



CITY OF RANCHO PALOS VERDES

CIVIC CENTER ADVISORY COMMITTEE AGENDA REPORT

MEETING DATE: 02/23/2023
AGENDA HEADING: Regular Business

AGENDA DESCRIPTION:

Receive a report on the Civic Center Geotechnical Investigation Report

RECOMMENDED COMMITTEE ACTION:

1. Receive and file a report on the Civic Center Geotechnical Investigation Report

STAFF COORDINATOR: Matt Waters, Senior Administrative Analyst 

ATTACHED SUPPORTING DOCUMENTS:

- A. [Review of Geotechnical Report by Cotton Shires](#)
 - B. [Leighton Group Geotechnical Investigation Final Report](#)
 - C. [July 14, 2022 Leighton Geotechnical Investigation Memorandum](#)
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BACKGROUND AND DISCUSSION:

The City Council approved an agreement with Griffin Structures (Griffin) on February 15, 2022 to provide project management services for the Civic Center Master Plan project. The agreement's scope included a Geotechnical investigation of the site to be conducted by a Griffin subcontractor, Leighton Group (Leighton).

The purpose of the geotechnical investigation is to provide preliminary information on the nature of the Civic Center site and its geologic conditions as it relates to opportunities and constraints related to preliminary site planning efforts. Prior to preparing a site plan, it is important to have a thorough understanding of the geologic condition of the site to determine where and whether potential development can occur.

Leighton completed all scheduled boring and drilling on site. Surface and subsurface investigative methods were performed including geologic reconnaissance, bucket auger drilling, downhole logging, hollow stem auger exploration, and geotechnical laboratory testing. Leighton also reviewed geotechnical reports and supplemental documentation prepared in 1999 and 2000 for the proposed Terranea Resort (then referred to as Long Point Development) which looked at both Upper and Lower Point Vicente. Leighton has reviewed items including topography, landforms, cliff face setbacks, locations of mapped springs and seeps, slope profiles and slope aspect, geologic structures, weathering of geologic units, the proximity of active faults, and the potential for earthquake ground shaking.

Leighton, at Staff's request, produced a memo on the progress and findings to date that was reviewed by the CCAC at its July 28, 2022 meeting (Attachment C).

The final report was submitted on December 16, 2022 by Leighton (Attachment B). The report was subsequently reviewed by the City's geological consultant, Cotton Shires. Its review was submitted to the City on February 16, 2023 (Attachment A).

The Leighton report is divided into three sections: Introduction, Findings, and Conclusion and Recommendations. While highly technical in nature, the report does not preclude the general location and type of buildings and components as laid out in the preliminary site plans.

Below are some key takeaways from the geotechnical report's conclusions and recommendations summary:

- 1) The site is not located within a state designated special study zone for surface fault rupture.
- 2) The site is subject to strong ground shaking as is the case for most of Southern California.
- 3) The site is not located within a currently designated liquefaction hazard zone
- 4) The site is underlain by stiff to hard clay and silt, and shallow bedrock.
- 5) Proposed Civic Center improvements can be founded on conventional spread footings bearing solely on a zone of newly excavated and recompacted engineered fill soils derived from onsite earth materials
- 6) The report contains specific recommendations for site grading, foundations, and other geotechnical aspects of the conceptual project.

The report notes that the eventual project should be performed in accordance with all applicable building codes and standards to reduce seismic risk and that Leighton Consulting should be retained to provide geotechnical review of site grading, foundation and shoring if applicable when final plans are available. They note that additional geotechnical review may be necessary if the site's conceptual plan changes significantly.

City Geologist Review

Cotton Shires, the City's Geological consultant reviewed the submitted Leighton Geotechnical Review. Their report noted that the report by Leighton was based on conceptual designs prepared by Gensler that are still being evaluated. They note that formal design plans have not been prepared.

Cotton Shires report includes the following comments and recommendations (details can be found in Attachment A):

- 1) Leighton did not plot the conceptual design on their geologic map and cross sections with the presumption that this will be done as part of a future design-level geotechnical investigation

- 2) Notes that Leighton relies on subsurface exploration data from a 2000 investigation of the Point View Development. That data should have added as an appendix to the report.
- 3) States that Leighton should perform their own geologic mapping of the site and provide a statement that they have reviewed and accepted the pervious geologic mapping performing in 2000.
- 4) Seismic design parameters should be updated.
- 5) Requested a discussion of the significance of the purposed of the structural setback line of the geologic map in the southern portion of the project area.
- 6) Request for clarity and recommendations in section 3.8 Earth Anchors.
- 7) A design-level geotechnical investigation should be performed once the City's preferred design for the Civic Center Master Plan is selected.
- 8) Leighton should make the findings required by RPV Municipal Code Title 15, Section 107A.3 regarding the safety of the site against hazards from landslide, settlement, or slippage, and the effect the proposed project will have on the geological stability of the site.

Staff will follow up on these remarks and concerns with both Cotton Shires and Leighton. Staff will work with Leighton and Cotton Shires to determine which issues, if any, need to be addressed now and which need to wait until the Civic Center Master Plan enters the design phase.

CONCLUSION:

It is important to have a thorough understanding of the geologic condition of the site to determine where potential development can occur. The completed geotechnical report, combined with a review by the City Geologist, is an important tool to confirm and guide the current site plans as well as any future refinements to future site design work.