

**VILLAGE OF HASTINGS-ON-HUDSON, NEW YORK
BOARD OF TRUSTEES
SPECIAL MEETING
SEPTEMBER 30, 2003**

A Special Meeting was held by the Board of Trustees on Tuesday, September 30, 2003 at 8:00 p.m. in the Meeting Room, Municipal Building, 7 Maple Avenue.

PRESENT: Mayor Wm. Lee Kinnally, Jr., Trustee Michael Holdstein, Trustee Bruce Jennings, Trustee Marjorie Apel, Trustee Peter Swiderski, Village Manager Neil P. Hess, and Village Clerk Susan Maggiotto.

CITIZENS: Five (5).

Mayor Kinnally: The only item on the agenda is consideration of lighting for the pool renovations. We are here this evening because questions have been raised by the Board and information sought to help us in our deliberation.

Trustee Apel: I have been to the site here and have been to Irvington to see the comparable lighting, and the only thing that one does not realize when we are there is the difference when lights shine on the grass versus in the pool. Could you describe the reflection off the water when the lights are 80 feet tall?

Dick Ward, Ward Associates: At the 80-foot height, they are coming down fairly steep. Part of that is to penetrate the water. The lower it is, the less penetration of the water. So the 80-foot specified in the plan is designed to reduce the number of poles.

Trustee Apel: When we saw the poles in Irvington, some of them were thinner or fatter. Is that because of the number of lights on the pole?

Mr. Ward: Generally speaking, yes.

Trustee Apel: We are going to need how many lights on each pole? Twenty lights, 22?

Mr. Ward: Yes. One of the poles has 28 lights.

Trustee Apel: So that pole would be larger?

Mr. Ward: Yes.

Trustee Jennings: A number of things have been clarified since our meeting a week ago. At that time there was some concern about the height of the poles and how that would look in the context of the pool location. I have also visited the waterfront park in Irvington and I do

not find the prospect of two 80-foot poles any longer to be objectionable or out of keeping with our pool. We asked for alternatives in part because we were worried about the height of the poles, and that led us into speculation about a number of different ways to meet county requirements. I do not think it is necessary to go down that path this evening.

The second thing we talked about was negotiations with the county to see if we could change their requirements and, hence, change the nature of the lighting required. Again, that is unnecessary to pursue, given the acceptability of the two 80-foot poles.

For me, that only leaves one question, which has to do with the effect on the immediate neighborhood, or the effect generally of the ambient light that would be seen not just at the pool but elsewhere in the Village. As I understand it, the lighting in Irvington, which is greater than what we are going to have, has not occasioned problems with the immediate neighbors or with the rest of the village. I would ask you to review one more time the steps we would take to minimize the impact of the evening lighting on the neighborhood.

Mr. Ward: The spill and glare control that is specified eliminates both the vertical and the horizontal cut-offs from being very severe. Once you are outside the path of the limits of the lighting it gets dark pretty quickly. We are not illuminating the sky, and we are not illuminating the woods around us. It is restricted to the site itself: the pools, the decks, and the adjacent lawn area. If you are in the parking lot you will need a light to get in your car.

There was a question on maintenance. The contractor is coming with a contract with a 10-year maintenance on replacement and all parts and labor. If lights go out that would be detrimental to the 50 foot candles, Musco Lighting is on the hook to come back and fix it for us. They will climb the poles and do that for a 10-year period; that is part of the bid.

Trustee Holdstein: A lot of us have had some real clarity by visiting the Irvington site and talking to Ray and others. If I am at the corner of Hillside, about to pull into the driveway to go up the hill, at a dark 9:30 p.m. on a July night if I look up, I am going to see the lights. But you are saying that if my back is turned it is going to be dark. One of the issues was raised about the light reflecting off the water, shooting up into the sky and creating a glow around town. I suspect there probably will be some. But the other part that we did not think about is the fact that we are talking about till 9:30 or 10 o'clock in the summer. And with the pool surrounded by trees, while there might be a little bit of a glow shooting up, it is only until 9:30 or 10 p.m. I do not think that glow is going to hit any homes that are in the immediate area. I am feeling very comfortable about the two 80-foot where, like Bruce, I was a little concerned last week.

Mayor Kinnally: We have two poles. You said there will be a 22 and an 18.

Don Rhuda, Musco Lighting: A 28 and a 16.

Mayor Kinnally: Which will be the 28?

Mr. Ward: The one that is between the wading pool and the main pool.

Mayor Kinnally: And that is because it is going to be directional?

Mr. Ward: It will be in different directions.

Mr. Rhuda: Not all of those lights are on the same side of the pole. There are 15 on one side and 13 on the other. So the profile is divided up into a very balanced appearance.

Trustee Apel: I noticed that it is like racks. So instead of being one rack with four parts, there are going to be two racks on one pole, one sort of facing one way?

Mr. Rhuda: We discussed that as a possibility. We could also have a simple rack with multiple rows of three.

Mr. Ward: Rather than go across, we could go vertically on the pole.

Trustee Apel: So you could have single lights going down the poles? That would make it even more narrow and make it look a little less than stadium lights. I also want to attest to the fact that in Irvington if I walked from here to where you are it was dark.

Mr. Rhuda: The average preconception is that you are going to have sky-glow, light all over the place. That is not the case with this technology. You saw two types in Irvington. The ones with the black visor are the style that Dick's firm has specified. There is nothing in the industry to equal that in cutoff and control. Once it is installed we do a variety of tests to ensure that the light is on the facility and away from other areas within the region. We have the ability to do a variety of things to that product even once it is up in the air.

Trustee Holdstein: Are you saying that light bounding off the water and sending a bit of light even only to the height of the trees is unlikely?

Mr. Rhuda: Very. Part of the reason I indicate that so strongly is that the angle at which the lights are pointing down is greater than 50 degrees vertical. That means you are coming

down very sharply to the water surface so that you can penetrate to the bottom. You need to see the bottom of that pool. All of the other issues aside, what drives the mounting height is safety. The downward angle, hitting that water, allows it to penetrate. The flatter that angle is, it does not penetrate the water at all. It skips off and bounces up. That is where you have real problems with the shorter mounting heights.

Trustee Holdstein: What kind of impact would people walking around the deck sense with those lights? If you are standing under the pole and you look up, it is going to be pretty blinding. But as I am looking you in the eye, am I going to feel the light in my eye in some way? Or is it so high up that you do not in the course of normal activity see it?

Mr. Rhuda: Again, the degree of vertical tilt on that fixture is downward. The more downward in the screening that is on the fixture itself, the more difficult it is to look into the face of the reflection. In this room we can look up and see the light bulb in the ceiling. If you screen off the light bulb, you will see light being reflected off the ceiling but not the source of the glare. It is a lot easier to look at. It is the same thing. Screening the lights and a combination of mounting heights makes it more user-friendly. That is what we are doing.

Mayor Kinnally: I would like to see the best of both worlds: shorter lights but not multiple lights. But you are saying that the angle is going to be not as steep and you are going to lose the light? It is going to skip off the surface of the water and not penetrate?

Mr. Rhuda: Right.

Mayor Kinnally: It seemed to me, looking at the basketball courts in Irvington, that they were sufficiently lighted with the 50-foot poles. But that is just surface.

Mr. Rhuda: That is surface. And it is a much, much smaller area. You have to be site-specific and generate a game plan based on what you are dealing with. It was not somebody sitting down and saying, let us grab this size pole. It has mathematics and aiming logic behind it.

Mayor Kinnally: And you could do the shorter poles, but they would be multiples.

Mr. Rhuda: Correct, and that is part of what led us to that other suggestion, which was a five-pole design. You need to have a vertical angle into the pool. What is the shortest pole we could do that with, and what is the fewest number of poles? We came up with the 50-foot and the five poles. You are throwing your money away to try to do it with anything shorter.

In spite of all the wishes and wants and well-intentions, it is just too sharp. It does not function.

Trustee Holdstein: But the five poles at 50 or the two at 80 give you the identical surface covering to the bottom of the pool. So from the standpoint of what they are providing, going higher with only two is not any better. They are equal.

Mr. Rhuda: They are equal with the end result. The difference is the approach: having two sources of light or five.

Mayor Kinnally: Questions were raised about the utilization of lights in the pool. What type of lighting could there be in the pool that would allow us to have the penetration, or to assist in the penetration, of the pool?

Mr. Rhuda: The underwater lights would help us some, but not enough. The health department is still requiring 50 foot on the decks. We might be able to back off a bit over the pool, but not substantially.

Mayor Kinnally: Could you accomplish the 50 foot candles on the deck using 50-foot towers?

Mr. Rhuda: We already have shown that it can be done.

Mayor Kinnally: You would still have to have the five poles?

Mr. Rhuda: Yes.

Mr. Ward: I think that, visually, the two poles is a better arrangement than the five. It is less intrusive. There is a little better distribution with the light source being higher up. There is a little less tendency to see right into it.

Mr. Rhuda: Dick's observation is very valid.

Trustee Holdstein: The placement of the two poles on the plan: was that also a function of the mathematics?

Mr. Rhuda: Yes. We could move it 10 feet, yes. But to move it to the other side of the pool, no. The factory could re-aim the lights a little if we want to move the pole 5 or 10 feet, but we cannot just change poles from one side to another.

Trustee Swiderski: This experience was one that filled me with a little chagrin. I had quite a strong opinion as of Friday, which was to forget the poles and the whole idea. I have to hand it to our parks commissioner for dragging us to Irvington and exposing us to what it really was like. I went last night as well to see the field lit up. Somebody should call Irvington and thank them for turning on the lights for us. I was struck during the daytime by how hard it was to believe that those poles were 100 and 80 feet tall. They did not look it.

Mr. Rhuda: And you are looking at it in its worst condition because you are in a flat plane. In the valley here they are going to feel even shorter than those.

Trustee Swiderski: I came away feeling that I would be surprised if 20 feet of pole came out over the trees. Those are big trees.

Mr. Rhuda: I went to look at the site again, and had not been there in a couple of years. I did not tape it off using our scope to determine the height of the trees, but I would venture to guess you might see five feet of pole.

Trustee Swiderski: And then I was struck, especially at the basketball court where the visors are in place, that you stand behind the lights and you cannot see a glimmer. You cannot see the time on your watch, without much exaggeration. So with those factors, and with the fact that this is an asset that serves the whole Village, I was left flipping my decision 180 degrees. More and more of this Village works during the day and cannot utilize the pool until the evening. If we are looking to increase market share on the pool down the road, the more commuters who see this as a benefit and would sign up for the pool as a result, the better off we are. In a long-term perspective of 10 and 20 years, the three to four nights a week for 10 weeks a year that the lights would be run for an hour-and-a-half to two hours, even with the light pollution that might result that I am not so sure will be that great, I felt it would be all worth it. So I did a flip, and my perspective has changed quite a bit.

Mr. Rhuda: I think the entire Board is to be complimented for the open-mindedness with which you approached this subject. It is not an easy one to deal with because there are very few examples. So you have done your homework to make an educated decision. It is based on fact, not hearsay or wishes.

Mayor Kinnally: What types are the lamps?

Mr. Rhuda: They are middle A-1. It is a white light, and we use that for viewability.

Trustee Apel: How do you change the bulbs?

Mr. Rhuda: We have the equipment to do that. We have taken the initiative to deal with those issues so that you and your parks people can do what you are good at: worry about the things that are germane to your problems. We will take care of them and make them work. The arrangement that we have discussed with the three across is exactly the same arrangement that we have at the top of Arthur Ashe Stadium in the U.S. tennis facility. Same reflector, same configuration, same method of servicing. Those are mounted on the top of a 100-foot stadium with steel poles on the top of that.

Trustee Swiderski: In those 28 and 16 lights, there is some redundancy so if one light fails we do not have to shut the pool down for the night?

Mr. Rhuda: True. There are overlapping aiming points, so if one fails you will be picking up light from the other side.

Trustee Holdstein: If we lose light on a Monday and we plan to have the lights on Tuesday, how quick do you people come out to get it fixed?

Mr. Rhuda: The wording that we have in our warranty is that if there is 10% of failure on any particular pole, or if a light out makes an impact to the use of the facility. You tell us how urgent that repair is and we will be there either that morning or, if it can wait till the end of the week, we will be there then.

Trustee Holdstein: But if Ray determines we have to have it to get the lights on for the next night?

Mr. Ward: In the spring before you open the pool, you turn the lights on and if we have a problem that is when you are going to do it. Normally, during the season, if one or two have burned out for some reason, it is usually not a problem. But if you have a battery or a group of them go out, that is when you definitely have to fix them.

Trustee Holdstein: How long do those bulbs last?

Mr. Rhuda: With your intended use, those will last at least 10 years, if not longer.

Trustee Holdstein: So, barring any complications, those bulbs are not going to go out in the 10 years.

Mr. Rhuda: I should have bit my tongue when I said that. The definition of the lamp life is the point at which 50% of your lights are expected to burn out. The rated lamp life is 3,000

hours on that wattage of a fixture. If we are having 40-some-odd lights, we expect 20 of them to burn out within the 3,000 hours. By the end of 10 years we will expect to come in and replace at least 20 of them. And at the end of 10 years we come in and replace all the lamps, whether they failed or not, so that you have a fresh batch of lights to work with for the next 10 years.

Mr. Ward: At that point, you have the option of going for the insurance policy again for another 10 years.

Mayor Kinnally: On the poles, is there any color?

Mr. Rhuda: Right now it is silver, the galvanized steel color.

Mayor Kinnally: Does it come in any other color?

Mr. Rhuda: It can be colorized. The original Forest Hills tennis facility were green. Arthur Ashe stadium has sort of a purplish color. Green and brown seem to be popular.

Mayor Kinnally: We have to make a decision when?

Mr. Ward: As soon as possible.

Mayor Kinnally: When are you ordering?

Mr. Ward: When you say what is going on.

Trustee Swiderski: Can I just address your question, Mayor? Anything that will blend in.

Mayor Kinnally: I was talking about a brown, or something like that.

Trustee Holdstein: The brown or the green.

Mayor Kinnally: You do not want green. The trunks are brown. But if we can just see some chips. We do not have to make that decision tonight.

Trustee Swiderski: I do not want to have a special meeting to convene for color chips.

Mayor Kinnally: I think under the open meetings law we can have something just to consider colors.

Trustee Swiderski: I do not want contractor fees and penalties to accrue. Will the decision delay your work?

Mr. Rhuda: No.

Mayor Kinnally: Do we have a formal motion?

Village Manager Hess: You do not need a motion. You have already approved the contract with the 80-foot lights.

Mayor Kinnally: Is the sense of the Board to go with the 80-foot lights with camouflage painting on it? Is there any public comment on this? Gentlemen, I thank you. This has been a long, laborious process but one that ultimately will come out for the better. Ray, thank you for putting this together. You have been quite informative.

ADJOURNMENT

On MOTION of Trustee Apel, SECONDED by Trustee Swiderski with a voice vote of all in favor, Mayor Kinnally adjourned the Special Meeting at 8:30 p.m.