

From: [Karl Heisler](#)
To: [Hill, Shannon](#)
Cc: [Keyon, David](#); [Pete Choi](#); [Keyon, David](#); [Hillary Gitelman](#); [Linda S. Peters](#); [Michael Lisenbee](#); [Elliott Schwimmer](#)
Subject: RE: Downtown West: Response to RFIs
Date: Monday, January 13, 2020 6:36:36 PM
Attachments: [image001.png](#)
[Shadow Fan2.pdf](#)

[External Email]

Shannon: With respect to shadow, we reviewed the 2017 Museum Place SEIR and also took a closer look at both the 2018 and 2005 Downtown Strategy EIRs. We also reviewed the 2004 EIR and the 2016 Addendum for the Delmas Avenue Mixed-Use (Trammel Crow Company) project. All of these EIRs identified shading as a significant CEQA impact. And both the Museum Place SEIR and the Trammel Crow found the shadow impact to be significant and unavoidable, with respect to Plaza de Cesar Chavez (Museum Place) and the Guadalupe River Trail and Arena Green (TCC). (The TCC EIR and Addendum analyzed shadow under Aesthetics (visual character), while the Downtown Strategy 2000 EIR (from 2005) included a separate section on Shade and Shadow. The Downtown Strategy 2040 EIR and the Museum Place SEIR analyzed shadow under Land Use.)

Both Downtown Strategy EIRs found that shadow impacts would be mitigated to a less-than-significant level through measures (called “mitigation measures” in the 2005 document and “measures included in the project” in the 2018 document) requiring project-specific shadow analysis that “must demonstrate that the proposed development would not result in a 10 percent or greater increase in the shadow cast onto the open space area.”

The most definitive threshold of significance in any of the above EIRs was in the 2004 TCC EIR:

- The project would have a significant impact if it would “substantially shadow public open space, other than street and sidewalk, which in this case equates to causing a 10 percent increase in the shadow effects to the Guadalupe River Park and Arena Green during the fall, spring, and winter months between the hours of 11 AM and 2 PM.” Accordingly, the EIR presented shadow graphics for the winter solstice (Dec. 21) and the spring/fall equinoxes (Mar/Sep 21) at 11 a.m., 12 noon, 1 p.m., and 2 p.m., for both a maximum building envelope and an illustrative site plan. The EIR also tabulated shadow for both dates (winter table below).

The 2004 TCC EIR justified its choice of hours analyzed thusly, “These hours are considered most important, because it is when most pedestrians, including both workers and residents, are likely to eat lunch, run errands, and/or stroll through the open spaces.”

The Museum Place and 2005 Downtown Strategy EIR also included a second significance threshold: “Substantially shadow other public open space (beyond the six major open space areas) but excluding streets and sidewalks or private open space between September and March.”

TABLE 19 SHADE/SHADOW ANALYSIS OF LAND USE PLAN MAXIMUM BUILDING ENVELOPE & CONCEPTUAL SITE PLAN ON GUADALUPE RIVER PARK & ARENA GREEN WINTER SOLSTICE (DECEMBER 21)				
Hour	Maximum Building Envelope Shadow (in square feet)	Percentage of Park*	Conceptual Site Plan Shadow (in square feet)	Percentage of Park*
11:00 AM	60,945	12.11%	34,400	6.84%
12:00 PM	57,000	11.33%	31,570	6.27%
1:00 PM	88,110	17.51%	59,010	11.73%
2:00 PM	98,270	19.53%	76,660	15.24%
Average Increase	76,081	15.10%	50,410	10.00%
*Note: The portion of Guadalupe River Park and Arena Green evaluated for the shadow impact totals 503,140 square feet (sf).				

The 2016 TCC Addendum identified the same significant unavoidable shadow impact with the same 11 a.m. to 2 p.m. analysis times but included no graphics.

The Downtown Strategy 2000 EIR analyzed shadow at, and provided graphics for, 10 a.m., 12 noon, and 2 p.m., on the winter and summer solstices and on the spring/fall equinoxes. The Downtown Strategy 2018 EIR appears to have simply done a qualitative analysis; it had no graphics.

The Museum Place SEIR analyzed shadow at, and provided graphics for, 9 a.m., 12 noon, and 3 p.m.

For discussion, I have attached a *very rough* shadow fan diagram that shows the approximately maximum extent of year-round project shadow *without accounting for shadow from existing buildings* at the following times:

December 21 (winter solstice) from 9 a.m. to 3 p.m.

March/September 21 (spring/fall equinoxes) from 9 a.m. to 5 p.m.

June 21 (summer solstice) from 9 a.m. to 6 p.m.¹

Virtually all of the shadow indicated by the gray shading represents the winter solstice, when shadows are longest. Even later shadows on the summer solstice and the two equinoxes is quite a bit shorter than the December extremes. The only exception is that McEnery Park (one of the six major parks analyzed in the Downtown Strategy EIRs) is shaded (by buildings on the TCC site) in the late afternoon in spring and summer. If we were to cut off the analysis at 2 p.m. or even 3 p.m. year-round, consistent with the other EIRs, McEnery Park would not be shaded by the project. However, there would still be morning and mid-day shadow on Arena Green and midday shadow on the Guadalupe River Trail. Also, Cahill Park (not one of the six major parks) would still be shaded at 9 a.m. in late fall and early winter, but likely not at 10 a.m. Note that the 2005 Downtown Strategy EIR included, in addition to the six major parks, analysis of shadow on "Confluence Point" where Los Gatos Creek joins the Guadalupe River, which was then undeveloped open space. This is now part of Arena Green, so perhaps Arena Green should be included in the analysis?

Please advise whether the shadow analysis should be a CEQA impact and, if so, which significance criteria we should use whether we should include Arena Green in the CEQA analysis.

In terms of the hours of analysis, as noted above, previous EIRs have used 9 a.m. to 3 p.m., 10 a.m. to 2 p.m., and 11 a.m. to 2 p.m. It is probably reasonable to limit the analysis to midday hours (11 a.m. to 2 p.m.) on the basis that Downtown parks are mostly used by nearby workers, as opposed to parks in residential neighborhoods, which may more commonly be used in the late afternoon.

Thank you.

¹ We used these times in a recent EIR shadow analysis in Oakland. Oakland's typical analysis times are 9:00 a.m., 12 noon, and 3 p.m., and we added an extra, later hour (except in winter) to more fully capture effects, given the people often use parks in the afternoon. For the spring and fall equinoxes, we chose 5:00 p.m. PDT because it is about one hour before sunset. For the summer solstice, shadows are roughly comparable in length at 6:00 p.m. PDT as those at 5:00 p.m. on the spring/fall equinoxes (even though sunset is not until about 8:30 p.m.). We did not add a later hour in winter because the sun is already quite a bit lower at 3:00 p.m. PST in December than at 5:00 on the equinoxes or 6:00 on the summer solstice, and it sets before 5:00 p.m.

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From: Hill, Shannon <Shannon.Hill@sanjoseca.gov>

Sent: Thursday, January 9, 2020 6:07 PM

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Cc: Keyon, David <david.keyon@sanjoseca.gov>

Subject: Downtown West: Response to RFIs

Hi All,

Sorry for the delay in getting this information to you. We have had a few legislative deadlines to meet this week. Here is a list of your outstanding requests, and the City's responses. I need to run out to catch the bus, but I'll provide the highlighted responses tomorrow:

1. **City to review Land Use Section of ADEIR-1 and identified if additional policies should be highlighted in section. Will provide tomorrow.**
2. **City direction on cumulative impact significance for Population and Housing. Will provide tomorrow.**
3. **City to provide direction related to identification of compliance with City process as a mitigation measure.**

Discussed this with public works (PW), and it's acceptable to provide a mitigation measure to comply with LOS policies. Compliance with the policies will be confirmed during building permit review. However, in support of this, PW is expecting a description of existing and proposed infrastructure and connections to the system in the EIR.

Related to this, I had the following question that we didn't receive a response to: Is there any analysis planned to determine impacts to existing LOS downstream of the project?

4. **Shadow confirmation (placement and methodology)**

Analysis should be provided in the Land Use section under non-CEQA affects. However, it needs to be provided for compliance with General Plan policies. The shade/shadow analysis need only include the parks covered in the [Downtown Strategy 2040 EIR](#). Other parks potentially affected by the project can be discussed briefly at qualitative level.

*Following is an excerpt from the Land Use and Planning section (section 3.11): “The City identifies significant shade and shadow impacts as occurring when a building or other structure located in the Downtown area substantially reduces natural sunlight on **six major public open spaces (St. James Park, Plaza of Palms, Plaza de Cesar Chavez, Paseo de San Antonio, Guadalupe River Park and McEnery Park)**, measured on winter solstice when the sun is lowest in the sky (December 21st); the spring equinox, when day and night are approximately equal in length (March 21st); and the summer solstice when the sun is at its highest point in the sky (June 21st).”*

Refer to the [draft SEIR for Museum Place](#) for the level of detail. An SEIR was required to add the shade/shadow analysis, so this is a good reference.

5. **Cumulative list confirmation.**

No need to include projects in addition to projects added shortly after the NOP was circulated.

Thank you,

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