



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

MCPB
Item #
6/14/07

May 31, 2007

MEMORANDUM – MANDATORY REFERRAL

TO: Montgomery County Planning Board

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

William R. Barron, Team Leader, Eastern County Team *WRB*
Community-Based Planning Division

FROM: Calvin Nelson, Jr., Planning Coordinator, Eastern County Team *CN*
Community-Based Planning Division (301-495-4619)

SUBJECT: Mandatory Referral No. 07605-MCPS-1: Northwood High School Stadium Lights, 919 University Boulevard West (MD 193), R-60 Zone, Kemp Mill Master Plan

STAFF RECOMMENDATION: APPROVAL

PROJECT SUMMARY

Montgomery County Public Schools (MCPS) has submitted, under the Mandatory Referral process, an application to install four light towers with a height of up to 90 feet, at Northwood High School.

THE SITE

Northwood High School is located at 919 University Boulevard West (MD 193) between Arcola and Caddington Avenues. The subject site and adjacent properties are all zoned R-60. Properties and uses surrounding the site include: a wooded, 150-foot wide State Highway Administration right-of-way along the northern boundary; the Mariner Health nursing home further to the north; single-family detached homes in the Forest Knolls neighborhood to the east and south; single-family detached homes across University Boulevard to the west; townhomes across Arcola Avenue to the northwest; and University Towers and the Warwick Apartments further to the west off MD 193. On the west side of the site, there is a single point of vehicular access to the school off MD 193.

The 29.5-acre site is currently improved with a two-story building, an un-lit football stadium field, a telecommunications monopole, basketball courts, tennis courts, practice fields, parking areas and a bus staging area.

On February 26, 2004, the Planning Board recommended approval of a MCPS Mandatory Referral proposal to modernize and add to the school structure, and to re-open Northwood High School in the fall of 2004 beginning with the ninth grade class only, with a grade to be added each year for the following three years. The topic of stadium lighting was briefly discussed at the hearing, but MCPS was not ready to go forward with the lights at that time.

On April 14, 2005, the Planning Board recommended approval of a MCPS and Cingular Wireless Mandatory Referral for a 110-foot telecommunication monopole which also included lights for the adjacent tennis courts.

Northwood High School is also in the process of modifying its baseball field and implementing new concession stands and restrooms in the bleacher area.

PROJECT DESCRIPTION

Montgomery County Public Schools proposes to install four light towers at Northwood High School's stadium. Two of the light towers will have a mounting height of 90 feet, located at both ends of the existing bleachers, and two will have a mounting height of 70 feet, located on the opposite side of the stadium field.

The light towers would be located approximately 250 feet to the closest residence on Caddington Avenue to the south, and approximately 325 feet to the closest residence on Loxford Terrace to the east. MCPS is proposing to use Musco "Green Generation" lighting for the stadium. According to Musco, their lighting system provides "a more usable light on the playing surface while decreasing off-site spill." The average amount of light on the field would be 31.0 footcandles. The highest level of lighting on the property lines shared with the residential properties to the south and east is 0.84 footcandles, indicating there would be very little light intrusion into the surrounding neighborhood.

In their Mandatory Referral submission, MCPS stated that night time use of the stadium will be limited to school related functions and will not be made available to the community, and that stadium lights will be turned off one (1) hour after night time events are complete.

ANALYSIS

Master Plan

The 2001 Approved and Adopted Kemp Mill Master Plan describes the site as being within the Forest Knolls neighborhood. The Kemp Mill neighborhood is located north of the State Highway Administration property; the University Towers neighborhood is located in the northwest quadrant of the intersection of Arcola Avenue and University Boulevard; and the Sligo Woods neighborhood is located southwest of the site across University Boulevard West. The Master Plan recommended acquiring the SHA right-of-way (adjacent to the north side of the school site) from University Boulevard to Northwest Branch Park for parkland.

Development Standards for the Zone

The proposed light towers meet the definition of an accessory structure set out in the Zoning Ordinance. In the R-60 Zone, the ordinance requires that accessory buildings or structures must be located in a rear yard and must be set back from the lot lines with a minimum setback as follows:

59-C-1.326. Yard requirements for an Accessory Building or Structure (in feet)	R-60 Zone, Required	Proposed
(2) An accessory building or structure must be set back from the lot lines with a minimum setback as follows: (A) From the street line: (B) From a rear lot line: (C) From a side lot line:	60 feet 5 feet 5 feet	(See below)
(3) For any accessory building or structure in the (R-60) Zone, with a height greater than 15 feet, the side yard and rear yard minimum setback must be increased from the requirements in (2) above at a ratio of 2 feet of additional setback for each foot of height in excess of 15 feet.	Light pole height = 90 ft. 90 ft. – 15 ft. = 75 ft. x 2 ft. = 150 ft. minimum setback for side and rear yards.	Approximately 250 ft. side yard setback to Caddington Ave. Approximately 325 ft. rear yard setback to Loxford Terrace

Environmental

This Mandatory Referral has a Forest Conservation Exemption (4-07254E) approved on May 17, 2007.

Transportation

The proposed development has no significant impact on circulations or traffic capacity.

COMMUNITY PARTICIPATION

MCPS sent out notification letters inviting the immediate community to attend a meeting where the subject mandatory referral was one of the topics to be addressed on March 27, 2007. A video of the Musco lighting system was shown at the meeting. The video showed an example of how stadium lighting looked at night, with little impact on the surrounding neighborhood. Staff also sent out postcards, notifying the immediate neighborhood of the subject Mandatory Referral. As of the date of this staff report, staff has not received any written correspondence.

CONCLUSION

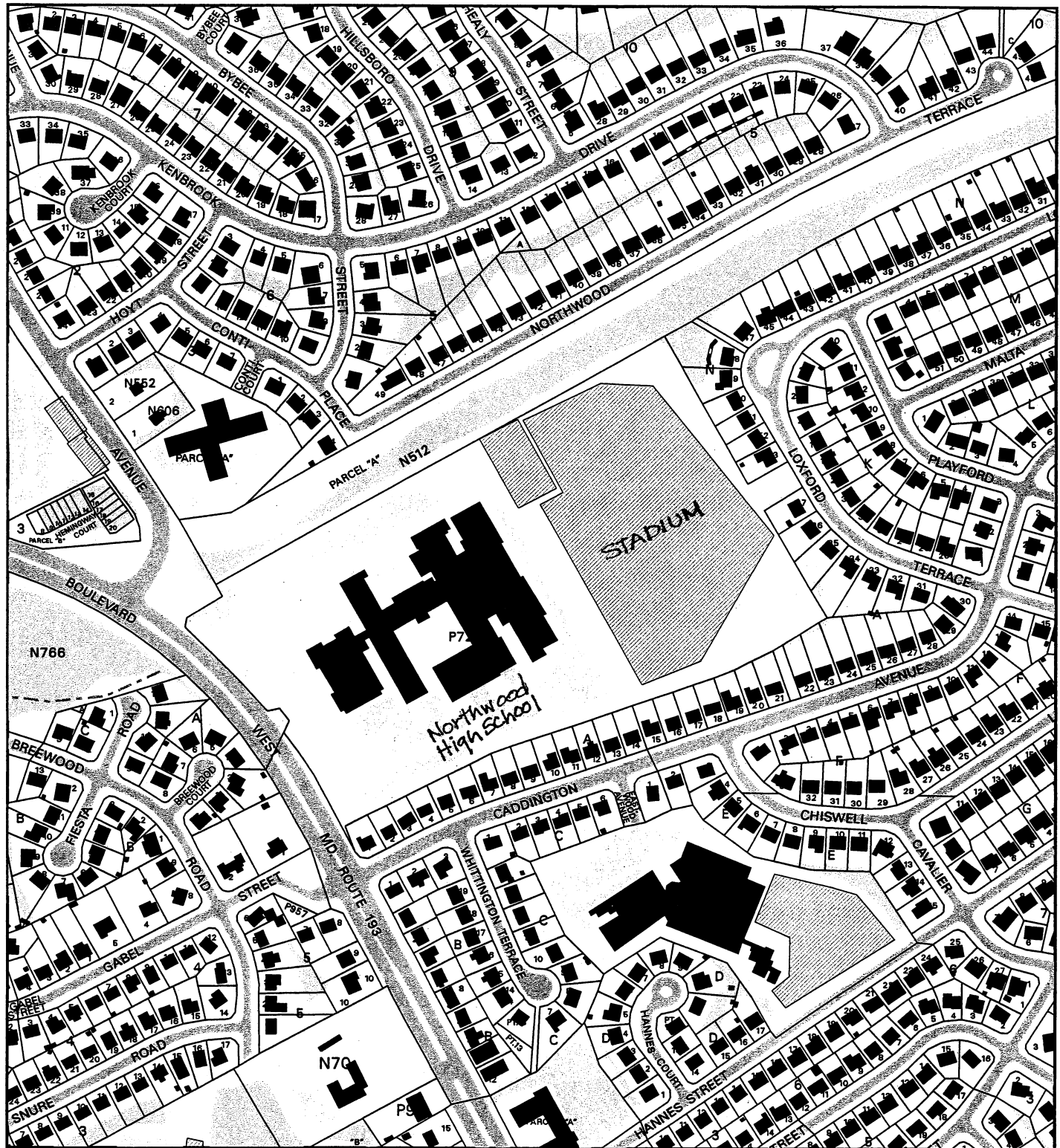
The proposed stadium lights meet the development standards of the R-60 Zone, and they have no significant impact on the natural environment or on circulation at Northwood High School. The lights proposed by MCPS are designed to focus light on the field and will have low levels of spill off at the school's boundaries. School officials have stated that nighttime use of the stadium will be limited to school related functions and will not be made available to others. The stadium lights will be turned off one hour after nighttime events are complete. Staff recommends approval of this Mandatory Referral.

CN:ha: g:\nelson\man.ref.Northwood HS.s.rpt.07

Attachments

1. Vicinity Map
2. Site Plan
3. Aerial View
4. Light Details

NORTHWOOD HIGH SCHOOL - STADIUM LIGHTS



Map compiled on May 31, 2007 at 8:41 AM | Site located on base sheet no. 214NW01

NOTICE

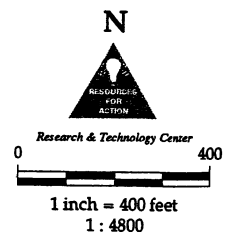
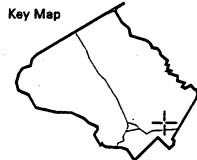
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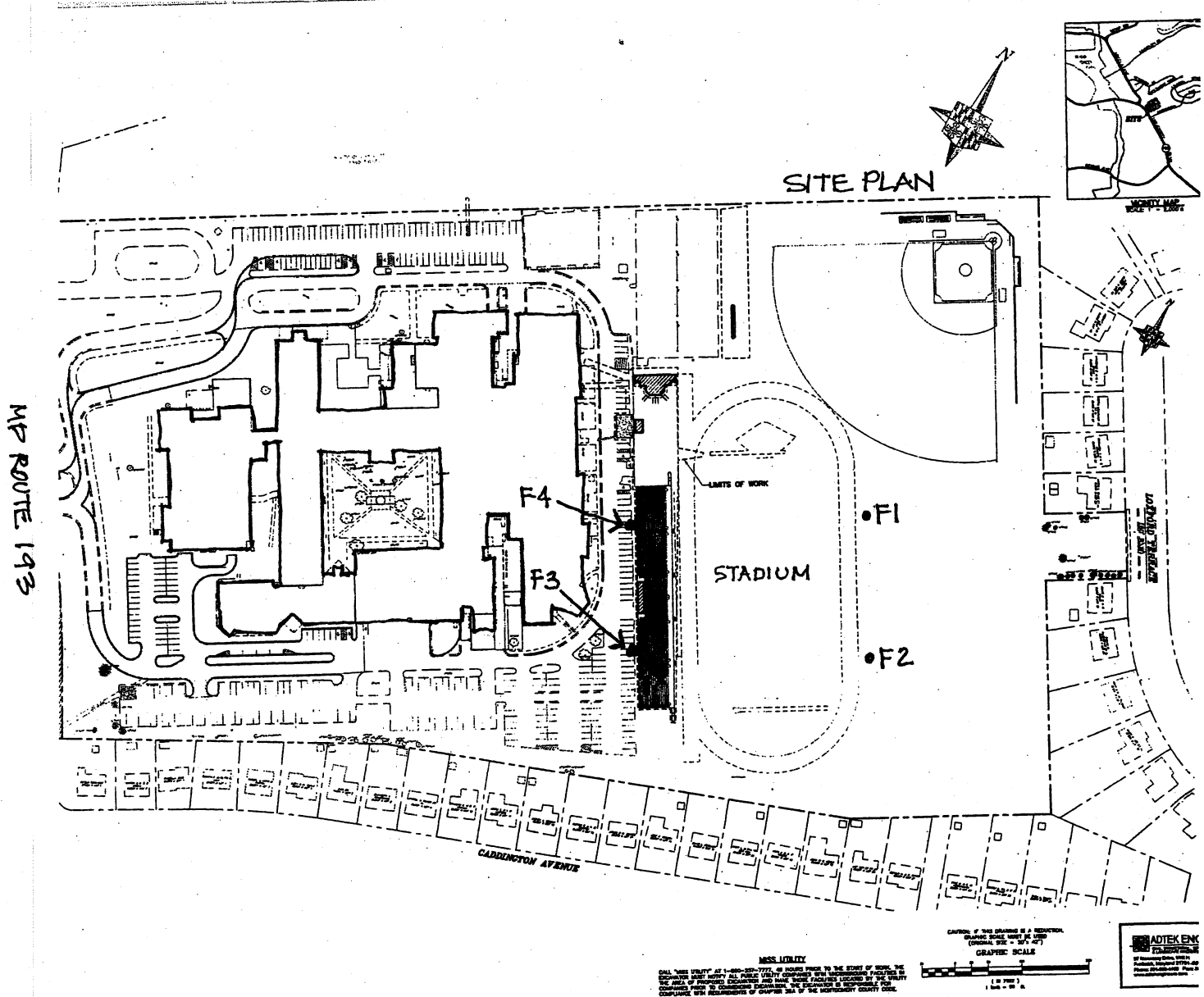
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MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
8787 Georgia Avenue - Silver Spring, Maryland 20910-3760

Key Map



ATTACHMENT 2



ATTACHMENT 3



ATTACHMENT 4

NOTES: Poles F3 and F4 each have one fixture pointed at the grand stand.



GUARANTEED PERFORMANCE

EQUIPMENT LAYOUT

Northwood High School
Montgomery County, MD

INCLUDES:

• Football

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume +/- 3% nominal voltage at line side of the ballast and structures located within 3 feet (1m) of design locations.

EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires		
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY/POLE
2	F1-F2	70'	-	70'	1500W MZ	6
2	F3-F4	90'	-	90'	1500W MZ	10
4	TOTALS					32

SINGLE LUMINAIRE AMPERAGE DRAW CHART

Ballast Specifications (.90 min power factor)		Line Amperage Per Luminaire (max draw)									
Single Phase Voltage		120 (60)	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	415 (60)	480 (60)	
1500 watt MZ	Max	-	8.6	7.7	7.5	6.5	5.1	-	-	3.7	
	Min	11.7	6.7	6.0	5.9	5.1	4.0	X	X	2.9	

By: Micha Hudack

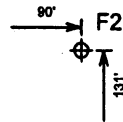
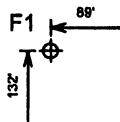
Date: 30-Jan-07

File #: 33474

Pole location(s) Ⓢ dimensions are relative to 0,0 reference point(s) ⊗

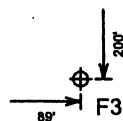
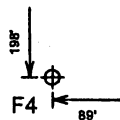
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Print Date (30/Jan/2007) & Time (11:18)



	10	20	30	40	50	40	30	20	10	
	10	20	30	40	50	40	30	20	10	

⊗ Football
393' x 160'



160'