

GOVERNMENT OF THE DISTRICT OF  
COLUMBIA DEPARTMENT OF GENERAL  
SERVICES



**Addendum No. 5**

**To**

**Request for Proposal (“RFP”) No. DCAM-22-AE-RFP-0001**

**Architectural/Engineering Services for the MPD 7th District Headquarters  
New Facility and New Parking Structure**

**Issued: January 25, 2023**

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This Addendum No. 5 is issued on January 25, 2023. Except as modified herein, the RFP remains unchanged.

**Item No. 1.** The proposal due date is extended to **January 31, 2023 at 4:00 PM.**

**Item No. 2.** In Accordance with section **E.7 Explanations to Prospective Offerors**, the Questions and Answers Spreadsheet is hereby attached as **Exhibit A.**

**Item No. 3.** Revised Form of Offer Letter and Bid Form (Attachment C of the RFP) is hereby attached as **Exhibit B.**

**Item No. 4.** Existing Drawings provided as **Exhibit C** to Addendum 5 are hereby incorporated into the RFP.

**Item No. 5.** Facilities Condition Assessment provided as **Exhibit D** to Addendum 5 is hereby incorporated into the RFP.

**Item No. 6.** Section B.1.2.2 of the RFP, delete in its entirety and replace with the following:

**B.1.2.2 Design Development Phase Deliverables:**

- a. Preliminary Evaluation
- b. Preliminary Design

- c. Existing Conditions Report
- d. Site survey
- e. Hazardous Material Report
- f. MEP Assessment
- g. Project Program
- h. Code and Regulatory Report
- i. DC Green Building Act/LEED SILVER V4 Report
- j. Summary of Options
- k. Budget Review
- l. Other items as required in the Scope of Work
- m. Construction Cost Estimate
- n. FF & E

**Item No. 7.** Section B.6 of the RFP, delete in its entirety and replace with the following:

#### **B.6 Key Personnel**

In its proposal, each Offeror will be required to identify its key personnel. Key personnel shall include, at a minimum, the following individuals: (i) Executive Architect (ii) Project Manager; (iii) Geotechnical Engineer; (iv) Traffic Engineer; and (v) Permit Expeditor. **The A/E will not be permitted to reassign any of the key personnel unless the Department approves the proposed reassignment and the proposed replacement.** The key personnel specified in the contract are considered to be essential to the work being performed. Prior to diverting any of the specified key personnel for any reason, the A/E shall notify the Contracting Officer (“CO”) at least thirty (30) calendar days in advance and shall submit justification, including proposed substitutions, in sufficient detail to permit evaluation of the impact upon the contract. The A/E shall obtain written approval of the CO for any proposed substitution of key personnel.

**Item No. 8.** Section D.3.2, sub section B(1) of the RFP, delete in its entirety and replace with the following:

List of Key Personnel to include, at a minimum, the following individuals: (i) Executive Architect (ii) Project Manager; (iii) Geotechnical Engineer; (iv) Traffic Engineer; and (v) Permit Expeditor.

**Item No. 9.** Section E.4.1.1 of the RFP, delete in its entirety and replace with the following:

#### **E.4.1.1 Executive Summary**

Each Offeror should provide a Proposal executive summary of no more than three pages.

**Item No.10.** In the Scope of Work (Attachment A1 of the RFP), on Page number 3, section title “Orientation Meeting”, delete in its entirety and replace with the following:

## Orientation Meeting

- Conduct an orientation/kick-off meeting for all key DGS and MPD staff to explain the process and how each person can participate most effectively.
- During this meeting, distribute and explain questionnaires.
- Discuss the overall project preliminary goals and objectives to establish a consensus with the project team that guides the development of the project programming and planning and confirms the course of action including:
  - Organizational Goals
  - Form and Image Goals
  - Functional Goals
  - Economic Goals
  - Time Goals

**Item No. 11.** Section 1.10 of the Form of Contract (Attachment F of the RFP), delete in its entirety and replace with the following:

**1.10 Key Personnel.** The following individuals shall be considered key personnel: (i) Executive Architect (ii) Project Manager; (iii) Geotechnical Engineer; (iv) Traffic Engineer; and (v) Permit Expeditor as identified in **Exhibit H**. The A/E will not be permitted to reassign any of the key personnel unless the Department approves the proposed reassignment and the proposed replacement. In the event that any of the key personnel become unavailable to work on this Project for reasons beyond the control of the A/E or its principal consultants (i.e. due to retirement, resignation, termination, etc.), the A/E shall propose a substitute for any such individual and obtain the Department's consent to such substitute.

By: James H. Marshall  
James H. Marshall  
Contracting Officer

Date: 1/25/2023

--End of Addendum 5--

**GOVERNMENT OF THE DISTRICT OF COLUMBIA  
DEPARTMENT OF GENERAL SERVICES**



**EXHIBIT A**

**[EXHIBIT WILL APPEAR ON THE FOLLOWING PAGE]**

**GOVERNMENT OF THE DISTRICT OF COLUMBIA  
DEPARTMENT OF GENERAL SERVICES**



**Request for Proposals (“RFP”) No. DCAM-22-AE-RFP-0001**

**Architectural/Engineering Services for the MPD 7th District Headquarters  
New Facility and New Parking Structure**

**Offerors Questions on RFP with DGS Responses**

<b>No.</b>	<b>Question</b>	<b>DGS Response</b>
1	In the RFP’s executive summary, the permit phase was not indicated. Please confirm that the permit phase which entails permit review period of potentially 3 to 6 months.	The Permit Phase should be included in all proposals.
2	Cost estimate after CD to be prepared by A/E on page 2 of the RFP was indicated. Shouldn't the final cost estimate be provided by the General Contractor who has won the bid?	AE shall provide cost estimate as described page 2 RFP.
3	If we have additional consultants relevant to the project that are not listed in Attachment C (Form of Contract Letter), should their company profiles, resumes, PPE, be included in our submission?	Yes.
4	Does DGS have a zoning attorney?	No
5	Can the design exceed the FAR with a parking structure added to the site?	The Floor Area Ratio (FAR) shall meet all local code including the parking structure
6	Due to complexity of the scope, should the project undergo a DOB velocity?	No
7	Was a hazmat survey performed and will it be provided?	No hazmat survey performed.
8	On page 3 of Attachment A, there was mention of previous studies. Will these be made available to the bidders before or after submission?	Please see Addendum No. 5, Item No. 10.
9	What is the current status of the land lot where MPD is parking their vehicles outside of the MPD 7 property line adjacent to the single-family residences?	Available details will be provided to the awarded A/E.

10	Please clarify ‘5.5 The A/E may be held financially responsible for all errors and omissions resulting in a deficient design or changes including funds spent by the District to correct the documents or redesign and complete construction exercise.’ Does this apply to the construction cost or just the design cost?	Both
11	Is solar design a consideration for this project?	Yes
12	The RFP states that the GC provides the ‘As-builts’ and the A&E reviews. Attachment G states that the A&E is to provide the ‘as built’. Please clarify who is responsible for creating the as built?	The A/E is responsible for creating the as-builts.
13	On the walk-through FF&E was mentioned to be a separate budget. Please clarify	FF&E is part of the A/E’s deliverables. Please see Addendum No. 5, Item No. 6
14	Should the A&E charge additional for the FF&E effort?	FF&E is part of the A/E’s deliverables. Please see Addendum No. 5, Item No. 6
15	What is the allowable distance away from the property for the temporary parking?	AE shall determine during design process with clients
16	Will the temporary parking require design and permitting for a temporary parking lot (i.e. conversion of a field to a gravel parking lot)? If so, can you please share the location so that we may define the scope?	AE shall determine during design process with client Agency
17	Can existing drawings please be provided?	Please see Addendum No. 5, Item No. 4.
18	Can the facilities assessment report please be provided?	Please see Addendum No. 5, Item No. 5.
19	Are there any environmental or geotechnical reports that can be provided?	No.
20	Once the new police station building is built, will a temporary certificate of occupancy be acceptable, so that final certificate of occupancy can be obtained at completion of the entire project? There are design, permitting, and cost implications for needing to obtain two final certificates of occupancy,	Yes, start with temporary certificate of occupancy and later to obtain Final COO.

	essentially making this two separate projects needing meet regulatory requirements each on their own.	
21	The existing parking lot extends out into a public right-of-way. Is extents of the redevelopment limited solely to the property limits as-is?	Project shall meet all zoning regulations.
22	Are there any plans or report available for the fueling station?	No
23	Will a subdivision to create one single new record lot be required?	Architects shall coordinate with the offices of Zoning and DGS to determine if single lot is required.
24	Will reuse of existing curb cuts be sufficient, or is there a contemplated location for a new curb cut?	No new curb cut location have been contemplated AE shall design and obtain all permits per DDOT.
25	Do we have to design and provide CDs for temporary parking lot? Should we include in our fee? DDOE does not allow for parking on a dirt lot. The temporary parking is a dirt lot.	AE shall provide all drawings and specifications that meet all local building and zoning codes.
26	Please explain what we should include in Title 1 and Title 2. There seems to be a disparity between what is outlined in the RFP and direction explained at the site.	The Offeror shall submit a proposal for both Title I and Title II Services. Please refer to Section B of the RFP.
27	Who is responsible for coordinating moving, documenting furniture and equipment to remain and do we have to include this as a line item in our fee?	The A/E shall coordinate with the General Contractor team in relocating FF&E and other items, as applicable.
28	Are their existing drawings including site plan? Please forward.	Please see Addendum No. 5, Items No. 4 and 5.
29	Is community engagement included within the Scope of Work? No information provided within the RFP but was discussed during the site visit.	Yes, Per Attachment A2- section 4.3

30	Should we include fee for IT and what part does DGS play in security and running wire?	Yes, the Design shall meet all OCTO and MPD requirements. All information shall be gathered during the design phase.
31	Though cost estimates are required at each phase of the project, would the cost estimator be defined as key personnel?	The key personnel identified in Section B.6 of the RFP are the only key personnel for this project.
32	In Section E- E.4.1.1. Executive Summary (page 23), it's noted that a summary of no more than 3 pages is requested in the following sections. Are the 3 pages to include all the requested information noted within Sections E.4.1.2 and E.4.1.3 (which includes Section D.3) or are there other sections that should also be included within that 3 page limit?	Please see Addendum No. 5, Item No. 9.
33	Will a copy of the sign-in sheet for the MPD 7 walk-thru on December 20 <sup>th</sup> be released on ProjectTeam or email?	A copy of the sign in sheet has been provided via addendum No. 2.
34	Can you please clarify the scope for this solicitation? Apparently, the scope explained during the site visit on 12/20 was different from the RFP and was limited to a POR and a feasibility study only.	The Scope of this solicitation includes all the services identified in Section B of the RFP and Attachments A1 and A2.
35	Please confirm if other tenants are on the comms tower that will need to be relocated or coordinated with.	No
36	Does the prime offeror for this solicitation have to be SBE?	Yes, as indicated on the cover page of the RFP, This solicitation is being set-aside for Offerors that are certified by the District of Columbia Department of Small and Local Business Development ("DSLBD") as certified Small Business Enterprises (SBEs).



**GOVERNMENT OF THE DISTRICT OF COLUMBIA  
DEPARTMENT OF GENERAL SERVICES**



**EXHIBIT B**

**[EXHIBIT WILL APPEAR ON THE FOLLOWING PAGE]**

Attachment C

[Offeror's Letterhead]

[Insert Date]

District of Columbia Department of General Services  
2000 14<sup>th</sup> Street, NW  
Washington, DC 20009

Attention: James H. Marshall  
Contracting Officer

**Reference: Request for Proposals (RFP) – DCAM-22-AE-RFP-0001  
Architectural/Engineering Services for the MPD 7<sup>th</sup> District Headquarters  
New Facility and New Parking Structure**

Dear Mr. Marshall:

On behalf of [INSERT NAME OF Offeror] (the "Offeror"), I am pleased to submit this proposal in response to the Department of General Services' (the "Department" or "DGS") RFP to provide **Architectural/Engineering Services for the MPD 7<sup>th</sup> District Headquarters New Facility and New Parking Structure** (the "Project"). The Offeror has reviewed the RFP and the attachments thereto, any addenda thereto, and the proposed Form of Contract (collectively, the "RFP Documents") and has conducted such due diligence and analysis as the Offeror, in its sole judgment, has deemed necessary in order to submit its Proposal in response to the RFP.

The Offeror's proposal including the Design Fee (as defined in paragraph A), and the Hourly Rates (as defined in paragraph B) are based on the RFP Documents as issued and assume no material alteration of the terms of the RFP Documents. Collectively Offeror's Design Fee and Hourly Rates are referred to as the ("Offeror's Price Proposal").

**The Offeror's Bid as follows:**

A. Design Fee:

Program of Requirements	\$ _____
Schematic Design	\$ _____
Design Development	\$ _____
Construction Documents	\$ _____
Bid Phase	\$ _____
Construction Administration	\$ _____
Maximum Reimbursable Allowance	\$100,000.00
<b>Total Design Fee</b>	<b>\$ _____</b>

B. Hourly Rates:

<b>Position</b>	<b>Hourly Rate</b>
Executive Architect	\$_____/hour
Project Manager	\$_____/hour
Geotechnical Engineer	\$_____/hour
Traffic Engineer	\$_____/hour
Permit Expeditor	\$_____/hour

The Offeror acknowledges and understands that the Design Fee is a fixed fee and covers all of the Offeror's costs associated with the preparation of (i) program of requirements; (ii) schematic design; (iii) design development documents; (iv) construction documents; (v) Bid Phase; and (vi) construction administration services.

The Offeror's Proposal is based on and subject to the following conditions:

The Offeror agrees to hold its proposal open for a period of at least sixty (60) days after the date of the RFP solicitation.

1. Assuming the Offeror is selected by the Department and subject only to the changes requested in paragraph 5, the Offeror agrees to enter into a contract with the Department on the terms and conditions described in the Bid Documents within ten (10) days of the notice of the award.
2. Both the Offeror and the undersigned represent and warrant that the undersigned has the full legal authority to submit this form and bind the Offeror to the terms of the Offeror's Price Proposal.
3. The Offeror further represents and warrants that no further action or approval must be obtained by the Offeror in order to authorize the terms of the Offeror's Price Proposal.
4. The Offeror and its principal team members hereby represent and warrant that they have not: (i) colluded with any other group or person that is submitting a proposal in response to the RFP in order to fix or set prices; (ii) acted in such a manner so as to discourage any other group or person from submitting a proposal in response to the RFP; or (iii) otherwise engaged in conduct that would violate applicable anti-trust law.
5. The Offeror's proposal is subject to the following requested changes to the Form of Contract: **INSERT REQUESTED CHANGES. OFFERORS ARE ADVISED THAT THE CHANGES SO IDENTIFIED SHOULD BE SPECIFIC SO AS TO PERMIT THE DEPARTMENT TO EVALUATE THE IMPACT OF THE REQUESTED CHANGES IN ITS REVIEW PROCESS. GENERIC STATEMENTS, SUCH AS "A MUTUALLY ACCEPTABLE CONTRACT" ARE NOT ACCEPTABLE. OFFERORS ARE FURTHER ADVISED THAT THE DEPARTMENT WILL CONSIDER THE REQUESTED CHANGES AS PART OF THE EVALUATION PROCESS.**

6. The Offeror hereby certifies that neither it nor any of its team members have entered into any agreement (written or oral) that would prohibit any contractor, subcontractor or sub-consultant that is certified by the District of Columbia Office of Department of Small and Local Business Enterprises as a Local, Small, Resident Owned or Disadvantaged Business Enterprise (collectively, "LSDBE Certified Companies") from participating in the work if another company is awarded the contract.
7. This form and the Offeror's Price Proposal are being submitted on behalf of [INSERT FULL LEGAL NAME, TYPE OF ORGANIZATION, AND STATE OF FORMATION FOR THE OFFEROR].

Sincerely,

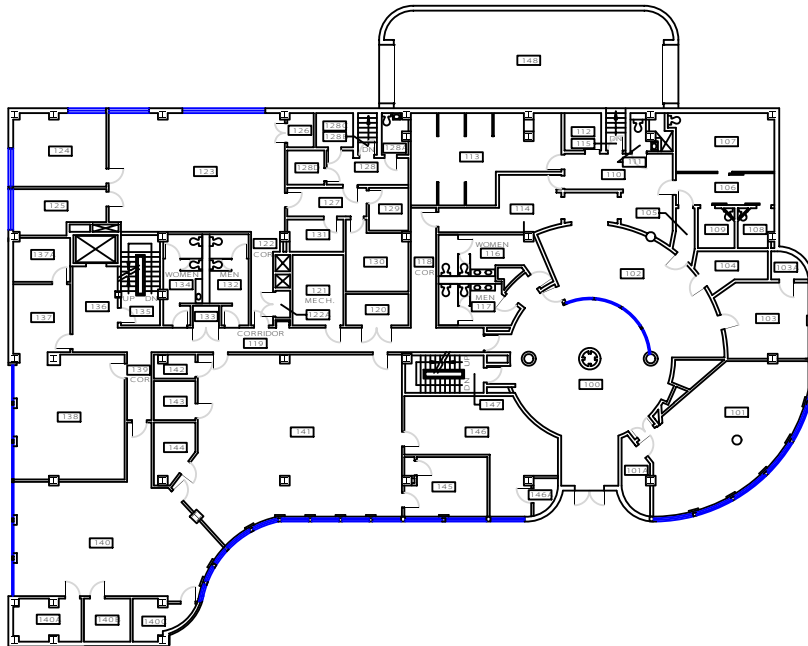
By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**GOVERNMENT OF THE DISTRICT OF COLUMBIA  
DEPARTMENT OF GENERAL SERVICES**



**EXHIBIT C**

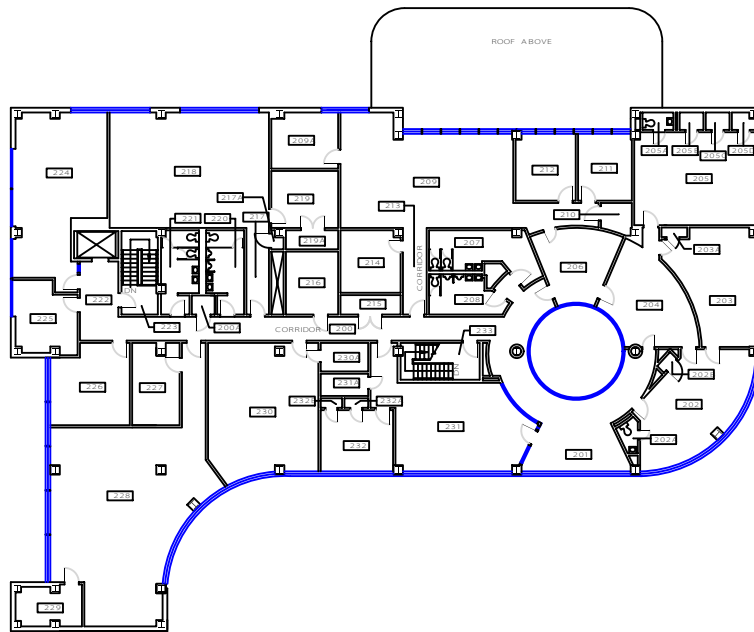
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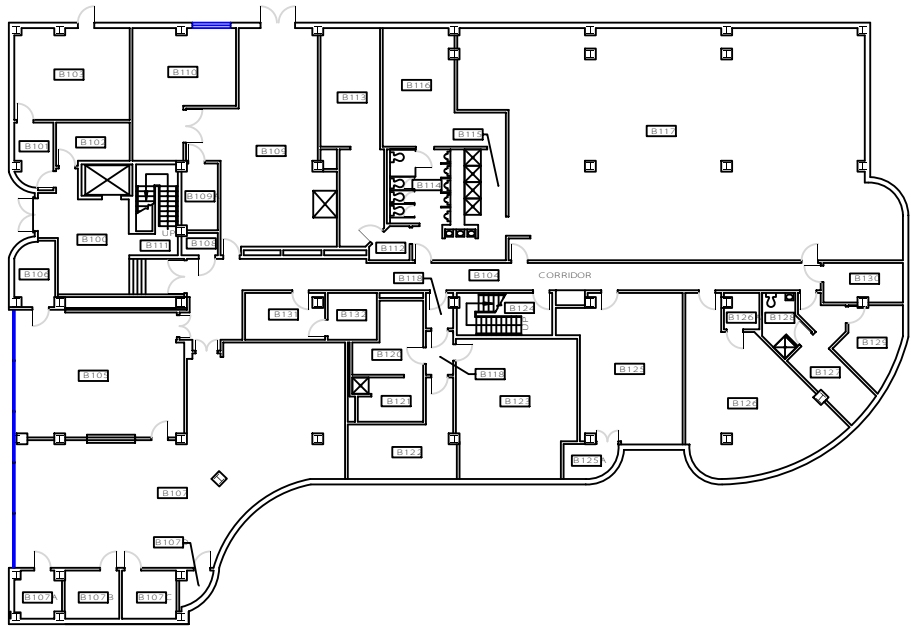


SEVENTH DISTRICT HEADQUARTERS  
FIRST FLOOR PLAN



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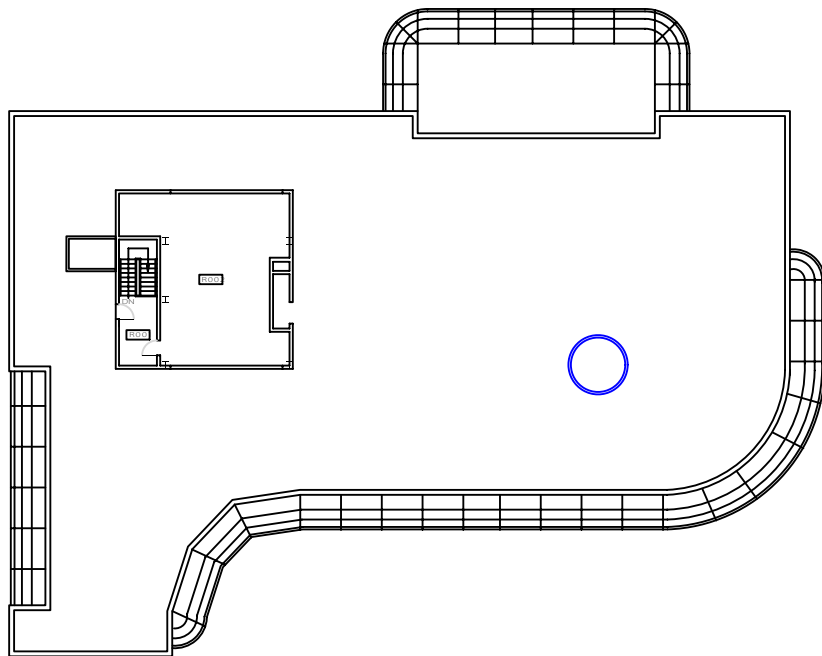


SEVENTH DISTRICT HEADQUARTERS  
 BASEMENT FLOOR PLAN



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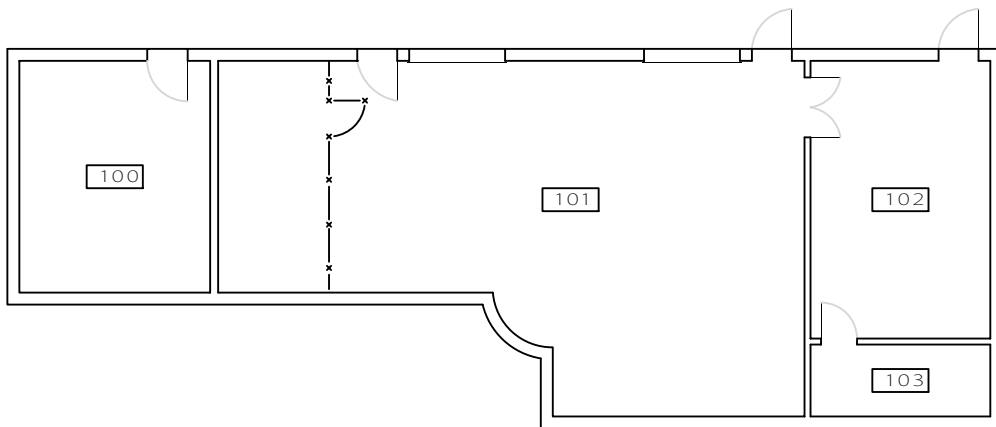


SEVENTH DISTRICT HEADQUARTERS

ROOF PLAN

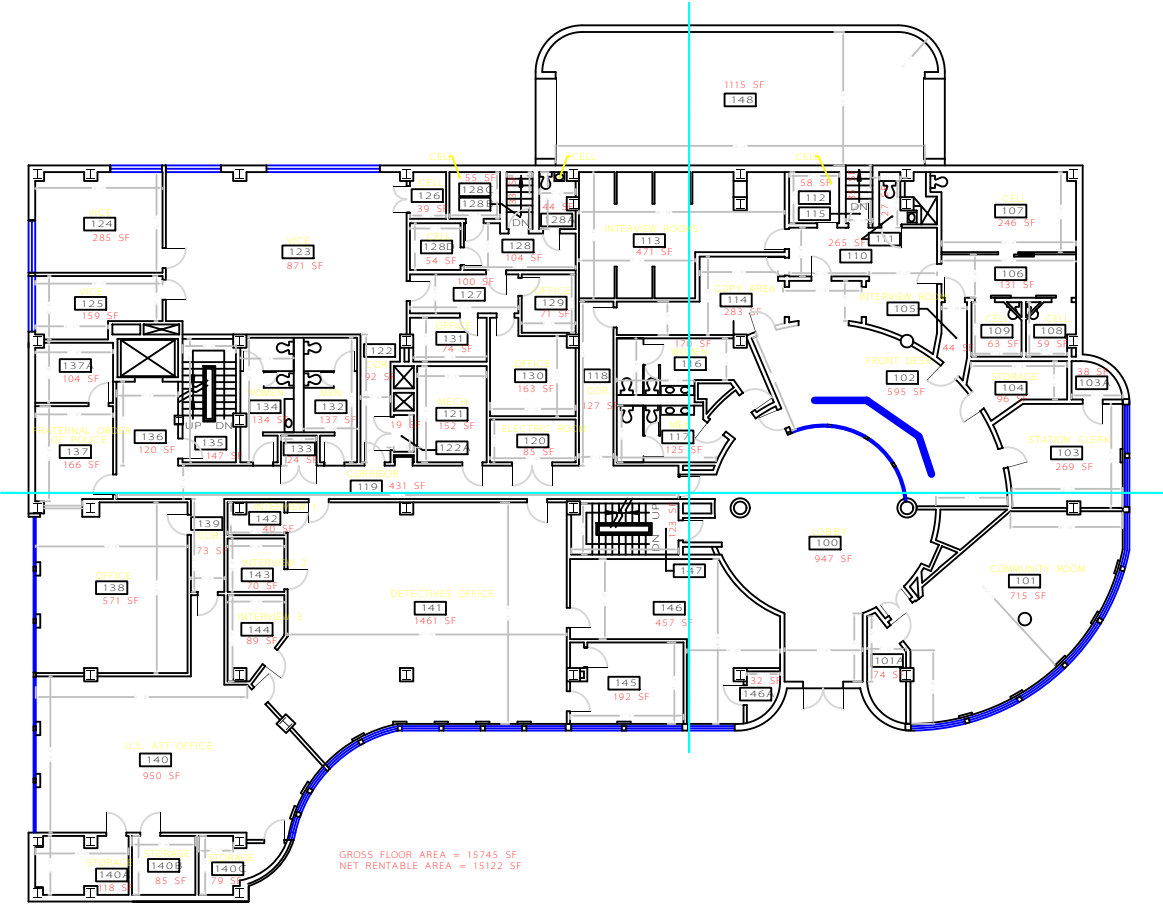


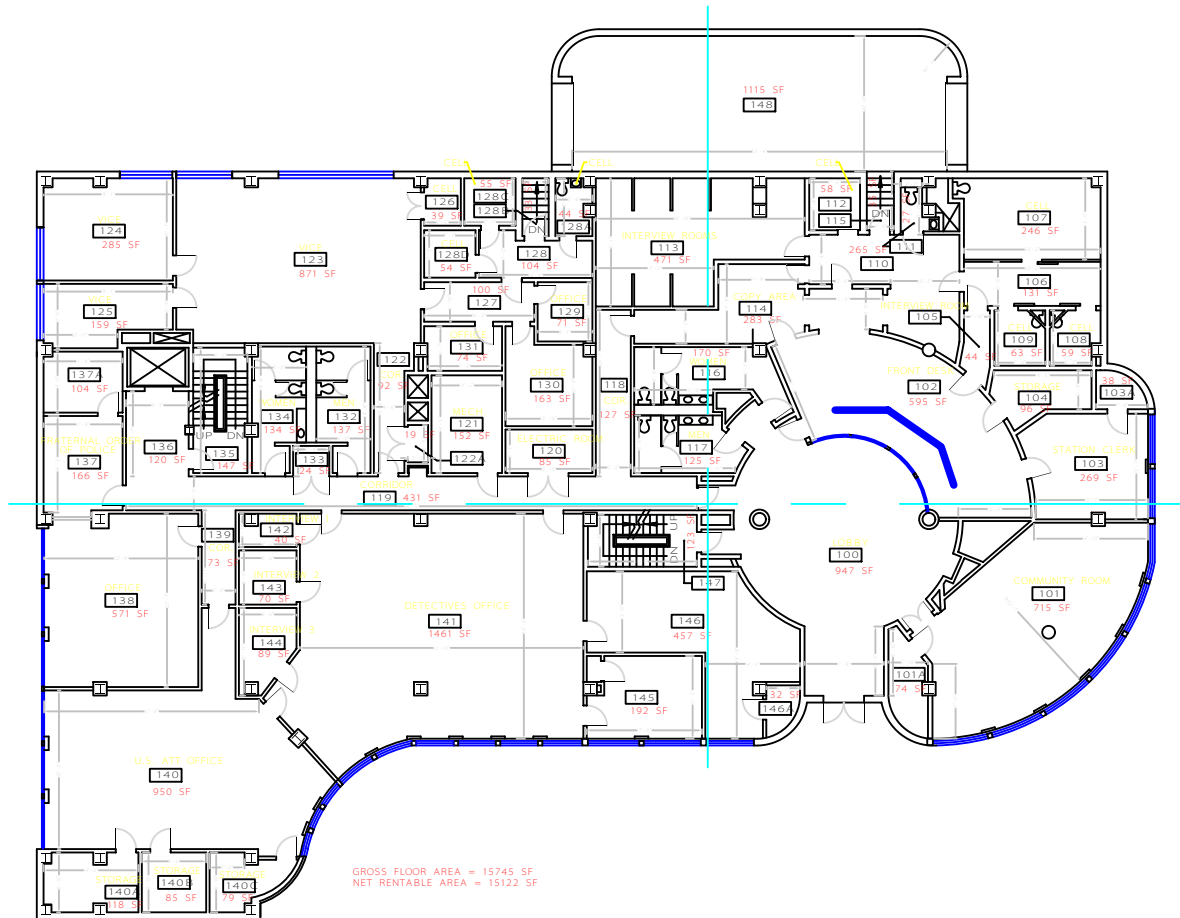
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SEVENTH DISTRICT SCOOTER STORAGE SHED  
FIRST FLOOR PLAN






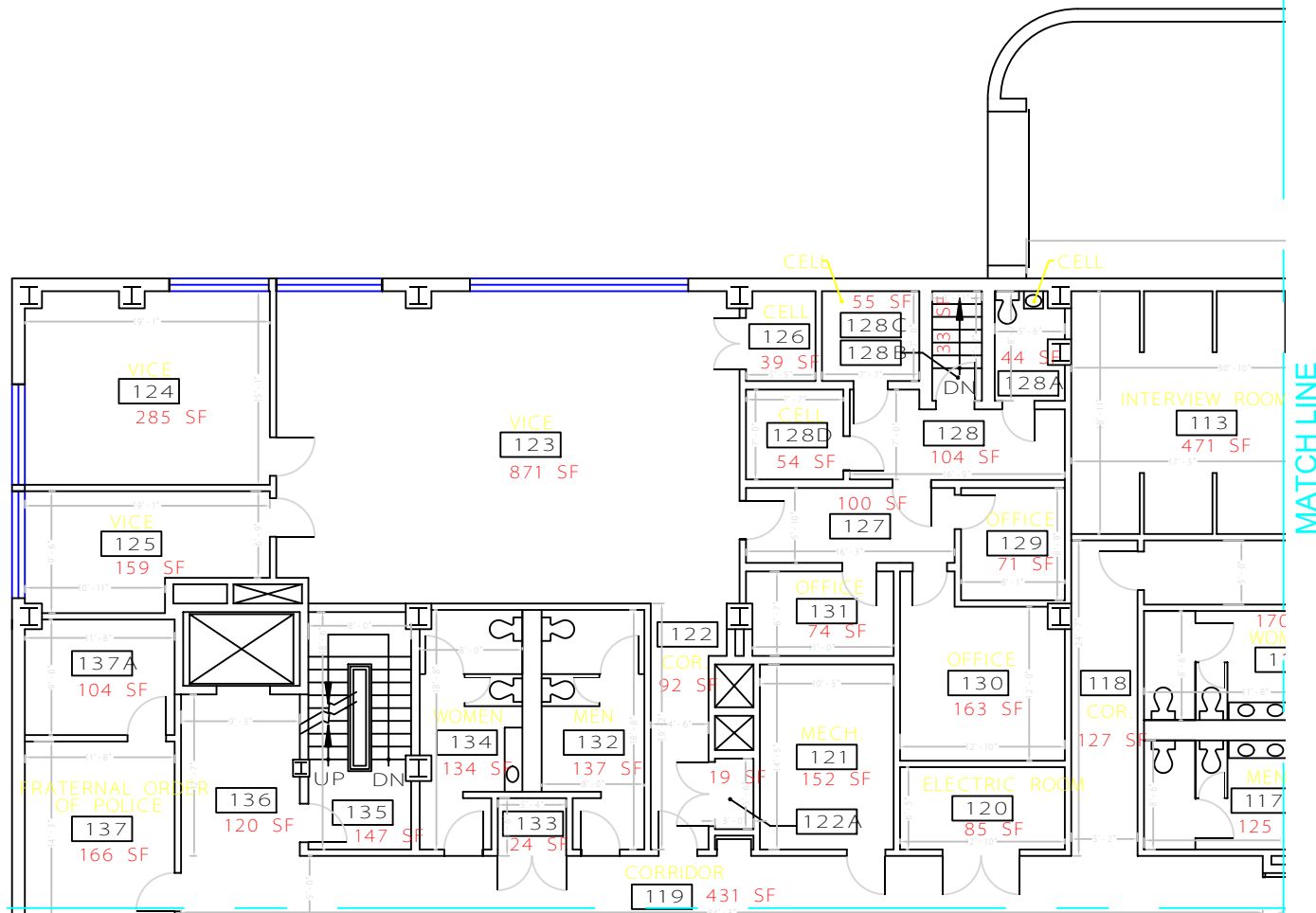


## FIRST FLOOR PLAN

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Project: <b>SEVENTH DISTRICT HEADQUARTERS</b>	
Sheet No.:	<b>1 OF 5</b>
Sheet Title:	<b>A-1</b>
Description:	<b>FIRST FLOOR PLAN</b>



Project:  
SEVENTH DISTRICT  
HEADQUARTERS

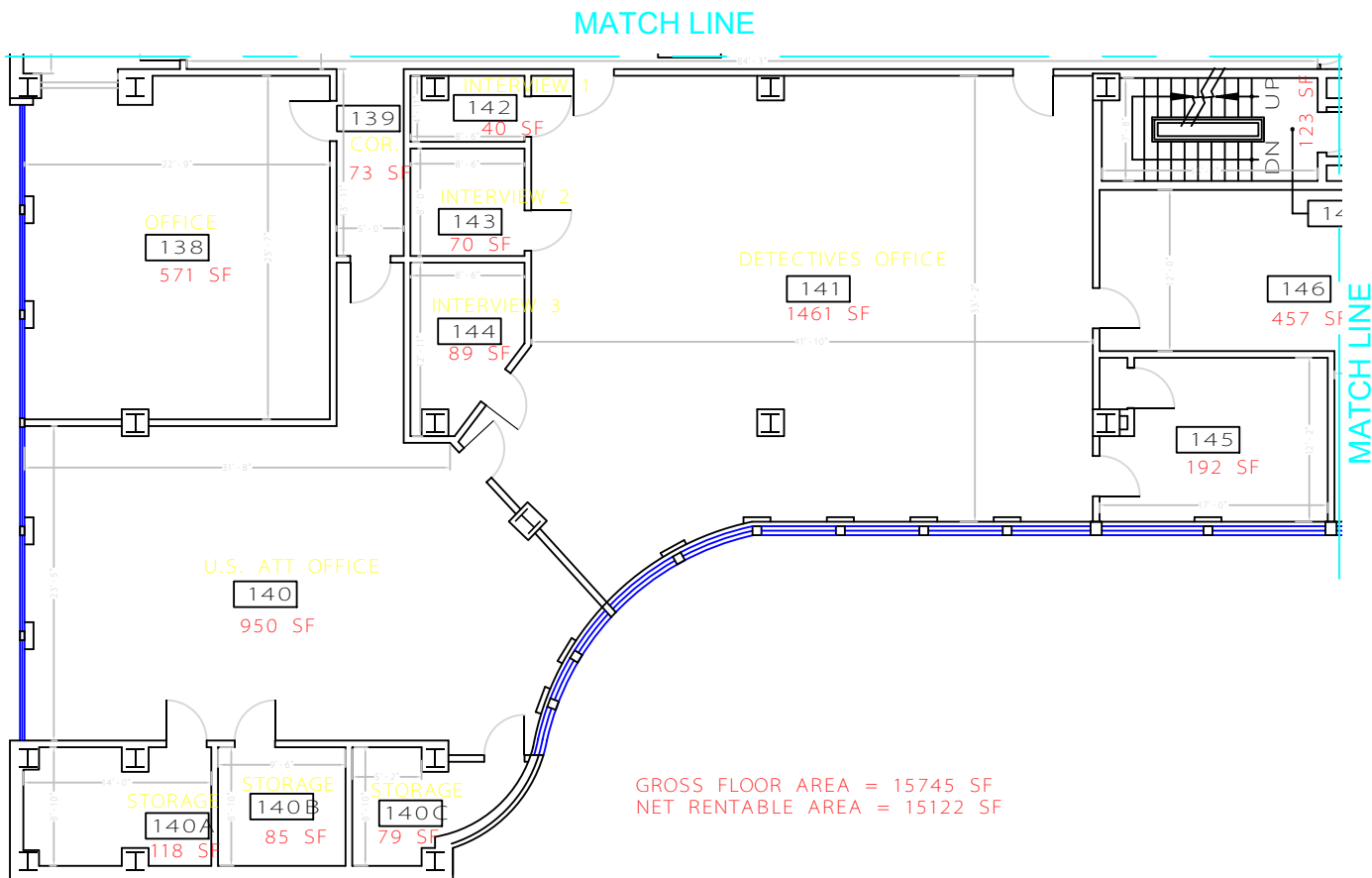
Sheet No.:  
2 OF 5

Sheet Title:  
A-2

Description:  
FIRST FLOOR PLAN A

**FIRST FLOOR PLAN A**

SCALE: 1/8" = 1'



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 NET RENTABLE AREA = 15122 SF

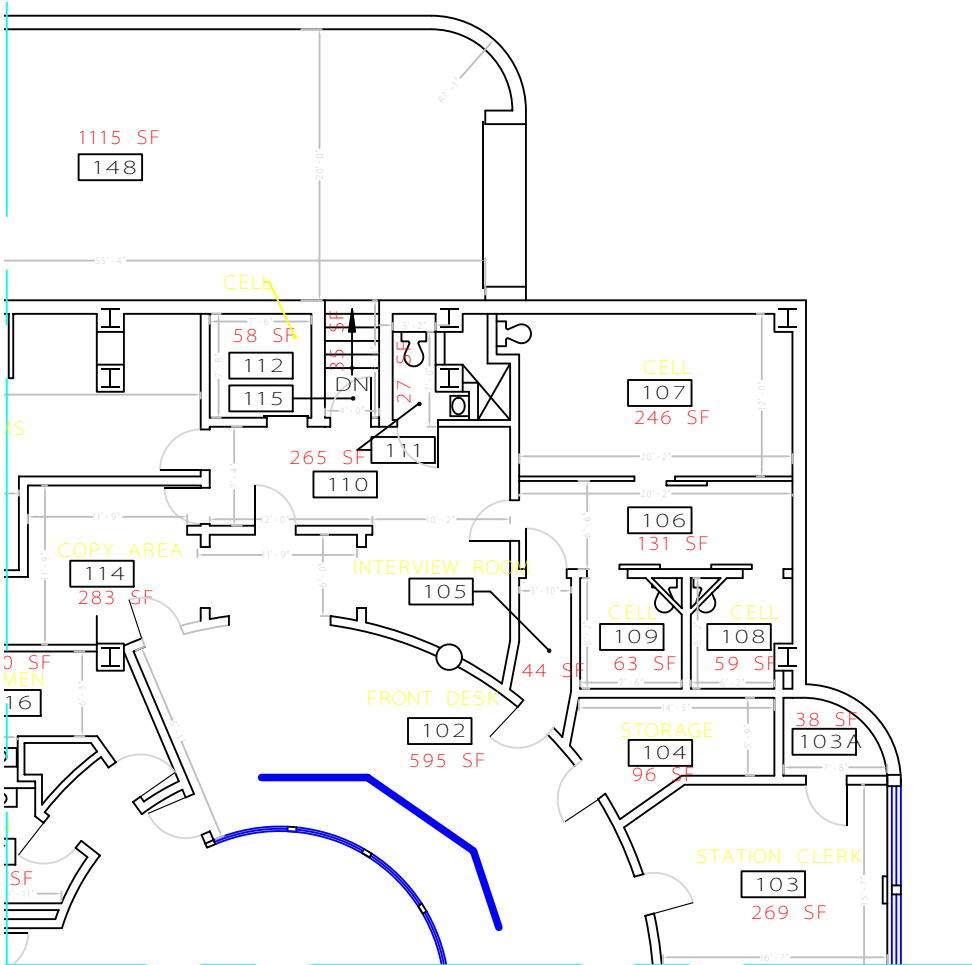


Project:	SEVENTH DISTRICT HEADQUARTERS
Sheet No.:	3 OF 5
Sheet Title:	A-3
Description:	FIRST FLOOR PLAN B

**FIRST FLOOR PLAN B**

SCALE: 1/8" = 1'


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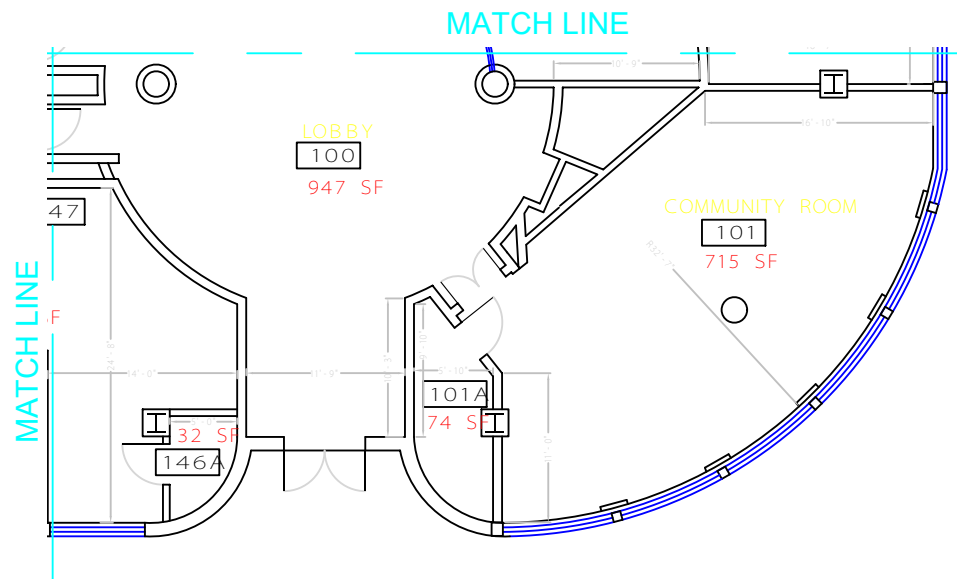


**FIRST FLOOR PLAN C**

SCALE: 1/8" = 1'

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Project: <b>SEVENTH DISTRICT HEADQUARTERS</b>	
Sheet No.:	<b>4 OF 5</b>
Sheet Title:	<b>A-4</b>
Description:	<b>FIRST FLOOR PLAN C</b>



**FIRST FLOOR PLAN D**

SCALE: 1/8" = 1'



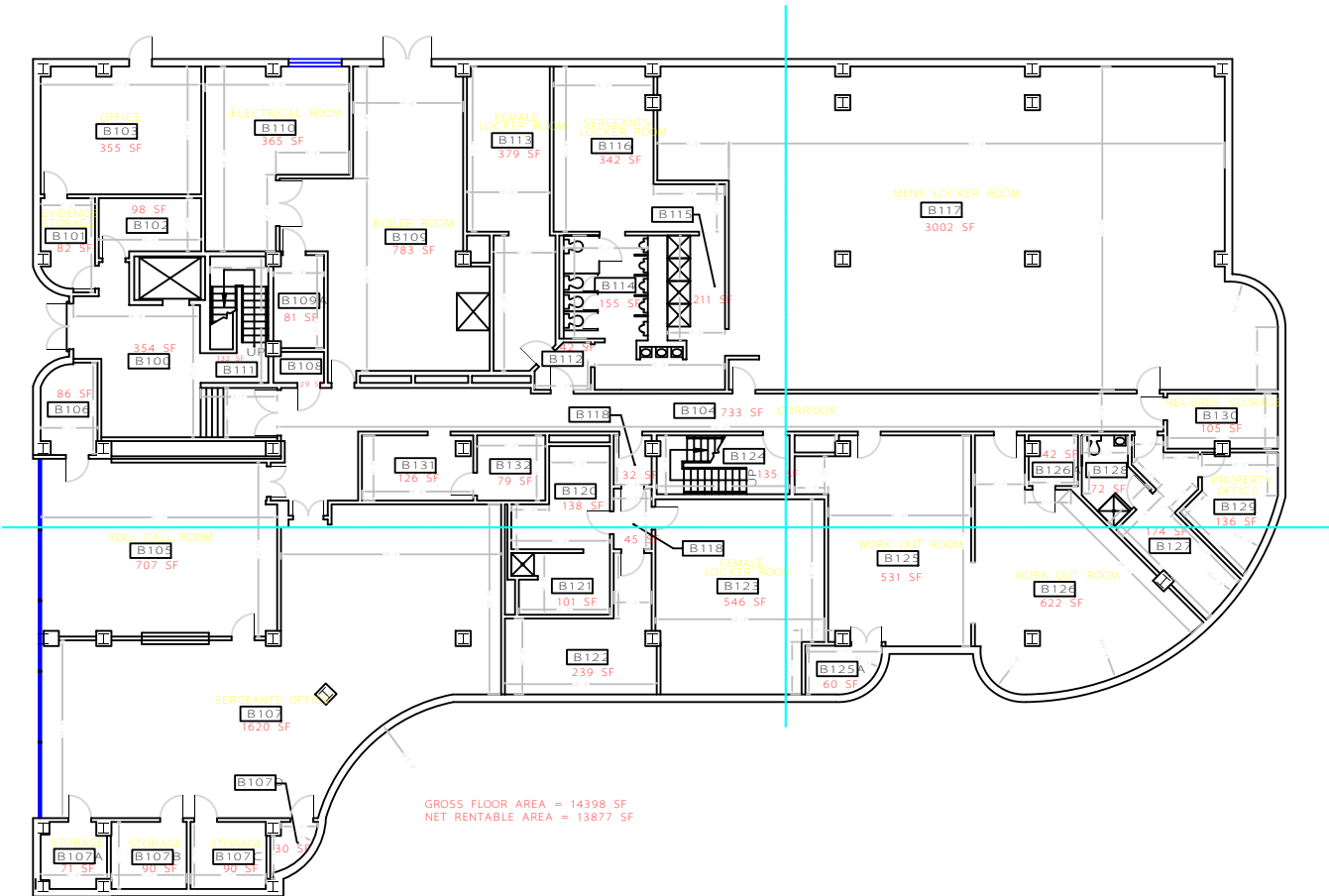
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SEVENTH DISTRICT  
HEADQUARTERS

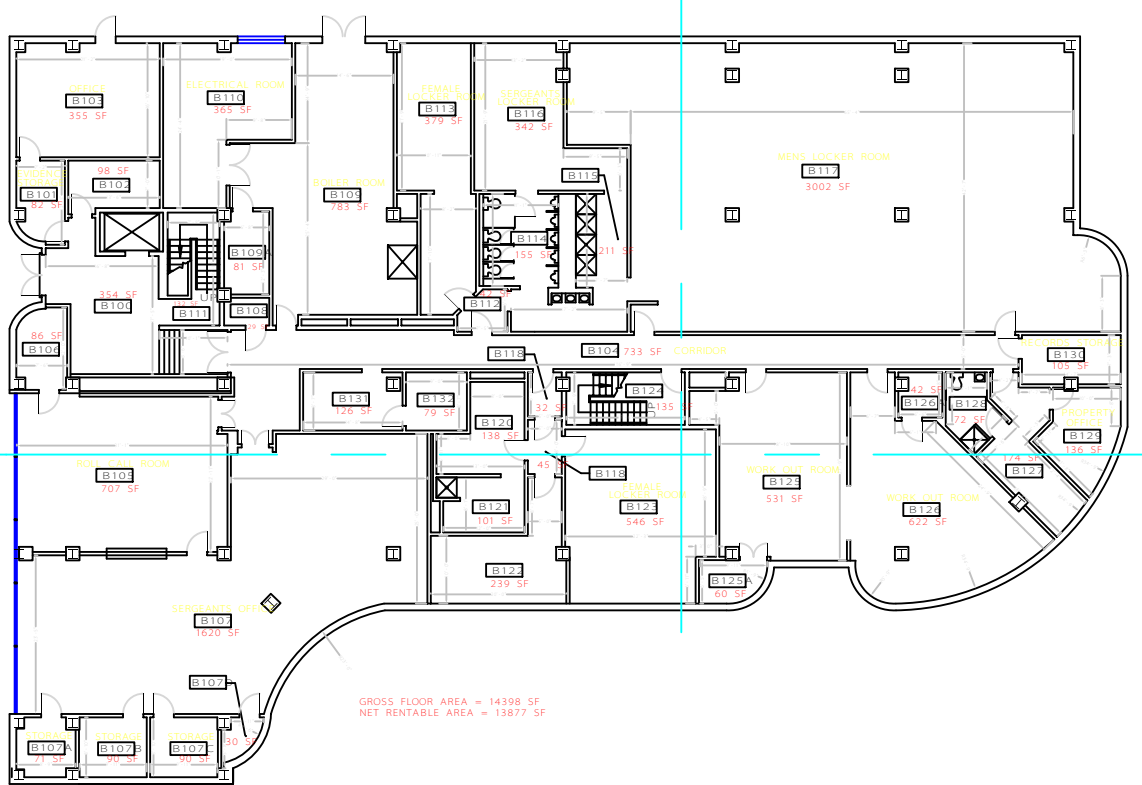
Sheet No.:  
5 OF 5

Sheet Title:  
A-5

Description:  
FIRST FLOOR PLAN D





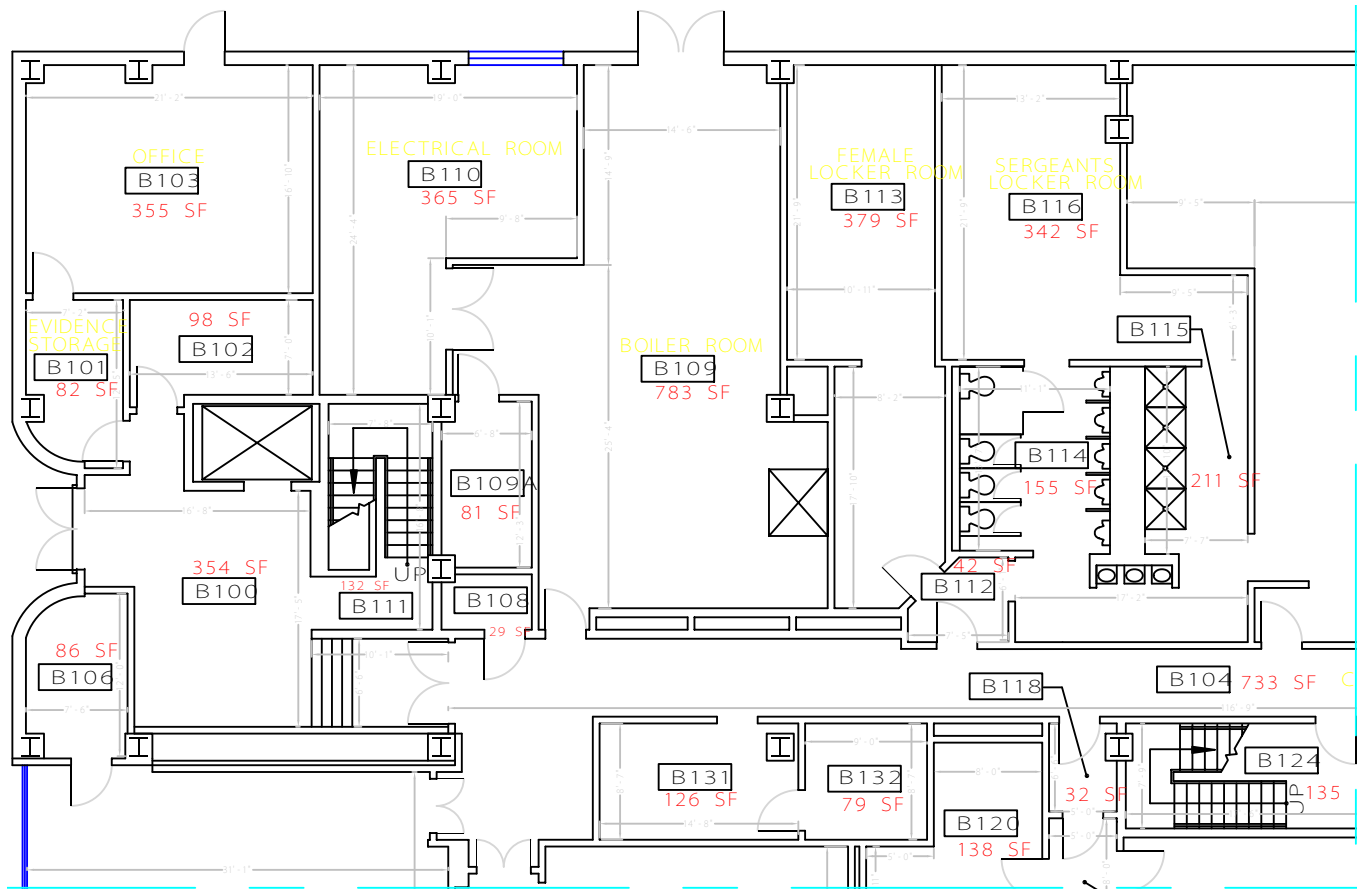


# BASEMENT FLOOR PLAN

SCALE: 1/16" = 1'



Project: <b>SEVENTH DISTRICT HEADQUARTERS</b>	
Sheet No.: <b>1 OF 5</b>	Sheet Title: <b>A-1</b>
Description: <b>BASEMENT FLOOR PLAN</b>	




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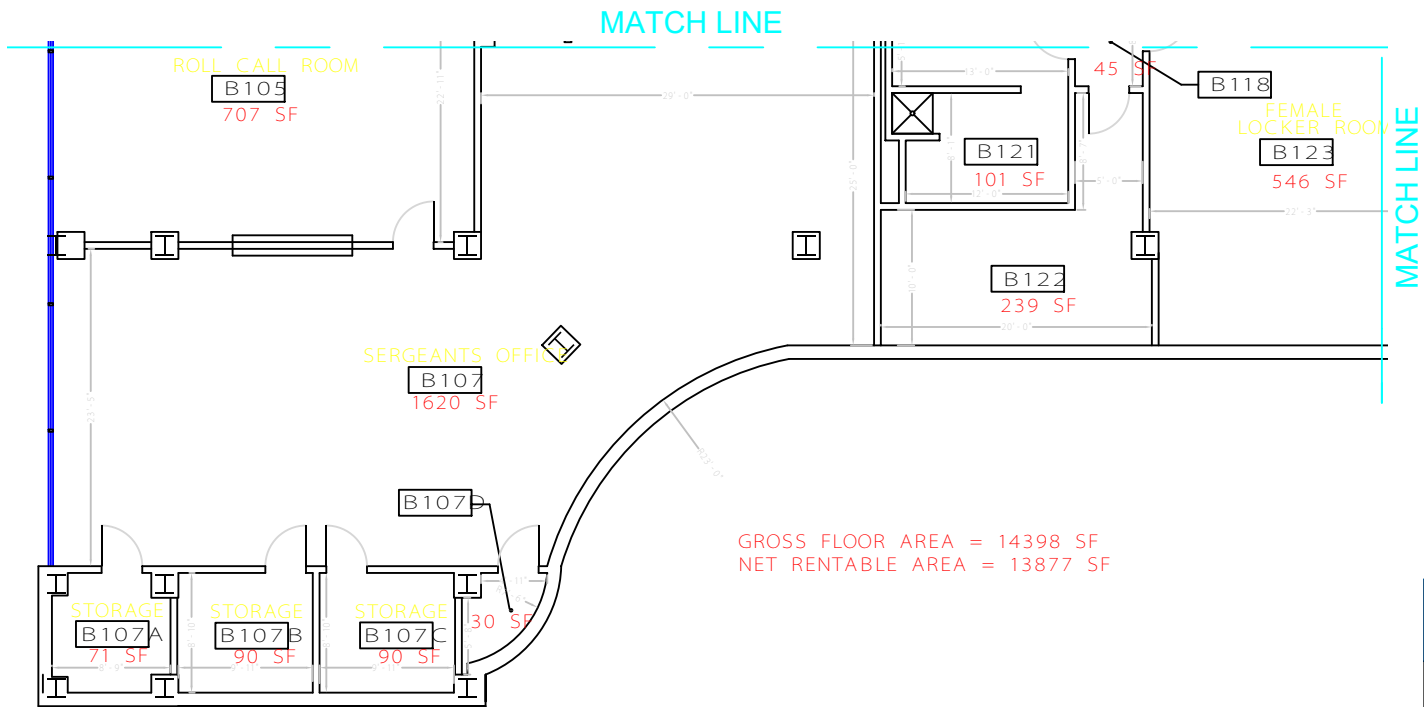
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**BASEMENT FLOOR PLAN A**

SCALE: 1/8" = 1'



	
Project: <b>SEVENTH DISTRICT HEADQUARTERS</b>	
Sheet No.:	2 OF 5
Sheet Title:	A-2
Description:	<b>BASEMENT FLOOR PLAN A</b>

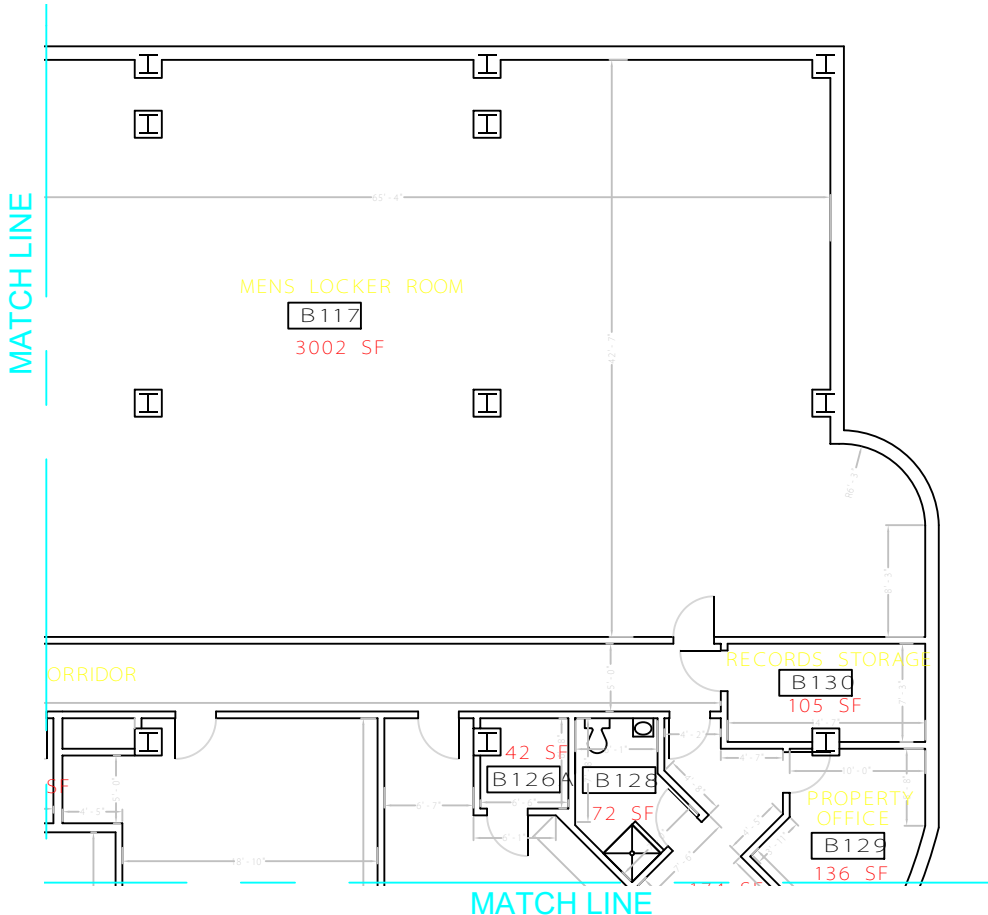


**BASEMENT FLOOR PLAN B**

SCALE: 1/8" = 1'




<b>FAITHFUL+GOULD</b> <small>CONSTRUCTIVE SOLUTIONS</small>	
Project: <b>SEVENTH DISTRICT HEADQUARTERS</b>	
Sheet No.: <b>3 OF 5</b>	
Sheet Title: <b>A-3</b>	
Description: <b>BASEMENT FLOOR PLAN B</b>	

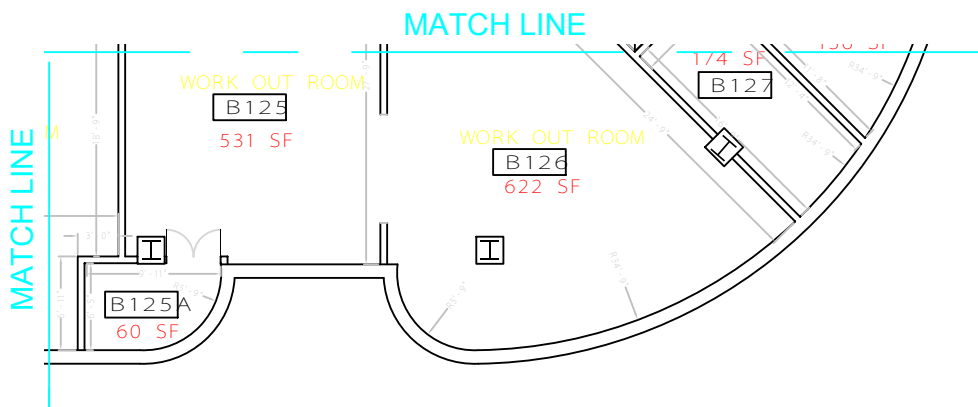


**BASEMENT FLOOR PLAN C**

SCALE: 1/8" = 1'




	
Project: <b>SEVENTH DISTRICT HEADQUARTERS</b>	
Sheet No.: <b>4 OF 5</b>	
Sheet Title: <b>A-4</b>	
Description: <b>BASEMENT FLOOR PLAN C</b>	

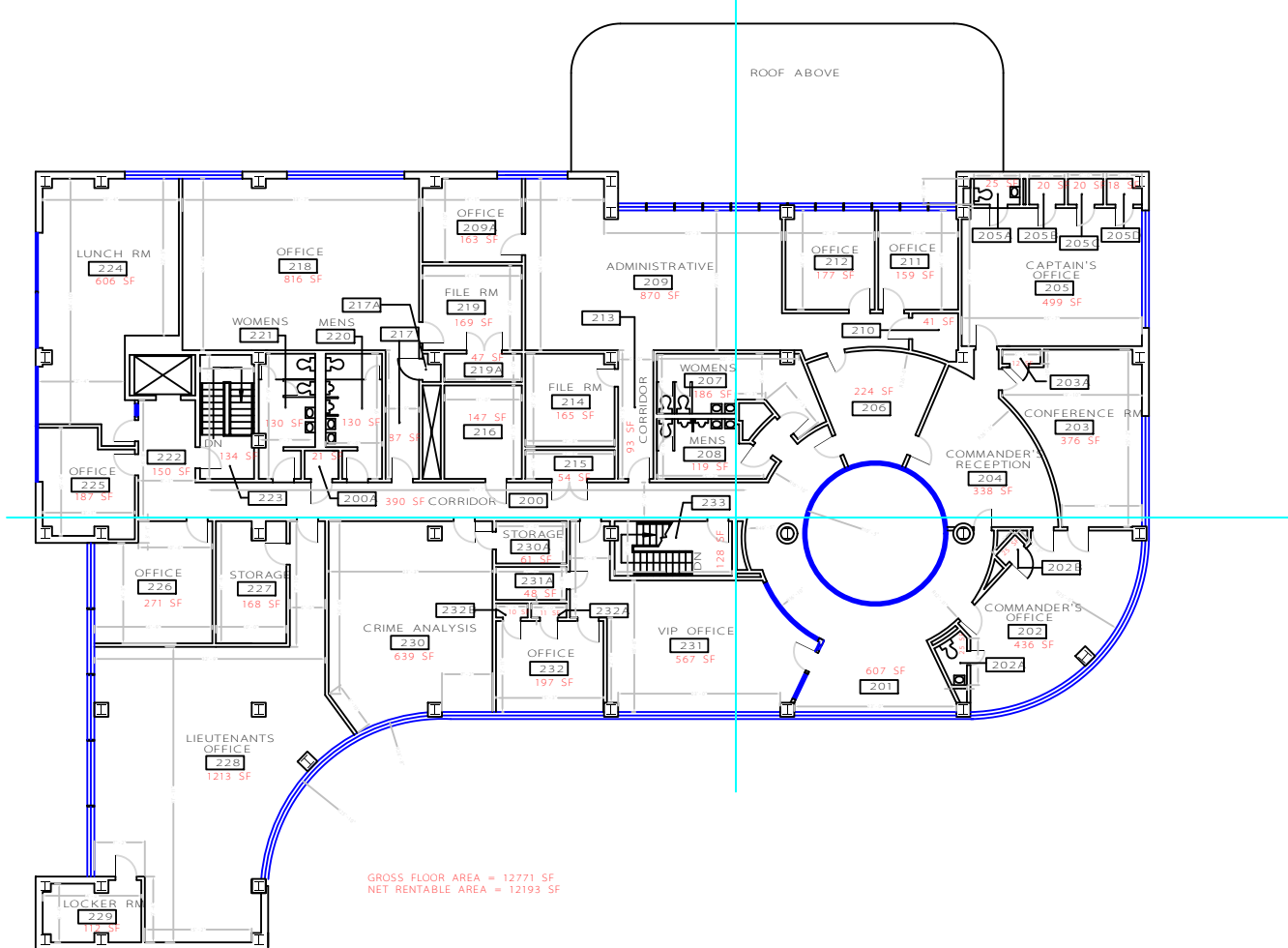


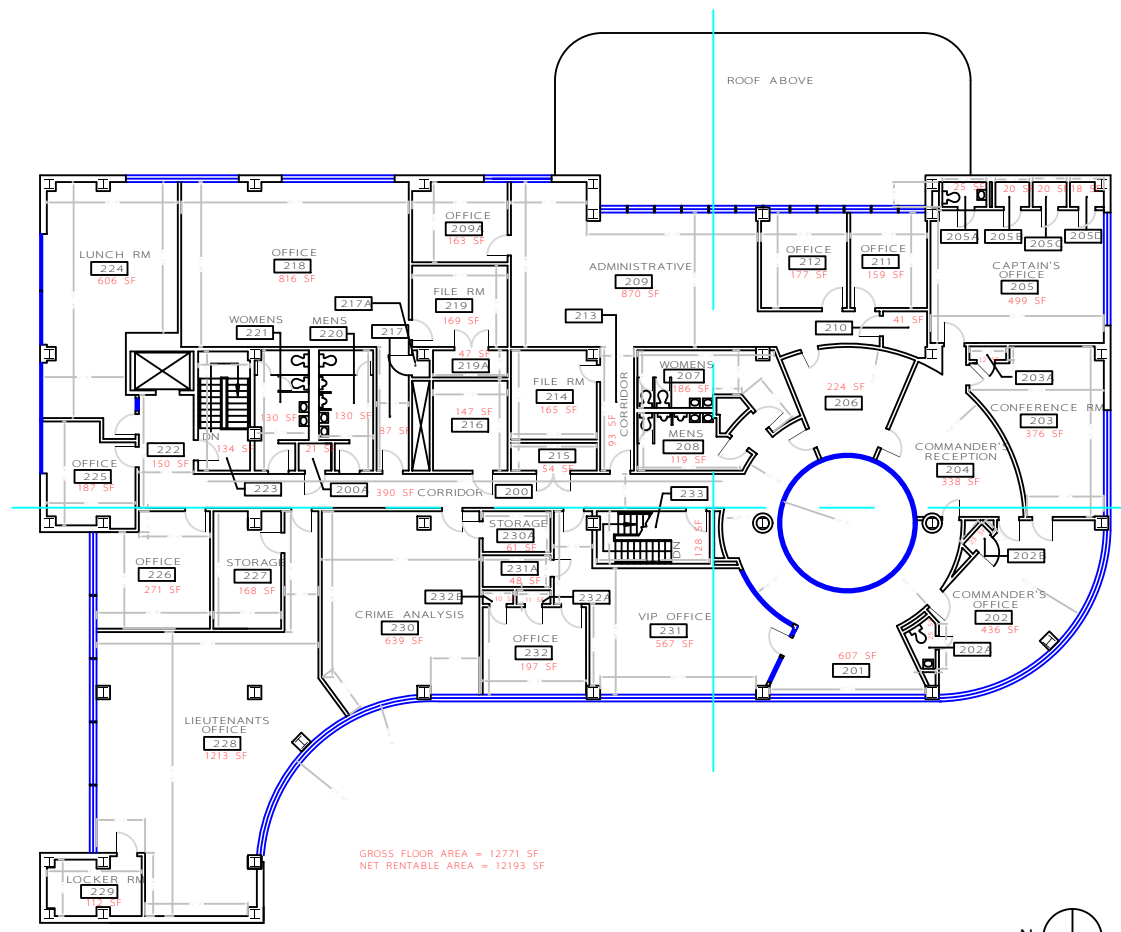
**BASEMENT FLOOR PLAN D**

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Project: <b>SEVENTH DISTRICT          HEADQUARTERS</b>	
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Sheet Title: <b>A-5</b>	
Description: <b>BASEMENT FLOOR PLAN D</b>	





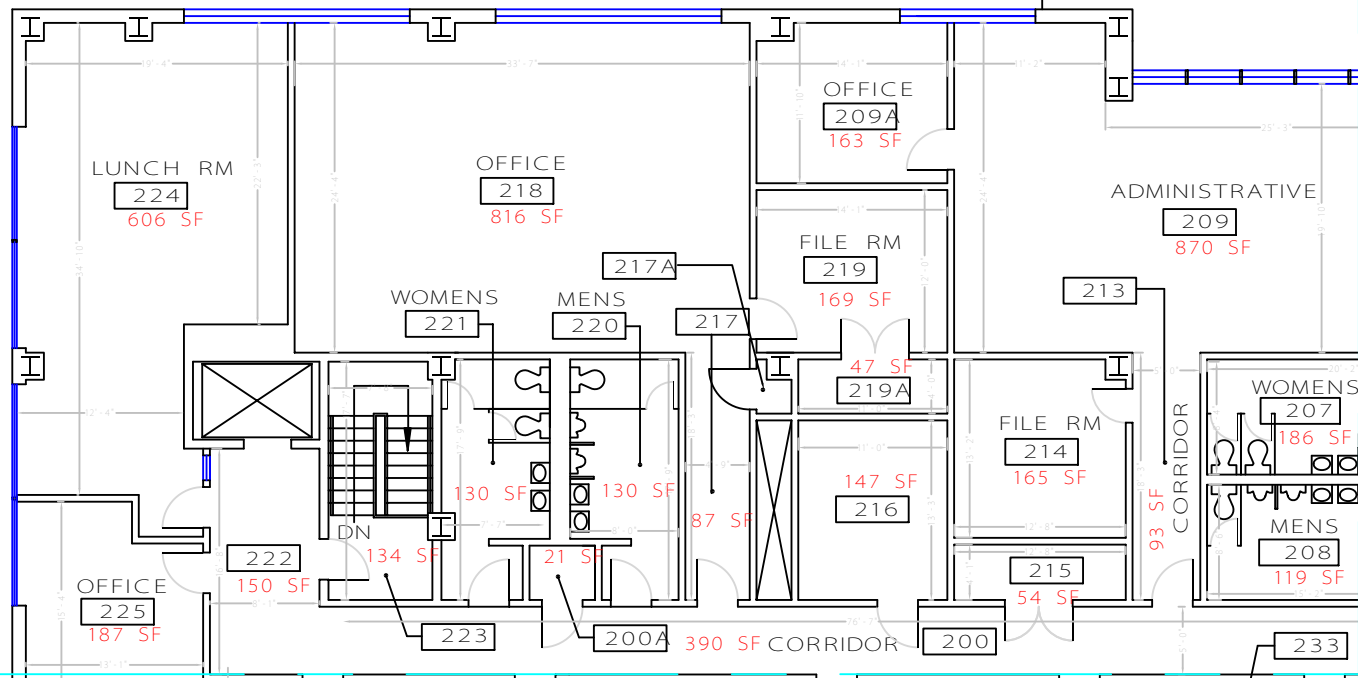
## SECOND FLOOR PLAN

SCALE: 1/16" = 1'



<b>Project:</b> SEVENTH DISTRICT HEADQUARTERS	
<b>Sheet No.:</b> 1 OF 5	<b>Sheet Title:</b> A-1
<b>Description:</b> SECOND FLOOR PLAN	






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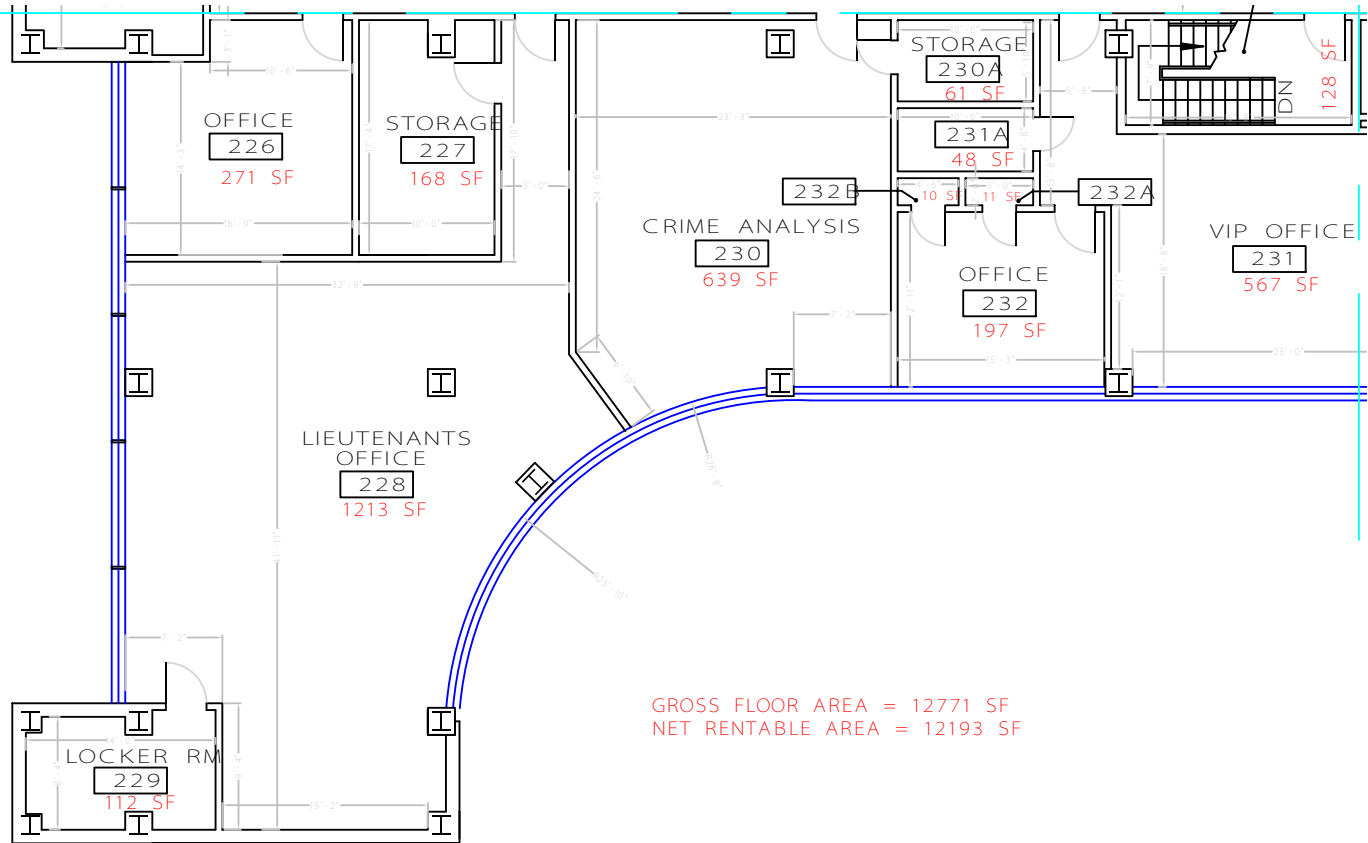
**SECOND FLOOR PLAN A**

SCALE: 1/8" = 1'



	
Project:	SEVENTH DISTRICT HEADQUARTERS
Sheet No.:	2 OF 5
Sheet Title:	A-2
Description:	SECOND FLOOR PLAN A

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MATCH LINE

GROSS FLOOR AREA = 12771 SF  
NET RENTABLE AREA = 12193 SF

### SECOND FLOOR PLAN B

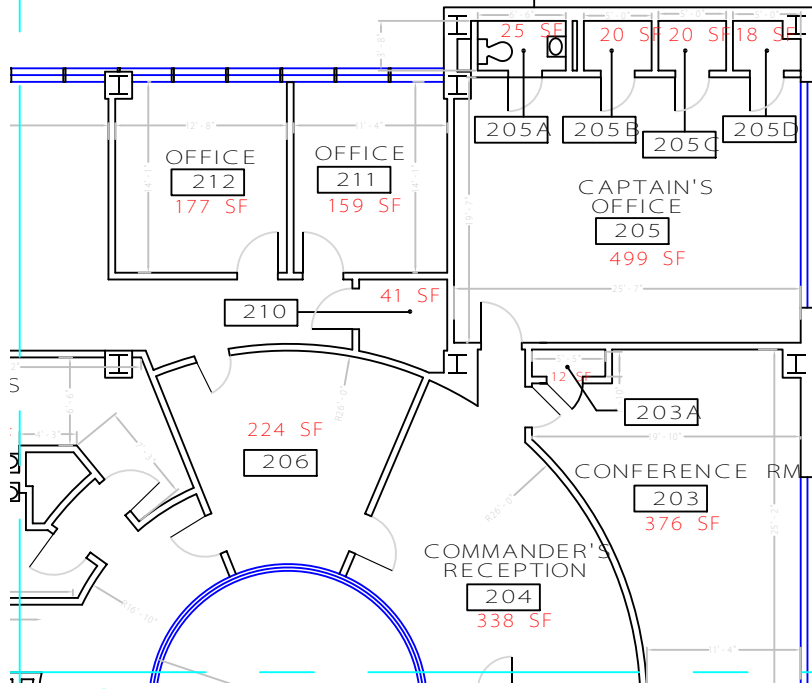
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Project: <b>SEVENTH DISTRICT HEADQUARTERS</b>
Sheet No.: <b>3 OF 5</b>
Sheet Title: <b>A-3</b>
Description: <b>SECOND FLOOR PLAN B</b>

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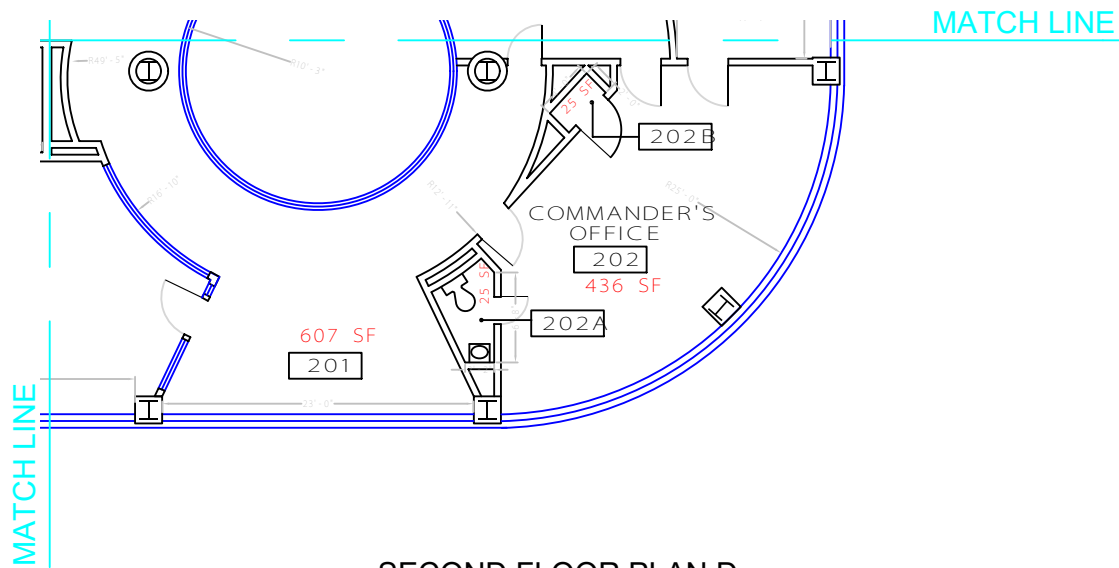


SECOND FLOOR PLAN C

SCALE: 1/8" = 1'




Project: SEVENTH DISTRICT HEADQUARTERS
Sheet No.: 4 OF 5
Sheet Title: A-4
Description: SECOND FLOOR PLAN C

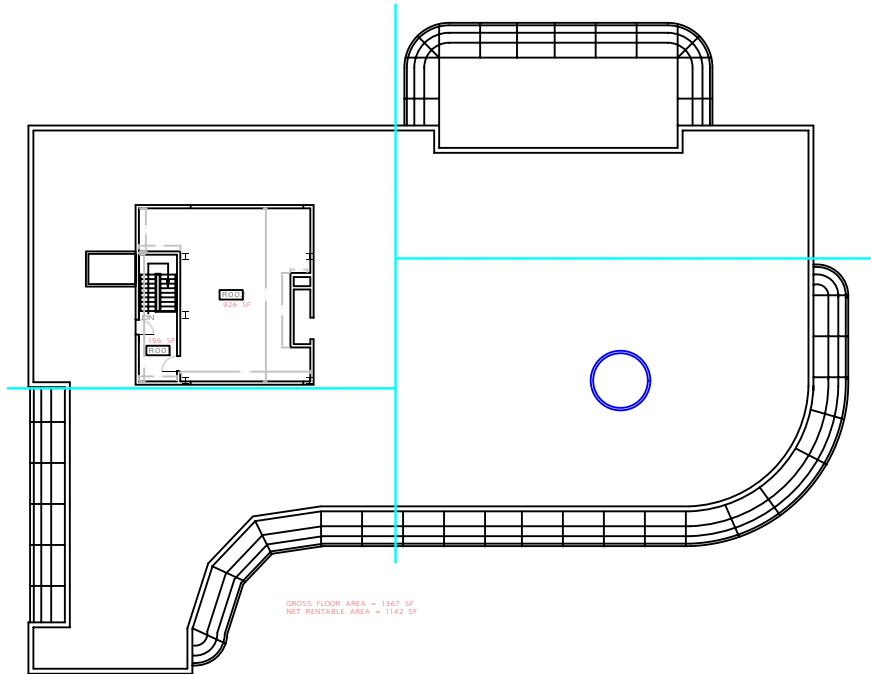


**SECOND FLOOR PLAN D**

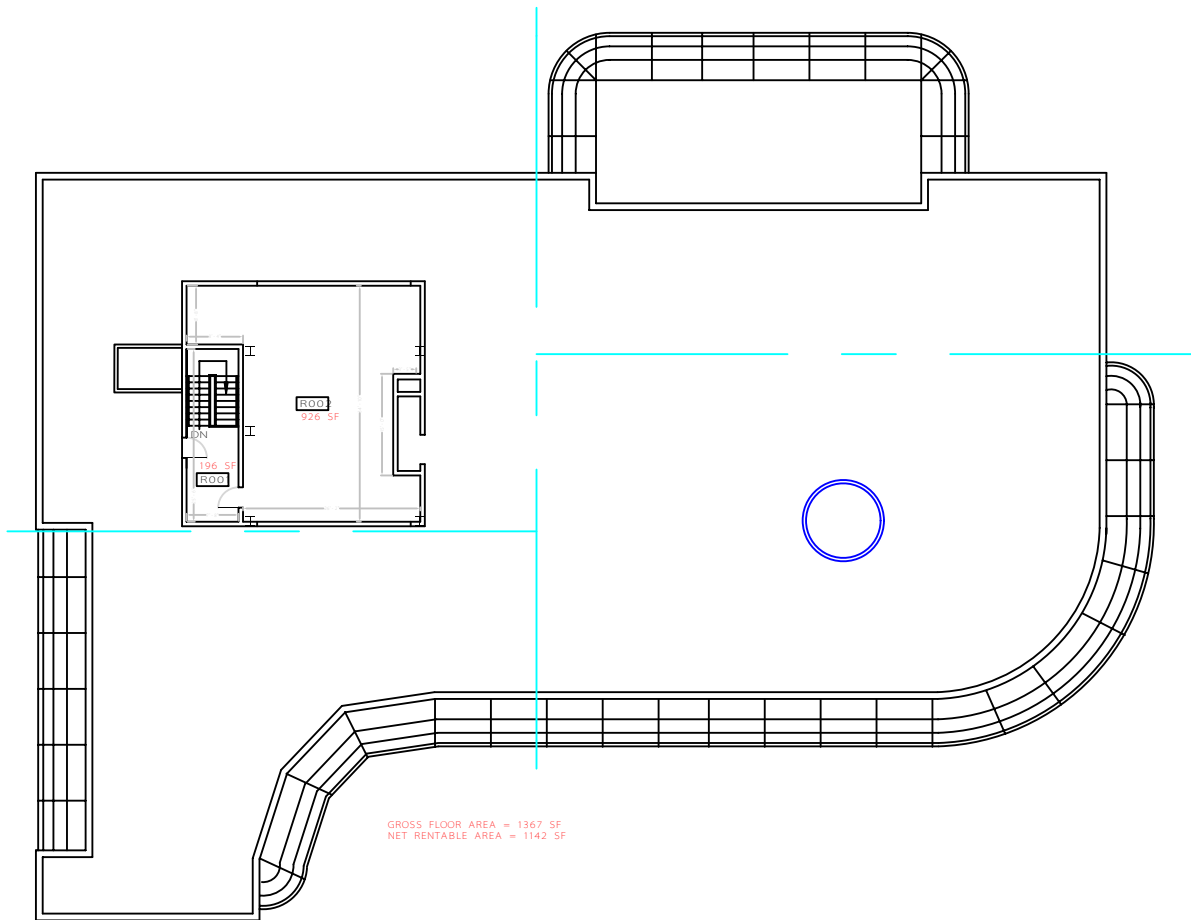
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Project: <b>SEVENTH DISTRICT HEADQUARTERS</b>	
Sheet No.: <b>5 OF 5</b>	
Sheet Title: <b>A-5</b>	
Description: <b>SECOND FLOOR PLAN D</b>	



GROSS FLOOR AREA = 1367 SF  
NET RENTABLE AREA = 1142 SF




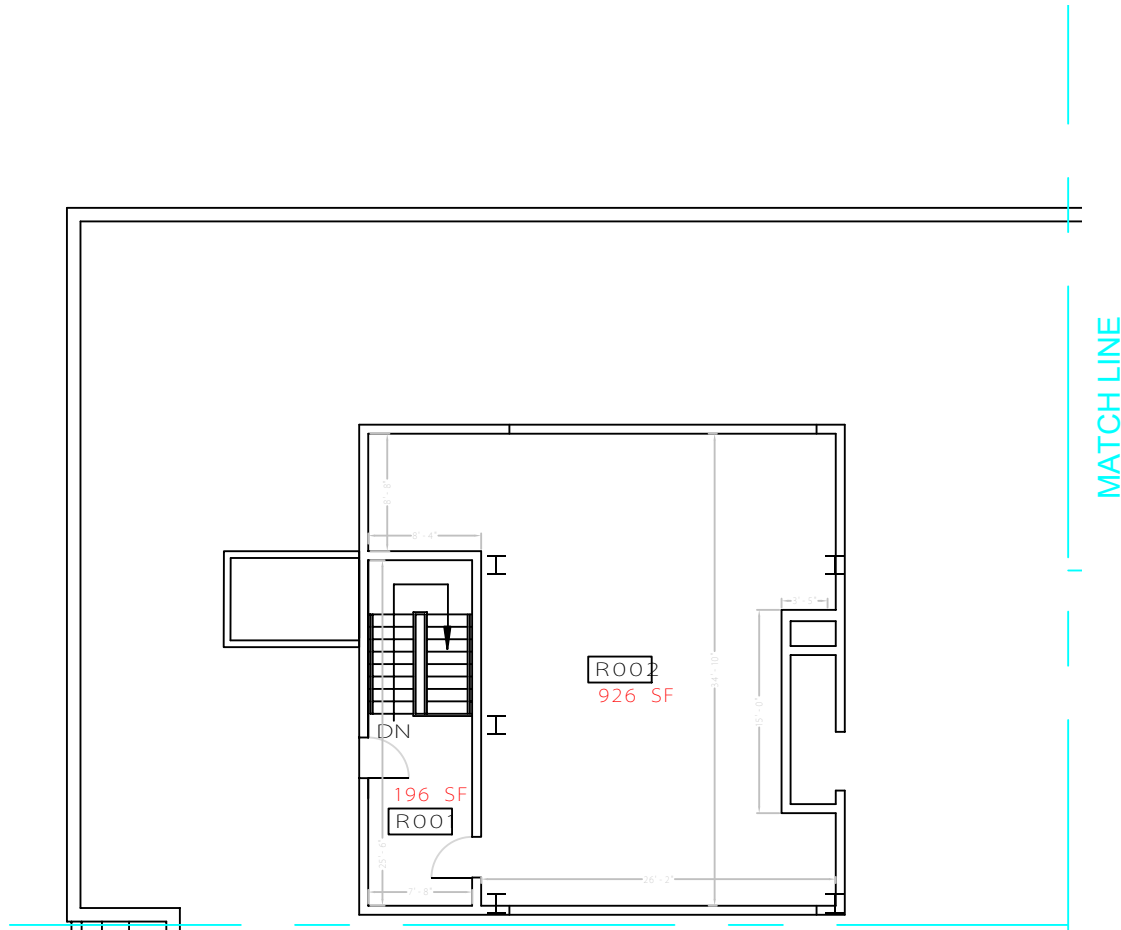
GROSS FLOOR AREA = 1367 SF  
 NET RENTABLE AREA = 1142 SF

**ROOF PLAN**

SCALE: 1/16" = 1'



	
Project: <b>SEVENTH DISTRICT          HEADQUARTERS</b>	
Sheet No.: <b>1 OF 5</b>	
Sheet Title: <b>A-1</b>	
Description: <b>ROOF PLAN</b>	




MATCH LINE

**ROOF PLAN A**

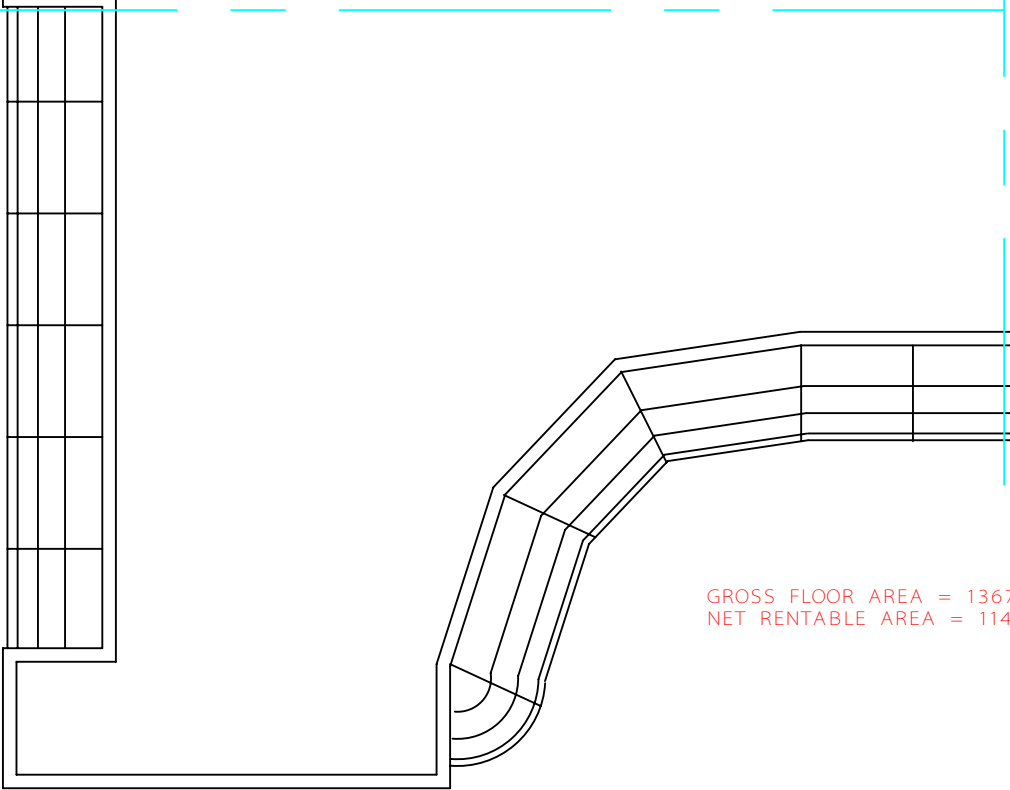
SCALE: 1/8" = 1'

MATCH LINE



	
Project: <b>SEVENTH DISTRICT HEADQUARTERS</b>	
Sheet No.: <b>2 OF 5</b>	
Sheet Title: <b>A-2</b>	
Description: <b>ROOF PLAN A</b>	

MATCH LINE




MATCH LINE

GROSS FLOOR AREA = 1367  
NET RENTABLE AREA = 1147

**ROOF PLAN B**

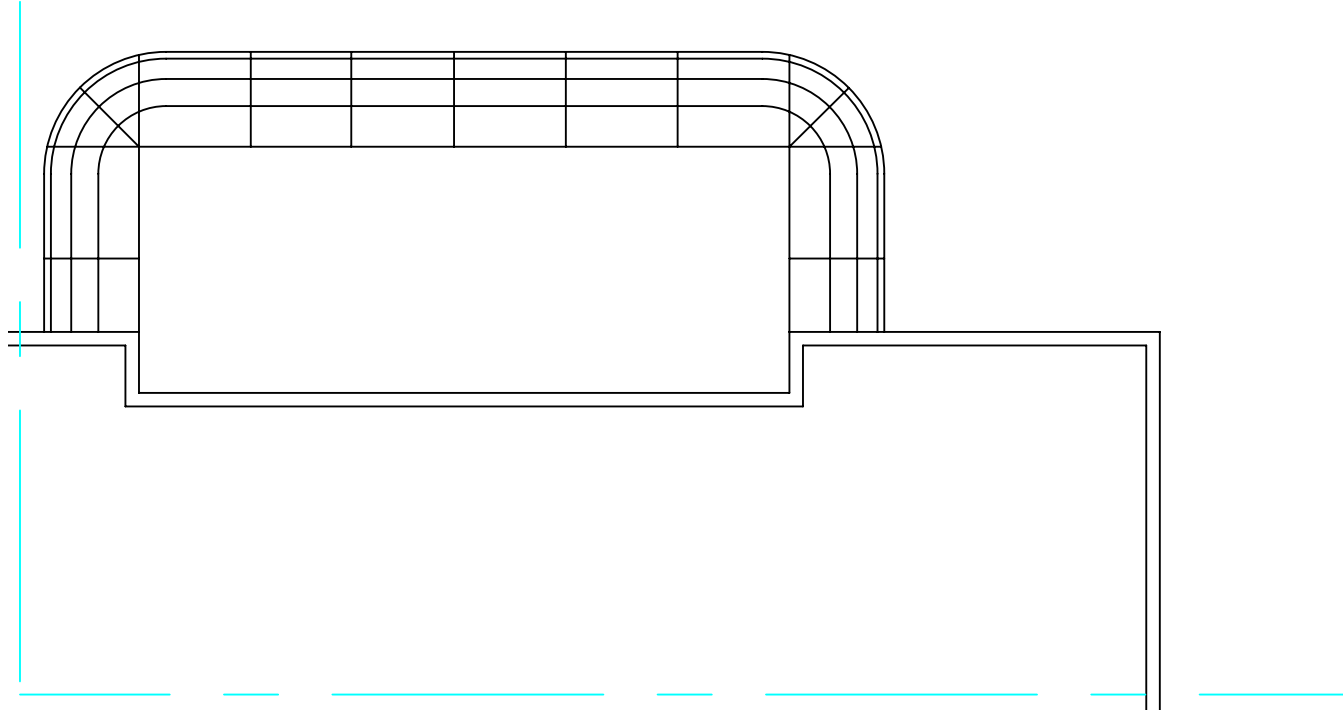
SCALE: 1/8" = 1'



	
Project:	SEVENTH DISTRICT HEADQUARTERS
Sheet No.:	3 OF 5
Sheet Title:	A-3
Description:	ROOF PLAN B



MATCH LINE




MATCH LINE

**ROOF PLAN C**

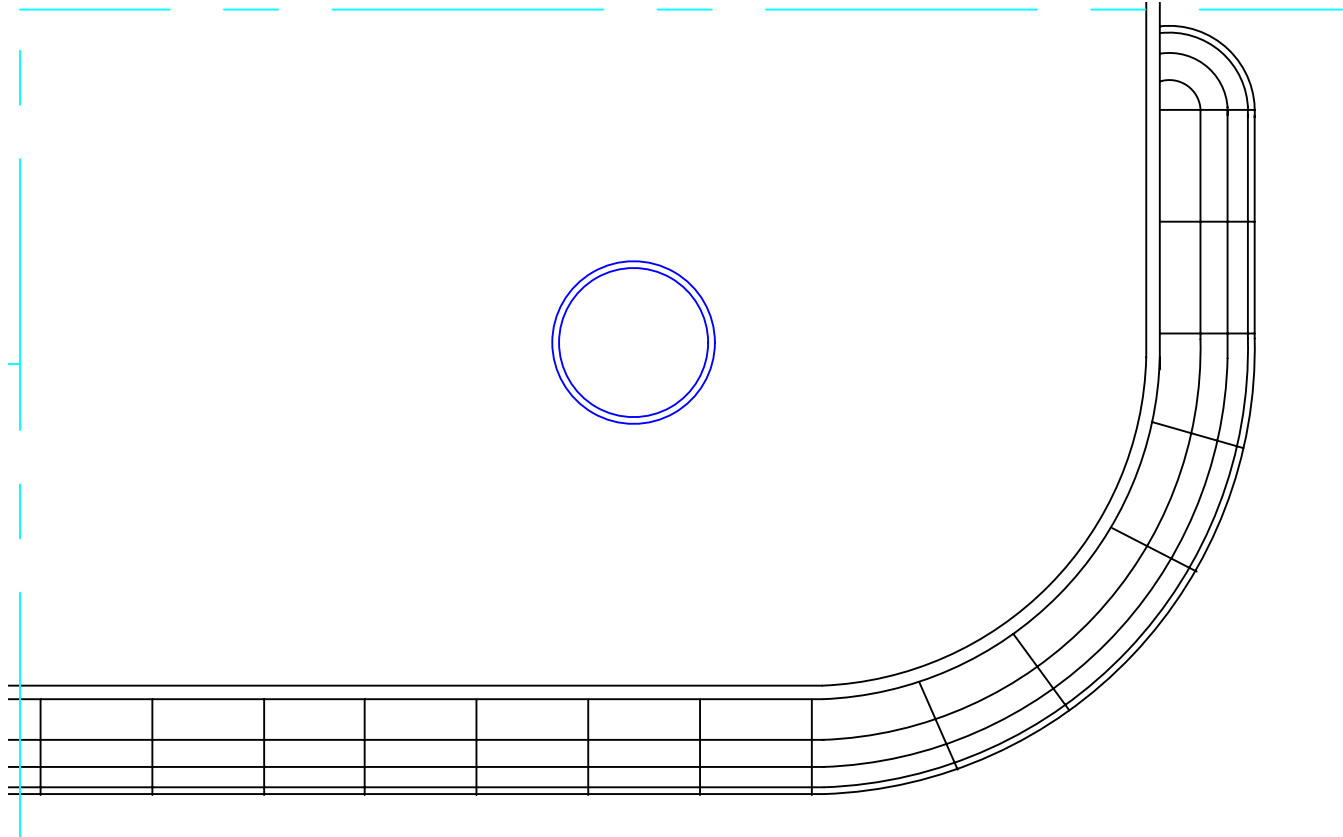
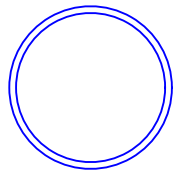
SCALE: 1/8" = 1'



	
Project: SEVENTH DISTRICT HEADQUARTERS	
Sheet No.: 4 OF 5	
Sheet Title: A-4	
Description: ROOF PLAN C	

MATCH LINE


MATCH LINE

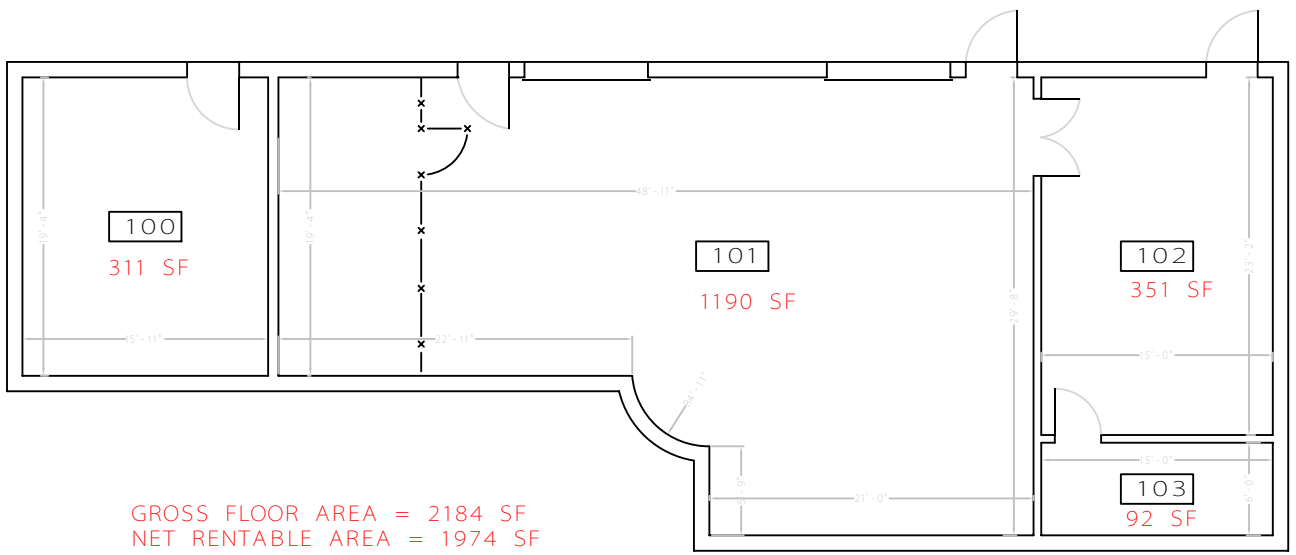


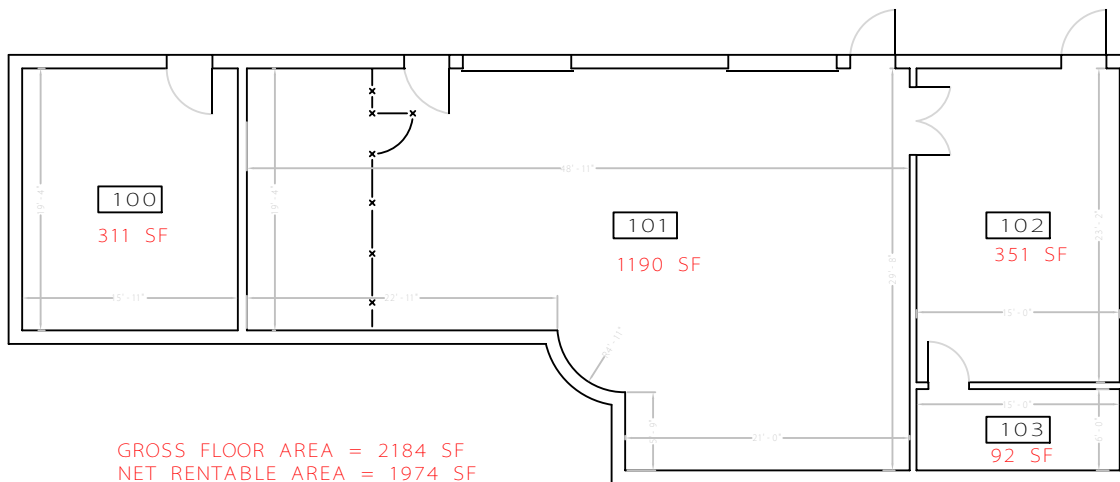
**ROOF PLAN D**

SCALE: 1/8" = 1'



	
Project: <b>SEVENTH DISTRICT HEADQUARTERS</b>	
Sheet No.: <b>5 OF 5</b>	
Sheet Title: <b>A-5</b>	
Description: <b>ROOF PLAN D</b>	






GROSS FLOOR AREA = 2184 SF  
 NET RENTABLE AREA = 1974 SF

### FIRST FLOOR PLAN

SCALE: 1/8" = 1'



	
Project:	
SEVENTH DISTRICT SCOOTER STORAGE SHED	
Sheet No.:	
1 OF 1	
Sheet Title:	
A-1	
Description:	
FIRST FLOOR PLAN	

**GOVERNMENT OF THE DISTRICT OF COLUMBIA  
DEPARTMENT OF GENERAL SERVICES**



**EXHIBIT D**

**[EXHIBIT WILL APPEAR ON THE FOLLOWING PAGE]**

REPORT OF

# COMPREHENSIVE FACILITIES CONDITION ASSESSMENT & SPACE UTILIZATION SURVEY

FOR

DISTRICT OF COLUMBIA METROPOLITAN POLICE DEPARTMENT  
7TH DISTRICT HEADQUARTERS  
2455 ALABAMA AVENUE, SE  
WASHINGTON, D.C 20020



**MAYOR ADRIAN M. FENTY**

PUBLISHED OCTOBER 2009, BY  
DISTRICT OF COLUMBIA DEPARTMENT OF REAL ESTATE SERVICES  
ROBIN-EVE JASPER, DIRECTOR  
GERICK T. SMITH, DEPUTY DIRECTOR OF CONSTRUCTION DIVISION

October 5, 2009

District of Columbia Capital Construction Services Administration  
Department of Real Estate Services  
2000 14<sup>th</sup> Street, N.W. Fifth Floor  
Washington, DC 20009

Attention: Mr. Amar Singh  
Project Manager

Reference: Report of Comprehensive Facilities Condition Assessment & Space Utilization Survey  
District of Columbia Metropolitan Police Department  
7<sup>th</sup> District Headquarters  
2455 Alabama Avenue, SE  
Washington, D.C 20020  
Faithful+Gould Project No. 55535-09  
District of Columbia Contract No. POAM-2004-C-0044-14-CA

Dear Mr. Singh:

Faithful+Gould, Inc. has completed a report of our Comprehensive Facility Condition Assessment and Space Utilization Survey of the District of Columbia Metropolitan Police Department 7<sup>th</sup> District Headquarters located at 2455 Alabama Avenue in Southeast (SE) 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 development of an occupancy profile to include production of floor plans and summarizing of the current utilization of occupiable space.

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 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 look forward to working with you on other projects.

**Very Truly Yours,**

Paul Alders, MCIQB, LEED® AP  
Senior Facility Assessor

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

cc. File

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**TABLE OF CONTENTS**

	<u>Page</u>
<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>FACILITY ATTRIBUTE TABLE .....</b>	<b>3</b>
<b>SUMMARIES .....</b>	<b>5</b>
<b>FACILITY CONDITION ASSESSMENT .....</b>	<b>6</b>
<b>A. SUBSTRUCTURE .....</b>	<b>6</b>
<b>A10 Foundations .....</b>	<b>6</b>
<b>A20 Basement Construction .....</b>	<b>7</b>
<b>B. SHELL .....</b>	<b>9</b>
<b>B10 Superstructure .....</b>	<b>9</b>
<b>B20 Exterior Closure .....</b>	<b>11</b>
<b>B30 Roofing .....</b>	<b>15</b>
<b>C. INTERIORS .....</b>	<b>20</b>
<b>C10 Interior Construction .....</b>	<b>20</b>
<b>C20 Stairs .....</b>	<b>20</b>
<b>C30 Interior Finishes .....</b>	<b>20</b>
<b>D. SERVICES .....</b>	<b>22</b>
<b>D10 Conveying .....</b>	<b>22</b>
<b>D20 Plumbing Systems .....</b>	<b>29</b>
<b>D30 HVAC Systems .....</b>	<b>33</b>
<b>D40 Fire Protection .....</b>	<b>42</b>
<b>D50 Electrical Systems .....</b>	<b>47</b>
<b>D60 Safety, Security &amp; Access Control .....</b>	<b>54</b>
<b>E. EQUIPMENT &amp; FURNISHINGS .....</b>	<b>56</b>
<b>E10 Equipment .....</b>	<b>56</b>
<b>E20 Furnishing .....</b>	<b>57</b>
<b>F. SPECIAL CONSTRUCTION .....</b>	<b>59</b>
<b>F10 Special Construction .....</b>	<b>59</b>



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<b>G.</b>	<b>SITE FEATURES.....</b>	<b>60</b>
	<b>G10 Site Systems.....</b>	<b>60</b>
<b>H.</b>	<b>ACCESSIBILITY ISSUES .....</b>	<b>64</b>
	<b>H10 Accessibility .....</b>	<b>64</b>
<b>I.</b>	<b>HAZARDOUS MATERIALS .....</b>	<b>71</b>
	<b>I10 Hazardous Materials .....</b>	<b>71</b>
<b>J.</b>	<b>ENVIRONMENTAL ANALYSIS .....</b>	<b>73</b>
	<b>J10 LEED Analysis.....</b>	<b>73</b>
	<b>J20 Green Roof Feasibility.....</b>	<b>82</b>
	<b>J30 Energy Efficiency.....</b>	<b>84</b>

**SPACE UTILIZATION SURVEY**

<b>A.</b>	<b>INVENTORY &amp; OCCUPANCY NUMBER .....</b>	<b>86</b>
<b>B.</b>	<b>FLOOR PLANS &amp; AREA CALCULATIONS .....</b>	<b>86</b>

**Appendices**

<b>Appendix A</b>	-	<b>Six Year Capital Expenditure Forecast</b>
<b>Appendix B</b>	-	<b>Six Year Maintenance Expenditure Forecast</b>
<b>Appendix C</b>	-	<b>Photographs</b>
<b>Appendix D</b>	-	<b>Inventory &amp; Checklist</b>
<b>Appendix E</b>	-	<b>Preventative Maintenance Recommendations</b>
<b>Appendix F</b>	-	<b>Scope of Services, Document Review &amp; Exclusions</b>
<b>Appendix G</b>	-	<b>Resumes</b>

## EXECUTIVE SUMMARY

The District of Columbia Metropolitan Police Department 7<sup>th</sup> District Headquarters located at 2455 Alabama Avenue in Southeast (SE) Washington, DC ("the Property") consists of a two-story (plus walk-out basement) concrete-framed office building. The Property also contains an adjoining garage, detached vehicle maintenance building, and a vehicle fueling station.

The overall building construction resembles Type II-A construction, per IBC Table 601 and is contained upon a 1.46 acre (66,371 gross square feet) site. The Property is bounded at the north side by Alabama Avenue SE and Hartford Street SE and at the south side by Alabama Avenue SE and James M. McGee Jr. Street SE. The Property was developed in 1988 and contains a measured gross floor area of 45,098 square feet.

The Property is served by bus stops located on Alabama Avenue SE, approximately one block to the north of the Property. The nearest Metrorail station is located approximately 0.9 miles to the east of the Property (Naylor Road Metrorail station).

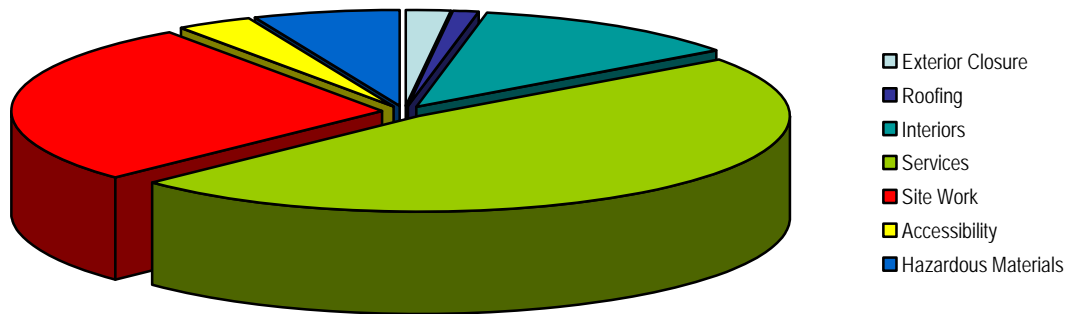
On March 24, 2009 Mr. Paul Alders of Faithful+Gould visited the Property to observe and document the condition of the building and site components. During our site visit, Faithful+Gould was assisted by Mr. Melvin G. Brown, Jr., Building Management Specialist with the District of Columbia Office of Property Management.

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 calculate the Facility Condition Index (FCI) of the Property and develop an occupancy profile to include production of floor plans. The Property is generally in fair to good condition. This is reflected by a calculated FCI of 0.06 (Good) reflective of a **total Deferred Maintenance expenditure requirement of \$491,218 (excluding discretionary sustainability and energy upgrades) over the six-year study period.** Refer to the next page for further discussion of the Property's Facility Condition Index. **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
Elevator Modernization	Condition	\$159,088	2015
Chiller Replacement	Condition	\$105,000	2015
Boiler Replacement	Condition	\$35,709	2011

**Chart EX-2 Expenditure by System**



**FACILITY ATTRIBUTE TABLE**

**DC METROPOLITAN POLICE DEPARTMENT  
7<sup>TH</sup> DISTRICT HEADQUARTERS**

**PROPERTY DETAILS**

**ADDRESS:** 2455 ALABAMA AVENUE, SE  
WASHINGTON, D.C 20020

**NEAREST INTERSECTION:** ALABAMA AVENUE SE AND JAMES M. MCGEE JR. STREET SE

**SQUARE, SUFFIX, AND LOT (SSL):** 5728 0800

**QUAD-WARD:** SE-8

**HISTORIC DISTRICT:** YES  NO

**HISTORIC BUILDING:** YES  NO

**GROSS SQUARE FOOTAGE OF BUILDING:** 45,098

**GROSS SQUARE FOOTAGE OF LAND:** 66,371

**YEAR OF CONSTRUCTION:** 1988

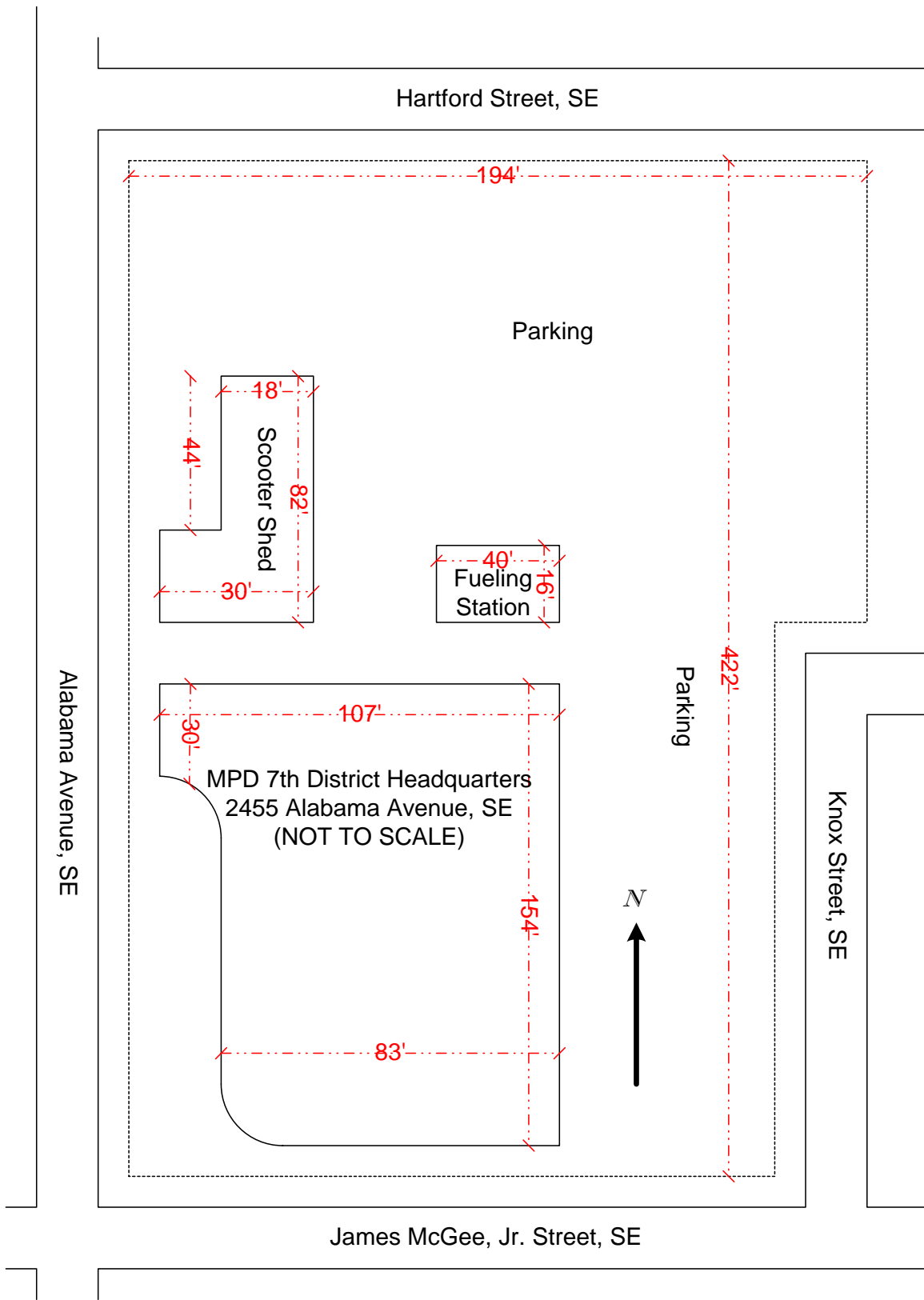
**NUMBER OF PARKING SPACES:** 105

**OCCUPANCY STATUS:** OCCUPIED  VACANT  PARTIALLY OCCUPIED

**ASSESSED BUILDING AND LAND VALUES<sup>1</sup>:**

SSL	Assessment Year	Land Value	Improvement Value	Total Assessment Value
5728 0800	2010	\$1,493,350	\$11,141,850	\$12,635,200

1. Source: <https://www.taxpayerservicecenter.com/>



**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 gross square foot times the gross square footage of building 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 **\$8,027,444** (based on a value of \$178 gross square foot and a floor area of 45,098 gross square feet) and a Deferred Maintenance value of over the six-year study period of **\$682,239** the FCI ratio for the Property is **0.06** indicating that the Property is in **good** condition. The FCI rating is generally a good reflection of the building’s condition.

Capital Expenditure Forecast	\$312,796
Maintenance Expenditure Forecast	<u>\$369,442</u>
Subtotal	\$682,238

Less Sustainability Costs (LEED/Energy)	
Analysis Expenditures	
Capital Expenditure Forecast	(\$0)
Maintenance Expenditure Forecast	<u>(\$191,020)</u>
Subtotal	(\$191,020)

Deferred Maintenance (DM)	\$491,218
---------------------------	-----------

$$\$491,218 \text{ DM} / \$8,027,444 \text{ CRV} = 0.06 \text{ FCI}$$

---

## FACILITY CONDITION ASSESSMENT

### A. SUBSTRUCTURE

#### A10 Foundations

##### Description

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 basement level of the building is founded on a series of mild-steel reinforced cast-in-place concrete spread and continuous footings.

##### Condition

The foundation systems appeared to be in good condition with no evidence of overloading, failure or other visually indicative deterioration noted. Assuming no change in the building's loading profile, 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 contained a walk-out basement level. The basement contains an exposed exterior wall on the north elevation of the building. The basement contained areas used as locker rooms and shower facilities, restrooms, mechanical rooms, electrical closets, telecommunications equipment, and related support spaces. The basement level contained a cast-in-place concrete floor slab enclosed at the below grade areas with cast-in-place concrete and concrete masonry unit (CMU) walls. Walls were supported on the cast-in-place concrete footings.

**Condition**

The basement appeared to be in generally good condition with no evidence of moisture ingress or poor ventilation noted. We do not anticipate a requirement to complete significant repair or replacement of the basement construction 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.

**B. SHELL**

**B10 Superstructure**

**Description**

Concrete Strength

We were unable to determine the designed strength of the concrete elements.

Lowest Floor

The main building basement floor consists of a 5" thick cast-in-place concrete slab placed over a vapor barrier and compacted gravel fill. The adjoining garage building and the detached vehicle maintenance building floor also consisted of a 5" thick cast-in-place concrete slab placed over a vapor barrier and compacted gravel fill.

Upper Floors

The upper floors and roof of the main building consist of mild-steel conventionally-reinforced concrete flat panel floor slabs ranging in thickness from five to seven inches. Slabs were supported on a network of beams and concrete columns and load bearing concrete masonry unit (CMU) walls.

Superstructure

The superstructure at the main building consists of conventionally-reinforced concrete columns which support the upper floors and wall enclosure system. Cylindrical cast-in-place concrete columns of approximately 2' diameter are provided at the central portion of the building (reference Photograph 3 in Appendix C). Conventionally-reinforced concrete columns provide support at the perimeter of the building and have typical dimensions of approximately 2' x 2' and are spaced at approximately 20' on-center.

The building contains two interior stairwells located at the central portion of the facility and also at the north end, which provide access to all levels of the building. Additional stairs are provided at the basement level of the building. The stairs consist of cast-in-place concrete with steel-framed handrail assemblies and are supported on the structural concrete floor slabs (reference Photograph 4 in Appendix C). Treads and landings were typically covered with a rubberized slip-resistant covering at each tread.

The superstructure at the vehicle maintenance building consisted of structural CMU walls supporting the steel-framed lattice beam roof structure (reference Photograph 5 in Appendix C). The vehicle fueling station canopy was constructed of three steel columns supporting steel I beams and the roof structure, which consisted of a corrugated metal roof deck supporting the roof system (reference Photograph 6 in Appendix C).

### Internal Walls & Ceilings

Interior wall construction consists of a combination of 4" and 8" CMU walls and drywall-faced metal stud partitions. Exposed portions of the wall systems are painted. The ceiling system typically consists of 2' x 4' suspended acoustic ceiling tiles with exposed prefinished steel grids. Mechanical spaces consist of exposed concrete ceilings.

### Exterior Walls

The main building is enclosed by a glazed clay brick exterior wall system with a CMU backup. The upper portion of the exterior wall system consists of a vertically aligned clay brick façade which appears to be adhered to the concrete superstructure and CMU backup. The first floor of the main building is enclosed by an anodized aluminum panel enclosure system supported at grade and mechanically attached to the superstructure.

The vehicle maintenance building is also enclosed by a glazed clay brick exterior wall system with a CMU backup throughout the building. The upper portion of the exterior wall system consists of a vertically aligned clay brick façade which appears to be adhered to the CMU backup.

### Roof Structure

The low slope roof at the main building is supported on conventionally reinforced concrete slabs of variable thickness. Slabs are supported in turn by structural concrete beams and columns and structural CMU walls that loaded onto the main superstructure.

The low slope roof system at the adjoining single-story garage building also consists of a concrete-framed structure supported on the enclosure CMU walls. The low slope roof system at the detached vehicle maintenance building consists of a steel-framed lattice beam roof structure supported on the enclosure CMU walls. The roof structure for the vehicle fueling station canopy consists of steel beams which support a corrugated metal low slope roof system.

### **Condition**

The respective 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 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.

**B20 Exterior Closure**

**Description**

Exterior Wall Systems

The main building's exterior wall system consists of a glazed clay brick veneer laid in stretcher bond constructed with a scored cementitious mortar. The brick veneer at the upper portion of the building forms parapets walls at the roof level and is clad with a vertically aligned glazed clay brick veneer which appears to be adhered to the CMU backup. A CMU backup is provided at the perimeter of the building. The back-up and veneer is supported by the structural floor slabs and structural concrete frame.

The exterior wall system at the majority of the first floor of the main building consists of an anodized aluminum panel enclosure system (reference Photograph 7 in Appendix C). The system consists of individual panels with typical dimensions of 30" x 104" which appear to be mechanically attached to a steel-framed structure

with a 1" wide urethane construction joint provided between each of the panels. Horizontally aligned anodized aluminum panels form the front façade at the first floor with integrated curved roof system which also consists of anodized aluminum panels which enclose the front portion of the first floor.

The anodized aluminum panel enclosure system is also provided at the single-story adjoining garage portion of the building.

The detached single-story vehicle maintenance building located at the north end of the site consists of a glazed clay brick veneer laid in stretcher bond constructed with a scored cementitious mortar with a CMU backup (reference Photograph 8 in Appendix C). The brick veneer at the upper portion of the building is clad with a vertically aligned glazed clay brick veneer which appears to be adhered to the CMU backup.

Windows and Doors

The building contains a total of 182 windows. All of the windows are aluminum-framed double glazed units. Windows consist of a combination of fixed and operable square and rectangular single mullied window units. The windows appear to be mechanically attached to the adjacent structural exterior walls at the second floor of the building. First floor windows are an integrated part of the anodized aluminum enclosure system. The second floor windows are sealed at the perimeter with variable thickness elastomeric sealant. First floor windows consist of an anodized aluminum trim. Table B20-1 provides a summary of the window systems.

**Table B20-1 Window Systems**

TYPE	SIZE	QUANT.	LOCATION	FRAME	GLAZING	OPER.	OTHER
1	1' x 4'	58	Main Building	Aluminum	Double	Fixed	First Floor
2	3'-6" x 4'	122	Main Building	Aluminum	Double	Operable	First and Second Floors
3	2'-6" x 7'	2	Main Building	Steel	Single	Fixed	Front Entrance

The main public entrance on the west side of the building consists of double leaf 3' x 7' glazed doors placed within a steel-framed storefront glazing system. Additional steel-framed access doors are provided at the rear of the main building. Doors throughout the building typically consist of steel doors set in steel doorframes. Door hardware consists of a combination of mechanical lock-sets and knob and lever handles. Handicap accessible restrooms located on the first floor contain lever hardware.

Two galvanized steel retractable vehicular doors are provided at the adjoining single-story garage. Two additional retractable vehicular doors are provided at the detached single-story vehicular maintenance building.

The exterior doors are sealed along the perimeters with variable thickness elastomeric sealant. Table B20-2 provides a summary of the door systems.

**Table B20-2 Door Systems**

TYPE	SIZE	QUANTITY	LOCATION	MATERIAL	FRAME	OTHER
1	3'-0" x 7'-0"	2	Main Entrance	Steel / Glass	Steel	Double-leaf
2	3'-0" x 7'-0"	2	Rear Entrance	Steel / Glass	Steel	Double-leaf
3	3'-0" x 7'-0"	2	East Elevation	Steel	Steel	Double-leaf
4	3'-0" x 7'-0"	1	East Elevation	Steel	Steel	Single
5	8'-0" x 9'-0"	2	Adjoining Garage Building	Steel	Steel	Garage Doors
6	6'-0" x 7'-0"	2	Vehicle Maintenance Building	Steel	Steel	Garage Door

**Condition**

Exterior Wall Systems

The exterior wall system at the main building is generally in fair to good condition with no significant defects noted during our assessment. However, we noted localized deterioration of the urethane sealants provided at the first floor aluminum enclosure system. This had resulted in consequential water ingress and damage at the soffit board at the main entrance (reference Photographs 9 and 10 in Appendix C). We have recommended budgeting for the near-term replacement of the defective portion of soffit board and urethane sealants. In addition, we have recommended budgeting for the mid-term replacement of defective portions of the urethane sealant at the aluminum enclosure system, due to anticipated localized failure.

The exterior wall system at the vehicle maintenance building is generally in fair to good condition with no significant defects noted during our assessment. We do not anticipate a requirement to complete significant repairs or replacement of the vehicle maintenance building exterior wall system within the six-year study period.

Windows and Doors

Window systems and associated perimeter sealants appeared to be in fair to good condition. However, we noted interstitial condensation at five window units contained adjacent to the main entrance and six failed window screens at the upper level windows at the front and rear elevations. We have recommended budgeting for near-term replacement of these windows and screens, and the establishment of an on-going allowance for replacement of similar failed units throughout the study period.

The perimeter urethane sealants at the windows and doorframes are in fair condition. Due to anticipated end of effective useful life, we have recommended budgeting for the mid-term replacement of 100 linear feet of the perimeter urethane window sealants. We have also recommended budgeting for the mid-term replacement of all doorframe perimeter urethane sealants.

Doors appeared to be in generally fair to good condition with only localized instances of surface blemishes noted. We have recommended budgeting for the mid-term repainting of the exterior steel doors and doorframes.

### **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 for localized remedial repairs to the façade and soffit board located at the front entrance to the building. Our opinion of the cost for this work is \$580 in 2010. This cost is based on eight hours labor at \$60 per hour plus \$100 for replacement materials.
2. We recommend budgeting for the replacement of the deteriorated urethane sealants at the aluminum enclosure system at the front entrance. Our opinion of the cost for this work is \$250 (\$5 per linear foot) in 2010.

3. We recommend replacing the five failed window units located adjacent to the principal entrance of the main building. Our opinion of cost for this work is \$1,250 (\$250 per unit) in 2010.

Priority 3 (2011 – 2014)

4. We recommend budgeting for the replacement of anticipated deteriorated urethane sealant at the aluminum enclosure system. Our opinion of the cost for this work is \$1,000 (\$5 per linear foot) in 2013.
5. We recommend budgeting for the replacement of anticipated deteriorated urethane sealants at the exterior window perimeters. Our opinion of the cost for this work is \$900 (\$5 per linear foot) in 2013.
6. We recommend budgeting for the replacement of all urethane sealant joints at the exterior doorframe perimeters. Our opinion of the cost for this work is \$810 (\$5 per linear foot) in 2013.
7. We recommend budgeting for the repainting of the exterior steel doors and doorframes. Our opinion of the cost for this work is \$930 (\$5 per square foot) in 2013.
8. We recommend budgeting for replacement of five failed window units per year throughout the study period. Our opinion of cost for this work is \$1,250 (\$250 per unit) per year.

Priority 4 (2015)

9. We recommend budgeting for replacement of five failed window units per year throughout the study period. Our opinion of cost for this work is \$1,250 (\$250 per unit) per year.

**B30 Roofing**

**Description**

The Property contains four primary roofing systems. The roofs consist of the main low-slope roof area over the main building, the adjoining single-story garage building, the detached vehicle maintenance building, and the vehicle fueling station (reference Photographs 11 through 13 in Appendix C).

Main Building & Garage

The primary low slope roof over the main building and at the adjoining single-story garage building is finished with a fully-adhered single-ply 0.60-mil EPDM roofing membrane. The EPDM membrane appears to be adhered to rigid tapered insulation board (with localized crickets) installed directly to the structural concrete deck. The low slope roof areas drain via sheet flow to 4" diameter internal roof drains with bonnet strainers (four drains total at the main roof). The single-story garage building is provided with two 4" diameter internal roof drains with bonnet strainers. No overflow drainage from the low slope roofs is provided. The low slope roof at the main building is enclosed by parapet walls that are approximately 18" above the roof finish. The parapet walls are an extension of the main exterior wall closure system and are capped with anodized aluminum cap flashing. The field membrane at the low-slope roofs is turned up and continued up the interior face of the parapet walls forming perimeter base flashings.



An aluminum framed domed skylight with polycarbonate glazed panels is provided at the central portion of the main roof. The domed skylight is approximately 13' in diameter and consists of 12 perimeter polycarbonate transparent panels with additional translucent capped component and provides natural light into the main reception area at the first floor.

The low slope roof at the single-story garage building is enclosed by parapet walls that are approximately 15" above the roof finish. The parapet walls are an extension of the main exterior wall closure system and are capped with an extension of the main first floor anodized aluminum panel façade. The field membrane at the garage roof is turned up and continued up the interior face of the parapet walls forming perimeter base flashings. Table B30-1 provides a summary of the roof construction.

**Table B30-1 Summary of Roof Construction (Main Building & Garage)**

Roof Component	Main Roof	Garage Roof
Age	Circa 2005	Circa 2005
Roof Area (total / approx. square footage)	12,410	675
Application/ Membrane	EPDM	EPDM
Manufacturer / Model	Unknown	Unknown
Surface	EPDM	EPDM
Deck Type	Concrete	Concrete
Insulation	Rigid Tapered Insulation Board	Rigid Tapered Insulation Board
Cover Board	None	None
Drainage	Internal 4" Drains (4 total)	Internal 4" Drains (2 total)
Overflow Scuppers	None	None
Base Flashings	Extension of Field Membrane	Extension of Field Membrane
Cap Flashings	Aluminum	Aluminum
Perimeter Enclosure	CMU and Brick Parapets	Extension of Aluminum Façade
Warranty (Manufacturer)	Unknown	None
Warranty (Contractor)	Unknown	None

Maintenance Building & Vehicle Fueling Station

The roofing system at the single-story vehicle maintenance building consists of a three-ply asphaltic based built up roofing system with a hot mopped granular surfaced SBS modified bitumen cap sheet. The roof system is applied over the corrugated steel pan with concrete fill roof deck. Drainage is provided via two 4" diameter drainage outlets, which appear to discharge below grade into the storm water sewer system. The low slope roof at the vehicle maintenance building is enclosed by a parapet wall system that is approximately 8" above the roof finish. The parapet walls are capped with anodized aluminum cap flashings.

The vehicle fueling station canopy consists of a standing seam metal roof system drained via two 3" diameter downspouts that discharge at-grade. Table B30-2 provides a summary of the roof construction.

**Table B30-2 Summary of Roof Construction (Maintenance Building & Vehicle Fueling Station)**

Roof Component	Vehicle Maintenance Roof	Vehicle Fueling Station Roof
Age	Circa 2005	1988
Roof Area (total / approx. square footage)	1,900	570
Application/ Membrane	Three-Ply Asphaltic-Based Built-Up Roofing System	Corrugated Metal
Manufacturer / Model	Unknown	Unknown
Surface	Granular Surface Modified Bitumen	Corrugated Metal
Deck Type	Steel Pan	Corrugated Metal
Insulation	None	None
Cover Board	None	None
Drainage	Internal 4" Drains (3 total)	Two 3" Diameter Downspouts
Overflow Scuppers	None	None
Base Flashings	Extension of Field Membrane	None
Cap Flashings	Aluminum	None
Perimeter Enclosure	CMU and Brick Parapets	None
Warranty (Manufacturer)	Unknown	Unknown
Warranty (Contractor)	Unknown	Unknown

**Condition**

Main Building & Garage

The low-slope roof system installed at the main building is generally in good condition. We noted minor instances of repairs at two of the roof pipe penetrations. Assuming the completion of on-going maintenance and repair, we do not anticipate a requirement to replace the existing roofing system at the main building within the six-year study period.

The domed skylight provided at the main roof was in poor condition and had reportedly been recently leaking. We observed the condition of the sealant at the polycarbonate glazing and steel glazing bars and noted numerous instances of previous repairs and the sealant was generally in poor condition (reference Photographs 14 and 15 in Appendix C). We have recommended budgeting for near-term repairs to consist of raking out and replacing all of the urethane sealants between the polycarbonate glazed panels and the steel framed glazing bars.

The low-slope roof system installed at the single-story garage is generally in fair to good condition. We do not anticipate a requirement to replace the existing roofing system at the garage building within the six-year study period.

#### Maintenance Building & Vehicle Fueling Station

The vehicle maintenance building roofing system appeared to be in fair to good condition. We noted an instance of poor quality installation, or possibly previous repairs, at the curved portion of the parapet cap flashing at the west elevation of the building (reference Photograph 16 in Appendix C). The roof was otherwise in acceptable condition and should not require replacement within the six-year study period.

The vehicle refueling canopy roof system appeared to be in good condition with no apparent defects noted during our assessment. We do not anticipate a requirement to replace the existing roofing system at the vehicle refueling canopy 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)

1. We recommend budgeting for raking out and replacing the existing urethane sealants at the domed skylight located at the main roof. Our opinion of the cost to complete this work is \$750 in 2010 (\$5 per linear foot).

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.

**C. INTERIORS**

**C10 Interior Construction**

Interior areas include the lobby and reception area, corridors, offices, restrooms, meeting rooms, holding cells, locker rooms, shower facilities, and mechanical spaces, (reference Photographs 17 through 20 in Appendix C). Variable size administrative offices are provided at the outer perimeter of each corridor with demising walls between the rooms constructed of painted gypsum board on metal studs, painted cementitious screeds or CMU.

**C20 Stairs**

Stairwells consist of painted cast-in-place concrete with intermediate landings. Stairs consist of treads with a rubberized covering and mechanically attached steel-framed handrail assemblies. Stairs are supported by the floor decks and structural concrete frame.

**C30 Interior Finishes**

**Description**

Interior finishes varied throughout the building. Finishes consist of a combination of 1' x 1' resilient vinyl tile flooring, 4" clay tile flooring, localized areas of carpet flooring, and painted gypsum board or CMU walls and 2' x 4' suspended acoustic ceiling tiles set within prefinished metal grids. Interior doors typically consist of painted steel panels. Glazed ceramic floor tiles are provided at the restrooms.

**Condition**

Faithful+Gould personnel walked the interior of the building to observe for general configuration and condition and entered all spaces. Finishes were in generally fair to good condition and adequate to support continued use of the building as a police facility.

We noted defective 2' x 4' suspended acoustic ceiling tiles at the ground floor meeting room, the detectives' office, and also at various second floor office spaces. We have recommended budgeting for the near-term replacement of the defective ceiling tiles.

The finishes in the various restrooms were generally in fair to good condition. However, we noted various defects at the male locker restroom facility including water ingress and delaminating at the melamine vanity counter top, and localized areas of detached or damaged ceramic wall tiles (reference Photographs 21 and 22 in Appendix C). We have recommended budgeting for near-term repairs to the defective components within the male locker restroom facility.

The interior painted walls including the exposed CMU and painted cementitious screeds are in fair to good condition. Due to anticipated end of effective useful life, we have recommended budgeting for the mid-term repainting of the interior wall surfaces throughout the facility.

## **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 for the replacement of the localized defective ceiling tiles located at the ground floor meeting room, the detectives' office, and also at various second floor office spaces. Our opinion of the cost to complete this work is \$176 (\$2 per square foot).
2. We recommend budgeting for various repairs at the male locker room restroom. Our opinion of the cost to complete this work is \$3,500. This cost includes replacement of the defective vanity counter top and trim including necessary plumbing adjustments (\$1,500), and assumes a requirement to replace approximately 100 square feet of defective ceramic wall tile at \$20 per square foot.

#### Priority 3 (2011 – 2014)

3. We recommend budgeting for the repainting of the building interiors in 2013 at a cost of \$5 per square foot. The total cost of the work is estimated at \$24,000.

#### Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

**D. SERVICES**

**D10 Conveying**

The Property contains a single conventional hydraulic passenger elevator. The elevator provides service to the ground floor, first floor and second floor. Table D10-1 provides a summary of the elevator system.

**Table D10-1 Elevator Systems Summary**

<b>Elev. No.</b>	<b>Type</b>	<b>Use</b>	<b>Floors Served</b>	<b>Manufacturer</b>	<b>Install. Date</b>
1	Hydraulic	Passenger	G, 1, 2,	Various	1988

The elevator system was installed using non-proprietary equipment at the time of building construction. No significant repairs or replacements have been completed since installations. The elevator is 21-years old and as such is approaching the end of its industry standard useful life with the majority of components now obsolete. However, the elevator appears to be in generally fair condition and reportedly receives limited use. Assuming the continued integrity of the hydraulic cylinder, the availability of remanufactured components and the implementation of a preventative maintenance program full modernization of the elevator should not be required until towards the end of the six-year study period.

**Elevator Number One**

Elevators number one is a hydraulic elevator system providing passenger service to the ground floor, first floor and second floor.

**General / Capacity**

Elevator Type, Original Manufacturer, Original Installer and Year Installed

The elevator is a standard hydraulic system. The elevator was originally manufactured and installed as a mixed component non-proprietary system at the time of building construction.

Year Modernized and Description of Modernization

The elevator has not been significantly modernized since installation.

Elevator Application, Capacity, Speed, Floor Designation, Openings Served and Number of Landing Served

The elevator was designed and installed as a passenger system. The elevator has a rated capacity of 2,500 pounds and a rated speed of 100 feet per minute. The elevator serves all floors (ground floor, first floor and second floor). The elevators provide a single opening to each of the three landings served.

### Capacity Adequacy

In addition to completing an assessment of the condition of the conveyance systems, Faithful+Gould was requested to determine whether the existing elevator system is adequate to meet the needs of the building occupants. In order to complete this analysis we used an industry accepted installation requirement of one elevator per 45,000 net useable square feet. Based upon a net square foot area of approximately 41,192 square feet the Property requires a minimum of one elevator. Based upon this standard, our observation of the elevator system, and the distribution of the elevator system the property appears to contain an adequate number of elevators.

### **Machine Room Installations**

#### Machine Room

All control and machine equipment for the elevator is provided within a self-contained ground floor level machine room. The room measures approximately 15' x 10' and is self-contained behind a signed and fire-rated steel door system (door and frame). The machine room enclosure consists of concrete masonry unit walls and a corrugated steel fire-rated ceiling system.

The machine room appears adequate and well suited for its intended function. However, we noted that the machine room door was unlocked and did not contain a warning notice advising of the dangers contained within the machine room. In addition, we noted that various boxes were contained within the machine room. As required by code, we have recommended the installation of a door lock and suitable cautionary signage, and that all non-elevator related equipment be removed from the machine room.

#### Hydraulic Tank

The elevator is provided with a hydraulic tank that stores the oil used within the hydraulic system. The interior of the tank contains various control valves and a 20-hp circulation pump. The tank and related pump and valves appear to be in fair condition having been installed as part of the original installation. We have recommended budgeting for late-term replacement.

#### Controller

The elevator is controlled by a single relay logic controller manufactured by Virginia Controllers, Inc.. The controller is rated with a working pressure of 276 pounds per square inch (psi), an empty car pressure of 250 psi, a static pressure of 240 psi and a relief pressure of 340 psi. The controller is contained within the main elevator machine room and appears to be an original unit installed at the time of building construction in 1988. The controller is in fair condition with general deterioration noted. The controller is not well suited to modern day use, and is generally obsolete with a poor availability of replacement parts. We have recommended budgeting for replacement and upgrade of the controller late-term.

#### Generator and Governor

The elevator system is not provided with a generator or governor.



### Hoist Way & Machine Room Electrics and Sub Systems

Visible wiring systems appeared to consist of copper wire with thermoplastic insulation run in electrical metallic tubing, flexible metal conduit and the traveling cable consisting of coax cable within a coated rubber assembly. Wiring appeared to be in good condition and of an adequate size and capacity to handle the imposed electrical loads. Wiring systems should be replaced and upgraded at the time of elevator modernization.

The main line feeds for the elevator machine room consists of a single 200-amp Cutler Hammer feed and safety switch. The feed appears to be in good condition but should be replaced and upgraded at the time of elevator modernization.

Thermostatically controlled heating and cooling for the machine room is provided through a series of ceiling diffusers and ducts from the main building heating and air conditioning system. Heating and cooling within the machine room appears adequate. Replacement or upgrade is not anticipated within the six-year study period.

### **Car and Elevator Lobby**

#### Platform Size & Clear Inside of Car Size

The car has a platform size of 7' 4" x 5' 4" and a clear inside car area of 7' x 5'.

#### Car Top Equipment

Car top equipment includes the car top inspection station and a fan. The inspection station and fan are older units installed at the time of building construction in 1988. The inspection station and fan are in fair condition with areas of deferred maintenance, deterioration and general obsolescence noted. Replacement is recommended late-term.

#### Car Finishes

Car finishes consist of 12 x 12" resilient vinyl floor tiles placed over the car platform, painted steel walls and a steel coffered ceiling system with recessed perimeter lighting. Car finishes are in fair to poor condition. We noted localized instances of stained or damaged floor tiles, minor areas of impact damage and localized staining of ceiling tiles. We have recommended budgeting for late-term replacement of car finishes.

Car finishes appeared to generally comply with sections 4.10.9 (Floor Plan of Elevator Cars), section 4.10.10 (Floor Surfaces) and section 4.10.11 (Illumination Levels) of the 1990 American's with Disability Act Accessibility Guidelines (ADAAG).

### **Car Controls, Position Indicators and Emergency Communication**

The car is provided with illuminated car operating buttons and an in-car overhead position indicator. Buttons and the position indicators appear original to the building construction. Although presently operable and generally conforming to the height and character requirements of sections 4.10.12 (Car Controls) and 4.10.13

(Car Position Indicators) of the ADAAG car control buttons and position indicators are generally dated. We have recommended budgeting for replacement and upgrade in conjunction with replacement of car finishes.

The car is provided with a hands-free emergency communication phone. Although not yet connected the District of Columbia's central call answering service, the phone appears to be in fair operational condition and in general compliance with section 4.10.14 (Emergency Communications) of the ADAAG. We have recommended budgeting for replacement and upgrade in conjunction with replacement of car finishes.

#### Car Door Type, Door Operator and Detector

The elevator is provided with two-speed center opening steel car doors. Doors are provided with a clear opening width of 44". Doors are original to the building construction and as such are approaching 22 years of age. However, doors appear to be in generally good condition with only minimal lower level damage noted. We do not anticipate a requirement to replace car doors within the six-year study period.

The elevator is provided with a two-stage door operator. The door operator was installed as part of the building construction. The operator appears to be in fair condition with areas of general deterioration and obsolescence noted. We have recommended budgeting for replacement in conjunction with the recommended late-term replacement of other portions of the elevator system.

Doors are provided with horizontal sliding door detectors that are intended to prevent doors from closing if an obstacle is noted. The sensors appear to be in fair condition. We have recommended budgeting for replacement as part of the recommended late-term elevator modernization project.

#### Car Guide Rails, Roller Guides, Sling, Platform and Car Safety Device

The elevator is provided with steel T guide rails. Guide rails are original to the building but are in good condition and should not require replacement within the six-year study period. The elevator is provided with slide rails. Slide rails are in generally in fair condition. We have recommended budgeting for replacement as part of the recommended late-term elevator modernization project.

The elevator sling consists of two stiles, a crosshead and a bolster plank that supports the elevator platform. The elevator platform consists of the elevator floor placed in the sling and supported by brace rods in each corner. Both the elevator sling and platform are original to the building construction but appear to be in generally good condition. Replacement is not anticipated within the six-year study period.

### **Hoistway**

#### Pump Unit-Jack Assembly

The elevator is provided with a hydraulic cylinder assembly. The cylinder is grade-recessed at the pit level and is connected through a series of variable dimension pipes to the ground level machine room.

The cylinder appears to be in good condition with no visually apparent oil leakage or car settlement noted. However, the cylinder is approaching a 22-year age and in the absence of oil usage logs we are unable to

conclusively determine its condition. As such, we have recommended that replacement be completed when the cylinder reaching a 30 to 35 year age.

#### Hoistway Door Type and Opening

The elevator is provided with two-speed center opening steel hoistway doors. Doors are provided with a clear opening width of 44". Doors are original to the building construction and as such are approaching 20 years of age. We noted localized areas of impact damage at door edges. This is primarily an aesthetic concern and should not have an effect on the operational efficiency of the doors. Assuming the completion of routine and preventative maintenance and repair replacement is not anticipated within the six-year study period.

#### **Hall Call Buttons, Hallway Lanterns and Hoistway Entrances**

Hall call buttons are traditional style illuminated units provided adjacent to the elevator. Buttons are in fair condition and appear to conform to the height and description requirements of section 4.10.3 (Hall Call Buttons) of the ADAAG. We have recommended budgeting for replacement and upgrade in conjunction with the late-term modernization project.

Hall Lanterns are not provided at the elevator. Braille characters are provided at hoistway entrances to detail the floor designations. Characters are provided in accordance with Section 4.10.5 (Raised and Braille Characters on Hoistway Entrances) of the ADAAG.

#### Hoist Way Door Frames, Door Hardware, Door Panels, and Door Enclosure

The hoistway doorframe, related hardware, door panels and the car enclosure are of steel construction and although original to the building construction appear to be in good condition. Replacement is not anticipated within the six-year study period.

#### Counterweight Sheaves, Frames and Guide Rollers

As a conventional hydraulic machine, the elevator is not provided with counterweights.

#### Pit

The elevator is provided with a single standard pit containing the hydraulic cylinder and related piping, two car buffer springs and a light. No drain is provided within the pit. The buffers and related installations within the pit appear to be in good condition. Replacement of buffers is not anticipated within the six-year study period. As previously discussed, replacement of the hydraulic cylinder and related installations is anticipated late-term.

#### **Summary**

The elevator system is in fair condition and reportedly receives limited use. However, the system is of older technology, does not appear to be receiving adequate maintenance and within the six-year study period will exceed its industry standard useful life. Equipment is generally obsolete with limited availability of replacement parts and with management reporting operational concerns.

Due to the general condition of the elevator system we recommend budgeting for late-term modernization. Modernization should include installation of non-proprietary equipment and should consist of the following general scope:

### **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)

1. We recommend budgeting for replacement of the hydraulic oil tank in 2015. Our opinion of cost for replacement of the hydraulic oil tank and related pump and valve assemblies is \$18,750. This opinion of cost assumes a material cost of \$10,000, a labor cost of \$5,000 and a contractor's profit allowance of 25%.
2. We recommend budgeting for replacement of the controller in 2015. Our opinion of cost for the installation of a variable voltage microprocessor-based solid-state controller is \$37,500. This opinion of cost assumes a material cost of \$22,000, a labor cost of \$8,000 and a contractor's profit allowance of 25%.
3. We recommend budgeting for the replacement of electrical installations serving the elevator system in 2015. Our opinion of cost for this project is \$5,000.
4. We recommend budgeting for replacement of the car top fan and inspection station in 2015. Our opinion of cost for this work is \$1,000. This opinion of cost assumes a material cost of \$400, a labor cost of \$400 and a contractor's profit allowance of 25%.
5. We recommend replacing car finishes in 2015. Our opinion of cost for this project is \$15,000. This opinion of cost assumes a material cost of \$8,000, a labor cost of \$4,000 and a contractor's profit allowance of 25%.

6. We recommend replacing car and lobby control buttons, communication devices and position indicators in 2015. Our opinion of cost for this project is \$15,625. This opinion of cost assumes a material cost of \$7,500, a labor cost of \$5,000 and a contractor's profit allowance of 25%.
  7. We recommend budgeting for the installation of infrared full screen door protectors with differential door timing and nudging and interrupted beam time and for the replacement of the door operator in 2015. The replacement door operator should be a high-speed heavy duty 2 ½ feet per second door opener. Our opinion of cost for this project is \$7,500. This opinion of cost assumes a material cost of \$3,000, a labor cost of \$3,000 and a contractor's profit allowance of 25%.
  8. We recommend replacement of slide rails in 2015. Our opinion of cost for this project is \$6,750. This opinion of cost assumes a material cost of \$2,400, a labor cost of \$3,000 and a contractor's profit allowance of 25%.
  9. We recommend budgeting for replacement of the hydraulic cylinder and associated piping in 2015. Our opinion of cost for this project is \$37,500. This opinion of cost assumes a material cost of \$5,000, a labor cost of \$25,000 and a contractor's profit allowance of 25%.
- The items above will require the retention of a District of Columbia registered engineer and architect to write specifications, produce design documents, monitor installation and provide final sign-off of the completed work. We have included an allowance of 10% of the capital cost of completing the work.

***Required Maintenance Expenditures:***

Priority 1 (Immediate)

No required maintenance expenditures are anticipated at this time.

Priority 2 (2010)

1. We recommend budgeting for installation of additional signage at the elevator machine room door in 2010. Signage should have lettering at least two inches in height and should read "elevator equipment room authorized personnel only - no storage". Our opinion of cost for this project is \$50.

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.

## **D20 Plumbing Systems**

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

### **Domestic Water Systems**

#### **Description**

##### Domestic Cold Water

There is a nominal 6" water line entering the building at the basement level. The line tees above the floor with a 3" branch for domestic cold water that is routed through a 2" water meter and then into the building. Domestic cold water enters the building in the main mechanical room located at the basement level of the building. The incoming line size is 2" diameter and appears to be ductile iron pipe. There is no pressure booster system. Water service for the building is supplied directly from the street pressure. Taps are made to the water line downstream of the meter and routed to plumbing fixtures and equipment in the various areas of the building.

##### Domestic Hot Water

Domestic hot water for the main building is generated by an electric water heater. The water heater is located in the main mechanical room at the basement level of the building and has a rating of 54,000 watts and a storage tank capacity of 80 gallons. The water heater is manufactured by A.O. Smith. There is a small fractional horsepower circulating pump installed in a domestic hot water return loop to minimize the delay in supplying hot water to remote plumbing fixtures.

Hot water used for vehicle washing at the vehicle maintenance building is generated by an electric water heater. The water heater is ceiling-hung and located within the vehicle maintenance building. The heater has an input rating of 4,500 watts and a storage tank capacity of 20 gallons. The tank is manufactured by Bradford White.

##### Domestic Water Piping

The incoming domestic water piping appeared to be ductile iron or steel. Within the building, domestic water piping, where observed, was copper. Domestic cold and hot water lines in the building are believed to be insulated.

#### **Condition**

The domestic water systems appear to be in fair condition. No major problems were observed that could not be attributed to age and deferred maintenance. Based upon our experience with similar buildings in the District of Columbia, the 2" diameter incoming water line should be adequate to serve for the needs of the building.

We have recommended budgeting for annual maintenance and repair of the domestic water system to include the completion of as-needed pipe and fixture replacements.

The domestic water heaters and storage tank appeared to be in fair condition. We do not anticipate a requirement to replace the water heaters within the six-year study period. The copper piping system appeared to be in generally 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)

1. We recommend budgeting an allowance of \$1,280 per year from 2011 for as-needed repairs and replacement of domestic piping and fixtures. This cost assumes the requirement for 2 days labor (16 hours) per year at \$80 per hour.

Priority 4 (2015)

2. We recommend budgeting an allowance of \$1,280 in 2015 for as-needed repairs and replacement of domestic piping and fixtures. This cost assumes the requirement for 2 days labor (16 hours) per year at \$80 per hour.

**Sanitary Waste and Storm Drainage Systems**

**Description**

Sanitary Waste Systems

Sanitary waste is collected from multiple riser stacks and routed to the City sanitary system via gravity drain lines below the basement floor level.

Visible portions of the sanitary piping are of cast iron construction.

Storm Water Systems

Storm drainage from the low-slope roof areas is via roof drains and internal leaders and downspouts. There are no overflow drains. Storm water collected from all roof areas is drained to the City storm lines via gravity lines.

Visible portions of the storm water piping were of cast iron construction.

**Condition**

The sanitary and storm drainage systems appeared to be in fair to good condition with no significant leaks or other areas of deterioration noted. We do not anticipate a requirement to complete significant repair or replacement of the piping 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.

**Natural Gas Systems**

**Description**

Washington Gas supplies natural gas service to the Property. Gas service is routed to the boiler. Gas piping is painted 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 (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.

**D30 HVAC Systems**

The following information on building systems was obtained through visual observations. The heating, ventilation, and air conditioning systems include the hot water boiler, air-cooled chillers, air-handling units, hot water convectors, and exhaust fans.

**Heating Systems**

**Description**

Heating for the building is provided by a gas-fired hot-water boiler. The boiler is located in the basement level mechanical room (reference Photograph 26 in Appendix C). The boiler is manufactured by Burnham and has an output capacity of 1,855 British Thermal Units per Hour (BTUH). A burner is provided and appears to be part of the original boiler installation. The nameplate for the burner is missing, but the motor was manufactured by Baldor.

### Pumps and Piping

There are two end-suction style pumps floor-mounted on pads adjacent to the boiler. Each pump is driven by a 15 horsepower (HP) electric motor. One pump is primary and the second is secondary/standby. These pumps circulate heating hot water through the boiler and to heating coils in air-handling units and cabinet heaters. Nameplates indicating the manufacturer of the pumps are missing, but the motors are products of Baldor.

Piping is black steel in the larger sizes and copper for runouts to equipment. Heating hot water piping is insulated.

### Condition

The boiler appeared to be in fair condition. Boiler capacity appears to be adequate for the building needs. The hot water circulating pumps appeared to be in fair to good condition. The nominal life expectancy for the type of pumps used for the heating water systems is 30 years.

The piping appeared to be in generally fair condition. We noted evidence of leaks and surface corrosion at the existing boiler and at the pumps. We also noted defective pipe insulation. We anticipate that necessary localized remedial pipe repairs will be completed as part of our recommended replacement of the boiler and pumps.

In addition, based on anticipated remaining effective useful life, we have recommended budgeting for the replacement of the existing boiler and pumps in 2011.

### **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)

1. We recommend budgeting for the replacement of the existing boiler. Our opinion of the cost for this work is \$35,709 in 2011. This cost is based on \$19.25 per BTU.
2. We recommend budgeting for the replacement of the two circulating pumps concurrently with the boiler. Our opinion of cost for this work is \$6,500 per pump to a total cost of \$13,000.

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.

**Cooling Systems**

**Description**

Chilled water for cooling is generated by two rooftop air-cooled chillers (reference Photograph 27 in Appendix C). The chillers are products of Trane and have capacities of 60-tons and 80-tons of cooling.

The building utilizes a dual-temperature piping system. Piping between the rooftop chillers and the central plant in the basement is dedicated to the chilled water system. But distribution from the central plant to the coils in the air-handling units and other equipment utilizes the same piping used for heating. Changeover valves are installed in the lines in the central plant and the system is switched from heating to cooling mode in the spring and cooling to heating in the fall. Chilled water piping from the chillers to the central plant is black steel. The pumps described above under Heating Systems are used to circulate chilled water when the system is in the cooling mode.

The vehicle maintenance building is provided with a packaged rooftop unit manufactured by Trane. The unit was manufactured in 1995 and has an output capacity of 200,000 BTU/hr.

## **Condition**

### Air-Cooled Chillers

The chillers appear to be in fair condition. Equipment panels are missing and damaged and insulation on the piping is damaged exposing the piping to the weather and potential freezing. Based on the age of the equipment and nominal life expectancies for this type of equipment, we anticipate a requirement to replace the existing chillers within the six-year study period.

### Pumps and Piping

The chilled water pumps are in fair to good condition and should be replaced as described above under Heating Systems.

Chilled water piping systems appeared to be in fair condition. We noted localized corrosion at the piping throughout the system. We also noted defective pipe insulation. We anticipate that necessary localized remedial pipe repairs will be completed as part of our recommended replacement of the boiler, chillers, and pumps.

### System Capacity

The main building is provided with a total of 140 tons of cooling. This factors to approximately one ton per 345 square feet of space. A "rule-of-thumb" range for acceptable office cooling comfort is from 250 square feet per ton to 450 square feet per ton, depending upon the geographical location and the energy efficiency of the building envelope. The cooling system appears adequate for the building.

## **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)

3. We recommend budgeting for the replacement of the 60-ton and 80-ton air-cooled chillers in 2015 at an estimated cost of \$105,000 (\$750 per ton of capacity). This opinion of cost includes for removal of the existing units and installation of the replacement chillers.

*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.

**Air Distribution Systems**

**Description:**

Air-Handling Units

The main building is equipped with three modular air handler units (AHU). The AHUs were manufactured by Trane. AHU No.1 is located in the basement main mechanical room. AHU No.2 is located in the first floor mechanical room and AHU No.3 is located at the second floor of the building, in an additional mechanical room.

Taps are made to the medium pressure distribution ductwork routed from the air-handling units in the ceiling plenum and run outs.

Fan Coil Units

There are fan coil units/cabinet heaters in various areas of the building, primarily in stairwells and entry vestibules. These units have a single coil (heating or cooling), a small blower fan, and unit mounted controls. These units are not furnished with outside air connections for ventilation.

## **Condition**

### Air Handler Units

The air handler units are in good condition with no problems noted or reported to us. AHUs should not require significant capital repair or replacement within the study period. AHU-1 in the basement was missing the fan belt guard. This should be replaced for personnel safety reasons.

### Fan Coil Units

The fan coil units are in fair condition with no problems noted or reported to us. The fan coil units should not require significant capital repair or replacement 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**

**Description**

Outside air for ventilation of the occupied floors is supplied through operable windows around the perimeter of the building. Air-handling units serving the building are provided with outside air intake ducts to supply fresh air. Dedicated exhaust systems collect air from the toilet rooms. Exhaust air is ducted up to six exhaust fans located on the roof of the main building, with an additional two exhaust fans located on the roof of the vehicle maintenance building.

**Condition**

The exhaust fans are in poor condition. At the time of the building surveys, only one of the six exhaust fans was operational. The others were missing the dome covers and the motors were exposed to the elements and not working. It is recommended that all of the roof-mounted exhaust fans be replaced near-term.

**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 six rooftop exhaust fans in 2010 at an average cost of \$1,250 per fan for a total of \$7,500.

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.

**Temperature Control Systems**

**Description**

Controls for the HVAC systems utilize direct digital electronic controls and electric valve and damper actuators. There is a central control in the main basement mechanical room. The packaged rooftop system located at the vehicle maintenance building system is controlled by a local thermostat.

**Condition**

The controls are functional. The boiler and heating hot water controls and the chillers and the chilled water controls provide minimal flexibility to adapt systems operations to changing conditions. However, the greater limitation to building comfort is the dual-temperature HVAC water system.

The local thermostats at the split system and package unit allow the maximum in user control, but at the cost of total building system control and energy efficiency. The building automation system is functional and should continue to serve the building adequately beyond 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.

**D40 Fire Protection**

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

**Structural Fire Protection**

**Description**

The structure consisted of reinforced concrete and CMU load-bearing walls, concrete floors, fire-protected structural steel, and masonry walls. Exit stair enclosure appeared to meet the requirements for two-hour fire-resistance rated construction with concrete masonry unit walls. The overall building construction resembles Type II-A construction, per IBC Table 601.

**Condition**

We noted the condition and adequacy of the structural fire protection systems where visible throughout the building. The structural fire protection appeared to be in generally good condition and generally 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 building is provided with exiting through the main interior stairwell and leading through exit corridors to the street level at the first floor. Exit stair enclosures appeared to meet the requirements for two-hour fire-resistance rated construction with concrete masonry unit walls. The basement level is also provided with exterior exits on the north (rear) elevation of the building. Other exit doors are provided at the west side of the first floor, leading to the rear parking area. Exit doors had a clear opening width of 33" per leaf. Exit signs are provided at each exit and at appropriate locations along the path of egress.

**Condition**

Means of egress appeared to be generally compliant with the building codes in effect at the time of construction and are grandfathered. We do not anticipate a requirement to complete significant adjustments to the existing means of egress at the building.

**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**

A wet-pipe fire suppression sprinkler system provides designed 100% coverage of the building. The suppression system is provided with sprinkler flow switches, sprinkler valve tamper switches and a backflow preventer. The sprinkler system consists of peripheral devices including fire alarm chime and strobe flashers, manual pull stations, smoke detectors and duct detectors. Several wall-mounted manually operated fire extinguishers are provided at throughout the building.

**Condition**

The wet-pipe fire suppression sprinkler system appears to be in fair condition. The system was not tested. During our assessment we observed the condition of the sprinkler heads and noted a buildup of dirt and mold growth, in addition to localized surface corrosion at some of the heads (reference Photograph 28 in Appendix C). Sprinkler heads should be tested immediately.

### **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**

A fully addressable fire alarm system provides coverage throughout the building. The fire alarm control panel (FACP) is located in the main electrical room at the basement level of the building. The fire alarm system monitors manual pull stations, smoke and heat detectors located in mechanical, electrical rooms, common areas, the elevator lobby, and top of stair shafts. The FACP drives visual (strobes) and audio (horn) devices located in the corridors and common areas, and provides local alarm throughout the building. The system also appears to supervise the duct smoke detectors. The fire alarm system is a product of Fire-Lite Alarms (a division of Honeywell Controls).

### **Condition**

The fire alarm system appears to be in good condition and assuming yearly testing, replacement or upgrade should not be required during 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.

**D50 Electrical Systems**

The electrical systems include the service entrance equipment, panelboards, safety switches, lighting fixtures, the emergency generator and related distribution equipment, and communications systems.

**Electrical Service Equipment**

**Description**

Electric Service Equipment

The building receives electrical service from Potomac Electric Power Company (PEPCO). Service characteristics are 208/120-volts, 3-phase, 4-wire. Underground ducts are routed from the utility company's transformer to a 2,000-amp main switchboard located in the basement level main electrical room. The switchgear line-up includes an incoming cable termination cabinet that houses power company metering equipment, a section with a main circuit breaker, and two distribution sections with circuit breaker type feeder devices.

Power Distribution

Voltages

Large motors in the building (e.g. those serving the cooling tower fans, condenser water pumps, air-handling units) are supplied at the service voltage of 208-volts. Building fluorescent and HID lighting fixtures are served at 120-volts. General purpose receptacles, incandescent lighting fixtures, small motors, and miscellaneous power branch circuits are supplied from 208/120-volt system panelboards.

Cable and Conduit

Power distribution is accomplished using cables in conduit or prefabricated cable assemblies, such as Type MC cable. Observed wiring consists of copper conductors 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 and physical damage. Electrical metallic tubing (EMT) is used in interior spaces. Type MC cables are used for some branch circuit wiring.

#### Panelboards

Panelboards used in the building consist of medium amperage distribution panels and lighting and appliance panels used for branch circuit distribution. All panelboards utilize circuit breakers for overcurrent and short circuit protection of circuits.

#### Equipment Manufacturer

The main switchboard and most branch circuit panels were manufactured by Challenger, now owned by Cutler Hammer. Most date to the original construction of the building in the 1980's.

#### **Condition**

Condition of the electrical equipment and components was generally fair to good.

#### *System Capacity*

The existing service has a capacity of 2,000 amps at 208/120-volt, this equates to 720 kVA. Given a building area of 45,098 SF, the unit load capacity for the building is 16 VA/SF.

Unit load factors for an office building based on code requirements and industry design standards are 3.5 VA/SF for lighting, 1.0 VA/SF for general power (minimum), 6.0 VA/SF for HVAC, and another 1.0 to 2.0 VA/SF to cover elevators, water heaters, and other miscellaneous loads. This equates to 11.5 to 12.5 VA/SF. For this building, that is a total load of about 562.5 kVA. The service to this facility appears to be adequate.

The electrical distribution equipment is generally considered to have a useful life of 30-years. Switchboards, panelboards, transformers, and wiring are often serviceable for 10 to 20 years beyond this time if properly maintained, and not subjected to repeated overload or short circuit conditions. Assuming the implementation of an electrical preventive maintenance program, replacement of most of the main electrical distribution equipment should not be anticipated within the six-year study period.

There was a considerable amount of materials stored in and around the main switchboard in violation of code requirements. These items should be removed from the vicinity of the electrical equipment.

#### **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. Although presently in operational condition, as the electrical service equipment ages we recommend budgeting for the completion of electrical preventive maintenance. Our opinion of the cost for this work is \$10,000 per cycle starting in 2010.

Priority 3 (2011 – 2014)

2. Although presently in operational condition, as the electrical service equipment ages we recommend budgeting for the completion of electrical preventive maintenance. Our opinion of the cost for this work is \$10,000 in 2013.

Priority 4 (2015)

No required maintenance expenditures are anticipated at this time.

**Emergency Power Generation and Distribution Equipment**

**Description**

A 180 kW/225 KVA diesel engine-driven generator set supplies emergency power for life safety loads in the building. The generator is located in the main electrical room at the basement level. It is manufactured by Generac (reference Photograph 29 in Appendix C).

Fuel for the generator is available from storage nominal 25-gallon day tank located on the floor adjacent to the generator. There is a remote fuel storage tank in the adjacent mechanical room that provides fuel for extended generator operation. That tank appears to have a nominal 250-gallon capacity.

Output from the life safety generator is routed to three automatic transfer switches on the wall adjacent to the generator and from the transfer switches to emergency panelboards elsewhere in the building. Loads served by the emergency power system include egress and exit lighting, elevator, fire alarm system, and other miscellaneous loads.

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 generator appears to be in fair to good condition. There is no corrosion or evidence of significant fuel leakage in or around the generator. We understand that the generator is exercised monthly and receives yearly preventive maintenance by an outside vendor.

The automatic transfer switches, panels, feeders, and circuits are in fair to good condition.

We recommend that the emergency system distribution equipment be maintained in the same manner and in conjunction with the normal power distribution equipment as described above.

Although not required by code for this type and size of facility, it is recommended that consideration be given to installing a separation wall between the generator area and the main switchboard area. This will reduce the likelihood that a problem with either the normal or emergency switchgear will impact the other system.

### **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)

3. We recommend budgeting for the annual preventive maintenance and servicing of the existing generator. Our opinion of the cost for this work is \$2,000 per annum commencing in 2010.
4. We recommend budgeting for the completion of electrical preventive maintenance on the emergency power distribution system. Our opinion of the cost for this work is \$4,000 per cycle starting in 2010.

Priority 3 (2011 – 2014)

5. We recommend budgeting for the annual preventive maintenance and servicing of the existing generator. Our opinion of the cost for this work is \$2,000 per annum.
6. We recommend budgeting for the completion of electrical preventive maintenance on the emergency power distribution system. Our opinion of the cost for this work is \$4,000 per cycle in 2013.

Priority 4 (2015)

7. We recommend budgeting for the annual preventive maintenance and servicing of the existing generator. Our opinion of the cost for this work is \$2,000 per annum.

**Lighting Systems**

**Description**

General lighting consists of fluorescent and incandescent lighting in the public lobbies, corridors, and public areas. Fluorescent lighting is used in office areas and in equipment rooms. Most of the linear fluorescent fixtures utilize the newer F32T8 lamps and electronic ballasts.

Emergency egress lighting is provided by fixtures common to the respective areas and powered by the emergency generator. Illuminated exit signs are installed at exit doors and along the path of egress. Power for the exit signs is also derived from the emergency distribution system. Exit signs are typically stencil face with red letters. Exterior lights consist of six pole-mounted metal halide fixtures and eleven wall-packs.

**Condition**

Fixtures generally appeared to be in good condition and appropriate for the applications. Incandescent fixtures are less efficient and have shorter lamp life than fluorescent fixtures. Consideration should be given to either retrofitting or replacing the incandescent fixtures with fluorescent luminaires.

**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.

## **Communication, Data and Security Systems**

### **Description**

The main telephone room is located in the basement adjacent to the main mechanical room. Trunk cables are routed up to floor telephone closets to serve the spaces at the first and second floors.

### **Condition**

The data and telephone infrastructure appeared to be in good condition and should not require significant repair or replacement 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.

**D60 Safety, Security & Access Control**

**Description**

The Property is provided with a video surveillance system with closed circuit television (CCTV) cameras. The cameras are digitally recorded by a video recording system located in the first floor Station Room. Access into the building was monitored by on duty police officers at the building's main entrance, with secondary perimeter doors monitored by the cameras.

**Condition**

The security systems should be serviceable through the six-year study period. We believe that the standard maintenance budget should be sufficient to maintain the systems and equipment through the study period. At the end of the study period, the systems should be replaced.

**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 rear and sides of the Property are enclosed with a variable height clay brick boundary wall. Given the current use of the facility and regular presence of staff at the facility, we do not anticipate a requirement to upgrade the current security measures at the Property.

Windows were not provided with any form of security grating. Doors consisted of glazed and non-glazed steel 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 includes various administrative office equipment distributed throughout the main building.

**Condition**

Office equipment appeared to be in generally fair to 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 office furniture, lockers, and storage shelving and files.

**Condition**

Furniture appeared to be in generally fair to good condition. We do not anticipate a requirement to replace furniture 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 Systems**

Site systems include the asphalt-paved parking areas and concrete-paved access road located at the east elevation of the Property, cast-in-place concrete sidewalks, clay brick boundary wall surrounding the rear and sides of the Property, and minimal landscaping. Cast-in-place concrete public sidewalks are located along Alabama Avenue SE and James M. McGee Jr. Street SE. Curbs and gutters and storm drain management features are provided throughout the site.

**Description**

The Property contains the main asphalt-paved parking area located at the rear and east elevation of the building (reference Photograph 30 in Appendix C). The main vehicular access to the parking area is provided from Knox Street SE. Additional access to the Property is provided from Alabama Avenue SE and Hartford Avenue SE. Public parking is located along adjacent streets to the Property. Employee parking is located at the rear parking lot. The construction design of the asphalt and concrete pavement is unknown. A portion of the parking area located adjacent to the vehicle maintenance building is concrete-paved. Table G10 summarizes the approximate area of the asphalt and concrete site features.

**Table G10 Asphalt & Concrete Site Features**

<b>Asphalt Pavement (s.y.)<sup>1</sup></b>	<b>Concrete Pavement (s.y.)<sup>1</sup></b>	<b>No. Parking Stalls (inc. ADA)<sup>2</sup></b>	<b>Area of Concrete Sidewalks (s.f.)<sup>3</sup></b>	<b>Area of Concrete Curbs (l.f.)<sup>4</sup></b>
4,210	328	105	2,464	610

1. s.y. indicates square yards
2. 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) – THERE ARE NO DESIGNATED SPACES MARKED FOR HANDICAP USAGE.
3. s.f. indicates square feet
4. l.f. indicates linear feet

The main pedestrian entrance to the Property is located on the west side of the building. Concrete sidewalks connect the public sidewalk along Alabama Avenue SE and James M. McGee Jr. Street SE. The vehicular entrance road consists of a cast-in-place concrete sidewalk provided at Knox Street SE. The sidewalks at the Property are constructed of cast-in-place concrete with an exposed aggregate surface.

A clay brick boundary wall is provided at the rear and sides of the Property and varies in height between 6' to 10' at the exterior façade outside of the Property. Three pairs of steel-framed vehicular entrance gates are provided at the Property. Entrance gates consist of painted rigid steel frames and are mechanically attached to the clay brick boundary wall.

A steel-framed canopy with dimensions of approximately 15' by 40' is provided over the vehicle fueling station located in the main parking area at the rear of the Property. The canopy is constructed of painted steel columns supporting painted steel beams and a metal-clad roof system.

Landscaped areas were primarily along the front (west elevation) and south side of the building and included lawn areas and mature trees indigenous to the area.

### **Condition**

The majority of the asphalt-paved parking area is in fair condition. The asphalt-paved area near the entrance and fueling station is in poor condition. We noted localized areas of longitudinal and traverse cracks and minor alligatoring at the pavement surface, as well as deterioration of the pavement markings (reference Photograph 31 in Appendix C). We have recommended budgeting an allowance for near-term repairs to the defective portions of the asphalt-paved surface at the main vehicular entrance and fueling area. We have also recommended for the application of a one (parking stalls) to two (drive lanes) coat asphaltic-based seal coat, and the re-application of surface markings in 2010. The surface seal coating should be repeated every three to five years to prolong the useful life of the asphalt pavement.

We have also recommended budgeting an allowance for mid-term repairs to consist of milling and overlaying the existing parking lot surface, due to anticipated end of effective useful life.

The concrete pavement at the vehicle fueling station and at the main vehicular entrance is in fair condition. We noted localized areas of cracking and deterioration at the main vehicular entrance adjacent to the stormwater drainage grill (reference Photograph 32 in Appendix C). We have recommended budgeting an allowance for localized near-term repairs to the defective portions of the cast-in-place concrete at the vehicular entrance located on Knox Street SE.

The concrete sidewalks located at the front and side elevations of the building are generally in fair to good condition with minimal surface damage and deterioration noted. We do not anticipate a requirement to replace the concrete sidewalks within the six-year study period.

The brick boundary wall was generally in fair to good condition at the majority of the Property. However, we noted evidence of structural failure at the east elevation adjacent to the vehicular entrance on Knox Street SE (reference Photograph 33 in Appendix C). A tell-tale monitor has been installed at the defective portion of the boundary wall as a result of movement within the structure (reference Photograph 34 in Appendix C). The tell-tale device indicates movement of eight millimeters (8mm) or approximately 0.31 inches has occurred within the structure. Based on the existing condition and limited amount of structural movement noted during our assessment, we do not anticipate a requirement to complete significant repair or replacement of the boundary wall within the six-year study period. However, we recommend the implementation of a suitable program to ensure the ongoing monitoring of the defective portion of the wall and tell-tale monitoring device.

The steel-framed vehicular entrance gates are in fair to good condition with no corrosion evident. Gates should not require replacement within the six-year study period. Storm water management provisions and landscaping appeared to be in 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 capital expenditures are anticipated at this time.

#### Priority 2 (2010)

1. We recommend budgeting for the mill and overlay of the defective portions of asphalt-paved parking area adjacent to the main vehicular entrance and fueling station. Our opinion of the cost of this work is \$3,000 in 2010. The cost of this work is based on a unit price of \$12 per square yard.
2. We recommend budgeting for localized repairs to the cast-in-place concrete-paved area located at the main entrance to the Property at Knox Street SE. Our opinion of the cost of this work is \$1,200 in 2010. The cost of this work is based on a unit price of \$40 per square foot.
3. We recommend budgeting for the application of an asphalt seal coating at the asphalt-paved parking area. Our opinion of the cost of this work is \$5,052 in 2010. The cost of this work is based on a unit price of \$1.20 per square yard.

#### Priority 3 (2011 – 2014)

4. We recommend budgeting for the mill and overlay of the asphalt-paved parking area. Our opinion of the cost of this work is \$50,520 in 2012. The cost of this work is based on a unit price of \$12 per square yard.

5. We recommend budgeting for the application of an asphalt seal coating at the asphalt-paved parking area. Our opinion of the cost of this work is \$5,052 in 2013. The cost of this work is based on a unit price of \$1.20 per square yard.

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 a 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 priorities 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 enjoys a grandfathered code status and is not required to complete accessibility upgrades.

### **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 located on Alabama Avenue SE to the west of the Property. Persons arriving by the Metrorail system will arrive via the Naylor Road Metrorail station located approximately 0.9 miles to the east of the Property.

Pedestrians wishing to access the building are able to access through the main entrance at the front (west) elevation of the Property. A cast-in-place concrete paved sidewalk is provided at the front of the building at the main entrance (reference Photograph 35 in Appendix C).

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

#### **Route of Travel**

Disabled persons wishing to access the building are able to gain suitable means of entry via the compliant accessible entrance located at the main entrance. The route of travel is generally unrestricted and accessible.

#### **Accessible Parking**

At-grade asphalt-paved parking area is located at the rear of the Property. The parking area however, does not provide an accessible route of travel to the main entrance. Supplemental on-street parking, although limited, is available along adjacent streets. There are currently no designated marked spaces or signs for handicap accessibility. According to ADAAG, for the 105 parking spaces provided, five must be designated as handicap accessible, with one of these five being van accessible.

We recommend that handicap accessible parking spaces complying with ADAAG be provided as part of the parking lot resurfacing and restriping detailed in Section G10 of this report. We anticipate the provision of these spaces is located adjacent to the rear building entrance to enable employees and visitors accessible access into the building. However, based on the current configuration of the Property we have recommended budgeting for the near-term provision of two ADA compliant parking spaces at Alabama Avenue SE to provide accessible spaces adjacent to the main entrance. We recommend the necessary work consists of the provision of cut curbs and signage provided adjacent to the main entrance of the building.

### **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)

1. We recommend budgeting for the provision of two ADA compliant parking spaces adjacent to the main entrance to the Property. Our opinion of the cost for this work is \$1,652. We anticipate this work will

consist of 10 linear feet of curb adjustments at \$31.20 per linear foot, 16 hours (2 persons, 8-hour day) labor at \$40 per hour, and two ADA compliant pole-mounted parking signs at \$350 each.

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**

Once within the building, a disabled individual is provided with level and generally unrestricted access to the first floor. Access to the upper and basement floor is provided by a passenger elevator located at the rear of 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". The building entrance doorways meet this requirement, with a typical clear opening width of 33".

The ADAAG requires that signs that identify permanent rooms and spaces, such as those identifying restrooms and exits or providing room 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 did not meet these requirements. Signs did not have Braille letters or numbers. We have recommended the installation of compliant signage.

### **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)

2. We recommend the installation of ADA compliant door and directional signage throughout the building in 2010. Our opinion of cost for this work is \$2,600 (\$50 per sign).

##### 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 restrooms located on each floor throughout the building. Restrooms were typically compliant with the ADAAG. However, the male and female handicap accessible restrooms provided on the first floor contained non-compliant entrance doors (reference Photograph 35 in Appendix C).

We have recommended budgeting for the near-term adjustments to the male and female restroom entrance doors located on the first floor of the building. Adjustments should ensure a minimum clear opening space of 33" is provided at each of the accessible restrooms located on the first floor near the reception and lobby area.

### **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)

3. We recommend budgeting for increasing the width of the existing narrow entrance door at the first floor male and female restrooms. Our opinion of the cost of this work is \$6,000 (\$3,000 per door opening) in 2010. This cost includes for increasing the width of the existing openings, installation of a new compliant steel doors and frames and all necessary ADA compliant door furniture.

##### 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 and free-standing water fountains are provided on each floor (reference Photograph 36 in Appendix C). The drinking fountains appear to be compliant with Section 4.15 of the ADAAG. However, we noted an active leak at the fountain at the second floor. The leak appeared to be caused by a loose coupling valve. We anticipate that this can be addressed as part of routine maintenance.

### **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.

Based upon our visual observation of the building, the building likely contains numerous hazardous materials as detailed below:

- 9" x 9" asbestos containing floor tiles and associated mastics throughout the building
- Asbestos containing pipe insulation throughout the building
- Asbestos containing fireproofing
- Lead-based paint at painted areas throughout the interior and exterior of the building
- 250-gallon above ground diesel fuel storage tank
- Two 10,000 gallon underground fuel storage tanks

The hazardous materials observed during our evaluation were generally in fair condition (intact, non-friable and contained/encapsulated). 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 in depth environmental analysis be completed of the Property. Our opinion of the cost for this work is \$9,000 in 2010.

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 to 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 160% 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 prior to 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 not deemed eligible for any LEED Credits based on the conditions observed and discussions with the building managers.

### **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.

Based on the current condition and our recommendations at the Property, the building is unlikely to achieve LEED credits through our recommended improvements. The specific types of recommended improvements do not provide opportunity for LEED credits.

### **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 Armory.

#### 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.

#### Energy & Atmosphere Credit 4.1-4.4 – On-Site and Off-Site Renewable Energy

To achieve the points available for this credit, the building must meet some or all of the building's total energy use with on-site or off-site renewable energy systems. Up to four points are available in this credit, by demonstrating a that off-site renewable energy sources provide 25% of the buildings' energy; one point, 50% of the buildings' energy; two points, 75% of the buildings' energy; three points, and 1005% of the buildings' energy; four points. We anticipate for the Property that two points could be gained by providing 50% of the buildings' energy from an off-site renewable source.

#### 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.

We have recommended budgeting an allowance of \$30,000 to achieve LEED certification.

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

Group Name	Possible Pts	Existing Condition (1)		From FCA (2)		To LEED Certification (3)	
		Detail/No of Credits	Notes	Detail/No of Credits	Notes	Detail/No of Credits	Notes
Sustainable Sites	12	0		0		2	
Water Efficiency	10	0		0		2	
Energy and Atmosphere	30	0		0		14	
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	0	Subtotal	0	Subtotal	43	Subtotal
From FCA (2)		0					
Total after FCA		0					
To LEED Certification (3)		43					
<b>LEED TOTAL POINTS</b>		<b>43</b>				<b>SILVER</b>	

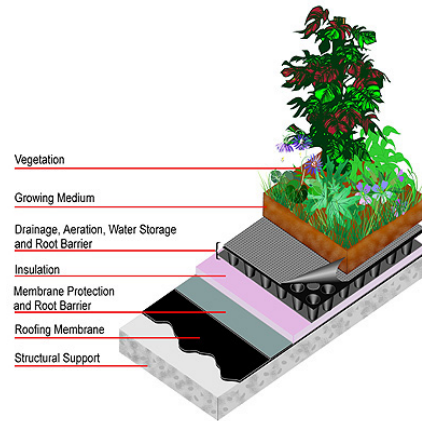
- (1) Existing Condition      Points observed based on the facilities' condition and operations and maintenance procedures in place at the time of assessment.
- (2) From FCA                      Points that can be achieved through the implementation of requirements included in the FCA.
- (3) To LEED Certification      Points 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/sf (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/sf. 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 main low-slope roof is installed over cast-in-place concrete decks or steel deck. The low-slope roof at the vehicle maintenance building is installed over a steel pan roof deck. 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 psf and a dead load of 80 psf. Assuming installation of an Extensive Green Roof at all roof areas, this would add approximately 17 (dry) to 30 (wet) psf 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 adequately drained low-slope roof areas. The roof systems are generally 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 estimate an allowance of \$12 per square foot is reasonable for this work. Our unit rate for this work is based upon the cost factors detailed within Table J-20 as follows:

**Table J-20 Green Roof Cost Factors**

<b>Component</b>	<b>Costs Per Square Foot</b>	<b>Cost Factors</b>
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

We have recommended budgeting an allowance of \$157,020 for installation of a green roof.

**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.

**Capital**

No capital expenditures are required at this time.

**Maintenance**


1. Exit Signs: Existing exit signs consisted of compact fluorescent fixtures. Based upon their constant operation replacement of the existing signs with LED fixtures will result in significant cost savings. Based upon anticipated replacement costs and energy usage, we anticipate that the building will see a 3 – 4 month payback on any such replacement. Our opinion of the cost to replace existing lighting is \$4,000 (\$200 per fixture).

### 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			

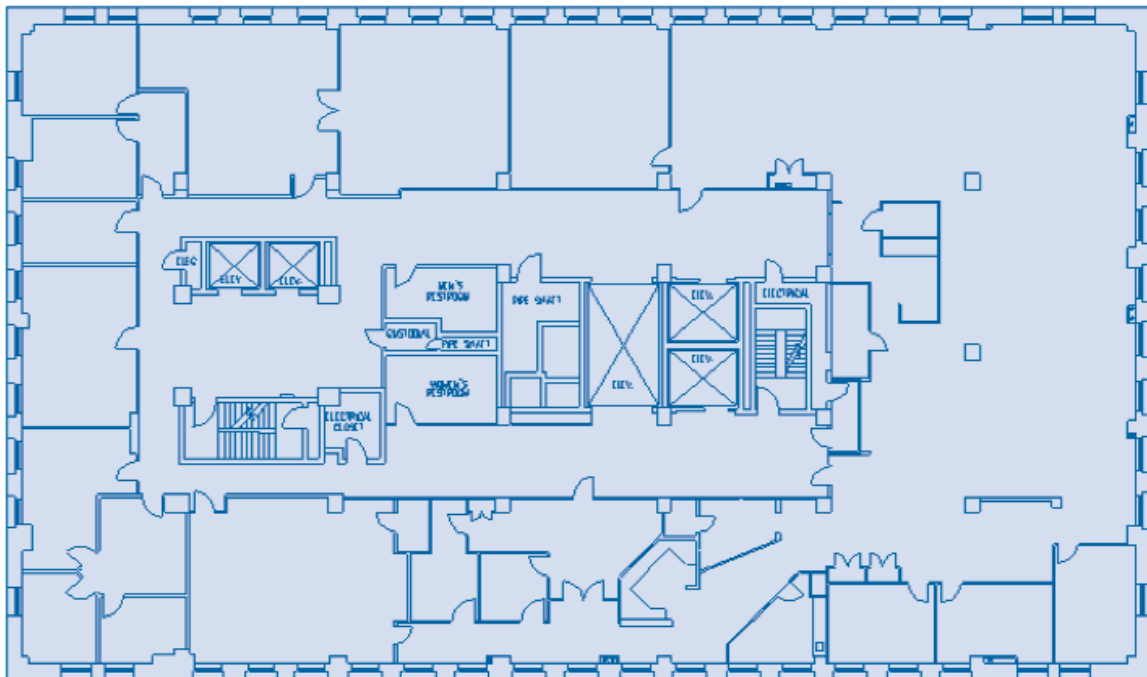
## Floor Plans & Area Calculations

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:

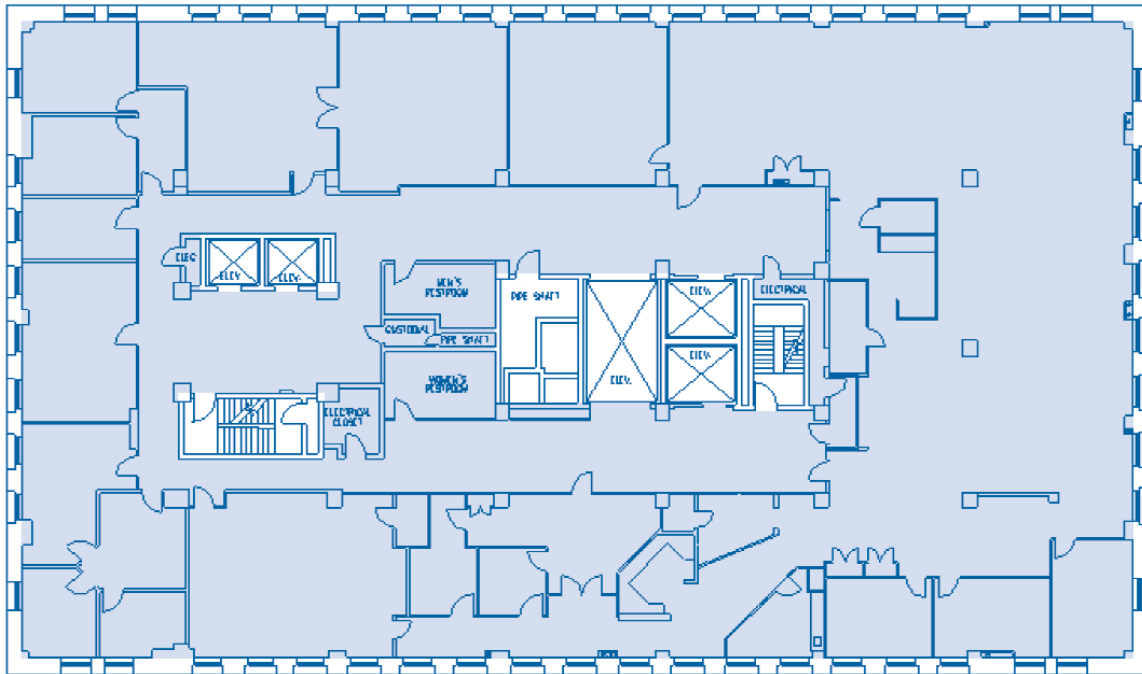
- Basements and Sub-basements;
- Mechanical equipment floors;
- Penthouses;
- Structured parking;



- 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:

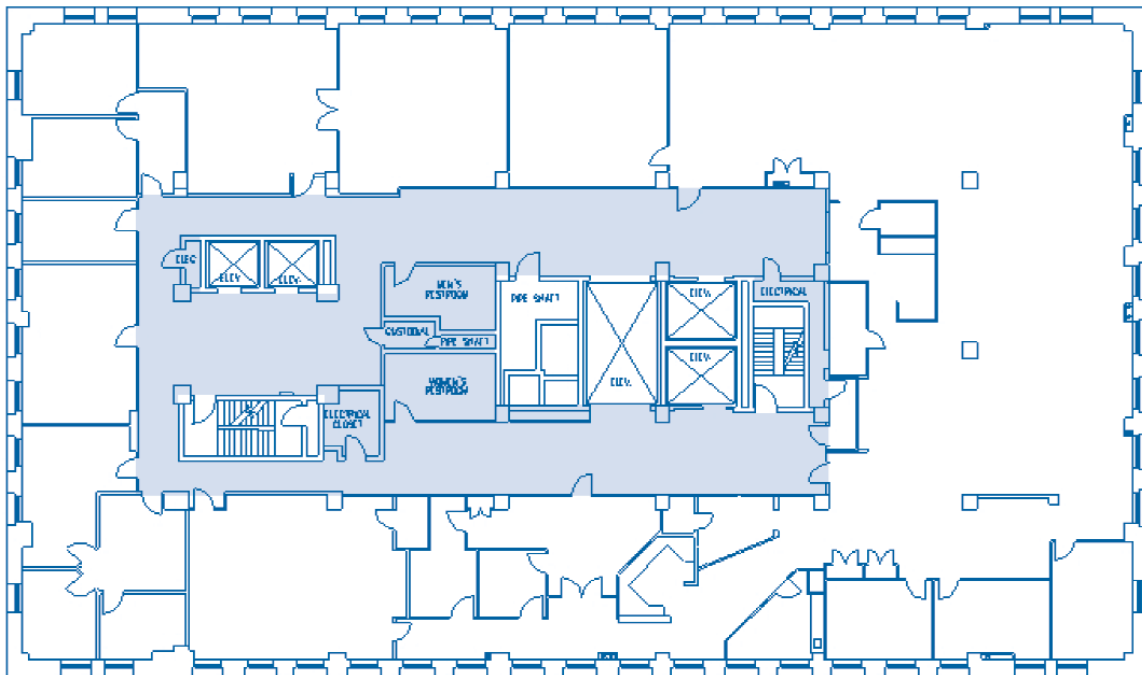
- Public corridors and main auxiliary lobbies used by all tenants in the building;
- Tenant support or security areas such as concierges, security desks and fire control rooms;
- Fully enclosed courtyards within the building line;
- Mechanical and/or telephone rooms that service (support) more than one 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.

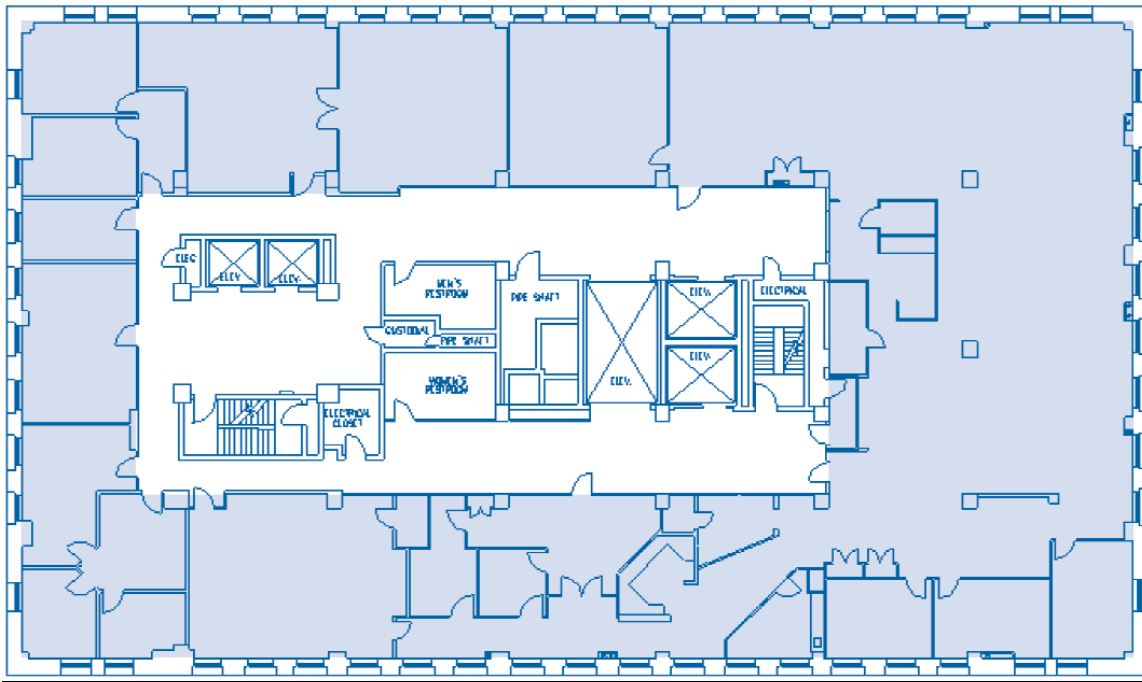


Building Common is calculated by summing all of the following Space Types within a particular building:

- 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.

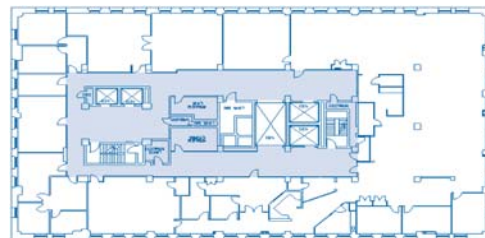
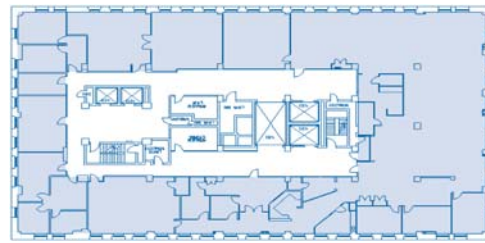
MPD 7	
Floor Number	Gross Measured Area (SF)
B	14,398
1	15,745
2	12,771
Scooter Shed	2,184
<b>TOTAL</b>	<b>45,098</b>

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.

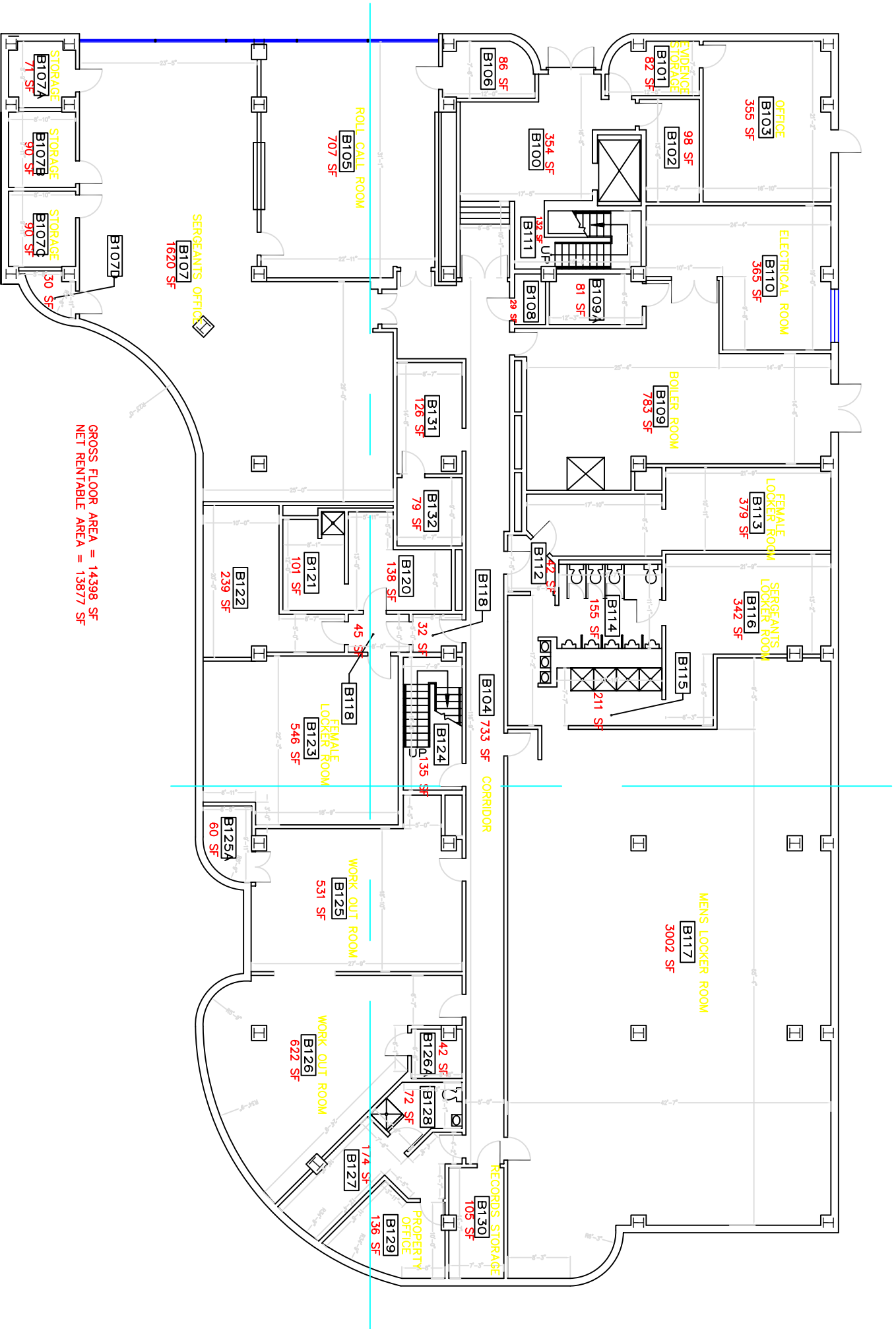
As the building is configured for single tenant use the net rentable area is basically the floor area measured from the interior face of the exterior walls minus the area of the major vertical penetrations. Major vertical penetrations consist of vertical shafts, stairs and chimneys.

**Net Rentable Area calculation**

MPD 7	
Floor Number	Net Rentable Area (SF)
B	13,877
1	15,122
2	12,193
Scooter Shed	1,974
<b>TOTAL</b>	<b>43,166</b>

Tenant Profiles & Inventory

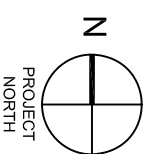
The building is occupied by the District of Columbia Metropolitan Police Department and houses a total of 133 staff.



GROSS FLOOR AREA = 14398 SF  
 NET RENTABLE AREA = 13877 SF

# BASEMENT FLOOR PLAN

SCALE: 1/16" = 1'

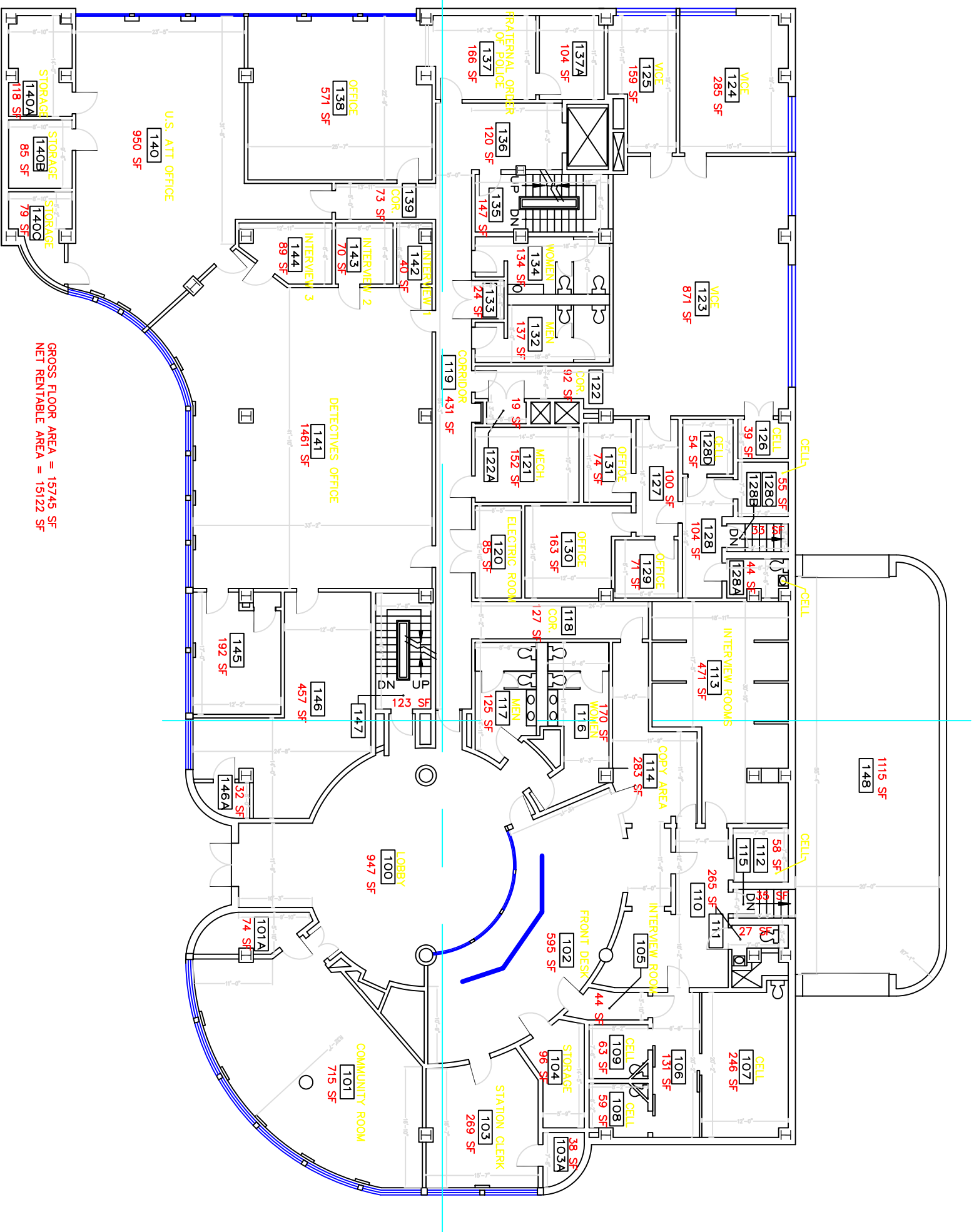


Project:  
**SEVENTH DISTRICT HEADQUARTERS**

Sheet No.:  
**1 OF 5**

Sheet Title:  
**A-1**

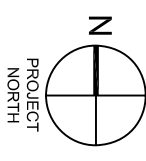
Description:  
**BASEMENT FLOOR PLAN**




GROSS FLOOR AREA = 15745 SF  
 NET RENTABLE AREA = 15122 SF

# FIRST FLOOR PLAN

SCALE: 1/16" = 1'



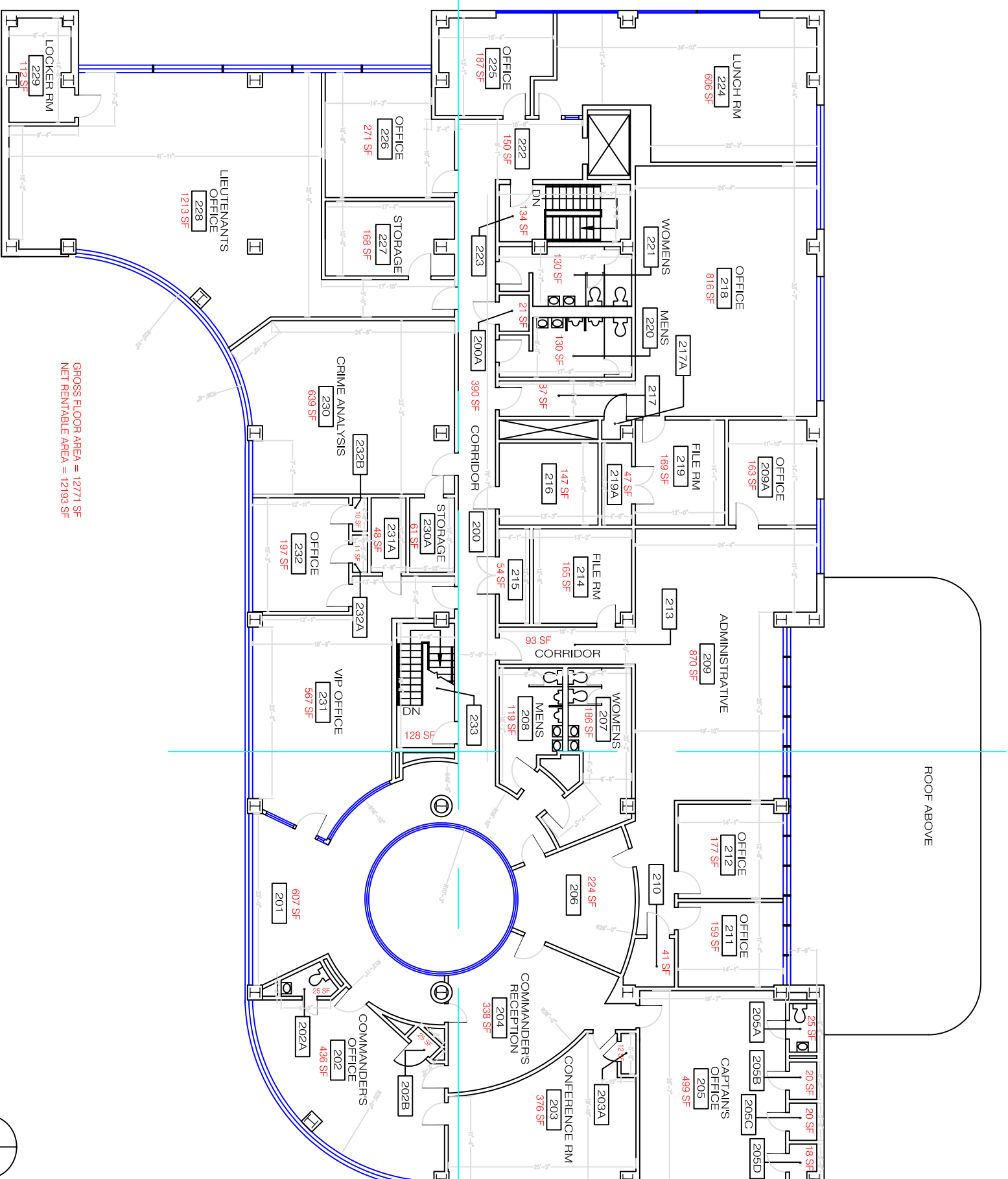


**Project:**  
 SEVENTH DISTRICT  
 HEADQUARTERS

**Sheet No.:**  
 1 OF 5

**Sheet Title:**  
 A-1

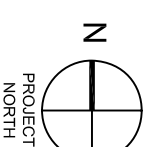
**Description:**  
 FIRST FLOOR PLAN



GROSS FLOOR AREA = 12771 SF  
 NET RENTABLE AREA = 12193 SF

# SECOND FLOOR PLAN

SCALE: 1/16" = 1'



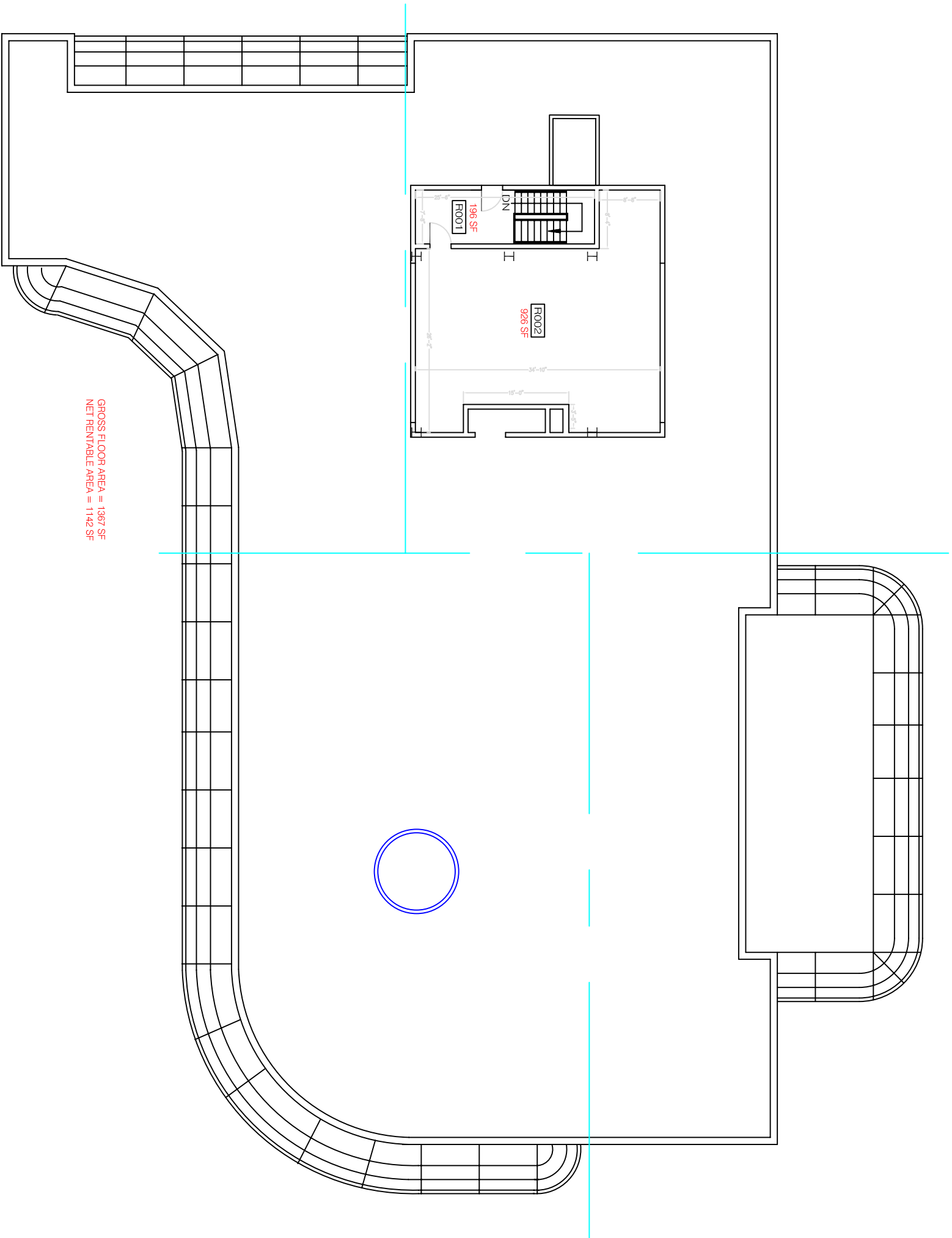
Project:  
**SEVENTH DISTRICT  
 HEADQUARTERS**

Sheet No.:  
**1 OF 5**

Sheet Title:  
**A-1**

Description:  
**SECOND FLOOR PLAN**

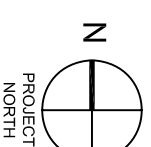




GROSS FLOOR AREA = 1367 SF  
 NET RENTABLE AREA = 1142 SF

# ROOF PLAN

SCALE: 1/16" = 1'

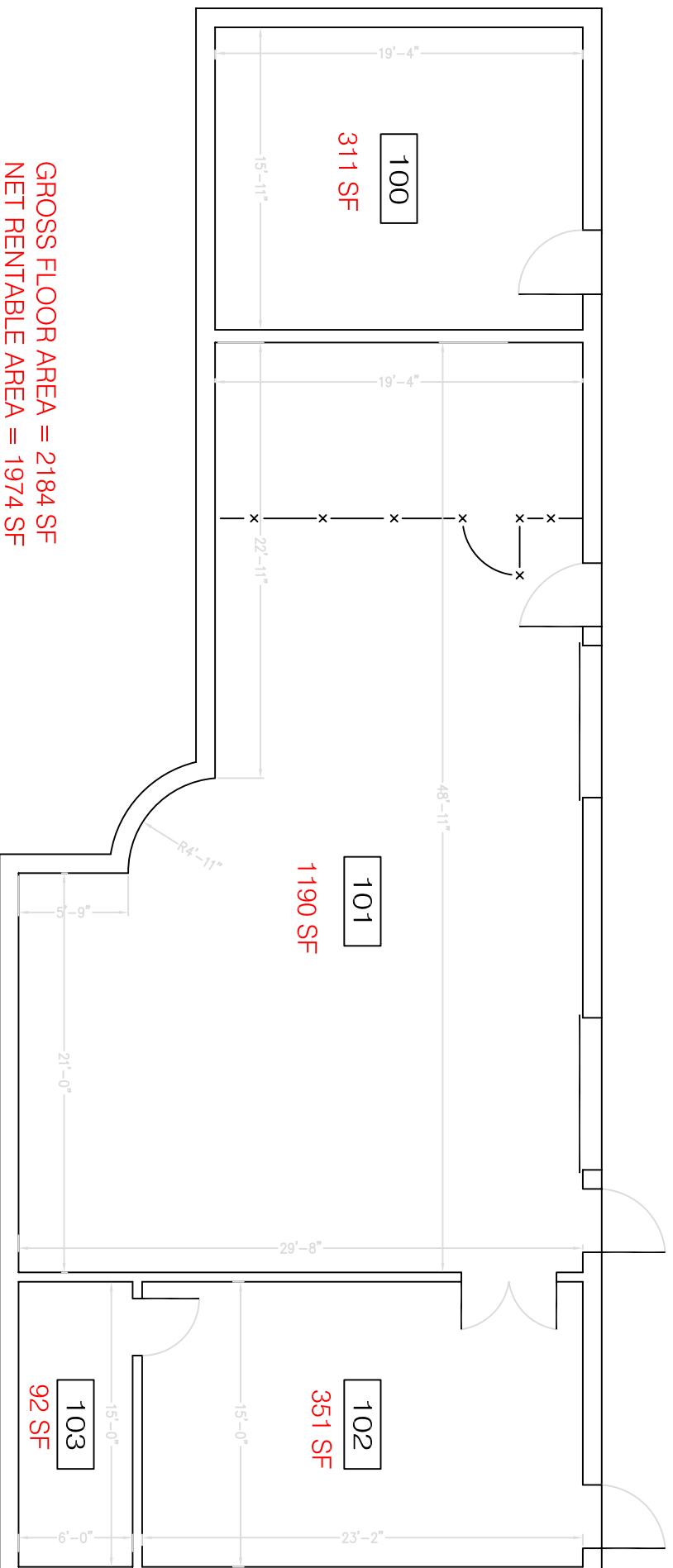


Project:  
**SEVENTH DISTRICT  
 HEADQUARTERS**

Sheet No.:  
**1 OF 5**

Sheet Title:  
**A-1**

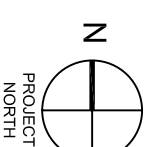
Description:  
**ROOF PLAN**



GROSS FLOOR AREA = 2184 SF  
 NET RENTABLE AREA = 1974 SF

# FIRST FLOOR PLAN

SCALE: 1/8" = 1'



	
Project:	SEVENTH DISTRICT SCOOTER STORAGE SHED
Sheet No.:	1 OF 1
Sheet Title:	A-1
Description:	FIRST FLOOR PLAN

# Inventory and Occupancy

By Building



**Seventh District HQ**

Continued from previous page ....

Tenant	Tenant ID	Space Name	Space ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
MPD	MPD	Property Office	B129	Office	136	B	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Mens Locker Room	B117	Locker Room	3002	B	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Cell	128D	Cell	54	1	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Interview 1	142	Interview Room	40	1	0	0	2	0	0	0	0	1	0	0	0
MPD	MPD	Interview 2	143	Interview Room	70	1	0	0	2	0	0	0	0	1	0	0	0
MPD	MPD	Interview 3	144	Interview Room	89	1	0	0	2	0	0	0	0	1	0	0	0
MPD	MPD	Detectives Office	141	Office	1461	1	18	0	18	4	0	0	18	0	0	1	0
MPD	MPD	U.S. Attorney Office	140	Office	950	1	3	0	14	0	0	0	0	2	0	0	0
MPD	MPD	Office	138	Open Office	571	1	8	0	8	1	1	0	8	0	0	0	0
MPD	MPD	Fraternal Order of Police	137	Office	166	1	2	2	2	0	0	0	0	0	0	1	0
MPD	MPD	Vice	137A	Office	104	1	1	1	4	1	0	0	0	0	0	0	0
MPD	MPD	Vice	123	Open Office	871	1	12	0	12	0	0	0	12	0	0	0	0
MPD	MPD	Vice	125	Office	159	1	1	1	2	0	2	0	0	0	0	0	0
MPD	MPD	Cell	128A	Cell	44	1	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Records Storage	B130	Storage	150	B	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Office	130	Office	163	1	1	1	2	1	0	0	0	0	0	0	0
MPD	MPD	Work Out Room	B126	Fitness Center	622	B	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Work Out Room	B125	Fitness Center	531	B	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Female Locker Room	B123	Locker Room	546	B	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Storage	B107C	Storage	90	B	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Storage	B107B	Storage	90	B	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Storage	B107A	Storage	71	B	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Sgt. Office	B107	Office	1602	B	33	0	33	0	0	0	33	0	0	0	0
MPD	MPD	Roll Call Room	B105	Roll Call	707	B	0	18	18	0	0	0	0	0	0	0	0
MPD	MPD	Office	B103	Office	355	B	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Boiler Room	B109	Boiler Room	783	B	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Boiler Room	B110	Boiler Room	365	B	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Female Locker Room	B113	Locker Room	379	B	0	0	0	0	0	0	0	0	0	0	0

**Seventh District HQ**

Continued from previous page ....

Tenant	Tenant ID	Space Name	Space ID	Space Use	SF	Floor #	Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
MPD	MPD	Sergeant's Locker Room	B116	Locker Room	342	B	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Vice	124	Office	285	1	3	3	3	4	1	0	0	0	0	1	0
MPD	MPD	Lunch Room	224	Lunch Room	606	2	0	0	17	0	0	0	0	3	0	0	0
MPD	MPD	Office	209A	Office	163	2	1	1	3	0	0	0	0	0	0	0	0
MPD	MPD	Administrative	209	Open Office	870	2	5	5	5	2	0	0	0	0	0	0	0
MPD	MPD	Office	212	Office	177	2	1	1	2	1	1	0	0	0	0	0	0
MPD	MPD	Office	211	Office	159	2	1	1	2	1	1	0	0	0	0	0	0
MPD	MPD	Captain's Office	205	Office	499	2	3	3	3	0	2	0	0	0	0	0	0
MPD	MPD	Conference Room	203	Conference Room	376	2	0	0	11	0	0	0	0	1	1	0	0
MPD	MPD	Commander's Office	202	Office	436	2	1	1	3	0	1	0	0	0	0	2	0
MPD	MPD	VIP Office	231	Open Office	567	2	3	0	3	0	0	0	3	0	0	0	0
MPD	MPD	Office	232	Office	197	2	1	1	2	1	0	0	0	0	0	0	0
MPD	MPD	Crime Analysis	230	Office	639	2	5	5	5	5	0	0	0	2	0	0	0
MPD	MPD	Lieutenants Office	228	Open Office	1213	2	12	0	12	2	0	0	12	1	0	1	0
MPD	MPD	Office	226	Office	271	2	1	1	2	1	0	0	0	0	0	0	0
MPD	MPD	Cell	126	Cell	39	1	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Office	218	Open Office	816	2	4	4	4	9	0	0	0	1	0	1	0
MPD	MPD	File Room	219	File Room	169	2	0	0	0	19	0	0	0	0	0	0	0
MPD	MPD	Office	130	Office	163	1	1	1	2	1	0	0	0	0	0	0	0
MPD	MPD	Front Desk	102	Reception	595	1	6	6	6	6	0	0	0	0	0	0	0
MPD	MPD	Community Room	101	Assembly	715	1	0	0	27	0	0	0	0	4	0	0	0
MPD	MPD	Station Clerk	103	Office	269	1	3	3	3	0	2	0	0	0	0	0	0
MPD	MPD	Storage	104	Storage	96	1	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Cell	108	Cell	59	1	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Cell	109	Cell	63	1	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Cell	107	Cell	246	1	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Cell	112	Cell	58	1	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Interview Room	113	Interview Rooms	471	1	0	0	0	0	0	0	0	0	0	0	0
MPD	MPD	Copy Area	114	Copy Area	283	1	0	0	1	1	0	0	0	2	0	0	1

**Seventh District HQ**

Continued from previous page ....

Tenant	Tenant ID	Space Name	Space ID	Space Use	SF	Floor #	Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
MPD	MPD	Office	131	Office	74	1	1	1	2	1	0	0	0	0	0	0	0
MPD	MPD	Office	129	Office	71	1	1	1	2	1	0	0	0	0	0	0	0
MPD	MPD	Office	225	Office	187	2	1	1	1	0	0	0	0	0	0	0	0
<b>Total for Seventh District HQ</b>							133	62	240	62	11	0	86	19	1	7	1
<b>Total for Report</b>							133	62	240	62	11	0	86	19	1	7	1

# Inventory and Occupancy

By Floor



1

Building	Tenant	Space Name	Space ID	Space Use	SF	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	Interview 3	144	Interview Room	89	0	0	2	0	0	0	0	1	0	0	0
Seventh District HQ	MPD	Cell	107	Cell	246	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Cell	112	Cell	58	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Interview Room	113	Interview Rooms	471	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Copy Area	114	Copy Area	283	0	0	1	1	0	0	0	2	0	0	1
Seventh District HQ	MPD	Office	131	Office	74	1	1	2	1	0	0	0	0	0	0	0
Seventh District HQ	MPD	Office	129	Office	71	1	1	2	1	0	0	0	0	0	0	0
Seventh District HQ	MPD	Cell	128A	Cell	44	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Cell	128D	Cell	54	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Cell	109	Cell	63	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Interview 2	143	Interview Room	70	0	0	2	0	0	0	0	1	0	0	0
Seventh District HQ	MPD	Office	130	Office	163	1	1	2	1	0	0	0	0	0	0	0
Seventh District HQ	MPD	Detectives Office	141	Office	1461	18	0	18	4	0	0	18	0	0	1	0
Seventh District HQ	MPD	U.S. Attorney Office	140	Office	950	3	0	14	0	0	0	0	2	0	0	0
Seventh District HQ	MPD	Office	138	Open Office	571	8	0	8	1	1	0	8	0	0	0	0
Seventh District HQ	MPD	Fraternal Order of Police	137	Office	166	2	2	2	0	0	0	0	0	0	1	0
Seventh District HQ	MPD	Vice	137A	Office	104	1	1	4	1	0	0	0	0	0	0	0
Seventh District HQ	MPD	Vice	123	Open Office	871	12	0	12	0	0	0	12	0	0	0	0
Seventh District HQ	MPD	Vice	125	Office	159	1	1	2	0	2	0	0	0	0	0	0
Seventh District HQ	MPD	Vice	124	Office	285	3	3	3	4	1	0	0	0	0	1	0
Seventh District HQ	MPD	Interview 1	142	Interview Room	40	0	0	2	0	0	0	0	1	0	0	0
Seventh District HQ	MPD	Storage	104	Storage	96	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Station Clerk	103	Office	269	3	3	3	0	2	0	0	0	0	0	0
Seventh District HQ	MPD	Community Room	101	Assembly	715	0	0	27	0	0	0	0	4	0	0	0
Seventh District HQ	MPD	Front Desk	102	Reception	595	6	6	6	6	0	0	0	0	0	0	0
Seventh District HQ	MPD	Office	130	Office	163	1	1	2	1	0	0	0	0	0	0	0
Seventh District HQ	MPD	Cell	126	Cell	39	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Cell	108	Cell	59	0	0	0	0	0	0	0	0	0	0	0



**1** Continued from previous page ....

Building	Tenant	Space Name	Space ID	Space Use	SF	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
<b>Total for 1</b>					61	20	114	21	6	0	38	11	0	3	1	

**2**

Building	Tenant	Space Name	Space ID	Space Use	SF	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	Captain's Office	205	Office	499	3	3	3	0	2	0	0	0	0	0	0
Seventh District HQ	MPD	Office	209A	Office	163	1	1	3	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Administrative	209	Open Office	870	5	5	5	2	0	0	0	0	0	0	0
Seventh District HQ	MPD	Office	211	Office	159	1	1	2	1	1	0	0	0	0	0	0
Seventh District HQ	MPD	Conference Room	203	Conference Room	376	0	0	11	0	0	0	0	1	1	0	0
Seventh District HQ	MPD	Commander's Office	202	Office	436	1	1	3	0	1	0	0	0	0	2	0
Seventh District HQ	MPD	VIP Office	231	Open Office	567	3	0	3	0	0	0	3	0	0	0	0
Seventh District HQ	MPD	Office	218	Open Office	816	4	4	4	9	0	0	0	1	0	1	0
Seventh District HQ	MPD	Office	212	Office	177	1	1	2	1	1	0	0	0	0	0	0
Seventh District HQ	MPD	Office	232	Office	197	1	1	2	1	0	0	0	0	0	0	0
Seventh District HQ	MPD	Lunch Room	224	Lunch Room	606	0	0	17	0	0	0	0	3	0	0	0
Seventh District HQ	MPD	File Room	219	File Room	169	0	0	0	19	0	0	0	0	0	0	0
Seventh District HQ	MPD	Office	225	Office	187	1	1	1	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Office	226	Office	271	1	1	2	1	0	0	0	0	0	0	0
Seventh District HQ	MPD	Lieutenants Office	228	Open Office	1213	12	0	12	2	0	0	12	1	0	1	0
Seventh District HQ	MPD	Crime Analysis	230	Office	639	5	5	5	5	0	0	0	2	0	0	0
<b>Total for 2</b>					39	24	75	41	5	0	15	8	1	4	0	

**B**

Building	Tenant	Space Name	Space ID	Space Use	SF	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	Sergeant's Locker Room	B116	Locker Room	342	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Work Out Room	B126	Fitness Center	622	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Sgt. Office	B107	Office	1602	33	0	33	0	0	0	33	0	0	0	0
Seventh District HQ	MPD	Boiler Room	B110	Boiler Room	365	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Boiler Room	B109	Boiler Room	783	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Office	B103	Office	355	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Roll Call Room	B105	Roll Call	707	0	18	18	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Female Locker Room	B113	Locker Room	379	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Storage	B107A	Storage	71	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Storage	B107B	Storage	90	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Storage	B107C	Storage	90	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Work Out Room	B125	Fitness Center	531	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Property Office	B129	Office	136	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Records Storage	B130	Storage	150	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Mens Locker Room	B117	Locker Room	3002	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	Female Locker Room	B123	Locker Room	546	0	0	0	0	0	0	0	0	0	0	0
<b>Total for B</b>						<b>33</b>	<b>18</b>	<b>51</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total for Report</b>						<b>133</b>	<b>62</b>	<b>240</b>	<b>62</b>	<b>11</b>	<b>0</b>	<b>86</b>	<b>19</b>	<b>1</b>	<b>7</b>	<b>1</b>

# Inventory and Occupancy

By Space



## Administrative

209

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Open Office	870	2	5	5	5	2	0	0	0	0	0	0	0
<b>Total for Administrative</b>						5	5	5	2	0	0	0	0	0	0	0

## Boiler Room

B110

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Boiler Room	365	B	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Boiler Room	783	B	0	0	0	0	0	0	0	0	0	0	0
<b>Total for Boiler Room</b>						0	0	0	0	0	0	0	0	0	0	0

## Captain's Office

205

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Office	499	2	3	3	3	0	2	0	0	0	0	0	0
<b>Total for Captain's Office</b>						3	3	3	0	2	0	0	0	0	0	0

## Cell

128A

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Cell	44	1	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Cell	54	1	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Cell	39	1	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Cell	58	1	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Cell	246	1	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Cell	63	1	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Cell	59	1	0	0	0	0	0	0	0	0	0	0	0
<b>Total for Cell</b>						0	0	0	0	0	0	0	0	0	0	0

### Commander's Office

202

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Office	436	2	1	1	3	0	1	0	0	0	0	2	0
<b>Total for Commander's Office</b>						1	1	3	0	1	0	0	0	0	2	0

### Community Room

101

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Assembly	715	1	0	0	27	0	0	0	0	4	0	0	0
<b>Total for Community Room</b>						0	0	27	0	0	0	0	4	0	0	0

### Conference Room

203

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Conference Room	376	2	0	0	11	0	0	0	0	1	1	0	0
<b>Total for Conference Room</b>						0	0	11	0	0	0	0	1	1	0	0

### Copy Area

114

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Copy Area	283	1	0	0	1	1	0	0	0	2	0	0	1
<b>Total for Copy Area</b>						0	0	1	1	0	0	0	2	0	0	1

### Crime Analysis

230

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Office	639	2	5	5	5	5	0	0	0	2	0	0	0
<b>Total for Crime Analysis</b>						5	5	5	5	0	0	0	2	0	0	0

### Detectives Office

141

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Office	1461	1	18	0	18	4	0	0	18	0	0	1	0
<b>Total for Detectives Office</b>						18	0	18	4	0	0	18	0	0	1	0

### Female Locker Room

B113

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Locker Room	379	B	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Locker Room	546	B	0	0	0	0	0	0	0	0	0	0	0
<b>Total for Female Locker Room</b>						0	0	0	0	0	0	0	0	0	0	0

### File Room

219

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	File Room	169	2	0	0	0	19	0	0	0	0	0	0	0
<b>Total for File Room</b>						0	0	0	19	0	0	0	0	0	0	0

### Fraternal Order of Police

137

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Office	166	1	2	2	2	0	0	0	0	0	0	1	0
<b>Total for Fraternal Order of Police</b>						2	2	2	0	0	0	0	0	0	1	0

### Front Desk

102

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Reception	595	1	6	6	6	6	0	0	0	0	0	0	0
<b>Total for Front Desk</b>						6	6	6	6	0	0	0	0	0	0	0

### Interview 1

142

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Interview Room	40	1	0	0	2	0	0	0	0	1	0	0	0
<b>Total for Interview 1</b>						0	0	2	0	0	0	0	1	0	0	0

### Interview 2

143

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Interview Room	70	1	0	0	2	0	0	0	0	1	0	0	0
<b>Total for Interview 2</b>						0	0	2	0	0	0	0	1	0	0	0

### Interview 3

144

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Interview Room	89	1	0	0	2	0	0	0	0	1	0	0	0
<b>Total for Interview 3</b>						0	0	2	0	0	0	0	1	0	0	0

### Interview Room

113

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Interview Rooms	471	1	0	0	0	0	0	0	0	0	0	0	0
<b>Total for Interview Room</b>						0	0	0	0	0	0	0	0	0	0	0

### Lieutenants Office

228

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Open Office	1213	2	12	0	12	2	0	0	12	1	0	1	0
<b>Total for Lieutenants Office</b>						12	0	12	2	0	0	12	1	0	1	0

### Lunch Room

224

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Lunch Room	606	2	0	0	17	0	0	0	0	3	0	0	0
<b>Total for Lunch Room</b>						0	0	17	0	0	0	0	3	0	0	0

### Mens Locker Room

B117

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Locker Room	3002	B	0	0	0	0	0	0	0	0	0	0	0
<b>Total for Mens Locker Room</b>						0	0	0	0	0	0	0	0	0	0	0

### Office

138

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Open Office	571	1	8	0	8	1	1	0	8	0	0	0	0
Seventh District HQ	MPD	MPD	Office	187	2	1	1	1	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Office	355	B	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Office	177	2	1	1	2	1	1	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Office	163	2	1	1	3	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Office	271	2	1	1	2	1	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Open Office	816	2	4	4	4	9	0	0	0	1	0	1	0
Seventh District HQ	MPD	MPD	Office	71	1	1	1	2	1	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Office	197	2	1	1	2	1	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Office	74	1	1	1	2	1	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Office	163	1	1	1	2	1	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Office	159	2	1	1	2	1	1	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Office	163	1	1	1	2	1	0	0	0	0	0	0	0
<b>Total for Office</b>						22	14	32	18	3	0	8	1	0	1	0



### Property Office

**B129**

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Office	136	B	0	0	0	0	0	0	0	0	0	0	0
<b>Total for Property Office</b>						0	0	0	0	0	0	0	0	0	0	0

### Records Storage

**B130**

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Storage	150	B	0	0	0	0	0	0	0	0	0	0	0
<b>Total for Records Storage</b>						0	0	0	0	0	0	0	0	0	0	0

### Roll Call Room

**B105**

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Roll Call	707	B	0	18	18	0	0	0	0	0	0	0	0
<b>Total for Roll Call Room</b>						0	18	18	0	0	0	0	0	0	0	0

### Sergeant's Locker Room

**B116**

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Locker Room	342	B	0	0	0	0	0	0	0	0	0	0	0
<b>Total for Sergeant's Locker Room</b>						0	0	0	0	0	0	0	0	0	0	0

### Sgt. Office

**B107**

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Office	1602	B	33	0	33	0	0	0	33	0	0	0	0
<b>Total for Sgt. Office</b>						33	0	33	0	0	0	33	0	0	0	0

### Station Clerk

103

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Office	269	1	3	3	3	0	2	0	0	0	0	0	0
<b>Total for Station Clerk</b>						3	3	3	0	2	0	0	0	0	0	0

### Storage

104

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Storage	96	1	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Storage	90	B	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Storage	90	B	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Storage	71	B	0	0	0	0	0	0	0	0	0	0	0
<b>Total for Storage</b>						0	0	0	0	0	0	0	0	0	0	0

### U.S. Attorney Office

140

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Office	950	1	3	0	14	0	0	0	0	2	0	0	0
<b>Total for U.S. Attorney Office</b>						3	0	14	0	0	0	0	2	0	0	0

### Vice

123

Building	Tenant	Tenant ID	Space Use	SF	Floor	# Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Open Office	871	1	12	0	12	0	0	0	12	0	0	0	0
Seventh District HQ	MPD	MPD	Office	159	1	1	1	2	0	2	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Office	104	1	1	1	4	1	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Office	285	1	3	3	3	4	1	0	0	0	0	1	0
<b>Total for Vice</b>						17	5	21	5	3	0	12	0	0	1	0

### VIP Office

**231**

Building	Tenant	Tenant ID	Space Use	SF	Floor #	Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Open Office	567	2	3	0	3	0	0	0	3	0	0	0	0
<b>Total for VIP Office</b>						3	0	3	0	0	0	3	0	0	0	0

### Work Out Room

**B125**

Building	Tenant	Tenant ID	Space Use	SF	Floor #	Occ's	Desks	Chairs	Filing Cabinets	Book Shelves	Workstations (Triple)	Workstations (Single)	Tables (Standard)	Tables (Conference)	Sofas	Fridges
Seventh District HQ	MPD	MPD	Fitness Center	531	B	0	0	0	0	0	0	0	0	0	0	0
Seventh District HQ	MPD	MPD	Fitness Center	622	B	0	0	0	0	0	0	0	0	0	0	0
<b>Total for Work Out Room</b>						0	0	0	0	0	0	0	0	0	0	0
<b>Total for Report</b>						133	62	240	62	11	0	86	19	1	7	1

# Appendix A

## Six Year Capital Expenditure Forecast

**SIX YEAR CAPITAL EXPENDITURE FORECAST**

7th District Headquarters

2455 Alabama Avenue, SE

Washington, D.C. 20020

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		
<b>A. SUBSTRUCTURE</b>																			
<b>A10 Foundations</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																		\$0	
<b>A20 Basement Construction</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																		\$0	
SUBSTRUCTURE TOTALS =																		\$0	
<b>B. SHELL</b>																			
<b>B10 Superstructure</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																		\$0	
<b>B20 Exterior Closure</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																		\$0	
<b>B30 Roofing</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																		\$0	
SHELL TOTALS =																		\$0	
<b>C. INTERIORS</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																		\$0	
INTERIORS TOTALS =																		\$0	
<b>D. SERVICES</b>																			
<b>D10 Conveying</b>																			
1	Hydraulic Tank	20	5	1	EA	\$18,750.00	4											\$18,750	\$18,750
2	Controller	20	5	1	EA	\$37,500.00	4											\$37,500	\$37,500
3	Electrical Installations	20	5	1	LS	\$5,000.00	4											\$5,000	\$5,000
4	Car Top Fan & Inspection Station	20	5	1	LS	\$1,000.00	4											\$1,000	\$1,000
5	Car Finishes	10	5	1	EA	\$15,000.00	4											\$15,000	\$15,000
6	Fixtures & Emergency Phone	20	5	1	LS	\$15,625.00	4											\$15,625	\$15,625
7	Door Packages	20	5	1	LS	\$7,500.00	4											\$7,500	\$7,500
8	Slide Rails	20	5	1	LS	\$6,750.00	4											\$6,750	\$6,750
9	Hydraulic Cylinder	20	5	1	EA	\$37,500.00	4											\$37,500	\$37,500
	A/E Consulting Services (A/E Serv.) - 10%	N/A	N/A	10.00%	N/A	Percent	4	Applicable to Items above										\$14,463	\$14,463
SECTION SUBTOTALS =																		\$159,088	
<b>D20 Plumbing</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																		\$0	
<b>D30 HVAC</b>																			
1	Replace Existing Boiler	25	2	\$35,708.75	1	EA	3						\$35,709						\$35,709
2	Replace Circulating Pumps	25	2	\$6,500.00	2	EA	3						\$13,000						\$13,000
3	Replace Chillers	30	5	\$750.00	140	Tons	4											\$105,000	\$105,000
SECTION SUBTOTALS =																		\$153,709	
<b>D40 Fire Protection</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																		\$0	
<b>D50 Electrical</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																		\$0	
SERVICES TOTALS =																		\$312,798	

**SIX YEAR CAPITAL EXPENDITURE FORECAST**

**7th District Headquarters**

**2455 Alabama Avenue, SE**

**Washington, D.C. 20020**

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		
<b>E. FURNISHINGS &amp; EQUIPMENT</b>																			
<b>E10 Equipment</b>																			
No Capital Expenditures are Forecasted																			
<b>E20 Furnishings</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																			\$0
FURNISHINGS & EQUIPMENT TOTALS =																			\$0
<b>F. SPECIAL CONSTRUCTION &amp; DEMOLITION</b>																			
<b>F10 Special Construction</b>																			
No Capital Expenditures are Forecasted																			
<b>F20 Demolition</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																			\$0
SPECIAL CONSTRUCTION & DEMOLITION TOTALS =																			\$0
<b>G. BUILDING SITEWORK</b>																			
<b>G10 Site Systems</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																			\$0
BUILDING SITEWORK TOTALS =																			\$0
<b>H. ACCESSIBILITY</b>																			
<b>H10 Site Improvements</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																			\$0
ACCESSIBILITY TOTALS =																			\$0
<b>I. HAZARDOUS MATERIALS</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																			\$0
HAZARDOUS MATERIALS TOTALS =																			\$0
<b>J. ENVIRONMENTAL ANALYSIS</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																			\$0
<b>J20 Green Roof Feasibility</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																			\$0
<b>J30 Energy Efficiency</b>																			
No Capital Expenditures are Forecasted																			
SECTION SUBTOTALS =																			\$0
ENVIRONMENTAL ANALYSIS TOTALS =																			\$0
<b>TOTALS</b>																			\$0
<b>TOTALS (w/ Inflation @ 4%)</b>																			\$0
												\$0	\$0	\$48,709	\$0	\$0	\$0	\$264,088	\$312,796
												\$0	\$0	\$50,657	\$0	\$0	\$0	\$321,303	\$371,960

<b>Total Expenditures (current \$)</b>	5312,796
<b>Expenditures Considered by FCI (Exc. Environ. Analysis, Includes Maintenance)</b>	5491,218
<b>Current Replacement Value (current \$)</b>	58,027,444
<b>Facility Condition Index (FCI)</b>	0.06

# Appendix B

## Six Year Maintenance Forecast



**SIX YEAR MAINTENANCE FORECAST**

7th District Headquarters

2455 Alabama Avenue, SE

Washington, D.C. 20020

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		
<b>A. SUBSTRUCTURE</b>																			
<b>A10 Foundations</b>																			
No Maintenance Expenditures are Forecasted																			
												SECTION SUBTOTALS =							\$0
<b>A20 Basement Construction</b>																			
No Maintenance Expenditures are Forecasted																			
												SECTION SUBTOTALS =							\$0
												SUBSTRUCTURE TOTALS =							\$0
<b>B. SHELL</b>																			
<b>B10 Superstructure</b>																			
No Maintenance Expenditures are Forecasted																			
												SECTION SUBTOTALS =							\$0
<b>B20 Exterior Closure</b>																			
1			\$580.00	1	LS	2	√					\$580						\$580	
2			\$5.00	50	LF	2		√				\$250						\$250	
3 + 8 + 9			\$250.00	5	Window	varies		√				\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$1,250	\$7,500	
4			\$5.00	200	LF	varies		√							\$1,000			\$1,000	
5			\$5.00	180	LF	3		√							\$900			\$900	
6			\$5.00	162	LF	3		√							\$810			\$810	
7			\$5.00	186	SF	3									\$930			\$930	
												SECTION SUBTOTALS =							\$11,970
<b>B30 Roofing</b>																			
1			\$5.00	150	LF	2	√					\$750						\$750	
												SECTION SUBTOTALS =							\$750
												SHELL TOTALS =							\$12,720
<b>C. INTERIORS</b>																			
1			\$2.00	88	SF	2		√				\$176						\$176	
2			\$3,500.00	1	LS	2	√					\$3,500						\$3,500	
3			\$5.00	4,800	SF	3								\$24,000				\$24,000	
												SECTION SUBTOTALS =							\$27,676
												INTERIORS TOTALS =							\$27,676
<b>D. SERVICES</b>																			
<b>D10 Conveying</b>																			
1				1	EA	\$50.00	2					\$50						\$50	
												SECTION SUBTOTALS =							\$50
<b>D20 Plumbing</b>																			
1 + 2			\$1,280.00	1	LS	varies		√					\$1,280	\$1,280	\$1,280	\$1,280	\$1,280	\$6,400	
												SECTION SUBTOTALS =							\$6,400
<b>D30 HVAC</b>																			
1			\$1,250.00	6	EA	2		√				\$7,500						\$7,500	
												SECTION SUBTOTALS =							\$7,500
<b>D40 Fire Protection</b>																			
No Maintenance Expenditures are Forecasted																			
												SECTION SUBTOTALS =							\$0
<b>D50 Electrical</b>																			
1 + 2			\$10,000.00	1	LS	varies	√					\$10,000			\$10,000			\$20,000	
3 + 5 + 7			\$2,000.00	1	LS	varies	√					\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$12,000	
4 + 6			\$4,000.00	1	LS	varies	√					\$4,000			\$4,000			\$8,000	
												SECTION SUBTOTALS =							\$40,000
												SERVICES TOTALS =							\$53,950



**SIX YEAR MAINTENANCE FORECAST**  
**7th District Headquarters**  
**2455 Alabama Avenue, SE**  
**Washington, D.C. 20020**

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		
<b>E. FURNISHINGS &amp; EQUIPMENT</b>																			
<b>E10 Equipment</b>																			
No Maintenance Expenditures are Forecasted																			
<b>E20 Furnishings</b>																			
No Maintenance Expenditures are Forecasted																			
												SECTION SUBTOTALS =						\$0	
												FURNISHINGS & EQUIPMENT TOTALS =						\$0	
<b>F. SPECIAL CONSTRUCTION &amp; DEMOLITION</b>																			
<b>F10 Special Construction</b>																			
No Maintenance Expenditures are Forecasted																			
												SPECIAL CONSTRUCTION & DEMOLITION TOTALS =						\$0	
<b>G. BUILDING SITEWORK</b>																			
<b>G10 Site Systems</b>																			
1			\$12.00	250	SY	2	√					\$3,000						\$3,000	
2			\$40.00	30	SF	2	√					\$1,200						\$1,200	
3 + 5			\$1.20	4,210	SY	varies						\$5,052			\$5,052			\$10,104	
4			\$12.00	4,210	SY	3	√							\$50,520				\$50,520	
												SECTION SUBTOTALS =						\$64,824	
												BUILDING SITEWORK TOTALS =						\$64,824	
<b>H. ACCESSIBILITY</b>																			
1			\$1,652.00	1	LS	2						\$1,652						\$1,652	
2			\$50.00	52	EA	2						\$2,600						\$2,600	
3			\$3,000.00	2	EA	2						\$6,000						\$6,000	
												SECTION SUBTOTALS =						\$10,252	
												ACCESSIBILITY TOTALS =						\$10,252	
<b>I. HAZARDOUS MATERIALS</b>																			
1			\$125.00	72	Hrs.	2			√			\$9,000						\$9,000	
												SECTION SUBTOTALS =						\$9,000	
												HAZARDOUS MATERIALS TOTALS =						\$9,000	
<b>J. ENVIRONMENTAL ANALYSIS</b>																			
<b>J10 LEED Analysis</b>																			
1			\$30,000.00	1	LS	2			√			\$30,000						\$30,000	
												SECTION SUBTOTALS =						\$30,000	
<b>J20 Green Roof Feasibility</b>																			
1			\$12.00	13,085	SF	2						\$157,020						\$157,020	
												SECTION SUBTOTALS =						\$157,020	
<b>J30 Energy Efficiency</b>																			
1			\$200.00	20	EA	2						\$4,000						\$4,000	
												SECTION SUBTOTALS =						\$4,000	
												ENVIRONMENTAL ANALYSIS TOTALS =						\$191,020	
<b>TOTALS</b>												\$0	\$249,580	\$4,530	\$55,050	\$51,222	\$4,530	\$4,530	\$369,442
<b>TOTALS (w/ inflation @ 4%)</b>												\$0	\$249,580	\$4,711	\$59,542	\$57,618	\$5,299	\$5,511	\$382,262

Total Expenditures (current \$)

\$369,442

# Appendix C

## Photographs



Photograph No. 1

Front Elevation – Main Building



Photograph No. 2

Rear Elevation – Main Building



Photograph No. 3

Structural Concrete Column



Photograph No. 4

Concrete Staircase



Photograph No. 5

Roof Structure at Vehicle Maintenance Building



Photograph No. 6

Vehicle Fueling Station





Photograph No. 7

Exterior Wall Panel System at Main Building



Photograph No. 8

Vehicle Maintenance Building



Photograph No. 9

Defective Joint at Enclosure System

Photograph No. 10

Water Ingress at Enclosure System



Photograph No. 11

Low Slope Roof at Main Building



Photograph No. 12

Low Slope Roof at Single Story Garage Building



Photograph No. 13

Low Slope Roof at Vehicle Maintenance Building



Photograph No. 14

Domed Skylight at Main Roof



Photograph No. 15

Defective Sealant at Glazed Panels and Glazing Bars







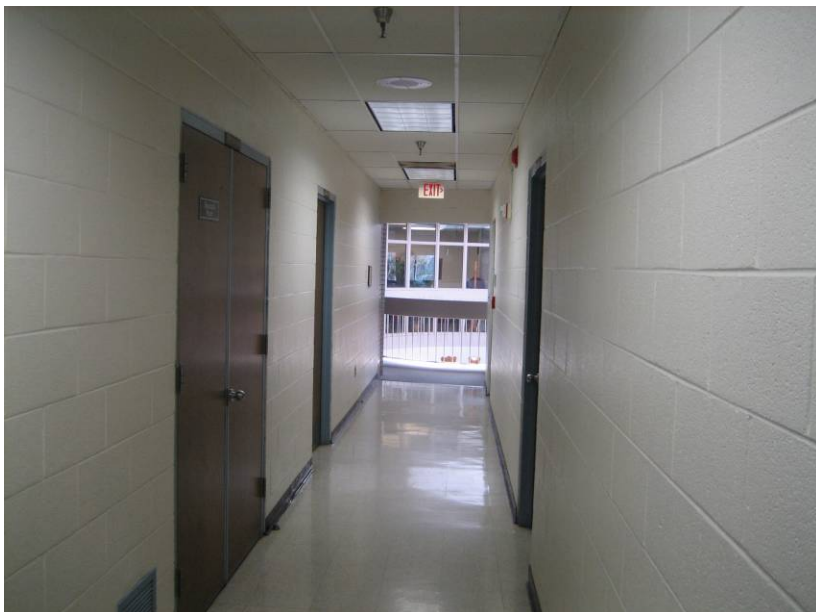
Photograph No. 16

Poor Quality Installation of Curved Portion of Cap Flashing



Photograph No. 17

Reception Area



Photograph No. 18

Corridor at Second Floor





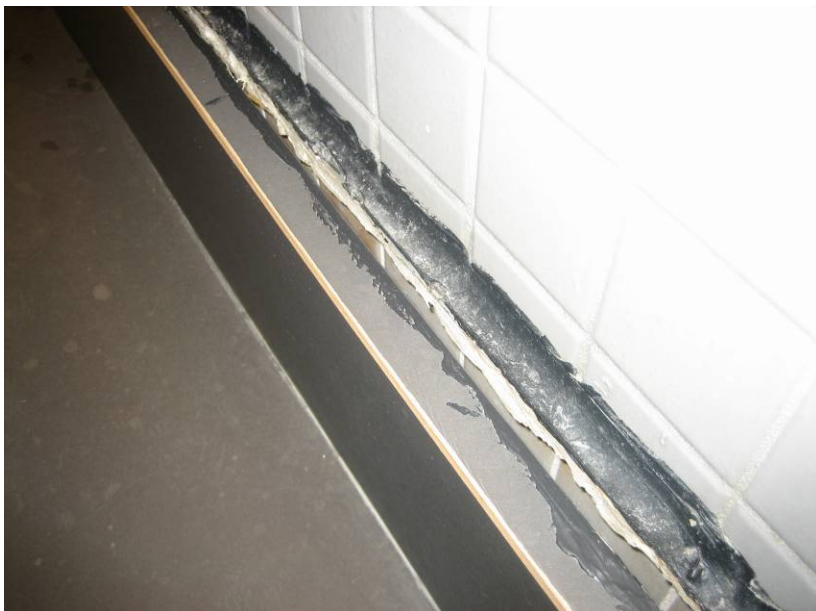
Photograph No. 19

Office Space



Photograph No. 20

Locker Room



Photograph No. 21

Defective Counter Top at Restroom



Photograph No. 22

Defective Tiles at Restroom



Photograph No. 23

Elevator Cab



Photograph No. 24

Elevator Control Panel





Photograph No. 25

Elevator Machine Room



Photograph No. 26

Boiler



Photograph No. 27

Chiller



Photograph No. 28

Sprinkler Head



Photograph No. 29

Emergency Generator



Photograph No. 30

Main Parking Area





Photograph No. 31

Worn Asphalt-Paved Parking Surface



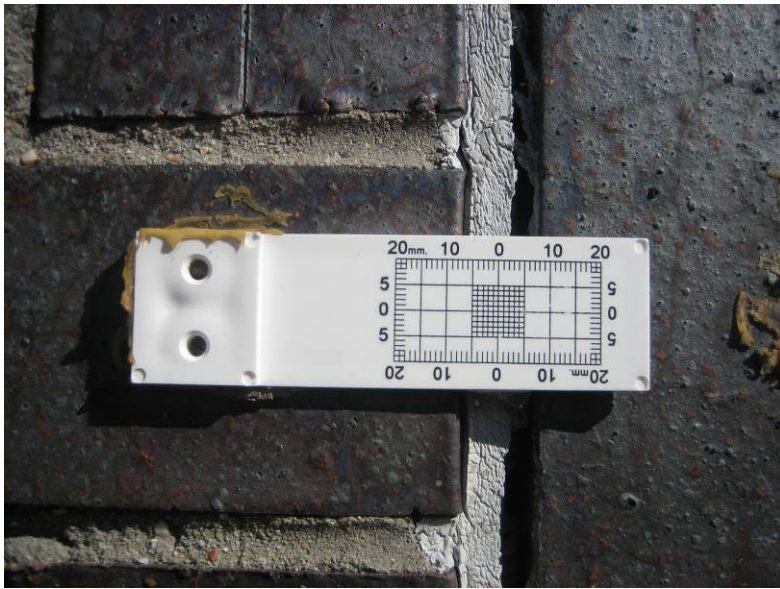
Photograph No. 32

Worn Concrete Surface at Vehicular Entrance



Photograph No. 33

Movement at Boundary Wall



Photograph No. 34

Tell-tale Monitor at Boundary Wall



Photograph No. 35

Non ADA Compliant Restroom Entrance Doors



Photograph No. 36

Reduced Height Drinking Fountain

# Appendix D

## Inventory & Checklist



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	No	
	Wall deterioration / seepage	No	
	Inadequate ventilation	No	
Superstructure	Overall alignment	Okay	
	Deflection	No	
	Surface condition – cracks	No	
	Scaling, spalls, and pop-outs	No	
	Stains	No	
	Exposed reinforcing	No	
	Type	Cast-in-place concrete frame, with solid clay brick façade and aluminum panels at first floor	
	Loading capacity	Information not available	
Exterior	Paint or surface treatment	Fair	
	Caulking	Fair to poor	Localized defects at front elevation
	Windows and doors fittings	Fair	
	Flashing conditions	Fair	
	Hardware conditions	Fair	
	Material integrity	Fair	
	Cracks	No	
	Evidence of moisture	Yes	Localized defects at front elevation (aluminum panels)
	Construction joints	Yes	
	Pointing of brick and stone works	Fair	
	Paving (walks and steps)	Yes	
	Type of paving	Concrete	
	Handicap accessibility	Yes	
	Railings	No	
	Exterior lighting	Yes	
	Peeling paint	No	
	Stains	Yes	Defective soffit due to leaking aluminum panel joint
	Dislocation	No	



System	Detail	Yes / No	Comment
	Roof ventilators	Yes	
Roofing	Water tightness (evidence of leaks)	Okay	Generally fair
	Standing water	No	
	Roofing surface (blisters, wrinkles, cracks, holes, tears, alligating, fish mouths, ballast)	No	
	Insulation	Yes	
	Flashing (deterioration, holes or damages, open joints)	Yes	
	Drainage (alignment, corrosion)	Fair	
	Parapets	Yes	
	Downspouts & gutters	Yes	Internal downspouts (x6), 2 at garage portion
	Type of roofing	EPDM	Modified bitumen at vehicle maintenance building
	Drains, downspouts – Nos. & size	6 x 4" Internal drain	2 x 4" Internal drain at vehicle maintenance building
	Loading limits	Information not available	
	Roof Top Equipment	Yes	
Building Interior	Floors, walls and ceilings (stains, holes, tears, etc.)	Fair	
	Restrooms	Faif	Repairs required at basement level restroom
	Stairwells	Okay	
	Surface damage (missing tiles and floor coverings)	No	
Site	Paving (walks and driveways)	Yes	Concrete and asphalt
	Fountains	No	
	Parking (number of spaces & areas)	Yes	North elevation, 105 spaces
	Fences	Yes	Movement at brick boundary wall
	Transformers	No	
	Underground storage tank	No	
Mechanical / Plumbing	Leaks, dripping, running faucets and valves	N/A	
	Pipe insulation	Yes	Possibly asbestos
	Hangers, supports and clamps	Yes	
	Drain and waste	Okay	

System	Detail	Yes / No	Comment
	connections		
	Adequate flow	Yes	
Mechanical / HVAC	Condition of motors, fans, drive assembly and pumps – rust and corrosion	Fair	Rooftop equipment
	Wiring and electrical controls	Fair	
	Thermal insulation	Yes	
	Air cooled condensers	Yes	
	Compressors	Yes	
	Air distributors	Yes	
	Supply and return ducts – corrosion, cracks and air leaks	Fair	
	Burner assembly	Yes	
	Dampers, louvers and grilles	Yes	
	Heating and cooling capacity	Varies	
	Exhaust system	Yes	
	Air intake system	Yes	
	No. of Window Air Conditioning Units	None	
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	Yes	
	Auto start and switch over	No	
	Cooling and exhaust	Yes	
	Exit signs	Yes	
	Emergency lighting	Yes	
Public address system	Yes		
Conveying System (elevators and escalators)	Overall appearance	No Elevators or Escalators	
	Door operation		
	Control systems		
	Noise		
	Code compliance		
	Handicap access		
	Carriage lighting		
	Signage		
Fire Resistive Requirements	Exterior bearing walls	Yes	Suitable for intended building use
	Interior bearing walls	Yes	

System	Detail	Yes / No	Comment
	Exterior non bearing walls	Yes	
	Structural frame	Yes	
	Permanent partitions	Yes	
	Shaft enclosures	Unknown	Not accessed
	Floor & ceiling / floor	Yes	
	Exterior doors & windows	Yes	
	Stairway construction	Concrete	
Fire Alarm Required	Provided	Yes	
Draft Stops	Provided	No	
Doors (Analyze doors for ratings in area separations, occupancy separations, and rated exitways)	Number	3	Exterior, pedestrian
	Size	3' x 6' 6"	
	Sealant – Type and LF	No	
	Glazing	Varies	
	Location	First floor	
	Type	Steel Frame	
	Hardware	Mechanical Lock Sets; round Handles	
Windows	Number	182	
	Size	Varies	
	Sealant – Type and LF	Varies	
	Glazing	Double	
	Location	Each elevation	
	Type	aluminum-framed	
	Hardware	Steel	
Access Control	Card Reader	No	
	Type of access control	No	
	X-Ray machine	No	
	Interior Cameras	No	
	Exterior Cameras, Location	No	
	Intrusion Detection Systems	No	
	Emergency Call Boxes	No	
Fire Stops	Provided	No	
Exits (From Building)	Number Required		
	Number Provided	3	
	Distance Required		
	Distance Provided		
	Width Required		
	Width Provided	33"	
Fire Extinguishers	Number Provided	No	
	Number Required		
Automatic Fire Suppression System	Provided	Yes	
	Required	No	

System	Detail	Yes / No	Comment
Public Access	Accessible Parking	No	Marked spaces required
	Floor or Ground Surfaces	Concrete	
	Curbs / ramps	No	
	Elevators	Yes	
	Stairways including Treads, Risers, Nosing and Handrails	Yes	
Entry Doors and Doorways	32" Clear opening	No	Increase restroom door widths
	Clearances	Yes	
	½" Maximum height threshold	Yes	
	Door hardware (lever type)	No	
	Door – opening force	Okay	
Toilet Rooms	Wheelchair Turning Space	Okay	
	Water Closets & Toilet Compartments Including Location, Clearances, Height, Size & Accessories	Adjust	First floor - Increase restroom door widths
	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		
	Spout Height (36")	Yes	
Alarms	Audible Alarms	Yes	
	Visual Alarms	Yes	
Signage	Signs	Yes	Limited

Project Name: 7<sup>th</sup> District Headquarters, 2455 Alabama Avenue SE

Mechanical and Plumbing Equipment List

Equipment Type/Use	Model Name/No.	Serial No.	Manufacturer's Name	Capacity/Rating	Installation Date or Age	Comments
Rooftop AC Unit	GRAA25PDBAON1CN105CO	A95E36619	Trane	200,000 BTU output	8.4.95	Vehicle Maintenance building .Slight surface corrosion
Rooftop Ventilators	Not Available	Not Available	Not Available	2' diameter	Not Available	Vehicle Maintenance building – x2 circular capped
Water heater	M40L-5DS-8	FF7945931	Bradford White	40 gallon	Not Available	Vehicle Maintenance building
AHU (1)	CC0B17A1DG	K87428771	Trane	200PSIG. 7-5hp motor	Not Available	Corrosion. Basement
AHU (2)	CCD814C10G	K87J28772	Trane	200psig 7.5hp	Not Available	1 <sup>st</sup> floor mech. Room. Safety violation of missing belt cover
AHU (3)	CCDB10B10G	K87J28773	Trane	200psig 5hp	Not Available	2 <sup>nd</sup> floor mech. room. Corroded pipes
Water Pump	JMM2513T	37G107T897	Baldor	15hp, 1755RPM	Not Available	(x 2 Pump Motors)
Water Heater	DRE 80 920	J05M003771	A.O. Smith	80 gallon	Not Available	Mech. Room
Boiler	4FW.277.50.LB	17616	Burnham	55hp, 1855 MBH	Not Available	Corrosion
Boiler Motor	VI13084	34-155942414	Baldor	3/4hp 3450 rpm	Not Available	Serves boiler
Roof Ventilators	Not Available	Not Available	Not Available	Not Available	Not Available	Main roof x 6
Air-Cooled Chiller (1)	CGAFC60EAHA 10000	C04K09345	Trane	Not Available	Not Available	Main roof, enclosed
Air-Cooled Chiller (2)	CGACC806RANJJ423FGP WM	J87J72760	Trane	Not Available	Not Available	Main roof, enclosed
Climate Controller	Not Available	914701	McLean Midwest	100 Watts	Not Available	Main roof, enclosed
Oil tank (elevator)	Not Available	Not Available	Not Available	Not Available	Not Available	Adjacent to elevator ( machine room)
Fuel pumps	Not Available	Not Available	Bennett	(2 nozzles Per Pump	Not Available	x 2 pumps

Project Name:2455 Alabama Avenue SE

Electrical Equipment List

Type	Name Location (Model if applicable)	Manufacturer's Name	Voltage (volts)	Ampacity (amps) or other capacity	Installation Date or Age	Comments
Emergency Gen.	440FDR8032GG-F915	UB3459982	Generac	225KVA	Not Available	Overhead diesel tank provided
Transfer Switch	88C01115-W	6750	Generac	Not Available	Not Available	Main mech. Room
Elevator Transfer Switch	88B01115-W	6676	Generac	Not Available	Not Available	Main mech. Room
DPE Transfer Switch	88A01115-W	6732	Generac	Not Available	Not Available	Main mech. Room

Project Name:2455 Alabama Avenue SE

Electrical Equipment List

Type	Name Location (Model if applicable)	Manufacturer's Name	Voltage (volts)	Ampacity (amps) or other capacity	Installation Date or Age	Comments
FACP	MS-9200VDLS	Not Available	Honeywell	Not Available	Not Available	Main mech. Room
Switchgear panel	BDP	AT86-4-54	Challenger	2000 Amps	Not Available	(x 3 Panels)

# Appendix E

## Preventative Maintenance Recommendations

1.0. PM PROCEDURE NAME

**1.1. MPD 7th District HQ Generator Annual Mechanical PM**

2.0. GENERAL EQUIPMENT DESCRIPTION

2.1. Emergency Diesel Generator (Various Manufacturers)

3.0. MATERIAL REQUIRED

- 3.1. Grease guns and oilers
- 3.2. Oil and Oil Filters
- 3.3. Belts

4.0. EQUIPMENT REQUIRED

4.1. Hand tools

5.0. POWER REQUIRED

5.1. Standard 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. Have approved type fire extinguishers readily available.

6.4. Allow no open flame or smoking in area.

6.5. Use safety type fuel cans only.

6.6. Obtain and review manufacturer's instructions. Follow manufacturer's instructions or procedures if different to these instructions or procedures.

7.0. OTHER REFERENCE DOCUMENTS

- 7.1. Manufacturers Manual
- 7.2. National Fire Protection Association Form 18-D
- 7.3. Material Safety Data Sheets (MSDS)

8.0. PREVENTIVE MAINTENANCE PROCESS

8.1. Change fuel filters.

8.2. Inspect and adjust rack on unit injector or fuel distributor pump according to manufacturer's instructions.

8.3. Check governor, adjust for correct speed.

8.4. Determine fuel level, drain water from tank and inspect for contamination. Prior arrangements should be made for local procurement of fuel in emergencies.

8.5. Change engine oil and filter and perform other lubrication on engine and generator.

8.6. Inspect cooling system for leaks, air obstructions, "V" belt tension and proper anti-freeze solution. Make needed adjustments.



8.7. Inspect generator winding and clean if needed.

8.8. Clean commutator and collector rings. Check brush wear and tension in accordance with manufacturer's instructions.

8.9. Inspect generator heaters.

8.10. Remove old oil and diesel fuel from around generator area when maintenance is complete.

8.11. Check tank vents and overflow piping for obstructions.

8.12. Inspect fuel piping.

8.13. Inspect louver motor and controls.

8.14. Inspect exhaust system hangers and supports.

8.15. Inspect transfer switch main contacts.

8.16. Check the ignition system of the engine.

8.17. Clean electrical boxes, panels, and cabinets.

8.18. Check all fuses

8.19. Service the air cleaner for the engine.

8.20. Run the generator with its connected load for 30 minutes.

#### 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. MPD 7th District HQ Electric Boiler Quarterly Mechanical PM**

2.0. GENERAL EQUIPMENT DESCRIPTION

2.1. Electric Boiler (Various Manufacturers)

3.0. MATERIAL REQUIRED

3.1. N/A

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 / Tag out procedures must be followed prior to servicing equipment.

7.0. OTHER REFERENCE DOCUMENTS

7.1. Lockout Tagout Procedure

7.2. Material Safety Data Sheets (MSDS)

8.0. PREVENTIVE MAINTENANCE PROCESS

8.1. Check all valves to be sure that they will open all the way and seat properly when closed.

8.2. Tighten valve stem packing where needed.

8.3. Check for water leaks at all connections and tanks.

8.4. Open tank drain valve to remove sludge and contaminants. Drain until water runs clear (approximately a gallon or so).

8.5. Check safety relief valve for operation, and check drain pipe from valve to be sure it is clear.

8.6. For bathroom heaters, keep thermostat at 120 degrees.

8.7. Check operation and setting of aqua stat. Check hot water temperature with dial thermometer, and set aqua stat at minimum value.

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. MPD 7th District HQ Electric Boiler Annual Mechanical PM**

2.0. GENERAL EQUIPMENT DESCRIPTION

2.1. Electric Boiler (Various Manufacturers)

3.0. MATERIAL REQUIRED

3.1. Lubricant

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 / Tag out procedures must be followed prior to servicing equipment.

7.0. OTHER REFERENCE DOCUMENTS

7.1. Lockout Tagout Procedure

7.2. Material Safety Data Sheets (MSDS)

8.0. PREVENTIVE MAINTENANCE PROCESS

8.1. Drain hot water storage tanks, and flush. Route drain hose to the nearest floor drain.

8.2. Check circulating pump for excessive vibration, noise and overheating.

8.3. Inspect the insulation on hot water heaters, hot water storage tank and pipe.

8.4. Check all flanges for leaks, replace gasket and bolts where needed.

8.5. Clean valve stems and apply light lubricant (oil and graphite) on stem and packing.

8.6. Check safety relief valve for operation and check drain pipe from valve to be sure it is clear.

8.7. Check all pipes for leaks, corrosion and scale.

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. MPD 7th District HQ Electric Boiler Annual Electrical PM**

2.0. GENERAL EQUIPMENT DESCRIPTION

2.1. Electric Boiler (Various Manufacturers)

3.0. MATERIAL REQUIRED

3.1. N/A

4.0. EQUIPMENT REQUIRED

4.1. Hand tools

5.0. POWER REQUIRED

5.1. Standard 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 / Tag out procedures must be followed prior to servicing equipment.

7.0. OTHER REFERENCE DOCUMENTS

7.1. Lockout Tagout Procedure

7.2. Material Safety Data Sheets (MSDS)

8.0. PREVENTIVE MAINTENANCE PROCESS

8.1. Check terminals or connections on hot water heater elements.

8.2. Check insulation on power feeds for deterioration.

8.3. Check amperage draw of upper and lower elements and compare to name plate data. Clean element contacts, and check for proper closing under load.

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. MPD 7th District HQ Chiller Semi-Annual Mechanical PM**

2.0. GENERAL DESCRIPTION

2.1. Chiller, Reciprocating Air Cooled (Various Manufacturers)

3.0. MATERIAL REQUIRED

- 3.1. Replacement filter
- 3.2. Replacement seals
- 3.3. Oil
- 3.4. Lubricants

4.0. EQUIPMENT REQUIRED

- 4.1. Hand tools
- 4.2. Grease guns and oilers
- 4.3. Vacuum, commercial type

5.0. POWER REQUIRED

5.1. Standard 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.

7.0. OTHER REFERENCE DOCUMENTS

- 7.1. Lockout Tagout Procedure
- 7.2. Material Safety Data Sheets (MSDS)
- 7.3. Manufacturer's Manuals

8.0. PREVENTIVE MAINTENANCE PROCESS

8.1. Run system diagnostics test.

8.2. Compressor Items (when installed)

- 8.2.1. Check compressor and shaft seals for evidence of gasket or seal failure.
- 8.2.2. Check motors for proper operation, excessive noise or vibration. Lubricate, if necessary.
- 8.2.3. Test for leaking discharge and suction valves. Repair as necessary.
- 8.2.4. Check motor amperage under load. Correct if overloaded (i.e. over charged with gas, non-condensable gases in system, damaged bearings or worn parts).
- 8.2.5. Analyze oil sample.
- 8.2.6. Check oil level in sight glass of lead compressor only, add oil as necessary.

8.3. Condensers

- 8.3.1. Clean intake side of condenser coils, fans and intake screens.

- 8.3.2. Check refrigerant piping and valves for leaks and proper support.
- 8.3.3. Check level of refrigerant charge.

8.4. Check the following items, if present.

- 8.4.1. Suction gas line, filters, and pressure regulators
- 8.4.2. Hot gas by-pass valves
- 8.4.3. Crankcase pressure regulating valves
- 8.4.4. Head master controls
- 8.4.5. Fan controls
- 8.4.6. Evaporator, pump down operation
- 8.4.7. Thermostats.
- 8.4.8. Check superheat and sub-cooling temperatures.
- 8.4.9. Verify flow switch operation

8.5. Chiller Pump

- 8.5.1. Grease motor
- 8.5.2. Check coupling
- 8.5.3. Check pump for leaks
- 8.5.4. Clean chiller coils and straighten fins.

8.6. Check contactors, sensors and mechanical safety limits.

8.7. Check Electrical wiring and connections; tighten loose connections

8.8. Inspect fan(s) or blower(s) for bent blades of imbalance

8.9. Lubricate shaft bearings and motor bearings as required

8.10. Check evaporator and condenser for corrosion.

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. F+G 3-3-09

1.0. PM PROCEDURE NAME

**1.1. MPD 7th District HQ Air Handling Unit Quarterly PM**

2.0. GENERAL EQUIPMENT DESCRIPTION

2.1. Air Handling Units (Trane)

3.0. MATERIAL REQUIRED

3.1. Filters

3.2. Belts

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 / Tag out procedures must be followed prior to servicing equipment.

7.0. OTHER REFERENCE DOCUMENTS

7.1. Manufacturer's Manuals

7.2. Lockout / Tagout Procedure

7.3. Material Safety Data Sheets (MSDS)

8.0. PREVENTIVE MAINTENANCE PROCESS

8.1. Check fan bearings for unusual noise and excessive bearing temperature.

8.2. Lubricate fan and motor bearings.

8.3. Check electrical components and wiring for evidence of overheating. Check wiring connections for tightness.

8.4. Check float switches for proper operation.

8.5. Observe fan motors in operation for noises which may indicate a problem or possible failure.

8.6. Check belts to fan units for proper adjustment and alignment and for wear. Replace belts if required.

8.7. Inspect the control valves for leaks and proper operation.

8.8. Clean blow-down strainers.

8.9. Check and replace disposable filters if required.

8.10. Check pressure gauges for proper operation.

8.11. Check Magnehelic gauge sensor lines and zero the Magnehelic gauge.

8.12. Record CFM reading.

8.13. Check condensate drain for obstructions and clear if necessary.

8.14. Check duct connections for proper sealing.

8.15. Check CW coils for build-up of dirt which interferes with air flow.

8.16. Check fan wheels and shaft for corrosion or build-up of dirt. Clean if required.

8.17. Check dampers, linkage, and operators for proper function. Clean as necessary.

8.18. Check door gaskets and repair/replace as required to ensure sealing of unit.

8.19. Check for corrosion.

#### 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 3-3-095



1.0. PM PROCEDURE NAME

**1.1. MPD 7th District HQ A/C Unit – Semi-Annual Mechanical PM**

2.0. GENERAL EQUIPMENT DESCRIPTION

2.1. Window Type Air Conditioning Units (Various Manufacturers)

3.0. MATERIAL REQUIRED

- 3.1. Filters
- 3.2. Belts
- 3.3. Freon
- 3.4. Lubricant

4.0. EQUIPMENT REQUIRED

- 4.1. Hand tools
- 4.2. A portable sprayer may be needed for condenser cleaning
- 4.3. Grease guns and oilers
- 4.4. Refrigeration gauges
- 4.5. Leak detector-electronic or halogen
- 4.6. Pocket thermometer
- 4.7. Clamp on meter (volt - ohm - amp meter)
- 4.8. Flaring tool
- 4.9. Tubing cutters
- 4.10. Packing kit and packing
- 4.11. Vacuum cleaner wet/dry type.
- 4.12. Fin comb
- 4.13. Self-sealing quick disconnect refrigerant hose fittings, if applicable.
- 4.14. Refrigerant recovery/recycling unit, if applicable.
- 4.15. EPA/DOT approved refrigerant storage tanks, if applicable.

5.0. POWER REQUIRED

5.1. Standard 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.

6.4. No intentional venting of refrigerants is permitted. During the servicing, maintenance, and repair of refrigeration equipment, the refrigerant must be recovered.

6.5. Whenever refrigerant is added or removed from equipment, record the quantities.

6.6. Recover, recycle, or reclaim the refrigerant as appropriate.

6.7. If disposal of the equipment item is required, follow regulations concerning removal of refrigerants and disposal.

6.8. Refrigerant oils to be removed for disposal must be analyzed for hazardous waste and handled accordingly.

6.9. Closely follow all safety procedures described in the material safety data sheet (MSDS) for the refrigerant and all labels on refrigerant containers.

#### 7.0. OTHER REFERENCE DOCUMENTS

- 7.1. MSDS for any process chemicals being exhausted
- 7.2. Manufacturer's manuals

#### 8.0. PREVENTIVE MAINTENANCE PROCESS

- 8.1. Clean condenser, cooling coil fins, drain pan, and fans. Slime or mold found on the cooling coil or drain pan should be cleaned with an appropriate EPA approved solution. Place an EPA approved biocide tablet in the drain pan.
- 8.2. Inspect fins. Straighten with a fin comb as required
- 8.3. Remove dirt, or rust from all interior parts, repaint as necessary.
- 8.4. Check filters - clean or replace as necessary
- 8.5. Inspect and adjust fresh air damper.
- 8.6. Check condenser fan motor(s) for proper operation. Lubricate motor and fan bearings as necessary.
- 8.7. Inspect gaskets. Look for leaks between unit and window, caulk as necessary.
- 8.8. Check for refrigerant leaks with halogen leak detector and soap bubbles. If leaks are not able to be stopped or corrected, report leak status to supervisor. Consult the material safety data sheets (MSDS) for disposal requirements.
- 8.9. Check operation of refrigeration cycle.
- 8.10. Check and verify that the thermostat is calibrated and set at no greater than 68 degrees F.
- 8.11. Check frame of unit with ohmmeter for proper electric ground.
- 8.12. Inspect electrical connections
- 8.13. Check voltage and amperage draw
- 8.14. Replace covers, clean filter and front filter grill.
- 8.15. Verify Unit is operating properly.

#### 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. MPD 7th District HQ 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

1.0. PM PROCEDURE NAME

**1.1. MPD 7th District HQ Pump Semi-Annual Mechanical PM**

2.0. GENERAL EQUIPMENT DESCRIPTION

2.1. Pumps; Electric (Various Manufacturers)

3.0. MATERIAL REQUIRED

3.1. N/A

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 / Tag out 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.

7.0. OTHER REFERENCE DOCUMENTS

7.1. Lockout / Tagout Procedure

7.2. Material Safety Data Sheets (MSDS)

7.3. Manufacturer's Manuals

8.0. PREVENTIVE MAINTENANCE PROCESS

8.1. Check pump and motor bearings for noise, replace if worn or noisy. Lubricate bearings (if not sealed type).

8.2. Inspect pump packing; tighten or replace if necessary or replace mechanical seal if leaking.

8.3. Inspect coupling for alignment, lubricate (if applicable) and tighten bolts and set screws.

8.4. Inspect shaft. If shaft is damaged by defective coupling or bearings it will be removed, repaired or replaced. At this time packing sleeves, impellers, and housings can be inspected and repaired or replaced as required.

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. MPD 7th District HQ Generator Weekly Mechanical PM**

2.0. GENERAL EQUIPMENT DESCRIPTION

2.1. Emergency Diesel Generator (Various Manufacturers)

3.0. MATERIAL REQUIRED

3.1. N/A

4.0. EQUIPMENT REQUIRED

4.1. Hand tools

5.0. POWER REQUIRED

5.1. Standard 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.

7.0. OTHER REFERENCE DOCUMENTS

7.1. Manufacturers Manual

7.2. National Fire Protection Association Form 18-D

7.3. Material Safety Data Sheets (MSDS)

8.0. PREVENTIVE MAINTENANCE PROCESS

8.1. Drain water and sediment from water separator and fuel storage system.

8.2. Top off the fuel tank with number 2 diesel. Take necessary precautions to prevent the entrance of dirt, water, or other contaminants into the fuel system while fueling.

8.3. Check engine oil level and top up if necessary.

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: C. Bourgoin, 4-6-04

10.2. Rev: Muthart, 7-14-04

10.3. Rev: F+G/VFA, 6-10-08

1.0. PM PROCEDURE NAME

**1.1.MPD 7th District HQ Fire Alarm Control Panel**

2.0. GENERAL EQUIPMENT DESCRIPTION

2.1. Fire Alarm Control Panel

3.0. MATERIAL REQUIRED

3.1. N/A

4.0. EQUIPMENT REQUIRED

4.1. Hand tools

4.2. Multimeter

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. Manufacturer's Manuals

8.0. PREVENTIVE MAINTENANCE PROCESS

8.1. Perform a full functionality, test according to the requirements of NFPA 72 and by the manufacturer's procedure.

8.2. If required, disable audible/visual alarms and air handler shutdowns.

8.3. Clean the system control panel and internal components, so as to be free from debris and dust. Test indicator lamps and switches.

8.4. Inspect the transient suppressors. Lightning protection equipment shall be inspected and maintained per the manufacturer's specifications.

8.5. Back-up batteries shall be tested on a separate PM #, less than annually. Amp hour capacity of batteries shall be recorded and records maintained in accordance with NFPA 72. 10.6.2.1

8.6. Test the fire alarm panel and the twelve remote power supplies for receipt of open battery circuit.

8.7. Test the fire alarm panel and the remote power supplies for loss of AC power.

8.8. Test the NACS for receipt of open circuits.

8.9. Test the NACS for receipt of ground faults.

8.10. Test the loop 1 and loop 2 signal line circuits for receipt of ground faults.

8.11. Test loop 1 and loop 2 signal line circuits for receipt of short circuit faults.

8.12. Test loop 1 and loop 2 signal line circuits for receipt of open circuit faults.

8.13. Test the four node network for an open circuit.

8.14. Panel and power supply locations

8.14.1. FACP and two 55AH batteries G.4-9.5 (break area, east of auditorium)

8.14.2. Three NAC power supplies and six 12 AH batteries, one beam, detector power supply and two 12 AH batteries D.5-6.9 (core, 2)

8.14.3. Three NAC power supplies and six 12 AH batteries, one beam, detector power supply and two 12 AH batteries D.5-10.0 (core, 3)

8.14.4. Three NAC power supplies and six 12 Ah batteries, one beam, detector power supply and two 12 ah batteries d.8-14.3 (Core, 4)

8.15. Verify that troubles are received at fire alarm panel.

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



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## 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.

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- 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.

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**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

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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

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- 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

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## 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 (FSES) 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, PA.** 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, PA.** 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, VA.** 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, VA.** 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.