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10 February 2013

Mayor and City Council
City of Sierra Vista
1011 N. Coronado Drive
Sierra Vista, AZ 85635

Dear Mayor Mueller and Council Members,

We write to express our concern about consideration of lifting the current ban on digital advertising signs in Sierra Vista. Your vibrant city is a close neighbor to Mt. Hopkins, at the summit of which is one of the premier astronomical research telescopes in the country, the MMT. This facility, with its 20-foot-diameter telescope mirror, is run jointly by the University of Arizona and the Smithsonian Institution through its research branch, the Smithsonian Astrophysical Observatory. Its high impact observational studies range from characterizing the small bodies in our Solar System to measuring the most distant galaxies in the Universe. All these studies depend on access to the dark Arizona night sky, with minimal blinding glare from urban lighting gone astray.

Digital signs have the clear advantage of a customizable and changing message. But they have severe consequences in terms of control of direction and intensity of these powerful light sources. A substantial fraction of the radiated light goes directly into the skyward direction (above horizontal), wasting that light and therefore energy, while creating glare that impacts neighbors strongly and the ability of both professional and amateur observatories to pursue their observations. It is easy for such signs to be strongly overlit, exacerbating the problem.

The Federal Government and the State of Arizona jointly invest millions of dollars in the operation of the MMT. We urge you to consider seriously the impact of a public policy that would demonstrably impair such an operation. We also note that the dark skies of the Sierra Vista area are a draw for amateur astronomers and astro-tourism, serious contributors to the local economy.

We believe that Sierra Vista can have a vigorous business environment while protecting one of the most precious assets of the region, the dark night sky.

Sincerely,

A handwritten signature in blue ink that reads "Buell Jannuzi".

Buell T. Jannuzi
Director, Steward Observatory
Head, Department of Astronomy

A handwritten signature in black ink that reads "Richard Green".

Richard Green
Assistant Director, Steward Observatory