



**MONTGOMERY COUNTY PLANNING DEPARTMENT**  
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

April 11, 2007

**MEMORANDUM**

**TO:** Montgomery County Planning Board

**VIA:** John A. Carter, Chief *JAC*  
Community-Based Planning Division

Sue Edwards, I-270 Team Leader *SUE*  
Community-Based Planning Division

**FROM:** Nellie Shields Maskal, Senior Planner, I-270 Team (301.495.4567) *NM*  
Community-Based Planning Division

**SUBJECT:** Mandatory Referral No. 07307-MCPS-1: Clarksburg High School Stadium Lighting, 22500 Wims Road, R-200 Zone, 1994 Clarksburg Master Plan and Hyattstown Special Study Plan

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**STAFF RECOMMENDATION:** Approval with the following comments to be transmitted to Montgomery County Public Schools (MCPS):

1. Use the stadium lighting solely for interscholastic sports events involving Clarksburg High School. A letter is to be sent to the Interagency Coordinating Board (ICB) informing them of this agreement.
2. Turn off the stadium lighting 30 minutes after each game ends.

**PROJECT SUMMARY**

Montgomery County Public Schools (MCPS) proposes to install four new poles and fixtures to light Clarksburg High School football stadium to a maintained light level of 30-foot candles as shown in Attachment 1: Site Plan-Stadium Light Installation. MCPS also plans to add one 1500-watt fixture to each pole on the grandstand side, directed towards the stadium seating for general illumination. Four light towers are proposed to be located near both ends of the existing bleachers on both sides of the stadium field. The lights will allow Clarksburg High School's football, soccer, field hockey and lacrosse teams to play in the evening. Clarksburg High School's administration, athletic staff, and booster club believe that having evening games would increase parent and student interest and the school revenue. According to the Clarksburg High School athletic director, there will be approximately 50 night games in the school's stadium during the 2007-2008, fall and spring sports season.

The cost of the project is estimated to be approximately \$110,000 and will be shared by MCPS and Clarksburg High School's Booster Club.

## **PROJECT BACKGROUND**

Clarksburg High School is located on Wims Road and opened in 2005. The school was originally constructed in 1995 for Rocky Hill Middle School. In 2004, the Planning Board approved a Mandatory Referral for the expansion and conversion of Rocky Hill Middle School into Clarksburg High School to relieve overcrowding at Damascus, Seneca Valley, and Watkins Mill High Schools. The conversion consisted of the existing core facilities, building additions, athletic fields, parking expansion, and the associated infrastructure as shown in Attachment 2: High School Site Plan.

The school totals 324,323 square feet in size and has parking for 369-faculty/visitor cars at the northern edge of the site along MD 355. Additional parking for 105 cars is located along the southern portion of Wims Road adjacent to the gymnasium and ball fields. The former Rocky Hill Middle School was designed to allow for expansion to a high school when enrollment warranted. In 2004, the new Rocky Hill Middle School opened on the 23.29-acre site adjacent to Clarksburg High School on Little Seneca Parkway near the Meadows of Hurley Ridge community.

## **PROJECT DESCRIPTION**

### **Neighborhood Context**

The Clarksburg High School site is rectangular in size, and has frontage on Wims Road. Frederick Road (MD 355) and Shawnee Lane form the northern and western boundaries respectively of the school as shown in Attachment 3: Vicinity Map. Located directly across MD 355 from the school at Foreman Boulevard is the Timber Creek Estates community of single-family detached dwellings in the R-200 Zone. Little Seneca Parkway (Newcut Road Extended) is located within a short distance of the school.

The school faces Clarksburg Local Park and several scattered single-family detached dwellings located on Wims Road in the R-200 Zone. The Meadows at Hurley Ridge (Toll Brothers) is located south of the school on the 62-acre Martens property in the R-200/TDR-4 Zone. This 250-unit development of single-family detached and attached dwellings is currently under construction. A vacant portion of the COMSAT (LCOR) property in the I-3 Zone is located directly south of the school property near the school's athletic fields and stormwater management pond and wetlands.

To the northwest of the school site and along the south side of Shawnee Lane are the Moyer & Sons Moving Company, the MCPS Bus Depot, and Eastside (proposed 265-unit development of single-family attached and multi-family dwellings). Along the north side of Shawnee Lane are scattered single-family dwellings and the proposed 404-unit Garnkirk Farms development in the PD-11 Zone.

## **Project Description**

Four new poles and light fixtures are to be installed to the existing stadium located in the southwestern portion of the school property. See Attachment 1: Site Plan-Stadium Light Installation, and Attachment 4: Stadium Lighting Specifications. The height of the poles will be 80 to 90 feet. The lights will be the metal halide type and equipped with cut-off shields. They would be located approximately 850 feet from the closest residence to the north, and approximately 600 feet to the southeast. See Attachment 5: Aerial Photo. Because of the orientation of the stadium field, the lights would not be oriented in the direction of these homes. A buffer of mature trees exists between the stadium and residences to the west near Shawnee Lane.

MCPS is proposing to use MUSCO "SportsCluster-2, Level 8" lighting for the stadium. According to MUSCO, their lighting system "provides additional reduction in off-field spill light and glare, while maintaining a high quality of light on the field." The average amount of light on the field would be 30.3 foot-candles. The average amount of spill light, measured approximately 300 feet from the field is .19 foot-candles, indicating there would be very little intrusion into the surrounding neighborhood.

Clarksburg High School, like many high schools in the County, has authority over the use of its fields. The Interagency Coordinating Board (ICB) schedules requests for meetings and events, which occur inside high school buildings.

## **Subject Site**

The Clarksburg High School site comprises 62 acres, and it is located at the intersection of Wims Road and MD 355. Wims Road provides access to the school bus loading/unloading lot and the second staff/visitor lot. The primary access to the school is from MD 355 opposite Foreman Boulevard. The school is improved with a two-story building comprising approximately 2,732,066 square feet in size. Features on the site include: football stadium and track, playing fields for soccer/hockey and baseball, basketball courts, tennis courts, 474 parking spaces, and a bus staging area for 33 buses. The Meadows at Hurley Ridge community, located southwest of the site, will have pedestrian pathways to connect with the school site.

## **ANALYSIS**

### **Master Plan Conformance**

Clarksburg High School is located in the Transit Corridor District of the Clarksburg Master Plan and Hyattstown Special Study Area, adopted and approved in 1994 (see Attachment 6: Transit Corridor District Land Use Plan).

The Master Plan states the following for the high school property: The Montgomery County Board of Education owns a 62-acre site fronting MD 355. The location of a school complex here would help establish a strong community image along this portion of MD 355 and help mark the entry into Clarksburg.

The Master Plan recommends that a high school be located on a portion of a 62-acre site owned by the Board of Education at the intersection of MD 355 and Shawnee Lane. The Board of Education has determined that only 30 acres are buildable and plans are under way to construct a middle school on the site until it can be converted later when needed for a high school. The Master Plan states that the ultimate development plan for this site should place special emphasis on an attractive frontage along MD 355 since this is a critical entry into Clarksburg.

### **Development Standards**

The proposed stadium lighting meets the definition of an accessory structure set out in the Zoning Ordinance. In the R-200 Zone, the Zoning Ordinance requires that accessory buildings or structures must be located in a rear yard and must be set back 65 feet from the street line, 7 feet from a rear lot line and 12 feet from a side lot line.

### **Environment**

An approved Natural Resources Inventory/Forest Stand Delineation, Final Forest Conservation Plan and Water Quality Plan cover the school site. The Environmental Planning staff recommends approval of the proposed project. They believe that the environmental issues are not significantly affected by the proposed lighting addition, since work will be entirely on the stadium facility. The project proposes no encroachment into the stream buffers, forest or other sensitive areas on the property.

### **Transportation**

According to Transportation Planning staff, there are no transportation issues regarding the installation of stadium lighting at the high school.

### **Subdivision**

No subdivision is required.

## **COMMUNITY OUTREACH**

The MCPS sponsored a public, informal meeting on February 28, 2007, to present the design and installation of the stadium lights. Public comments were solicited at this meeting. There was support at the meeting for the project. Staff notified the Clarksburg Civic Association and other interested parties, of the proposed hearing date of the mandatory referral. Staff has not received written comments from the community.

## **CONCLUSION**

The proposed stadium lighting meets the development standards of the R-200 Zone and has no significant impact on the natural environment or on circulation at Clarksburg High School. It conforms to the policies and recommendations of the 1994 Clarksburg Master Plan. The lights proposed by MCPS are not oriented towards the neighborhood, and are designed to focus light on the stadium field. The lights will have low levels of spill off at the school's boundaries. School officials have agreed to turn off the stadium lights 30 minutes after completion of each game. School administrators, parents and athletic boosters strongly believe that night athletics will increase participation in athletic events, especially among working parents. This benefit, coupled with the relatively low overall impact of the stadium lights, enables staff to recommend approval of this project and transmittal of comments on page 1 to the MCPS.

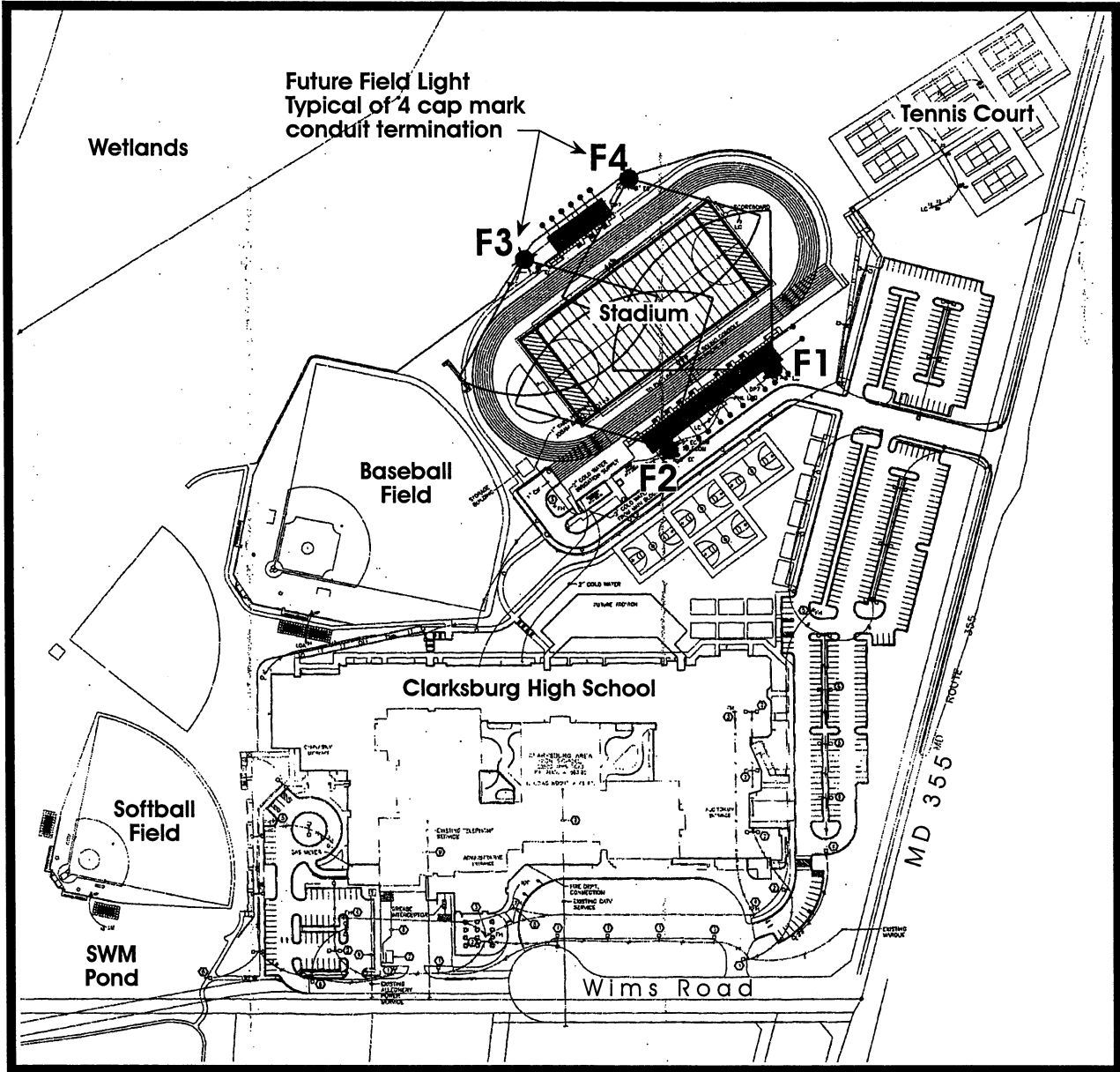
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### **Attachments:**

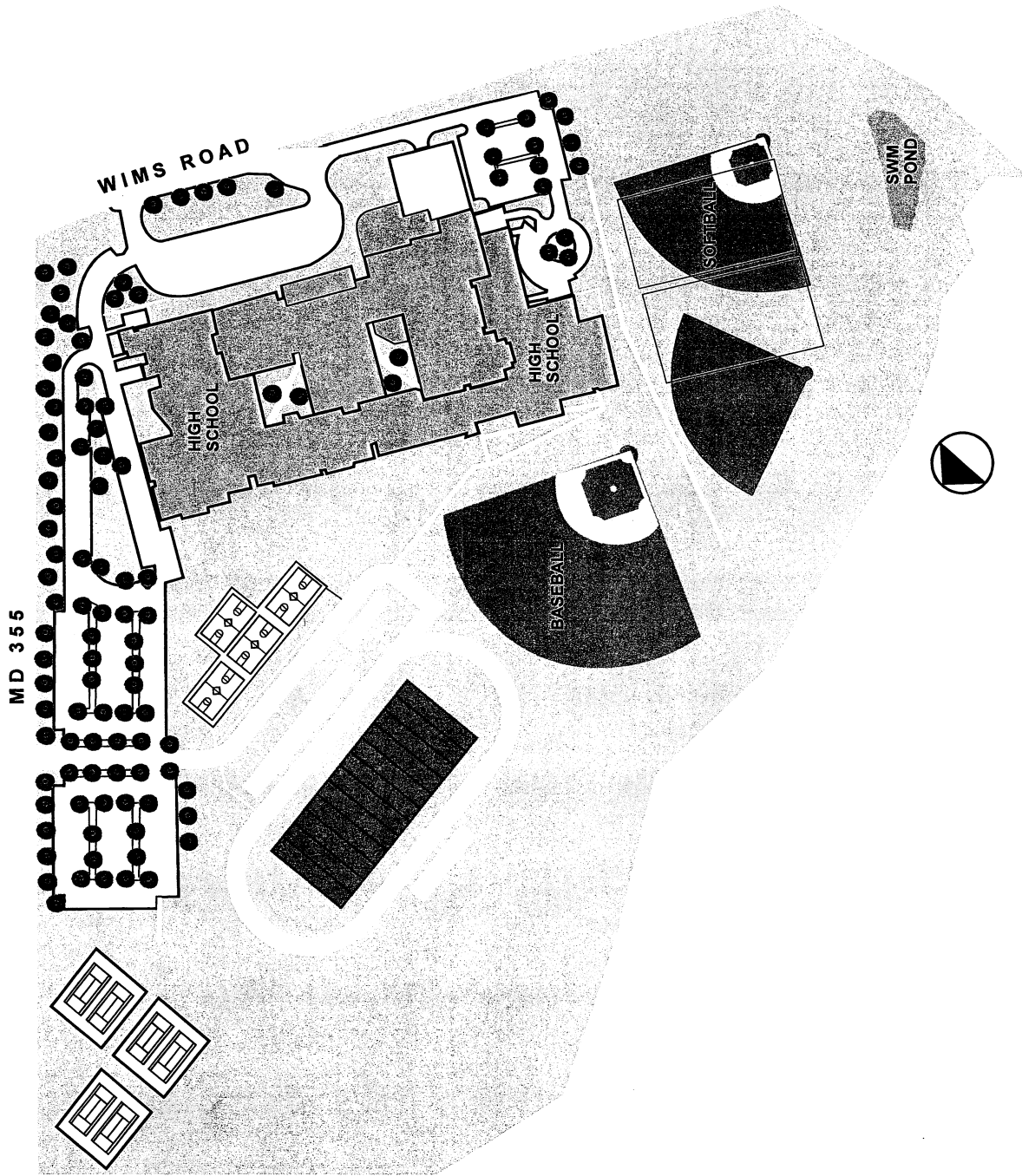
1. Site Plan – Stadium Light Installation
2. High School Site Plan
3. Vicinity Map
4. Stadium Lighting - Specifications
5. Aerial Photo
6. Transit Corridor District Land Use Plan

# ATTACHMENT 1

## Site Plan - Stadium Light Installation

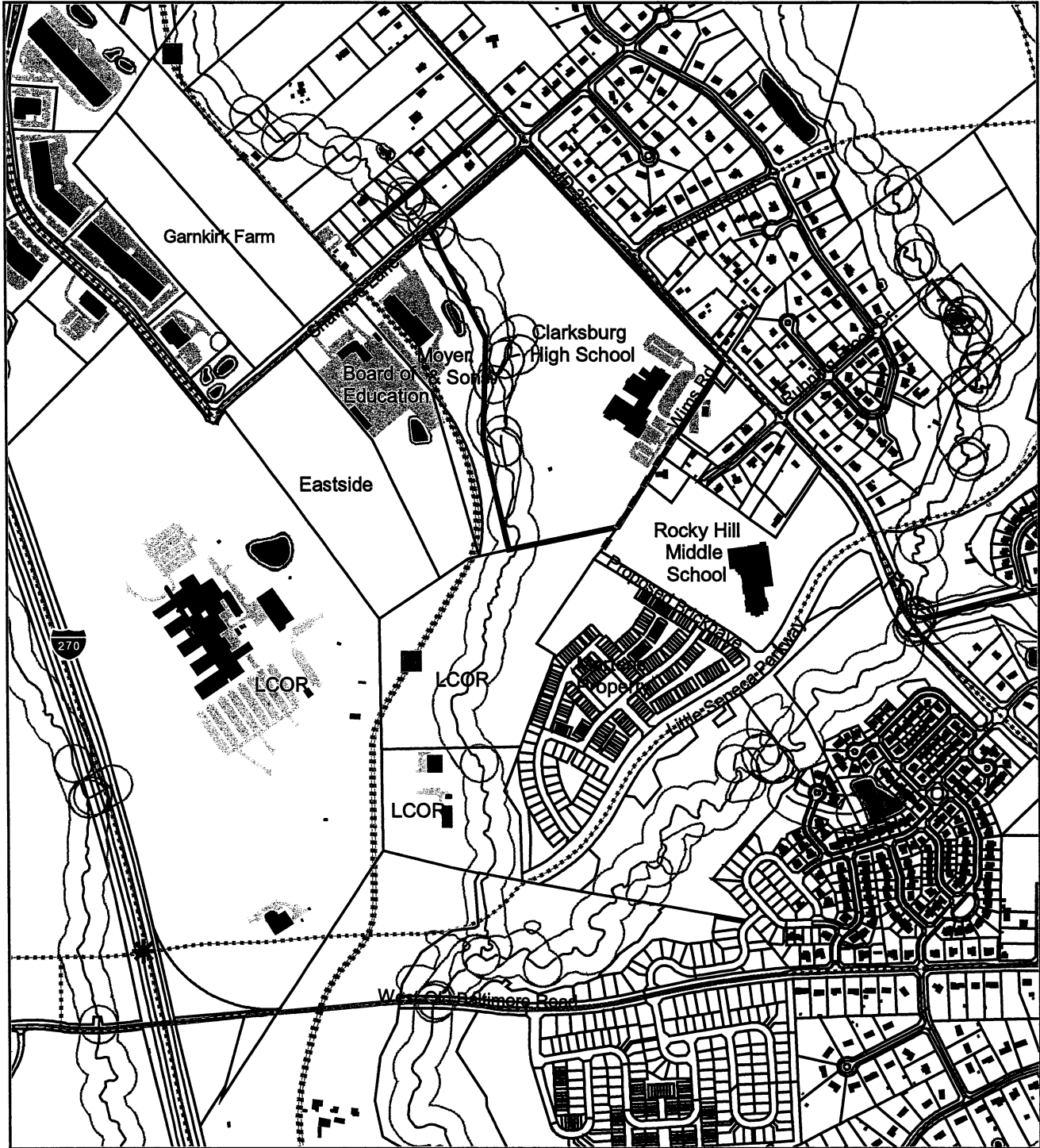


# ATTACHMENT 2 HIGH SCHOOL SITE PLAN



# ATTACHMENT 3 VICINITY MAP

## Clarksburg High School



- Buildings
- Property lines
- Master plan transit stations**
- New Transit Stations
- MARC
- METRO
- Master plan of highways ROW
- Master plan of highways interchanges
- Master plan of highways dual centerline
- Master plan of highways centerline.shp
- Road
- Parking lots
- Environmentally sensitive areas—all
- Ponds
- Streams



1000 0 1000 2000 Feet



# ATTACHMENT 4

## STADIUM LIGHTING FOR CLARKSBURG HIGH SCHOOL

### PART 1 - SCOPE OF WORK

- 1.1 Provide administration, facilities, equipment, accessories and materials required, and furnish all labor, with the expertise and degree of skill necessary for stadium lighting.

### PART 2 - GENERAL

- 2.1 The bonded bidding contractor shall be responsible for performing the actual work. No subcontracting work, other than specific trade related work.

### PART 3 - CONTRACTOR'S RESPONSIBILITY

- 3.1 The contractor shall have a complete set of standard specifications issued by the manufacturer on the job site at all times. All parts of the specification shall be adhered to unless amended by mutual consent of the Owner.
- 3.2 The contractor shall remove all materials and debris resulting from the work off the site and keep the interior and exterior of the building and field clean at all times.
- 3.3 The contractor is fully responsible for repairing any damage to the building and field as a result of the contract. This shall include damages caused by the contractor's equipment and improperly stored materials.
- 3.4 The project shall remain accessible at all times to the Owner's normal course of activities including scheduled games and practices.
- 3.5 All contracted work shall be completed within 60 days after receipt of written notice-to-proceed.

### PART 4 - WORK INCLUDED

- 4.1.a. Install new poles and fixtures to light the football field to a maintained light level of 30 foot-candles. Add one 1500-watt fixture to each pole on the grandstand side, directed towards the stadium seating for general illumination.
- 4.1.b. Lighting fixture specification as follows: Manufacturer – MUSCO, catalog No. Sportscluster-2 level 8. Acceptable Manufacturer – MUSCO, Hubbell, Qualite.
- 4.2 The new poles and fixtures shall be as follows:
  - A. Foundations shall be precast concrete. The installation for the foundations shall be as per the manufacturer's recommendations and be verified by a registered Maryland Structural Engineer. Scaled shop drawings of the foundation design shall be submitted to the owner prior to the installation of the foundations.
  - B. Poles shall be galvanized steel a minimum of 70' above grade and shall slip over the precast concrete foundations. Direct burial steel poles are not acceptable. A minimum of 4 poles shall be provided and install at locations that do adversely restrict the viewing of the spectators. Pole heights are based on a 75' setback from the edge of the football field. If longer setbacks are needed, the pole heights may be increased if recommended by the lighting manufacturer. The poles shall have individual ground rods and lightning protection. See site plan for pole location and height.

# ATTACHMENT 5

## Clarksburg High School Aerial Photo



Aerial photo taken Feb/Mar 2006

500 0 500 1000 Feet



- C. Fixtures shall be 1500-watt metal halide, assembled into one photometric unit and slipfitted on to the top of the pole shaft. All fixture wiring shall be enclosed and protected within the fixture crossarm. No exposed
  - D.
  - E. All ballasts shall be remotely mounted to approximately 10' above grade. All ballasts shall have individual circuit breaker to disconnect each pole.
  - F. Connections from the remote ballasts to the top of the fixture assembly shall be made by a factory built wire harness with quick disconnect plugs at each end.
  - G. All circuits within the harness shall be labeled with the referenced fixture. All fixtures will be labeled to correspond to the wiring.
  - H. The number of fixtures shall be as required to achieve a minimum maintained average of 30 footcandles. Max/Min ratios shall be less than 2:1. The fixtures for general scattering illumination shall not be included in these calculations.
- 4.3 The existing electrical service in the school shall be used. New circuit breakers and/or panelboards shall be installed as required. The AIC rating of the panelboards and circuit breakers shall be coordinated with the existing building service. The field lighting shall be on a separate circuit from the general lighting circuit. The lighting shall be controlled by the installation of lighting contractors, size and number as required by the electrical design. All panelboard transformer etc. to be located in the existing concession stand.
- 4.4 The electrical design shall be reviewed and scaled by a registered Maryland Professional Electrical Engineer and submitted to the owner prior to construction. All work shall comply with local and National Electric codes.
- 4.5 All wiring installed below grade shall be copper in schedule 40 PVC, size as required.
- 4.6 Install underground junction boxes at the base of all poles and at conduit runs longer than 250 feet.
- 4.7 Asphalt or concrete surface shall not be cut unless tunneling efforts have ailed; in which case they shall be patched to match existing.
- 4.8 The lighting shall be tested at night to demonstrate the specific lighting levels. The general lighting shall be directed by the owner at this time.
- 4.9 Grass surfaces damaged by the new work shall be seeded, fertilized and mulched. The owner shall maintain the seeded surfaces. Excess dirt shall be stockpiled at the site at a location directed by the owner.
- 4.10 The pole and fixture assembly shall be warranted by the manufacturer to be free from defects in material and workmanship for a period of seven years from the date of delivery to the job site except for fuses and lamps. The manufacturer shall provide labor and materials for a period of two years to repair or replace defective parts, and for the re-lamping warranty period, shall provide replacement parts only. Labor and material for replacement of lamps shall be provided at no cost for a period of one year and for replacement lamps only, provided for an additional year thereafter. The manufacturer shall submit to the owner, a copy of the warranty, prior to delivery of the poles and fixtures. All other work shall be warranted to be free of defects and workmanship for a period of one year from the date of beneficial occupancy by the owner.

**END OF SPECIFICATIONS**

# Transit Corridor District Land Use Plan

