

REPORT OF

COMPREHENSIVE FACILITIES CONDITION ASSESSMENT & SPACE UTILIZATION SURVEY

FOR

DISTRICT OF COLUMBIA DEPARTMENT OF PARKS AND RECREATION
WILLIAM H. RUMSEY, SR. AQUATIC CENTER
635 NORTH CAROLINA AVENUE, SE
WASHINGTON, DC 20003



MAYOR ADRIAN M. FENTY

PUBLISHED OCTOBER 2009, BY
DISTRICT OF COLUMBIA DEPARTMENT OF REAL ESTATE SERVICES
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October 5, 2009

District of Columbia Department of Real Estate Services
Construction Services Division
2000 14th Street, N.W., Fifth Floor
Washington, D.C. 20009

Attention: Mr. Amar Singh
Project Manager

Reference: Report of Comprehensive Facilities Condition Assessment & Space Utilization Survey
William H. Rumsey, Sr. Aquatic Center
635 North Carolina Avenue, SE
Washington, DC 20003
Faithful+Gould Project No. 55561-10
District of Columbia Contract No. POAM-2004-C-0044-14-CA

Dear Mr. Singh:

Faithful+Gould, Inc. has completed a report of our Facility Condition Assessment and Space Utilization Survey of the William H. Rumsey, Sr. Aquatic Center located at 635 North Carolina Avenue in Southeast Washington, DC ("the Property").

This report provides a summary of the project information known to us at the time of the study, the scope of work performed, an evaluation of the visually apparent condition of the Property, identification of potential sustainability improvements, a forecast of capital and maintenance expenditures required over the next six-years and a Space Utilization Survey.

This report was completed in general accordance with the District of Columbia issued Statement of Works and Faithful+Gould's revised proposal for Facility Condition Assessment dated January 21, 2009 as authorized under Purchase Order 287952 by Ms. Diane B. Wooden of the District of Columbia Construction, Design and Building Renovation Commodity Group on January 3, 2009.

It has been a pleasure working with you on this project, and we look forward to working with you on future projects.

Very Truly Yours,

Bradley D. Hankins
Senior Facility Assessor

Benjamin J.M. Dutton, MRICS, MCIOB
Scope Compliance & Technical Review

cc. File

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SPACE UTILIZATION SURVEY

- A. INVENTORY & OCCUPANCY NUMBER
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- Appendix A - Six Year Capital Expenditure Forecast
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- Appendix D - Inventory & Checklist
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EXECUTIVE SUMMARY

The William H. Rumsey, Sr. Aquatic Center located at 635 North Carolina Avenue in Southeast (SE) Washington D.C. ("the Property") consists of indoor swimming pool facilities. The Property contains a one-story concrete, steel, and masonry-framed recreation building, which houses one full-sized indoor swimming pool, one small children's wading pool, a community room, men's and women's restrooms and showers, and support spaces all contained upon a site of approximately 1.71 acres (74,496 square feet). The Property is bounded by North Carolina Avenue, SE and C Street, SE. The Property is served by bus stops along 8th Street, SE, approximately two blocks to the east, and Pennsylvania Avenue, SE, approximately two blocks to the south. The nearest Metrorail station is the Eastern Market Station, which is approximately 0.17 miles to the southeast.

The recreational building was constructed in circa 1970. The recreational building is of construction Type II-B and contains a reported gross floor area of 20,584 square feet. The building underwent extensive interior renovations that were completed in 2008.

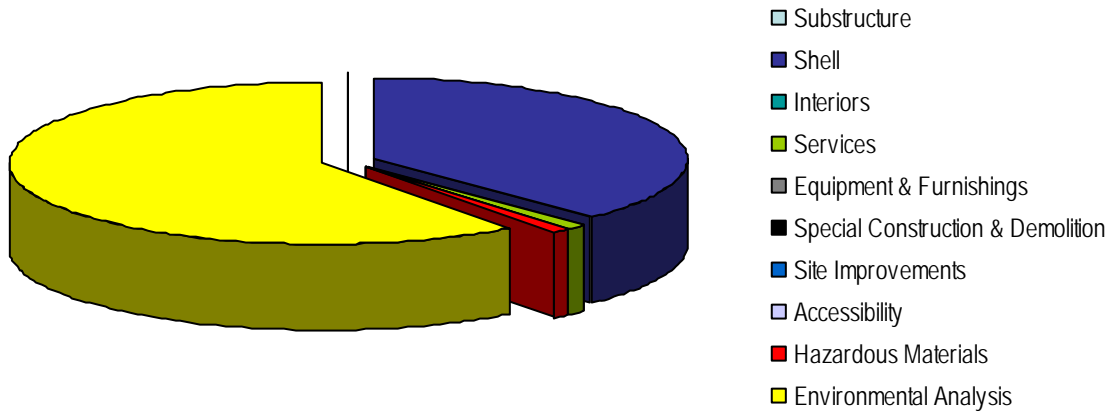
On July 2, 2009 Mr. Bradley Hankins of Faithful+Gould visited the Property to observe and document the condition of the building and site components. During our site visit, Faithful+Gould was assisted by Mr. Alfonso Allen (Assistant Manager) and Mr. Malcolm Lawrence (Assistant Manager).

The purpose of this report is to identify visually apparent deficiencies in the building and site systems, determine capital and maintenance costs required over the next six-years and calculate the Facility Condition Index (FCI) of the Property and provide an occupancy profile. The Property is in good condition. This is supported by a calculated FCI of **0.06 (Good)** rating reflective of a **total expenditure requirement of \$218,000 (excluding discretionary energy and sustainability upgrades)** over the six-year study period. The most pressing facility condition related issues affecting the Property are summarized in table EX-1, Chart EX-2, and the cost tables included within Appendix A and B.

Table EX-1 Primary Expenditures

Project	Expenditure Type	Cost	Year
Roof Replacement	Condition	\$192,000	2012
Electrical Preventative Maintenance	Maintenance	\$6,000	2010, 2013

Chart EX-2 Expenditure By System



FACILITY ATTRIBUTE TABLE

WILLIAM H. RUMSEY, SR. AQUATIC CENTER

PROPERTY DETAILS

ADDRESS: 635 NORTH CAROLINA AVENUE SE
WASHINGTON, DC 20003

NEAREST INTERSECTION: NORTH CAROLINA AVENUE SE AND 7TH STREET SE

SQUARE, SUFFIX, AND LOT (SSL): 0872 0800 QUAD-WARD: SE-6

HISTORIC DISTRICT: YES NO (CAPITOL HILL HISTORIC DISTRICT)

HISTORIC BUILDING: YES NO

GROSS SQUARE FOOTAGE OF BUILDING: 20,584

GROSS SQUARE FOOTAGE OF LAND: 74,496

YEAR OF CONSTRUCTION: 1970

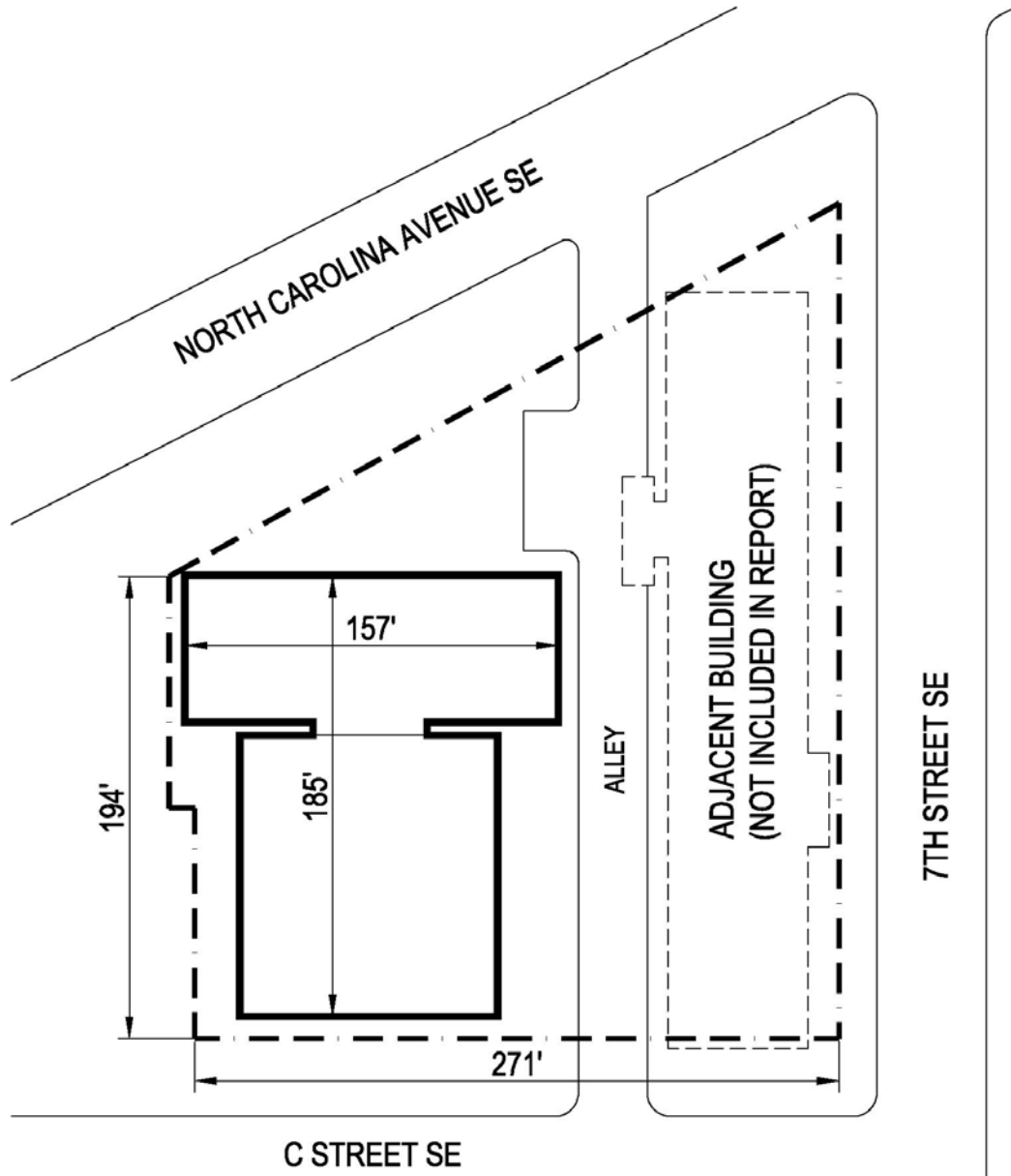
NUMBER OF PARKING SPACES: 7

OCCUPANCY STATUS: OCCUPIED VACANT PARTIALLY OCCUPIED

ASSESSED BUILDING AND LAND VALUES^{1,2}:

SSL	Assessment Year	Land Value	Improvement Value	Total Assessment Value
0872 0800	2009	\$19,368,960	\$2,540,170	\$21,909,130

1. Source: <https://www.taxpayerservicecenter.com/>
2. Building and land values appear to include adjacent building to the east of the Aquatic Center



WILLIAM H. RUMSEY, SR.
AQUATIC CENTER SITE PLAN
NOT TO SCALE
(ALL DIMENSIONS ARE APPROXIMATE)

SUMMARIES

As part of this evaluation, Faithful+Gould was requested to calculate the Facility Condition Index (“FCI”) of the Property. The FCI is the ratio of accumulated Deferred Maintenance (DM) to the Current Replacement Value (CRV). The DM includes the total Capital Expenditure Forecast amount indicated in Appendix A and the Maintenance Expenditure Forecast amount indicated in Appendix B, less Environmental Analysis costs. The CRV is based on cost data provided by RS Means® at a value of \$178 per gross square foot times the gross square footage of floor area. The FCI of the constructed asset is calculated by dividing DM (maintenance and capital costs) by the CRV as indicated by the following formula:

$$\text{Deferred Maintenance} / \text{Current Replacement Value} = \text{Facility Condition Index}$$

The FCI range is from zero for a newly constructed asset, to one for a constructed asset with a DM value equal to its CRV. Acceptable ranges vary by “Asset Type”, but as a general guideline the FCI scoring system is as detailed in Table FCI-1.

Table FCI-1 Facility Condition Index (FCI) Values

Numerical Value	Condition
> 0.75	Poor
0.4 – 0.75	Fair
0.0 – 0.40	Good

We have calculated a Current Replacement Value of \$3,663,952 (based on a value of \$178 per gross square foot and a floor area of 20,584 gross square feet) and a Deferred Maintenance value of \$218,000, the FCI ratio for the Property is **0.06** indicating that the Property is in **good** condition.

Capital Expenditure Forecast	\$300,326
Maintenance Expenditure Forecast	<u>\$248,000</u>
Subtotal	\$548,326

Less Environmental Analysis Expenditures	
Capital Expenditure Forecast	(\$300,326)
Maintenance Expenditure Forecast	<u>(\$30,000)</u>
Subtotal	(\$330,326)

Deferred Maintenance (DM)	\$218,000
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$$\$218,000 \text{ DM} / \$3,663,952 \text{ CRV} = 0.06 \text{ FCI}$$

FACILITY CONDITION ASSESSMENT

A. SUBSTRUCTURE

A10 Foundations

Description

In the absence of structural drawings we have based our description of the foundation systems upon our visual observation (where possible) of the systems and our experience with similar structural systems. Based upon the sizing, type and anticipated loadings of the superstructure systems and our visual observation of geotechnical conditions, we anticipate that the building is founded on a series of mild-steel reinforced cast-in-place concrete spread footings.

Condition

The foundation systems appeared to be in good condition with no evidence of overloading, failure or other visually indicative deterioration noted. We do not anticipate a requirement to complete significant repair or replacement of the foundation systems within the six-year study period.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

A20 Basement Construction

Description

The building is a single-story structure without a basement.

B. SHELL

B10 Superstructure

Description

Concrete Strength

In the absence of structural drawings, we were unable to determine the designed strength of the concrete elements.

Floor

The lower floor consisted of a presumed 5" thick cast-in-place concrete slab placed over compacted gravel fill.

Superstructure

The superstructure consisted of load-bearing concrete masonry unit (CMU) perimeter and interior walls and steel columns supporting open web steel roof trusses and corrugated steel pan decking (reference Photograph 1 in Appendix C).

Internal Walls & Ceilings

Interior wall construction consisted of combination of 4" and 8" concrete masonry units. Exposed portions of the wall system were painted.

The ceiling system throughout the majority of the building consisted of a suspended ceiling grid supporting acoustic ceiling tiles. Portions of the ceilings in the men's and women's shower rooms consisted of painted gypsum board.

Exterior Walls

The exterior wall system consisted of the exterior clay face bricks mechanically-attached with wall ties against a 4" thick concrete masonry unit back-up and supported on the mild-steel reinforced cast-in-place concrete spread footings.

Roof Structure

The structure supporting the low-slope roof areas consists of open web steel joists with corrugated steel pan decking supported by the interior concrete masonry load bearing walls, steel columns, and the concrete masonry unit superstructure.

Condition

The masonry and steel-framed superstructure systems appeared to be in good condition with no evidence of overloading or failure noted. We do not anticipate a requirement to complete significant repair, replacement or supplementing of the superstructure system during the study period.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

B20 Exterior Closure

Description

Exterior Wall Systems

The building is laid out in two wings: the exterior wall system at the north (front portion) of the building consisted of the exterior clay face bricks mechanically-attached with wall ties against a 4" thick concrete masonry unit back-up (reference Photographs 2 and 3 in Appendix C). The brick veneer is laid in a running bond constructed with a scored cementitious mortar. The exterior walls system at the natatorium (south portion) consisted of an aluminum and glass storefront system with aggregate panels around the structural columns and along the roofline (reference Photographs 4 and 5 in Appendix C). The exterior wall systems are supported on the mild-steel reinforced cast-in-place concrete spread footings.

Windows and Doors

The building contains 336 windows. The exterior windows typically consisted of a dark bronze anodized aluminum framing system with operable and/or fixed panes of insulated and insulated glass. The connection between the building exterior and the window frames was sealed with a 1/8" to 1/4" wide elastomeric sealant. The operable sections of the windows were equipped with exterior security grating. Table B20-1 provides a summary of the windows.

Table B20-1 Window Schedule

TYPE	SIZE	QUANT.	LOCAT.	FRAME	GLAZING	OPERATION	INSTALL DATE
1	1'-6" x 6'-8"	244	Natatorium	Aluminum	Double	Fixed	1960
2	2'-9" x 7'-4"	5	North Wing	Aluminum	Single	Hopper/ Fixed	1960
3	2'-8" x 9'-6"	10	Natatorium	Aluminum	Double	Fixed	1960
4	3'-2" x 9'-6"	3	Natatorium	Aluminum	Double	Fixed	1960
5	2'-0" x 9'-6"	8	Natatorium	Aluminum	Double	Fixed	1960
6	4'-10" x 9'-6"	54	Natatorium	Aluminum	Double	Fixed	1960
7	3'-10" x 9'-6"	7	Natatorium	Aluminum	Double	Fixed	1960
8	6'-6" x 7'-2"	5	Entrance	Aluminum	Double	Fixed	1960

The building contained 39 doors. There is one main entrance to the building at the north elevation, which consisted of glass and metal doors set in a storefront type framing system (reference Photograph 6 in

Appendix C). There are eight additional exits distributed throughout the building. The connection between the brick masonry and the window frames was sealed with a 1/8" to 1/4" wide elastomeric sealant.

Doors throughout the building consisted of various styles including painted hollow-core steel panel doors and glass and metal doors. All doors are placed within steel frames. Door hardware consisted of a combination of mechanical lock-sets and knob and lever handles. Table B20-2 provides a summary of the doors.

Table B20-2 Door Schedule

TYPE	SIZE	QUANTITY	LOCATION	MATERIAL	FRAME	REMARKS
1	3'-0" x 8'-0"	2	Exterior	Steel	Metal	
2	3'-0" x 6'-8"	4	Interior	Steel	Metal	
3	3'-0" x 7'-0"	6	Interior	Steel	Metal	
4	2'-6" x 6'-8"	1	Interior	Steel	Metal	
5	3'-0" x 7'-10"	1	Interior	Steel	Metal	With Vision Panel
6	2'-6" x 7'-0"	3	Interior	Steel	Metal	
7	2'-4" x 7'-0"	4	Interior	Steel	Metal	
8	2'-6" x 7'-10"	2	Interior	Steel	Metal	
9	3'-0" x 7'-10"	1	Interior	Steel	Metal	
10	3'-0" x 9'-4"	6	Exterior	Glass/Metal	Metal	
11	3'-0" x 7'-10"	6	Exterior	Glass/Metal	Metal	
12	3'-4" x 7'-10"	2	Exterior	Glass/Metal	Metal	
13	3'-0" x 7'-0"	1	Interior	Glass/Metal	Metal	

Condition

Exterior Wall Systems

The exterior wall systems appeared to be in good condition with no evidence of significant damage or failure noted. However, it appears that several of the aggregate panels had cracked in the past and had been repaired with an elastomeric sealant (reference Photograph 7 in Appendix C). The sealant appeared to be in generally good condition and should remain serviceable throughout the study period. We do not anticipate a requirement to complete significant repair to the exterior wall system during the study period.

Windows and Doors

Window systems appeared to be in generally fair condition having been installed in circa 1960. The perimeter sealants are in good overall condition (reference Photograph 8 in Appendix C). We do not anticipate a requirement to complete the replacement of the perimeter window or door sealants during the study period.

Doors appeared to be in generally good condition with only localized instances of surface damage and corrosion noted on the steel lintels (reference Photograph 9 in Appendix C). Assuming as-needed painting and repairs, we do not anticipate a requirement to replace the doors within the six-year study period.

We have recommended budgeting for a yearly "Door and Window Life Extension Maintenance" throughout the six-year study period.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

1. We recommend budgeting a maintenance allowance of \$2,500 per year for as-needed repair and life-extension maintenance of the door and window systems. Per cycle, this cost assumes the retention of two technicians for an eight hour period at a per hour / per operative rate of \$100 (\$1,600 per day) and a combined material, contingency and disposal cost of \$900.

Priority 3 (2011 – 2014)

2. We recommend budgeting a maintenance allowance of \$2,500 per year for as-needed repair and life-extension maintenance of the door and window systems. Per cycle, this cost assumes the retention of two technicians for an eight hour period at a per hour / per operative rate of \$100 (\$1,600 per day) and a combined material, contingency and disposal cost of \$900.

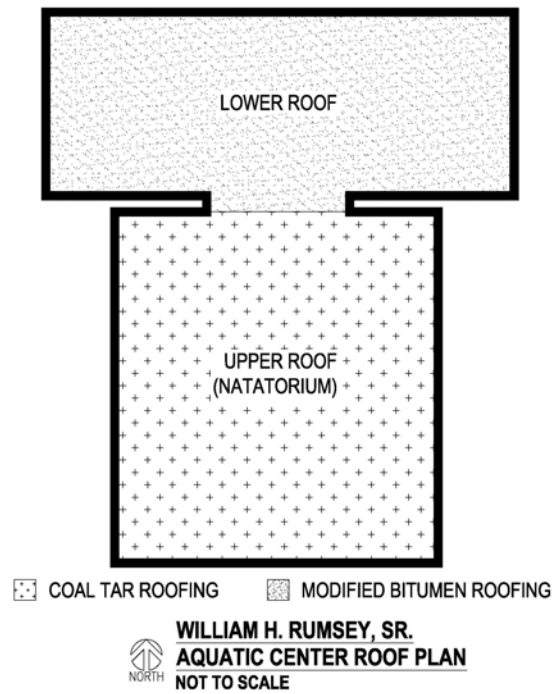
Priority 3 (2011 – 2014)

3. We recommend budgeting a maintenance allowance of \$2,500 per year for as-needed repair and life-extension maintenance of the door and window systems. Per cycle, this cost assumes the retention of two technicians for an eight hour period at a per hour / per operative rate of \$100 (\$1,600 per day) and a combined material, contingency and disposal cost of \$900.

B30 Roofing

The Property contained two primary roofing systems. The lower roof over the north wing of the building contained one primary low-sloped roof area covered with a three-ply asphaltic-based built-up roofing system with a hot-mopped granular-surface styrene-butadiene-styrene (SBS) modified bitumen cap sheet (reference Photograph 10 in Appendix C). The roof appeared to have been installed as a recovery system. However, the date of installation was unknown. The upper roof over the natatorium (south wing) contained one primary low-sloped roofing system comprised of a coal tar built-up roofing system with a pea gravel surface (reference Photograph 11 in Appendix C). The low-slope roof areas appear to be installed over rigid tapered insulation installed directly to the corrugated steel deck. The plan below details the general configuration and location of each roof area.

Overview of Roof Locations & Configuration



The lower roof is internally drained through fourteen 4-inch diameter drains. Overflow drainage is provided by two overflow drains, one on each end of the roof. The lower roof has an approximately 18-inch high parapet wall with metal cap flashing. The upper roof over the natatorium is internally drained through twelve 4-inch diameter drains. Overflow drainage is not provided. The upper roof does not have a parapet wall. The perimeter of the roof is surrounded by metal flashing materials and gravel stops. Table B30-1 provides a summary of the construction of the low-slope roofs.

Table B30-1 Summary of Roof Construction

Roof Component	Lower Roof	Upper Roof
Age	Unknown	Circa 1960
Roof Area (total / approx. square footage)	9,950	12,800
Application/ Membrane	Three-Ply Asphaltic-Based Built-Up Roofing System	Coal Tar Built-Up Roofing System
Manufacturer / Model	Unknown	Unknown
Surface	Gravel Surfaced Modified Bitumen	Embedded Pea Gravel
Deck Type	Corrugated Metal	Corrugated Metal
Insulation	Rigid Tapered	Rigid Tapered
Cover Board	None	None
Drainage	Internal Drains	Internal Drains
Overflow Scuppers	None	None
Base Flashings	Modified Bitumen	None
Cap Flashings	Aluminum	None
Perimeter Enclosure	Parapet	None
Warranty (Manufacturer)	Unknown	Unknown
Warranty (Contractor)	Unknown	Unknown

Condition

The low-slope roof system at the lower roof area appeared to be in good condition. The modified bitumen system appeared to have been installed as a recovery system. Assuming the completion of on-going maintenance and as-needed repair, we do not anticipate a requirement to replace the lower roof system within the six-year study period.

The coal tar built up roofing system was likely original construction, and appeared to be in generally good condition with no reports or evidence of active roof leaks. However, at 49 years of age, we recommend budgeting for replacement of the coal tar roofing system on the upper roof within the six-year study period.

We have recommended budgeting for a "Roof Life-Extension and Maintenance" program throughout the six-year study period

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

1. We recommend replacing the coal tar roofing system over the natatorium. Our opinion of cost for this work is \$192,000 (\$15.00 per square foot) in 2012.
2. We recommend budgeting an allowance of \$2,500 per year for as-needed repair and life-extension maintenance of the sloped and low-slope roof systems. Per cycle, this cost assumes the retention of one roof operatives for an eight hour period at a per hour / per operative rate of \$100 (\$1,600 per day) and a combined material, contingency and disposal cost of \$900.

Priority 3 (2011 – 2014)

3. We recommend budgeting an allowance of \$2,500 per year for as-needed repair and life-extension maintenance of the sloped and low-slope roof systems. Per cycle, this cost assumes the retention of one roof operatives for an eight hour period at a per hour / per operative rate of \$100 (\$1,600 per day) and a combined material, contingency and disposal cost of \$900.

Priority 4 (2015)

4. We recommend budgeting an allowance of \$2,500 per year for as-needed repair and life-extension maintenance of the sloped and low-slope roof systems. Per cycle, this cost assumes the retention of one roof operatives for an eight hour period at a per hour / per operative rate of \$100 (\$1,600 per day) and a combined material, contingency and disposal cost of \$900.

C. INTERIORS

C10 Interior Construction

The building underwent extensive interior renovations that were completed in March 2008. Renovation project work consisted of renovation of the men's and women's locker rooms, including replacement of tile, lockers, showers, painting, and other repairs. Other general interior and exterior repairs were also completed.

The building spaces included the main lobby, community room, men's and women's restrooms, men's and women's shower and locker rooms, natatorium, and support spaces. The interior walls are typically painted concrete masonry unit (CMU) (reference Photographs 12 through 16 in Appendix C).

C20 Stairs

The building is a single-story structure with no interior stairs.

C30 Interior Finishes

The types of Interior finishes were fairly consistent throughout the building. The floor finishes consisted of a combination of clay tile, 12" x 12" resilient vinyl floor tiles and ceramic tiles. The walls were finished with painted concrete masonry units (CMU). The ceilings in the men's and women's shower rooms consisted of painted gypsum board and the walls were had ceramic tile. The ceilings encountered were typically suspended ceiling tiles. The interior doors were typically painted metal panel doors with stainless steel door hardware.

The signage for corridors and at room entrances were in good condition and appeared to meet ADAAG requirements.

Condition

The interior finishes are throughout the building are in good condition having been replaced within the past year. We do not anticipate a requirement to complete significant repair or replacement of the interior finishes during the study period.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

D. SERVICES

D10 Conveying

There are no conveying systems in the building.

D20 Plumbing

The following information was obtained through our visual observations of the building systems. The plumbing systems include the domestic cold water, domestic hot water, sanitary waste and vent, and storm water collection systems.

Domestic Water Systems

Description

Domestic Cold Water

Domestic cold water enters the building at main boiler room on the west side of the building and is fitted with a 3-inch water meter (reference Photograph 17 in Appendix C). The piping observed within the building is copper. Supply pressure is supplied from the cold water intake pressure. Domestic cold water is routed to all the plumbing fittings within the building.

Domestic Hot Water

Domestic hot water is generated by a 90-gallon capacity natural gas-fired water heater located in the boiler room (reference Photograph 18 in Appendix C). The water heater was manufactured by PVI Industries. The system is designed with a fractional horsepower circulation pump.

Domestic Water Piping

The domestic water piping consisted of copper. Domestic cold and hot water piping was uninsulated.

Condition

The domestic water systems appeared to be in good condition. Based upon our experience with similar buildings in the District of Columbia, the incoming water line should be adequate to serve for the needs of the building.

The domestic water heater appeared to be in good condition and was replaced in 2002. Based upon the remaining useful life and the current condition, replacement of the water heater should not be required during the six year evaluation period.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

Sanitary Waste and Vent Systems

Description

Sanitary waste is collected from riser stacks throughout the building and tied to horizontal mains that are routed out of the building under the first floor via gravity drain lines to the site sanitary sewer system. The sanitary waste and vent piping is cast iron.

Condition

The sanitary waste and vent piping system is in fair condition. No visually apparent problems with the systems were observed.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

Storm Water Systems

Description

The storm drainage system includes the internal roof drains that collect the water from the low-sloped roof areas and route it to the site storm drainage system via a cast iron piping system (reference Photograph 19 in Appendix C).

Condition

The storm water drainage system appeared to be in good condition. Given the age of the building, it is possible that the piping is subject to interior deterioration. Although the system should be serviceable through the end of the study period, the systems should be replaced and upgraded within the next 10 to 12 years.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

Natural Gas Systems

Description

Washington Gas supplies natural gas service to the Property. The pressure reducing station and gas meter are located on the west side of the boiler room. Gas service is routed to the boilers, HVAC equipment, and the water heater. Gas piping is black steel.

Condition

No problems were noted related to the natural gas distribution piping system.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2009)

No required capital expenditures are anticipated at this time.

Priority 3 (2010 – 2013)

No required capital expenditures are anticipated at this time.

Priority 4 (2014)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2009)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2010 – 2013)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2014)

No required maintenance expenditures are anticipated at this time.

D30 HVAC

The heating, ventilation and air conditioning (HVAC) systems include the central heating and cooling systems, central air-handling, and exhaust and ventilation systems. Recent repairs, renovation, and installation of new heating, ventilating, and air conditioning systems were completed in 2008.

Description

The north wing of the building is heated and cooled by four rooftop units with electric auxiliary heating coils or natural gas furnaces (reference Photograph 20 in Appendix C). The natatorium is equipped with an air to air energy recovery dehumidification system (reference Photograph 21 in Appendix C).

The HVAC equipment is mounted on the lower roof. Supply air is routed to the spaces through sheet metal ducts and distributed overhead and discharged to the space via ceiling-mounted diffusers throughout the building.

Condition

Recent repairs, renovation, and installation of new heating, ventilating, and air conditioning systems were completed in 2008. With proper routine maintenance and repairs, we do not anticipate the need to conduct major repairs or replacement of the HVAC systems within the study period.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

Ventilation and Exhaust Systems

Description

The building contains dedicated exhaust systems collect air from the toilet rooms and the natatorium. Exhaust air is ducted up to the exhaust fans on the roof.

Condition

The roof ventilators are in good condition. No visually apparent problems with the systems were observed.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

Building Automation and Controls

Description

The building does not include any central control. The systems were controlled by local wall-mounted thermostats.

Condition

The controls are in fair to good condition.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

D40 Fire Protection

Fire and life safety elements observed included audible fire alarm and detection systems, handheld fire extinguishers, and fire-rated means of egress.

Structural Fire Protection

Description

The building is a single-story structure with masonry exterior walls. Doors opening into main building corridors typically had listing labels with fire rating of 20 minutes to 1-1/2 hours. Exposed CMU, gypsum wallboard and lay-in tile ceilings were present throughout the building. The building structure appeared to meet requirements for Type II-B construction, per IBC Table 601.

Condition

We noted the condition and adequacy of the structural fire protection systems in the basement mechanical room and where visible above lay-in tile ceilings. The structural fire protection appeared to be in generally good condition and installed in accordance with industry accepted practice and the codes enforced at the time of construction.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

Means of Egress

Description

The facility is provided with nine exits distributed throughout the building and leading to the exterior at each location.

Condition

The paths of egress appeared to be generally compliant with the building codes in effect at the time of construction. The layout of exits and travel distances involved meet current code requirements for assembly (Group A) use.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

Fire Suppression Systems

Description

The building is not protected with an automatic fire suppression sprinkler system or a standpipe. Handheld fire extinguishers, wall mounted or located in recessed wall cabinets, were provided throughout the building.

Condition

Assuming continued use of the building as a recreational building without the completion of major renovation (i.e. alteration of more than 50% of the gross floor area), the installation of a building wide fire suppression system is not required. The existing systems appear to be in adequate condition.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

Fire Detection and Alarm Systems

Description

The building is protected by a fully addressable Notifier Model AFP-200 fire alarm control panel (FACP) located in the main electrical room (reference Photograph 22 in Appendix C). An annunciator panel is located near the main entrance. Audio bells, pull stations, and hard-wired smoke detectors have been provided throughout the building.

Condition

The fire alarm system appeared to be in good condition. We do not anticipate the need to conduct major repairs or replacement of the fire alarm system within the study period.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

D50 Electrical

The electrical systems observed included the electrical distribution and lighting systems.

Electrical Service and Distribution Equipment

Description

The building receives electrical service from an underground feed supplied by Potomac Electric Power Company (PEPCO). Service characteristics are 208/120-volt, 3-phase, 4-wire. Underground ducts are routed from the utility company's transformer to a current transformer (CT) cabinet in the electrical room located on the west side of the building (reference Photograph 23 in Appendix C).

The main distribution panel for the building was manufactured Cutler Hammer. The panel is located in the main electrical room. The incoming service has a capacity of 1,600 Amps at 208/120 volts.

Additional branch electrical panels and disconnects are located throughout the building. All of these are 120/208 volt equipment.

Voltages

Large motors in the building (e.g. those serving the HVAC equipment, pumps, and fans) are supplied at 208-volt, 3-phase. Light fixtures, general purpose receptacles, and small appliance and equipment loads are served at 120-volt single phase.

Wire and Conduit

Electrical distribution is typically accomplished using wiring in conduit. Wiring appeared to consist of copper with thermoplastic insulation.

Conduit types varied in the building based on area and usage. Rigid metal conduit is used in areas subject to constant moisture or physical damage. Electrical metallic tubing (EMT) is used in interior spaces. Limited amounts of flexible metal conduit and Metal Clad (MC) flexible cable are used for connections to typically vibrating machinery.

Safety Switches

Fusible and non fused type safety switches are also installed near equipment such as pumps and fans and serve as the required local disconnecting means for the equipment.

Equipment Manufacturers

Panelboard and safety switches within the building are manufactured by Cutler Hammer.

Condition

The electrical distribution system appeared to be in generally good condition. The main distribution panel, switchboard, and CT cabinet were replaced in 2003. Assuming the completion of periodic preventative maintenance and repair, replacement of the electrical system should not be required within the study period.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

1. The electrical equipment should receive preventive maintenance consisting of cleaning the interiors of all enclosures, and infrared scans of connections, fuses, and breakers in switches, panelboards, and motor starters beginning this year and repeating no more than every 3 years thereafter. Any items identified as abnormal during the infrared scans should be corrected at the time. The estimated cost for preventive maintenance is \$3,000 per occurrence.

Priority 3 (2011 – 2014)

2. The electrical equipment should receive preventive maintenance consisting of cleaning the interiors of all enclosures, and infrared scans of connections, fuses, and breakers in switches, panelboards, and motor starters beginning this year and repeating no more than every 3 years thereafter. Any items identified as abnormal during the infrared scans should be corrected at the time. The estimated cost for preventive maintenance is \$3,000 per occurrence.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

Emergency Power Generation and Distribution Equipment

Description

Emergency power is supplied through a separate feed to an emergency electric distribution panel located in the main mechanical room.

Loads served by the emergency power system include fire alarm system, emergency lighting, and duct heaters.

Emergency power distribution within the building is similar in configuration to that for normal power. Wiring is run in conduit and cables consisted of copper conductors with thermoplastic insulation.

Condition

The life safety equipment appears to be in good condition. The emergency system distribution equipment is maintained in the same manner and in conjunction with the normal power distribution equipment as described above. We do not anticipate the need to conduct major repairs or replacement of the emergency power system within the study period.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2009)

No required capital expenditures are anticipated at this time.

Priority 3 (2010 – 2013)

No required capital expenditures are anticipated at this time.

Priority 4 (2014)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2009)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2010 – 2013)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2014)

No required maintenance expenditures are anticipated at this time.

Lighting Systems

Description

Fluorescent lighting is used in most areas of the building including administrative office areas, community room, natatorium, locker rooms and classrooms. Lamp and ballast types vary. Most fixtures utilize newer F32T8 lamps and electronic ballasts.

Illuminated exit signs are installed at exit doors and along the path of egress. Lighting control is via local switching in the respective rooms. Emergency egress lighting is provided by fixtures common to the respective areas and powered by the emergency power supply.

Condition

The lighting systems appeared to be in good condition. No visually apparent problems with the lighting systems were observed.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

D60 Safety, Security & Access Control

Description

The Property was provided with a video surveillance system with four cameras that monitor the entry points to the building. The monitor and recording equipment was located in the swim office (reference Photograph 24 in Appendix C).

Blast Shrapnel Protection

The windows were not provided with blast shrapnel protection. Based upon their construction type, the use of non-tempered glazing panels and their general configuration, the existing window system will provide poor blast shrapnel protection.

Safety / Security Review

In addition to observation of the safety, security and access control systems, we completed a cursory level safety and security review. The purpose of the review was to determine and document hazards and required improvement in all areas of the building and surrounding site.

The west, south and east perimeters of the Property were enclosed by 6' to 8" brick walls with 4' chain link fencing along the top of the wall (reference Photograph 25 in Appendix C). The north side of the Property was unenclosed and facilitated public access to the Property. The operable sections of the windows were provided with steel security grating. Doors consisted of glazed and non-glazed metal construction.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

E. **EQUIPMENT & FURNISHINGS**

E10 **Equipment**

Description

Equipment provided at the Property included administrative office equipment and swimming pool equipment.

Condition

Equipment appeared to be in generally good condition. We do not anticipate a requirement to complete replacement of equipment within the six-year study period.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

E20 Furnishing

Description

Furnishings provided at the Property included lockers and office furniture.

Condition

Furniture appeared to be in generally good condition. Lockers were recently replaced. We do not anticipate a requirement to complete replacement of the furnishings within the six-year study period.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

F. SPECIAL CONSTRUCTION

F10 Special Construction

None.

G. SITE FEATURES

G10 Site & Recreational Systems

Site systems include the concrete-paved parking areas, aggregate plaza areas, perimeter brick wall with chain link fencing, and storm water management features.

Description

Site Systems

Parking was provided for 7 standard sized vehicles at the parking lot on the east side of the Property, with additional parking spaces provided along the adjacent streets (reference Photograph 26 in Appendix C). The parking lot was accessed and exited from the alley that ran along the east side of the Property. The alley was marked as a one-way street entering from North Carolina Avenue, SE and exiting onto C Street, SE.

The majority of the Property was paved with aggregate stone plaza areas over the entire area not covered by the building or the minimal landscape features (reference Photograph 27 in Appendix C). Table G10 summarizes the approximate area of the aggregate and concrete site features.

Table G10-1 Aggregate & Concrete Site Features

No. Parking Stalls (inc. ADA) ¹	Concrete Pavement (s.y.) ²	Area of Aggregate Pavement (s.f.)
7	1,350	16,357

1. ADA indicates that parking stalls are marked and signed in general accordance with the intent of the 1991 Americans with Disability Acts Accessibility Guidelines (ADAAG)

2. s.f. indicates square feet

Recreational Features

Two indoor swimming pools are located in the building and consisted of one full-sized competition swimming pool and one children's wading pool (reference Photographs 28 and 29 in Appendix C). The pools are constructed with reinforced shotcrete with a white plaster finish. The competition swimming pool is an approximately 75' x 60' rectangular pool and varies in depth from 3'-6" to 10'-0" with an approximate volume of 240,000 gallons. The pool has an aluminum edge with continuous surface strainer around the perimeter and contrasting tile lane lines along the bottom of the pool for lap swimming. The rectangular shaped children's wading pool is 1'-3" deep and has a volume of approximately 3,000 gallons.

Table G10-2 Pool Details

	Competition Pool	Children's Pool
Dimensions (linear feet)	75' x 60'	15' x 20'
Pool Perimeter (linear feet)	270	70
Surface Area (square feet)	4,500	300
Volume (gallons)	240,000	3,000
Filter Flow Rate (gallons per minute)	229.5-306	141
Turnover Rate (hours)	6	6

The mechanical equipment associated with the swimming pools was located in the mechanical room on the west side of the building (reference Photographs 30 through 33 in Appendix C). The competition pool was heated by a Lochinvar gas-fired heater that was rated with an input of 990,000 British thermal units per hour (BTUH). The children's pool was heated by a Lochinvar gas-fired heater that was rated with an input of 250,000 BTUH. Filters for the competition pool were Eko³ Systems manufactured by Nemato Corporation, and consisted of three automatic sand filters, each with a filter surface area of 15.3 square feet. One Triton II sand filter manufactured by Pentair served the children's pool and had a filter surface area of 7.06 square feet. The pool equipment provided a turnover rate of six hours for both the competition pool and the children's pool. This is in compliance with the turnover rate of eight hours as required by Section 6408, subsection 1 (Water Quality) of the District of Columbia Municipal Regulations Swimming Pools and Spas.

Exterior building illumination is provided by building mounted HID fixtures and pole mounted fixtures.

Condition

Site Systems

The concrete paved parking lot is in generally good condition. We do not anticipate a requirement to complete significant repair or refurbishment of the pavement within the study period.

The perimeter walls appeared to be in generally good condition. We do not anticipate a requirement to complete significant repair or refurbishment of the perimeter walls within the study period.

Storm water management provisions and landscaping appeared to be in good condition.

Recreational Features

The two swimming pools appeared to be in good condition, as did the pump and filtration equipment. Further repair is not anticipated within the six-year study period.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

H. ACCESSIBILITY ISSUES

H10 Accessibility

Introduction

As a publicly accessible facility, access to and within the building for disabled building users will be governed (where applicable) by the 1991 Americans with Disability Act (ADA) Accessibility Guidelines. Specifically, two areas of the ADA have significant effect on the physical aspects of the Property.

Title I deals with employment discrimination, and requires that employers not discriminate against a disabled person in hiring or employment. This can impact the configuration and features of buildings and those employers are expected to make "reasonable accommodation", including making facilities readily accessible to disabled employees.

Title III requires that public accommodation provide goods and services to disabled patrons on an equal basis with the non-disabled patrons. This title is the part of the Act with perhaps the greatest impact on buildings, which provide public accommodations.

The ADA has provided a benchmark for measuring accessibility, primarily orientated towards new construction. It also provides guidance for modification of existing facilities to eliminate barriers to access. This benchmark is the ADA Accessibility Guidelines (ADAAG). The ADAAG was written by the Architectural and Transportation Barriers Compliance Board, and first issued in final form in July 1991. The stated purpose of the guidelines is to ensure that newly constructed facilities and altered portions of existing facilities covered by the ADA are readily accessible to disabled persons.

This report has been based upon the ADAAG issued in July 1991. Discussion has been made by the Architectural and Transportation Barriers Compliance Board for modification to the presently enforceable ADAAG. The details and enforcement date of these modifications have yet to be released. In light of this information, we recommend that prior to conducting any improvement, advice is sought from legal counsel and current guidelines be adhered to.

Regulatory implementation of the ADA includes the following prioritizes for barrier removal in existing facilities:

- **Accessible Entrances.** Providing access from public sidewalks, parking or public transportation that enables disabled individuals to enter the facility.
- **Access to Goods and Services.** Providing access to areas where goods and services are made available to the public.
- **Usability of Restrooms.** Providing access to restroom facilities.
- **Removal of Remaining Barriers.** Providing access to the goods, services, facilities, privileges, advantages, or accommodations.

Applicability

The ADA in its purist form relates only to facilities occupied or significantly altered after March 13, 1991. For facilities with Certificates of Occupancy issued prior to March 13, 1991 and not significantly altered after this date, the ADA is seen as a "good practice guide" with a requirement to complete accessibility upgrades typically made by civil suit and employee / user request.

The building received its initial Certificate of Occupancy prior to the March 13, 1991 implementation of the ADA and has not been subject to major renovation since this date. As a result under the current use, the building and related features enjoys a grandfathered code status and is not required to complete accessibility upgrades. However, as a good practice guide we have identified projects that would be required to bring the building and related elements into compliance with the ADAAG.

Accessibility Considerations

Accessible Entrances

The first consideration of the ADAAG relates to measures that will enable individuals with disabilities to physically approach and enter a place of public accommodation. The priority of "getting through the door" recognizes that providing actual physical access to a facility from public sidewalks, public transportation, or parking, is generally preferable to any alternative arrangement in terms of both business efficiency and the dignity of individuals with disabilities. In general terms this can mean exterior access to the building.

Persons traveling to the building by public transportation, specifically, arriving by bus will arrive at stops along 8th Street SE, approximately two blocks to the east, and Pennsylvania Avenue SE, approximately two blocks to the south. The nearest Metrorail station is the Eastern Market Station, which is approximately 0.17 miles to the southeast.

Pedestrians wishing to access the building are able to access through the main entrance or at the ground floor entrances (reference Photograph 6 in Appendix C). This provides compliant access to the building.

Based upon our review, access to the building and site systems is largely compliant.

Accessible Parking

There are seven marked parking spaces. However, no spaces were marked for use by disabled building users and no signage was provided. A curb ramp is provided adjacent to the parking spaces. One accessible parking space should be signed and marked as part of the routine operational repair budget.

Accessible Drop-Off and Pick-Up Areas

Accessible drop-off and pick-up areas were not provided. If passenger drop-off areas were provided, they must be accessible and an accessible route must connect each accessible drop-off area with the accessible entrance(s). Curb ramps must be provided if the drop-off area is next to a curb and raised sidewalk.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

Access to Goods & Services

The second consideration relates to measures that will enable individuals with disabilities to access areas within the Property that provides goods and services.

Accessible Routes and Amenities

Horizontal and Vertical Circulation

There are no passenger elevators in the building.

Door Widths and Signage

Section 4.1 (Minimum Requirements) of the ADAAG states that when accessible entrances are not all accessible then the inaccessible entrances shall have directional signage to indicate the route to the nearest accessible entrance. The building did not contain directional signage. Section 4.13 of the ADAAG (Doors) states that doorways shall have a minimum clear opening of 32-inches. The building doorways meet this requirement, with a minimum clear opening width of 33-inches.

The ADAAG requires that signs that identify permanent rooms and spaces, such as those identifying restrooms and exits or providing classroom numbers, must have Braille and raised letters or numbers, so that they may be read visually or tactilely. The signs must also meet specific requirements for mounting location, color contrast, and non-glare surface. Signs used to identify restrooms and other permanent rooms and spaces within the building appeared to meet these requirements (reference Photograph 34 in Appendix C).

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

Usability of Restrooms

The third priority emphasizes those measures that will provide individuals with disabilities with access to restroom facilities. The building contained one set of men's and women's restrooms and one set of men's and women's showers/locker rooms. The restrooms and showers/locker rooms were generally compliant with the ADAAG, having been renovated in 2008 (reference Photographs 35 and 36 in Appendix C).

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

Removal of Remaining Barriers

Drinking Fountains

Wall-mounted water fountains are provided near the men's and women's restrooms. The drinking fountains generally complied with Section 4.15 of the ADAAG.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

I. HAZARDOUS MATERIALS

I10 Hazardous Materials

Faithful+Gould was not requested to perform an environmental assessment of the Property and has not performed sampling or testing of materials as part of our assessment. However, as part of our assessment we noted materials that may be hazardous.

We did not note any potentially hazardous building materials. However, our evaluation consisted of a limited-scope visual assessment without the completion of sampling or destructive analysis. The true condition of the hazardous materials and the extent of the hazard they present will only be known after the completion of a more-in depth analysis.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

1. We recommend that an appropriately qualified environmental scientist be retained to test the suspected environmental hazards. Our opinion of cost for this work is \$5,000 in 2010 (40 hours at \$125 per hour).

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

J. ENVIRONMENTAL ANALYSIS

J10 LEED Analysis

LEED INTRODUCTION

The Property was evaluated using the Leadership in Energy and Environmental Design for Existing Buildings: Operations and Maintenance (LEED-EB) rating system to determine the required upgrades necessary to achieve LEED certified status.

LEED-EB is intended to maximize a building's operational efficiency while minimizing environmental impacts. As a consensus-based system for certifying green building performance, operations, and maintenance, LEED-EB provides a means for property managers, portfolio owners, and service providers to lower operational costs, while increasing occupant productivity in an environmentally responsible manner.

The LEED-EB Rating System is a set of voluntary performance standards for the upgrades and operation of buildings not undergoing major renovations. It provides sustainable guidelines for building operations, periodic upgrades of building systems, minor space use changes and building processes.

LEED-EB addresses exterior building and site maintenance programs, efficient and optimized use of water and energy, purchasing of environmentally preferred products, waste stream management and ongoing indoor environmental quality (IEQ). In addition, LEED-EB provides sustainable guidelines for whole-building cleaning and maintenance, recycling programs and systems upgrades to improve building energy, water, IEQ and materials use.

To achieve LEED-EB certification, buildings must meet all prerequisites in the Rating System and a minimum of 34 points. The flexibility of the Rating System allows building owners, managers and practitioners to determine which credits to pursue based on performance goals. LEED-EB Operations and Maintenance ratings are awarded according to the following point thresholds:

- Certified 34–42 points
- Silver 43–50 points
- Gold 51–67 points
- Platinum 65–92 points

To determine any improved operational procedures or facility upgrades required for the Property to achieve LEED certification, we first established the current, or existing, numerical rating of the Property. We then compared this numerical value to the range of minimum points required to achieve LEED certification. To determine the current point value of the Property, we used the LEED for Existing Buildings: Operations and Management project checklist. This checklist allows an existing building to score a maximum of 92 points under the following six categories:

- Sustainable Sites (SS) - 12 Possible Points
- Water Efficiency (WE) - 10 Possible Points
- Energy & Atmosphere (EA) - 30 Possible Points

- Materials & Resources (MR) - 14 Possible Points
- Indoor Environmental Quality (IEQ) - 19 Possible Points
- Innovation in Operation, Upgrades and Maintenance (IO) - 7 Possible Points

The available credits, credits achieved and credits not achieved are shown in the attached LEED for Existing Buildings: Operations and Management Project Checklist. The following section, LEED Evaluation, is based on this data.

LEED EVALUATION

MINIMUM PROGRAM REQUIREMENTS

- The building must be fully occupied for at least 12 months preceding certification application; at least 75% of the floor area must be physically occupied at normal capacity and the corresponding building systems shall operate normally for a year.
- The project scope must include 100% of the total floor area of each building in the certification application, with the following exception: If operations are under separate management control for a portion of the building, up to 10% of its floor area may be excluded for that reason. Other exemptions are prohibited.
- The building must be in compliance with federal, state, and local environmental laws and regulations, including but not limited to those addressing asbestos, PCBs, water discharge, and water management.

At present, the percentage of physically occupied space within the building appears to be at 100% and therefore appears to meet the Minimum Program Requirements for LEED EB certification. The following sections will identify the areas in which the buildings can gain credits to become certified.

PREREQUISITE CREDITS

To be eligible achieve LEED Certified status, the building is required to meet all the prerequisite criteria. The following prerequisites are still to be achieved (refer to the LEED for Existing Buildings: Operations and Management Project Checklist):

Water Efficiency (WE) Prerequisite 1: Minimum Indoor Plumbing Fixture and Fitting Efficiency.

To achieve this prerequisite, potable water usage must be reduced to the level of or below the designated baseline for the building. The baseline is designated as 120% of the water usage that would occur if all the plumbing fixtures met the International Plumbing Code (IPC) 2006 fixture and fitting performance requirements. This baseline applies as the last major plumbing renovation was after 1993.

Energy & Atmosphere (EA) Prerequisite 1 – Minimum Efficiency Best Management Practices: Planning, Documentation and Opportunity Assessment.

This prerequisite can be achieved by documenting the operations of the building, and preparing systems narratives that describe the electrical and mechanical systems and the preventative maintenance required for them.

EA Prerequisite 2 – Minimum Energy Efficiency Performance

To achieve this prerequisite, the building is required to score a minimum EPA rating of 69 using the Energy Star Portfolio Manager tool.

EA Prerequisite 3 – Refrigerant Management: Ozone Protection

To achieve this prerequisite, evidence must be submitted indicating that the HVAC&R base building systems do not contain CFC-based refrigerants. If the current systems do contain CFC-based refrigerants, a phase out plan must be created and implemented or a third party audit is required to calculate whether the systems' replacement is economically feasible.

Materials & Resources (MR) Prerequisite 1 – Sustainable Purchasing Policy

This prerequisite requires a sustainable purchasing policy is implemented for the building and site. This policy should include the on-going consumables as illustrated in MR Credit 1, and at least one further Sustainable purchasing credit, such as MR Credit 2: Sustainable Purchasing – Durable Goods.

MR Prerequisite 2 – Solid Waste Management Policy

This prerequisite can be achieved by providing a policy that identifies the requirements to achieve MR Credits 7, 8 and 9 which cover Ongoing Consumables, Durable Goods and Facility Alterations and Additions respectively. The prerequisite requires only policies, not actual sustainable performance, with the exception of the recycling of all mercury containing lamps.

Indoor Environmental Quality (EQ) Prerequisite 1 – Outdoor Air Introduction and Exhaust Systems

To achieve this prerequisite, evidence is required that the supply of outdoor air ventilation meets the rate required by ASHRAE 62.1-2007 Ventilation Rate Procedure under all normal operating conditions. Additionally; all air handlers are required to be measured for this prerequisite. A HVAC maintenance program is required to ensure the proper operations and maintenance of HVAC components, and testing and maintenance of all the building exhaust systems, including bathroom, shower, kitchen and parking exhaust systems is also required.

EQ Prerequisite 2 – Environmental Tobacco Smoke (ETS) Control

To ensure this prerequisite is achieved, the designated smoking areas need to be located 25 feet from building entries, outdoor air intakes and operable windows.

Indoor Environmental Quality (EQ) Prerequisite 3 – Green Cleaning Policy

The policy required for this prerequisite covers the following points: the purchase of sustainable cleaning products and equipment, the implementation of Standard Operating Procedures (SOPs) for the cleaning of the building, hand hygiene strategies, chemical storage and handling standards, and staffing and training requirements for the maintenance personnel of the building.

The prerequisites indicated above are all feasibly achievable with building improvements and the adoption of sustainable building operations and maintenance policies.

CURRENT LEED CREDITS

At the time of assessment, the building was appeared to be eligible for 2 LEED Credits based on the conditions observed and discussions with the building managers.

Recent renovation of the showers/locker rooms at the Property has potentially allowed 2 points to be gained in the Water Efficiency section by installing water efficient fixtures. To achieve these credits, the new plumbing fixtures should reduce water consumption by at least 20% of the current base line water usage. For the Property, this would mean the building's plumbing fixtures and fittings must meet the requirements of the International Plumbing Code (IPC) 2006 Edition. It appears that the newly installed fixtures meet these requirements

CREDITS AVAILABLE THROUGH RECOMMENDED IMPROVEMENTS

The recommendations included in the LEED for Existing Buildings: Operations and Management Project Checklist provide opportunity for modifications to be made to the building or its operation in order to achieve LEED credits. This section will identify credits that can be gained for the building with the work recommended in the report and operations and maintenance policy and procedural changes. No credits are available through recommended improvements.

CREDITS AVAILABLE THROUGH STRATEGIC POLICY AND BEST PRACTICE

This section addresses the credits to be gained in operations and maintenance procedures which are not mentioned otherwise in our recommendations. These procedures include credits to be gained through the building management implementing Policies and Procedures that establish a more environmentally sustainable and efficient way to operate and maintain the building. The following credits appear within this category:

Sustainable Sites (SS) Credit 2 – Building Exterior and Hardscape Management Plan

One point is available for the implementation of a management plan that reduces harmful chemical use, energy waste, water waste, air pollution, solid waste, and/or chemical runoff in the management of the building exterior and Hardscape areas. The plan is to cover the maintenance equipment, snow and ice removal, cleaning of building exterior, paints and sealants on building exterior and the cleaning of sidewalks, pavement and other Hardscape.

SS Credit 3 – Integrated Pest Management, Erosion Control and Landscape Management Plan

To achieve the point available for this credit, the building must have in place an environmentally sensitive management plan for the site's natural components. The plan must employ best management practices that significantly reduce harmful chemical use, energy waste, water waste, air pollution, solid waste, and/or chemical runoff (e.g., gasoline, oil, antifreeze, salts) compared with standard practices.

Water Efficiency (WE) 1.1 & 1.2: Water Performance Measurement

One point may be achieved by regularly recording the water usage data and producing monthly and annual data summaries from the existing water meter. A second point may be achieved by installing permanent sub-meters to meter irrigation, indoor plumbing fixtures and fittings, cooling towers, and / or domestic hot water systems.

Energy & Atmosphere (EA) Credit 1.0 – Optimize Energy Performance

To achieve the points available for this credit, the building has to achieve an EPA rating of at least 69 using the Energy Star's Portfolio Manager Tool. This achievement is worth two points and also satisfies EA Prerequisite 1. This credit is worth up to 15 points for the highest rated buildings. For the purposes of this LEED assessment, an estimate of 5 points has been designated for this credit at the Property.

EA Credit 2.1 – Existing Building Commissioning: Investigation & Analysis

The Investigation and Analysis portion of this credit is worth 2 points. In this phase, a plan for the commissioning or recommissioning of the major energy systems of the building is developed. The investigation and analysis process for the phase is to be conducted. From this process, an energy use breakdown is documented and the operational problems that affect occupants' comfort and energy use, and operational solutions for the problems are developed. Potential capital improvements for cost effective energy savings are identified and a cost benefit analysis for each potential improvement is prepared.

EA Credit 2.2 – Existing Building Commissioning: Implementation

This is the second phase of EA Credit 2.1 and is worth 2 points. The no or low cost improvements identified in the Investigation and Analysis process are implemented and the financial benefits and costs (anticipated or observed) of the improvements are demonstrated. Training should be made available for management staff to build awareness and skills in a broad range of sustainable building operations topics. This training will help develop a 'green' mentality for future operations and maintenance decisions. Sections from the investigation and analysis phase should be updated where necessary.

EA Credit 2.3 – Existing Building Commissioning: Ongoing Commissioning

The third phase of the Existing Building Commissioning credit is intended to ensure continual commissioning of the building. This section is worth 2 points. An ongoing commissioning program is developed and implemented to address future operating problems when they arise. A written plan to summarize the overall commissioning cycle for the building by equipment or building system group is also developed. The plan will cover a period of no more than 24 months and includes an equipment list, performance measurement frequency for each item and steps to respond to deviation from expected performance levels. Half of the projected work items should be completed in the first commissioning cycle prior to application for LEED certification. The building operation plan should also be updated diligently when changes to the building occur.

EA Credit 6 – Emissions Reduction Reporting

To achieve the point in this credit, building performance parameters must be identified that reduce conventional energy use and emissions, quantify those reductions, and report them to a formal tracking program.

Materials & Resources (MR) Credit 1.1 to 1.3 – Sustainable Purchasing: Ongoing Consumables

To achieve the points available for this credit, the building has to maintain a sustainable purchasing program covering materials with a low cost per unit that are regularly used and replaced through the course of business. These materials include, but are not limited to, paper (printing or copy paper, notebooks, notepads, envelopes), toner cartridges, binders, batteries, and desk accessories but exclude food and beverages. For the purposes of this assessment, an estimate of 80% of total purchases has been made, scoring three points.

MR Credit 2.1 and 2.2 – Sustainable Purchasing: Durable Goods

Two possible points are available for the adoption of a sustainable purchasing program for high unit cost items, infrequently replaced and purchases that may require capital program outlays.

- Credit 2.1 is concerned with the purchases of electronic equipment such as computers, printers, monitors and appliances such as refrigerators and dishwashers (lists not exhaustive). To achieve this credit, 40% of purchases are required to be sustainable.
- Credit 2.2 is concerned with the purchases of furniture to achieve this credit, 40% of purchases are required to be sustainable.

For the purposes of this assessment, a conservative estimate of 40% has been made, scoring two points.

MR Credit 3.0 – Sustainable Purchasing: Facility Alterations and Additions

One point is available for maintaining a sustainable purchasing program for materials used for renovations, demolitions, retrofits and new construction additions. This applies to items or elements permanently or semi-permanently attached to the building, such as floor and ceiling finishes, and structural components such as wall studs (list not exhaustive). To achieve the credit, 50% of purchases are required to be sustainable.

MR Credit 4.0 – Sustainable Purchasing: Reduced Mercury in Lamps

This credit is a requirement as part of MR Prerequisite 1: Sustainable Purchasing Policy. To achieve the points in this credit, a sustainable purchasing policy needs is implemented for all lamp purchases in the study period and beyond. To achieve the maximum of two points, at least 90% of mercury containing lamps must have a maximum content of 70-picograms per lumen-hour. This credit does not cover the lamps currently installed within the building.

MR Credit 6.0 – Solid Waste Management: Waste Stream Audit

One credit is available for conducting an audit of the entire facilities ongoing consumables waste stream. This data should be used to calculate a baseline usage and identify opportunities for sustainability improvements, for example recycling or waste diversion.

MR Credit 7.1 and 7.2 – Solid Waste Management: Ongoing Consumables

Two points have been targeted for the reuse, recycling or composting of 70% of the ongoing consumables waste stream. The ongoing consumables are the same as listed previously, with the inclusion of glass, plastics, cardboard, old corrugated cardboard, food waste and metals. A program to divert at least 80% of batteries from the trash should also be implemented.

MR Credit 8 – Solid Waste Management: Durable Goods

One point is available for recycling or reusing 75% of the durable goods as previously outlined entering the waste stream. The durable goods waste stream is defined as goods leaving the project building, site and organization that have fully depreciated and reached the end of their useful lives for normal business operations.

MR Credit 9 – Solid Waste Management: Facility Alterations and Additions

One point is available for diverting at least 70% of construction waste generated from facility alterations and additions from disposal to landfill and incineration facilities. This, as with credit MR 3.0, applies to items permanently or semi-permanently attached to the building. MEP components and special items such as elevators are excluded from this credit.

Indoor Environmental Quality (EQ) Credit 1.1 – IAQ Best Management Practices: IAQ Management Program

To achieve the available one point for this credit, an indoor air quality (IAQ) management plan should be developed and implemented based on EPA's "Indoor Air Quality Building Education and Assessment Model (I-BEAM)," EPA Reference Number 402-C-01-001, December 2002..

EQ Credit 1.5 – IAQ Best Management Practices: Management for Facility Alterations and Additions

To achieve the available one point for this credit, an indoor air quality (IAQ) management plan should be developed and implemented for the construction and occupancy phases for facility alterations and additions. The plan should include containment control strategies that include protecting the HVAC system, controlling pollutant sources, interrupting pathways for contamination, enforcing proper housekeeping, and coordinating schedules to minimize disruption.

EQ Credit 2.1 – Occupant Comfort: Occupant Survey

To achieve the available one point for this credit, an occupant survey should be undertaken to collect anonymous responses about thermal comfort, acoustics, indoor air quality, lighting levels and other occupant comfort issues. The survey should be a representative sample of 30% of the buildings occupants. The survey results and corrective actions to address comfort issues should be documented.

EQ Credit 3.1 – Green Cleaning: High-Performance Cleaning Program

There is a point available for having a sustainable cleaning policy that addresses; Appropriate staffing levels, a training plan for maintenance personnel in the hazards, use, maintenance, disposal and recycling of cleaning chemicals, dispensing equipment and packaging; the use of chemical concentrates; the use of sustainable cleaning materials, products, equipment, janitorial paper products and trash bags; the use of sustainable cleaning and hard floor and carpet care products meeting the sustainability criteria outlined in EQ Credit 3.4 – 3.6 and the use of cleaning equipment meeting the sustainability criteria outlined in EQ Credit 3.7.

EQ Credit 3.2 and 3.3 – Green Cleaning: Custodial Effectiveness Assessment

To achieve the 2 possible points for this credit the building must score 2 or less in an audit with APPA Leadership in Educational Facilities “Custodial Staffing Guidelines” which will determine the appearance level of the facility. The audit must cover a representative sample of the different types of spaces within the building such as, offices, corridors etc.

EQ Credit 3.4 to 3.6 – Green Cleaning: Purchase of Sustainable Cleaning Products and Materials

The points in this credit are awarded for the percentage of cleaning products and materials purchase over the course of the study period that meet the sustainable criteria. One point is awarded each 30% of purchases. For the purposes of this assessment, we have targeted 60% of purchases to meet the criteria, scoring the building 2 points.

EQ Credit 3.7 – Green Cleaning: Sustainable Cleaning Equipment

To achieve the point available for this credit, the building has to have in place a program for the use of janitorial equipment that reduces building contaminants and minimizes environmental impact. The cleaning equipment program must meet sustainable criteria such as operation at less than 70dBA, “Green Label”, Carpet and Rug Institute’s “Seal of Approval”, and equipped with environmentally friendly batteries.

EQ Credit 3.9 - Green Cleaning: Indoor Integrated Pest Management

A point is available for developing, implementing, and maintaining an indoor integrated pest management (IPM) plan, defined as managing indoor pests in a way that protects human health and the surrounding environment and that improves economic returns through the most effective, least-risk option. IPM calls for using least-toxic chemical pesticides, minimum use of chemicals, use only in targeted locations, and use only for targeted species.

Innovation in Operations (IO) Credit 3 – Documenting Sustainable Building Cost Impacts

Two points may be gained by documenting overall building operating costs for the previous five years and track changes in overall building operating costs over the performance period. This should include tracking building operating costs to identify any positive impacts related to the sustainable performance improvements to the building and its operations.

SUMMARY

The recommendations provided above identify the necessary steps required to achieve certified status at this present time, using the LEED-Existing Buildings Operations and Maintenance rating system. A summary table showing potential LEED points is included on the following page.

Projected Expenditures

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2009)

No required capital expenditures are anticipated at this time.

Priority 3 (2010 – 2013)

No required capital expenditures are anticipated at this time.

Priority 4 (2014)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2009)

1. We recommend budgeting \$30,000 for analysis and submittal of documentation required for the LEED certification process.

Priority 3 (2010 – 2013)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2014)

No required maintenance expenditures are anticipated at this time.

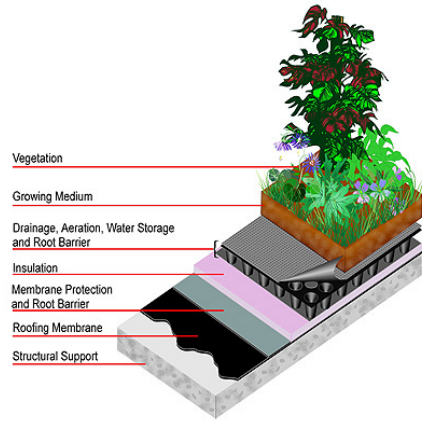
SUMMARY									
	Possible Maximum	92	points						
	LEED CERTIFIED Minimum	34	points						
	LEED SILVER Minimum	43	points						
	LEED GOLD Minimum	51	points						
	LEED PLATINUM Minimum	68	points						
		Pts	Existing Condition (1)		From FCA (2)		To LEED Certification (3)		
	Group Name	Possible	Detail/No of Credits	Notes	Detail/No of Credits	Notes	Detail/No of Credits	Notes	
	Sustainable Sites	12	0		0		2		
	Water Efficiency	10	2		0		2		
	Energy and Atmosphere	30	0		0		12		
	Materials and Resources	14	0		0		13		
	Indoor Environmental Quality	19	0		0		10		
	Innovation in Operation, Upgrades & Maint.	7	0		0		2		
	Existing Condition (1)	92	2	Subtotal	0	Subtotal	41	Subtotal	
	From FCA (2)		0						
	Total after FCA		2						
	To LEED Certification (3)		41						
	LEED TOTAL POINTS		43	SILVER					
	(1) Existing Condition	Credits observed based on the facilities' condition and operations and maintenance procedures in place at the time of assessment.							
	(2) From Facility Condition Assessment (FCA)	Credits that can be achieved through the implementation of recommended improvements included in this FCA.							
	(3) To LEED Certification	Credits that can be achieved through the implementation of operations and maintenance policies and procedures, without the use of FCA requirements.							

J20 Green Roof Feasibility

Faithful+Gould was requested to conduct a study for the design and installation of a green roof system to support low impact development solutions. This study consisted of an evaluation of the existing roof structure, subsurface components (i.e. roof system), drainage systems and structural load limits.

Introduction

A green roof system consists of a landscaped system installed over the waterproofing membrane of a low-slope roof. For the Property, this would consist of a series of landscaped elements installed over the top of the existing low-slope roof areas. The sectional detail of a typical green roof system is as detailed in the attached plan, and includes the roof membrane, a root repellent system, a drainage system, filter cloth, an irrigation system and a lightweight growing medium and plants.



Options

The Property is faced with two principal options when deciding the type of green roof system to be installed.

1. Option one consists of an "Extensive Green Roof". This type of system consists of a Soil Depth (Shallow depth) of 0.8 – 6 inches, an imposed weight on the structural systems of 15 – 50 lbs/square foot (depending on the soil depth and type of substrate used) and require limited maintenance. The system is usually not meant to be publicly accessible except for maintenance purposes. Plant selection and diversity is based on hardiness and climate adaptability with plants typically chosen because of their shallow root systems. The variety of plants that can be used is limited compared to an intensive green roof. The growing medium consists of mineral-based mixture including gravel sand crushed brick, soil, lightweight expanded clay aggregate, peat, and organic matter.
2. Option two consists of "Intensive Green Roofs". This system is similar to a traditional garden or manicured landscape Intensive green roofs are meant to be accessible or showcased for public use. Soil Depth is typically 6 inches or more (typically 8 – 24 inches). Weight load on the structure is significant at 80-150 lbs/square foot. Maintenance is aggressive with the system requiring regular watering and landscaping. This system also requires a complex irrigation and drainage system

Based upon the configuration and extensive nature of the roof areas, no requirement for the green roof to be accessible for public use, and anticipated cost and construction constraints, we have recommended that if installed, an Extensive Green Roof be selected.

Existing Roof Structure and Structural Load Limits

The low-slope roofs are installed over corrugated metal decks. Structural drawings failed to detail the designed live and dead loadings of the roof structures. Based upon the structural systems, we anticipate that the roof structures were designed with a superimposed live load of 20 pounds per square foot (psf), a snow load of 20 square foot and a dead load of 80 square foot. Assuming installation of an Extensive Green Roof at all roof areas, this would add approximately 17 (dry) to 30 (wet) square foot to a roof's load. Based upon the anticipated design loadings and even with the installation of the recovery roof system, the roof structure should be of adequate capacity to allow installation of a green roof system.

Roof System & Drainage Systems

The building contained well-drained low-slope roof areas. The roof systems are in generally good condition, of a root repellent membrane, adequately drained and generally suitable for the installation of a green roof system.

Installation Costs

The cost for the installation of green roofs can vary considerably and will include the following major components:

- Consultant fees: Structural analysis, designers, landscapers, and contractors fees
- Structural analysis recommendations: Safety and repairs needed before installation of green roof.
- Irrigation system: Drip system (permanently installed) or sprinkler and drainage costs
- Garden materials: Growing medium, plants, fertilizers, substrate containers (extensive green roofs), and pavers (to prevent spread of fire and allow accessibility).
- Plants.
- Maintenance: Initial (extensive green roofs) and sometimes long-term (intensive green roofs) maintenance costs depending on the size and type of green roof installed. For example, extensive green roofs regular maintenance is only needed for 6-12 months (after plants are established) after which watering a weeding once a season is sufficient.
- Professional assistance and permits.

Based upon these costs and the project constraints (i.e. multiple roof areas), we recommend budgeting an allowance of \$273,024 (\$12 per square foot). We have also included an allowance of 10% of the capital cost of completing the work. This is based upon the cost factors detailed within Table J-20.

Table J-20 Green Roof Cost Factors

Component	Costs Per Square Foot	Cost Factors
Green Roof System (drainage, filtering, paving, growing medium)	\$7	Growing medium (type and depth), pavers (size and type), and square footage of the green roof (project size)
Plants	\$2	Season of installation, type of plants, and size of seeds being planted
Installation and Labor	\$3	Equipment necessary to move materials on to the roof (E.g. crane, if rented is: \$ 4,000.00 /day), project size, design, and planting methods

J30 Energy Efficiency

Faithful+Gould was requested to identify areas of the building that could be improved to increase energy efficiency. Buildings make up 40% of total U.S. energy consumption (including two-thirds of the country's electricity) and 16% of total U.S. water consumption. They are responsible for 40% of all material flows and produce 15%– 40% of the waste in landfills within the D.C. market.

Older buildings such as the Property contribute significantly to this energy use and therefore provide a potential source to reduce energy use through improving energy efficiency.

The majority of the Property appears to have been retrofitted with energy efficient F32T8 lamps with electronic ballasts.

Required Capital Expenditures:

Priority 1 (Immediate)

No required capital expenditures are anticipated at this time.

Priority 2 (2010)

No required capital expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required capital expenditures are anticipated at this time.

Priority 4 (2015)

No required capital expenditures are anticipated at this time.

Required Maintenance Expenditures:

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

No required maintenance expenditures are anticipated at this time.

Priority 3 (2011 – 2014)

No required maintenance expenditures are anticipated at this time.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

Space Utilization Survey




SPACE UTILIZATION SURVEY

Faithful+Gould was requested to develop an occupancy profile for the Property to indicate current utilization of the building. This effort consisted of producing a location and tenant specific inventory of furnishings and people, developing a floor plan for each occupiable floor, and calculating various usable and gross floor area matrixes. The process used to generate these deliverables along with the findings of our study are detailed below.

Inventory & Occupancy Number

Faithful+Gould walked the interior of each occupiable area of the Property, quantified major items of furniture and counted the number of persons contained within those spaces. The intent is that this list will provide an inventory of contained furnishings and details of the number of occupants within each area. Upon completion of our on-site assessment, we entered our findings into a database system that allows sorting by any of the major system elements (i.e. floor, tenant, furniture etc.). The results of this inventory and occupancy profile are included within the following pages. A sample of this sheet is shown below.



By Tenant

Printed: 3/2/2009
Filter: NONE

FEMS/MPD											FEMS/MPD				
Tenant	Space Name	Space ID	Space Use	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Communication Center Annex & New Facility	Shower	115	Storage	1											
Communication Center Annex & New Facility	MPD Watch Commander	156	Office	1	1	1	2	1	2						
Communication Center Annex & New Facility	Server Room	146	Server	1	0										
Communication Center Annex & New Facility	Server Room	102	Server	1	0										
Communication Center Annex & New Facility	UPS Room	148	Uninterruptible Power Supply	1	0										
Communication Center Annex & New Facility	Kitchen	107	Food Preparation	1	0										3
Communication Center Annex & New Facility	Vending	108	Vending	1	0										
Communication Center Annex & New Facility	Dining	110	Dining	1			15					6			
Communication Center Annex & New Facility	Janitors Closet	132	Storage	1											
Communication Center Annex & New Facility	Conference / SOCC	114	Conference	1	0		12					3			
Communication Center Annex & New Facility	Radio Shop	None	Office	1	4	4	4	2	2		2				
Communication Center Annex & New Facility	Intermediate Distribution Frame Room	118	Telecommunications	1											
Communication Center Annex & New Facility	Electrical Room	119	Electrical Service	1											
Communication Center Annex & New Facility	No Name	120	Vacant	1		2									
Communication Center Annex & New Facility	MPD Captain Office	117	Vacant	1											
Communication Center Annex & New Facility	Chief Operations Unit Fire EMS	125	Office	1	1	1	1	1							
Communication Center Annex & New Facility	Watch Commander Fire EMS	151	Office	1	1	1	1	1							
Communication Center Annex & New Facility	Fire EMS Transcript Room	201	Office	2	1	1	1	1	1						
Communication Center Annex & New Facility	MPD Cell Phone & Pager Unit	111	Office	1	7	7	7				7				
Communication Center Annex & New Facility	Training Classroom / Conference	224	Training	2	0	14	9	0	0			0			

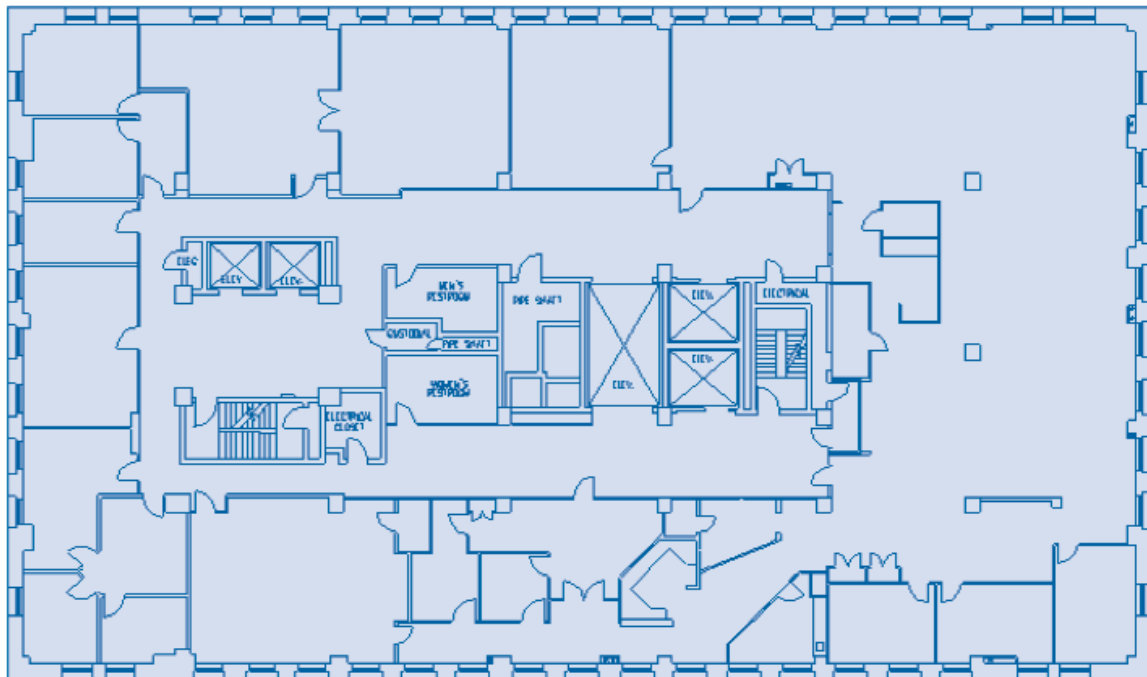
Floor Plans & Area Calculations

In conjunction with the completion of our on-site inventory and occupancy survey, we completed detailed measurements of the building interiors. Measurements were taken to determine the interior dimensions of each room and common area, the interior area of each room, the location of all walls, partitions, doors, and windows, and the location and extent of the building core area, including elevator shafts, toilets, storage area, public corridors and other support areas.

At the conclusion of our on-site measurements we produced space level floor plans of each occupiable level using AutoCAD. Floor plans were utilized to determine the key building measurements detailed below. On-site measurements and floor area calculations were completed in accordance with the PBS National Business Assignment Guide standards and ANSI/BOMA Z65.1-1996.

Gross Floor Area

Gross Measured Area is the total “constructed area” of a building (also referred to as Design Gross). NOTE: In Federal and Leased buildings where the government is the sole tenant, this area is the Total Construction Area. However, in Leased buildings where the government is a partial tenant, the Design Gross is the occupied portion plus the pro rated share of the Common space.



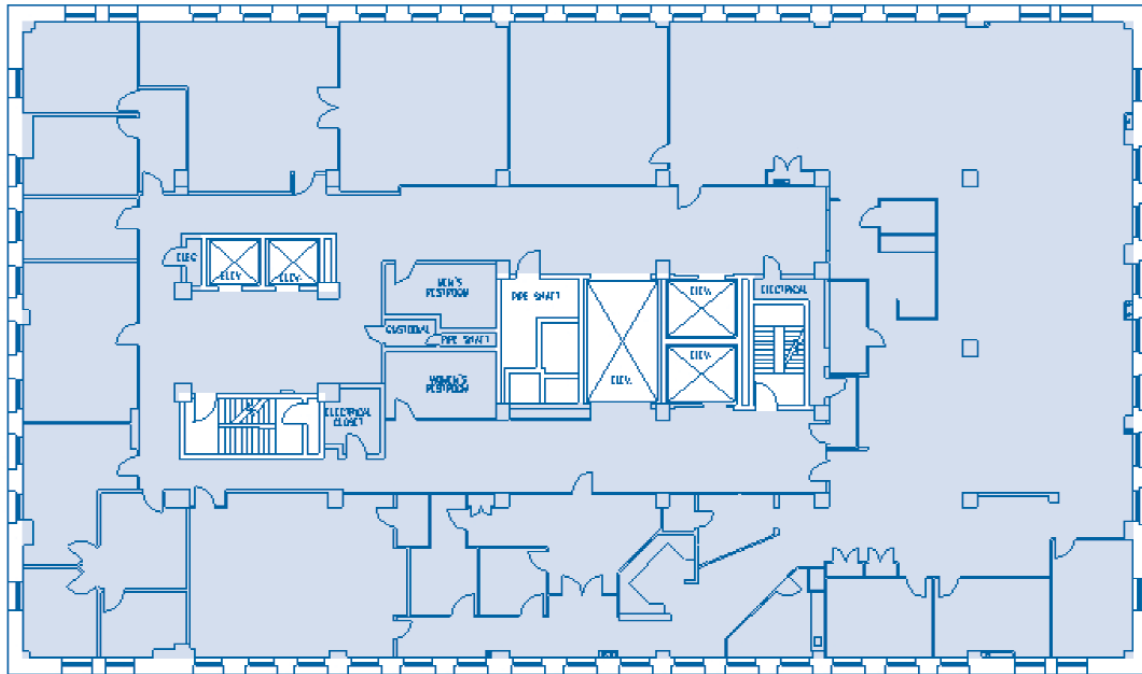
The Gross Measured Area is typically used for measuring building value and/or building costs. It is calculated by measuring to the outside dominant finished surface (without deductions) and adding the sum of all enclosed floors including:

- Basements and Sub-basements;
- Mechanical equipment floors;
- Penthouses;
- Structured parking;

- Crawl space.

Net Rentable Area

Rentable (ANSI Rentable) area is defined as the tenant's usable area plus their share of Building Common area. Non-assignable area(s) are not included in this calculation. Rentable is used to calculate the tenant's rent bill and is calculated as follows: Rentable = Usable area + Building Common.



Building Common

Building Common

Assigned as ANSI Category 02 and according to BOMA the Building Common area is "the areas of a building that provide services or circulation to building tenants but which are not included in the Office or Storage area of any specific tenant. EXCLUDED from Building Common are parking, portions of loading docks outside the building line and major vertical penetrations (see above)." Specific examples and/or illustrations of Building Common are as follows:

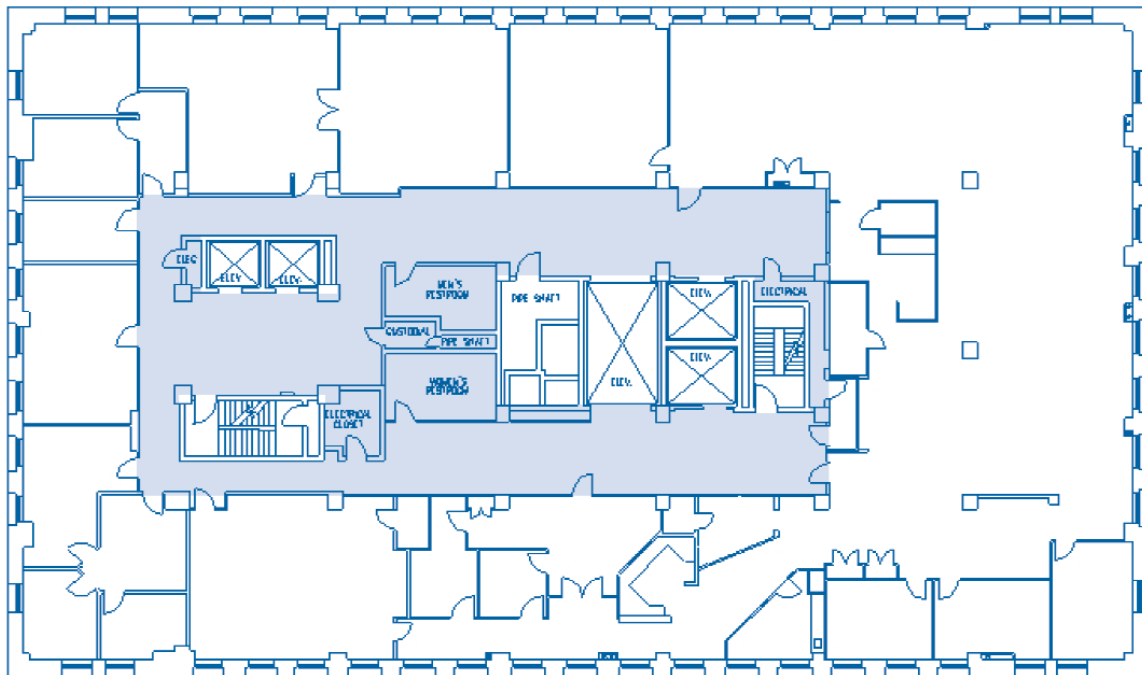
- Public corridors and main auxiliary lobbies used by all tenants in the building;
- Tenant support or security areas such as concierges, security desks and fire control rooms;
- Fully enclosed courtyards within the building line;
- Mechanical and/or telephone rooms that service (support) more than one floor (i.e. the whole building) and are not specialty spaces for a single tenant;
- Public toilets used by all tenants that are required by the Uniform Building Code for the floor where they are located. The public toilet square footage includes the associated plumbing chase and (according to BOMA) are NOT vertical penetrations; and
- Spaces used for the sole purpose of supporting building operations or upkeep, such as:
- Property Management Office (PMO) specifically used to support or service the building in which it is located;

- Spaces used to house or support building operations and maintenance, such as: storage rooms (doors, paint, light bulbs, ceiling tiles...), maintenance offices and contractor space used specifically to support or service the building in which it is located; and
- Guard and building monitoring stations within the building, but are NOT used for other types of office functions.

Floor Common

Assigned as ANSI Category 03 and according to BOMA, the Floor Common Area is "the areas on a floor, such as washrooms, janitorial closets, electrical and telephone rooms, mechanical rooms, elevator lobbies and public corridors that are available primarily for the use of the tenants on that floor." Specific examples and/or illustrations of Floor Common are as follows:

- Horizontal Circulation spaces such as public corridors and elevator lobbies;
- Public toilets (and associated plumbing chases) required by the Uniform Building Code for the floor where they are located; and
- Support spaces such as janitorial closets, electrical, telephone, mechanical and equipment rooms that specifically support the floor on which it is located.

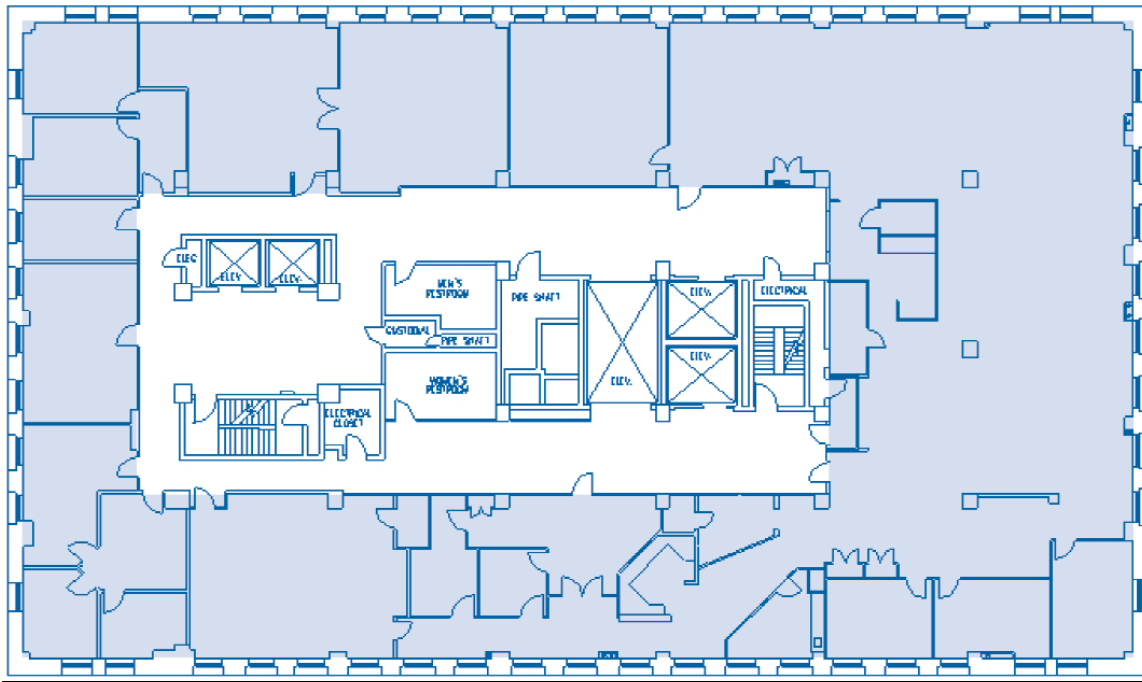


Building Common is calculated by summing all of the following Space Types within a particular building:

- Circulation Horizontal (CRH)
- Mechanical (MCH)
- Toilets (TLT)
- Custodial (CST)

Usable

Usable space (ANSI Usable) is defined as all Assignable and Joint Use space within the building. This is used for calculating the actual space occupied by tenants. The calculation to determine usable square footage is to measure the area(s) enclosed between the Finished Surfaces of Office Areas (ex. the office side of a corridor), the dominant portion or major vertical penetration and the center of partitions that separate office spaces. No deduction is made for columns and projections necessary to the building.



Vertical Penetrations

Assigned as ANSI Category 04 and according to BOMA, Vertical Penetrations are "the areas such as stairs, elevator shafts, flues, pipe shafts, vertical ducts and their enclosing walls are considered vertical penetrations. Atria, lightwells and similar penetrations above the finished floor are also included within this definition." Specific examples and/or illustrations of Vertical Penetrations are as follows:

- Generally, the space must be large enough for a person to fit comfortably through the penetration (approximately 9 square feet);
- The space must be deducted from the floor slab it penetrates—however, sleeved slabs and/or openings for plumbing, electrical or telephone chases are NOT vertical penetrations;
- Examples of common vertical penetrations are:
 - Atrium spaces that are NOT an amenity to a single tenant,
 - Attic space on a mezzanine floor level,
 - Elevator shafts,
 - Incinerator chimneys,
 - Fire egress stairwells,
 - Public and or multi-tenant stairs, and
 - Return/supply air chase; and
- Vertical penetrations built specifically for the private use of a tenant are NOT classified as vertical penetrations

Property Specific Calculations

Gross Floor Area

The Gross Measured Area is calculated by measuring to the **outside** dominant finished surface (without deductions) and adding the sum of all enclosed floors including:

- Basements and Sub-basements;
- Mechanical equipment floors;
- Penthouses;
- Structured parking;
- Crawl space.

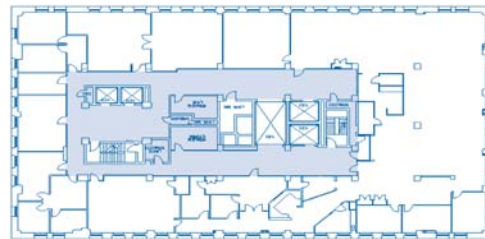
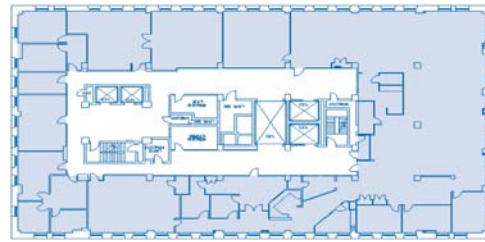
William Rumsey	
Floor Number	Gross Measured Area (SF)
Ground Floor	20,584
TOTAL	20,584

Net Rentable Area

Rentable (ANSI Rentable) area is defined as the tenant's usable area plus their share of Building Common area. Non-assignable area(s) are not included in this calculation. Rentable is used to calculate the tenant's rent bill and is calculated as follows: Rentable = Usable area + Building Common.

Rentable = Usable Area + Building Common

Usable Area = Usable space is defined as all Assignable and Joint Use space within the building. The calculation used to determine usable square footage is to measure the area(s) enclosed between the Finished Surfaces of Office Areas (ex. the office side of a corridor), the dominant portion or major vertical penetration and the center of partitions that separate office spaces. No deduction is made for columns and projections necessary to the building. The area shaded blue on the attached plan is measured. The central core shown in white is not measured.



Building Common = Building common is "the areas of a building that provide services or circulation to building tenants but which are not included in the Office or Storage area of any specific tenant. EXCLUDED from Building Common are parking, portions of loading docks outside the building line and major vertical penetrations.

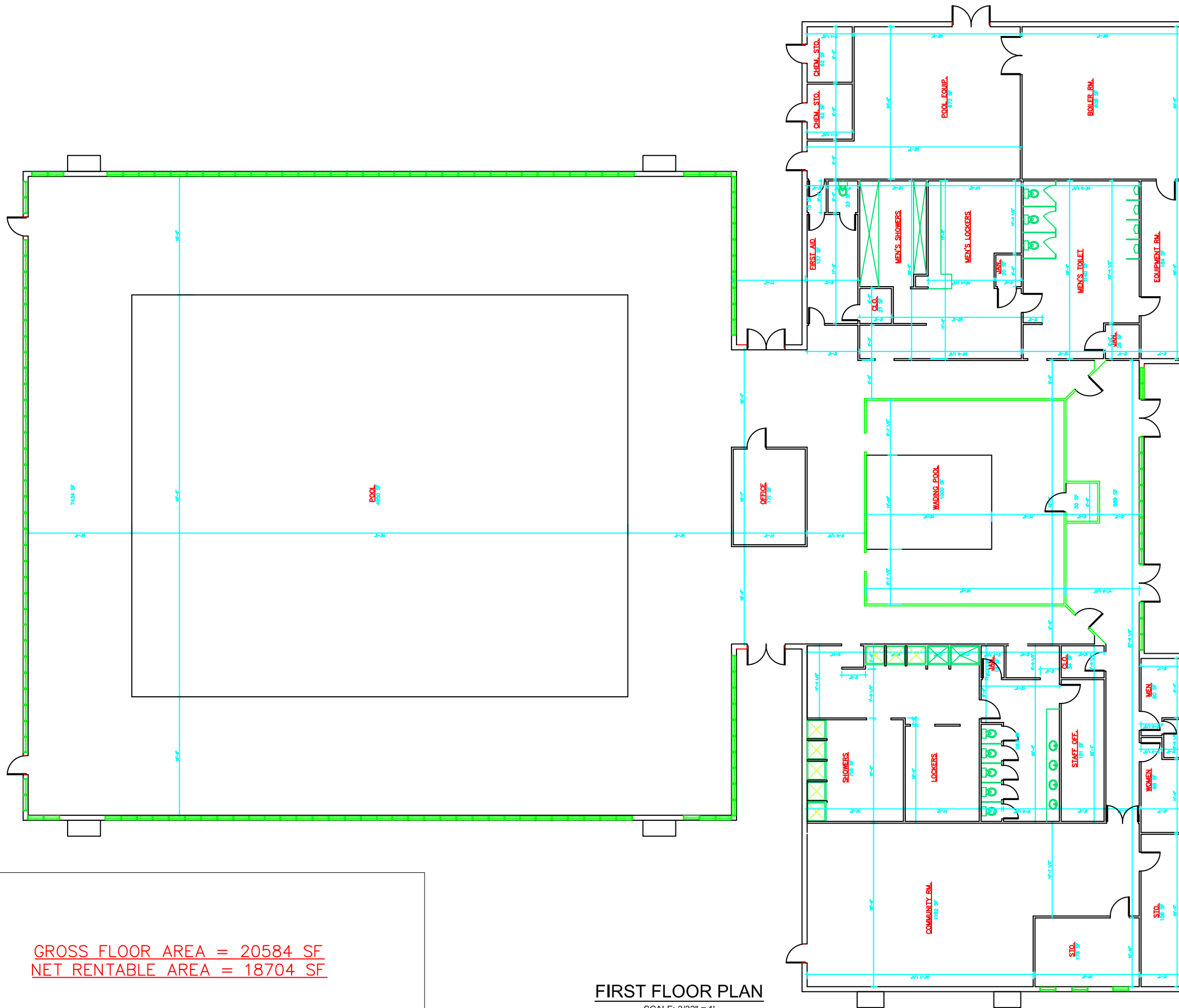
As the building is configured for single tenant use the net rentable area is basically the floor area measured from the interior face of the exterior walls minus the area of the major vertical penetrations. Major vertical penetrations consist of vertical shafts, stairs and chimneys.

Net Rentable Area Calculation

William Rumsey	
Floor Number	Net Rentable Area (SF)
Ground Floor	18,704
TOTAL	18,704

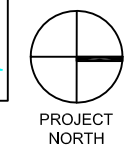
Tenant Profiles & Inventory

The building is occupied by the District of Columbia Department of Parks and Recreation and houses 3 member of staff.



GROSS FLOOR AREA = 20584 SF
 NET RENTABLE AREA = 18704 SF

FIRST FLOOR PLAN
 SCALE: 3/32" = 1'



Project:
 WILLIAM RUMSEY AQUATIC

Sheet No.:
 1 OF 1

Sheet Title:
 A-1

Description:
 FIRST FLOOR PLAN

Inventory and Occupancy

By Building



William Rumsey

Tenant	Tenant ID	Space Name	Space ID	Space Use	Usable					Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
					SF	Floor	# Occ's	Desks	Chairs								
DPR	DPR	Community Room		Community Room	1162	1	0	0	0	0	0	0	0	0	0	0	0
DPR	DPR	First Aid		First Aid	137	1	0	1	2	0	0	0	0	0	0	0	0
DPR	DPR	Office		Office	171	1	2	2	3	0	0	0	0	0	0	0	0
DPR	DPR	Office		Office	30	1	1	1	1	0	0	0	0	0	0	0	0
Total for William Rumsey					1500		3	4	6	0	0	0	0	0	0	0	0
Total for Report					1500		3	4	6	0	0	0	0	0	0	0	0

Appendix A

Six Year Capital Expenditure Forecast

SIX YEAR CAPITAL FORECAST
 William H. Rumsey, Sr. Aquatic Center
 635 North Carolina Avenue SE
 Washington, D.C. 20003

ITEM	EUL	RUL	Unit Cost	Quantity	Unit of Measurement	Priority	Repair / PM	Replace	A/E Serv.	GC Allow.	Immediate	2010	2011	2012	2013	2014	2015	TOTAL
												Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
												Priority 1	Priority 2	Priority 3			Priority 4	
A. SUBSTRUCTURE																		
A10 Foundations																		
No Capital Expenditures are Forecasted																		
SECTION SUBTOTALS =																		\$0
A20 Basement Construction																		
No Capital Expenditures are Forecasted																		
SECTION SUBTOTALS =																		\$0
SUBSTRUCTURE TOTALS =																		\$0
B. SHELL																		
B10 Superstructure																		
No Capital Expenditures are Forecasted																		
SECTION SUBTOTALS =																		\$0
B20 Exterior Closure																		
No Capital Expenditures are Forecasted																		
SECTION SUBTOTALS =																		\$0
B30 Roofing																		
No Capital Expenditures are Forecasted																		
SECTION SUBTOTALS =																		\$0
SHELL TOTALS =																		\$0
C. INTERIORS																		
No Capital Expenditures are Forecasted																		
SECTION SUBTOTALS =																		\$0
INTERIORS TOTALS =																		\$0
D. SERVICES																		
D10 Conveying																		
No Capital Expenditures are Forecasted																		
SECTION SUBTOTALS =																		\$0
D20 Plumbing																		
No Capital Expenditures are Forecasted																		
SECTION SUBTOTALS =																		\$0
D30 HVAC																		
No Capital Expenditures are Forecasted																		
SECTION SUBTOTALS =																		\$0
D40 Fire Protection																		
No Capital Expenditures are Forecasted																		
SECTION SUBTOTALS =																		\$0
D50 Electrical																		
No Capital Expenditures are Forecasted																		
SECTION SUBTOTALS =																		\$0
SERVICES TOTALS =																		\$0

SIX YEAR CAPITAL FORECAST
 William H. Rumsey, Sr. Aquatic Center
 635 North Carolina Avenue SE
 Washington, D.C. 20003

ITEM	EUL	RUL	Unit Cost	Quantity	Unit of Measurement	Priority	Repair / PM	Replace	A/E Serv.	GC Allow.	Immediate	2010	2011	2012	2013	2014	2015	TOTAL	
												Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
												Priority 1	Priority 2	Priority 3			Priority 4		
E. FURNISHINGS & EQUIPMENT																			
E10 Equipment																			
No Capital Expenditures are Forecasted																			
E20 Furnishings																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																		\$0	
FURNISHINGS & EQUIPMENT TOTALS =																		\$0	
F. SPECIAL CONSTRUCTION & DEMOLITION																			
F10 Special Construction																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																		\$0	
SPECIAL CONSTRUCTION & DEMOLITION TOTALS =																		\$0	
G. BUILDING SITEWORK																			
G10 Site Systems																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																		\$0	
BUILDING SITEWORK TOTALS =																		\$0	
H. ACCESSIBILITY																			
H10 Site Improvements																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																		\$0	
ACCESSIBILITY TOTALS =																		\$0	
I. HAZARDOUS MATERIALS																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																		\$0	
HAZARDOUS MATERIALS TOTALS =																		\$0	
J. ENVIRONMENTAL ANALYSIS																			
J10 LEED Analysis																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																		\$0	
J20 Green Roof Feasibility																			
1	Install Green Roof	N/A	N/A	\$12.00	22,752	SF	2						\$273,024					\$273,024	
	A/E Consulting Services (A/E Serv.) - 10%	N/A	N/A	10.00%	N/A	Percent	2	Applicable to item 1 above						\$27,302					\$27,302
SECTION SUBTOTALS =																		\$300,326	
ENVIRONMENTAL ANALYSIS TOTALS =																		\$300,326	
TOTALS												\$0	\$0	\$300,326	\$0	\$0	\$0	\$0	\$300,326
TOTALS (w/ Inflation @ 4%)												\$0	\$0	\$312,339	\$0	\$0	\$0	\$0	\$312,339

Total Capital Expenditures (current \$)	\$300,326
Total Maintenance Expenditures (current \$)	\$248,000
Subtotal	\$548,326
Less Environmental - Capital	-\$300,326
Less Environmental - Maintenance	-\$30,000
Expenditures Considered by FCI (Exc. Environ. Analysis, Includes Maintenance)	\$218,000
Current Replacement Value (current \$)	\$3,488,800
Facility Condition Index (FCI)	0.06

Appendix B

Six Year Maintenance Forecast



SIX YEAR MAINTENANCE FORECAST
William H. Rumsey, Sr. Aquatic Center
635 North Carolina Avenue SE
Washington, D.C. 20003

ITEM	EUL	RUL	Unit Cost	Quantity	Unit of Measurement	Priority	Repair / PM	Replace	A/E Serv.	GC Allow.	Immediate	2010	2011	2012	2013	2014	2015	TOTAL
												Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
												Priority 1	Priority 2	Priority 3			Priority 4	
A. SUBSTRUCTURE																		
A10 Foundations																		
No Maintenance Expenditures are Forecasted																		
												SECTION SUBTOTALS =						\$0
A20 Basement Construction																		
No Maintenance Expenditures are Forecasted																		
												SECTION SUBTOTALS =						\$0
												SUBSTRUCTURE TOTALS =						\$0
B. SHELL																		
B10 Superstructure																		
No Maintenance Expenditures are Forecasted																		
												SECTION SUBTOTALS =						\$0
B20 Exterior Closure																		
1 + 2 + 3	Window and Door Life-Extension Maintenance	N/A	N/A	\$2,500.00	1	LS	varies	√				\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$15,000
												SECTION SUBTOTALS =						\$15,000
B30 Roofing																		
1	Roof Replacement	30	0	\$15.00	12,800	SF	3					\$192,000						\$192,000
2 + 3 + 4	Roof Life-Extension Maintenance	N/A	N/A	\$2,500.00	1	LS	varies	√				\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$15,000
												SECTION SUBTOTALS =						\$192,000
												SHELL TOTALS =						\$207,000
C. INTERIORS																		
No Maintenance Expenditures are Forecasted																		
												SECTION SUBTOTALS =						\$0
												INTERIORS TOTALS =						\$0
D. SERVICES																		
D10 Conveying																		
No Maintenance Expenditures are Forecasted																		
												SECTION SUBTOTALS =						\$0
D20 Plumbing																		
No Maintenance Expenditures are Forecasted																		
												SECTION SUBTOTALS =						\$0
D30 HVAC																		
No Maintenance Expenditures are Forecasted																		
												SECTION SUBTOTALS =						\$0
D40 Fire Protection																		
No Maintenance Expenditures are Forecasted																		
												SECTION SUBTOTALS =						\$0
D50 Electrical																		
1 + 2	Electrical Preventative Maintenance	3	0	\$3,000.00	1	LS	varies	√				\$3,000			\$3,000			\$6,000
												SECTION SUBTOTALS =						\$6,000
												SERVICES TOTALS =						\$6,000

SIX YEAR MAINTENANCE FORECAST
William H. Rumsey, Sr. Aquatic Center
635 North Carolina Avenue SE
Washington, D.C. 20003

ITEM	EUL	RUL	Unit Cost	Quantity	Unit of Measure	Priority	Repair / PM	Replace	A/E Serv.	GC Allow.	Immediate	2010	2011	2012	2013	2014	2015	TOTAL	
												Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
												Priority 1	Priority 2	Priority 3			Priority 4		
E. FURNISHINGS & EQUIPMENT																			
E10 Equipment																			
No Maintenance Expenditures are Forecasted																			
E20 Furnishings																			
No Maintenance Expenditures are Forecasted																			
												SECTION SUBTOTALS =						\$0	
												FURNISHINGS & EQUIPMENT TOTALS =						\$0	
F. SPECIAL CONSTRUCTION																			
F10 Special Construction																			
No Maintenance Expenditures are Forecasted																			
												SECTION SUBTOTALS =						\$0	
												SPECIAL CONSTRUCTION & DEMOLITION TOTALS =						\$0	
G. BUILDING SITEWORK																			
G10 Site Systems																			
No Maintenance Expenditures are Forecasted																			
												SECTION SUBTOTALS =						\$0	
												BUILDING SITEWORK TOTALS =						\$0	
H. ACCESSIBILITY																			
H10																			
No Maintenance Expenditures are Forecasted																			
												SECTION SUBTOTALS =						\$0	
												ACCESSIBILITY TOTALS =						\$0	
I. HAZARDOUS MATERIALS																			
1	Environmental Evaluation	N/A	N/A	\$125.00	40	Hours	2					\$5,000						\$5,000	
												SECTION SUBTOTALS =						\$5,000	
												HAZARDOUS MATERIALS TOTALS =						\$5,000	
J. ENVIRONMENTAL ANALYSIS																			
J10 LEED Analysis																			
1	Implement Policies to Achieve Silver Certification	N/A	N/A	\$30,000.00	1	LS	2					\$30,000						\$30,000	
												SECTION SUBTOTALS =						\$30,000	
												ENVIRONMENTAL ANALYSIS TOTALS =						\$30,000	
TOTALS												\$0	\$235,000	\$5,000	\$5,000	\$8,000	\$5,000	\$5,000	\$248,000
TOTALS (w/ Inflation @ 4%)												\$0	\$235,000	\$5,200	\$5,408	\$8,999	\$5,849	\$6,083	\$266,539

Total Expenditures (current \$)

\$248,000

Appendix C

Photographs



Photograph Number 1

CMU walls supporting metal joists and corrugated metal roof deck



Photograph Number 2

Partial north elevation with clay brick veneer



Photograph Number 3

Partial east elevation

Photograph Number 4

Natorium west elevation



Photograph Number 5

Natorium west elevation



Photograph Number 6

Main entrance on north elevation





Photograph Number 7

Aggregate panels with elastomeric sealant



Photograph Number 8

Sealant at window-to-brick joint in good condition



Photograph Number 9

Rusted steel lintel in need of repainting

Photograph Number 10



Lower roof consisting of a three-ply asphaltic-based built-up roofing system with a hot-mopped granular-surface styrene-butadiene-styrene (SBS) modified bitumen cap sheet

Photograph Number 11



Upper roof over natatorium comprised of a coal tar built-up roofing system with a pea gravel surface

Photograph Number 12



Main entrance lobby with clay tile floors and suspended ceiling tiles

Photograph Number 13

Community room with clay tile flooring, painted CMU walls and suspended ceiling tiles



Photograph Number 14

Newly renovated locker room



Photograph Number 15

Newly renovated restrooms





Photograph Number 16

Newly renovated showers



Photograph Number 17

3" domestic water meter



Photograph Number 18

Natural gas-fired domestic water heater



Photograph Number 19

Interior roof drain with bonnet strainer



Photograph Number 20

Rooftop HVAC unit serving north wing of building



Photograph Number 21

Dehumidification system serving the natatorium



Photograph Number 22

Fire alarm control panel located in main electrical room



Photograph Number 23

Main electrical equipment



Photograph Number 24

Video surveillance system located in pool office



Photograph Number 25

Perimeter brick wall with chain link fencing



Photograph Number 26

Parking spaces near northeast corner of Property



Photograph Number 27

Plaza area in front of building



Photograph Number 28

Competition swimming pool



Photograph Number 29

Children's wading pool



Photograph Number 30

Boiler for competition pool



Photograph Number 31

Boiler for children's wading pool



Photograph Number 32

Sand filters for competition pool



Photograph Number 33

Sand filter for children's wading pool

Photograph Number 34

Typical signage with Braille lettering meeting ADA
Accessibility Guidelines



Photograph Number 35

Handicap accessible toilet stall



Photograph Number 36

Handicap accessible lavatory sinks



Appendix D

Inventory & Checklist

System	Detail	Yes / No	Comment
Foundation	Settlement, alignment changes or cracks	No	
	Moisture penetration	No	
	Surface material deterioration	No	
	Openings deterioration	No	
Basement	Cracking or arching	N/A	
	Wall deterioration / seepage	N/A	
	Inadequate ventilation	N/A	
Superstructure	Overall alignment	OK	
	Deflection	No	
	Surface condition – cracks	No	
	Scaling, spalls, and pop-outs	No	
	Stains	No	
	Exposed reinforcing	No	
	Type		Concrete floors with masonry walls
	Loading capacity	Unknown	
Building Exterior	Overall appearance	Good	
	Paint or surface treatment	Fair	
	Caulking	Good	
	Windows and doors fittings	Fair	
	Flashing conditions	Fair	
	Hardware conditions	Fair	
	Material integrity	Fair	
	Cracks	No	
	Evidence of moisture	No	
	Construction joints	Fair	
	Pointing of brick and stone works	Fair	
	Paving (walks and steps)	Yes	
	Type of paving	Concrete slab; Aggregate	
	Handicap accessibility	Yes	
	Railings	N/A	
	Exterior lighting	Yes	
	Peeling paint	No	
Stains	No		
Dislocation	No		
Roof ventilators	Yes		
Roofing	Water tightness (evidence of leaks)	No	No leaks
	Standing water	No	
	Roofing surface (blisters, wrinkles, cracks, holes, tears, alligating, fish mouths, ballast)	Good	

System	Detail	Yes / No	Comment
	Insulation	Yes	
	Flashing (deterioration, holes or damages, open joints)	Good	
	Drainage (alignment, corrosion)	Good	
	Parapets	No	
	Downspouts & gutters	Yes	
	Type of roofing	Metal Panel, Built-up	
	Drains, downspouts – Nos. & size	Lower Roof: (14) 4" Upper Roof: (8) 4"	
	Loading limits	Information not available	
	Roof Top Equipment	Yes	
Building Interior	Floors, walls and ceilings (stains, holes, tears, etc.)	Good	
	Restrooms	Good	
	Stairwells	No	
	Surface damage (missing tiles and floor coverings)	No	
Site	Paving (walks and driveways)	Yes	Aggregate
	Fountains	No	
	Parking (number of spaces & areas)	7 spaces	
	Fences	Yes	6'-8" perimeter brick wall topped with 4'-0" chain link fence
	Transformers	Yes	Pad-mounted
	Underground storage tank	Unknown	
Mechanical / Plumbing	Leaks, dripping, running faucets and valves	No	
	Pipe insulation	Fair	
	Hangers, supports and clamps	Fair	
	Drain and waste connections	Fair	
	Adequate flow	Yes	
Mechanical / HVAC	Condition of motors, fans, drive assembly and pumps – rust and corrosion	Good	
	Wiring and electrical controls	Good	
	Thermal insulation	Good	
	Air cooled condensers	Good	
	Compressors	Good	
	Air distributors	Good	
	Supply and return ducts – corrosion, cracks and air leaks	No	

System	Detail	Yes / No	Comment
	Burner assembly	Good	
	Dampers, louvers and grilles	Good	
	Heating and cooling capacity	Good	
	Exhaust system	Good	
	Air intake system	Good	
	No. of Window Air Conditioning Units		0
Electrical Service and Distribution	Transformer arching or burning	No	
	Exposed wiring	No	
	Missing breakers	No	
	Panel – marked	Yes	
	Incoming conduits – marked	No	
	Panel schedule	Yes	
	Emergency generator	No	
	Auto start and switch over	No	
	Cooling and exhaust	No	
	Exit signs	Yes	
	Emergency lighting	Yes	
Public address system	No		
Conveying System (elevators and escalators)	Overall appearance	No elevator or escalator provided	
	Door operation		
	Control systems		
	Noise		
	Code compliance		
	Handicap access		
	Carriage lighting		
	Signage		
Floor alignment			
Fire Resistive Requirements	Exterior bearing walls	Yes	2 hours
	Interior bearing walls	Yes	1 hour
	Exterior non bearing walls	Yes	1 hour
	Structural frame	Yes	2 hours
	Permanent partitions	Yes	0 hours
	Shaft enclosures	No	
	Floor & ceiling / floor	Yes	0 hours
	Exterior doors & windows	No	0 hours
Stairway construction	No		
Fire Alarm Required	Provided	Yes	
Draft Stops	Provided	No	
Doors (Analyze doors for ratings in area separations, occupancy separations, and rated exitways)	Number	39	
	Size	See schedule	
	Sealant – Type and LF	Variable thickness Elastomeric Sealant	
	Glazing	Single	

System	Detail	Yes / No	Comment
	Location	North, south, east and west elevations; Interior	
	Type	Wood and Steel Frame; Hollow Core, Solid Core;	
	Hardware	Mechanical Lock Sets; Lever Handles	
Windows	Number	336	
	Size	See schedule	
	Sealant – Type and LF	Variable Thickness Elastomeric Sealant	
	Glazing	Single and Double	
	Location	North, south, east and west elevations	
	Type	Fixed and hopper	
	Hardware	NA	
Access Control	Card Reader	No	
	Type of access control	Keyed locks	
	X-Ray machine	No	
	Interior Cameras	No	
	Exterior Cameras, Location	No	
	Intrusion Detection Systems	Yes	
	Emergency Call Boxes	No	
Fire Stops	Provided	No	
Exits (From Building)	Number Required	2	Minimum, from each area of building
	Number Provided	9	
	Distance Required	200	
	Distance Provided	< 200	
	Width Required	36 inches	Minimum for any component
	Width Provided	36 inches	Minimum for surveyed components
Fire Extinguishers	Number Provided	3	
	Number Required		
Automatic Fire Suppression System	Provided	No	
	Required	No	
Public Access	Accessible Parking	Yes	
	Floor or Ground Surfaces	Aggregate	
	Curbs / ramps	Yes	
	Elevators	N/A	
	Stairways including Treads, Risers, Nosing and Handrails	N/A	
Entry Doors and Doorways	32" Clear opening	Yes	

System	Detail	Yes / No	Comment
	Clearances	Yes	
	½" Maximum height threshold	Yes	
	Door hardware (lever type)	Yes	
	Door – opening force	Yes	
Toilet Rooms	Wheelchair Turning Space	Yes	
	Water Closets & Toilet Compartments Including Location, Clearances, Height, Size & Accessories	Yes	
	Grab Bars (42" long on side wall, 24" long on back wall)	Yes	
	Urinals (17" max)	Yes	
	Lavatories and Sinks (34" Max. high)	Yes	
Drinking Fountains	Clearances	Yes	
	Spout Height (36")	Yes	
Alarms	Audible Alarms	Yes	
	Visual Alarms	Yes	
Signage	Signs	Good	

Project Name/Address: William H. Rumsey, Sr. Aquatic Center, 635 North Carolina Avenue SE, Washington, DC 20003

Mechanical Equipment List

Equipment Type/Use	Model Name/No.	Serial No.	Manufacturer's Name	Capacity/Rating	Installation Date	Comments
Rooftop Unit	48HJF015G-691AA	4902F92476	Carrier	15 Ton	2002	
Rooftop Unit	48HJE007-651HY	4702G50126	Carrier	7 Ton	2002	
Rooftop Unit	RAUCD10EBN1320D0000	C02K09436	Trane	10 Ton	2002	
Rooftop Unit	50EZ-024-311TP	4308G31279	Carrier	2 Ton	2008	
Dehumidification System	E-NDHU1I-31630-DX/IP-3-C	202217	Heatex	N/A	2002	

Project Name/Address: William H. Rumsey, Sr. Aquatic Center, 635 North Carolina Avenue SE, Washington, DC 20003

Plumbing Equipment List

Equipment Type/Use	Model Name/No.	Serial No.	Manufacturer's Name	Capacity/Rating	Installation Date	Comments
Water Heater	1250 P 900A-TP	1202109132	PVI	90 gallon; 1,000,000 BTUH	2002	
Boiler	CPN0991	C08H00207204	IBR	N/A	2002	
EnergyRite Pool and Spa Heater	ERN 252-A	D08H002075	Lochinvar	990,000	2002	Competition Pool
EnergyRite Pool and Spa Heater	Not Available	Not Available	Lochinvar	250,000	2002	Children's Pool
Pool Filter	Ecko Systems	Not Available	Nemato Corporation	15.3 Square Feet	2002	Competition Pool
Pool Filter	Triton II	Not Available	Pentair	7.06 Square Feet	2002	Children's Pool

Project Name/Address: William H. Rumsey, Sr. Aquatic Center, 635 North Carolina Avenue SE, Washington, DC 20003

Electrical Equipment List

Equipment Type/Use	Model Name/No.	Serial No.	Manufacturer's Name	Capacity/Rating	Installation Date	Comments
Main Panel	N/A	N/A	Cutler-Hammer	1,600 A; 208/120 V	2003	

Appendix E

Preventative Maintenance Recommendations

1.0. PM PROCEDURE NAME

1.1. William Rumsey, Sr. Rooftop Unit Quarterly Mechanical PM

2.0. GENERAL EQUIPMENT DESCRIPTION

2.1. AC Unit, Roof Top (Various Manufacturers)

3.0. MATERIAL REQUIRED

3.1. Filter

3.2. Fan Belts

3.3. Bearing Grease

4.0. EQUIPMENT REQUIRED

4.1. Hand tools

5.0. POWER REQUIRED

5.1. N/A

6.0. SAFETY WARNINGS OR SPECIAL PRECAUTIONS

6.1. Personnel servicing this equipment must use appropriate Personal Protective Equipment (PPE).

6.2. WARNING: Lockout / Tagout procedures must be followed prior to servicing equipment.

7.0. OTHER REFERENCE DOCUMENTS

7.1. N/A

8.0. PREVENTIVE MAINTENANCE PROCESS

8.1. Check belts on the return fans for wear, cracking, fraying and proper tension. The belt should deflect its width when pressed firmly inward at a point midway between the pulleys.

8.2. Check the supply fan system for all indications of wear, unbalance, looseness, proper belt tension, over-heating, and requirement for paint and/or lubrication. Check for broken or rusty springs on the fan/motor base. Check flexible coupling and all seals and gaskets.

8.3. Check that all drains (5) are free of debris and flow freely.

8.4. Check that all seven (7) of the vapor-proof marine lights are operational, firmly mounted, and have no broken globes.

8.5. Lube bearings as required.

8.6. Check pre-cooling, pre-heating, chilled water coils for rust, dirt, and/or corrosive build-up and leaks as required.

8.7. Check for proper operation of the return outside air dampers.

8.8. Inspect electrical connections

9.0. CLEANUP

9.1. Thoroughly clean work area once PM has been completed. Dispose of all waste and contaminated material properly.

10.0. REVISION (Employee, Date, Description)
10.1. Created : F+G 3-3-09

1.0. PM PROCEDURE NAME

1.1. William Rumsey, Sr. Domestic Water Heater Monthly Mechanical PM

2.0. GENERAL EQUIPMENT DESCRIPTION

2.1. Domestic Water Heater, Gas Fired (Various Manufacturers)

3.0. MATERIAL REQUIRED

- 3.1. Honeywell aquastat
- 3.2. Spark plug
- 3.3. Ceramic insulator
- 3.4. Bearings
- 3.5. Lubricant
- 3.6. Mechanical seal
- 3.7. Boiler chemicals as directed by competent water treatment company

4.0. EQUIPMENT REQUIRED

- 4.1. Hand tools
- 4.2. Calibrated temperature pressure gauge
- 4.3. Automatic pressure reducing regulator
- 4.4. Tubing cutters
- 4.5. Small acetylene outfit
- 4.6. Combustion testing equipment
- 4.7. Hydrostatic pump and safety valve gag
- 4.8. Vacuum cleaner wet/dry type

5.0. POWER REQUIRED

- 5.1. Standard Electrical Power Outlet

6.0. SAFETY WARNINGS OR SPECIAL PRECAUTIONS

6.1. Personnel servicing this equipment must use appropriate Personal Protective Equipment (PPE).

6.2. WARNING: Lockout / Tagout procedures must be followed prior to servicing equipment.

6.3. Obtain and review manufacturer's instructions. Follow manufacturer's instructions or procedures if different to these instructions or procedures. Obtain and review ASME Boiler and Pressure Vessel Codes for boilers.

6.4. Review Standard Operating Procedures for Controlling Hazardous Energy Sources.

6.5. If materials to be worked on are known or suspected to contain asbestos, check the building's asbestos management plan to see if they have been tested for asbestos. If they are suspect but have not been tested, have them tested. Manage asbestos in accordance with the plan.

6.6. Account for all tools and materials before closing boiler.

7.0. OTHER REFERENCE DOCUMENTS

- 7.1. Lockout / Tagout Procedure
- 7.2. Material Safety Data Sheets (MSDS)
- 7.3. Manufacturer's Manuals
- 7.4. ASME Boiler and Pressure Vessel Codes

8.0. PREVENTIVE MAINTENANCE PROCESS

- 8.1. Check all natural gas lines for leakage around valves and fittings.
- 8.2. Check that all valves operate properly and are leak free.
- 8.3. Check all water tank plumbing for leaks, corrosion, and/or alkali build-up. Replace gaskets, seals and/or bolts where needed.
- 8.4. Clean or flush all sediment or scale deposits from hot water storage tank.
- 8.5. Check/adjust the pilot. The main burner should light smoothly from pilot and burn with a blue flame with a minimum of yellow tips.
- 8.6. Visually check main burner for plugged orifices and proper flame adjustment. Clean orifices and/or adjust for a blue flame, void of yellow tips if necessary.
- 8.7. Check the safety relief valve and associated discharge piping for proper operation an installation.
- 8.8. Check that any temperature gages are functional and in good repair. Replace any that are not.
- 8.9. Check any hot water recirculation pumps for excessive vibration, bearing noise, over heating or leakage around seals or fittings.
- 8.10. Check that all hangers are free of missing or loose fasteners, and are properly supporting piping and equipment.
- 8.11. Inspect insulation around hot water tank and piping. Replace or repair as necessary.
- 8.12. Keep thermostat at 120 degrees.

9.0. CLEANUP

- 9.1. Thoroughly clean work area once PM has been completed. Dispose of all waste and contaminated material properly.

10.0. REVISION (Employee, Date, Description)

- 10.1. Created: F+G 3-3-09

Appendix F

Scope of Services, Document Review and Limitations



SCOPE OF SERVICES & DOCUMENT REVIEW

Faithful+Gould was requested to complete a Facility Condition Assessment and Space Utilization Study of the site and site improvements of the subject Property. This report was completed with the principal intention of identifying current conditions, recommending corrective actions and developing an occupancy profile to indicate current utilization of occupiable space.

The scope of services for the Facility Condition Assessment included performing a visual assessment of the interior, exterior and site components of the subject Property. The scope of services was governed by Faithful+Gould's revised proposal for Facility Condition Assessment as authorized under Purchase Order 287952 by Ms. Diane B. Wooden of the District of Columbia Construction, Design and Building Renovation Commodity Group on January 3, 2009.

The primary purpose of the Facility Condition Assessment was to identify visually apparent deficiencies in the building and site and to determine the general extent of capital and maintenance projects required to facilitate continued use of the building within its current use type. The evaluation included site visits to observe the building and site systems, interviewing available building management and maintenance personnel, and reviewing available maintenance systems, design and construction documents and plans, and public records.

The primary purpose of the Space Utilization Study was to provide an occupancy profile for the facility to indicate current utilization of occupiable space. This effort included providing an inventory of furnishings and occupants, and producing dimensioned floor plans of each occupied floor.

The Facility Condition Assessment was conducted in general accordance with industry standards and the American Society for Testing and Materials (ASTM) Standard E 2018-08 Standard Guide for Property Condition Assessment: Baseline Property Condition Assessment Process.

The Space Utilization Study was conducted in general accordance with industry standards and standards produced by the General Service Administration's Public Buildings Service and as contained within the ANSI/BOMA Z65.1-1996 Standard Method for Measuring Floor Area in Office Buildings.

Facility Condition Assessment

We performed a visual non-destructive assessment of the interior, exterior and site components of the Property, including the following major components and systems:

1.0 Facility Attributes: During our field evaluation, we collected and verified real estate and certain environmental information in order to prepare an accurate building information system. The information collected included the following:

- A. Building address, site location with at least two street references
- B. Lot, square and ward numbers
- C. Gross square foot area of building and land
- D. Assessed building and land values
- E. Occupancy status – occupied, vacant or partially occupied
- F. Building designation – historic or non-historic
- G. Building location – within or not within a historic district
- H. Environmental details as provided within OPM supplied checklist

2.0 Condition Assessment: We conducted a condition assessment of the Property. The condition assessment consisted of a detailed on-site evaluation completed to determine or verify and document the condition of all building major systems and components. The condition assessment consisted of the following elements:

- A. **Collection of Baseline Facilities Data:** We conducted a field survey of the Property for the purpose of updating and validating existing architectural floor plans. Updated floor plans are included within the report appendix.

-
- B. **Facility Existing Condition Data:** We identified the facility status data (i.e. age, historical status, construction type, square footage, materials, user/tenants, and functional areas such as offices, mechanical / electrical rooms, etc.); architectural floor plans; and site plan/general development map data (surface man-made site features, and real estate boundary maps).
- C. **Condition Assessment Survey:** As part of the condition assessment survey we:
- i. Provided a description of systems along with manufacturer's name for each major piece of equipment and the estimate age.
 - ii. Identified the current condition of the facilities and their components. This included a description of the deficiencies indicating what the deficiency is, how much it is, and where it exists.
 - iii. We provided a description of the recommended corrective measures, the associated cost, the remaining service life of the building component or system if the deficiency is left uncorrected. We specifically included quantitative information on recommended work to include opinions of cost and recommended date of accomplishment. This information was presented within the OPM supplied cost spreadsheets.
 - iv. We prioritized the criticality of necessary repair, renovation and or replacement with estimated cost forecast by the projected year.
 - v. We furnished the survey findings in the format supplied to us by OPM.
 - vi. We quantified deferred maintenance and furnish estimated costs within the format supplied to us by OPM.
 - vii. We provided an annual preventative maintenance schedule for the installed equipment.
- 2.1 **Drawing and Maintenance Review:** We reviewed any available construction documents (plans, specifications, etc.) and maintenance and repair logs prior to visually assessing the buildings. In addition, we interviewed available maintenance personnel to determine the maintenance / repair history, and know defects in each building.
- 2.2 **Included Components:** We surveyed the physical components and systems of the identified facilities. These will include the following for:
- 2.2.1 **Substructure:** We visually evaluated the condition of the foundation systems, slab-on-grade, basement excavation and walls, and other applicable substructure elements. We evaluated for signs of distress (cracking, displacement, insect infiltration etc.) and have documented and photographed our findings.
- 2.2.2 **Core and Shell:** We visually evaluated the condition of the superstructure (floors, bearing walls, columns, beams, roofs and related structures); exterior closure (exterior walls, windows and doors); and roofing systems. The evaluation included assessment of the accessible shell components and ancillary elements for signs of distress and documentation and photographing of our findings. This included cracking, displacement, and connection adequacy, continuity of flashing and seals, and evidence of other types of distress. We also checked for flashing and connections for proper drainage on walls and for the condition and proper placement of expansion joints. When assessing the roofing, we accessed the roofs to visually observe the condition of the system and any accessories and details to include flashings and penetrations. We also documented existing warranties, replacement costs and remaining useful life.
- 2.2.3 **Interiors:** We visually evaluated the interior construction (interior partitions, doors and specialties such as toilet accessories, lockers, storage shelving, etc.); stairway and finishes; and interior finishes (paint and other wall finishes, flooring and interior ceiling finishes and systems). The evaluation included documenting and photographing the condition of the interior finishes.

2.2.4 Services: We visually evaluated the condition of the conveyor systems (elevators, and other vertical transportation and conveying systems), plumbing systems (fixtures, domestic water distribution, sanitary waste, rain water drainage and special plumbing systems such as gasoline dispensing, compressed air, etc.); HVAC Systems to include heat generation, rejection, distribution and transfer systems; HVAC controls and instrumentations and other HVAC support elements; Fire detection and suppression systems (alarm systems, monitoring systems, sprinkler systems, standpipe and hose systems, pumps, fire protection specialties, and special fire suppression systems); Electrical Systems (service and distribution, feeder type), lighting and branch wiring, communications and security systems, emergency generators, UPS systems, electrical controls and instrumentation, service points, meters and capacities.

For each item of service equipment we visually evaluated the conditions and code compliance of the service and photographed and documented our findings. For the conveying systems (where provided), we reviewed available maintenance records and reports on the equipment and evaluate the performance and anticipated service life of the systems. For plumbing, HVAC and electrical systems, we observed the age, condition and adequacy of the capacity and status of maintenance of these systems and have documented their condition, deficiencies and code violations. We also commented on renovations to the system that would prove beneficial to their overall efficiency or performance, and have stated the estimated expected remaining useful service life of each major piece of equipment with and without repair. For fire and life-safety systems, we listed all major components and identified those systems that require upgrades. Findings were supported with photographs.

2.2.5 Equipment and Furnishings: We evaluated the condition of fixed components of the structure and non-moveable furnishings, office or support equipment. Representative examples include security vaults, commercial laundry equipment, fixed audio-visual equipment, parking control equipment, kitchen and food service equipment, fixed casework and seating etc. For each applicable piece of equipment or furnishing that we visually evaluated, we documented and photographed conditions, and produced a tabulated inventory of the equipment to include rating / capacity, make and manufacturer, year of manufacture, and location.

2.2.6 Other Building Construction: We visually evaluated items of special construction and systems (i.e. special security systems, incinerators, kennels, storage tanks, building automation systems, special purpose rooms etc.).

2.2.7 Building Site Improvements: We evaluated the condition of site improvements to include grading and drainage, slope stabilization, protection and erosion control; roadways and parking lots (pavement, curb, gutter, steps etc.); site development (fences and gates, recreational facilities, exterior furniture, bridges, flag poles, exterior signage etc.); and landscaping (planting, irrigation systems, etc.). For each element we visually evaluated, photographed and documented our findings. For grading and drainage, we observed the site systems for removal of storm water, and identified any areas that appear under-capacity or distressed. We also evaluated the site with respect to flood potential. We reviewed and documented the condition of the pavements, curb and gutter, sidewalks and plazas, retaining walls, fences, signs, landscaping and irrigation systems and will present our finding supplemented with photographs.

2.2.8 Accessibility: We completed an evaluation of the Property to determine compliance with applicable accessibility guidelines. This evaluation included a site review to determine major barriers to access to and into the building, through the building, to restroom facilities, and to other service areas within the building.

2.2.9 Safety / Security: We considered the facility as a whole when completing this evaluation. The evaluation included evaluation of the performance and current ability of lower-level wall / window system with regard to blast shrapnel protection. The evaluation also included a safety and security review to determine and document hazards and needed improvements in all areas of the building and surrounding site.

2.2.10 Access Control: We evaluated, documented and photographed the condition of doors and windows, including hardware and other components; intrusion detection systems; and the access control

system. We also identified a pattern in faulty hardware systems and controls, and have conducted a review of potential points of access and determined and documented the effectiveness of the access control system.

2.2.11 Hazardous Materials: We identified for further analysis building components and stored materials suspected of containing hazardous materials such as asbestos, lead, petroleum products etc.

2.2.12 Equipment List: The report includes an equipment list in tabulated form indicating the make, model, manufacturer's name, capacity / rating and installation date of each principal item of contained equipment.

At the completion of our on-site activities we issued this report of Facility Condition Assessment. The report includes detailed descriptions of installed systems, conditions and recommendations. The report also includes expenditures of anticipated capital and maintenance expenditures required over the next six-years. Expenditures are detailed in the year we recommend that they be completed and are prioritized as follows:

- Priority 1 – Critical (immediate) need that may prevent the continued use of the facility or is required to address issues of life safety and/or code compliance;
- Priority 2 – Potentially Critical (one to two years) need addressing system, equipment or component failure that, if not addressed promptly, may prohibit the continued use of the facility;
- Priority 3 – Necessary (but not yet Critical, three to five years) need that, if left unaddressed, will result in a portion or all of the facility to be unfit for continued use;
- Priority 4 – Recommended (six years and greater) need that represents a good practice improvement or action based on the observed conditions or the expected useful life of the component or system.

The scope of services under which the Facility Condition Assessment was completed was visual in nature and not intended to be destructive to the Property to gain access to hidden conditions. We did not perform any destructive testing or uncover or expose any system members. We have documented the type and extent of visually apparent defects in the systems in order to perform the condition assessment.

The scope of services includes only those items specifically indicated. The evaluation does not include any environmental services such as (without limitation) sampling, testing, or evaluation of asbestos, lead-based paint, lead-in-water, indoor air quality, PCB's, radon, mold, or any other potentially hazard materials, air-borne toxins or issues not outlined in the previous scope of services.

Space Utilization

We completed a space utilization survey to consist of providing an occupancy profile for the facility to indicate current utilization of occupiable space. Pertinent information collected will included:

A floor plan for each facility. The floor plan produced indicates interior dimensions and room areas for each floor. We also calculated the gross floor area versus occupiable (net rentable) area of each individual floor. Our determination of gross floor area and occupiable area was governed by the guidelines and methodology established by the General Service Administration's Public Buildings Service and as contained within the ANSI/BOMA Z65.1-1996 Standard Method for Measuring Floor Area in Office Buildings.

- Building core area, including elevator shafts, toilets, storage area, public corridors, and other support areas
- The location of all walls, partitions, doors, and windows
- Location and size of all occupiable areas and the name of current tenant agency

-
- Personnel density that includes number of personnel, furniture, files, and equipment in occupied space. This includes submission of the information gathered in written, graphic and digital format with floor and building summaries.

Document Review

None

Exclusions & Interpretation

This report and the attached expenditure forecasts generally identify the Expected Useful Life (EUL) and the Remaining Useful Life (RUL) of observed systems and components. EUL is projected based upon industry-standard guidelines and our experience with similar systems. RUL is projected based upon our assessment of age, condition and maintenance / repair history.

Our opinion of cost included within this report are based upon our experience with similar buildings and systems, industry-standard cost data, local cost data, discussions with contractors, and information provided by the current building management and maintenance staff. The costs provided are for planning purposes only and assuming open procurement of the recommended works. Actual project costs may vary significantly to those projected based upon inflationary factors, weather and time of season, unforeseen economic circumstances and market trends, contractor schedules, unusual owner requirements, and other factors beyond our control.

Where recommended projects require the use of a registered architect, licensed engineer or other professional (collectively referred to as A/E) we have included an allowance of 10% of the base project fee for this retention. Where recommended projects are likely to involve the retention of a General Contractor, we have included a separate collective line item for this retention. This allowance includes a percentage fee based upon the base project cost of 15% for Project Management, 20% for Contractors Profit and Overhead and a Contingency allowance of 10%. Unless otherwise stated project line items included within the capital and maintenance forecasts do not include for A/E fees or General Contractor costs.

When making the determination as to whether a General Contractor will be retained, we have generally considered that a General Contractor will only be retained when a project requires management of multiple contractors is required. A typical example would be brick repair and refurbishment resulting in management of masons, lintel installers, painters and related trades. An example of a project where we have considered that a General Contractor would not be required is pavement resurfacing. For this type of project, we have assumed that a single specialty contractor will be retained to complete and manage the project. Under this scenario, we have included the 45% allowance previously detailed into our unit rate.

The timing of the projected expenditures and their associated costs represent our opinion considering the aforementioned factors. Alternative methods of managing the existing equipment or systems may be feasible over the six-year study period. However, these alternative methods will depend upon actual management practices, financing requirements, and the ability of the engineering staff to perform some of the repairs in-house. Alternative scenarios that have not been presented to Faithful+Gould have not been considered within this report.

This report has been presented based upon our on-site observations, information provided to us, discussion with building management and maintenance staff listed in the executive summary, our review of available documentation (see scope of services and document review section) and our experience with similar systems. If any information becomes available that is not consistent with the observations or conclusions expressed within this report, we request that this information be immediately forwarded to us.

The evaluation of existing structures requires that certain assumptions be made regarding existing conditions. This evaluation was based upon our visual non-destructive evaluation of accessible conditions of the Property. Furthermore, this evaluation was limited in time on-site, fee, and scope and was not based upon a comprehensive engineering evaluation. As such, our report is not intended to represent a complete review of all systems or system components or a check or validation of design professionals' computations. Therefore, Faithful+Gould's evaluation and this report do not represent, warranty or guarantee any system or system component or the future performance of any site improvement.

Appendix G

Resumes



Benjamin Dutton, FFB, MCIQB, MRICS Project Coordinator

Benjamin Dutton has over twelve years of experience in Facility Assessment, working in all sectors of the industry, from multi-family residential and ecclesiastical facilities to airports and resorts. He has been employed by property developers and consulting firms, and previously founded a multi-office facility assessment corporation. Benjamin has been working with Faithful+Gould since 2005, and is spearheading the expansion of the company's already successful Facility Assessment sector.

Projects Benjamin has completed include Facility Assessment and expenditure forecasting for the U.S. Senate House Office Buildings in Washington, DC, assessment, capital planning and maintenance evaluation for Washington Dulles International Airport and Ronald Reagan National Airport, maintenance evaluation and asset inventory for the University of Virginia and American University, facility assessment of a 42-building school facility, pre-acquisition due diligence surveys for a 19-building industrial portfolio in the Pacific Northwest, and construction monitoring and management of various residential and adult living centers.

SELECTED PROJECT EXPERIENCE

- 230 Park Avenue, New York, New York
- Colliers Florida Portfolio, Miami, Florida
- Rosa Parks Federal Center, Detroit, Michigan
- National Institutes of Health, Bethesda, Maryland
- 202 State Street, Chicago, Illinois
- Washington Dulles International Airport, Dulles, VA
- Ronald Reagan Washington National Airport, Arlington, VA
- George Washington University Acquisition Surveys, Washington, DC
- Grace Episcopal High School, Alexandria, VA
- American University, Washington, DC
- University of Virginia, Charlottesville, VA
- Our Lady of the Blessed Shroud, WI and IL
- Pencader Industrial Portfolio, NJ and NY
- Rams Horn Resort, Greenwood, CO

Education:

Bachelor of Science, Building Surveying, 2000

Certifications/Affiliations:

Professional Member, Royal Institution of Chartered Surveyors

Professional Member, Chartered Institute of Building

Fellow, Faculty of Building

Member, Society for the Protection of Ancient Buildings

Years of Experience: 10+

RÉSUMÉ

- State Plaza Hotel, Washington, DC
- Edge Lofts Apartment, Portland, OR
- Table Rock Hotel, Laguna Beach, CA
- Chown Pella Apartment, Portland, OR
- River Island Office Estates, Eugene, OR
- The Henry Apartments, Portland, OR
- The Yachtsman Resort, Myrtle Beach, SC
- Colony Woods Apartments, Seattle, WA
- Logistics A and B Industrial Complex, Fort Lauderdale, FL
- Newberry Plaza Apartments, Chicago, IL
- Edgewater Beach Hotel, Chicago, IL
- Carroll Avenue Apartments, Cleveland, OH
- Ravinia Lofts Apartments, Chicago, IL
- Worldgate Office Complex, Herndon, VA
- Exploration V Office Complex, Columbia, MD
- Clock Towers Apartments, Lancaster, PA
- Alameda Towers Apartments, Kansas City, MO
- Ground Round Restaurant Portfolio, Various Locations

Richard Needler, AIA Architectural (Interiors / Exteriors)

As a Senior Consultant of Facility Assessment services, Richard Needler has nearly 20 years experience in the facility assessment and due diligence field. His experience has been in all sectors of the industry, including commercial office and retail, multifamily and military base housing, assisted living, hospitality and judicial facilities throughout the United States. Richard has provided condition assessment, pre-construction and construction monitoring services for property acquisitions and refinancing, equity investments and real estate development projects.

His project management role has included performing the site visits and preparing facility assessment and due diligence documents, as well as directing teams of professionals in performing these services.

SELECTED PROJECT EXPERIENCE

Commercial/Retail

- 8515 Georgia Avenue Office Building, Silver Spring, MD
- Thirteen Property Wachovia Bank Portfolio, PA and VA
- Wachovia Park Office Building, Winston Salem, NC
- Sheet Metal Workers' Union Office Building, Alexandria, VA
- Matthews Festival Shopping Center, Matthews, NC
- Security Square Mall, Baltimore, MD
- 230 Park Avenue, New York, New York
- Colliers Florida Portfolio, Miami, Florida
- Rosa Parks Federal Center, Detroit, Michigan
- National Institutes of Health, Bethesda, Maryland
- 202 State Street, Chicago, Illinois

Residential/Assisted Living

- Midtown Reston Condominiums, Reston, VA
- University View Apartments, College Park, MD
- Willow Lake Apartments, Indianapolis, IN
- Stoneridge at University Center Apartments, Ashburn, VA
- Ashbridge Manor Assisted Living Facility, Downingtown, PA
- Atlantic Shores Retirement Community, Virginia Beach, VA

Hospitality

- Staybridge Suites Hotel, Chantilly, VA
- Drake Hotel, Chicago, IL
- Red Roof Inn Portfolio, GA, AL and FL

Education:

Bachelor of Architecture and
Bachelor of Science –
Environmental Design, Ball State
University, College of Architecture
and Planning, 1980

Professional Licenses:

Registered Architect: Maryland,
1989; Colorado, 1982

Certifications/Affiliations:

Member, American Institute of
Architects (AIA)

Certified Environmental Site
Assessor, Georgia Institute of
Technology, 1996

Years of Experience: 30+

Courthouses

- U.S. Courthouse, Des Moines, Southern District of Iowa
- Howard H. Baker, Jr. Federal Courthouse, Knoxville, Eastern District of Tennessee
- Joel W. Solomon Federal Building and Courthouse, Chattanooga, Eastern District of Tennessee
- Earl Cabell Federal Building and Courthouse, Dallas, Northern District of Texas
- Eldon B. Mahon Federal Courthouse, Fort Worth, Northern District of Texas
- Joseph P. Kinneary U.S. Courthouse, Columbus, Southern District of Ohio

Military

- Marine Corps Base Quantico Officers' Family Housing, Quantico, VA
- Naval Station Norfolk Military Housing, Norfolk, VA
- Little Creek Amphibious Base Military Housing, Norfolk, VA
- Oceana Naval Air Station Military Housing, Virginia Beach, VA
- Naval Surface Warfare Center Military Housing, Annapolis, MD

David Elwyn, P.E. Structural Design

David Elwyn has over 28 years experience in the condition assessment industry. He is experienced in all aspects of construction ranging from design to cost and project management, claims management and dispute resolution, contract administration and close-out.

Mr. Elwyn's professional experience includes 19 years with a leading architectural, engineering, and construction services firm, during which time he progressed from construction administrator to firm president and managing partner. He has developed and implemented computer applications for construction administration and facilities evaluation, established quality assurance procedures for design and document review, investigated and negotiated design defect claims and contract disputes, and developed project execution checklists and procedures.

He is an experienced structural engineer, having served as lead design engineer on numerous public and private new construction and renovation projects, with particular expertise in masonry design and restoration, and structural forensic investigation and analysis.

Mr. Elwyn's project management experience includes serving as owner's project representative, leading full service architectural and engineering design teams from project inception and contract negotiation through construction close-out, serving as consulting engineer team leader providing engineering services to major architectural design firms, structuring and executing design/manage performance contracts, and providing construction management services as agent of the Owner.

Representative Recent Project Experience

- **Cornell University, Ithaca, New York.**
Project coordinator for cost estimating services and cost reconciliation services for the University:
 - New Sailing Center SD Estimate
 - Milstein Hall; DD and CD Estimates
 - Hollister Fluids Lab; DD and CD Estimates
 - Olin Library Suite 106 Renov; CD Estimate
 - Riley-Robb Hall 50% CD Estimate

Education:

Clarkson University, Potsdam, New York. BSCE Suma Cum Laud – 1980.

Professional Licences:

Registered Professional Engineer: New York, 1989; New Jersey, 1988; Pennsylvania, 1993; Texas, 1986 (inactive).

Affiliations:

National Society of Professional Engineers (NSPE)

Presentations:

Construction Change Orders; Lorman Education, 2005 and 20006

Risk Management in Construction; Lorman Education, 2006

Energy Performance Contracting; Benefits, Problems, Solutions; White paper on performance contracting in New York public schools presented to members of the NYS legislature, 1997

Years of Experience: 28

- Morrison Hall Labs Renovation 50% CD Estimate
- Uris Hall Vertebrate Animal Facility; 50% CD Est
- Child Care Center; DD Estimate

- **Cornell University, Ithaca, New York**
Project Manager, Senior Consultant for pre-project planning services for the University:
 - Livestock Teaching Arena Conceptual Estimate
 - Dairy Facility VE Study (to be conducted in May)

- **Syracuse Hancock International Airport, Syracuse, New York**
Senior Consultant for Independent Professional Services Fee Estimates.
 - Obstruction Removal Project
 - Sound Attenuation Project

- **General Electric Energy, Schenectady, New York**
Senior Consultant for conceptual cost estimates and pre-project planning services.
 - Building 2 Reconstruction
 - Building 5 Reconstruction
 - Building 53 Reconstruction
 - Building 55 Reconstruction
 - Building 59E Renovation

- **United States Geological Survey**
Senior Consultant for Condition Assessment and Building Engineering Evaluation
 - Northern Appalachian Research Laboratory, Wellsboro, PA
 - Florida Caribbean Science Center, Jacksonville, Florida

Additional Experience

- 230 Park Avenue, New York, New York
- Colliers Florida Portfolio, Miami, Florida
- Rosa Parks Federal Center, Detroit, Michigan
- National Institutes of Health, Bethesda, Maryland
- 202 State Street, Chicago, Illinois

Craig Thompson, PE Fire & Life Safety

Mr. Thompson has over fifteen years of experience in the field of fire protection engineering and assessment. Mr. Thompson has specialized experience in smoke control/management systems, fire alarm and automatic sprinkler/suppression systems design and analysis, building codes and standards for both new and renovated structures, fire protection surveys, fire alarm and automatic sprinkler/suppression system inspections, site investigations and Fire Safety Evaluation System (FSSES) surveys, NFPA 101A. He has also been involved in conducting complete building plan reviews, including means of egress calculations, analysis of use group, height area calculations and construction type.

Representative Experience

- **The Pennsylvania State University, University Park, PA.** Project Manager responsible for providing design and consulting services for the installation of sprinkler systems in 49 residence hall buildings totaling over 2.3 million sq. ft. Scope includes feasibility studies, master plans, system design and construction period services.
- **The Pennsylvania State University, Commonwealth Campus, P A.** Project Manager responsible for providing design and consulting services for the installation of sprinkler systems in seven residence hall buildings totaling 280,000 sq. ft. Scope includes feasibility studies, master plans, system design and construction period services.
- **Pattee Library, The Pennsylvania State University, University Park, P A.** Project Manager responsible for providing automatic suppression system design for the Pattee Library. Project includes feasibility studies, system design and construction period services.
- **Howard Hughes Medical Institute, Janelia Farms Campus, Loudoun County, V A.** Project Manager responsible for fire protection code consulting during the design of a 400,000 square foot landscape building containing over 265,000 square feet of research laboratory spaces, conference center, and central plant. Separate facilities include conference facilities and housing and approximately 40 townhouse style facilities for visiting scientist housing. Additional project efforts include the renovation of a historic manor house located on the property.

PROFESSIONAL REGISTRATION
Registered Professional Engineer, 1998, Maryland; 1999 Virginia

EDUCATION
Master of Engineering, Fire Protection Engineering, University of Maryland, College Park, MD, 2001

B.S., Fire Protection Engineering, University of Maryland, College Park, MD, 1992

MEMBERSHIPS/ AFFILIATIONS
Member, National Fire Protection Association (NFPA)
Member, Society of Fire Protection Engineers (SFPE)

- **John F. Kennedy Center for the Performing Arts, Washington, D.C.** Project Manager and Senior Fire Protection Engineer responsible for conducting life safety surveys and an egress study to identify and design upgrades as part of a renovation of this facility. He is currently providing automatic sprinkler system design and retrofit services for the Opera House's public spaces and a water curtain design to supplement the existing proscenium fire curtain.
- **Arts and Industries Building Renovation, Washington, DC.** Project Manager and Senior Fire Protection Engineer responsible for providing fire protection and life safety services for various phases of the renovation effort to the historic, 500,000 sq. ft., Smithsonian Institution's Arts and Industries Building (AIB). Project scope calls for the design of fire alarm and sprinkler systems, as well as a building code compliance analysis for the main acceptable level of protection.
- **Digex, Laurel, MD Headquarters.** Project Manager responsible for conducting field surveys, hydraulic calculations and fire protection conceptual design. The scope of the project included the determination of hazards, the preparation of fire alarm, FM-200 and automatic sprinkler conceptual design drawings and building and life safety code analysis. Additionally, the project included the review of the fire alarm, FM-200, and sprinkler shop drawings to ensure compliance with the codes and standards.
- **Lake Anne Fellowship House, Reston, VA.** Project Manager for the fire alarm system retrofit of the 9-story nursing home. Project included the building assessment survey and design and installation of the addressable fire alarm and detection system.
- **Wildwood Towers, Arlington, VA.** Project Manager for the fire alarm system retrofit of the 10-story apartment building. Project included the building assessment survey and design and installation of the ADA compliant addressable fire alarm and detection system.
- **Wildwood Park, Arlington, VA.** Project Manager for the fire alarm system retrofit of the 10-story apartment building. Project included the building assessment survey and design and installation of the ADA compliant addressable fire alarm and detection system.

- **Westfield Realty 1100 Wilson Blvd, Arlington, V A.** Project Manager for the fire alarm system retrofit of the 30-story office building. Project included the building assessment survey and design and installation of the ADA compliant addressable fire alarm and detection system.
- **Westfield Realty 1701 North Ft. Meyer Drive, Arlington, VA.** Project Manager for the fire alarm system retrofit of the 13-story office building. Project included the building assessment survey and design and installation of the ADA compliant addressable fire alarm and detection system.
- **Brown's Dulles Dodge, Chantilly, VA.** Project Manager for the fire alarm system of the 2-story office building. Project included the building assessment and design and installation of the ADA compliant addressable fire alarm and detection system.
- **Building System Assessments.** Project manager for building system assessments to include site surveys for code compliance of the building construction, the building fire alarm and detection systems.
 - 1000 Wilson Blvd, Arlington, VA
 - 1100 Wilson Blvd, Arlington, VA
 - 1401 Wilson Blvd, Arlington VA
 - 1701 North Ft. Meyer Drive, Arlington VA
 - 1515 Wilson Blvd, Arlington, VA
 - 1815 North Ft. Meyer Drive, Arlington, VA
- **Arlington County Inspections, Arlington, Virginia.** Fire Protection Engineer responsible for conducting complete building plan reviews to include means of egress calculations, building use classification, construction type classification, building height and area calculations, fire suppression specifications and fire alarm requirements; providing design review of fire alarm shop drawings; overseeing sprinkler plan reviews consisting of sprinkler head spacing, hazard classification, fire pump and standpipe sizing, and hydraulic calculations to meet standard specifications for both residential and/or commercial construction. Also responsible for training inspectors in the procedures for inspecting new fire suppression systems and assisted inspectors in fire alarm and fire suppression system inspections.
- Colliers Florida Portfolio, Miami, Florida
- Rosa Parks Federal Center, Detroit, Michigan
- National Institutes of Health, Bethesda, Maryland
- 202 State Street, Chicago, Illinois

Maury Paslick, P.E. Mechanical, Electrical & Plumbing

As a Mechanical, Electrical and Plumbing (MEP) condition assessor, Mr. Paslick is responsible for assessing MEP systems for office buildings, hospitals, industrial/warehouse buildings, schools, and other commercial and institutional buildings.

With 33 years of MEP assessment experience, he supervises a staff of engineers and designers implementing those concepts. Much of his design experience involves renovation and adaptive reuse requiring analysis of existing conditions and evaluations and recommendations of systems suitable to the physical and operational constraints. Besides being a professional engineer, he is a certified commercial electrical, mechanical, and plumbing inspector and electrical, mechanical and plumbing plans examiner, as well as certified in Module 1 as a value engineer. He has also performed many condition assessments averaging two per month. He is well versed in life cycle cost analysis and cost estimating. He brings your projects the benefit of experience with a wide variety of systems and familiarity with analytical methods.

Representative Condition Assessments Projects

- ❑ **Fairfax County Schools/Fairfax, Virginia**
Chief Electrical Engineer for the team that evaluated all elementary schools for Virginia's largest school division to assist with long-term planning.
- ❑ **Culpeper Public Schools/Culpeper County, Virginia**
Chief Engineer in charge of the team evaluating the MEP systems of all eight county schools. Following extensive surveys conducted during holiday times when students were on break, reports were prepared recommending and prioritizing repairs and upgrades and estimated costs were provided so that a long-term plan could be developed by county officials.
- ❑ **Mitre Buildings/Bedford, Massachusetts and McLean, Virginia**
MEP Engineer for the evaluation of MEP systems for these two multi-story corporate buildings.

Education:

The Johns Hopkins
University/BES/1975/Electrical
Engineering

Professional Licences:

1981/Texas/Professional Engineer
- Electrical (inactive)

1990/Maryland/Professional
Engineer - Electrical

1991/District of
Columbia/Professional Engineer –
Electrical

1996/Florida/Professional Engineer
– Electrical

1999/North Carolina/Professional
Engineer - Electrical

Affiliations:

National Society of Professional
Engineers (NSPE)

Years of Experience: 28

- ❑ **230 Park Avenue Office Building/New York, New York**
MEP Engineer for the due diligence evaluation of this 5-story plus 3-story roof-level cupola high-rise riveted iron frame office building containing an approximate gross floor area of 1,300,000 SF. The building contains 38 office suites, a management-occupied suite and 2 ground level retail units. The property is on a .415-acre site.
- ❑ **One Judiciary Square/Washington, D.C.**
MEP Engineer for the condition assessment of this high-rise building constructed in 1987. There are 11 floors above grade, one concourse level below grade, and two parking levels below the concourse. The building has a nominal area of 850,000 SF.
- ❑ **LaCosta Resort/San Diego, California**
MEP Engineer for this hotel resort, including guest and meeting rooms, lobby area, administrative offices, and restaurants. The hotel and clubhouse were built in 1965, with renovations and expansions in 1970, 1985, 2003, 2006 and ongoing. There are 472 rooms in 22 one, two and three-story buildings. Other amenities surveyed included several pools, ballrooms, retail shops and spa.
- ❑ **USGS Florida Caribbean Science Center/Gainesville, Florida**
MEP Engineer for the condition assessment of this scientific research facility for the study of fish species on an 18-acre site with 20 buildings including chemical storage building, service garage, shop, main R & D building, portable office building, battery storage, incubator building, and formalin storage.
- ❑ **301 Howard Street/San Francisco, California**
MEP Engineer for the condition assessment of this 21-year-old office building on .415 acres.
- ❑ **1 East Broward/Fort Lauderdale, Florida**
MEP Engineer for the condition assessment of this 19-story, Class A office building.
- ❑ **Smithsonian Arts and Industries Building/Washington, D.C.**
MEP Engineer for the condition assessment of this building of about 185,000 SF originally opened as the U.S. National Museum which was constructed in 1881 and renovated in 1996. Leaks and flakes of rust prompted closing of the building in 2004, leaving a largely vacant building with some office space still in use. This condition assessment was conducted in 2006 in anticipation of a major rehabilitation project.

- ❑ **Prince William County McCoart Building/Prince William, Virginia**
MEP Engineer for condition assessment report of the MEP systems of this 60,000 SF County Administration Building built in the 1980's.
- ❑ **MVI Post Building/Falls Church, Virginia**
MEP Engineer for the condition assessment of this 2-story, 20,000 SF building housing post-production audiovisual editing studios and support offices. This project also included schematic design and pricing for building MEP systems upgrades.
- ❑ **One Bethesda Office Building/Alexandria, Virginia**
MEP Engineer for the condition assessment of the central air handler unit and related system. A report was prepared on the remaining useful life and suggested timeframe for replacement.
- ❑ **1411 K Street Arlington Square Office Building/Washington, D.C.**
Chief Engineer for the extensive evaluation of the mechanical, electrical, and plumbing systems for this multi-story office building, the review of pertinent building documents and the preparation of a detailed report on the condition and recommendations with regard to each system.
- ❑ **Bethesda Towers/Bethesda, Maryland**
Chief Engineer for the review of the chilled water and air handler systems, garage ventilation systems, induction systems, all electrical systems including switchgear, lighting, distribution, emergency power systems, and plumbing systems including drainage and water systems for this condominium project with two multi-story residential towers.
- ❑ **1901 L Street Office Building/Washington, D.C.**
Chief Engineer for the review of the mechanical systems including the chilled water system, condenser water systems, air handling systems, exhaust systems, induction units, garage ventilation systems and controls, the electrical systems including switchgear, power distribution, emergency power and lighting systems and the plumbing systems including hot and cold water, sanitary drainage and storm water drainage for this multi-story office building.

- ❑ **Dulles Hilton/Sterling, Virginia**
Lead MEP Engineer for a two-phase survey and evaluation of this recently renovated and expanded business hotel. The first phase was to complete a construction punch list survey of 155 new guest rooms, a new conference center, and a new central mechanical plant to support the addition. The second phase included a condition assessment survey of the overall facility.
- ❑ **1310 North Courthouse Road/Arlington, Virginia**
MEP Engineer for the condition assessment and due diligence study of a 12-story, 380,000 SF office building.
- ❑ **USGS Hammond Bay Biological Station/Millersburg, MI**
MEP Engineer for the comprehensive condition assessment of the assets of this US Geological Survey facility dedicated to the study and control of sea lampreys in the Great Lakes. The facility is a converted Coast Guard Station originally constructed in the late 1800's.
- ❑ **Sheraton Hotel/Sunnyvale, California**
MEP Engineer for the condition assessment of a 26-year old, 2-story, full service hotel with 173 rooms, meeting rooms, and restaurant.
- ❑ **Sheraton San Jose/Milpitas, California**
MEP Engineer for the condition assessment of an 18 year old, high rise full service hotel with 229 rooms, meeting rooms, and restaurant.
- ❑ **Sheraton Four Points/Pleasanton, California**
MEP Engineer for the condition assessment of a 23 year old, 2-story full service hotel with 198 guest rooms, meeting rooms, and restaurant.
- ❑ **Holiday Inn/Louisville, Kentucky**
MEP Engineer for the condition assessment of a 36 year old, high rise full service hotel with 169 guest rooms, meeting rooms, laundry and restaurant.
- ❑ **XM Radio Headquarters/Washington, D.C.**
MEP Engineer for the condition assessment of two adjacent buildings in the District that house corporate offices, 84 sound studios, broadcast control rooms, and data center. One building is 3-stories plus basement with an area of 248,000 SF. The second building is 2-stories with an area of 43,000 SF.

- ❑ **Verizon Center/Washington, D.C.**
MEP Engineer for the condition assessment of the MEP systems of this 1 million SF multi-sport complex built in 1996.
- ❑ **American University/Washington, D.C.**
Chief MEP Engineer for the team conducting a detailed inventory survey and condition assessment of assets and equipment in all buildings on the main campus, Tenley campus, and two nearby satellite facilities, including over 40 buildings. Team members inventoried the major mechanical, electrical, plumbing and fire protection systems components in each building, evaluated the remaining useful life of the equipment and systems, and provided budget costs for replacement. Manufacturers were contacted for information on recommended maintenance practices and preventive maintenance procedures were compiled for all major systems and components. The information gathered through this process was entered in a database and will be used to schedule routine maintenance and budget for future construction and alteration projects.
- ❑ **Metropolitan Police Department/Washington, D.C.**
Chief Electrical Engineer on the team that surveyed approximately 20 sites to determine the condition of mechanical, electrical, and plumbing systems. Prepared reports containing life expectancies and cost estimates.
- ❑ **U.S. Naval Flag Quarters/Various Locations**
Chief Electrical Engineer on the team responsible for the audit and survey of mechanical, electrical and plumbing systems of newly designated flag quarters for the automated facilities maintenance plan for the United States Navy. Sites inventoried included those in Annapolis, Mechanicsburg, New Orleans, and Patuxent.
- ❑ **Reston Town Center/Reston, Virginia**
Chief Electrical Engineer for the preparation of a condition assessment and due diligence report of a complex which included two 400,000 SF, 11-story office buildings with retail spaces at grade; a 14-story hotel with 4-story garage; a 40,000 SF 3-story retail and office building; and a separate 4-story garage.
- ❑ Colliers Florida Portfolio, Miami, Florida
- ❑ Rosa Parks Federal Center, Detroit, Michigan
- ❑ National Institutes of Health, Bethesda, Maryland

- 202 State Street, Chicago, Illinois

- **Ritz Carlton Hotel/Pentagon City, Virginia**
Prepared Condition Assessment and Due Diligence Report for this 18 story luxury hotel with two below grade levels and a mechanical penthouse level. The lowest level, designated Lower Level 1, housed some of the central mechanical and electrical equipment, the laundry and dry cleaning operations, the building engineering department, the security office, and the shipping and receiving area. The first level below grade, labeled Lower Level 2, consisted of covered parking, engineering shop areas, and miscellaneous storage. The main reception areas, administrative offices, kitchens, and dining areas were located on the first floor. The second floor was comprised of meeting rooms and the ballroom. The fitness center and some central mechanical, electrical, and plumbing equipment were located on the third floor. The fourth through eighteenth floors contained approximately 250 guest rooms. The heating water boilers, the cooling towers and the domestic water heaters were located in the mechanical penthouse.

- **Anthem Blue Cross/Blue Shield Complex/North Haven, Connecticut**
MEP Engineer who performed a condition assessment and reserve study of a four building complex built from the late 1970's into the early 1990's.

- **Prudential Office Tower/Jacksonville, Florida**
MEP Engineer who performed a due diligence survey and report of a 23-story office structure built in the late 1960s.

- **Watergate South Condominiums/Washington, D.C.**
Chief Electrical Engineer who performed a condition assessment and reserve study of a 12-story condominium complex built in the late 1960s. Facility involved three below grade levels with parking and equipment rooms.

- **Yorktown 50 Office Building/Fairfax, Virginia**
Chief Electrical Engineer who prepared a condition assessment and due diligence report of a 100,000 SF 6-story office building build in the mid-1970s.

- ❑ **The Somerset House 1 and 2 Condominiums/Washington, D.C.**

Chief Electrical Engineer who performed a condition assessment and reserve study of two condominium complexes that were built in 1987-88. Each 21-story building had one level of parking and support spaces below. Building entry and common spaces were located on the first floor. The additional twenty floors were residential.
- ❑ **The Northumberland Apartments/Washington, D.C.**

Chief Electrical Engineer who performed a condition assessment and reserve study of 67 apartments constructed in 1911.
- ❑ **The Westchester Condominium/Washington, D.C.**

Chief Electrical Engineer who performed a condition assessment and reserve study of a 560-unit, 5-building complex completed in the 1930s.
- ❑ **Washington Harbor/Washington, D.C.**

Chief Electrical Engineer who performed a condition assessment and reserve study of two multi-story towers located over a two-level garage. One tower had six stories and the other had seven stories. Each tower had retail space at grade and offices and condo on the upper levels. The structures were built in 1982-85.
- ❑ **Engineering Survey and Systems Evaluations for the Watergate Office Building/Washington, D.C.**

Engineering Project Director/Chief Electrical Engineer who performed a site investigation and analyzed the condition, appropriateness, performance and capacities of the MEP systems for this 300,000 SF office tower. The report included estimates of remaining expected life of the building's systems as well as estimated costs for systems replacements.
- ❑ **Interfin Office Complex/Houston, Texas**

Engineering Team Leader and Chief Electrical Engineer for the survey and condition assessment of 4 office buildings totaling over 4 million SF. The report addressed the general capacities of the engineering systems, current conditions and maintenance, expected life and compliance with current codes.
- ❑ **First Interstate Bank/Houston, Texas**

Engineering Team Leader for the engineering effort which surveyed and analyzed 5 downtown Houston office buildings as candidates for relocation of approximately 120,000 SF of banking support functions including a 40,000 SF data processing center.

- ❑ **AMI Doctors Hospital Expansion Study/Laredo, Texas**
- ❑ **AMI Highland Park Expansion Study/Covington, Louisiana**

Chief Electrical Engineer who participated on the A/E team with the American Medical International (AMI) operational and strategic planners to develop comprehensive long range facility plans. This included condition assessments for major building systems at each site. Cost estimates and detailed plans of phased construction were developed.

- ❑ **Normandy Terrace Northeast and Southeast Nursing Homes, San Antonio, Texas**

Chief Electrical Engineer for the audit and inspection of existing MEP systems in the 200, 100 and 70 bed nursing home facility and hospitals. Work included preparing an audit of the existing HVAC, plumbing and fire protection systems that addressed the condition, operation and code compliance. The information in this report was used as a basis in development of a renovation plan.

- ❑ **Vanderbilt Neonatal and OB-GYN/Nashville, Tennessee**

Chief Electrical Engineer for the team that performed initial feasibility studies for this 50,000 SF structure in order to achieve the client goals of expanding and upgrading the Neonatal Intensive Care Units. The engineering team performed surveys and assessed existing conditions in order to define the needed scope of work.