

Capital University

Athletic Event Traffic Impact Study

and

Review of the Conceptual Traffic Management Plan

Prepared For:

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May 9, 2014

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Executive Summary

Background:

This **Capital University Athletic Event Traffic Impact Study and Review of the Conceptual Traffic Management Plan** was initiated by the City of Bexley to address concerns expressed by the South Bexley Neighborhood Association residents regarding plans of Capital University to install field lighting and to upgrade the sound system for Bernlohr Stadium.

Conclusions:

- The existing freeway Guide Signing to Capital University on I-70, both eastbound and westbound, is missing signs on either the freeway off-ramps or on the arterial streets, or both.
- There are no Parking Area Guide signs to direct the Capital University visitors from Main Street to the Campus parking lots south of Mound Street.
- Capital University does not reserve parking spaces for athletic event (special event) visitors; visitors must search for any open space. Campus Security does not ticket vehicles without a valid parking permit during event periods.
- The hourly and/or daily restrictions of the Residential Permit Parking signs are not appropriate to prevent the Capital University “*special event*” visitors for many events from parking on the adjacent neighborhood streets, particularly if events are held after 6:00 pm.

Summary of Recommendations:

- The City of Bexley should request the Ohio Department of Transportation and the City of Columbus Planning and Operations Division to upgrade the Capital University Traffic Guide Signs.
- The City of Bexley should install Parking Area Guide Signs in accordance with the Ohio Manual of Uniform Traffic Control Devices guidelines.
- The City of Bexley should work with the adjacent residents on a street-by-street basis to determine and post what they determine to be more appropriate Residential Permit Parking restrictions.
- Capital University should ensure a sufficient number of parking spaces are reserved in the designated lot(s) for special event visitors.
- Capital University should install supplemental parking signs for large events.

Traffic Impact Study

Background:

This **Capital University Athletic Event Traffic Impact Study** and the **Review of the Conceptual Traffic Management Plan** was initiated by the City of Bexley to address concerns expressed by the South Bexley Neighborhood Association residents regarding plans of Capital University to install field lighting and to upgrade the sound system for Bernlohr Stadium. The study and Review were coordinated with input from the consultant firm Side Street Planning who was concurrently meeting with the South Bexley Neighborhood Association.

Purpose:

The purpose of this study is to address the following issues:

- 1) to evaluate the directional guide destination signing from the interstate freeway and local roads to the University,
- 2) to evaluate local traffic guide signing to direct motorists to visitor and athletic event parking, and
- 3) to evaluate the parking demand and its availability related to athletic events at Capital University,
- 4) to evaluate Residential Permit Parking,
- 5) to address traffic related issues contained in the:

**“Conceptual
Bernlohr Stadium
Game Day Stadium Management for Day and Night
Games and Athletic Events
Planning Approval Guidelines”**

Section 1 – Directional Guide Destination Signing

Interstate Freeway Signing

Capital University has Traffic Guide on I-70 both eastbound and westbound:

Eastbound on I-70

Capital University / DeVry University traffic on eastbound I-70 is directed to use exit **103B ALUM CREEK DRIVE LIVINGSTON AVENUE**.

Once on the exit ramp, a guide sign directs the DeVry University traffic to turn left. There is no guide signing advising the Capital University motorists to turn right onto northbound Alum Creek Drive, and no signing on Alum Creek Drive to continue north for over one-quarter of a mile until north of Livingston Avenue.

Recommendation: A shorter, more direct route is to use the prior exit, exit **103A MAIN STREET BEXLEY**. This exit is a loop ramp which becomes an add-lane northbound on Alum Creek Drive, which already has CAPITAL UNIVERSITY guide-signing. By using this exit, the Capital University traffic avoids the very congested Alum Creek Drive at Livingston Avenue intersection.

- The City of Bexley should request the Ohio Department of Transportation to revise the directional signing for Capital University traffic.
- If the exit designation is *not* changed, then the City of Bexley should:
 - request the Ohio Department of Transportation to install a CAPITAL UNIVERSITY guide sign on the exit ramp with a right-turn arrow, and
 - request the City of Columbus Planning and Operations Division to install a CAPITAL UNIVERSITY guide sign with a straight-ahead arrow on northbound Alum Creek Drive south of Livingston Avenue.

Westbound I-70

Capital University traffic on westbound I-70 is directed to use exit **103A US-33** [shield] **LIVINGSTON AVENUE**.

Once on the exit ramp, they are directed to turn right (east) onto Livingston Avenue. The follow-up guide sign to turn left onto College Avenue is either missing, or was removed when the US-33 designation was changed from College Avenue between Livingston Avenue and Main Street to Livingston Avenue between High Street (US-23) and the I-70 ramps.

Recommendation: The City of Bexley should request the Ohio Department of Transportation to revise the Westbound I-70 exit ramp guide sign to direct Capital University traffic to turn *left* (westbound) on Livingston Avenue, and then ask the City of Columbus to install a guide sign turning Capital University traffic right onto Alum Creek Drive northbound. This routing will direct Capital University traffic along Major Arterial streets, and not on the residential-lined, local street College Avenue.

Recommendation: Capital University should revise their webpage *Directions to Capital University Athletic Facilities* Directions from the *EAST* after the signs have been changed to reflect the changed directions, to discourage Capital University bound traffic from using the residential College Avenue.

Recommendation: The City of Bexley should request Google Maps to change their mapping so traffic is not routed onto the residential College Avenue north of Livingston Avenue.

Local Traffic Guide Signing:

The *Conventional Road Guide Signing* directs Capital University traffic from the I-70 freeway both eastbound and westbound via local streets north to Main Street.

Once on Main Street, there is no *Parking Area Guide Signing* to direct motorists on Main Street to turn south onto Pleasant Ridge Avenue to reach the Capital University parking lots.

The Ohio Manual of Uniform Traffic Control Devices, or **MUTCD**, defines the standards used nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public traffic. The MUTCD is a compilation of national standards for all traffic control devices, including road markings, highway signs, and traffic signals. It is updated periodically to accommodate the nation's changing transportation needs and address new safety technologies, traffic control tools and traffic management techniques.

The City of Bexley must comply with the guidance and standards contained in the Ohio Manual of Uniform Traffic Control Devices. The MUTCD standard regarding *Parking Area Guide Signing* is shown on the following page:

Section 2D.47 Parking Area Guide Sign (D4-1)

Option:

The Parking Area (D4-1) guide sign (see Figure 2D-10) may be used to show the direction to a nearby public parking area or parking facility.

Standard:

If used, the Parking Area (D4-1) guide sign shall be a horizontal rectangle with a standard size of 30 x 24 inches, or with a smaller size of 18 x 15 inches for minor, low-speed streets. It shall carry the word PARKING, with the letter P five times the height of the remaining letters, and a directional arrow. The legend and border shall be green on a retroreflectorized white background.

Guidance:

If used, the Parking Area guide sign should be installed on major thoroughfares at the nearest point of access to the parking facility and where it can advise drivers of a place to park. The sign should not be used more than four blocks from the parking area.

Since the Capital University visitor parking lots are one city-block south of Main Street and are not visible because of dense development on the south side of Main Street, *Parking Area Guide Signing* should be installed to direct campus visitors to where they may park.

Recommendation:

The city of Bexley should install green on white 30" x 24" Parking Area Guide signing (MUTCD D4-1) west of College Avenue to direct daily visitors and Special Event traffic straight ahead to Pleasant Ridge Avenue and the on-campus parking lots.

A supplemental sign with the legend CAPITAL UNIVERSITY should be installed above the Parking Area Guide sign.



Eastbound Main Street west of College Avenue



Recommendation:

At the intersection with Pleasant Ridge Avenue, the city of Bexley should install a 30" x 24" green on white Parking Area Guide sign both eastbound and westbound on the traffic signal strain poles directing traffic to Capital University turn south to find parking.

A supplemental sign with the legend CAPITAL UNIVERSITY may be installed above the Parking Area Guide sign.



Eastbound Main Street west of Pleasant Ridge Avenue



Westbound Main Street east of Pleasant Ridge Avenue

Recommendation: The city of Bexley should install permanent Parking Area Guide signing at the intersection of Pleasant Ridge Avenue and Mound Street/Mound Street Plaza above the STOP sign directing VISITOR PARKING to the right, and SPECIAL EVENT PARKING straight ahead.



Section 2 – Parking Demand and Availability Related to Athletic Events

Seating Capacities:

Bernlohr Stadium (football, soccer, lacrosse) has a seating capacity of 3,000, and

Capital Center (basketball) has a seating capacity of 2,100.

Not included in this study of athletic events, but felt to be equally applicable regarding the need to provide *special event* parking which Capital University may want to consider and include, are the large concerts or events held in the 923 seat Mees Hall.

2013/2014 Attendance:

The 2013/2014 attendance reported from the game box scores for sporting events using Bernlohr Stadium or the Capital Center is listed below:

2013/2014 GAME ATTENDANCE								
<u>Football</u>	<u>Mens Soccer</u>		<u>Womens Soccer</u>		<u>Mens Basketball</u>		<u>Womens Basketball</u>	
Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
1246	112	275	179	250	689	518	368	335
2138	149	75	75	213	349	487	204	185
410	35	175	125	125	506	874	308	308
1089		180	145	180	568	738	258	308
895		205	405	403	759	1528	658	752
					387		348	658

In addition to the above, Capital University this year added Men and Women's Lacrosse as Varsity sports, which will be played in Bernlohr Stadium in the spring. A review of other Ohio Athletic Conference schools that have Lacrosse teams indicated attendance were typically around 150 per game. Attendance at the two Men's games was 96 and 170, and at the three women's games was 93, 108, and 145.

Please note the football game observed and parking counted was the second-least attended game of the season. The basketball game, while the most attended game of the season, was only approximately 75% of a capacity crowd. As the attendance table indicates, the attendance varies significantly between each sport, and often varies game-by-game within a sport, whether it is a weekday or weekend game, the time of the game, the quality of the team and/or the quality of the opponent, whether it is a rivalry game, the weather, etc.

What this means: There is no *single* answer as to the number of spaces that should be reserved for each game. *A flexible Parking Management Plan should be developed for Capital to implement on a game-by-game basis based upon expected attendance.*

Parking Demand:

The 2013/2014 Attendance indicates the football, basketball, soccer or lacrosse games did not approach the seating capacities of Bernlohr Stadium or the Capital Center. Yet, the second-smallest football game crowd of the season (895 persons) was observed to fill the *available* parking spaces in lots S1, S2, and S3, as well as all the on-street spaces on Pleasant Ridge Avenue. The largest men's basketball game on a Saturday afternoon similarly filled all available parking spaces in lots S1, S2, and S3.

No occupancy or driver survey data was collected, as these were not in the Scope. Threshold crowd attendance to estimate the number of parking spaces which should be reserved for an athletic event was based upon our professional experience and judgment using the following assumptions:

- 40% of the attendance at soccer, lacrosse and women's basketball games was assumed to have driven, and
- 60% of the attendance at men's basketball and football games was assumed to have driven, and
- Auto occupancy was assumed to be 2.8 persons per vehicle.

With the above assumptions, and using the typical game attendance, the suggested attendance thresholds and the required number of reserved parking spaces includes:

For soccer and lacrosse games:	29 spaces
For women's basketball games:	71 spaces
For men's basketball games:	450 spaces
For football games:	643 spaces

Available Parking:

- lot(s) S1 and S2 south of the Capital Center (390 spaces),
- lot S3 south of Cottman Hall and west of the tennis courts (166 spaces),
and
- lot S7 east of Yochum Hall (64 spaces).

*Please see the **Capital University Parking Map** following.*

Parking Allocation:

Although no soccer games or lacrosse games were observed and counted, the reported attendance for both the men and the women is low enough that reserving just the west aisle of lot S1 (39 spaces not counting the 4 spaces marked for persons with disabilities) should be satisfactory.

Tournament games will likely require reserving both aisles of lot S1 (89 spaces).

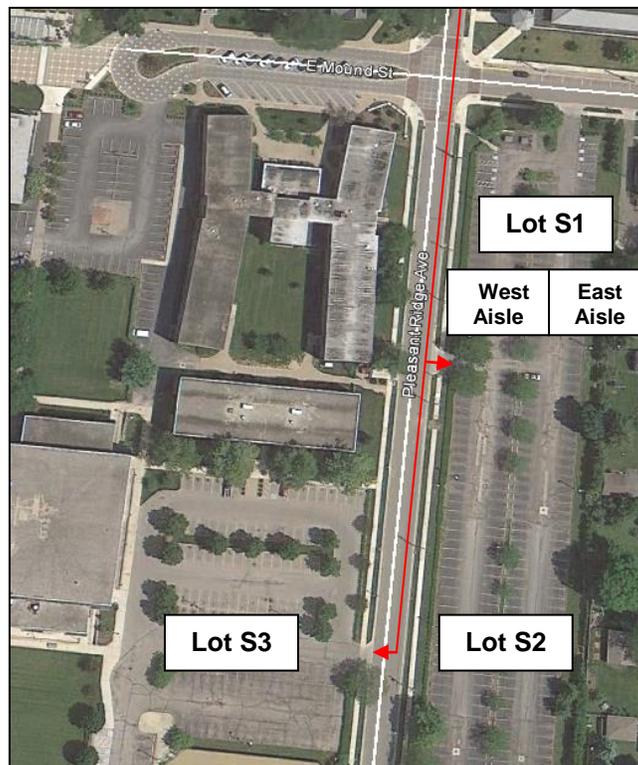
Women's Basketball (500 in attendance (typical)) - Reserve both aisles of lot S1 (89 spaces).

Men's Basketball (750 in attendance (typical)) – Reserve both aisles of lot S1 (89 spaces).

Men's Basketball (2,100 maximum crowd) – Reserve both aisles of lot S1 and lot S3 (south) (255 spaces).

Football – (1,500 in attendance (typical)) - Reserve both lot S1 and lot S3 (south) (255 spaces).

Football - -3,000 maximum crowds) – Requires more spaces than the capacity of lots S1, S2, and S3 combined.



The displaced S1 parked vehicles will need to park in another S parking lot, or be allowed to park in any F (faculty) parking lot after 4:30 pm or on weekends during “*special events*”. Students and staff can begin parking in the reserved spaces after the event has started.

Regulations and Signing

Our recommendation is intended to build upon the requirements of Section G. Section G of the **CAPITAL UNIVERSITY PARKING REGULATIONS** presently designates parking lots S1 and portions of lot S3, as designated on the previous map with the red dashes, indicating they are to be used for “...*special University Events*”. Section G is included in the Appendix.

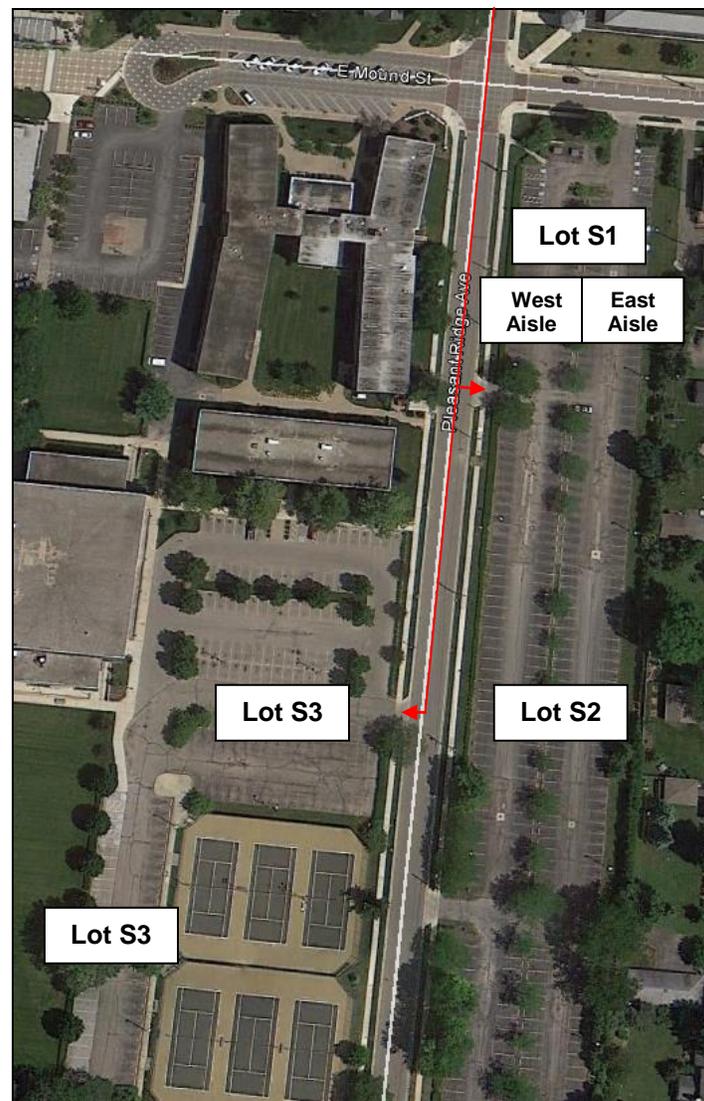
Recommendation: At the S1 and S3 parking lot entrances south of Mound Street before 6:00 am on the day of an event, Capital University should install temporary “A”-frame mounted directional signs for Special Events. The signs should be a minimum of 30” x 24”, with a minimum 4” high lettering. Additional temporary signing should be installed in the appropriate parking lots advising incoming motorists the parking spaces are to be reserved for special event parking later that day.



Because it is the existing practice in lot S1 and the southern-half of lot S3 to prohibit parking every day (NO PARKING 2 AM – 6 AM), it is felt these spaces would be the easiest, least controversial spaces to communicate to students (whose vehicles may not otherwise be moved for days or even weeks at a time) that these spaces would need to be reserved for “special event” parking later in the day.

On “*special event*” days when the parking is to be later prohibited, temporary sandwich board signing should be installed *prior* to 6:00 AM advising arriving motorists that parking will be prohibited later that day (i.e., three (3) hours before the event). Then, two (2) hours before the event, the temporary signs can be switched to indicate these spaces are reserved for the “*special event*” parking. Depending on the athletic event and the expected attendance, the number of reserved spaces could be easily be varied each time as necessary.

Students should be allowed to return to the parking lot(s) after the game had started.



Aerial showing parking for Special Events

Section 3 – Residential Permit Parking Restrictions

Residential Permit Parking Restrictions

The adjacent neighborhood streets presently have Residential Permit Parking restrictions. Presently, the Saturday afternoon game day traffic can legally park on Francis Avenue, which it is signed EXCEPT WEEKENDS.

Without strict police enforcement, the Saturday afternoon game day traffic can take a chance by parking on Astor Avenue, Cassingham Road, Euclaire Avenue and Montrose Avenue, each of which is signed to allow 2 HOUR PARKING 10 AM – 6 PM.

If field lighting is installed in Bernlohr Stadium, and if football games would be played in the evening, i.e., after 6 PM when the parking restrictions are *not* enforced, the game day football traffic could legally park on the adjacent South Bexley neighborhood streets.

Specific street-by-street parking restrictions are:

Astor Avenue

Parking on the north side of Astor Avenue is prohibited at all times.

Parking on the south side of Astor Avenue between College Avenue and Pleasant Ridge Avenue has Residential Permit Parking. However, the restriction does not apply after 6 pm for evening events at Bernlohr Stadium or at the Capital Center.



Cassingham Road:

Parking on the west side of Cassingham Road north of Mound Street Avenue has Residential Permit Parking. However, the restriction does not apply after 6 pm for evening events at Bernlohr Stadium or the Capital Center.



Parking is prohibited on the east side of Cassingham Road north of Mound Street Avenue except Residential Permit Parking holders may park on weekend and between 6 pm and 8 am daily.



Parking is prohibited on both the east and west sides of Cassingham Road south of Mound Street Avenue except Residential Permit Parking holders may park on weekends and between 6 pm and 8 am daily.



Euclaire Avenue:

Parking on the west side of Euclaire Avenue north and south of Mound Street has Residential Permit Parking. However, the restriction does not apply after 6 pm for evening events at Bernlohr Stadium or the Capital Center.



Parking is prohibited on the east side of Euclaire Avenue north and south of Mound Street Avenue except Residential Permit Parking holders may park on weekends and between 6 pm and 8 am daily.



Francis Avenue:

Francis Avenue south of Mound Street is signed for Residential Permit Parking. The NO PARKING restriction does not apply on weekends or in the evening after 6 pm for events at Bernlohr Stadium or the Capital Center.



Montrose Avenue:

Parking on the east side of Montrose Avenue north of Mound Street is prohibited, except the street can be used as a "DROP OFF ZONE" zone for Montrose Elementary School.

Parking on the west side of Montrose Avenue north of Mound Street is not restricted.

Both sides of Montrose Avenue south of Mound Street have Residential Permit Parking. However, the restriction does not apply after 6 pm for evening events at Bernlohr Stadium or the Capital Center.



Pleasant Ridge Avenue

Pleasant Ridge Avenue on the east side north of Mound Street and south of Main Street is signed for NO PARKING 1 AM to 6 AM.

Pleasant Ridge Avenue on the west side north of Mound Street and south of Main Street is signed for NO PARKING BUS LOADING ZONE.

Pleasant Ridge Avenue on the east side north of Astor Avenue and south of Mound Street is signed for NO PARKING ANYTIME..

Pleasant Ridge Avenue on the west side north of Astor Avenue and south of Mound Street is signed for NO PARKING 1 AM to 7 AM.

Both sides of Pleasant Ridge Avenue south of Astor Avenue are signed for NO PARKING 2 AM TO 6 AM EXCEPT WEEKENDS EXCEPT PERMIT HOLDERS.

Conclusion:

The one-time observation of a Saturday afternoon football game that attracted a crowd of only 895 persons (approximately 30% of the Bernlohr Stadium capacity of 3,000 seats), was observed to fill 95% of the available parking spaces in Lots S1, S2, and S3, as well as *all* the onstreet spaces on Pleasant Ridge Avenue north of Astor Avenue. It is reasonable to assume the larger crowds would fill all of the spaces, and then seek parking on adjacent South Bexley neighborhood streets.

Presently, the Residential Permit Parking restrictions on Francis Avenue do not include weekends, or after 6 PM on Astor Avenue, Cassingham Road, Euclaire Avenue, Francis Avenue, and Montrose Avenue. Without strict enforcement, the 2-Hour Parking restriction on Astor Avenue, Cassingham Road, Euclaire Avenue, and Montrose Avenue could be expected to be easily ignored by motorists.

If field lighting is installed in Bernlohr Stadium, and if football games would be played in the evening, i.e., after 6 PM when the parking restrictions are *not* enforced on the adjacent streets, the game day football traffic could legally park on the adjacent South Bexley neighborhood streets.

The Residential Permit Parking restrictions on the adjacent South Bexley streets should be reviewed. The City should consider the opinions of residents to determine any appropriate changes.

Recommendation: Work with adjacent residents to determine appropriate Residential Permit Parking restrictions.

Section 4 – Comments Regarding Traffic Issues

CONCEPTUAL Bernlohr Stadium Game Day & Stadium Management for Day and Night Games and Athletic Events Planning Approval Conditions

DRAFT DOCUMENT – TENTATIVE PROPOSAL

**CONCEPTUAL
Bernlohr Stadium
Game Day & Stadium Management for Day and Night
Games and Athletic Events
Planning Approval Conditions**

rev 3.0 3/22/2014

Editor's Note:

This conceptual draft of "planning approval conditions" has been created in order to facilitate further dialogue between Capital University and representatives of the South Bexley Neighborhood Association. This plan has not been endorsed by either party, but is a draft document attempting to incorporate recommendations and ideas generated through the public process and by studies commissioned by the City of Bexley. This revised conceptual draft still contains several incomplete metrics that need to be discussed by both parties. Engagement in discussion of these suggested planning approval conditions does not indicate agreement to any part or all of the plan by either party.

Contents

1. Game Day Traffic Management
2. Game Day Parking Management
3. ~~Stadium Lights Management~~ (Not addressed in this traffic study)
4. ~~Sound Management~~ (Not addressed in this traffic study)
5. Safety Management
6. Durability of the Plan & Miscellaneous Provisions

1. Game Day Traffic Management

Comment: While the guide signing will direct *visitors* to campus, the current students, alumni, faculty and staff who know the local street system will likely go whatever way they feel is the quickest and easiest.

- 1a. The City of Bexley shall have installed, and Capital shall fund, additional signage directing traffic to Capital University.

Comment: The directional guide signage to Capital University is outside the city of Bexley jurisdictional limits.

Guide signage on Interstate 70 must be in accordance with the policies and practices and be approved by the Ohio Department of Transportation (ODOT).

Guide signage on local streets must be in accordance with the policies and practices and be approved by the city of Columbus Planning and Operations Division.

For eastbound traffic, signage shall be placed at:

- the Alum Creek Drive Interstate 70 exit ramp,

Comment: The existing eastbound guide signage directs Capital University traffic to exit at 103**B ALUM CREEK DRIVE**, where it then must proceed north through the very congested intersection of Alum Creek Drive and Livingston Avenue. The city of Bexley should request the Ohio Department of Transportation to relocate the freeway guide signing to use the prior exit 103**A MAIN STREET / BEXLEY**, which exits onto an add-lane for northbound Alum Creek Drive, and which presently has CAPITAL UNIVERSITY guide signing.

- along the east side of Alum Creek Drive for north-bound traffic,

Comment: If the Ohio Department of Transportation agrees to relocate the signed exit to 103**A BEXLEY / MAIN STREET**, this request is not needed.

If the Ohio Department of Transportation *does not agree* to relocate the signed exit, then ODOT will need to install an exit ramp sign indicating CAPITAL UNIVERSITY traffic turn right onto Alum Creek Drive. The city of Columbus Planning and Operations Division will need to install a confirming CAPITAL UNIVERSITY guide sign with a straight-ahead arrow south of Livingston Avenue.

- at the intersection of Alum Creek Drive and East Main Street for eastbound traffic coming from both Main Street and Alum Creek Drive,

Comment: Guide signing for CAPITAL UNIVERSITY presently exists for northbound Alum Creek Drive south of Main Street to turn right on Main Street.

The city of Bexley will need to request the city of Columbus Transportation Division for permission to install a guide sign for eastbound Main Street traffic west of Alum Creek Drive.

- at College Avenue and Main Street directing traffic further east on Main Street,

Comment: The city of Bexley should install a 30" x 24" green on white *Parking Area Guide Sign* (D4-1) with a straight ahead arrow on Main Street just west of College Avenue. A supplemental sign with the Capital University logo and/ or the text CAPITAL UNIVERSITY should be installed above it.

- and, prior to Pleasant Ridge directing traffic southbound on Pleasant Ridge.

Comment: The city of Bexley should install a 30" x 24" green on white *Parking Area Guide Sign* (D4-1) with a right-turn arrow on Main Street just west of Pleasant Ridge Avenue. A supplemental sign with the Capital University logo and/or the text CAPITAL UNIVERSITY should be installed above it.

For westbound traffic, signage shall be placed;

The first bullet-point was not part of the CONCEPTUAL PLAN, but should be included:

- For westbound I-70 traffic, CAPITAL UNIVERSITY guide signage shall be placed:

Comment: On westbound exit 103 B US-33 LIVINGSTON AVE there is a directional guide sign for CAPITAL UNIVERSITY with a right-turn arrow. The follow-up directional sign on eastbound Livingston Avenue to turn left at College Avenue is missing. We suggest Bexley ask ODOT and the city of Columbus to change the off-ramp guide sign to indicate CAPITAL UNIVERSITY should turn left onto Livingston Avenue, and then right onto Alum Creek Drive and then follow the existing guide signing.

- On Main Street just west of Gould directing traffic west,

This is felt to be too far east of Capital, and its parking lot. We suggest the Guide Signing be installed east of Euclaire Avenue (below).

- Main Street just prior to Cassady directing traffic west, and

Comment: We suggest a guide sign for CAPITAL UNIVERSITY with a straight-ahead arrow east of Euclaire Avenue.

- just prior to Pleasant Ridge directing traffic southbound on Pleasant Ridge.

Comment: The city of Bexley should install a 30" x 24" green on white *Parking Area* (D4-1) guide sign with a left-turn arrow on Main Street just east of College Avenue. A supplemental sign with the Capital University logo and/or the text CAPITAL UNIVERSITY should be installed with it.

This signage plan shall be implemented in consultation with the City Engineer and the Bexley Police Department.

- 1b. In the event of a game which has an expected attendance of 250 or greater.

Comment: A game with an expected attendance of 250 or greater is typically all football and basketball games, and the tournament soccer games.

An expected attendance of 250 or greater does not mean 250 or more vehicles. For an event of that attendance, we are assuming 40% will have driven, with 2.8 persons per vehicle, for a total of just 36 vehicles. With a Traffic Management Plan and the proper traffic control signs and markings in place, the parking for an event of this size should require minimal on-site parking management.

The number of attendants should be at the discretion of the Capital University Campus Security, and the Bexley Police.

Capital shall place two-sided game-day signage directing traffic and parking appropriately. Game day signage shall be:

- at least 12 square feet, but not larger than 15 square feet in surface area.

Comment: Permanent Parking Area guide signs are recommended to be installed in accordance with the guidance and standards of the Ohio **Manual of Uniform Traffic Control Devices for Streets and Highways (MUTCD)**.

Capital University may want to consider supplemental two-sided, A-frame mounted game-day signage directing traffic and parking. These signs should conform to the requirements of the Ohio **MUTCD**, which are typically 5 square feet (30" x 24").

- Signage shall be highly visible for both daytime and nighttime games which may include reflective material or illumination, as directed by the City Engineer.

Comment: Game-day signage shall conform to the requirements of the Ohio **Manual of Uniform Traffic Control Devices for Streets and Highways**. Game-day signage should be at least 5 square feet (30" x 24", which is a typical highway sign conforming to the Ohio MUTCD).

Signage shall be placed at the following locations:

- A. At Euclaire and Main directing traffic further west and prohibiting game day traffic on Euclaire Avenue.

Comment: We suggested a CAPITAL UNIVERSITY with a straight-ahead arrow just east of Euclaire Avenue. We don't see how Bexley could prohibit "game day traffic" from turning left onto Euclaire Avenue unless Euclaire would be closed for *all* traffic.

Alternate Idea for Discussion: We suggest Bexley and Capital consider a temporary closure of Mound Street immediately west of Euclaire, so game day traffic would be unable to reach the parking lots, or the parking lot exiting vehicles would be unable to go east on Mound Street.

- B. At Pleasant Ridge and Main directing game day traffic southbound

Comment: The recommended permanent *Parking Area* (D4-1) guide sign on Main Street at Pleasant Ridge Avenue should be sufficient. However, a supplemental sandwich board sign with the Capital University logo or the text CAPITAL UNIVERSITY Special Event Parking may be installed.

- C. At College Avenue and Main directing game day traffic eastbound

Comment: The recommended permanent guide sign on College at Main Street should be sufficient.

- D. At College Avenue and Astor directing game day traffic northbound and prohibiting game day traffic on Astor

Comment: Does this mean all traffic would be prohibited on Astor Avenue, because how would you separate resident traffic from visitor traffic?

- E. At Mound, and Pleasant Ridge, prohibiting game day traffic from going Eastbound

Comment: As per bullet point A above, Bexley and Capital may want to discuss a temporary closure of Mound Street immediately west of Euclaire, so game day traffic would be unable to reach the parking lots before the game, or go east when leaving the parking lots.

- F. At Pleasant Ridge at Astor, prohibiting game day traffic from going southbound.

Comment: Following an event, the parking lots could be required to empty going northbound on Pleasant Ridge Avenue to Main Street.

- 1c. Traffic management will be implemented for all games with an anticipated attendance of 600 or greater.

The traffic management plan will have the primary goal of restricting traffic on the nearby residential street, directing traffic immediately into and out of the designated parking lots. The means of ingress and egress to these lots should be limited to Main Street, Pleasant Ridge north of Astor, Astor west of Pleasant Ridge, and College north of Astor.

Comment: A Traffic Management Plan should include many of the items mentioned in this Conceptual Plan, such as:

1. Guide signing will be adjusted to direct Capital University traffic along arterial streets (Livingston Avenue, Main Street, Alum Creek Drive), and Parking Area Guide signs will be installed on Main Street directing traffic to use Pleasant Ridge Avenue to the campus parking lots, and
2. Residential Permit Parking prohibitions should be adjusted to keep non-residents from parking on neighborhood streets, and
3. Capital University will reserve parking lot spaces in accordance with the CAPITAL UNIVERSITY PARKING REGULATIONS for the expected attendance, and
4. Capital University may install supplemental sandwich board signs directing traffic to the “*special event*” parking lots.
5. The Bexley Police and the Capital University Campus Security will monitor and enforce the traffic and parking regulations.

1d. Buses may stage unloading and loading on East Mound Street between Pleasant Ridge and Francis, or on Pleasant Ridge. Following unloading, buses shall relocate to the plaza area immediately west of The Capital Center where up to two buses can be stored during games. If there is a third bus, it shall relocate following unloading to a designated parking area at the Capital Commons Apartments. Buses shall be required to shut off their engines while parked during game time.

Comment: Capital and the city of Bexley should consider special event bus parking on Pleasant Ridge Avenue south of Mound Street.

2d. In the event of a game which has an expected attendance of 250 or greater, no less than 4 parking attendants with appropriate communication devices and parking management training shall be provided to direct traffic and manage parking two hours before the game and one hour after the game.

Comment: An expected attendance of 250 may be too low to consider requiring parking attendants. For an event of this attendance, we are assuming 40% will have driven, with 2.8 persons per vehicle, for a total of just 36 vehicles. With a Traffic Management Plan and the proper traffic control signs and markings in place, the parking for an event of this size should require minimal on-site parking management.

The number of attendants should be at the discretion of the Capital University Campus Security, and the Bexley Police.

2e. The City of Bexley will further restrict parking as follows:

- Francis Avenue to exclude non-permit parking on weekends;
- Euclaire (south of Main and north of Charles),
- Cassingham (south of Main and north of Charles),
- Astor (between Pleasant Ridge and College), and
- Pleasant Ridge (south of Astor) to exclude non-permit parking on evenings and weekends.

Comment:

We concur the Residential Permit Parking prohibitions should be modified to better deter traffic from parking in the adjacent neighborhood. However, this Conceptual document does not say what restriction the residents are asking for, which may vary street by street or even block-face by block-face.

The issue of Permit Parking is an administrative issue for the City, i.e.;

1. Do they want a majority of residents to decide what they want on their street? (Columbus requires a petition of at least 60% of households).
2. What about other Bexley streets?
 - a. Montrose Avenue and Cassingham have the same limited permit parking restrictions as these streets. Should they be included?
 - b. What about streets *north* of Main (realizing this was written by the *South* Bexley Neighborhood Association)?
3. Does Bexley charge residents a fee for this? (Columbus charges \$25 per household per year).

5. Safety Management

5a. In the event of a game which has an expected attendance in excess of 750 attendees, Capital shall employ 5 safety officers to engage in safety patrols and enforcement within the event area.

Comment: The number of security should be at the discretion of Campus Security and the Bexley Police.

6. Durability of the Plan & Miscellaneous Provisions

6a. This plan can be revisited every four years by both signatories to the plan. Any amendment to the plan will not go into effect until it is adopted by a resolution of Bexley City Council after three readings.

Comment: We suggest an operational review be held each year to discuss how the plan worked, and what changes, if any, may need to be made.

6b. This plan and the agreements herein shall remain in full force and effect until modified or terminated by both parties, in writing. Any proposed modification or termination process shall be announced to all Bexley residents by letter or equivalent, at least three months prior to the public discussion of such changes. Amendment or termination by the City of Bexley may not be enacted except via adoption of a resolution of Bexley City Council after three readings.

6c. By virtue of these conditions being conditional to permit approval, any violation of these conditions will be a violation of the City Zoning Code and shall be enforced through Bexley's Code Enforcement procedures including termination of the permit if violations continue.

6d. The stadium will not be used for concerts. The stadium use will be restricted to use by Capital University for its own athletic program events and will not be rented to other schools or organizations for their use. The stadium may be loaned to other Division III schools for limited use for football, soccer or lacrosse teams travelling through the area for NCAA playoff games as a reciprocal courtesy, but only during daylight hours.

6e. The City of Bexley will revise and/or add ordinances and initiate training and enforcement strategies for code enforcement staff to regulate the restrictions provided for in this document.

Appendix

Directions to Main Campus

Directions to Capital University Athletic Facilities

Capital University Parking Regulations *Section G*

On-Campus Parking Counts

Threshold Attendance Parking Calculations

DIRECTIONS TO CAMPUS

Directions to Capital Main Campus

[Get directions on Google Maps](#)

From the North or South:

- Travel I-71 to the Broad Street exit.
- Turn east (driving away from downtown) onto Broad Street and drive 2.5 miles to Drexel Avenue in Bexley.
- Turn right onto Drexel Avenue and continue south until Drexel ends in front of the campus at Main Street.
- Turn left (east) onto Main Street.
- At the next light, Pleasant Ridge Avenue, turn right (south).

From the West

- Travel east on I-70 to the Bexley/Main Street exit.
- Exit at Bexley/Main Street. The exit ramp automatically turns onto Alum Creek Drive, which will dead end at Main Street (in front of the Kroger store).
- Turn right (east) on Main Street.
- At the fourth traffic light, turn right (south) on Pleasant Ridge Avenue.

From the East

- Travel west on I-70 to the Livingston Avenue exit.
- Turn left (west) on Livingston Avenue.
- Turn right (north) at the first traffic light onto Alum Creek Drive.
- When Alum Creek dead ends in front of the Kroger store, turn right (east) on Main Street.
- At the fourth traffic light, turn right (south) on Pleasant Ridge Avenue.

From the Northwest

- Travel south on I-75 to Route 23.
- Follow Route 23 into Columbus and take I-270 east to I-71 South
- Travel south on I-71 to the Broad Street exit.
- Turn east (driving away from downtown) onto Broad Street and drive 2.5 miles to Drexel Avenue in Bexley.
- Turn right onto Drexel Avenue and continue south until Drexel ends in front of the campus at Main Street.
- Turn left (east) onto Main Street.
- At the next light, Pleasant Ridge Avenue, turn right (south).

From Port Columbus International Airport

- Capital is within a short flight of many major U.S. cities. Chicago, Atlanta, Nashville, Washington, D.C., and New York City are all within 90 minutes of Columbus, Ohio. The campus is approximately a 15-minute drive from Port Columbus.
- At the end of the airport's main drive, turn left (south) onto Stelzer Road.
- Follow Stelzer (which will change names and become James Road) approximately 2.5 miles to Main St.
- Turn right on Main.
- Travel approximately 1 mile to Pleasant Ridge Avenue.
- Turn left on Pleasant Ridge.

Men's Sports	Women's Sports	Live Coverage / Multimedia	Recruiting	Facilities	Camps & Clinics	Intramurals / Club Sports	Athletics Department
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Scoreboard Sat, 03/08 | Women's Lacrosse vs. Calvin W, 11-8 (Final) BX | RC | RC

SHARE  PRINTER FRIENDLY

Directions to Capital University Athletics Facilities

Directions to The Capital Center

(Football, Soccer, Volleyball, Basketball, Indoor Track)

From the North & South:

Travel on I-71 to I-70 East.
 Exit I-70 at the Main Street/Bexley exit.
 Exit ramp will merge onto Alum Creek Drive then dead end at Main Street (Kroger store will be in front of you).
 Turn right onto Main Street
 Proceed East on Main Street to fourth traffic light - Pleasant Ridge Drive.
 Turn right on Pleasant Ridge (The Capital Center will be on your left).
 Proceed to Mound Street and park in the large parking lot south of Mound Street and the main entrance to the building and stadium is on Mound Street.

From the West

Travel east on I-70.
 Exit I-70 at the Main Street/Bexley exit.
 Exit ramp will merge onto Alum Creek Drive then dead end at Main Street (Kroger store will be in front of you).
 Turn right onto Main Street
 Proceed East on Main Street to fourth traffic light - Pleasant Ridge Drive.
 Turn right on Pleasant Ridge (The Capital Center will be on your left).
 Proceed to Mound Street and park in the large parking lot south of Mound Street and the main entrance to the building and stadium is on Mound Street.

From the East

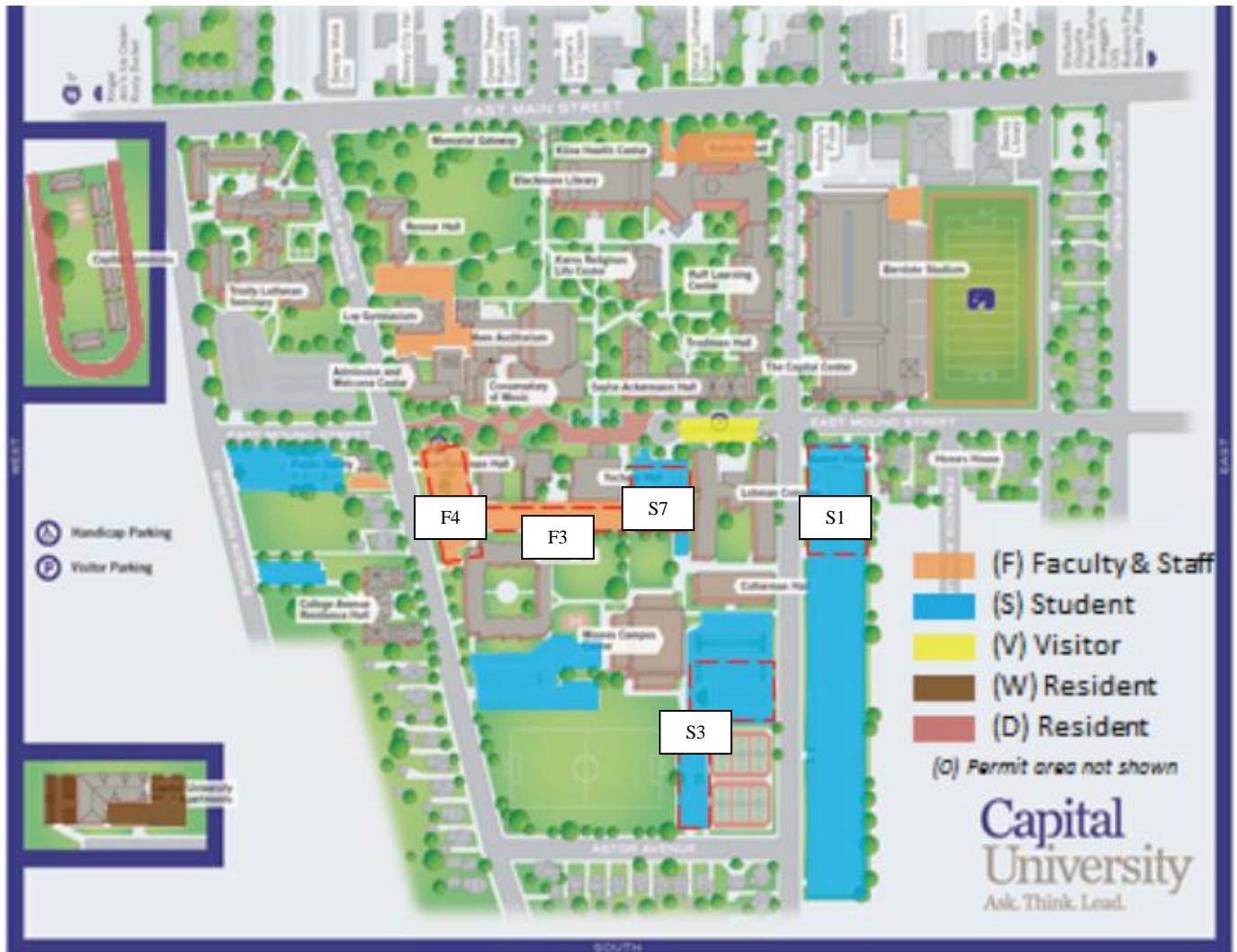
Travel west on I-70 to the Livingston Avenue exit.
 At the bottom of the exit ramp, turn right.
 At the first traffic light, turn left onto College Ave.
 Turn right on Astor Avenue.
 Turn left on Pleasant Ridge.
 Go one block and turn right onto Mound Street.
 The Capital Center and Bernlohr Stadium will be on your left turn into the parking lot on the right.

NOTE: Traffic *From the East* is directed to use the residential College Avenue. We recommend this be changed to use the arterial Alum Creek Drive like the Directions to Campus.

CAPITAL UNIVERSITY PARKING REGULATIONS

Section G. SNOW EMERGENCIES / RESTRICTED PARKING AREAS

Several of the University lots have signs designating them as restricted parking areas (the areas within the red dashes on the map). These lots are posted as **No Parking 2:00 a.m. – 6:00 a.m.** This restriction is enforced seven (7) days a week for the purpose of maintaining open spaces for incoming commuter students, snow emergencies and/or special University events. Vehicles found in violation will be ticketed or impounded at the owner's expense.



Restricted Parking Areas

On-Campus Parking Counts:

Weekday Parking:

- The 7:00 pm Wednesday Men's basketball game against Marietta College, with an attendance of 327 persons in the 2,100 seat Capital Center arena, filled 100% of all available parking spaces in lots S1, S2, and S3, as well as all on-street spaces on Pleasant Ridge Avenue.

Men's Basketball game versus Marietta			
Wednesday, February 12, 2014 @ 7:00 pm			
Reported attendance 387			
<i>Available Parking Spaces</i>			
	390 spaces Lot S1 & S2	166 spaces Lot S3	30 On-street Spaces on Pleasant Ridge
	<u>Capital Center Lot</u>	<u>Tennis Court Lot</u>	<u>Pleasant Ridge</u>
5:00 pm	33	32	3
6:00 pm	22	16	1
7:00 pm	0	0	1

Based on this observation two hours before the game, it can be inferred that parking in lots S1 & S2 was 357 vehicles, and 134 in lot S3.

Non-event Observation and Count				
Wednesday, March 5, 2014 @ 7:00 pm				
<i>Available Parking Spaces</i>				
	390 spaces Lot S1 & S2	166 spaces Lot S3	<u>Lot S4</u>	<u>Lot F3</u>
	<u>Capital Center Lot</u>	<u>Tennis Court Lot</u>		
5:30 pm	108	5	0	45
6:30 pm	55	5	1	45
7:15 pm	37	36	0	46

On-Campus Parking Counts – Determination of BASE Saturday parking

Weekend Parking:

- The 2:00 pm Saturday football game against Wilmington College, with an attendance of 895 persons in the 3,000 seat Bernlohr Stadium, filled 100% of all available parking spaces in lots S1, S2, and S3, as well as all on-street spaces on Pleasant Ridge Avenue. This was the second-*smallest* attended game in the 2013 season.

Parking counts were made for Lots S1 and S2 south of the *Capital Center*, and for lot (S3) north and west of the Tennis Courts.

Football Parking:

Capital Football game versus Wilmington		
Saturday, November 16, 2013 @ 1:00 pm		
Reported attendance 895		
<i>Available</i> Parking Spaces		
	390 spaces	166 spaces
	<u>Lot S1 & S2</u>	<u>Lot S3</u>
11:15 am	184	57
<small>Note: the 11:15 am count observed a number of people tailgating. We assumed these accounted for 20 spaces in lot S1 & S2.</small>		
1:30 pm	13	16
<i>Based on this observation a little more than two hours before the game, it can be inferred that residence hall student parking in lots S1 & S2 was 164 vehicles, and 109 in lot S3.</i>		

Basketball Parking:

- The 1:00 pm Saturday Men's basketball game against Otterbein College, with an attendance of 1,528 persons in the 2,100 seat Capital Center arena, filled 98% of all available parking spaces in lots S1, S2, and S3, as well as all on-street spaces on Pleasant Ridge Avenue. In addition, 19 vehicles were observed parked on Francis Avenue south of the Capital Center. This cross-town rivalry game was the *largest* in the 2013/2014 season.

Men's Basketball game versus Otterbein

Saturday, February 15, 2014 @ 2:00 pm

Reported attendance 1,528

(Followed by Women's game at 4:25 pm)

Available Parking Spaces

	390 spaces <u>Lot S1 & S2</u>	166 spaces <u>Lot S3</u>	30 On-street <u>Spaces</u>
12:00 pm	169	3	25
1:00 pm	141	8	8
2:00 pm	1	9	10

Note: The 2014 Athletic Awards and Hall of Fame Induction began at 11:00 am with a reception in the Harry C. Moores Campus Center. The reported attendance was approximately 70 persons, and all were assumed to have parked in the adjacent Lot 3.

Based on this observation two hours before the game, it can be inferred that residence hall student parking in lots S1 & S2 was 169 vehicles.

We were asked to consider visitor parking in lots S1, S2, and S3

Total Spaces in lots S1 and S2 is 390*

Total Spaces in lot S3 is 166*

Total number of *Main Campus* parking spaces is 1,163*

University parking at Capital Commons, Cap University Apartments, the Department of Public Safety lot, the College Avenue Residence Hall lot, the remote "O" lot, and on-street spaces on Sheridan Avenue and on Mound Street west of College Avenue were not counted as "Main Campus".

Bernlohr Stadium seats 3,000*

*The Parking Space Numbers and Seating Capacities are from the report: **Campus Parking Study 2009**

Attendance at a football game which filled lots S1, S2 and S3 was 895 persons. The parking lot counts taken at the start of the game indicated all spaces in lots S1, S2, and lot S3 were filled, as well as all on-street spaces on Pleasant Ridge Avenue, and on Mound Street.

The number of parked vehicles in lots S1 and S2 was 166. The available number of spaces in lots S1 + S2 was 390 – 166 filled = 224 available.

The number of parked vehicles in lot S3 was 57; the available number of spaces in lot S3 was 166 – 57 filled = 109 available.

TOTAL AVAILABLE SPACES TWO HOURS BEFORE KICK-OFF: 224 + 109 = 333

Assuming all other factors to be the same, the number of parking spaces that would be required for a capacity crowd (3,000 persons) at Bernlohr Stadium is:

$$\frac{333 \text{ spaces}}{895 \text{ attendance}} = \frac{X \text{ spaces}}{3,000 \text{ attendance}}$$

$$X = 1,116 \text{ parking spaces}$$

We were asked to consider visitor parking in lots S1, S2, and S3

Total Spaces in lots S1 and S2 is 390*

Total Spaces in lot S3 is 166*

Total number of *Main Campus* parking spaces is 1,163*

University parking at Capital Commons, Cap University Apartments, the Department of Public Safety lot, the College Avenue Residence Hall lot, the remote "O" lot, and on-street spaces on Sheridan Avenue and on Mound Street west of College Avenue were not counted as "Main Campus".

Capital Center seats 2,100*

*The Parking Space Numbers and Seating Capacities are from the report: **Campus Parking Study 2009**

Attendance at a basketball game which filled lots S1, S2 and S3 was 1,528 persons. The parking lot counts taken at the start of the game indicated all spaces in lots S1, S2, and lot S3 were filled, as well as all on-street spaces on Pleasant Ridge Avenue, and on Mound Street.

Counted Parked Vehicles Two Hours Before Kick-off

Total Available Spaces in lots S1 + S2: 390 – 169 filled = 221 available

Total Available Spaces in lot S3: 166 – 163 filled = 3 available

TOTAL AVAILABLE SPACES TWO HOURS BEFORE KICK-OFF: 221 + 3 = 224

Assuming all other factors to be the same, the number of parking spaces that would be required for a capacity crowd (2,100 persons) at the Capital Center is:

$$\frac{224 \text{ spaces}}{1,528 \text{ attendance}} = \frac{X \text{ spaces}}{2,100 \text{ attendance}}$$

$$X = 307 \text{ parking spaces}$$

Attendance for Parking Calculations

Vehicle Occupancy Data

There was no published trip generation or vehicle occupancy data for college football stadiums. The published data in the *Trip Generation* manual for arenas (ITE Land Use Code 460) is based upon a single site surveyed in California in 1970. Because the data is based upon a single study completed more than four decades ago, this information was not felt to be a reliable indicator of the traffic that will be generated by the proposed arena.

A web search found a traffic study that had looked at and summarized other studies and reports regarding stadiums and arenas nationwide. The table below summarizes the occupancy rates (persons per car) for vehicles arriving at arenas or similar facilities:

VEHICLE OCCUPANCY DATA	Vehicle Occupancy
Data Source	Rate
1994 ITE Report on Stadia and Arenas	3.0 to 3.5
ULI Shared Parking Manual (p. 62) - Arena (Concerts)	2.0
ULI Shared Parking Manual (p. 63) - Arena Public Parking	3.0
ULI Shared Parking Manual (p. 69) – Stadium (Football Game)	3.3
ITE Discussion Group – 2003 San Antonio Amphitheatre Study (9,000 attendees)	2.60 -2.75
Average	2.88

For purposes of this study, an auto occupancy of 2.8 persons was assumed.

For soccer and lacrosse games

Assume 200 in attendance $\frac{200 \times 0.4}{2.8} = 29$ spaces
 Assume 40% will have driven
 Assume 2.8 persons per vehicle

Recommendation: Reserve west aisle of lot S1 (39 spaces & 4 Disability Only).

For women's basketball games

Assume 500 in attendance $\frac{500 \times 0.4}{2.8} = 71$ spaces
 Assume 40% will have driven
 Assume 2.6 persons per vehicle

Recommendation: Reserve both aisles of lot S1 (80 spaces & 8 Disability Only).

For men's basketball games

Assume 2,100 max attendance (Capital Center maximum crowd)
 Assume 60% will have driven $\frac{2,100 \times 0.6}{2.8} = 450$ spaces
 Assume 2.8 persons per vehicle

Recommendation: Reserve both aisles of lot S1 (80 spaces & 8 Disability Only).

Site Observation Confirming Data

<u>Event</u>	<u>Attendance</u>	<u>Number of Parking Lot Spaces</u>	<u>Spaces taken 2 Hours Before by Students</u>	<u>Spaces taken at the Start of the Event</u>	<u>Assumed Football Parking</u>	<u>Spaces Needed for a Maximum Crowd</u>
Saturday Basketball vs Otterbein	1,528	S1 + S2 = 390 S3 = 166 On-street = <u>30</u> 594	S1 + S2 = 221 S3 = 57 On-street = <u>5</u> 283	390-13 = 377 166-16 = 150 30 - 0 = <u>30</u> 557	557 - 283 = 274 spaces per attendee 274 ÷ 1528 = 0.18	0.18 x 3000 = 378

Note: This was a crosstown rivalry game and was promoted on campus to “white-out Otterbein”. On-campus student attendance may have been higher than normal, resulting in a lower parking demand.

A maximum capacity basketball game will require all of lots S1 and S2.

For football games

3,000 max attendance (Bernlohr Stadium maximum crowd)

Assume 60% will have driven $\frac{3,000 \times 0.6}{2.8} = 643$ spaces

Assume 2.8 persons per vehicle 2.8

Recommendation: Reserve *all* of lots S1 and S2 (390 spaces) plus reserve *all* of lot S3 (166 spaces).

Site Observation Confirming Data						
Event	Attendance	Number of Parking Lot Spaces	Spaces taken 2 Hours Before by Students	Spaces taken at the Start of the Event	Assumed Football Parking	Spaces Needed for a Maximum Crowd
Saturday Football vs Wilmington	895	S1 + S2 = 390 S3 = 166 On-street = <u>38</u> 594	S1 + S2 = 216 S3 = 109 On-street = <u>2</u> 327	390-13 = 377 166-16 = 150 38 - 0 = <u>38</u> 527	527 - 327 = 200 spaces per attendee 200 ÷ 895 = 0.22	0.22 x 3000 = 660

A maximum capacity football game will require more than lots S1, S2 and S3.

Although no soccer games or lacrosse games were observed and counted, the reported attendance for both the men and the women is low enough that reserving just the west aisle of lot S1 (39 spaces not counting the 4 spaces marked for persons with disabilities) should be satisfactory.

For rivalry games or tournament games when attendance is expected to be higher, spaces on both the aisles of S1 (88 spaces) should be reserved.

The 39 or 88 displaced S1 parked vehicles will need to park in another S parking lot, or be allowed to park in any F (faculty) parking lot after 4:30 pm or on weekends during "special events". Students and staff can begin parking in the lot S1 after the event has started.

E.P. FERRIS & ASSOCIATES, INC.
CONSULTING CIVIL ENGINEERS AND SURVEYORS

880 King Avenue
COLUMBUS, OHIO 43212
(614) 299-2999 FAX (614) 299-2992

MEMORANDUM

To: Ben Kessler
Mayor
Bexley, Ohio

Attn: Bill Dorman
Bexley Public Service Director

Jason Sudy
Side Street Planning

From: Joe Ridgeway, Jr., P.E.
Vice President
E. P. Ferris & Associates, Inc.

Date: May 9, 2014

Subject: Capital University
Bernlohr Stadium Field Lighting
Athletic Event Traffic Management Plan

Enclosed is our report regarding the:

**Capital University
Athletic Event Traffic Impact Study
and
Review of the Conceptual Traffic Management Plan.**

If you recall, this began as your request for our firm to watch traffic and parking at the *last* Capital University home football game of 2013, and to comment upon the expected traffic impact(s) if lighting is installed at Bernlohr Field for athletic events to be held in the evening. During this time you and/or your staff, with Side Street Planning, continued to meet with the South Bexley Neighborhood Association, and this one-time limited observation quickly morphed into an Athletic Event Traffic Impact Study for Capital University and the South Bexley neighborhoods.

Our report discusses the issues and concerns raised by the residents that you asked to study and comment upon, such as:

- Capital University Traffic Guide Signing,
- Parking Area Signing,
- Threshold Attendance for "*Special Event*" Reserved Parking,
- Residential Permit Parking Prohibitions,
- The resident's Tentative Proposal:

CONCEPTUAL
Bernlohr Stadium
Game Day & Stadium Management for Day & Night
Games and Athletic Events
Planning Approval Conditions
rev 3.0 3/22/2014

Please review the report, and feel free to contact us if you have any questions and/or comments. We are ready to meet with you and your staff at your convenience to discuss our findings and recommendations.

Thank you for the opportunity to work with the City of Bexley and with Capital University and the South Bexley Neighborhood Association as you work collectively to address and mitigate traffic and/or parking impacts associated with athletic events held on campus.

Very truly yours,

E. P. Ferris & Associates, Inc.
Joseph A. Ridgeway, Jr., P.E.
Vice President

sjw/JAR

file: 201141