

Memorandum

TO: City Council
FROM: Allison Eddins , Senior planner
DATE: January 6, 2025
SUBJECT: Special Purpose Fence - City of Shoreview - 881 Highway 96
ITEM NUMBER: 9.j
SECTION: CONSENT AGENDA

REQUESTED MOTION

To approve the Special Purpose Fence Permit for the City of Shoreview to install a six foot tall fence in the front yard of the water treatment facility at 881 Highway 96. The purpose of the fence is to enclose a solar array that is being installed at the facility. The approval of the fence is subject to the following conditions:

1. The approval permits a six foot tall black metal fence to be installed in the front yard of the City's water treatment facility. The fence will match the existing black metal fence that is in place next door around the water retention pond.
2. The fence will serve a special purpose which is to provide an enclosure around a solar array that will installed at the site in 2025.
3. The fence shall be maintained in accordance with the standards of the Shoreview Development Code and shall be constructed in accordance with the submitted plans.
4. The City will obtain a zoning permit for the new fence.
5. If the solar array should cease to exist, the special purpose fence shall be removed.

INTRODUCTION

The City of Shoreview has submitted a Special Purpose Fence application for the water treatment facility at 881 Highway 96. The City would like to install a six foot tall black metal fence around a solar array that is being installed in 2025. The fence will fully enclose the solar array that will be installed in front (and southern facing) yard of the facility. A Special Purpose Fence is considered a fence that does not meet the development code requirements for construction, height or length but is permitted because it serves a special purpose. In this case, the City's proposed fence exceeds the four foot maximum height allowed for fences in front yards.

DISCUSSION

Site Characteristics - The water treatment facility is located along Highway 96 on a 3.3 acre lot that also contains the facility's booster station and retention pond and the city's salt shed and maintenance yard. The lot is located in the R1 - Detached Residential district.

The facility building is setback approximately 160 feet from the right-of-way. There is a swale roughly 40 feet south of the facility. The new solar array will be placed on the flat land between the swale and the right-of-way.

Project Description - Shoreview's Natural Resources staff applied for and received a grant from the Minnesota Department of Commerce Solar on Public Buildings Program to install a ground mounted solar array at the water treatment plant. When designing the project, city staff first looked at installing a roof mounted solar panels similar to the ones installed on the roof of the Public Works building. However, the irregular roof lines of the water treatment plant are not conducive for installing panels. It was decided that installing a ground mounted array was the best option.

The array will require a relatively flat area roughly 100 feet by 50 feet. The land between the water treatment facility and the swale is not large enough. The contractor who will be installing the solar array has identified the land between the swale and the front lot line as ideal. The ground is relatively flat, it is south facing and meet the space requirements. For safety reasons, the ground mounted array will require fencing at least six feet in height.

The six foot fence will be installed around the solar array and will be setback a minimum of 40 feet from the front lot line abutting Highway 96. For reference, the Shoreview Arena is setback approximately 23 feet from it's front lot line and 54 feet from the developed right-of-way. The fence will connect to and match the existing fence around the water retention pond and the maintenance facility. See the attached site photos for the existing fence and the proposed location of the solar array and fence enclosure.

The fence will be a ornamental steel fence painted black. The design will include two horizontal rails along the top and bottom. The vertical rails will be spaced 3 3/4" apart and will be installed in 8 foot panels. The fence will be installed with 12" footings at a 42" depth.

Development Code - Section 103.98 establishes a permitting process for fences that differ from the code requirements. These types of fences are permitted in any district provided a Special Purpose Fence Permit is approved by the city council. Before issuing the permit, the city council may submit the matter to the planning commission for its recommendation.

Section 107.65 (d) (7) (b) establishes standards and regulations for residential zoning districts. Fences are permitted provided the following standards are met:

(b) Height. Fences in front yards or any yard adjacent to a public road right-of-way or road easement shall not exceed four feet in height except:

(i) Fences in a rear yard of a double fronted lot, adjacent to an arterial or collector roadway, may be up to six feet in height.

(ii) Fences in other side or rear yards shall not exceed six feet in height. In no case shall the combined height of any fence and berm exceed the maximum height permitted by more than one foot.

Public Comment - A notice was mailed to all property owners within 350 feet of the water treatment facility. At the time this report was written staff had received no public comment.

Staff Review - The intent of the fence height limit is to minimize the visual impact that they have on the neighborhood, preserve a sense of open space typical of the suburban development pattern and maintain a high level of vehicular and pedestrian traffic visibility. Fences are also intended to provide a sense of security and enclosure.

In staff's opinion, the city's request is reasonable and a Special Purpose Fence Permit is

justified. A four foot fence, allowed out right by code, would not provide adequate security. The 40 foot setback and the fence design will provide the security that the solar array requires while maintaining sight visibility from the right-of-way.

RECOMMENDATION

The City has demonstrated that the proposed fence will serve a special purpose and is needed for the security of the future ground mounted solar array. Further, staff believes that the fence will not create traffic visibility issues and will blend well with the existing fence around the retention area.

Staff is recommending that the city council approve the Special Purpose Fence Permit with the following conditions:

1. The approval permits a six foot tall black metal fence to be installed in the front yard of the City's water treatment facility. The fence will match the existing black metal fence that is in place next door around the water retention pond.
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ATTACHMENTS

[Location Map](#)

[Fence Specifications](#)

[Site Plan](#)

[Site photos](#)