



CITY OF CORCORAN  
Council Work Session Agenda  
December 9, 2021 - 5:30 pm

1. Call to Order / Roll Call
2. Water Supply Planning\*
3. Unscheduled Items
4. Adjournment

**HYBRID MEETING OPTION AVAILABLE**  
*The public is invited to attend the regular Council meetings at City Hall.*

**Meeting Via Telephone/Other Electronic Means**

**Call-in Instructions:**

+1 312 626 6799 US

**Enter Meeting ID: 881 9481 9532**

Press \*9 to speak during the Public Comment Sections in the meeting.

**Video Link and Instructions:**

<https://us02web.zoom.us/j/88194819532>

visit <http://www.zoom.us> and enter

**Meeting ID: 881 9481 9532**

Participants can utilize the Raise Hand function to be recognized to speak during the Public Comment sections in the meeting. Participant video feeds will be muted. **In-person comments will be received first, with the hybrid electronic means option following.**

For more information on options to provide public comment visit:

[www.corcoranmn.gov](http://www.corcoranmn.gov)

**\*Includes Materials** - Materials relating to these agenda items can be found in the Council Chambers Agenda Packet book located by the entrance. The complete Council Agenda Packet is available electronically on the City website at [www.corcoranmn.gov](http://www.corcoranmn.gov).




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To:	Kevin Mattson, PE	From:	Ash Hammerbeck, PE Steve Hegland, PE
	City of Corcoran		Stantec
File:	227704426	Date:	December 3, 2021

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**Reference: Water Storage Options Evaluation – Follow Up Memo, December 9th Work Session**

Background

At the October 28<sup>th</sup> City Council Work Session, Stantec and Staff discussed with the City Council alternatives for constructing a water storage system within the neighborhood park of the Bellwether Development. The report presented multiple water storage options for the Northeast Corcoran Water System including an elevated water tower, above-ground storage tank (GST), and a buried storage tank and provided information based on aesthetics, costs, water system functionality.

During that work session the City Council discussed the pros and cons of both systems within this park and briefly discussed whether the park was the appropriate location for water storage. Through those discussions, the City Council elected to continue with the geotechnical investigation at the water treatment plant/storage site and discuss further.

Additional Information

Since the October work session, the City has contracted with Braun Intertec to provide soil borings at the water treatment plant site and the proposed water storage location in Bellwether Park to identify groundwater elevations and soil conditions. This information was needed to further evaluate the feasibility of a buried or partially buried GST in the park location as well as confirm that soil conditions are conducive for the storage foundations.

Based on a preliminary boring at the Bellwether Park site, the groundwater was identified at approximately 36-feet below the surface elevation and the soils were comprised of sandy lean clay and poorly graded sands. The preliminary boring information indicates that the soils within the Bellwether Park would be suitable for an elevated water tower or water storage tank with a typical foundation. Based on these initial results, deep pile foundations or substantial subgrade corrections would not be anticipated.

The soils borings for the treatment site also indicated reasonable soils for constructing that facility. Braun is working on finalizing the borings they could get access to and performing laboratory testing on the material prior to issuing the final report to confirm site suitability.

Stantec has also reviewed the hydrology and floodplain elevations as part of the adjacent Bellwether and Newman West Development plans. The estimated high-water level (HWL) within the wetland complex directly south of the water storage location is at an elevation of 937.8 This is approximately 8' below the future ground elevation of the park.

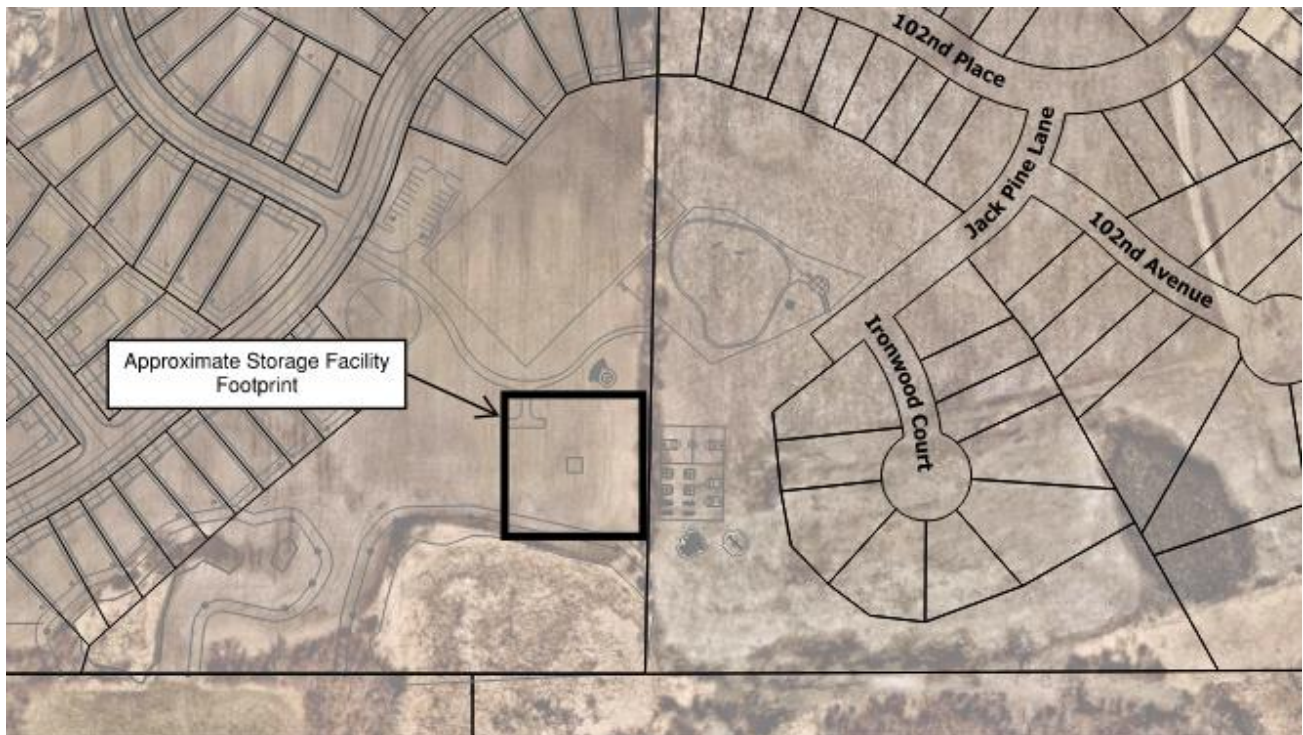
The state regulations for a water storage facility require that the sump of a ground storage tank be located above the high-water levels of adjacent waterbodies and at least two feet above the groundwater table. This means that, at most, a ground storage tank at the park location could be buried to a depth of approximately 8' (elev. 938) and approximately 30' of the tank would be above grade. At this height, it would not be reasonable to mounded soils around the tank to visually hide due to substantial grading impacts and the enlarged footprint it would require.

**Reference:** Water Storage Options Evaluation – Follow Up Memo, December 9th Work Session

A fully above ground tank at the park location would cost less to construct and maintain versus a partially buried and would have a height of approximately 40' above grade.

Based on this additional information, we believe an elevated water tower and at-grade water storage tank are viable alternatives within the Bellwether Park.

At the previous Work Session, additional questions were raised relative to the tower footprint as compared to a ground storage tank and how that may impact or limit the park space available for other uses. For both options, a footprint of approximately 200'x200' would be required for the infrastructure itself, as well as area to complete maintenance activities in the future. While much of this space could be greenspace and landscaping to screen the structures, no park features could be located within that footprint for either option. See below for a figure showing that approximate footprint within the park



**Figure 1: Water Storage Footprint**

City Council Considerations

At the Work Session, we would ask the City Council to consider and discuss the following:

- Is the park the preferred water storage system location for staff to proceed with or should staff look for alternate locations outside the park?
  - If the park is preferred, what storage option (elevated water tower or above-ground storage tank) is preferred?

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**Reference:**     **Water Storage Options Evaluation – Follow Up Memo, December 9th Work Session**

- If the Council directs staff to look for alternative locations, our recommendation would be to identify a site suitable for a water tower in lieu of a ground storage tank. We would ask Council to discuss and provide direction on what criteria should be used in selecting alternative sites as it relates to existing and proposed land uses or other factors.

Changing the water storage location from the Bellwether Park will likely have additional costs to extend the utility infrastructure to the location and purchase land rights. To maintain the current schedule, purchase agreements and site work should be completed by Fall 2022. Additional details on these impacts would be further discussed and quantified depending on the site selection.

*Additional Work Session Topics*

If time allows, Stantec will review with City Council the results of the Architectural Survey, which is attached to this memo.

# Architecture preference survey

Please rate each of the building styles below.

\* Required

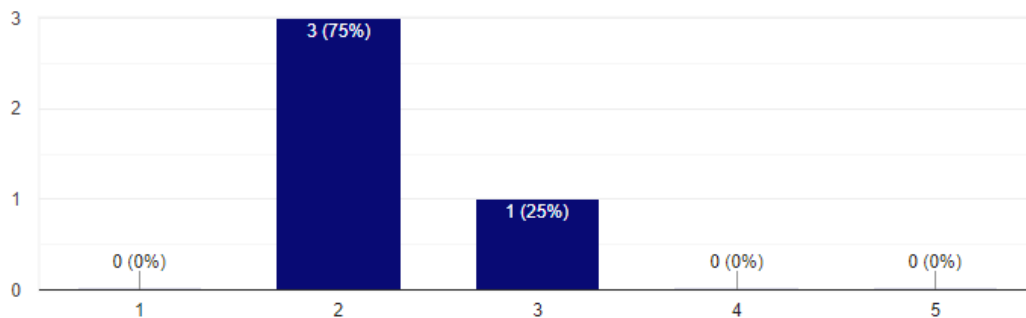
1. Name \*

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2. Please rate your preference for this style of building. \*



## Chaska Water Treatment Facility



Do not like at all      Like very much



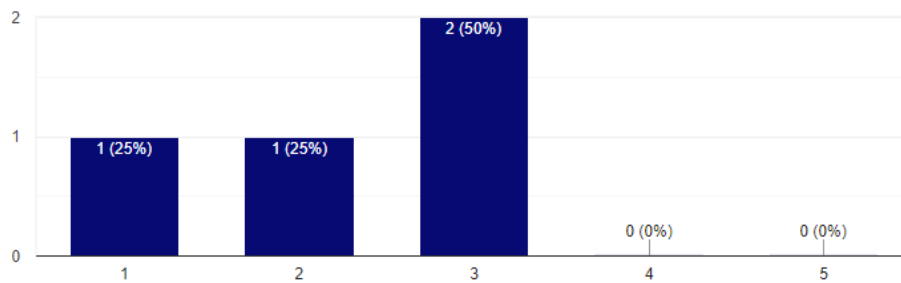
3. Please rate your preference for this type of building. \*



Mark only one oval.

1 2 3 4 5

Do not like at all      Like very much



4. Please rate your preference for this type of building. \*



## Apple Valley Water Treatment Facility Expansion

- Face brick veneer – three color blends
- Manufactured stone corner accent
- Horizontal corrugated prefinished metal wall panels behind name
- Multi-colored prefinished aluminum wall panels
- Aluminum framed windows
- Prefinished metal coping at flat roofs

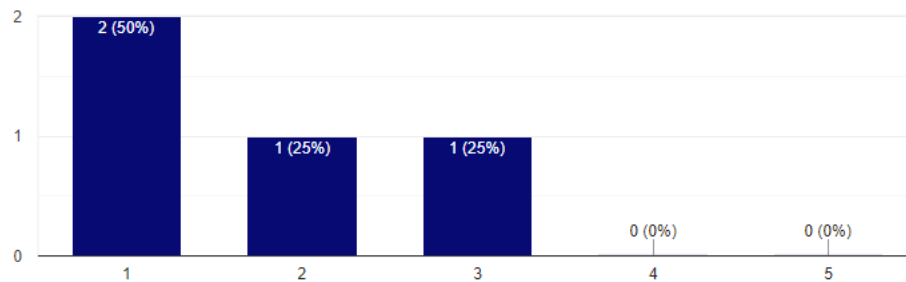
Mark only one oval.

1      2      3      4      5

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Do not like at all                  Like very much

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5. Please rate your preference for this type of building. \*

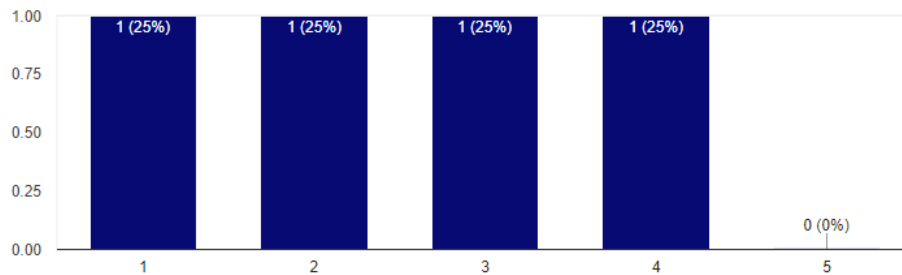


Chaska Ground Water Storage Booster Station

Mark only one oval.

1 2 3 4 5

Do not like at all      Like very much





6. Please rate your preference for this type of building. \*



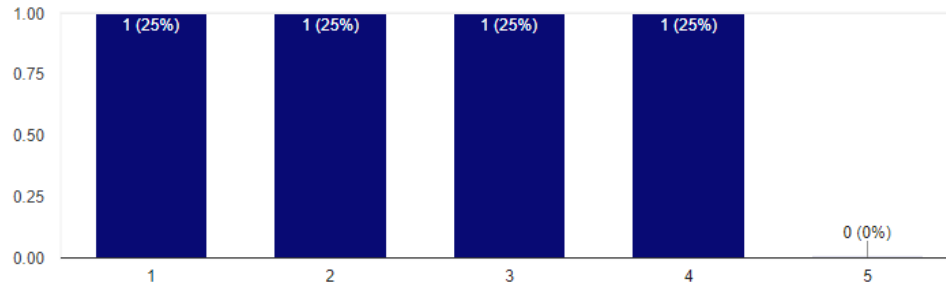
# Stacy Water Treatment Facility

0.6 MGD Capacity  
• Gravity filtration to remove radium, manganese, and iron

Mark only one oval.

1 2 3 4 5

Do not like at all      Like very much



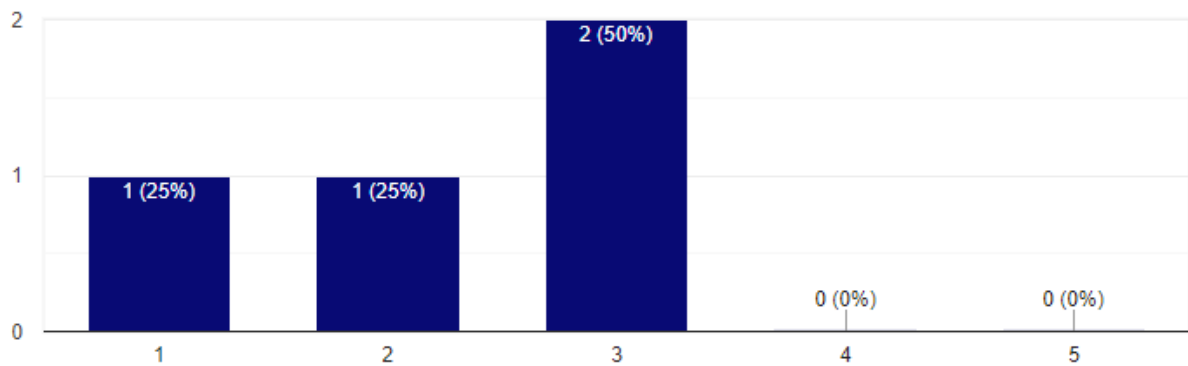
7. Please rate your preference for this type of building. \*



Mark only one oval.

1 2 3 4 5

Do not like at all      Like very much



8. Please rate your preference for this type of building. \*



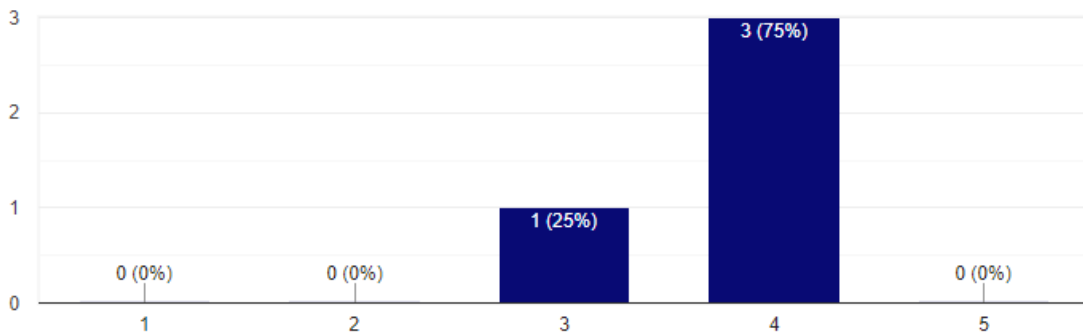
Mark only one oval.

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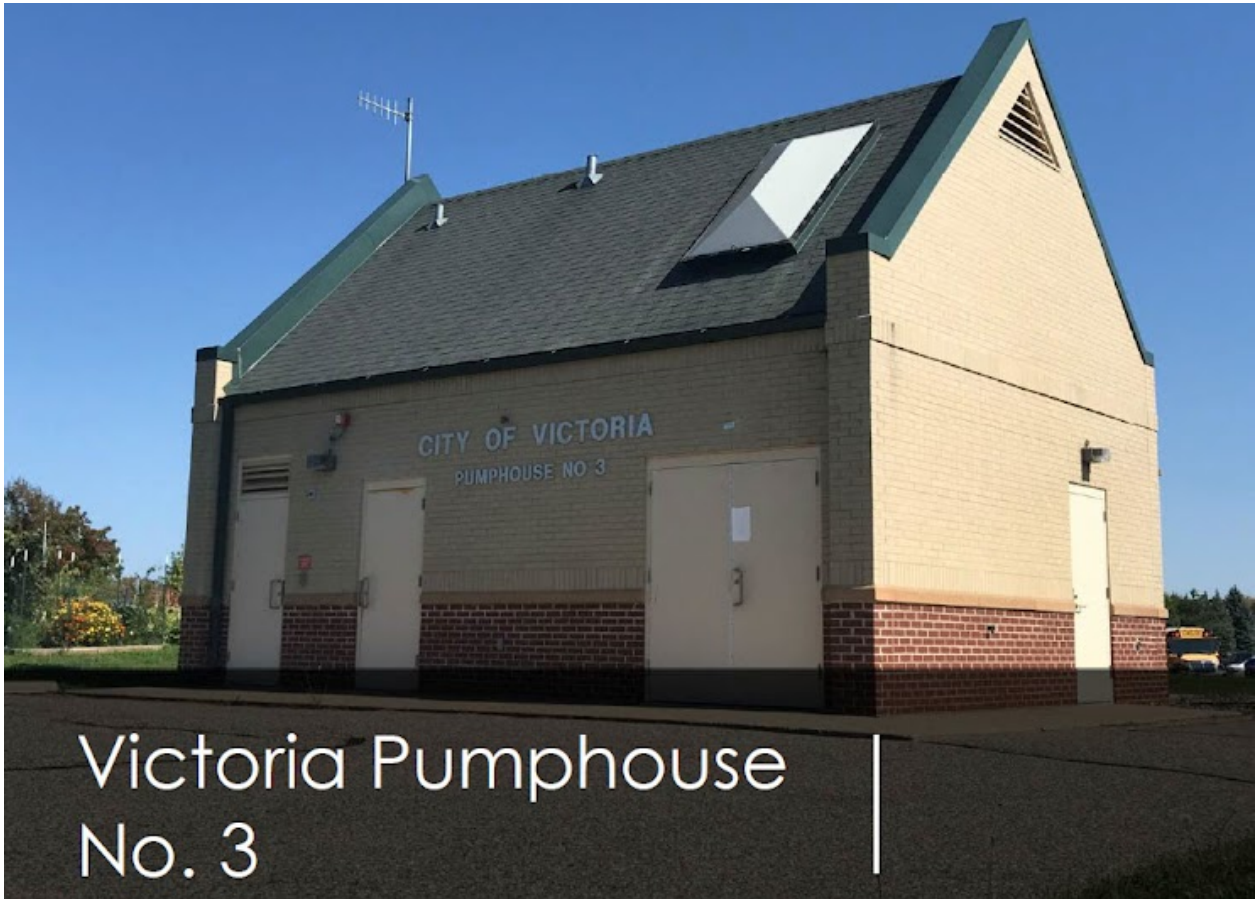
Do not like at all                  Like very much

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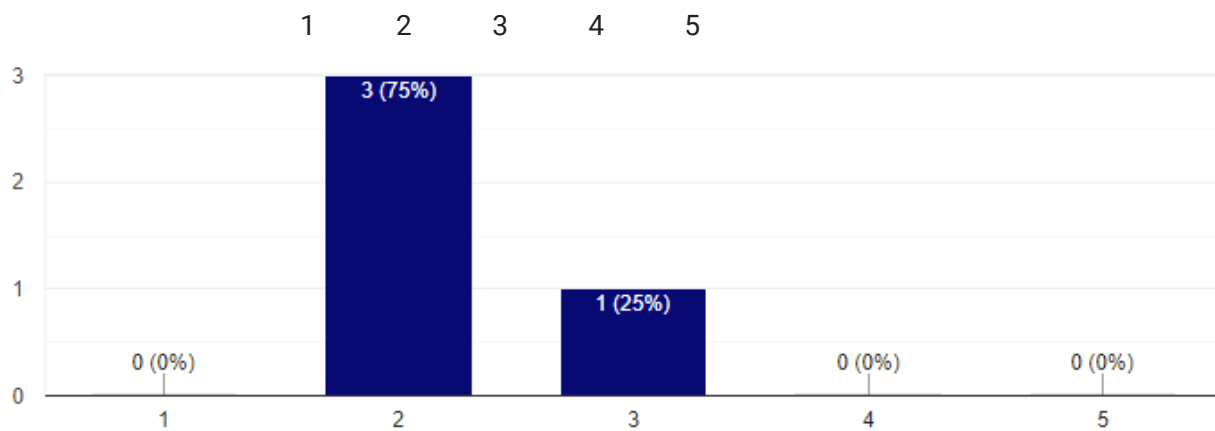




9. Please rate your preference for this type of building. \*



Mark only one oval.





10. Please rate your preference for this type of building. \*



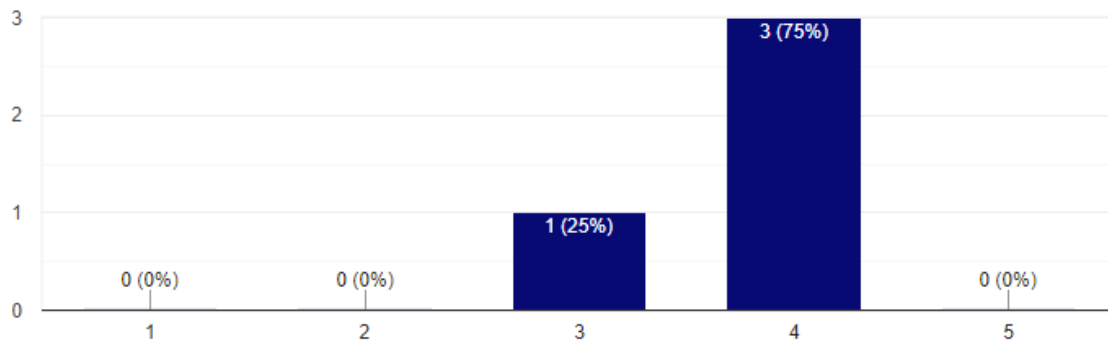
Mark only one oval.

1      2      3      4      5

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Do not like at all                  Like very much

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11. Please rate your preference for this type of building. \*



Mark only one oval.

1      2      3      4      5

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Do not like at all                  Like very much

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