

**BEFORE THE BOARD OF ZONING ADJUSTMENT
OF THE DISTRICT OF COLUMBIA**

In Re Appeal of:

William J. Harnett

v.

Zoning Administrator

**Department of Consumer and Regulatory
Affairs**

)
)
)
)
)
)
)
)
)
)

BZA Appeal No. 17615

ANC 2E

Public Hearing: June 5, 2007

Testimony of Michael P. Albers, P.E.

My name is Michael P. Albers. I am Vice President of Walker Parking Consultants in Wayne, Pennsylvania.

I obtained a Bachelor of Science in Civil Engineering from Michigan Technological University in 1978, and a Master of Science of Civil Engineering degree from Michigan Technological University in 1980. I am a Registered Professional Engineer in the State of Michigan. I have been with Walker Parking Consultants since 1984, and since that time, I have been involved in the project management and design of hundreds of parking related projects. I have participated in all aspects of parking, including parking feasibility studies, site analysis studies, parking structure design projects, and parking structure facility condition appraisals. I have also been involved in parking design consultation to assist architects and engineers lay out parking structures, which includes drive aisle widths, end bay turn widths, ramp slopes, stall widths, and various components of parking maneuver geometrics. I have been involved in consulting on a number of projects in the District of Columbia and surrounding metropolitan area. A representative list is attached as Attachment 1.

I have personally visited the parking garage at Washington Harbour Condominium, and I conducted measurements of the areas around parking space #112 and spaces #2 and #3. It is

**BOARD OF ZONING ADJUSTMENT
District of Columbia**

CASE NO. 17615

EXHIBIT NO. 20

Board of Zoning Adjustment
District of Columbia
CASE NO. 17615
EXHIBIT NO. 20

clear that the drive aisle does not meet the 20 foot zoning requirement. Because there is no wheel stop, the location of the cars parking in spaces #2 and #3 vary. Even when they are not pulled as far forward, the parking aisle width between #112 and #2 and #3 is no more than 19 feet, 7 inches. As a practical matter, however, the aisle width is much less depending upon how far the vehicles using #2 and #3 are pulled forward. There is no barrier prohibiting the operator of a vehicle from pulling forward and reducing the aisle width even further.

When a vehicle is parked in space #2, it is almost impossible for a driver of a full size vehicle to easily get in/out of space #112. If the driver was required to make one or two back/forth maneuvers to help align the stall, traffic and parking professionals would say that could be tolerated and judged acceptable. The problem is that one or two back and forth maneuvers are insufficient. The drive aisle width is simply too narrow and vehicles and columns behind and adjacent to space #112 prevent a parking/unparking maneuver that can be deemed acceptable. Placing a wheel stop at the front of space #2 will not improve the situation. Increasing the drive aisle by shifting the wheel stop only narrows the already narrow drive aisle behind spaces #2 and #3.

There is simply not enough distance to create spaces #2 and #3 and comply with the aisle width requirements on both sides. In addition, a vehicle in space #112 has nowhere to turn when spaces #2 and #3, and particularly space #2, are occupied. A vehicle in space #113 and the adjacent column and storage units prevents a movement in that direction, and there is not enough space in the aisle to allow the vehicle from #112 to maneuver.

To show the futility of both entry/exit maneuvers in/out of space #112, we used the computer program "AutoTurn," a commercially available program that allows the design vehicle to be input into the program and visually track how it can make a turn. In Attachment 2 we show

the entry maneuver, and Attachment 3 is the exit maneuver. Even with multiple back and forth maneuvers and hitting columns, cars, etc., the parking maneuver fails. The exit maneuver is even more impractical than the entry maneuver. Backing out in the same serpentine manner to get to the end bay drive aisle between space #3 and #107 is not recommended for ease and safety reasons.

I have reviewed the materials submitted by WHCA to the BZA previously, which include a drawing prepared with the AutoTurn program, which is Exhibit 5 to Mr. Harnett's Pre-Hearing Statement. Another copy is attached as Attachment 4. This document shows that, by WHCA's own calculations, the car is shown hitting the wall and confirms that this maneuver cannot be carried out.

Project List

Monday, June 04, 2007

Walker Parking Consultants/Engineers, Inc.

9:31:06 AM

Project #	LongName	Owner Name	Client Name	Project City	Project State	Project Start	Memo
14-3390.00			RTKL Associates, Inc.	Washington	DC	6/30/06	
14-2565.00	1130 Connecticut Ave Cds		Jones Lang Woolen Realty Advisors	Washington	DC	12/1/95	
14-2565.01	1130 Connecticut Ave Construction		Jones Lang Woolen Realty Advisors	Washington	DC	3/1/96	
14-3134.02	1515 15th Street - Addl Svc - Hourly	RTKL Associates, Inc.	RTKL Associates, Inc.	Washington	DC	4/1/07	
14-3134.01	1515 15th Street Additional Services		RTKL Associates, Inc.	Washington	DC	12/28/04	
14-3134.00	1515-15th Street NW		RTKL Associates, Inc.	Washington	DC	2/17/04	
14-3088.00	2400 M Street		The JBG Companies	Washington	DC	4/15/03	
14-3438.00	300 Block Guilford Ave		Kann&Associates, Inc.	Baltimore	MD	2/1/07	
14-3361.00	3rd & H Streets NE - Square 776	Steuart Investment Company	Steuart Investment Company	Washington	DC	4/3/06	
14-3192.00	51 Louisiana Ave Parking Garage		The JBG Companies	Washington	DC	8/31/04	Provide Parking Consulting Services for An Existin Garage In Washington Dc
14-2970.00	5Th & K Street Func (Washdc)		Torti Gallas and Partners	Washington	DC	6/19/01	Functional Design Portion of Conceptual Plan
14-2791.00	901 New York Ave		Monument Realty LLC	Washington	DC	12/22/98	
14-2725.00	Anne Arundel Acute Care		Wheeler Goodman Masek & Associates	Anne Arundel	MD	3/4/98	
14-2729.00	Anne Arundel MOB	Anne Arundel Medical Center	Wheeler Goodman Masek & Associates	Annapolis	MD	3/20/98	
14-3479.00	ATA Capitol Hill		RTKL Associates, Inc.	Washington	DC	5/16/07	
14-2806.00	Chase Tower		RTKL Associates, Inc.		MD	2/11/99	
14-2796.00	Chevy Chase Center		HOK	Chevy Chase	MD	1/27/99	
14-3126.00	DC Courts Underground Parking Garage		AFG Construction Management Inc	Washington	DC	1/16/04	
14-3012.00	Dorchester House Addition		Potomac Investment Properties Inc	Washington	DC	3/13/02	
14-2731.00	Dupont Btrc P/C Scope Documents		Baker/Mellon Stuart Construction		DE	3/31/98	
14-2726.00	Dupont Experimental Sta. Campus		KlingStubbins		DE	3/9/98	
14-2809.00	Ihs Corporation		The Hillier Group		MD	2/23/99	Consult On Surface Lot Modifications
14-3099.00	Inner Harbor East Parcel B		Beatty Harvey & Associates	Baltimore	MD	6/25/03	
14-3099.01	Inner Harbor East Parcel B - Addl Svc		Beatty Harvey & Associates	Baltimore	MD	8/8/06	

Project List

Monday, June 04, 2007 - 9:31:06 AM

Project #	LongName	Owner Name	Client Name	Project City	Project State	Project Start	Memo
14-2888.00	Logan Circle South		RTKL Associates, Inc.	Washington	DC	4/28/00	Consulting On Design and Development of New Garage. 150 Spaces Below Grade Under Residential Complex.
14-2768.00	Manugistics Center Consulting		Himes Associates Ltd		MD	9/2/98	Invoice By 28Th of Month
14-2815.00	Marriott Corporate Center		The Hillier Group	Bethesda	MD	3/9/99	
14-2564.00	Mercy Med Ctr Ps Review		Mercy Medical Center Baltimore	Baltimore	MD	11/1/95	
14-3353.00	Midtown Silver Spring		KSI	Silver Spring	MD	3/7/06	
14-2777.00	Monument 3 Consulting		Monument Realty LLC	Washington	DC	10/7/98	570+ Space Garage Below Office Building
14-3423.00	MPA Expert Witness Services		Nixon Peabody LLP	Washington	DC	11/15/06	
14-2539.00	National Institute of Health	National Institute of Health	National Institute of Health	Bethesda	MD	4/1/95	Pre-Bid Advice
14-3175.00	Natl Inst of Hlth Clinical Ctr Expansn		Ellerbe Becket	Washington	DC	6/30/04	
14-2742.00	NIH Parking Master Plan	National Institute of Health	Oudens & Knoop Architects PC		MD	5/6/98	
14-2568.00	Parole Town Center - NJ		Freedman & Company Real Estate		MD	1/1/96	
14-2568.01	Parole Town Center Addtl		Freedman & Company Real Estate		MD	3/1/96	
14-2563.00	Pepco Building (Winkler) Consulting		The Mark Winkler Company	Washington	DC	11/1/95	
14-2834.00	Potomac Center Parking Consultant		Hickok Cole Architects	Washington	DC	6/11/99	To Provide Functional Parking Consultation Service
14-3041.00	Rock Spring Center		King Farm Assoc/Four Irvington	Rockville	MD	8/6/02	
14-3041.01	Rock Spring Centre Retail		Penrose Group	Bethesda	MD	9/10/03	
14-2747.00	Rock Spring Park #2		Hines		MD	5/27/98	
14-3354.00	Rockville Town Center - 255 N Washington Street		KSI	Silver Spring	MD	3/7/06	
14-3085.01	Rockville Town Center - PARCS	City of Rockville	City of Rockville	Rockville	MD	11/29/05	
14-3318.00	Rockville Town Center Blocks 1 & 2 Operations		Development Management Group	Rockville	MD	11/3/05	
14-3085.00	Rockville Town Center Parking Garage		City of Rockville	Rockville	MD	3/28/03	
14-2589.00	Shady Grove Metro Station	Washington Metropolitan Area Transit Authority	Montgomery County, Maryland	Galthersburg	MD	6/1/96	
14-3058.00	Shirlington Parking Garage		Federal Realty Investment Trust	Arlington County	MD	10/28/02	
14-3127.00	Silver Spring 'Gateway'		The JBG Companies	Silver Spring	MD	1/22/04	
14-3003.00	Station Place Parking Consulting		Kevin Roche John Dinkeloo and Associates	Washington	DC	1/4/02	
14-2771.00	Tower Oaks Peer Review		Boston Properties, Inc.		MD	9/11/98	
14-3112.00	University Town Center		RTKL Associates, Inc.	Hyattsville	MD	8/13/03	

Project List

Monday, June 04, 2007 - 9:31:07 AM

Project #	LongName	Owner Name	Client Name	Project City	Project State	Project Start	Memo
14-3312.00	Upper Rock District	Boston Properties, Inc.	The JBG Companies	Rockville	MD	10/18/05	To provide consulting services for an Alternatives Analysis
14-3260.00	Washington Circle		Boston Properties, Inc.	Washington	DC	5/6/05	
14-3429.00	Washington Hilton		Beyer Blinder Belle	Washington	DC	1/2/07	
14-3157.00	Wax Museum		Torti Gallas and Partners	Washington	DC	4/19/04	
14-3080.00	Wheaton Metro Residential Station		Bozzuto & Associates	Montgomery County	MD	3/10/03	
14-3233.00	White Flint Crossing, Montgomery County		The JBG Companies	Montgomery County	MD	1/20/05	To perform functional design consultation services for a 300 space lot.
14-3073.00	WMATA Twinbrook Metro Station		The JBG Companies	Washington	DC	2/4/03	

POTOMAC

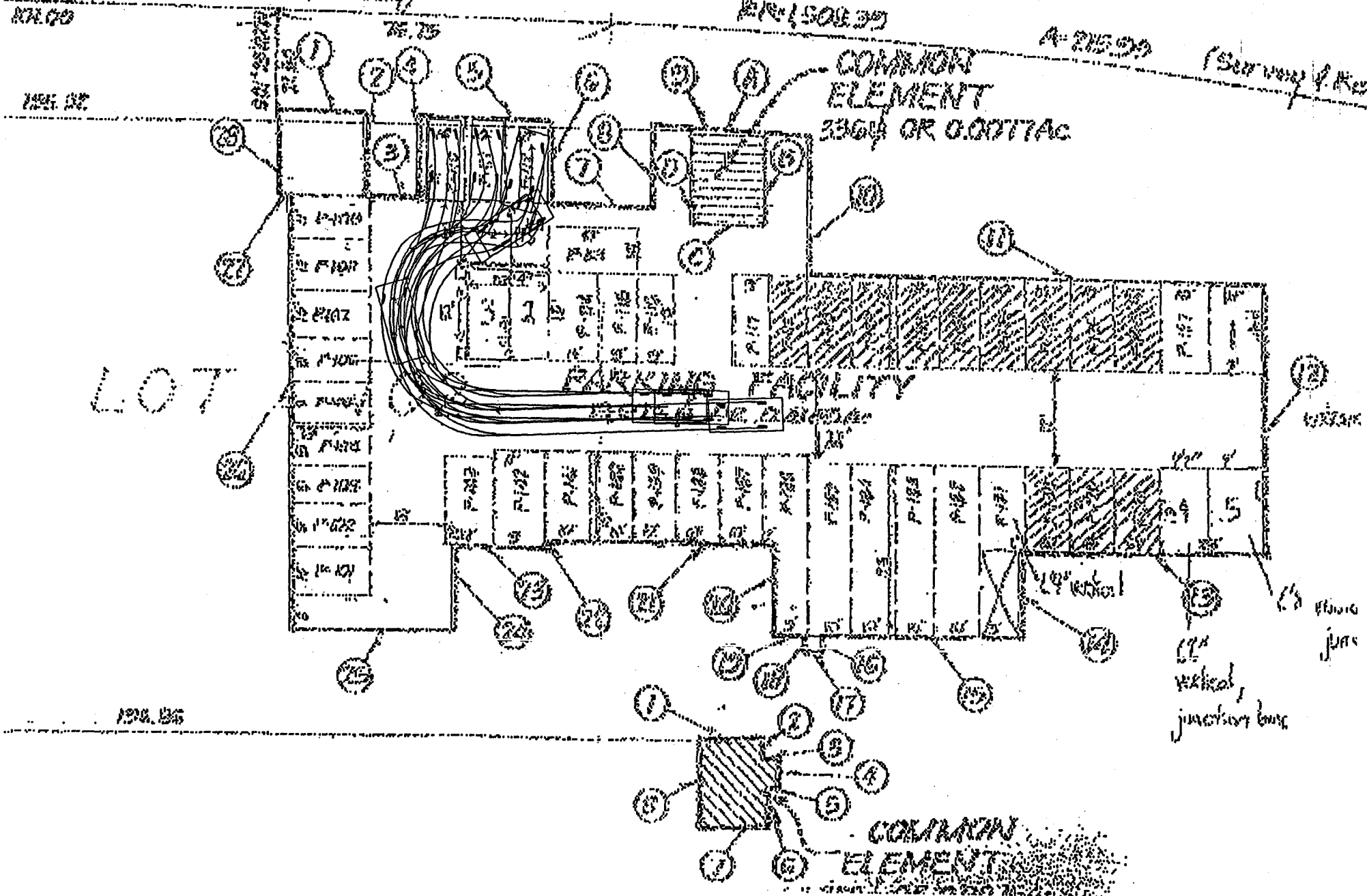
RIVER

FREEWAY

VIIA

W. 1/4

$\pm 88^{\circ}36'20''$ E - 177.75 (Record)
 $\pm 88^{\circ}36'14''$ E - 177.75 (Survey)



F. 1/11 + R