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Date: 03/08/2020 12:11 PM
Subject: Supplemental Shadow data for Heights Hotel project

To: Members of the Redevelopment Board

In the past, Board members have expressed dissatisfaction with the limited information provided on the impact of shadows by proposed development. Generally these shadow studies are limited to showing the extent of shadows at three specific times during the day, for four days a year.

I provide the Board with the attached analysis of the Heights Hotel project as a supplement to the study filed by the applicant. It does not contradict any of the results of that study but instead gives greater insight into the shadow impact on nearby homes in terms of the actual hours that sunlight is being blocked from the face of the home nearest the proposed hotel.

There are two homes that are severely impacted, at 22 Peirce and 26-30 Peirce. The attached analysis is for February 2, the midpoint of winter, but the hours of shade are roughly the same for the period from mid October to early March.

I hope that this will be some use to the Board. I welcome any follow up questions.

Don Seltzer

Attachments:

File: [Ext shadow study hotel.pdf](#) Size: 667k Content Type: application/pdf

Extended Shadow Study for Hotel Lexington Project

The architects for the proposed hotel project at 1207-1211 Mass Ave have provided the Redevelopment Board with a shadow study showing the extent of shadows cast by the building onto the immediate neighborhood.

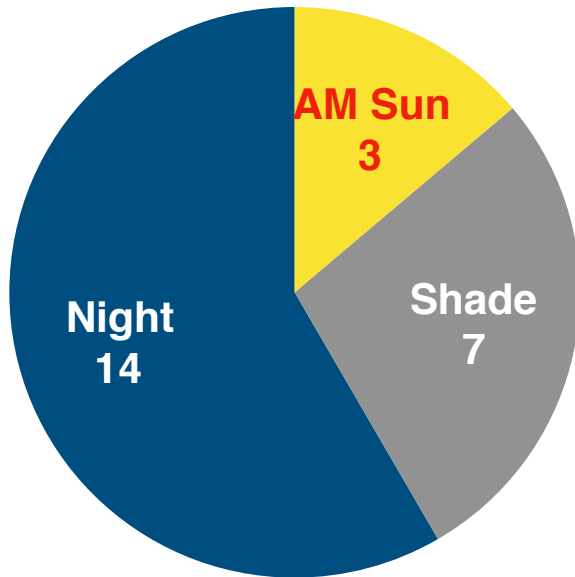
The following analysis is intended as a supplement to that study, providing a closer look at the specific hours of diminished sunlight for those nearby homes most severely impacted by the project.

Those households most affected are 22 Peirce St and 26-30 Peirce St, directly behind and north of the proposed hotel. This analysis looks at which hours during the day that these homes receive sunlight and which hours they are in the shadow of the four story hotel building. The analysis is for February 2, chosen because it is the midpoint of winter, halfway between the solstice and equinox. The source of the data for solar azimuth and altitude used in these calculations is the US Naval Observatory.

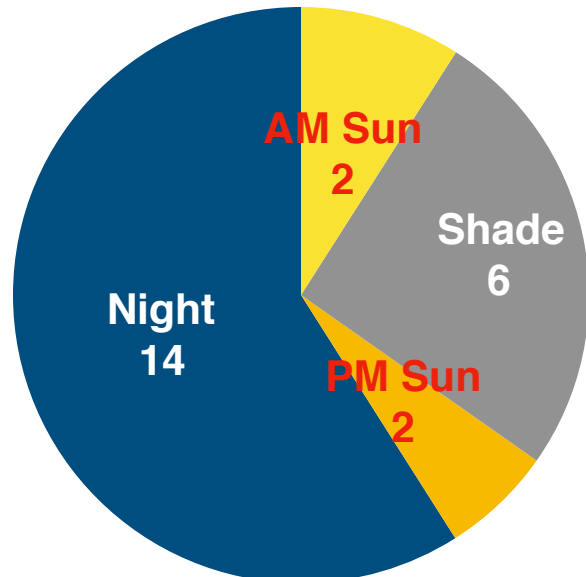


The results are portrayed graphically as

22 Peirce St Feb 2 Hours of Sun Light



26-30 Peirce St Feb 2 Hours of Sun Light



On Feb 2, 22 Peirce St will receive a little more than 3 hours of sunlight from dawn at 7 am to about 10:20 am. At that time, it will fall into the shadow of the hotel, lasting the rest of the day until sunset.

26-30 Peirce St fares slightly better. It will receive the first two hours of sunlight in the morning before going into eclipse for the next 6 hours. In late afternoon, it will emerge from the shadow to catch the last two hours of the setting sun.

The analysis looks only at those shadows cast by the proposed hotel. The estimates of sunlight received in the early morning and late afternoon will be diminished by other existing buildings in the neighborhood.

Don Seltzer