some minor shading could occur at Analysis Location 3 during the early morning hours and at Analysis Location 4 in the early afternoon.

Figure 6. No Transition Standards – Analysis Location 1

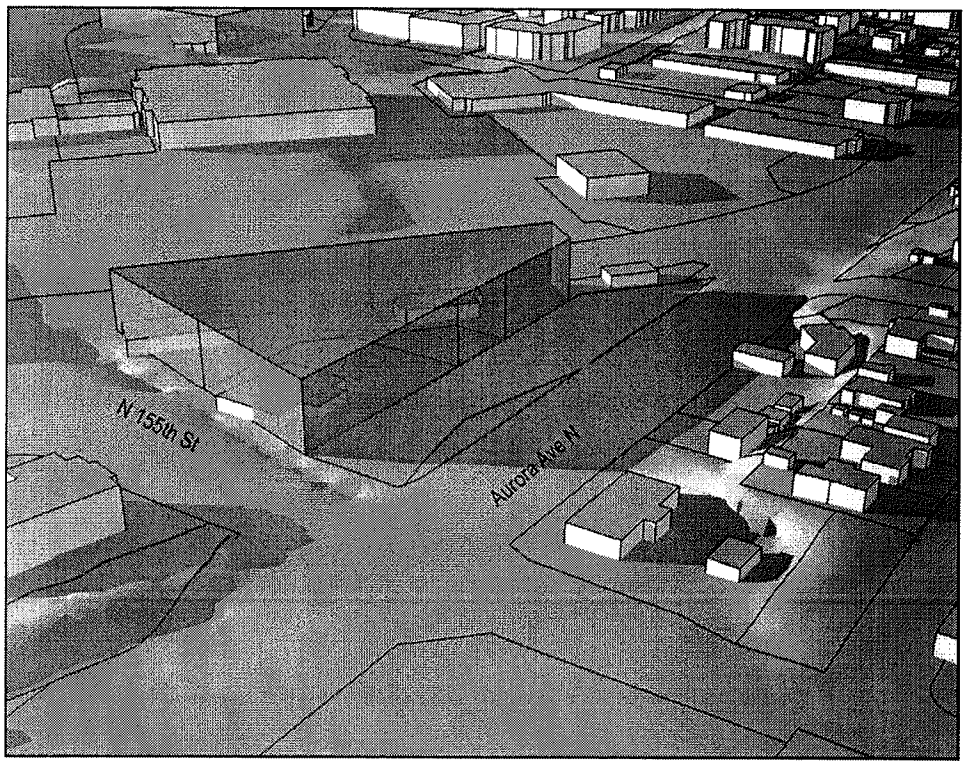


Figure 7. No Transition Standards – Analysis Location 2

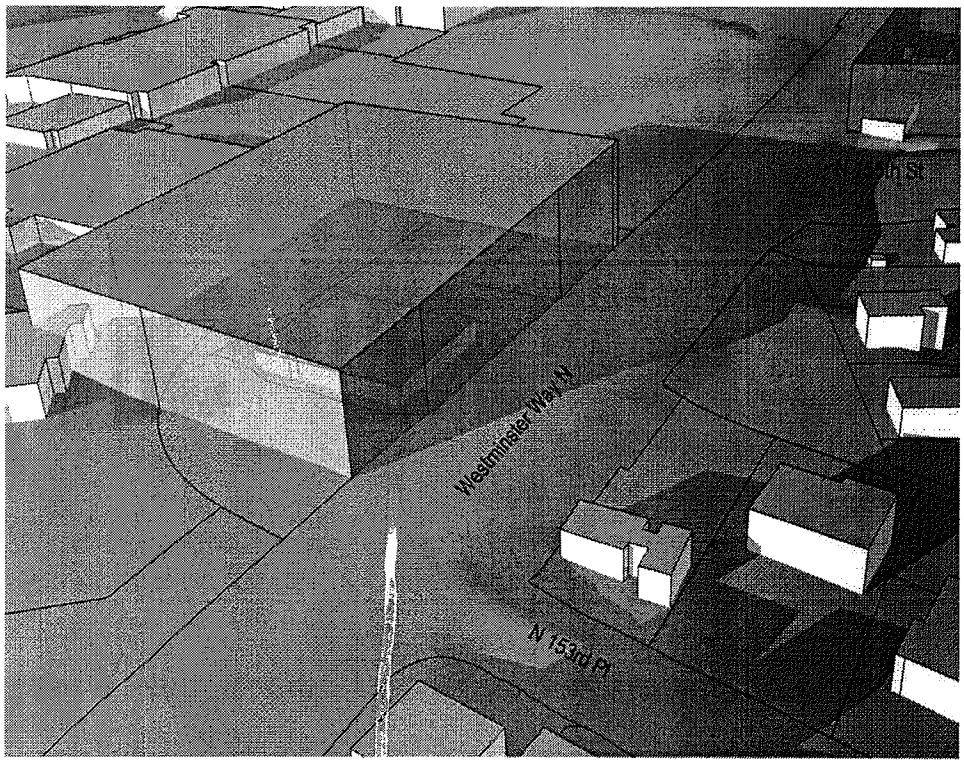


Figure 8. No Transition Standards – Analysis Location 3

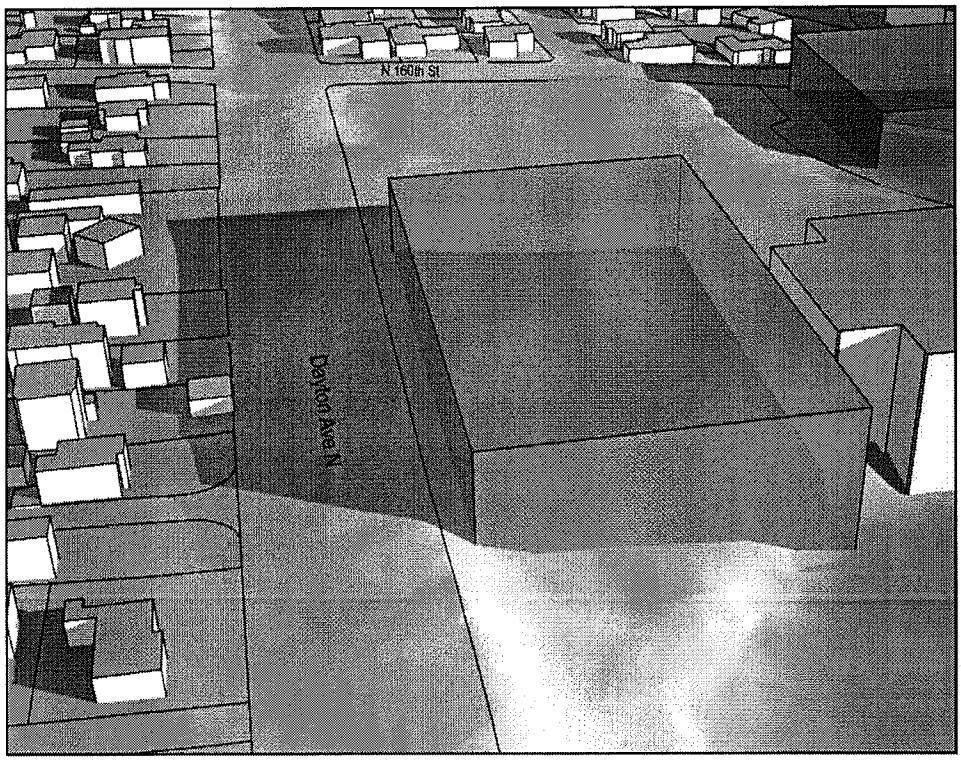
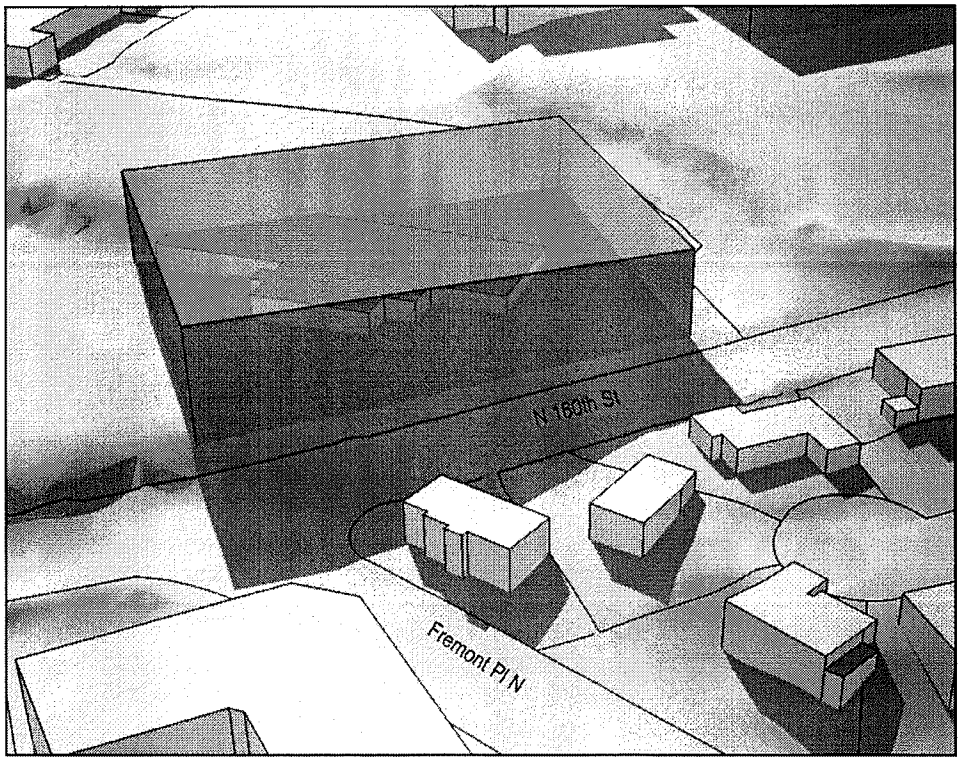


Figure 9. No Transition Standards – Analysis Location 4



Limited Transition Modifications

Predictably, limited modification of the Transition Standards to include a single upper-story stepback at 35 feet would result in shading effects within the range established by the previous two scenarios. In the areas most affected by elimination of the Transition Area standards (Analysis Locations 3 and 4), the limited modification scenario would still result in a similar increase in shading.

Figure 10. Limited Transition – Analysis Location 1

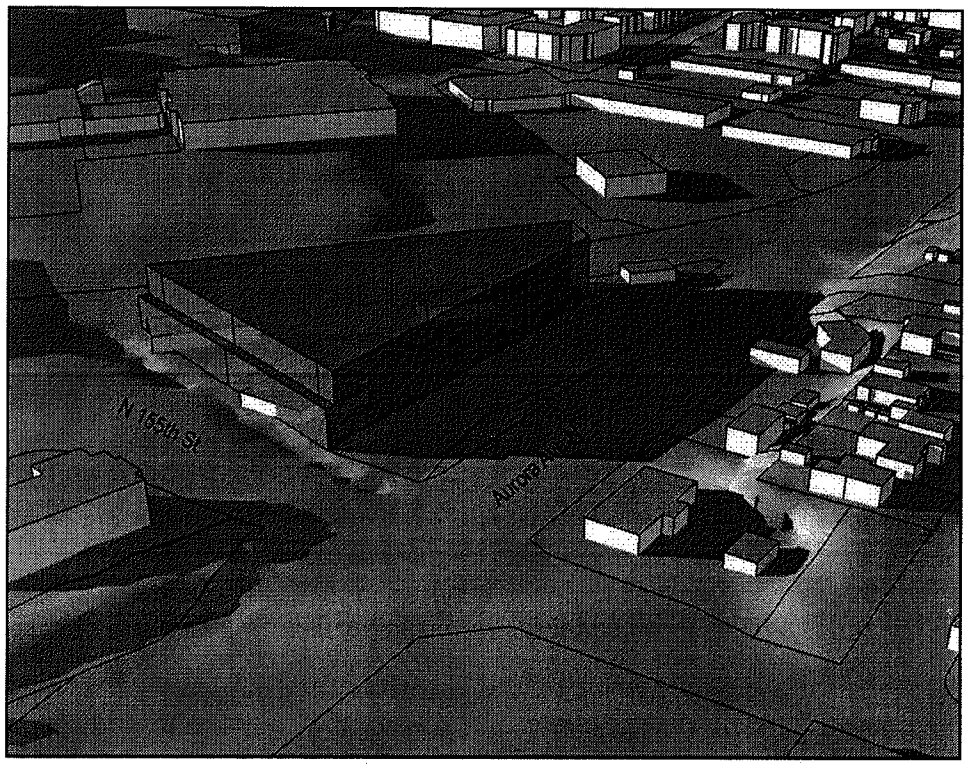


Figure 11. Limited Transition – Analysis Location 2

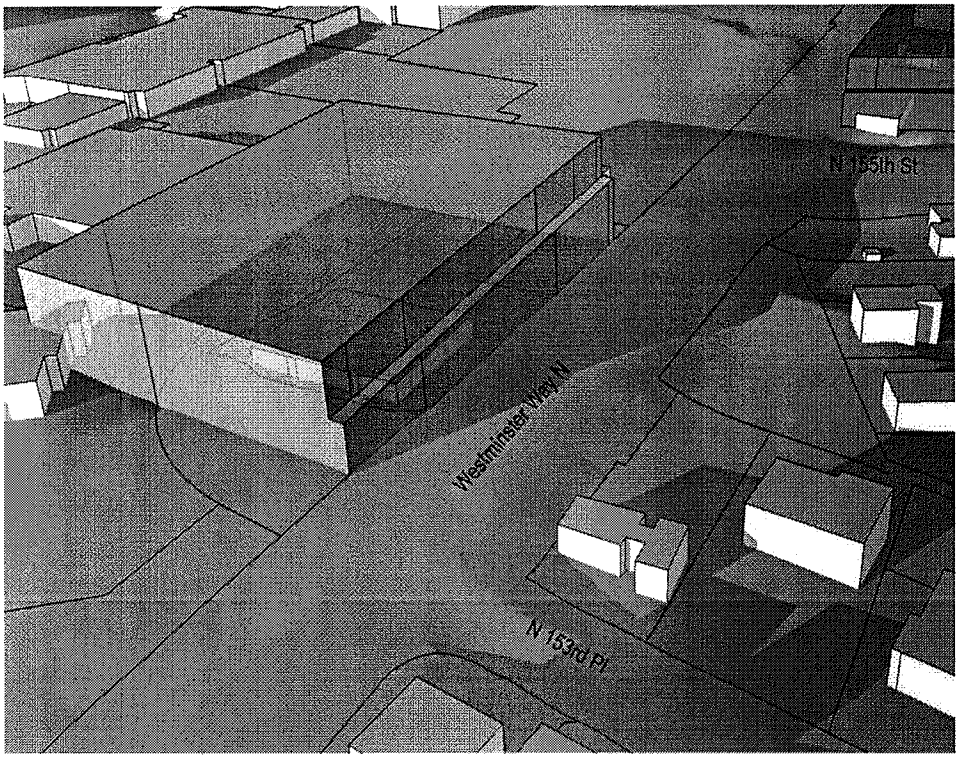


Figure 12. Limited Transition – Analysis Location 3

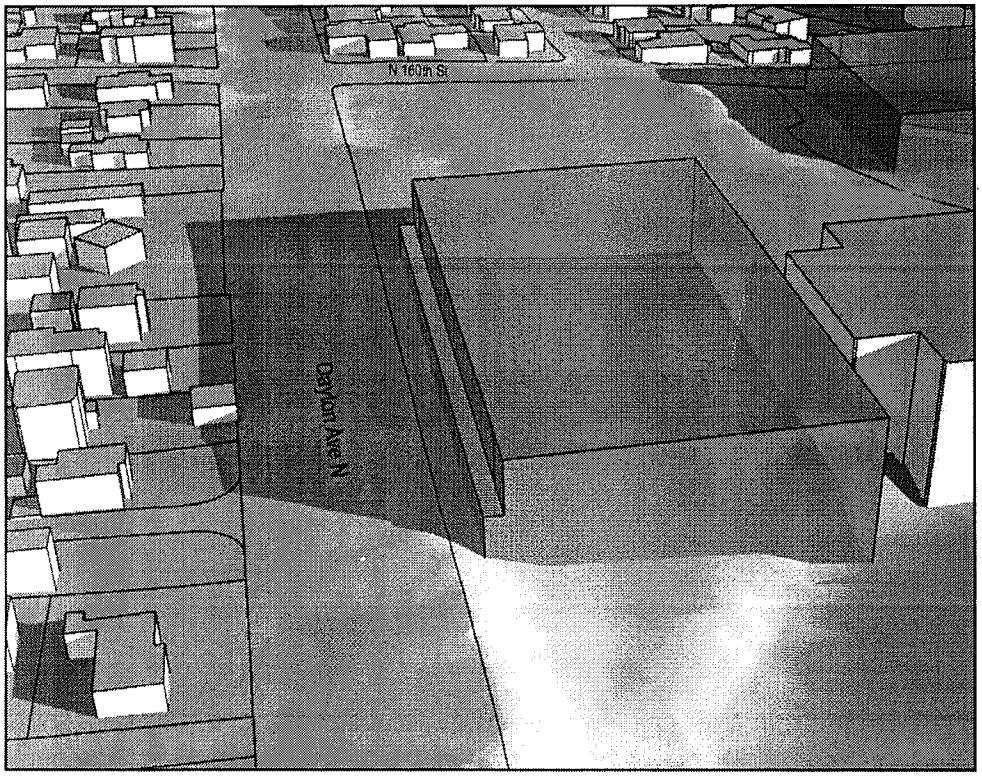
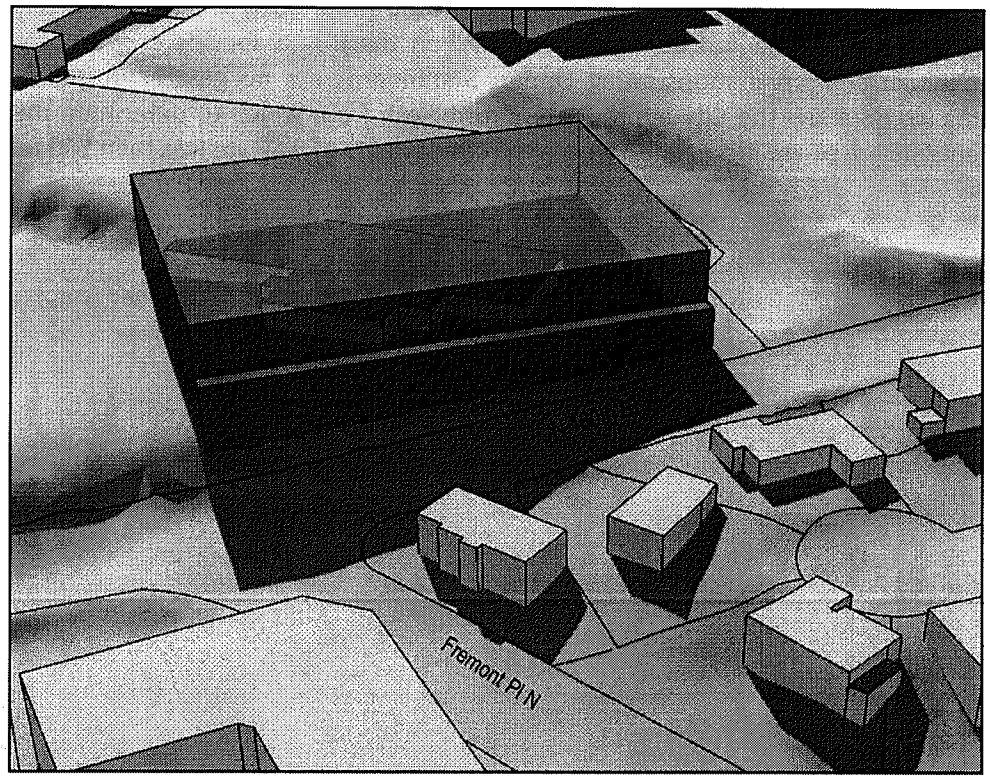


Figure 13. Limited Transition – Analysis Location 4



CONCLUSIONS AND RECOMMENDATIONS

Height, bulk, and shading effects associated with development on the Aurora Square site would be lowest under existing development regulations and Transition Area standards (Option 1). Increased shading effects resulting from elimination (Option 2) or modification of the Transition Area standards (Option 3) would be most pronounced on the north and west sides of the CRA, where street rights-of-way are narrower than in the south and east. Shading impacts in these locations would be moderate and would only occur for brief periods each day, though shading conditions would be more pronounced in winter months and less pronounced in summer. Option 3 avoids increased shading impacts associated with wider streets and allows for a more pedestrian-scaled environment than complete elimination of the Transition Area standards than Option 2.

In analysis locations where streets are characterized by wide rights-of-way, the modeled scenarios did not produce substantially different results, and elimination of the Transition Area standards would not result in a significant adverse impact in these locations. However, areas to the north and west of the CRA could potentially be impacted if development at Aurora Square was not required to apply the Transition Area standards, and complete elimination of the Transition Area standards would allow for only limited building façade modulation, which could have an adverse impact on the pedestrian environment. BERK would therefore recommend application of the modified Transition Area standards in areas where street rights-of-way are 100 feet or greater, which avoids increased shading impacts and allows for a more pedestrian-scaled environment than complete elimination of the Transition Area standards. In areas where the street right-of-way is less than 100 feet, BERK recommends that the development regulations be modified to allow applicants to request that the City apply the modified Transition Area standards instead of the current standards, provided that the applicant can demonstrate that their building design would not result

in increased shading when applying the modified standards; this is due to the conservative nature of the analysis in this memo that maximizes the bulk envelope. In the more specific site design for a specific parcel, it is likely that bulk would not be maximized. When there is a specific proposal, allowing an applicant to prepare an analysis demonstrating Option 3 standards are no greater in impact than for Option 1 standards would allow the City appropriate information from which to determine the standard Transition requirements are or are not needed where the street rights of way are less than 100 feet.

Attachment 1 – Transition Area Standards

Excerpted from Title 20 of the Shoreline Municipal Code

20.50.021 Transition areas.

Development in commercial zones: NB, CB, MB and TC-1, 2 and 3, abutting or directly across street rights-of-way from R-4, R-6, or R-8 zones shall minimally meet the following transition area requirements:

A. From abutting property, a 35-foot maximum building height for 25 feet horizontally from the required setback, then an additional 10 feet in height for the next 10 feet horizontally, and an additional 10 feet in height for each additional 10 horizontal feet up to the maximum height of the zone. From across street rights-of-way, a 35-foot maximum building height for 10 feet horizontally from the required building setback, then an additional 10 feet of height for the next 10 feet horizontally, and an additional 10 feet in height for each additional 10 horizontal feet, up to the maximum height allowed in the zone.