

VIEW NORTH FROM S. CAPITOL & P STREET (TOWARD CAPITOL DOME)  
D.C. Major League Baseball Park

SHEET 30 of 53

ZONING COMMISSION  
District of Columbia  
CASE NO.06-22  
EXHIBIT NO.3A2

















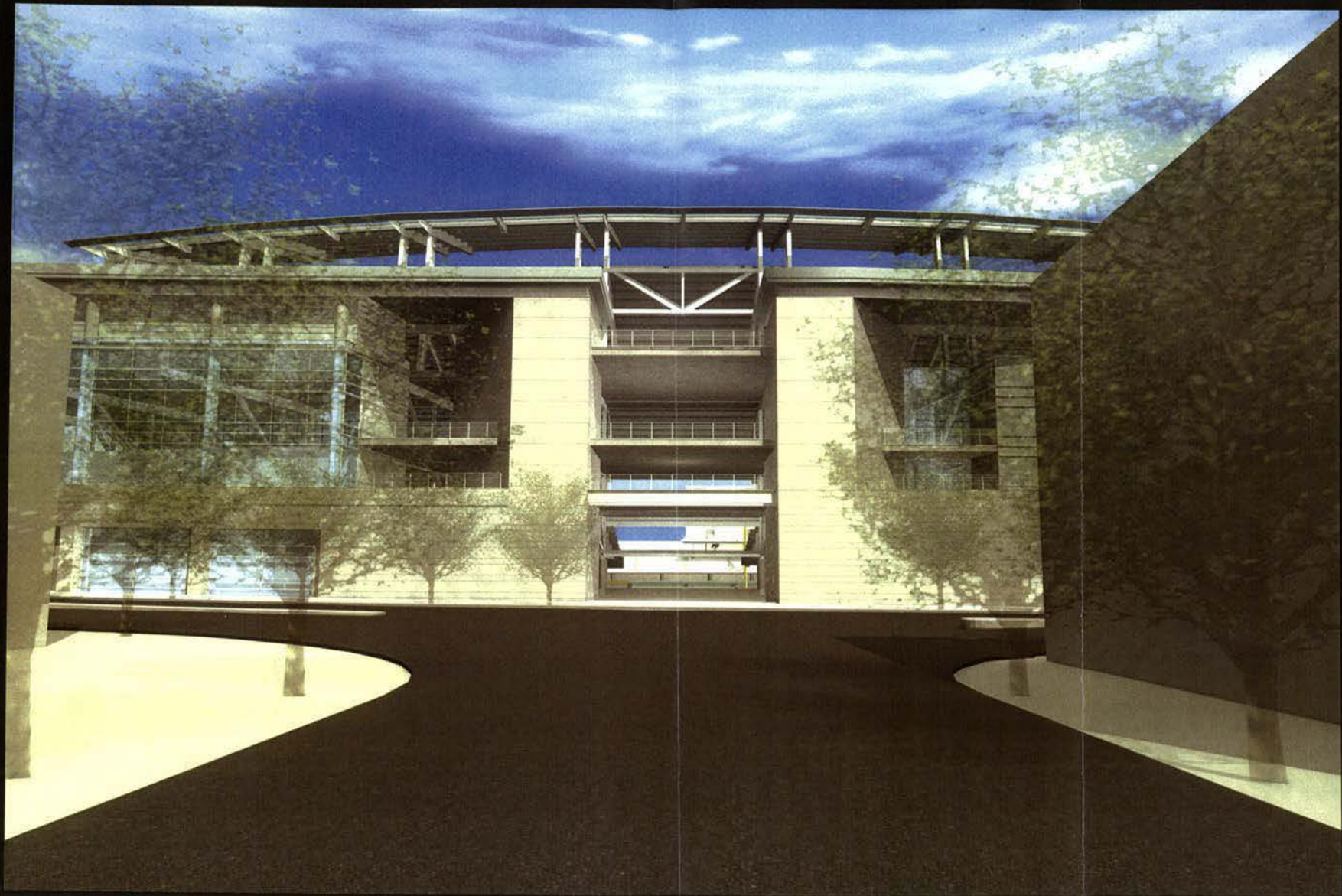


VIEW EAST FROM P STREET & SOUTH CAPITOL  
D.C. Major League Baseball Park

SHEET 35 of 53





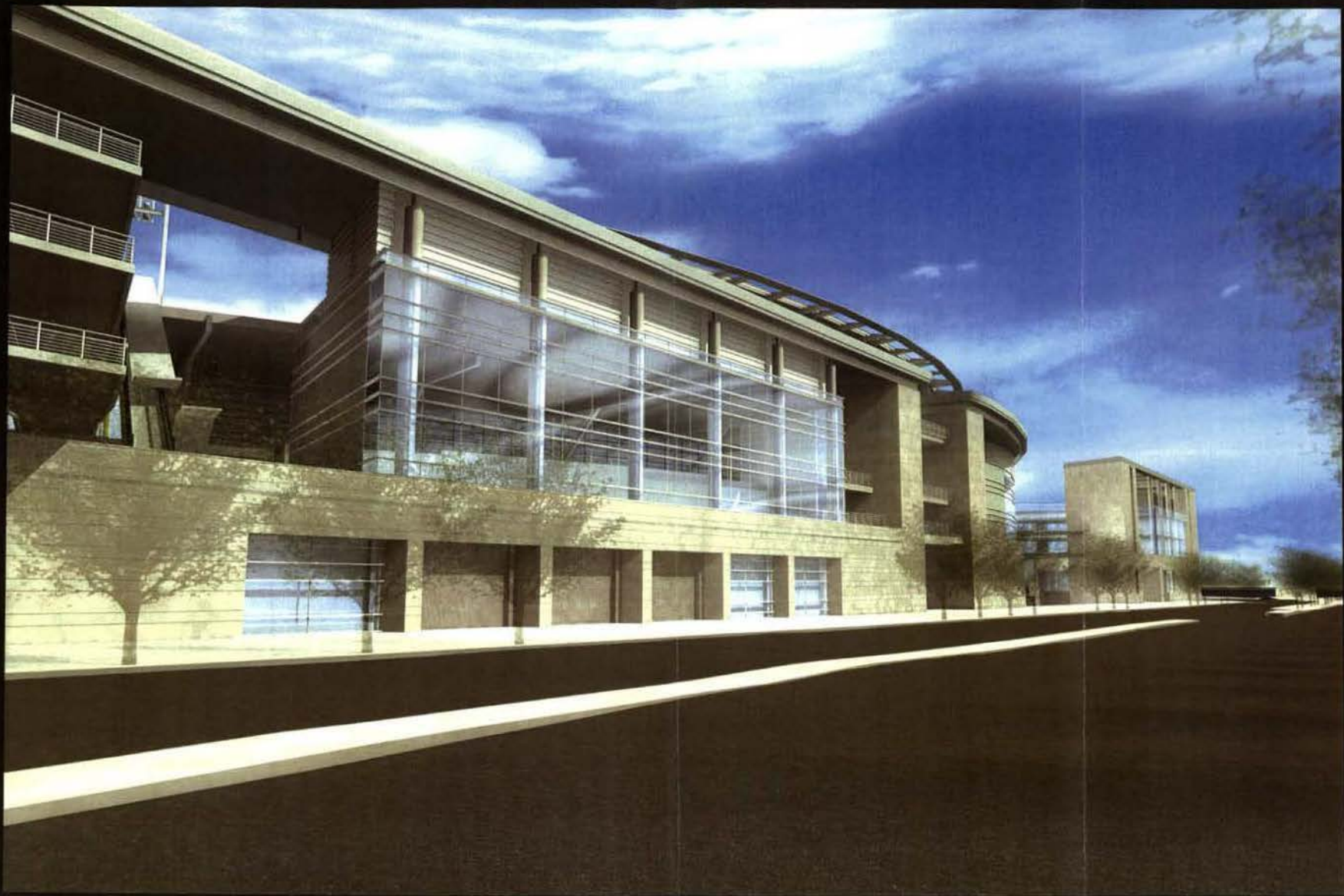


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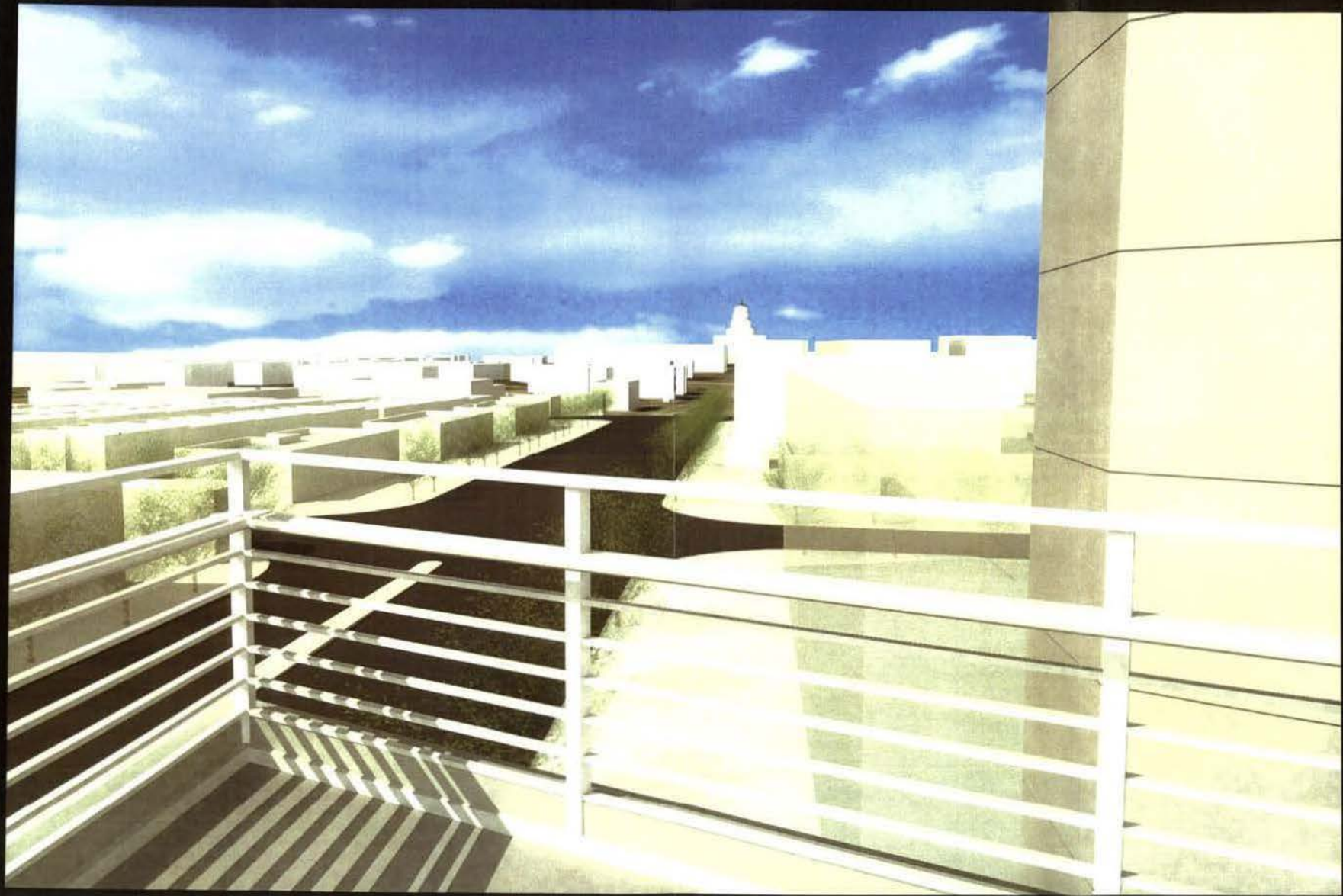


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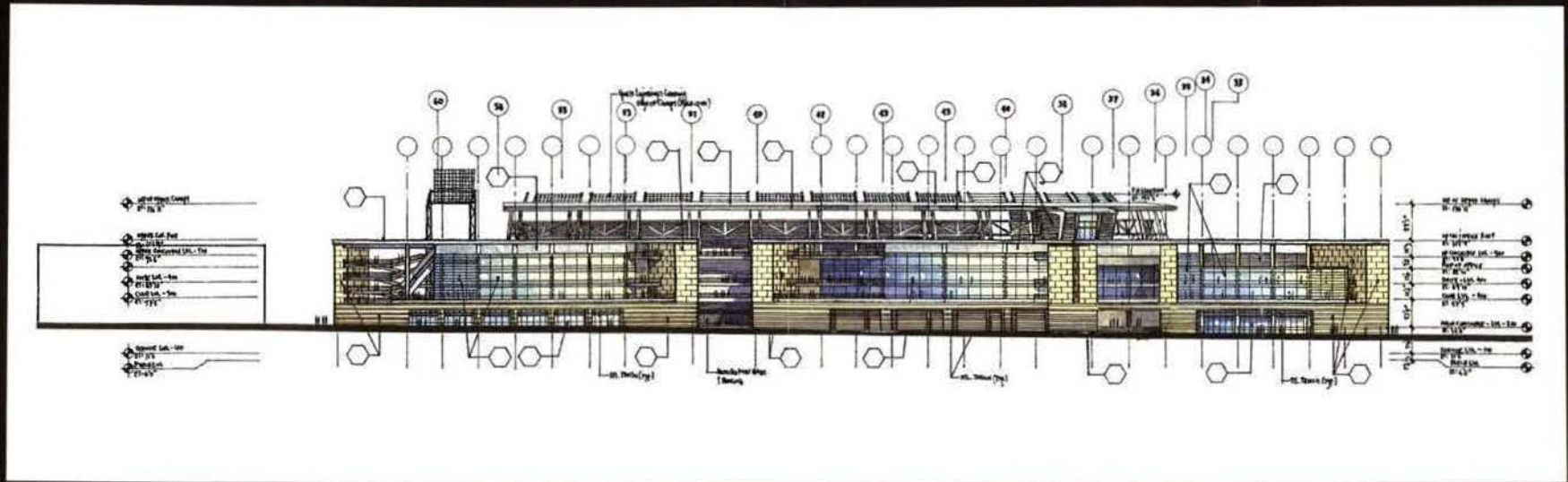




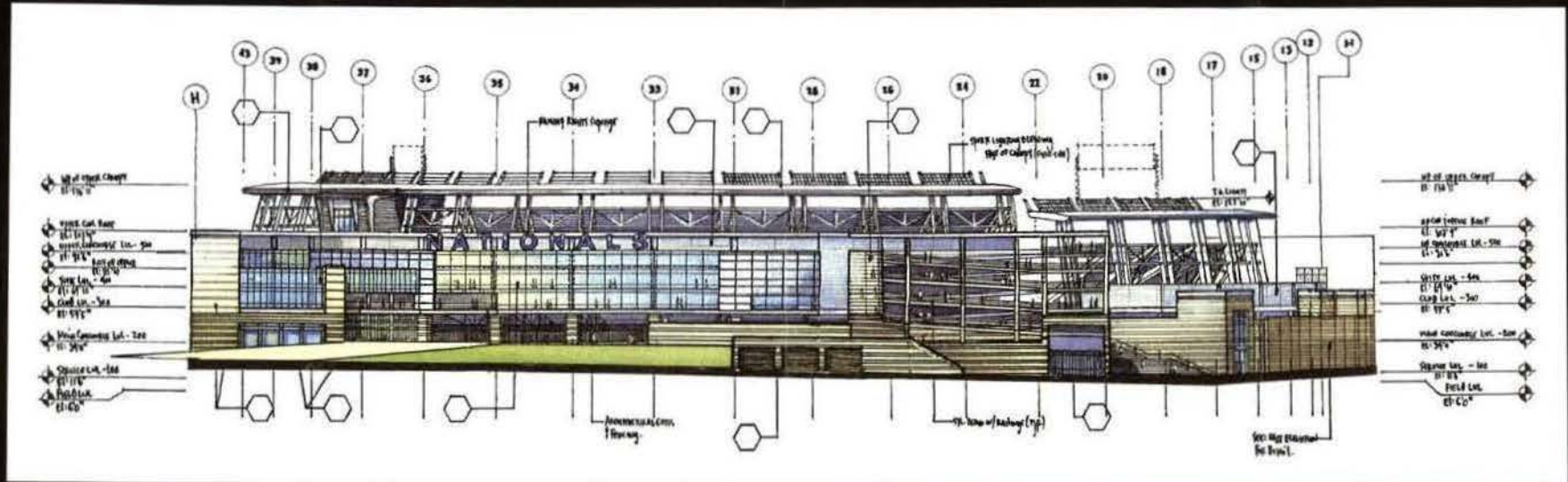
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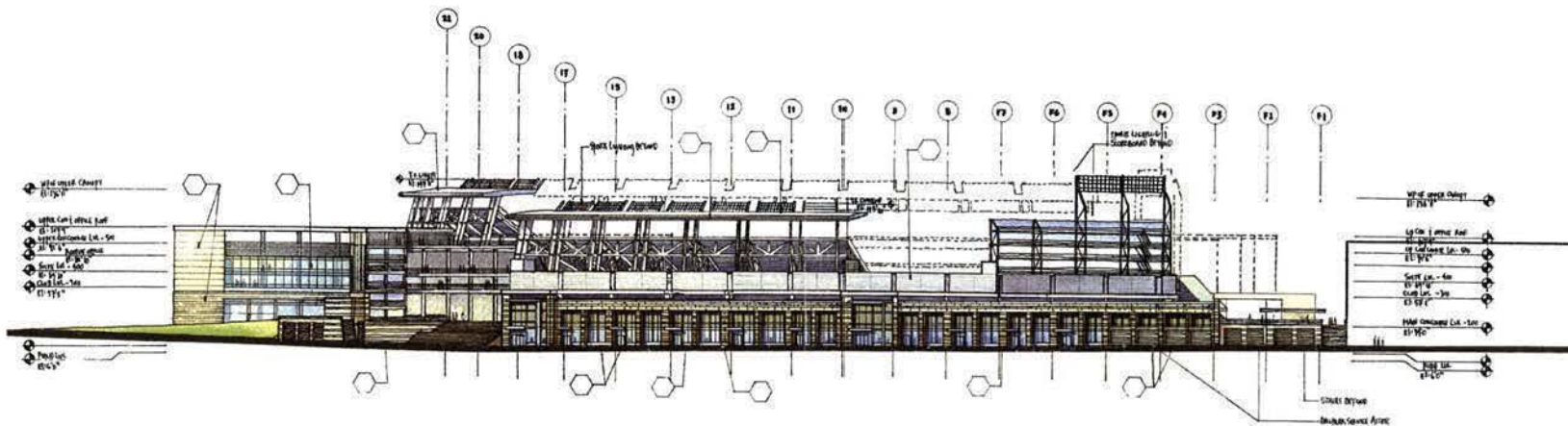




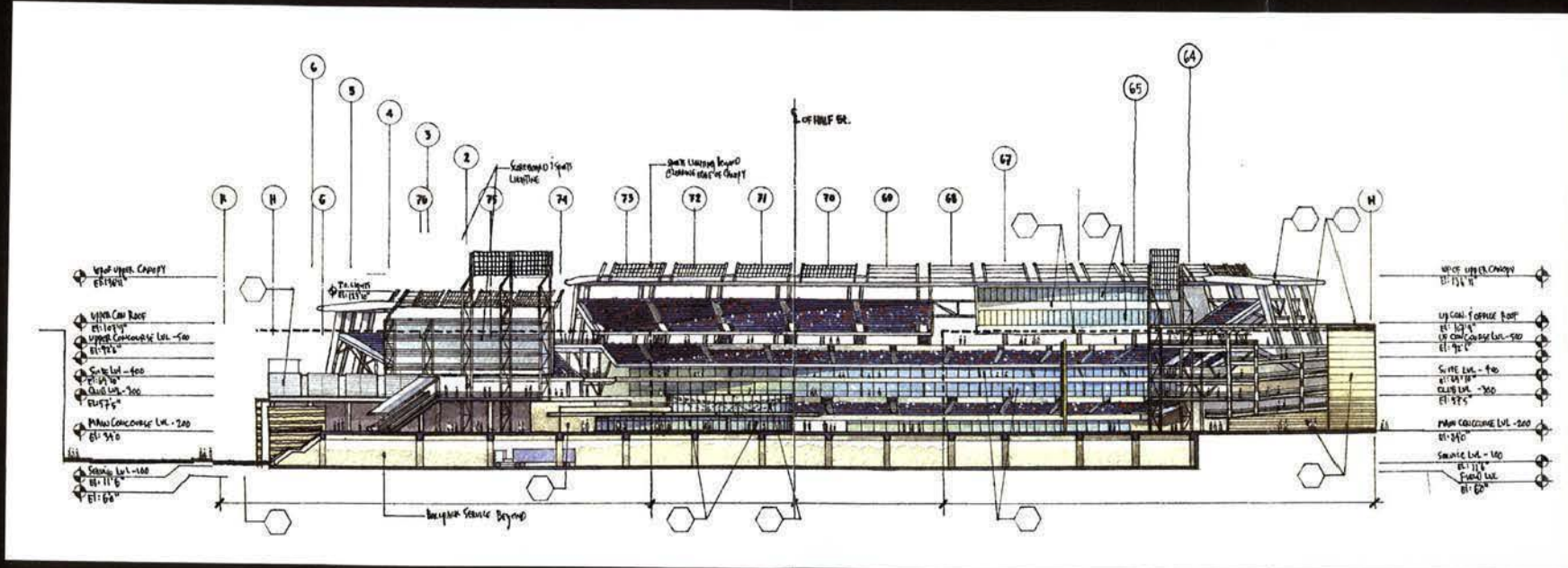




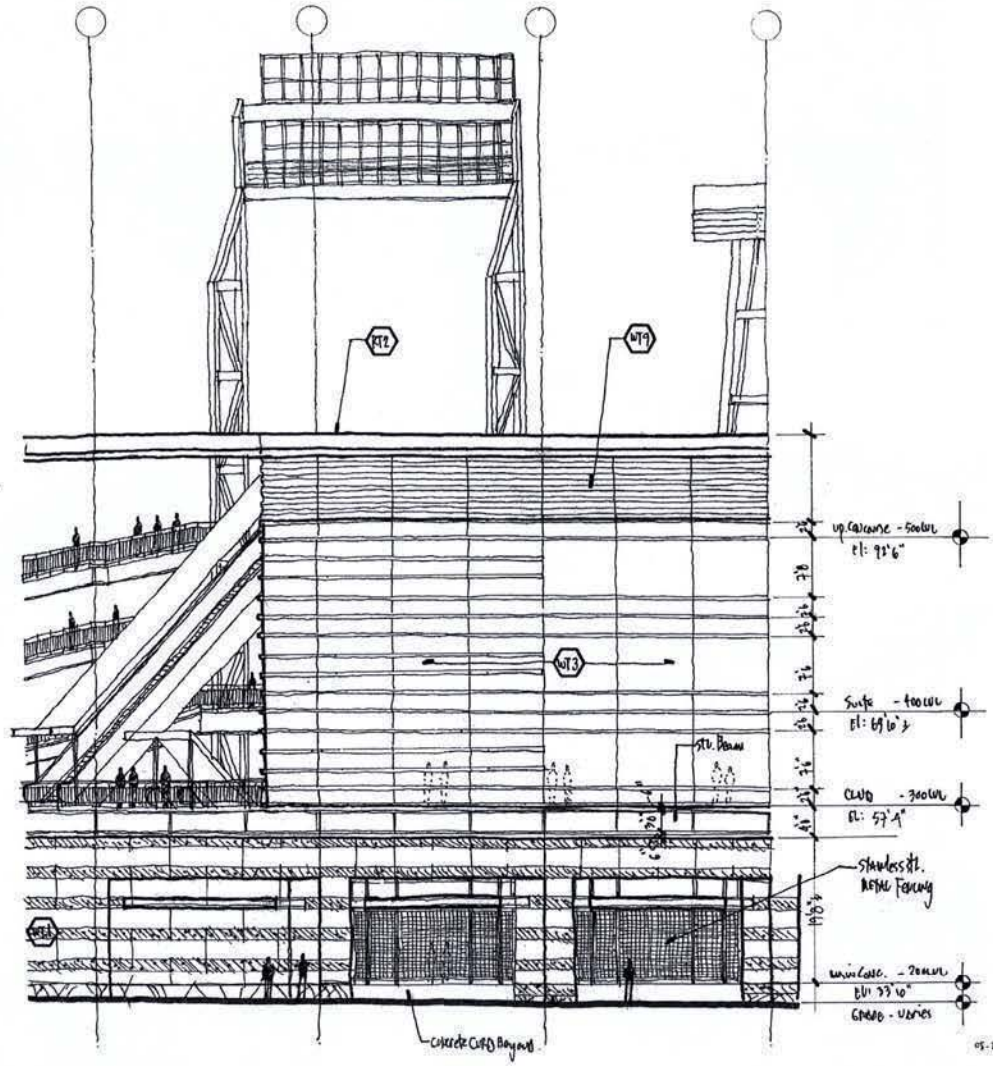












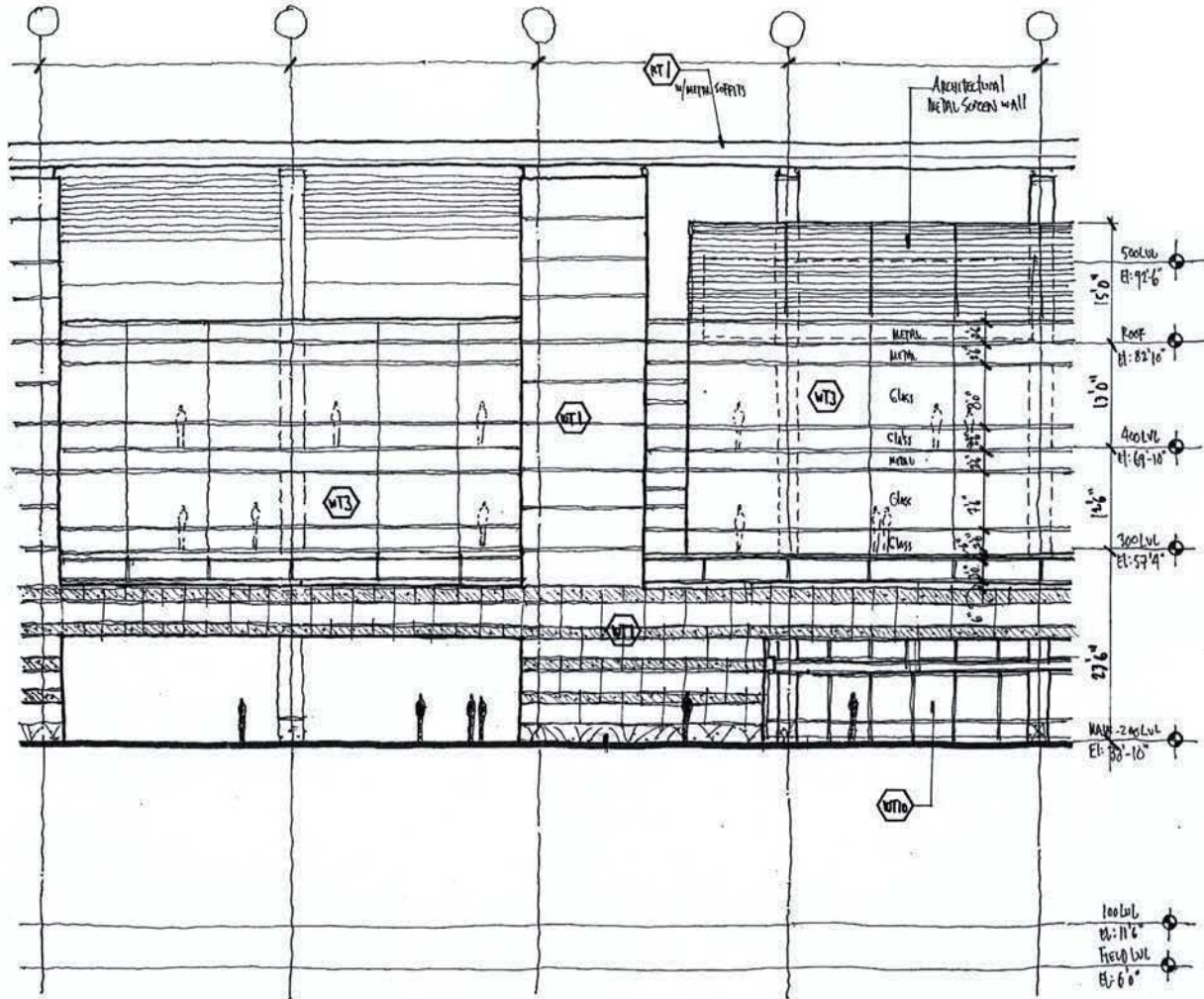
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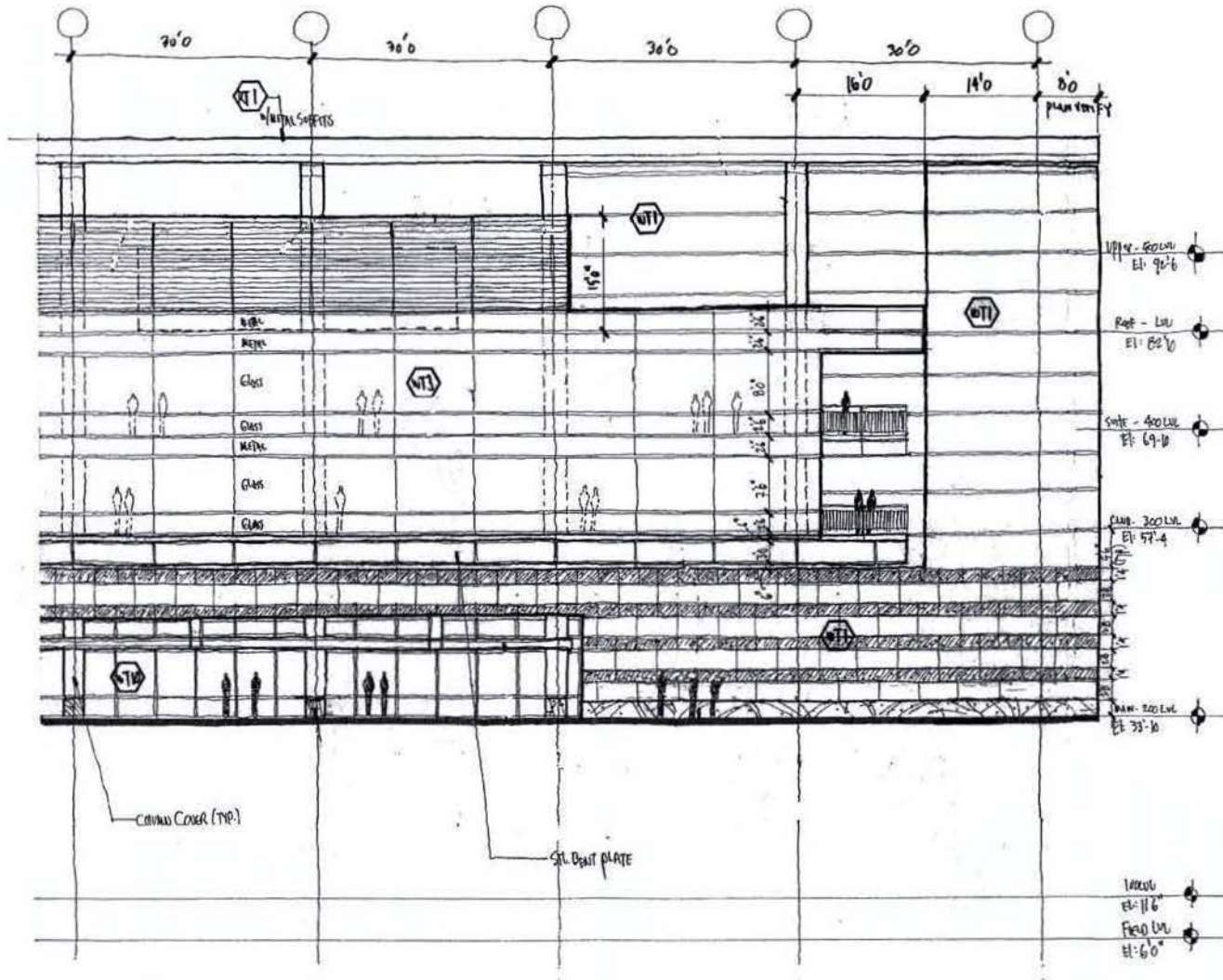


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D.C. Major League Baseball Park

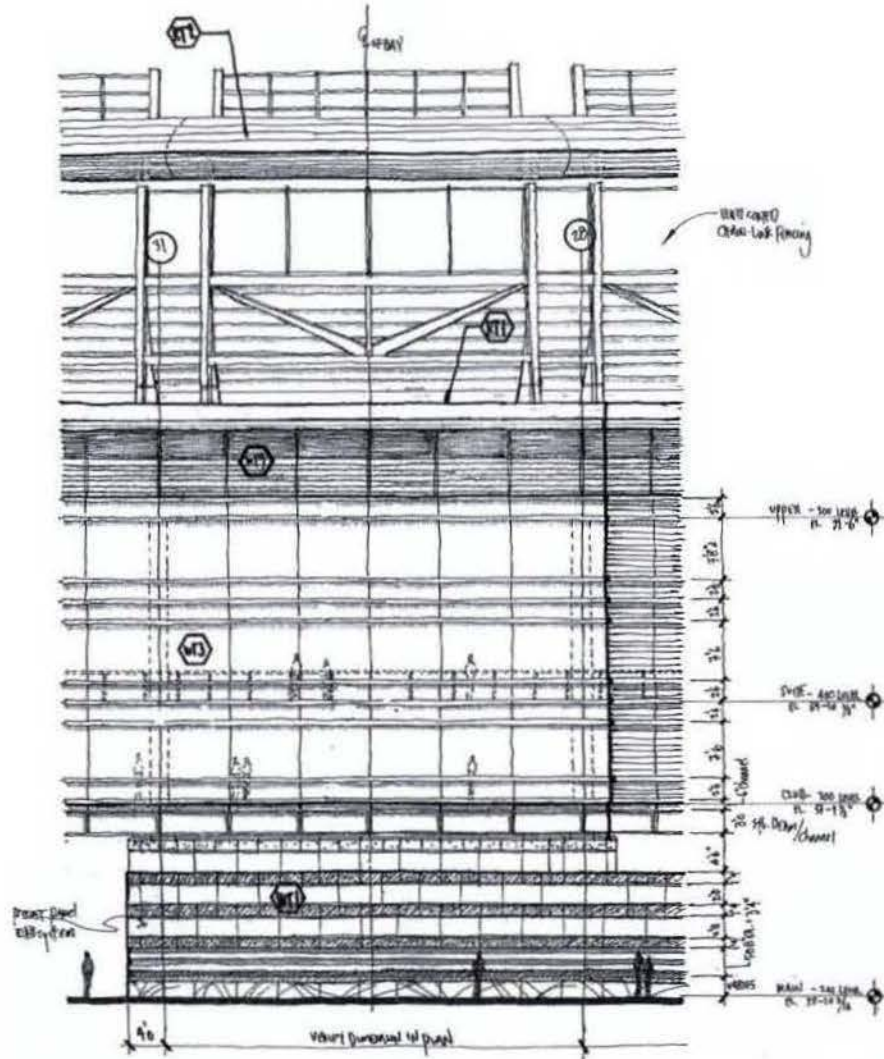


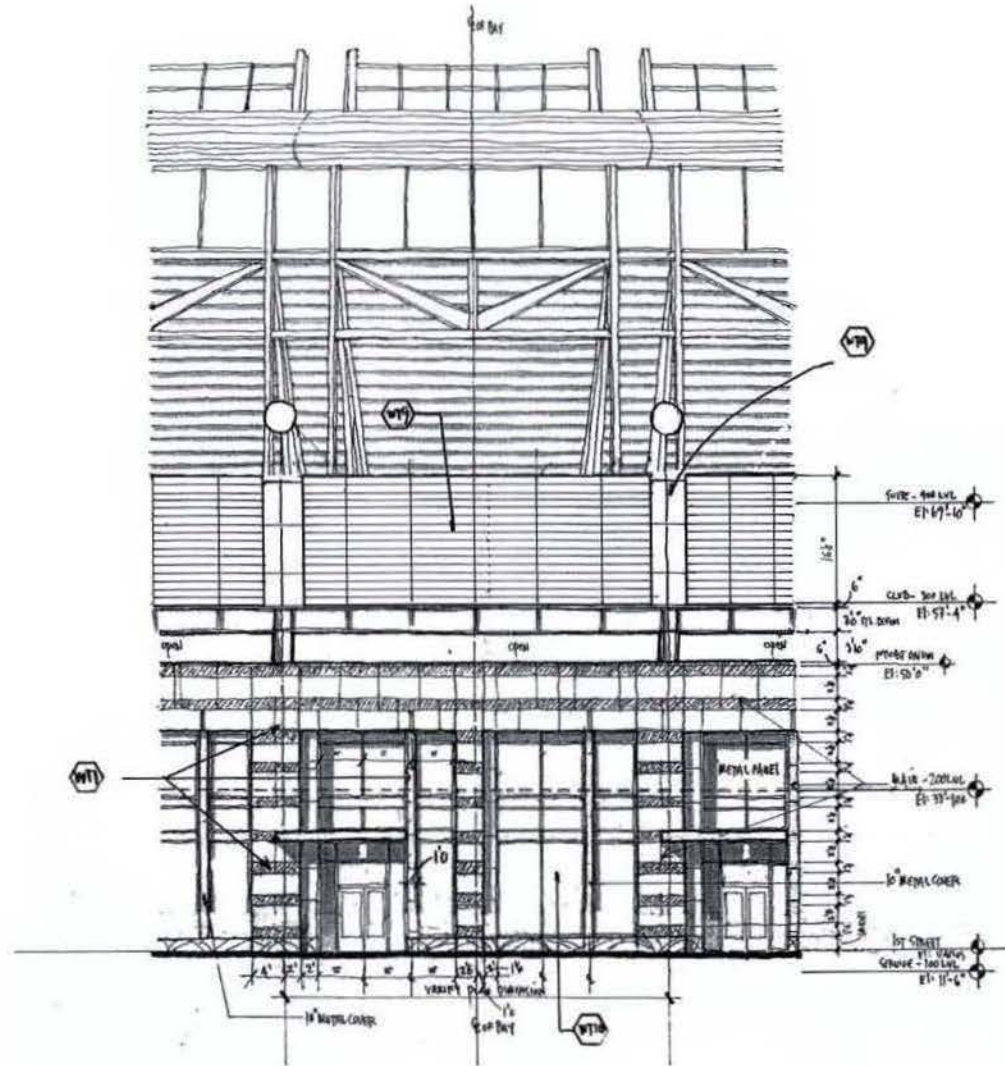




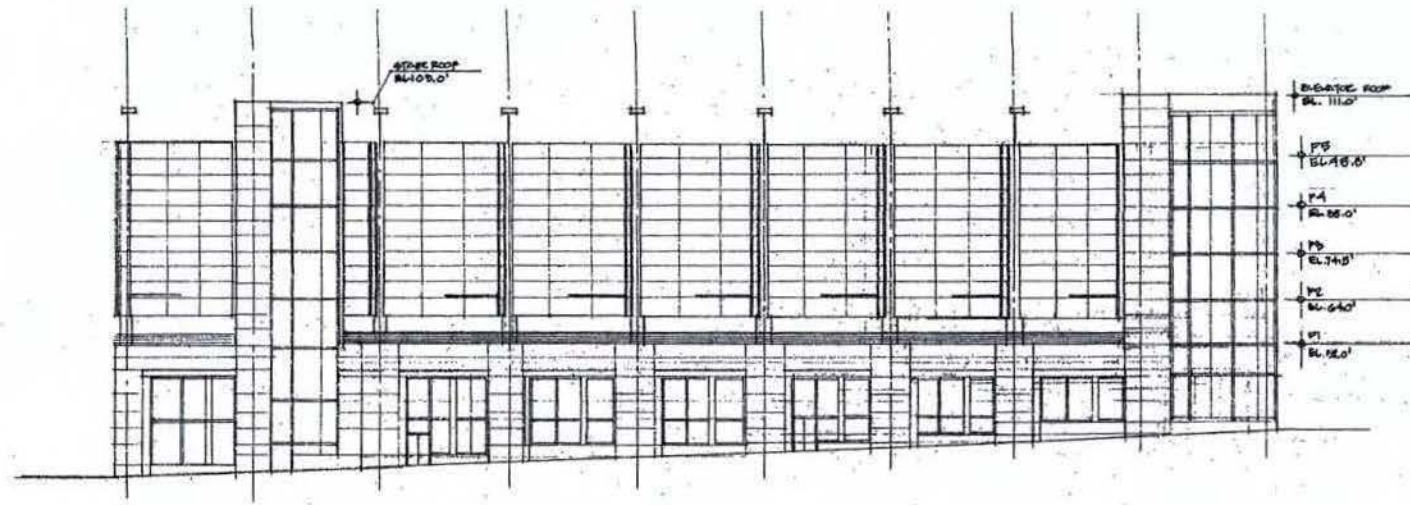


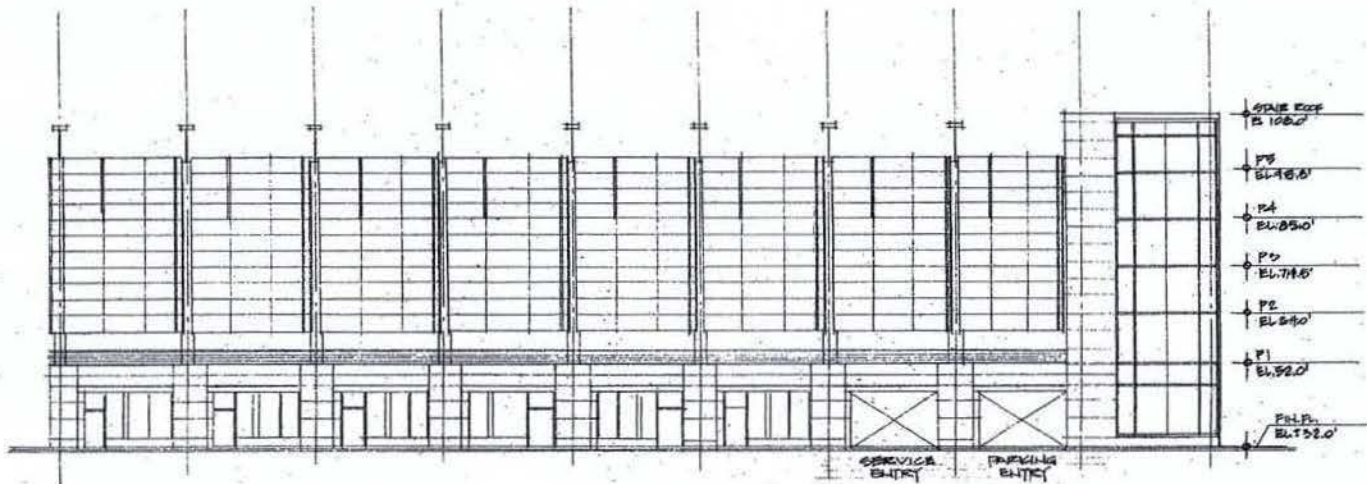




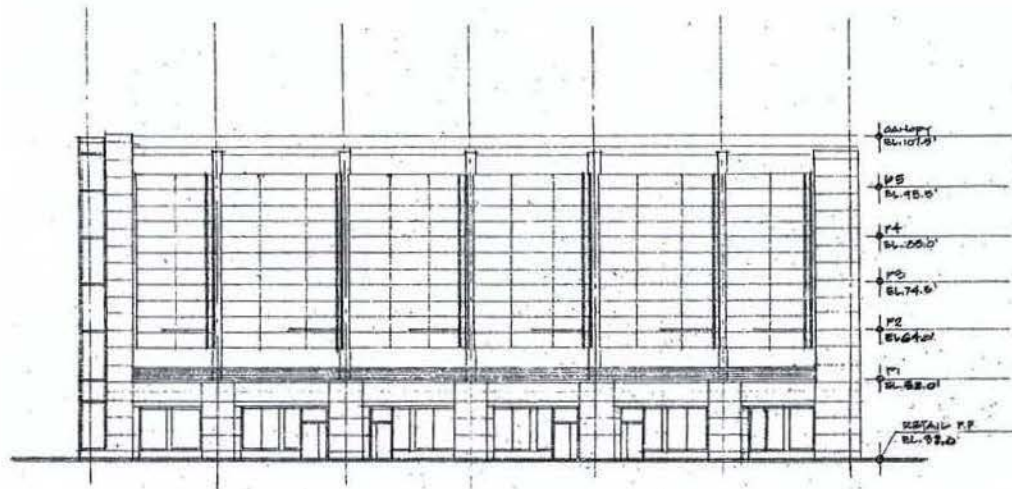


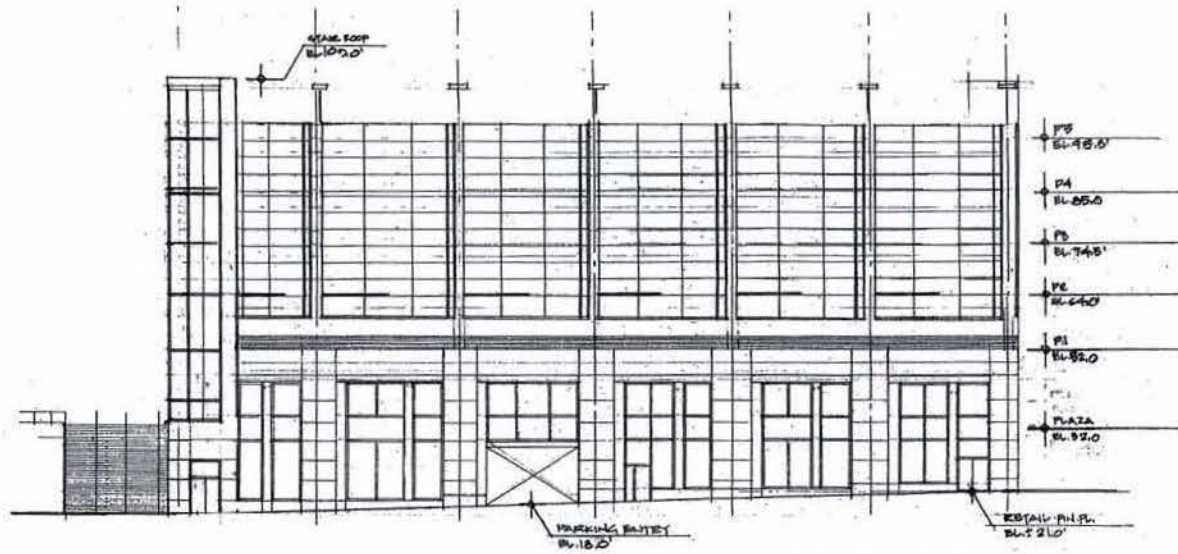




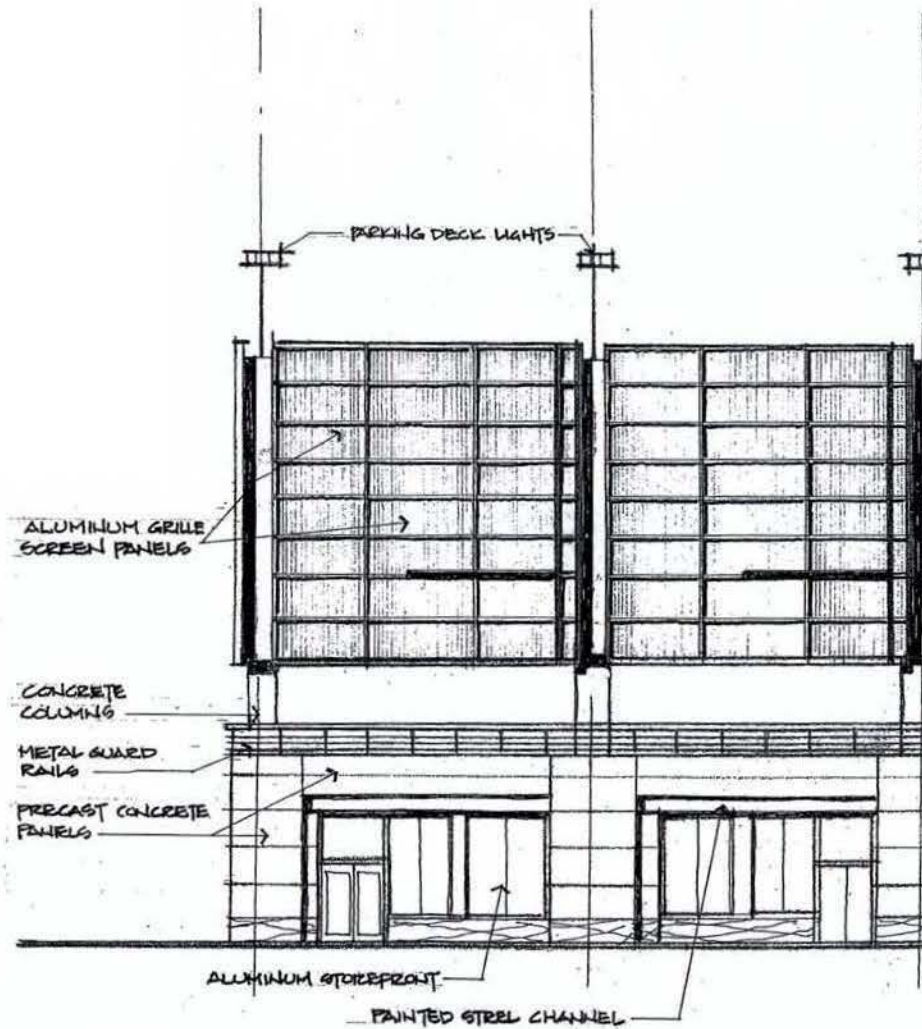




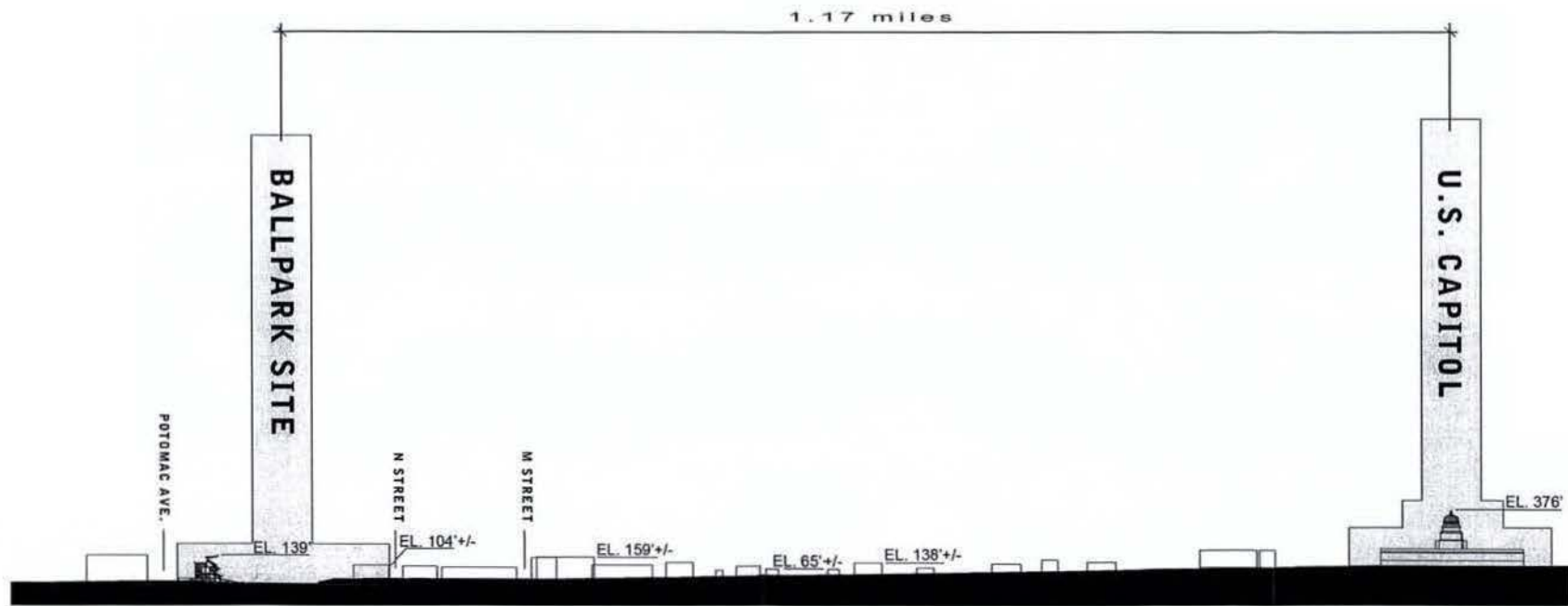








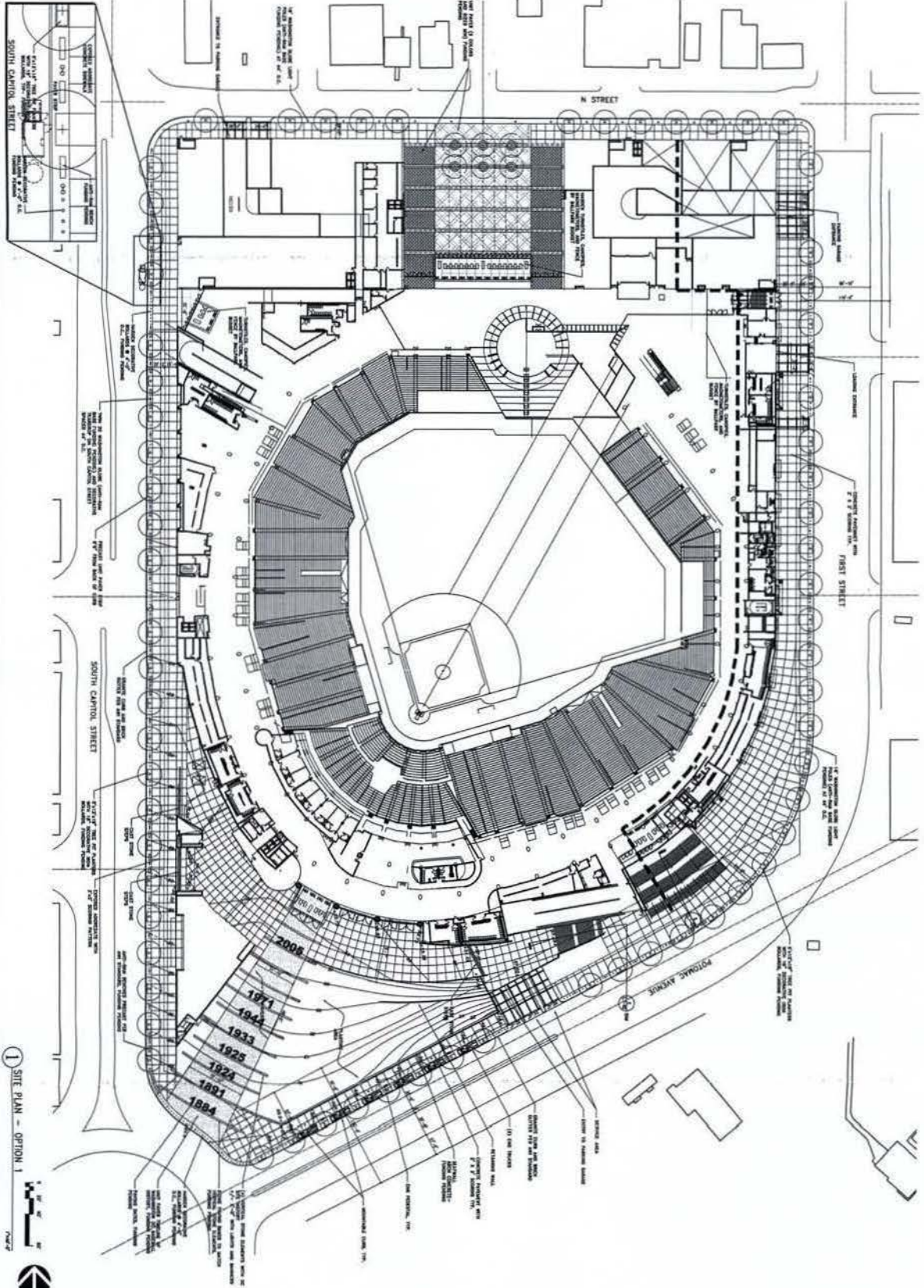
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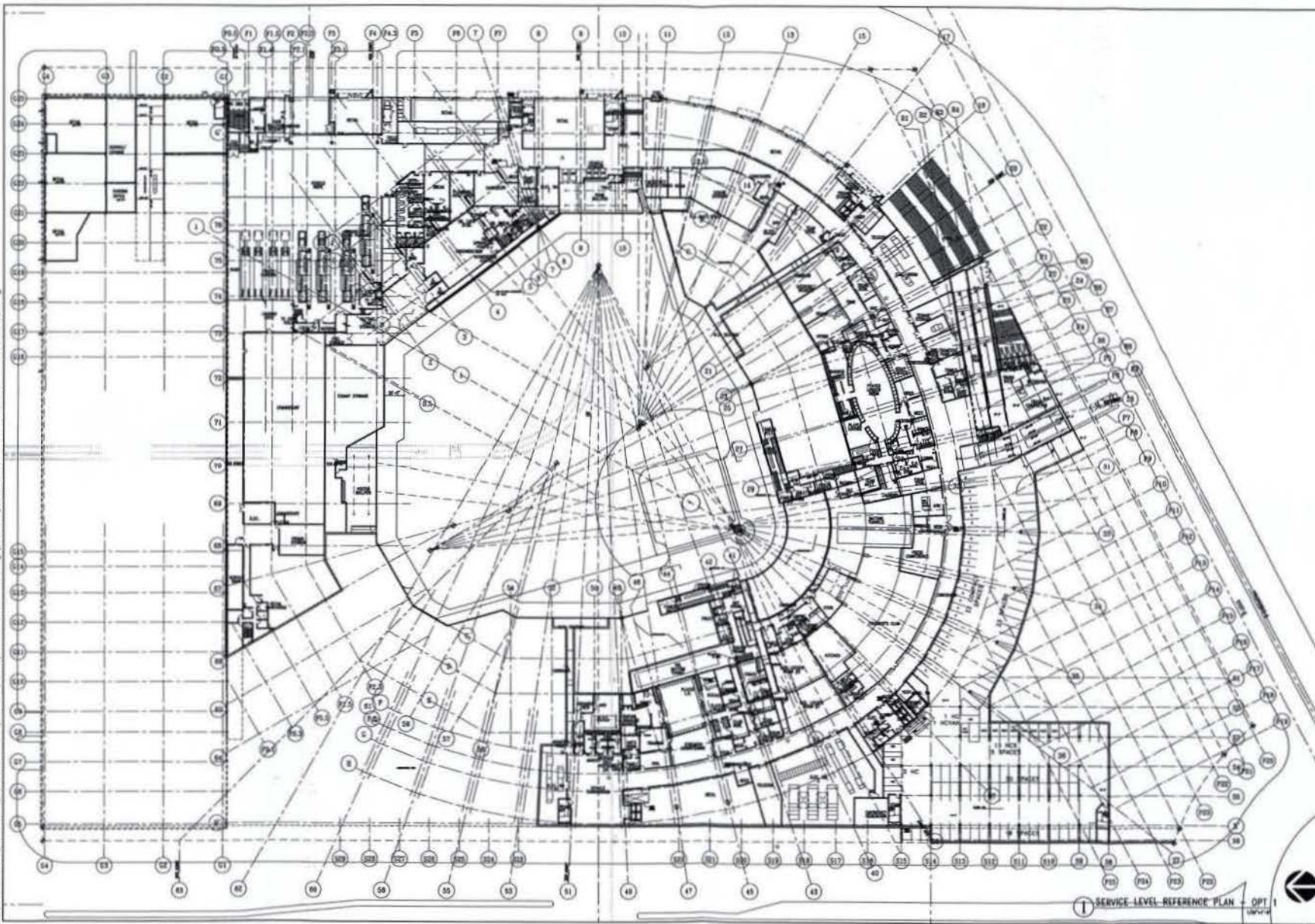


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<p><b>NOTES</b></p> <p>1. SEE SHEET 2 FOR GENERAL NOTES.</p> <p>2. SEE SHEET 3 FOR CONSTRUCTION NOTES.</p> <p>3. SEE SHEET 4 FOR FINISHES.</p> <p>4. SEE SHEET 5 FOR MECHANICAL.</p> <p>5. SEE SHEET 6 FOR ELECTRICAL.</p> <p>6. SEE SHEET 7 FOR PLUMBING.</p> <p>7. SEE SHEET 8 FOR STRUCTURE.</p> <p>8. SEE SHEET 9 FOR LANDSCAPE.</p> <p>9. SEE SHEET 10 FOR SITEWORK.</p>	<p><b>D.C. MAJOR LEAGUE BASEBALL PARK</b> WASHINGTON, DC</p> <p>PREPARED FOR: D.C. SPORTS AND ENTERTAINMENT COMMISSION</p>	<p><b>REVISIONS</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NO.	DATE	DESCRIPTION										<p><b>PROJECT INFORMATION</b></p> <p>PROJECT NO.: 05-01-06</p> <p>DATE: 05/14/06</p> <p>DRAWN BY: [Name]</p> <p>CHECKED BY: [Name]</p> <p>SCALE: AS SHOWN</p> <p>PROJECT LOCATION: [Address]</p>
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1 SERVICE LEVEL REFERENCE PLAN OPT 1



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WASHINGTON, DC



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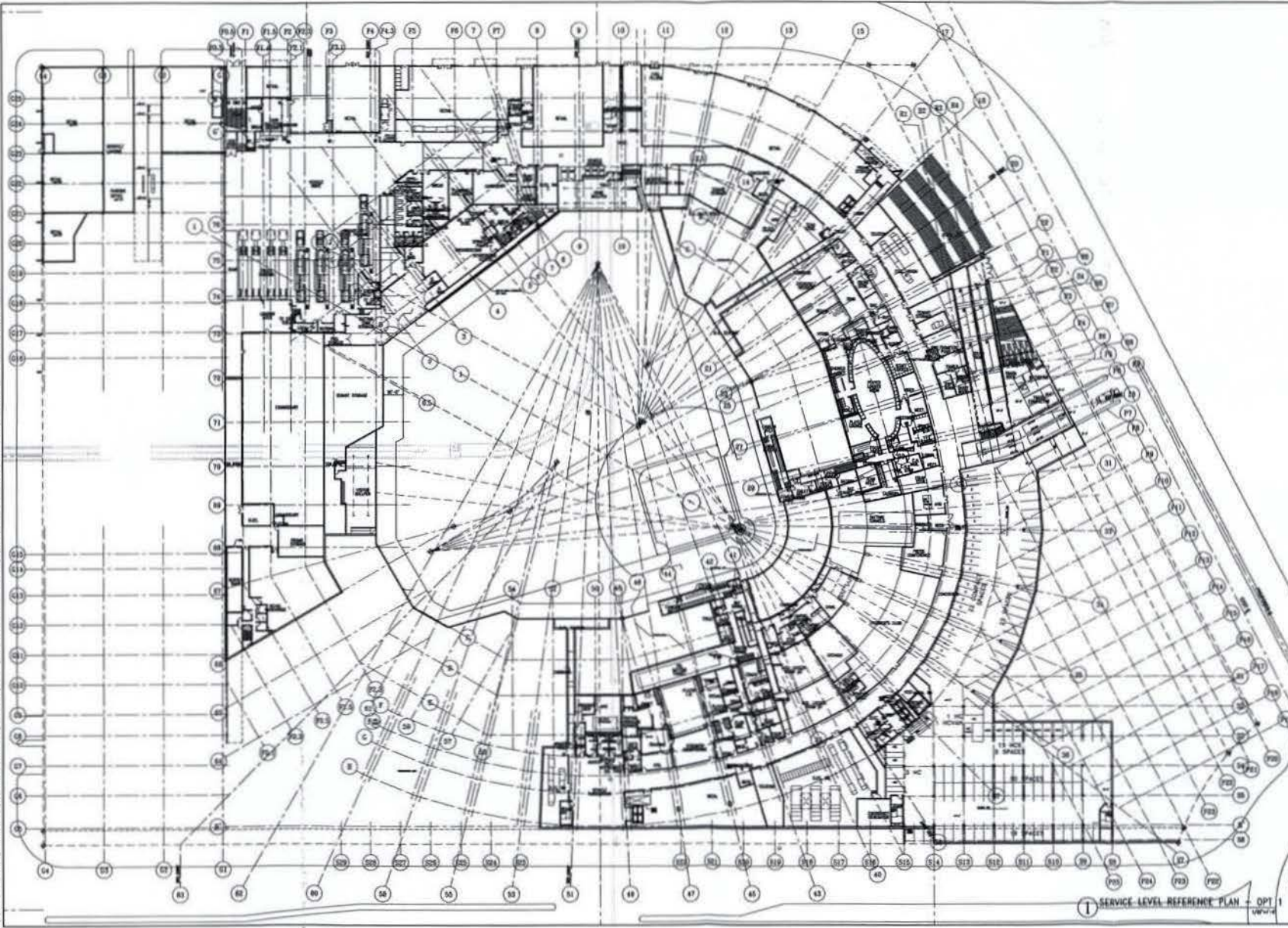
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1 SERVICE LEVEL REFERENCE PLAN - OPT 1



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D.C. MAJOR LEAGUE  
BASEBALL PARK  
WASHINGTON, DC

HDR	
ARCHITECTS & ENGINEERS, P.C.	
DATE:	
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CHECKED BY:	
APPROVED BY:	



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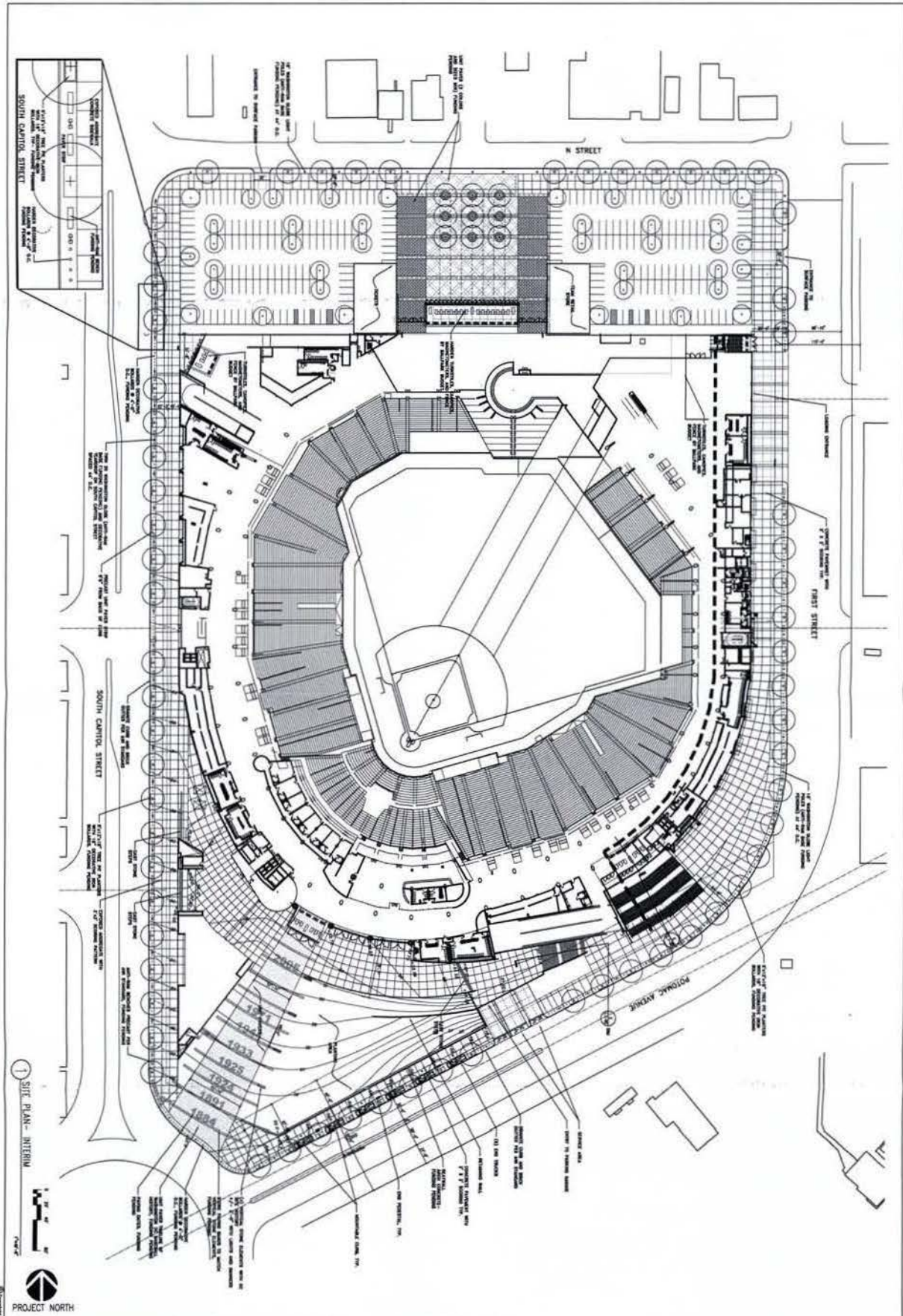


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REFERENCE PLAN

OPTION 2

PREPARED FOR:  
U.S. SPORTS AND ENTERTAINMENT COMMISSION





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Transportation Management Plan

# **D.C. Major League Baseball Park**

Washington, D.C.

**April 13, 2006 (DRAFT)**

**Prepared For:**



The DC Sports and Entertainment Commission  
2400 E Capitol St, SE  
Washington, D.C. 20003  
[www.dcsec.com](http://www.dcsec.com)



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## EXECUTIVE SUMMARY

The following report presents the result of the new DC Major League Baseball Park Transportation Management Plan (TMP). The District of Columbia and the DC Sports and Entertainment Commission are developing this Ballpark to be the home of their new team, the Washington Nationals. The Ballpark will be constructed on a site in Southeast Washington on the north side of the Anacostia River. The Nationals play their opening game at the Ballpark in April 2008. This TMP describes actions required to ensure that the Ballpark has excellent access for all modes of transportation and that the transportation networks and services continue to function for commuters, neighborhood residents and businesses, and other travelers on game days.

The Ballpark will be more urban in character and transportation demand than RFK stadium, where the Nationals currently play, and will thus have a higher percentage of transit use. Based on the calculations detailed within the TMP, the Ballpark is assumed to have the following mode split during a sell-out at the stadium: 51 to 57% transit, 28 to 37% driving, and 12 to 15% by other modes (charter bus, walking, etc.).

Based on this transportation demand profile and the conceptual plans for the Ballpark, the TMP examined each mode of travel and made recommendations on how each mode should be managed at the Ballpark. These recommendations were split into two groups, (1) those under the jurisdiction of the DC Sports and Entertainment Commission of high priority, and (2) suggestions that were of lower priority which require coordination between several stakeholders.

Of the high priority recommendations, three are considered 'essential' for the success of the transportation management plan; (1) coordination on the availability and operation of parking facilities on parcels near the site to ensure a sufficient amount of parking exists, (2) completion of the planned Navy Yard Metrorail station west portal improvements by opening day (see Page 11: Figure 4, item 5), and (3) construction of the planned improvements along South Capitol Street and the intersection of South Capitol and Potomac Avenues prior to opening day (see Page 11: Figure 4, items 1 and 2).

The recommendations contained in the TMP show that, although there is significant work to be done to manage and organize Ballpark traffic on game days, with the proper coordination between District agencies, the DC Sports and Entertainment Commission, the Washington Nationals and the private sector, transportation to and from the Ballpark can be accomplished safely and efficiently.



## 1: INTRODUCTION

The District of Columbia and the DC Sports and Entertainment Commission are developing the DC Major League Baseball Park (Ballpark) to be the home of their new Major League Baseball (MLB) team, the Washington Nationals. In April 2005, the Nationals began playing at a renovated RFK stadium in the eastern portion of the city. RFK was the home of the Washington Senators MLB team prior to 1971.

The Ballpark will be constructed on a site in Southeast Washington on the north side of the Anacostia River. Figure 1 shows an overview map of Southeast DC, including both RFK stadium and the location of the Ballpark. The Nationals are scheduled to play their opening game at the Ballpark in April 2008.

Along with the proposed action to construct the Ballpark, extensive transportation planning and engineering activities are underway to accommodate the transportation requirements and new traffic patterns as a result of the Ballpark. This report presents the Transportation Management Plan (TMP) and describes the transportation demand profile of Ballpark patrons and the actions necessary to ensure that the Ballpark has excellent access for all modes of transportation.

The Ballpark TMP consists of the following sections:

- A description of the purpose and goals of this TMP, including its relation to other studies;
- Background information including a description of the site, a summary of other studies within the vicinity of the Ballpark, and a summary of TMPs from other recently constructed MLB parks;
- Assumptions of the transportation demand profile of Ballpark patrons. This section includes a synopsis of current demand patterns observed at RFK, other District sports venues, other MLB Ballparks, and a summary of assumptions for the Ballpark derived from this information;
- Individual management plans per mode of travel, including parking and traffic, transit, taxi, charter bus, bicycle, service truck, and pedestrians; and
- A summary of recommended management practices to implement, including a review of preliminary traffic operations planning.



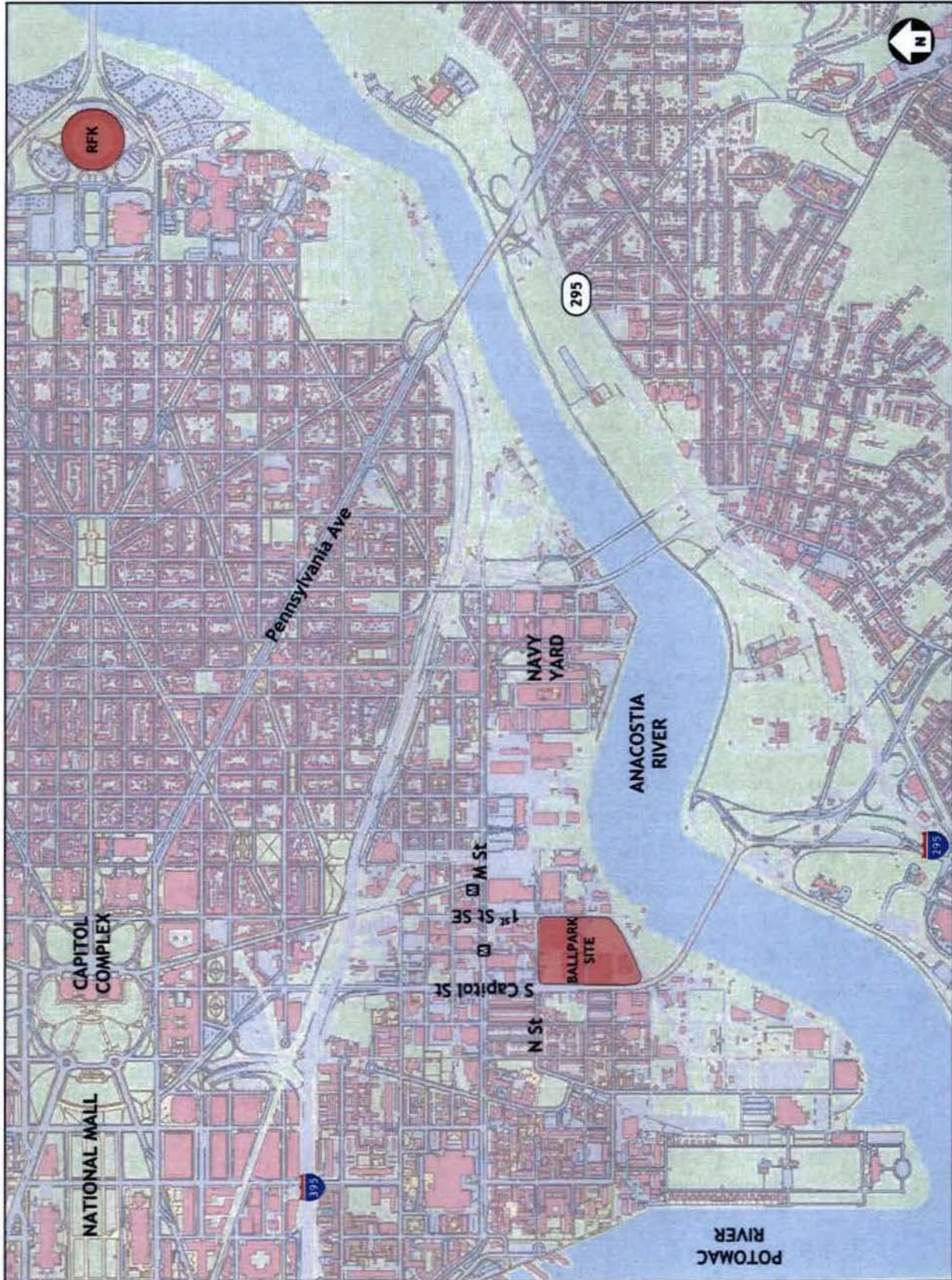


Figure 1: Location of DC Major League Baseball Park

April 13, 2006



## ***Purpose and Goal of the TMP***

The purpose of this TMP is to describe the actions required to ensure that the Ballpark has excellent access for all modes of transportation and that the transportation networks and services continue to function for commuters, neighborhood residents and businesses, and other travelers on days when there are games played at the Ballpark. The goals of the TMP are to:

- 1) Ensure that the Ballpark traffic impacts on the Southeast/Southwest DC neighborhoods are minimized; and
- 2) Provide a high level of service to Ballpark patrons at a reasonable cost.

Three major steps were undertaken to accomplish these goals:

- 1) Setting assumptions for the transportation demand profile of Ballpark patrons, including how many riders will use transit, how many people will ride in the same car, and what percentage of patrons leave from work versus home, etc.;
- 2) Examining each mode of travel, analyzing the impact of the additional Ballpark traffic and making recommendations on how to accommodate the increase in traffic; and
- 3) Summarizing these recommendations and examining their relative impact to each other. The TMP will also recommend operations strategies to be considered for future Ballpark Traffic Operations Plan (TOP).

In addition, the TMP process includes coordination between the TMP preparers, the Ballpark Architects, the DC Sports and Entertainment Commission (DCSEC), and District agencies including the District Department of Transportation (DDOT), the Office of Planning (OP), the Washington Metropolitan Area Transit Authority (WMATA) and the Anacostia Waterfront Corporation (AWC) to ensure a comprehensive management plan that includes feasible recommendations and the incorporation of findings from other studies. The TMP project team has met with DDOT on a regular basis during the writing of this report, and with WMATA on several occasions.

The TMP is one of three transportation related planning documents for the new Ballpark. The other two documents are the transportation chapters of the Environmental Mitigation Study (EMS) and the Traffic Operations Plan (TOP).

The EMS examines the general impact of the Ballpark to the surrounding neighborhood, including impacts to the transportation network. The EMS will document existing traffic levels and transit use in the area, and based on the Ballpark TMP, will analyze future traffic and transit capacity to determine the Ballpark impact. The purpose of the EMS is to ensure that the surrounding neighborhood is not negatively affected by the operation of the Ballpark, including recommending mitigation measures not included in the TMP. The TMP and EMS for the Ballpark are being developed simultaneously.





The TOP is a specific set of plans containing details for game day operations of the Ballpark. This TMP will not be a manual for day-to-day, hour-by-hour, or minute-by-minute traffic and parking operations associated with the Ballpark. The Ballpark TOP will be compiled after completion of the TMP and EMS processes, prior to the opening of the Ballpark and will set forth the responsibilities and the specific actions of Ballpark management, the City Department of Public Works, the Metropolitan Police Department, the Metropolitan Fire Department, emergency vehicle operators, and any other parties responsible for the movement of vehicles and people in and around the Ballpark. The TOP process cannot begin until the TMP and EMS reports have been fully defined, reviewed, and agreed to.

An example of how this process work is as follows: if the TMP for the Ballpark recommends operating a street as pedestrian only on game days, the EMS document will analyze the impact on traffic capacity, including delays and queuing of cars. The EMS will also include additional mitigation if required, for example limiting access to neighborhood streets to prevent Ballpark patrons cutting through a residential area. The TOP will examine these recommendations and provide details and plans on how to physically close the street, such as the placement of traffic cones, barriers, etc., and state who is responsible for the safe and efficient separation of pedestrian and vehicular traffic.



## **2: BACKGROUND INFORMATION**

### ***Site Description***

The transportation system that surrounds the Ballpark site is an evolving and multifaceted set of corridors. It includes a traditional urban street grid, regional arterials, bridges, Metrobus service, Metrorail stations, private commuter bus service, sidewalks for pedestrians, and a bike/trail system. As is the case in most urban areas, the system can become constrained, although the majority of the time the nature of the system allows neighborhood residents, commuters, regional travelers, and tourists the ability to travel fluidly through the system on several modes.

Figure 2 shows the major transportation aspects of the area surrounding the Ballpark site and the existing predominant land uses. The following section reviews area projects and studies that will influence the character of this section of the District.

### ***Area Studies and Developments***

In the near future, the area surrounding the Ballpark is expected to experience growth in residents, commercial uses, and attractions. Although this growth has been planned and expected for years, most recently through the Anacostia Waterfront Initiative, the Ballpark is serving as a catalyst to expedite these projects.

Table 1 provides a summary of on-going or completed transportation studies with study areas near the Ballpark area. The locations of these studies are shown on Figure 3. Details on many of these studies are available on the District Department of Transportation's website at: <http://www.ddot.dc.gov/>, under 'Information - Transportation Studies.'

Table 2 provides an overview of major planned development with expectations for their status as of 2008. Most of this development was planned prior to the Ballpark, and some projects are expected to be completed and open prior to the Ballpark.



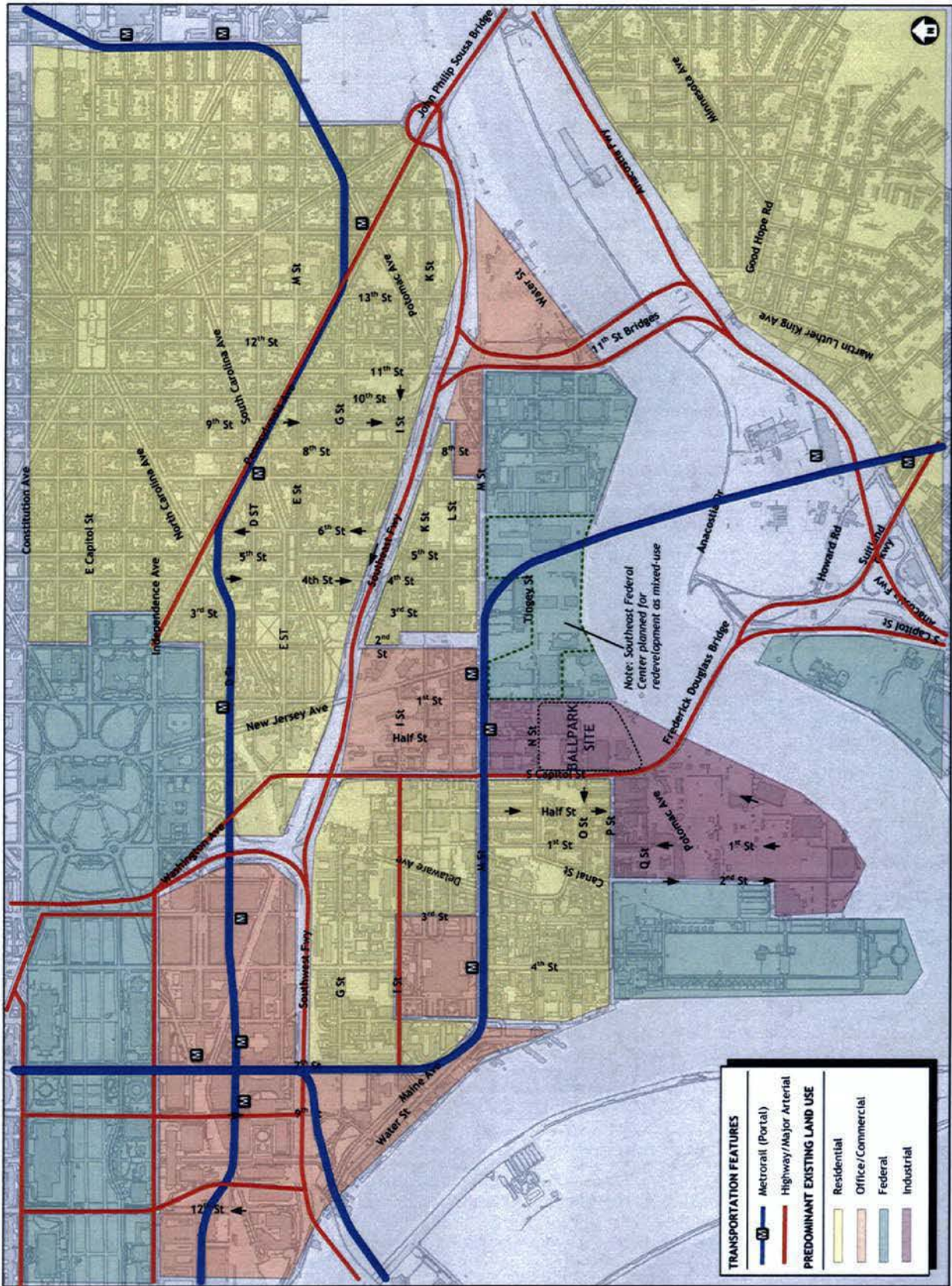


Figure 2: Major Transportation Features and General Land Use

April 13, 2006





**Table 1: Summary of Nearby Transportation Studies**

Study	Description	Improvements Completed by 2008 <sup>(1)</sup>
(1) South Capitol Gateway Corridor and Anacostia Access Study	Examined South Capitol Street (adjacent to Ballpark Site) and freeway connections. Recommended new Frederick Douglass Bridge, improved connections with I-295, and conversion of South Capitol Street to an urban Boulevard between Potomac Ave and M Street	<ul style="list-style-type: none"> <li>-Conversion of South Capitol Street to a boulevard between Potomac Avenue and M Street</li> <li>-New traffic signals at intersections of South Capitol Street at Potomac Avenue, O Street, and M Street</li> <li>-Existing bridge still in place by 2008</li> <li>-Partial traffic oval construction at intersection of new bridge, Potomac Avenue and South Capitol Street will bring grades together and allow for future bridge alignment</li> </ul>
(2) Middle Anacostia Crossings Study <sup>(2)</sup>	Studied crossings of Anacostia River at 11 <sup>th</sup> Street and Sousa Bridges, and freeway connections between the bridges and I-395 and the Anacostia Freeway (295)	<ul style="list-style-type: none"> <li>-New ramp from M Street to southbound 11<sup>th</sup> Street bridges</li> <li>-Majority of improvements to occur after 2010</li> </ul>
(3) Southwest Waterfront Traffic Study	Examined local roadways around waterfront in conjunction with proposed development	None
(4) 4 <sup>th</sup> St SW Study	Re-opening of 4 <sup>th</sup> Street to through traffic in conjunction with Waterside Mall re-development	None
(5) USDOT Impact Study	Examined local roadways around USDOT headquarters site in conjunction with proposed development	<ul style="list-style-type: none"> <li>-Extension of New Jersey Avenue</li> <li>-Closure of 2<sup>nd</sup> Street, SE south of M Street to vehicular traffic</li> <li>-New traffic signals at intersection of New Jersey Avenue and M Street and 3<sup>rd</sup> Street, SE and M Street</li> </ul>
(6) SEFC EIS Study	Examined local roadways around SEFC headquarters site in conjunction with proposed transfer to Private sector for development	<ul style="list-style-type: none"> <li>-Some internal roadways within SEFC to be constructed by 2008, dependent on final development plans</li> </ul>
(7) Bolling Impact Study	Currently studying expansion and addition of more employees to Bolling Air Force Base	None (study not yet complete)
(8) Anacostia Streetcar Project	Currently studying alignment and stop locations for streetcar starter line located in Anacostia	<ul style="list-style-type: none"> <li>-Completion of streetcar starter line</li> </ul>
(9) Anacostia Riverwalk Study <sup>(3)</sup>	Evaluating pedestrian and bicycle connections, and recommending improvements and trails along both sides of the Anacostia River	

1- Assumed, based on study recommendations

2- For more information, go to: [www.macstudy.com](http://www.macstudy.com)

3- For more information, go to: [www.arwstudy.com](http://www.arwstudy.com)



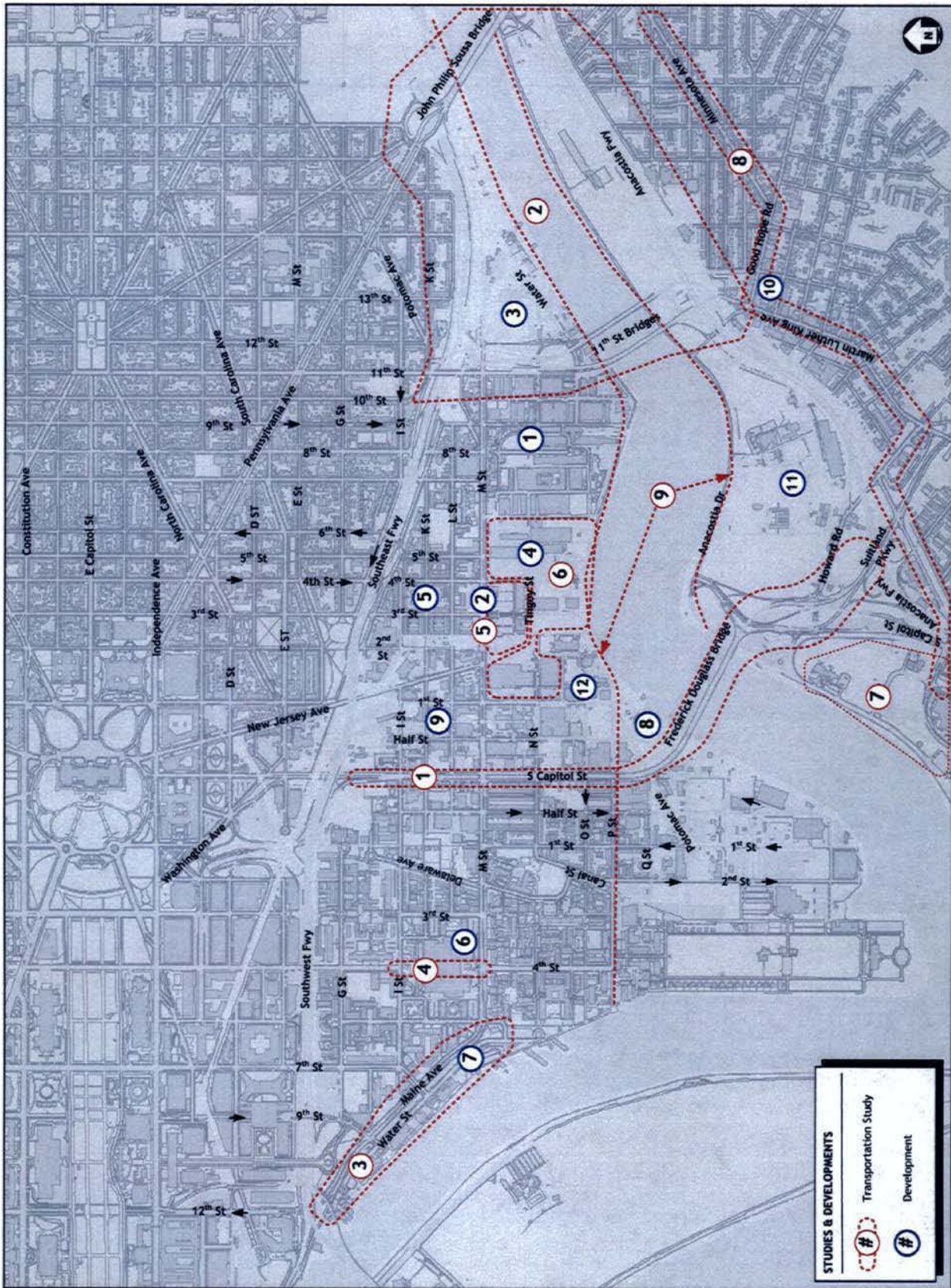


Figure 3: Nearby Studies and Developments

April 13, 2006





**Table 2: Summary of Major Nearby Development**

Development	Details/Description	Completed by 2008 <sup>(1)</sup>
(1) Navy Yard	Additional employees due to base closings	No
(2) USDOT headquarters	Approximately 2,000,000 s.f. office space, for 5,500 employees including a 950 space parking garage	Yes
(3) Maritime Plaza	Second phase of office development. Approximately 250,000 s.f. of office space and possibly a hotel	No
(4) Southeast Federal Center (SEFC)	Large mixed-use development, primarily residential located to the east of the Ballpark site. Latest plans call for 2,700 dwelling units, 1,800,000 s.f. of office space, and 120,000 s.f. of retail	Possibly one building, around 400 apartments
(5) Arthur Capper Carrollsburg	Redevelopment and addition of affordable and market-rate housing. 800 apartments, 260 townhouses, 580 condominiums, 740,000 s.f. office space, and 20-40,000 s.f. retail	Partial Completion
(6) Waterside Mall	Redevelopment of Waterside Mall site; includes re-opening of 4 <sup>th</sup> St SW to through traffic. 2,025,000 s.f. office space, 25,000 s.f. retail and 400,000 s.f. residential	No
(7) Southwest Waterfront	Effort led by the Anacostia Waterfront Corporation to re-develop the SW Waterfront. 300 room hotel, 800 swelling units, 217,000 s.f. retail, 100,000 s.f. museum	No
(8) Florida Rock	Mixed-use development on former industrial site, located adjacent to the Ballpark site to the south. Plans may change, but a recent proposal included 645,000 s.f. office space, 200 dwelling units, 32,000 s.f. retail and a 240 room hotel <sup>(2)</sup>	No
(9) "North of M Street"	North of the site, there are smaller parcels under construction, and being purchased for future development. Projects already under construction include 20 M Street, SE with 190,000 s.f. of office space, and the Capitol Hill Towers, an apartment building of approximately 340 units	Yes (20 M Street & Cap Hill Towers)  Maybe/No to others
(10) "East of River"	Across the Anacostia, there are plans for development including a new headquarters for the District Department of Transportation and discussions for a new home for WMATA	No
(11) Poplar Point	Across the river, there has been discussion of a large mixed-use development north of the Anacostia Metro Station at Poplar Point. DC United has interest in building a soccer stadium there, as the center-piece of the mixed-use project. No official plans have been released	No
(12) AWC Ballpark District	Property adjacent to the Ballpark site being developed in coordination with the AWC. To include a mix of uses including residential, retail and office space.	No

1 – Best estimate as of the writing of this report

2 – At the time of this report, Florida Rock was scheduled to appear at a zoning hearing, which may impact the status of their project for 2008



## ***2008 Ballpark Site Setting***

This TMP focuses on the characteristics of Ballpark traffic and the recommendations needed to accommodate this traffic for opening day, spring 2008. Based on the area studies and proposed developments, assumptions were made on the setting of the Ballpark site within its neighboring blocks. Figure 4 displays these assumptions graphically.

In addition to these assumptions, the Ballpark project is expected to include the following transportation features:

- Improvements to the western portal of the Navy Yard Metrorail Station;
- Resurfacing and streetscaping of streets surrounding the Ballpark 'block' (other than South Capitol Street): Potomac Avenue from South Capitol Street and 1<sup>st</sup> Street, SE, 1<sup>st</sup> Street, SE between Potomac Avenue and N Street, SE and N Street, SE between 1<sup>st</sup> Street and South Capitol Street;
- Pedestrian areas and ticket gates located in expected pathways of Ballpark patrons;
- 1,225 parking spaces provided on the site;
- The permanent closures of O and P Streets SE between South Capitol Street and 1<sup>st</sup> Street SE; and
- The permanent closure of Half Street SE between N Street and Potomac Avenue SE.

In discussions with DDOT regarding the timeline of the South Capitol Street improvements, it has been mentioned that the intersection and traffic signal at South Capitol Street and Potomac Avenue may not be complete by opening day. If turning movements were not possible at this intersection, various aspects of the TMP would be negatively impacted. This includes routing and access to parking, especially facilities located on Buzzard Point (Figures 6 and 9), and the ability to protect residential neighborhoods from game day traffic. Although an adequate TOP could be developed for the Ballpark for opening day without this intersection, this TMP highly recommends completion of this improvement on time to avoid these negative impacts.

A discussion of future Ballpark settings, after completion of many of these infrastructure improvements and developments, is included in Chapter 5.



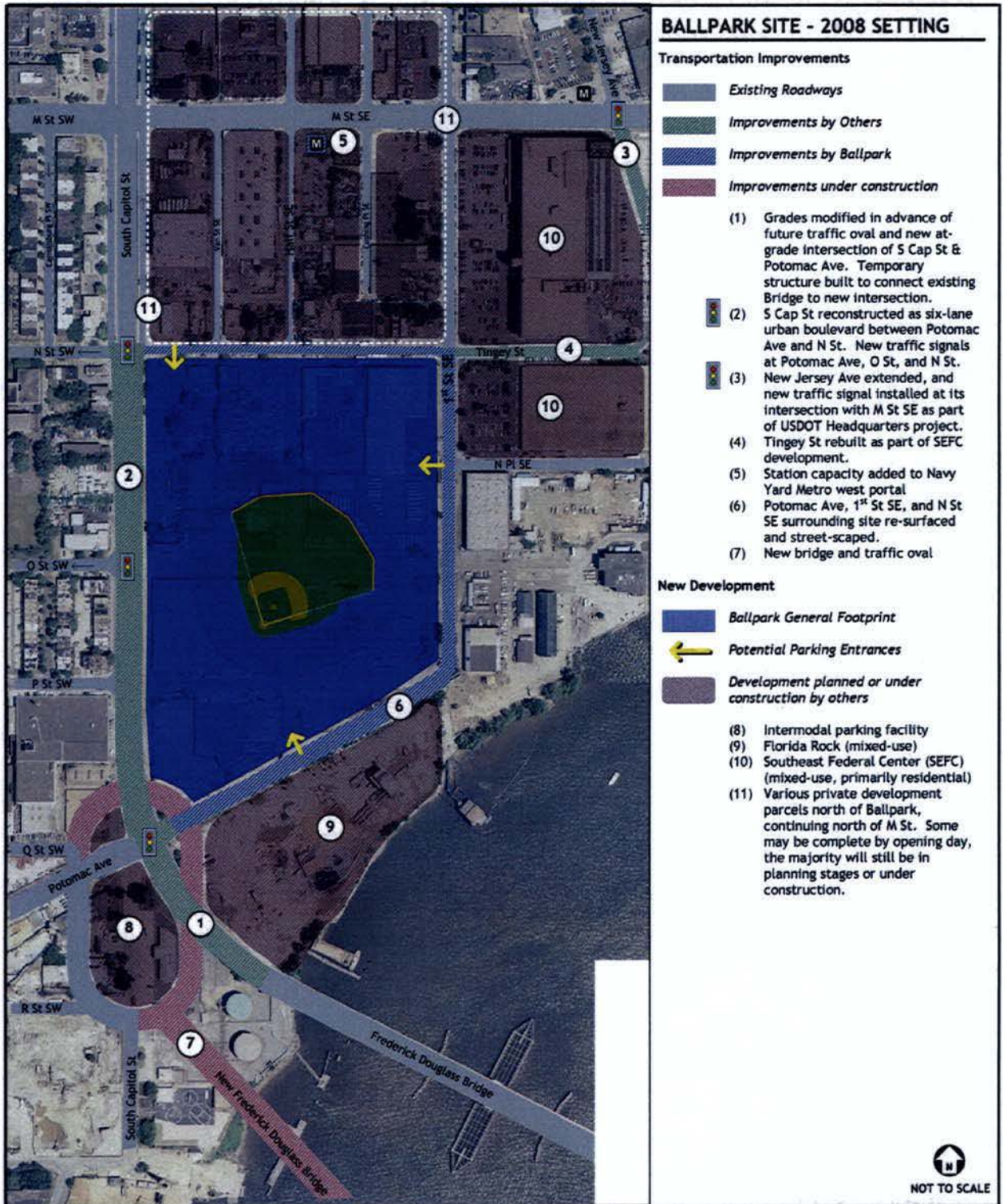


Figure 4: 2008 Ballpark Setting



### ***Other Major League Ballpark TMPs***

As part of the TMP process, two TMPs of recently constructed Ballparks were examined to determine what operation strategies they used to manage traffic. Specific attention was paid to measures used to limit the affect of the Ballpark on surrounding neighborhoods and provide quality access for Ballpark patrons.

#### *SBC Park (San Francisco, CA)*

SBC Park, formerly Pacific (Pac) Bell Park, with a capacity of 41,503 fans, is an ‘inter-modal’ ballpark located on the San Francisco Bay in a mixed use neighborhood, similar to the Ballpark neighborhood. Of the newly constructed Ballparks, its urban setting and location within the transportation network compares best to the Ballpark site. A significant percentage of fans at weekday (32%) and weeknight (28%) games came to the ballpark directly from work. (More details on the transportation demand profile of SBC Park patrons are included in the next chapter.)

Mitigation measures employed on game day include.

- Streets designated for no parking,
- Streets designated for residential parking only,
- One and two hour parking restrictions on adjacent streets,
- Street lane closures,
- Post-game turn restrictions,
- Limited designated parking overall (5,000 designated parking spaces),
- Pedestrian improvements, and
- Increased public transportation services, including a transit marketing program

#### *Petco Park (San Diego, CA)*

The key mitigations measures outlined by the Petco Park Event and Transportation and Parking Management Plan (ETMP) include

- Street closures,
- Increased public transportation service,
- Auto turning restrictions (six blocks surrounding the ballpark are closed during games, and an additional four streets are closed under ‘crush-load’ conditions),





- On street parking restrictions (parking is prohibited on twelve blocks surrounding the stadium during special events, while others have a two-hour time limit), and
- Off-site parking (approximately 11,000 parking spaces throughout Centre City were allocated for Petco Park use and were located in surface parking lots, parking structures, and in office building parking garages)

The ETMP determined that event-related traffic would not reduce the Level of Service (LOS) of streets in adjacent residential neighborhoods by more than two letter-grades, but in no case below LOS D. Eighteen streets were to be monitored for traffic volumes immediately prior to and one month after Petco Park opening, with additional subsequent monitoring as needed.



### 3: TRANSPORTATION DEMAND PROFILE OF BALLPARK PATRONS

A vital component of this TMP is the determination of the transportation demand profile of Ballpark patrons, a set of assumptions on how patrons will arrive to and depart from the Ballpark. This includes details such as the mode of travel, the times of arrival and departure, and the locations Ballpark patrons are traveling to and from. This TMP followed these steps to assemble a transportation demand profile for the Ballpark:

- Examined the 2005 home schedule of the Washington Nationals and general trends of DC area traffic to select appropriate design days,
- Compiled information on existing Ballparks and stadia, focusing on the existing Nationals season to date at RFK;
- Used the compiled information to determine the trends and features of Ballparks that influence the transportation demand profile of its patrons, and
- Used these trends and, based upon the transportation demand profile observed at RFK, compiled a set of assumptions for the selected design days at the new Ballpark.

#### *Design Scenarios*

81 games will be played between April and October throughout the week and on the weekends. In order to focus planning efforts, the existing Nationals schedule and general DC traffic trends were examined to create a list of design scenarios.

A review of DC area traffic trends by month shows that overall traffic and congestion in the area decreases during the summer months, especially in the month of August. This period of lower traffic volumes generally coincides with the DC Public School summer recess, which for the 2005 summer was between June 22<sup>nd</sup> and August 29<sup>th</sup>.

Additional traffic levels in the DC area can decrease on Fridays due to two main factors: (1) people taking long weekends in the summer, and (2) flex-time allowing for many federal employees to take every other Friday off.

Another major influence on DC area traffic is other sporting events, which during the Nationals season consists of Wizards and Capitals games at the MCI Center, DC United games at RFK, and Redskins games at FedEx Field.

In April, the Wizards are nearing the end of their season with the possibility of participating in the playoffs (this past season ended on April 17<sup>th</sup> and the first round of the playoffs started on April 30<sup>th</sup>). The Capitals also near the end of their season in April at the MCI Center playing nights opposite the Wizards. Games vary and are held on weeknight/weekends and begin around 7 p.m. DC United





begins their soccer season in April and play through October, but only average 2.7 home games per month. Of the 19 games scheduled for this season, 13 occur on Saturday, and 6 occur on a weeknight. Average attendance is 17,000, and since they currently share RFK with the Nationals, baseball and soccer games do not coincide. The Redskins pre-season games occur on Saturdays in August (two such games this year) and regular season games begin in September (two games this fall, both on Sundays).

DC also experiences an increase in tourism related traffic, which generally begins in the spring during the Cherry Blossom Festival.

Based on these general trends, the portion of the Nationals season with the potentially highest impact is a non-Friday weekday during April and May. During the majority of the season, the Ballpark will operate under lower overall traffic patterns compared to during the first few months of the season.

Table 3 shows the Nationals schedule in more detail, focusing on the day of the week and the most common game-days.

**Table 3: Breakdown of 2005 Washington Nationals Schedule**

Game-day Scenario	Overall Schedule		When School is in Session		During April/May	
	Number	Percentage	Number	Percentage	Number	Percentage
Weeknight, 7:05 PM	45	56%	21 <sup>(1)</sup>	26%	10 <sup>(1)</sup>	12%
Sunday, 1:05 PM	12	15%	8	10%	2	2%
Saturday, 7:05 PM	11	13%	8	10%	3	4%
Weekday, 1:05 PM	5	6%	3	4%	2	2%
Other <sup>(1)</sup> <sup>(2)</sup>	8	10%	6	7%	4	5%
<b>Total</b>	<b>81</b>	<b>100%</b>	<b>45</b>	<b>57%</b>	<b>21</b>	<b>25%</b>

1 – Does not include Friday nights

2 – Includes all games on Holidays

Based on the general DC trends and the breakdown in Table 3, the design scenarios for the Ballpark TMP were chosen as:

- *Major Focus: Weeknight, 7:05 p.m.*  
Due to this scenario being the most common, representing more than half of the schedule, and since the arrival of Ballpark patrons overlap with the evening commuter rush hour, this scenario is given the most attention. For this scenario, transportation demand profiles will be generated for, operational strategies and mitigation measures will be focused, and the Environmental Mitigation Study (EMS) will develop traffic forecasts and conduct capacity analyses.
- *Focus: Weekday, 1:05 p.m.*



Although this scenario only represents a small portion of the schedule, its impacts to roadways and the transit system require attention due to its overlap with the evening rush hour. For this scenario, transportation demand profiles will be assembled, the strategies and mitigation measures developed for the 7:05 weeknight game scenario will be tested, and the EMS study will also prepare a traffic forecast and capacity analysis.

- *Minor Focus: Saturday, 7:05 p.m., Sunday, 1:05 p.m., and 'Other'*

Since these game-day scenarios do not overlap with an existing rush hour, they will receive less focus than the weekday and weeknight scenarios. For these scenarios, a transportation demand profile will be assembled, and the recommendations from the weeknight and weekday scenarios will be compared to this profile to check for accommodation of the expected demand.

### ***Comparable Transportation Demand Characteristics***

The DC area has various event centers located in different sections of the transportation network. These include (1) FedEx Field, located outside of the Metrorail network on the Capitol Beltway (although starting this upcoming season, the new Morgan Boulevard Metrorail Station will be an approximately 15-minute walk from FedEx Field), (2) RFK stadium, located in the District, served by a large amount of parking and good regional highway access and a Metrorail station, and (3) the MCI Center, located downtown with parking provided by private sector parking garages, and served by several Metrorail stations including every line within the system.

As would be expected, these facilities experience significantly different transportation demand profiles. Although detailed transportation profile information does not exist, existing observations reveal important trends. In addition as part of developing this TMP, a large amount of data was collected on Nationals games at RFK, including observations and patron surveys.

During the preparation of the MCI Center TMP, US Air Arena traffic was examined to aid in developing assumptions (the US Air Arena has since been demolished). The mode split for observed games was 93% automobile, and 7% charter bus, with an average vehicle occupancy (AVO) of 2.22 per car. Based on the extremely low transit use at the US Air arena, the MCI Center TMP predicted the mode split for the arena to be between 30 and 50 percent Metro riders. This figure has shown to be very conservative, as estimates for actual Metro ridership at MCI Center range from 60 to 80 percent.

In terms of transit usage and average vehicle occupancy, the Ballpark is expected to rank above FedEx Field and RFK and below MCI Center. It is expected to exhibit a more urban character than RFK, although not at the same scale seen at the MCI Center.





## SBC Park

Among the newest generation of MLB parks, the closest from a transportation point-of-view would be SBC Park in San Francisco. SBC Park is located near (but not in) the center of the city, on the waterfront, in an redeveloping mixed-use neighborhood. It is served by regional highways and has good transit service, including the Bay Area Rapid Transit (BART) heavy rail. Fortunately, SBC Park was analyzed after its first year of operations, including surveys of patron transportation demand profiles<sup>1</sup>. Table 4 summarizes results from surveys conducted for the three games days that comprised the majority of the San Francisco Giants' schedule, (1) weekday 12:35 p.m., (2) weeknight, 7:15 p.m., and (3) weekend, 1:05 p.m.

**Table 4: Transportation Demand Profile of SBC Park Patrons**

Game-Day Scenario	Mode Split				Percent Coming from Work
	Transit	Walk	Other (Taxi/Bike/etc.)	Automobile	
Weekday, 12:35 PM	41%	8%	3%	48%	32%
Weeknight, 7:15 PM	37%	7%	6%	50%	28%
Weekend, 1:05 PM	34%	5%	4%	58%	3%

Additionally, the study reports an average vehicle occupancy of 2.8 people per car (an increase from 2.5 at the prior stadium), and a combined dedicated and private sector available parking supply of 7,000 to 8,000 spaces.

The analysis of transit use concluded that the high percentage of transit use, especially when compared to the previous stadium, was due to the following factors:

- Availability of reliable, efficient and reasonably-priced mass transit;
- High parking costs and limited parking availability;
- Commitment to quality transit services by transit agencies and the Giants;
- Close proximity to large downtown population base;
- Predictability of transit ridership;
- Easily-accessible public transit information and assistance for new riders;
- Well developed and executed transportation plan;
- SBC's image as a 'downtown' ballpark; and
- Public expectations of traffic and parking conditions.

<sup>1</sup> *San Francisco's New Downtown Ballpark: A Home Run for Public Transit*, Gerald Robbins, Alfonso Felder, and William E. Hurrell.



## RFK

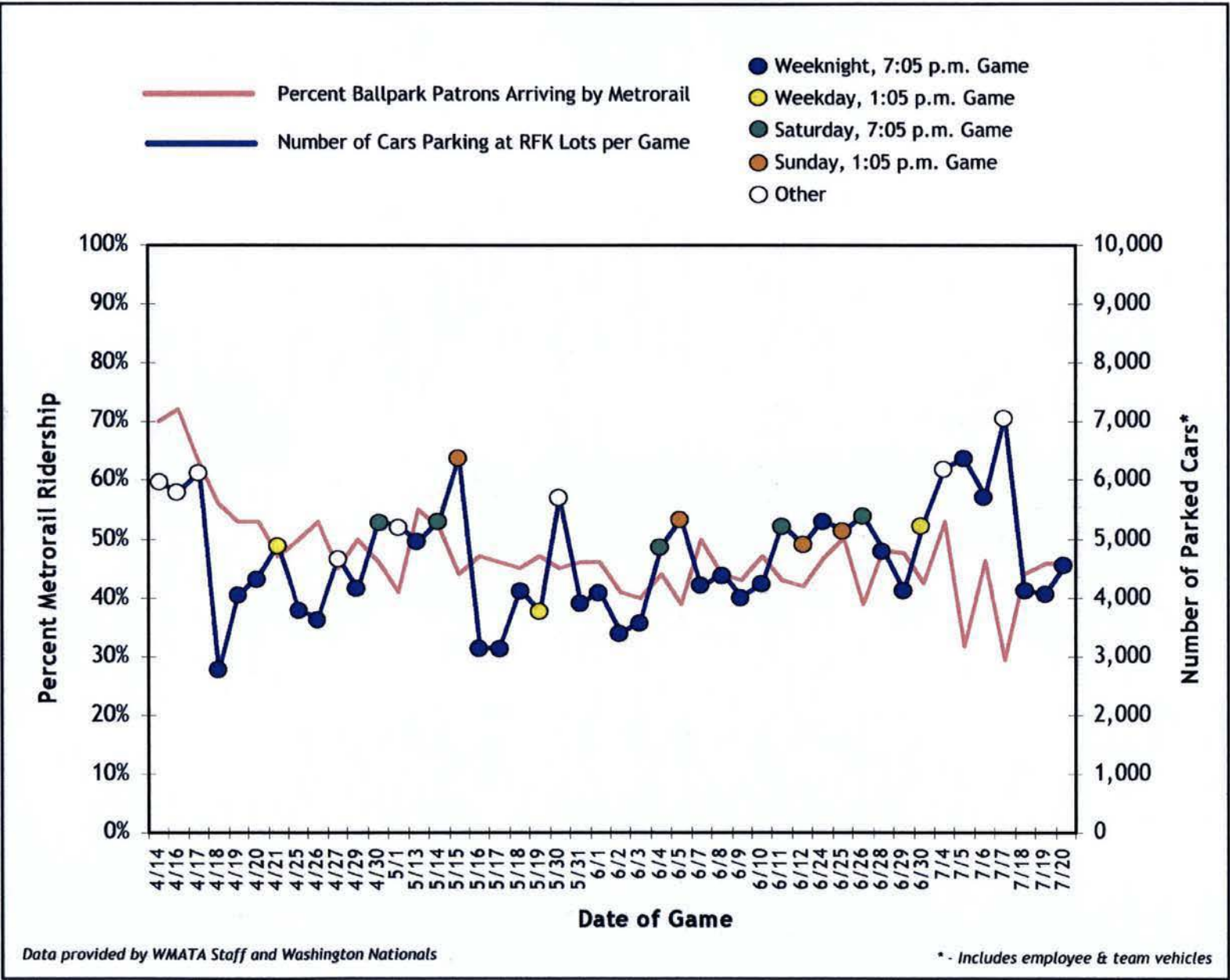
The main source of information used to compile the transportation demand profiles of Ballpark patrons was data and observations made and collected during Washington Nationals games at RFK stadium. The sources of information collected included

- Gate receipt and attendance data from RFK, provided by the Washington Nationals,
- Automobile and charter bus parking information provided by the DC Sports and Entertainment Commission,
- Ridership data of Metrorail stations near RFK stadium from the Washington Metropolitan Area Transit Authority (WMATA), and
- Patron surveys performed by Gorove/Slade Associates, during the games on August 4<sup>th</sup> (a weeknight 7:05 p.m. game), August 6<sup>th</sup> (a Saturday 7:05 p.m. game), and August 7<sup>th</sup> (a Sunday 1:05 p.m. game)

Figure 5 shows a summary of Metrorail ridership and total cars parked at RFK from opening day until July 20<sup>th</sup>. Each data point is also classified by its game-day scenario, the first series of the season was classified as 'others' due to their significant deviance from the average. In addition, the TMP analyses classified the July 7<sup>th</sup> home game as an 'other' due to the terrorist activity in London.

Tables 5 and 6 summarize a compiled transportation demand profiles for Nationals games at RFK based on the data sources listed above. Table 5 contains mode split information for patrons arriving and departing RFK, automobile occupancy, average number of charter buses, and average attendance. Table 6 presents origin/destination and arrival/departure observations for Ballpark patrons for the four game-day scenarios profiled.







**Table 5: 2005 RFK Mode Split Observations**

Scenario	Average Attendance	Mode Split					AVO	Average Cars Parked	Average Charter Bus
		Metro-rail	Charter Bus	Taxi/Limo/Drop-off	Bike/Walk	Auto			
Weeknight at 7:05pm	22,589							4,197	7
Arriving		47%	1%	1%	4%	47%	2.53		
Departing		38%	1%	1%	3%	57%	3.04		
Weekday at 1:05pm	24,631							4,650	6
Arriving		45%	1%	1%	4%	49%	2.59		
Departing		43%	1%	1%	3%	52%	2.76		
Saturday at 7:05pm	30,753							5,185	4
Arriving		47%	1%	1%	6%	45%	2.67		
Departing		44%	1%	1%	4%	50%	2.97		
Sunday at 1:05pm	30,892							5,514	4
Arriving		41%	1%	1%	6%	51%	2.85		
Departing		40%	1%	1%	4%	54%	3.02		

Source: Data provided by WMATA Staff and surveys conducted by Gorove/Slade and Associates

**Table 6: 2005 RFK Origin/Destination & Arrival/Departure Pattern Observations**

Scenario	Arrive/Depart Within		Origin/Destination						
	½ hour of begin/end	1 hour of begin/end	Drivers			Metro Riders			
			DC	MD	VA	DC	MD	VA	
Weeknight, 7:05pm									
Arriving	31%	60%	20%	22%	58%	36%	30%	33%	
Departing	58%	78%	18%	25%	56%	29%	26%	45%	
Weekday, 1:05pm									
Arriving	31%	60%	18%	22%	60%	42%	21%	37%	
Departing	58%	78%	14%	24%	62%	38%	24%	39%	
Saturday, 7:05pm									
Arriving	30%	60%	4%	29%	68%	45%	22%	34%	
Departing	41%	71%	4%	29%	68%	43%	22%	35%	
Sunday, 1:05pm									
Arriving	30%	60%	16%	35%	45%	45%	27%	28%	
Departing	41%	71%	20%	33%	43%	45%	27%	28%	

Source: Data provided by WMATA Staff and surveys conducted by Gorove/Slade and Associates



## ***Assumed Ballpark Transportation Demand Profile***

It can be inferred from the review of area traffic trends, other Ballparks, and analyses at RFK that patrons at the Ballpark will travel to and from the games similarly, but not the same as MCI Center and RFK stadium patrons. The transportation demand profile of Ballpark patrons was assembled by first examining what influences the demand profile and how the Ballpark fits within these trends. Then, based on the design scenarios and these trends, a set of assumptions was developed.

### *Influences and Trends*

Table 7 summarizes the major influencing features of a stadium on its transportation demand profile and compares known information about the MCI Center, SBC Park, and RFK Stadium. Derived from this comparison and the observations from RFK, the following is a list of conclusions on how DC residents will get to and from baseball games.

- *The transportation demand profile differs for each game-day scenario*  
Many factors are responsible for this effect, most notably that on weeknights many people leave from work, weekend games are attended by more families, traffic is less congested on weekends, and the average attendance is lower on a weekday.
- *A large segment of the Ballpark patrons will be able to choose between driving and taking the Metro*  
The amount of Metro use observed at RFK this season shows a large gap between the lowest (29%) and highest (72%) percentage of riders using transit. This indicates that the majority of Ballpark patrons can use either mode.
- *Arrival and departure mode splits differ*  
Observations at RFK indicated that many people traveled home a different way, usually by taking the Metro and riding home with a friend who drove. This effect happened more during weekday and weeknight games.
- *The concentration of arrivals and departures before and after games is influenced by neighboring land uses*  
Due to the nature of RFK being surrounded by parking lots and residences, arrivals and departures are concentrated, instead of being spread out as patrons spent time at nearby restaurants and commercial areas, similar to MCI Center.
- *The 'perception' of traffic influences which mode Ballpark patrons will use*  
Of the Ballpark patrons that can either use Metro or drive, it appears they make their decision based on a 'perception' of traffic, such as the general state of regional congestion, the amount of parking, or whether the game is a sell-out. This is very evident in the opening series this season at RFK, where 60-70% of patrons rode Metro. This number decreased over the season, due to the large parking fields seen at RFK and crowding at the Stadium-Armory Metrorail Station.



**Table 7: Comparison of Stadia Features**

Feature	MCI Center	SBC Park	RFK Stadium	DC MLB Park
Seats	Approx. 20,000	41,500	45,000	41,000
Distance from 'Downtown'	0 miles	1 mile	3 miles	2 miles
Surrounding Land Uses	Office, Commercial, Residential, Tourist Attractions	Offices, Apartments, Commercial	Parking Lots, Residential	Residential, Commercial, Office Space
Access to Regional Highways	Fair	Fair	Excellent	Good
Dedicated Parking Spaces	400	5,000	10,000	1,225
Available Parking Spaces (in private sector lots)	Over 10,000	2,000 to 3,000	0	3,500 to 5,000
Approx. Parking Fee	\$15	\$15 to \$20	\$10	...
Average Vehicle Occupancy (for arrivals)	...	2.8	2.5 to 2.9	2.8 to 3.1
Transit Service	All lines	Heavy Rail, Light Rail, and Bus	2 Metro lines, 5 to 8 stops from transfer point	3 Metro lines, 2 to 4 stops from transfer point
Range of Transit Use (arriving)	60 to 80 %	34 to 41 %	41 to 47 %	46 to 57 %
Range of Walk/Bike/Other (arriving)	...	9 to 13 %	6 to 8 %	11 to 13 %
Range of Auto Use (arriving)	...	48 to 58 %	45 to 51 %	37 to 43 %

### Summary of Assumptions

Based on these influences and the comparison above in Table 7, a set of assumptions was generated for the Ballpark transportation demand profile. These assumptions are contained in Table 8, and are used to derive the recommendations contained in this TMP.

For each game-day scenario, an average game and a sell-out game were compared to determine both typical and worst-case scenarios. The Ballpark will have 41,000 seats so this was considered to be the maximum number of tickets sold. For an average game, based on current attendance, it was assumed that approximately 30,000 tickets would be sold for weekday games and 35,000 for weekend games. The following assumptions were then applied:

- A no-show factor of 10% for an average game and 8% for a sell-out game were applied to the number of tickets sold for the weeknight and weekend scenarios.



- A no-show factor of 12% for an average game and 10% for a sell-out game were applied to the number of tickets sold for the weekday games. This reduction was increased due to the number of season ticket holders who are not able to attend games that conflict with their working hours.
- A 5% increase in transit ridership was applied for an average game and 10% for a sell-out based on the current ridership.
- The Ballpark will have space for 30 charter buses. The assumption was that each game would draw about 15 charter buses and that they would hold about 35 people each. Therefore a 1.5% increase was applied to the current rate.
- Biking and walking percentages were increased due to the fact that the Ballpark will be surrounded by more businesses and residences.
- The average vehicle occupancy (AVO) was assumed to increase to about 2.8 for a weeknight game using the existing AVO as a base. It is assumed that more people will carpool to the games due to the increased difficulty to find parking and the higher parking fees. Because of this, the weekday game AVO was increased to 3.0.
- It was estimated that 75% of Metro riders would use the Navy Yard Station on a weeknight and 25% would use Capitol South because patrons will be traveling during the commuter rush hour. During the rush hour, many train cars are crowded and it is expected that patrons will want to take an easier route to the game, with fewer transfers, thus increasing the amount of patrons that will stay on the blue and orange lines towards Capitol South. When stations and lines are less crowded, for example on a weekend, a 90%/10% split was applied.

It should be noted that after a first draft of the TMP was completed, these assumptions were revised to reflect the preliminary TMP and architectural concepts of the Ballpark. As more of the influencing design and operational factors listed in Table 7 became clear, the values in Table 8 were revised to reflect the new assumptions.



Table 8: Ballpark Transportation Demand Profile

Scenario	Tickets Sold	Actual Attendance	Arrival Mode Split					Average Vehicle Occupancy	Number of Parked Cars	Estimated Metro Ridership		Percent Arrival/Departure												
			Transit	Charter Bus	Taxi/Limo/Drop-Off	Biker/Walk	Auto			Navy Yard	Capitol South (& others)	½ hour Before	1 Hour Before	½ Hour After	1 Hour After									
Weeknight, 7:05 p.m.																								
Average Game	30,000	25,900	52%	2%	1.5%	10%	34.5%	2.8	3,400	10,100	3,400	28%	54%	52%	70%									
Sell-Out	41,000	37,720	57%	2.5%	1.5%	11%	28%	3.0	3,500	16,100	5,400	25%	49%	47%	63%									
Weekday, 1:05 p.m.																								
Average Game	30,000	25,080	50%	2%	1.5%	10%	36.5%	3.0	3,100	11,300	1,300	28%	54%	52%	70%									
Sell-Out	41,000	36,900	55%	2.5%	1.5%	11%	30%	3.2	3,500	15,200	5,000	25%	49%	47%	63%									
Saturday, 7:05 p.m.																								
Average Game	36,000	31,900	52%	2%	1%	8%	37%	3.0	3,900	15,000	1,600	27%	54%	37%	64%									
Sell-Out	41,000	37,720	57%	2.5%	1%	9%	30.5%	3.2	3,600	16,100	5,400	24%	49%	33%	58%									
Sunday, 1:05 p.m.																								
Average Game	36,000	31,900	46%	2%	1%	8%	43%	3.1	4,400	13,200	1,500	27%	54%	37%	64%									
Sell-Out	41,000	37,720	51%	2.5%	1%	9%	36.5%	3.3	4,200	14,400	4,800	24%	49%	33%	58%									





## 4: MANAGEMENT PLAN COMPONENTS

The following sections examine each component of the transportation system surrounding the Ballpark. For each system, the impacts of Ballpark traffic on game days are reviewed and recommendations made on how to manage or adjust the system to handle this traffic safely and efficiently. The recommendations are split into two groups: (1) high priority recommendations, which are those which the TMP believe are essential for efficient operations, and (2) lower priority recommendations, which include suggestions that are not essential for efficient operations but provide more options for Ballpark users, or those recommendations which involve coordination through several stakeholders.

### *Parking Management Plan*

#### *Existing On-Street Parking*

The on-street parking supply in the vicinity of the Ballpark site is split among spaces restricted to those with residential parking permits, unrestricted spaces, and those with limited availability (due to parking meters or time-based restrictions such as no parking during morning or evening peak periods). The residential permit parking is located within neighborhoods, such as those north of M Street near the Waterside Mall, between the new USDOT headquarters and the Freeway, and South of M Street between South Capitol Street and 4<sup>th</sup> Street, SW. The limited availability spaces consist of some parking meters near Buzzard Point and on 8<sup>th</sup> Street, SE, and some restricted parking on M Street based on the commuter peak periods. Most of the unrestricted parking is located in areas of industrial use or those marked for re-development.

#### *Existing Off-Street Parking*

The amount of public off-street parking reflects the different nature between the Ballpark neighborhood and Downtown DC. Downtown DC has many private-sector owned parking facilities available for public use by office workers, shoppers, and visitors. Although the Ballpark study area has some similar parking facilities, many located along M Street, SE; it appears that the critical volume of tourist attractions and office buildings is absent to generate a large volume of parking.

#### *Parking Demand*

Since the general concept of the Ballpark parking plan is to encourage use of privately owned parking lots, there are two major time periods of concern: (1) games during times when Ballpark patrons will compete with office workers for these public parking facilities, and (2) games during times when these facilities are available. Based on the experiences around the MCI Center, it can be expected that the public lots generally will be available for office workers on weekdays and Ballpark patrons on weeknight, Saturday and Sunday games.

The transportation demand profile results contained in Table 8 show a range of Ballpark parking

demand of 3,100 to 4,400 spaces. Generally, when calculating parking supply a circulation factor of 5-10% is generally applied to account for drivers searching for parking spots. The Ballpark parking supply will be carefully monitored, and it is expected that garage/lot attendants dispensing information and the use of 'garage/lot full' signs will make the supply efficient to a point where a circulation factor is not required.

### *Parking Supply*

There will be 1,225 parking spots on the Ballpark site. Of these, 250 will be used by Washington Nationals staff, and the remaining 975 will be used by patrons. Details on the location of parking facilities on the Ballpark site and their access points are still undetermined. Figure 7 shows possible locations of these facilities.

Thus, for a weekday game there is a need for an additional 2,525 spaces, and 3,425 spaces for a weeknight/weekend game. For the TMP to be a success, a sufficient amount of parking needs to be located to provide this supply. This will be accomplished using the following strategy:

- *On Street Parking*

It is anticipated that a similar residential parking enforcement policy to the one used in the vicinity of RFK stadium will be implemented in the residential areas near the Ballpark. Considering the amount of redevelopment expected in the area, it can also be assumed that many of the existing unrestricted spaces will be converted to residential permit parking, or will otherwise be unavailable for Ballpark patrons. A limited amount of metered spaces and off-peak parking spaces (for example, the parking lanes on M Street SE) may be available, but this number is expected to be negligible. Thus, no on-street parking is assumed to contribute to the Ballpark parking supply.

- *Off-Street Parking*

The majority of the parking supply at the Ballpark is expected to be provided by the private sector. This is similar to parking strategy at the MCI Center, which only has 400 dedicated parking spaces and relies on privately owned garages in the area, which were already present to serve office buildings and other tourist destinations. During the MCI Center TOP process, these garage owners were contacted and coordinated with to ensure their operations during events.

During the initial few years after the Ballpark opens, it is expected that the private sector will provide surface parking on existing vacant properties in the vicinity of the Ballpark. These are several properties that are planned to be demolished for redevelopment. While these properties are in the planning stages, their sites can serve as surface parking for the Ballpark. As the Ballpark district develops, the surface parking facilities will be replaced with buildings that will have their own parking. Some of that parking will become part of the supply of parking.



supply available to Ballpark patrons. For example, office-space parking can be used on weeknight and weekend game days. Similarly, retail parking will not be fully utilized on weekday afternoon games.

In addition, DDOT plans to construct a parking facility underneath the new traffic oval on South Capitol Street (see Figure 4), with an excess of 1,000 spaces. It is not expected that this facility will be available prior to opening day, although in the interim some surface parking may be available land acquired for construction.

A thorough inventory of off-street parking facilities is currently being performed by the AWC to determine which private sector garages and parcels may be available in 2008 for Ballpark use.

Based on preliminary parking inventories, information from the private sector and the AWC, there are four major areas of parking near the Ballpark site, shown on Figure 6:

- *Within the Ballpark Site*  
There will be 1,225 parking spots on the Ballpark site, located below ground. Of these, 250 will be used by Washington Nationals staff, and the remaining 975 will be used by patrons. Figure 7 shows the access points and locations of these parking facilities.
- *Southeast Federal Center*  
Prior to complete buildout of the SEFC, some existing buildings will be demolished and replaced by interim surface parking lots.
- *North of M Street*  
It is expected that the new construction north of M will include public parking garages, and in the interim some surface parking lots.
- *Buzzard Point*  
There are several large parking facilities on Buzzard’s Point that are assumed will become available for Ballpark patrons.

Table 9 summarizes these parking locations, their supply, and the predicted demand.

**Table 9: Summary of Parking Supply and Demand**

Parking Location	Weekday Afternoon Supply	Weeknight Supply	Saturday, and Sunday Supply
Ballpark Site	975	975	975
SEFC	1,200	1,200	1,200
North of M	900	2,100	2,400
Buzzard Point	500	1,400	2,000
<b>Total</b>	<b>3,575</b>	<b>5,675</b>	<b>6,575</b>
<b>Maximum Demand</b>	<b>3,500</b>	<b>3,500</b>	<b>4,400</b>



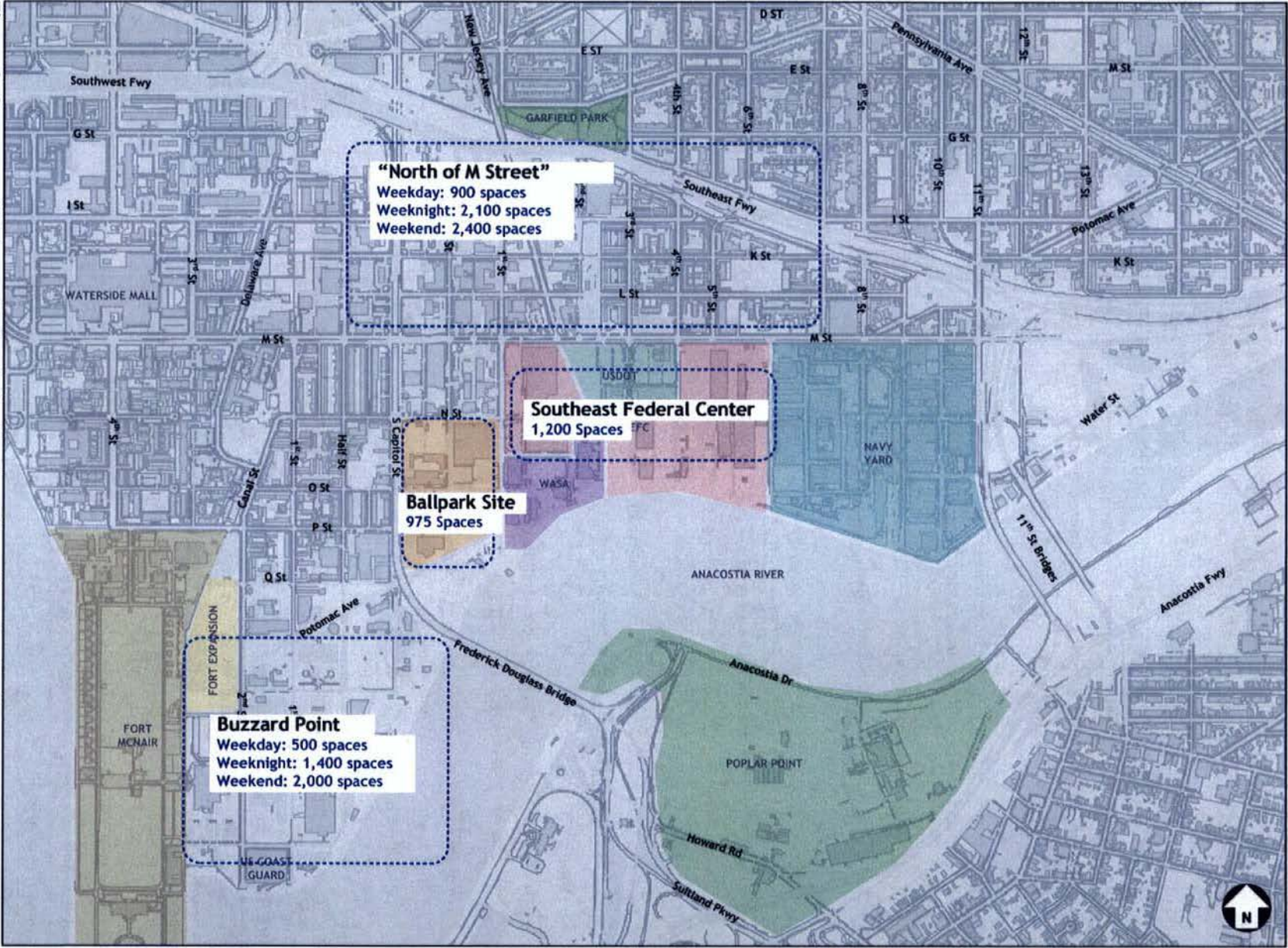


Figure 6: Summary of Primary Ballpark Parking Locations (Opening Day)





Figure 7: Parking on Ballpark Site



Table 9 shows that based on these preliminary supply estimates, there will be enough parking spaces to accommodate sell-out games at the Ballpark.

During the TOP process, the DCSEC, along with the Washington Nationals and the AWC will engage parking facility and private parcel owners to coordinate on the operation and availability of their garages. Information about these garages should then be disseminated to the general public and ticket purchasers prior to opening day.

In the years after opening day, as these parcels develop, coordination should occur between all stakeholders on a general parking plan to govern the large amount of parking that will be needed to serve all parcels. The AWC and the private sector are currently working on long-range parking strategies to accommodate and share parking across each of the various land uses, including the Ballpark. This may include placing all of the parking facilities under one ‘umbrella’, or parking district. Under a singular district the Ballpark would be able to use parking constructed by other developments on game days, and those developments would have access to the Ballpark parking facilities on non-game days.

### *Employee Parking*

Approximately 1,000 people are expected to work at the new Ballpark each game day (not including Washington Nationals staff). It is assumed that for those employees that drive, dedicated parking near the Ballpark will be reserved; or they will park off-site, for example at RFK Stadium, and be shuttled to the new Ballpark.

### *Parking Recommendations*

Based on the transportation demand profile of Ballpark patrons that drive, the following list contains the TMP parking management recommendations.

#### High Priority Recommendations

- *Private Sector Coordination*

For the Ballpark parking strategy to be successful, nearby parking garage owners and site owners need to be contacted to: (1) help lot owners agree to, and gain permits to stay open late on weekdays and on weekends; (2) discuss the possibility of using temporary surface parking lots on parcels that are planned for redevelopment; and (3) coordinate with garage owners in regards to reserving spaces for Ballpark use on weekday afternoons, or to be made available to season ticket holders.

This effort will be undertaken during the TOP process will require coordination between the Washington Nationals and the AWC. The list of parking facility and parcel owners should be based on the detailed inventory in the AWC parking inventory study. The goal of this effort





would be ensure that the total parking supply will be above the demand calculated in this chapter **This recommendation is essential for TMP success.**

- *On-Street Parking Management*

Based on the experiences in the neighborhoods surrounding RFK, implement the on-street parking management plan used at RFK in the neighborhoods surrounding the Ballpark

- *Ballpark Employee Parking*

Locate dedicated employee parking or develop a shuttle plan from an off-site parking location for the Ballpark employees Consider subsidizing transit use of employees through a program such as Metro check

Lower Priority Recommendations

- *Off-Site Parking*

Locate and designate off-site parking locations for Ballpark patrons This parking supply would provide an overflow parking location for patrons, and an additional option Shuttle buses would need to be coordinated and routed to designated pick-up/drop-off areas at the Ballpark Possible sites for off-street parking include Poplar Point, across the Anacostia River (including the Anacostia Metrorail garage), and the surface parking at RFK stadium



## ***Automobile Routing Plan***

### ***Existing Roadway Network***

The roadways in the study area are quite varied, some are neighborhood streets, others are regional arterials with heavy commuter traffic. In addition, some streets serve a fair amount of truck traffic from industrial uses. The following is a description of the major and local roadways included as part of the study area. Figure 8 shows the roadways classifications and Average Daily Traffic (ADT) of area roadways, measured by the District Department of Transportation (DDOT). Details on the existing traffic volumes and capacity of the existing roads are contained in the Ballpark EMS.

### ***Ballpark Area Roadways***

As part of the Ballpark project, the roadways surrounding the site will be resurfaced and streetscaped (N and 1<sup>st</sup> Streets SE, and Potomac Avenue along the edge of the site). Based on the traffic projections contained in the Ballpark EMS, these roadways will require one lane in each direction, with turning lanes at intersections. Thus, the TMP recommends that N and 1<sup>st</sup> Streets, SE and Potomac Avenue be reconstructed as four lane roadways, with two travel lanes in each direction and on-street parking on both sides. At intersections, the parking lanes will be used as turning lanes where appropriate. Traffic calming measures and landscaping should be incorporated into areas of possible pedestrian and vehicular conflicts. This would provide enough capacity for game day traffic while providing adequate pedestrian facilities. In addition, the on-street parking could be reserved on game days as a pick-up/drop-off area and on non-game days would provide additional parking for the expected commercial development near the site.

It should be noted that this recommendation covers the 2008 opening day scenario, which does not include much of the planned re-development in the surrounding neighborhood. The roadway recommendations only suggest what improvements are necessary for Ballpark operations, not a fully redeveloped neighborhood. Thus, the DCSEC and AWC should coordinate with parcel owners adjacent to these properties on access points. As these developments are studied in detail, it may be necessary to remove some of the on-street parking to provide turning lanes into site driveways. Similarly, as private development increases in the area surrounding the Ballpark, these roadways may need additional capacity. As these parcels develop their plans and traffic impact studies of the proposed development, they should analyze the impacts to these roadways to determine if capacity increases are required (i.e. all four lanes should be used for travel).

At the time of this report, DDOT was leaning towards construction of a six-lane cross-section for 1<sup>st</sup> and Potomac Streets (two lanes in each direction plus parking lanes). The need for a larger roadway arises from future traffic demand projections (in addition to the Ballpark) and construction management purposes (for diversion while work is being performed on South Capitol Street). None of the conclusions in this TMP would change if this cross-section were implemented.