

#### Independent Analysis by Gale

1. All of the calculations and costs appear to have been provided by MUSCO, the lighting vendor. Was there an independent analysis of lighting conditions or is the existing report an interpretation of Musco's calculations?
2. For example, did Gale gather similar calculations and costs from other lighting vendors?

#### Report Contents

1. The report appears to use soccer to model the lighting. If Musco had used football for their calculations,
  - a. Would the pole locations need to change for football vs soccer?
  - b. Would the light intensity and spillage be greater for football than soccer?
2. Are the lighting and spillage levels shown for practice conditions or MIAA game conditions?
3. Would there be more spillage during MIAA games?
4. Do the light spillage numbers calculated by Musco include spillage from the other lighting required for the project (grandstands, walkways etc as recommended by the Illumination Engineering Society)?
5. Is it correct that, at a minimum, light spillage at the property boundary will be between 7 and 15.94 footcandles?
6. Do the lights stay focused on the field or do they need to be adjusted over time as a result of movements from storms and high winds?
7. Once installed, are the modelled conditions verified? Are the operating conditions checked prior to each season? Annually?
8. Why were the residences on Main Street not considered by Musco in their calculations?
9. Are the electric lines above or below ground?
10. Why is a baseball field shown on the plans?

#### Permitting

1. To assess the feasibility of a project, how could a "rigorous permitting review" not be performed?
2. Isn't knowledge of the permit requirements needed to assess the feasibility of a project? Particularly if a variance would be required.
3. Given that the light spillage is well in excess of the amount allowed under Winchester's by-laws, will a variance and permit process be required in Gale's experience?
4. Does the height of the stanchions require a permit in Gale's experience?
5. If Gale does not know this information, shouldn't we know these answers before a gift is accepted?

#### Cost Elements

1. What cost elements are not included in the estimate but would be required? For example,
  - a. Are grandstand lighting included?
  - b. Are walkway lighting costs included?
  - c. Screening devices or mature plantings?
  - d. Automatic/remote light operations?
  - e. Labor and benefits to close the field each night?
2. Were the highest grade/quality of stanchion included in the cost estimate given the proximity of the stanchions to the school, private homes and public walkways and the documented failures of stanchions?

3. Were costs unique to accessing and installing the light stanchion in the SE corner included? For example there is no vehicular access to this area for the drilling equipment, cranes, or concrete trucks required to install a stanchion in this location.
4. Are mature plantings and/or screening included in the cost estimate?
5. What are the annual maintenance costs and are they included in the estimate?
6. Are the backup for the cost estimates available?
7. In your experience, what percentage of projects cost less than the estimates that you provide in similar feasibility studies?

#### Overall

1. How can the feasibility of the lighting be adequately assessed in the absence of determining and quantifying all of the required construction costs, permitting requirements and variances, and long term labor and benefits costs of the proposed project?

#### Other Comments

1. Comparisons to "traditional non-shielded systems" and electric costs for "typical floodlighting equipment" are not relevant to the feasibility study. All estimated electrical costs are costs that Winchester is currently not incurring. There are no savings.
2. Please note that Enclosure 1 is not legible.
3. Can an accurate rendering of the lighting be provided? It is hard to imagine the light towers in plan view.