MEMORANDUM

DATE: September 7, 2021

TO: Project Proponent

THROUGH: Paula Kehoe, Director of Water Resources

FROM: Annahita Fallah
Water Resources Division

SUBJECT: Project Demand Memo for Preparation of WSA

The SFPUC is in need of specific project information in order to prepare the Water Supply Assessment (WSA) for your proposed project. The SFPUC will prepare the project WSA based on the 2020 Urban Water Management Plan for the City and County of San Francisco, and according to the following outline:

1. Summary
   a. Introduction and Background
   b. Basis for Requiring a WSA
      c. Proposed Project Description*

2. Water Supply
   a. Existing Water Supplies
   b. Planned Water Supplies

3. Water Demand
   a. Projected Retail Water Demand
      b. Proposed Project Water Demand*

4. Conclusion
   a. Comparison of Projected Supply and Demand
   b. Potential for Shortages in SFPUC Service Area
   c. Water Use Reduction Implications to the Proposed Project
   d. Findings

*Information to support preparation of items 1c and 3b (Proposed Project Description and Proposed Project Water Demand, respectively) shall be provided by the project proponent to the SFPUC in the form of a Project Demand Memo (memo). This memo itself will be attached to the WSA as an appendix and referenced in the WSA as needed.

Proposed Project Description

As part of the Proposed Project Description provided for item 1c, the project proponent shall identify the proposed use(s) and associated data, as shown in the list below:

- If a residential development is proposed, provide the number of dwelling units.
- If a shopping center, business establishment, or commercial office building is proposed; provide the (1) number of occupants/employees and (2) square footage of floorspace.
- If a hotel and/or motel is proposed, provide the number of rooms.
• If an industrial, manufacturing, or processing plant or industrial park is proposed; provide the (1) number of persons to be housed, (2) acreage of land to be occupied, and (3) square footage of floor space.
• If a mixed-use development is proposed, provide the data for the corresponding use(s) as listed above.
• If the proposed project is not defined by one of the categories above, but would demand over 50,000 gallons per day, provide the average daily water use in gallons per day.

The project proponent shall also describe in a bulleted list how the proposed project will meet the requirements of the following City and County of San Francisco ordinances related to water conservation and resources, as applicable:

• Water Efficient Irrigation Ordinance (San Francisco Administrative Code, Ch. 63)
• Residential Water Conservation Ordinance (San Francisco Housing Code, Ch. 12A)
• Commercial Water Conservation Ordinance (San Francisco Building Code, Ch. 13A)
• Recycled Water Use Ordinance (San Francisco Public Works Code, Article 22)
• Non-potable Water Ordinance (San Francisco Health Code, Article 12C)

In addition, the San Francisco Planning Department case number, if applicable, and the anticipated project completion or occupancy date (or dates, if the proposed project is to be phased) shall also be provided.

Proposed Project Water Demand
As part of the Proposed Project Water Demand for item 3b, the project proponent shall provide an estimate of total existing demand at the project site (i.e., demand without proposed project) and cite the data sources or methodology used. The project proponent shall also provide complete accounting for all proposed water uses, including but not limited to indoor uses (toilets, sinks, showers, etc.), cooling applications, outdoor uses (irrigation, fountains), and process water or industrial uses. Proposed demands shall be apportioned into potable (e.g., sinks, showers) and non-potable (e.g., toilet flushing, irrigation, cooling) demands taking into consideration project compliance with the ordinances listed above (e.g., recycled water dual plumbing ["purple pipe"] per the Recycled Water Use Ordinance, onsite water system per the Non-potable Water Ordinance).

Use of the SFPUC’s water use calculator (https://sfpuc.org/programs/future-water-supply-planning/planning-tools-and-documents), which is specifically developed for SFPUC’s Onsite Water Reuse Program (https://sfpuc.org/construction-contracts/design-guidelines-standards/onsitewater-reuse), is strongly encouraged when feasible for estimating both potable and non-potable demands. Use of the calculator will expedite SFPUC’s review of the Project Demand Memo. However, default information in the calculator must be updated, organized, and formatted specifically to the proposed project in order to complete the Project Demand Memo. Project-specific information includes, but is not limited to, proposed project size, occupancy counts, and proposed fixture efficiencies that meet all applicable codes and ordinances. It is understood that estimates based on the calculator for the purpose of the WSA are preliminary, and that estimates may be refined at a later time as project designs progress. Any description of a method or technology proposed to comply the Non-potable Water Ordinance will only be used for informational purposes in the WSA at this time, and City review and approval of a proposed onsite water system must be performed separately through the Non-potable Water Program.

In addition, the project proponent shall complete and provide the following summary tables. Water volumes shall be reported in units of million gallons per day (mgd). Total demand shall be the sum of potable and non-potable demands.
Table 1: Water Demand based on Water Year Type

<table>
<thead>
<tr>
<th>Demand of Proposed Project (mgd)</th>
<th>Normal</th>
<th>Single dry</th>
<th>Multiple 2</th>
<th>Multiple 3</th>
<th>Multiple 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potable Demand</td>
<td>[See note below]</td>
<td>[See note below]</td>
<td>[See note below]</td>
<td>[See note below]</td>
<td>[See note below]</td>
</tr>
<tr>
<td>Non-potable Demand</td>
<td>[See note below]</td>
<td>[See note below]</td>
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<tr>
<td>Total Demand</td>
<td>[See note below]</td>
<td>[See note below]</td>
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</tbody>
</table>

Note: If the proposed project’s water demand would be adjusted based on water year type, the project proponent shall also provide annual demands for each of the following scenarios: normal year, single dry year, second of two dry years, third of three dry years, fourth of four dry years.

Table 2: Water Demand based on Project Phasing (mgd)

<table>
<thead>
<tr>
<th></th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
<th>2045</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potable Demand</td>
<td>[See note below]</td>
<td>[See note below]</td>
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<tr>
<td>Non-potable Demand</td>
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Note: If the proposed project would be phased over time, the project proponent shall also provide water demand estimates that reflect project phasing over the next 20 years in 5-year increments.

Table 3: Potential Potable Water Savings for Proposed Project

<table>
<thead>
<tr>
<th></th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
<th>2045</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Demand (mgd)</td>
<td>[See note below]</td>
<td>[See note below]</td>
<td>[See note below]</td>
<td>[See note below]</td>
<td>[See note below]</td>
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<tr>
<td>Non-potable Supply (mgd)</td>
<td>[See note below]</td>
<td>[See note below]</td>
<td>[See note below]</td>
<td>[See note below]</td>
<td>[See note below]</td>
</tr>
<tr>
<td>Potential Potable Water Savings as Percentage of Total Demand</td>
<td>[See note below]</td>
<td>[See note below]</td>
<td>[See note below]</td>
<td>[See note below]</td>
<td>[See note below]</td>
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Note: If the proposed project would be phased over time, the project proponent shall also provide water demand estimates that reflect project phasing over the next 20 years in 5-year increments.

Once the project proponent provides the memo, the SFPUC will complete the WSA within 90 days. The SFPUC will submit the WSA to its Commission for adoption. Commission meetings are held twice a month. If the requested memo is not provided by the project proponent in a timely manner, the SFPUC may request a 30-day extension to complete preparation and adoption of the WSA.

Note that approval of the WSA by the Commission does not signify approval of the project. The WSA simply provides information on water supplies available to serve the project as a component of environmental review conducted by the Planning Department. The approval of the WSA also does not verify the adequacy of the SFPUC’s existing distribution system capacity to serve the proposed project. A “will serve” letter and/or hydraulic analysis must be requested separately from the SFPUC City Distribution Division to verify hydraulic capacity.
Please submit the Project Demand Memo to the SFPUC’s Water Resources Division at:

SFPUC – Water Resources Division
Attn: Annahita Fallah
AFallah@sfwater.org

If you have any questions, please contact Annahita Fallah (AFallah@sfwater.org).