

Neighborhood
to the World



University City

University City Police Department
Facility Analysis

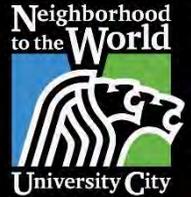
Public Meeting

November 23, 2015

Chiodini
ARCHITECTS

chiodini architects | planners | architecture | interior design | graphics
1401 south brentwood blvd. | saint louis, missouri 63144 | 314.725.5588 | www.chiodini.com

Agenda



- **Welcome and Study Purpose**
(10 Minutes)
- **Police Department Facility Analysis Project Overview**
(15 Minute Presentation, 15 Minute Q/A)
- **Strengths / Weaknesses / Opportunities / Threats (SWOT) Analysis**
(45 Minutes)
- **Wrap-Up / Next Steps**
(5 Minutes)



University City Police Department Analysis Project Team



William Tao & Associates
Mechanical / Electrical / Plumbing / Lighting
Technology



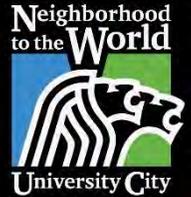
David Mason & Associates
Civil Engineering / Surveying / Structural Engineering



**Cooper Construction
Estimating, LLC**
Estimating



Public Safety - Team Representative Projects



- City of Brentwood, MO – Community Center Renovation
- City of Ladue, MO – Municipal Fire Facility Master Plan/Feasibility Study
- City of Maryland Heights, MO – Government Center and Police Headquarters
- City of Maryland Heights, MO – Maintenance Facility
- City of Bridgeton, MO – Government Center and Police Headquarters
- City of Bridgeton, MO – Maintenance Facility
- City of Columbia, MO – Government Center
- City of Woodson Terrace, MO – City Hall
- City of Clayton, MO – Council Chamber Renovation
- City of Des Peres, MO – Maintenance Facility
- City of Hazelwood, MO – City Hall and Police Additions and Renovations Planning
- City of Hazelwood, MO – City Hall Window Replacement
- St. Louis County – District 5 Department of Highways Roof Replacement
- St. Louis County – Departmental Office Relocations/Renovations and Roof Replacement
- State of Missouri – Potosi Correctional Center Roof Replacement
- State of Missouri – Missouri Eastern Correctional Center Phase I & II Roof Replacement
- Department of Veterans Affairs – VAMC – Jefferson Barracks; Spinal Cord Injury Suite Renovation
- Department of Veterans Affairs – VAMC – Poplar Bluff; Kitchen/Cafeteria
- Consolidation & Renovation Study
- Department of Veterans Affairs – VAMC – Dallas, Texas; Patient Parking Garage
- City of Edmundson, MO – City Hall
- City of Sedalia, MO – Council Chamber Renovation
- City of Clayton, MO – Police Needs Assessment
- City of Bridgeton, MO – Police Department and Court
- City of Troy, MI – Public Safety Headquarters/Fire Administration
- City of Waterford, MI – Police Headquarters
- Village of Franklin, MI – Police Department
- City of Kentwood, MI – Justice Center
- Grosse Pointe Park, MI – Public Safety Building
- City of Saline, MI – Police Department
- City of Novi, MI – Firearms Training Center
- West Bloomfield, MI – Police Headquarters and Addition
- City of Milford, MI – Police Department (D/B)
- Grand Blanc Township, MI – Police Department Strategic Plan
- City of Lowell, MI – Police Department and City Hall
- City of Utica, MI – Police Needs Assessment
- City of Chelsea, MI – Police Department
- City of Richmond, MI – “Shared” Local and State Police
- Aylmer, Ontario – Ontario Police College
- City of Meridian, MS – Police Headquarters and Court
- City of Carbondale, IL – Police Headquarters
- City of Bridgeport, WV – Public Safety Substation
- City of Grosse Point, MI – Police Needs Analysis
- City of Jacksonville, NC – Police Department
- City of Lansing, MI – Police Department and Court
- Detroit Metro Airport – Public Safety Department
- Oklahoma City, OK – Police Headquarters Study
- City of Milford, DE – Police Space Needs Analysis
- Harrison County, WV – 911-Emergency Management Center
- City of Inkster, MI – Police Department
- Macomb Township, MI – Town Hall/Village Square
- Waterford Township, MI – Department of Public Works
- Waterford Township, MI – Civic Center Master Plan
- City of Kentwood, MI – Civic Center Master Plan
- City of Saline, MI – City Hall Renovation/Addition
- Bay City, MI – Utility Department Study
- City of Detroit, MI – Northwest Activities Center
- City of Detroit, MI – Belle Isle Casino Renovation
- City of Pontiac, MI – Housing Commission
- City of Utica, MI – City Hall and Department of Public Works
- Grand Blanc Township, MI – 20 Year Facilities Strategic Plan
- City of Kentwood, MI – Department of Public Works Needs Assessment
- City of Glendale, MO – Preliminary Fire House Design
- City of Southfield, MI – Fire Station No. 2
- City of Detroit, MI – Engine Company No. 5
- Chesterfield Township, MI – Fire Headquarters No. 3
- City of Taylor, MI – Midtown Fire Station
- City of Monroe, MI – Central Fire Station Replacement
- City of Utica, MI – Fire Department Needs Assessment
- Putnam Township, MI – Fire Department Needs Assessment
- City of Springfield, MI – Public Safety Addition (D/B)
- City of Jacksonville, NC – Fire Headquarters and Station
- City of Plymouth, MI – Fire Department Substation

Historic Preservation



- **Daniel Boone Historic Hotel**
Exterior Preservation,
Renovation & Addition
City of Columbia Complex, MO
- **Howard & Gentry Buildings**
Preservation, Renovation & Addition - City of Columbia Complex, MO
* *Preservation Award*
- **St. Mary's Church**
Historic Reconstruction
Brussels, Illinois
- **Bonne Terre Memorial Library**
Historic Renovation & Addition
Bonne Terre, Missouri
- **Saint Louis University**
Historic Renovation
4th Flr DuBourg Hall
St. Louis, Missouri
- **St. Francis Borgia**
Historic Renovation, Addition & Renovation Annex Bldg
St. Louis, Missouri
- **Saint Louis University**
Aquanis Institute of Theology
Historic Preservation
St. Louis, Missouri
- **Rosebud Cafe**
Historic Restoration
St. Louis, Missouri

Overview - University City Police Department

- City Hall Annex constructed in 1903 as a press building;
112 years old
- Converted for Police and Fire in 1938; 78 years of occupancy
(Fire department moved out in 2013)
- University City Police Department
 1. One of the largest Police Departments in St. Louis County
 - a. 79 Commissioned Officers
 - b. 19 Civilians
 - c. 6 Part-time employees
 2. Bureaus
 - a. Investigation
 - b. Field Operations
 - c. Services
 3. Calls for Service
 - a. Over 2,300 "911" Police and Fire Department calls per month
 - b. 56,196 Calls for Service in 2014; **Diversity of Calls should be noted**



Overview - University City Municipal Courts



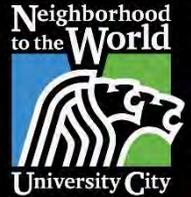
- **Municipal Courts**
 - **Meets 3 Times Per Month**
 - **Housing Court once a Month**
 - **150 – 200 people per Night**
 - **900 – 1,300 Docket Cases Per Night**
 - **Security Queuing and Screening
(First come, First Serve)**

SENATE BILL NO. 5



Requires a police department to be accredited or certified by the Commission on Accreditation for Law Enforcement Agencies or the Missouri Police Chiefs Association or contract for police services with a police department accredited or certified by such entities; **Accreditation or Certification shall be completed within 6 Years.**

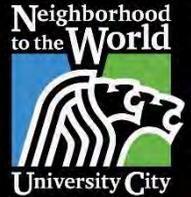
Facility Analysis Purpose



- **Evaluate Existing Police Department Facility**
 - City Hall Annex – Physical Evaluation
 - Police Department – Operational Evaluation
 - Current and Future Police Department Space and Operational Needs

- **Development of Efficient / Economical Solutions to Meet Police Department Municipal Courts Existing and Future Space / Operational Needs**
 - Renovation / Addition to the City Hall Annex
 - New Police Department Facility

Facility Analysis Purpose



- Physical / Operational Analysis
- Space and Operational Needs Assessment
- Development of Conceptual Alternatives
- Renovation & New
- Evaluation of Alternatives
- Next Steps

November 2015

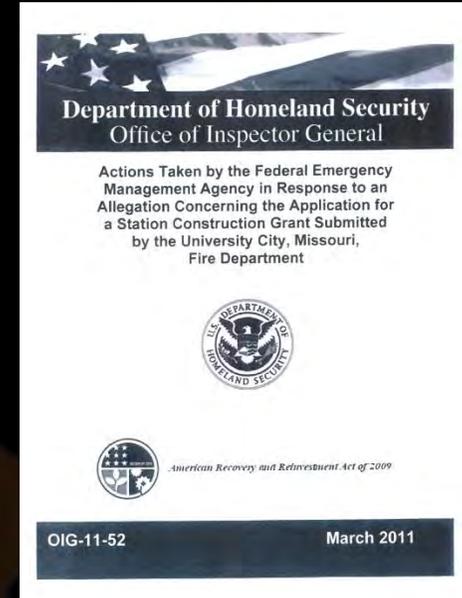
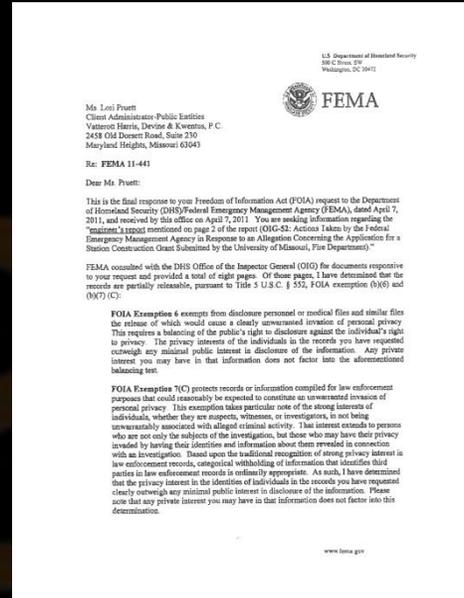
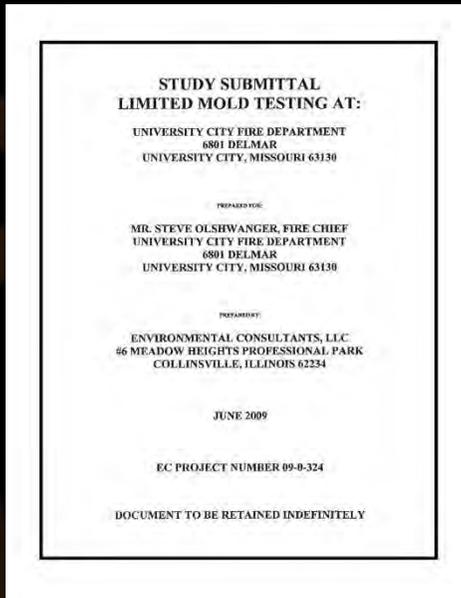


Evaluation of Alternatives

Next Steps



POLICE DEPARTMENT / CITY HALL ANNEX
Physical Evaluation



- **ANNEX PHYSICAL EVALUATION REPORTS**
 - Environmental Assessment Reports – June 2009/January 2014 (Mold, Asbestos, Lead, Radon, and Sewer Gas)
 - FEMA/DHS Reports – “unsafe”; “uninhabitable”
 - Structural Analysis – Engine House #1, 2007

Minor and temporary fixes are not the long term solution

- **University City Building Commissioner, Property Maintenance**
 - Inspection of Fire Station – 2009**
 - **“Pose an Immediate Threat to the Health, Safety, & Welfare of the Occupants and General Public”**
 - **58 Code Violations (only 6 have been addressed to date)**
 - Electrical Hazards
 - Improper Fire Separations
 - Rodent Infestation
 - Lack of Fire Alarm System
 - Mold
 - Water/Sewer Seepage & Damage
- **David Mason & Associates Structural Analysis – April 2015**

PHYSICAL OBSERVATIONS

1. Antiquated Systems
2. Absence of Fire Protection System
3. Continual Water Infiltration Issues
4. Continual Microbial/Mold Issues
5. Continual Structural Deterioration
6. Asbestos/Lead Containing Materials
7. Continual Pest Infiltration



BASEMENT – WATER STAINING
BIKE EVIDENCE ROOM



1ST WATER STAINED CEILING TILES
ROLL CALL AREA OF POLICE DEPARTMENT



3RD FLOOR SUSPECT VISIBLE MOLD GROWTH
WEST PLASTER WALL-COMMAND CENTER



3RD FLOOR – WATER DAMAGE EAST PLASTER
WALL IN D.A.R.E. OFFICE

ACCREDITATION AND CODE COMPLIANCE

- Lack of Accreditation and Code Compliance
 - 1.Senate Bill No. 5 – Accreditation/Certification Requirement
 - 2.Building Code
 - 3.Essential Services/Seismic Code
 - 4.ADA Accessibility Code
 - 5.Energy Standards
 - 6.National/State Police Facility Operational Guidelines



Lack of ADA Compliance

ESSENTIAL FACILITIES



Terminology was introduced with the adoption/consolidation of building codes to the **International Building Code (IBC)**. University City currently uses IBC 2012.

Chapter 16: Structural Design

- **Table 1604.5 – Risk Category of Buildings and Other Structures**
 - Risk Category IV: Buildings and other Structures designated as essential facilities:
 - Fire, Rescue, Ambulance and Police Stations and Emergency Vehicle Garages
(Occupancies having surgery or emergency treatment facilities; designated earthquake, hurricane, or other emergency shelters; emergency preparedness, communications and operations facilities; power-generating facilities and other public utility facilities; aviation control towers and air traffic control centers; etc.)

ESSENTIAL FACILITIES



- Facilities Categorized in Risk Category IV are to be designed to standards defined in ASCE 7 (American Society of Civil Engineers); establishes minimum design loads for Buildings and Other Structures:
 - Lateral Loading: **Seismic, Wind, Snow, and Flooding**
(Increased structural reinforcing: shear walls, cross bracing, moment connections, etc.)
 - Increase in Seismic, Wind, Snow and Flooding Load factors by between **25% to 50%**
(St. Louis Area Seismic classification already increases Lateral Load requirements by 10% +/- over other metropolitan areas)



POLICE DEPARTMENT / MUNICIPAL COURTS / CITY HALL ANNEX

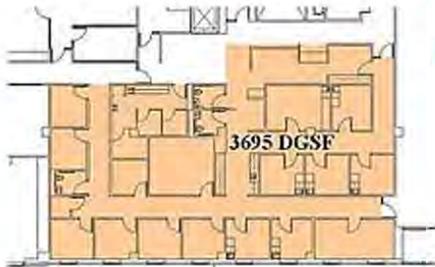
2015 Space Needs Assessment Existing Facility Space Allocation

NET TO GROSS CALCULATION METHODOLOGY

Net to Gross Factor or Grossing Factor: a multiplication factor applied to space to increase the allotment to accommodate elements not in the base number. A grossing factor is applied to space lists on Net Square feet to take into account internal circulation and walls to give Departmental Gross Square Feet. Another factor is used to increase DGSF to Building Gross Square Feet (BGSF) and further account for the amount of space required for major vertical circulation, shafts and building circulation. For instance, as a rule of thumb, building gross is approximately twice the amount of net area in a hospital.



Net Square Feet (NSF): Net Square Feet (NSF) is the area of an individual room or the usable floor area that is assigned to a function in an open area e.g. cubicles or workstations. Net square feet for each room is measured from the inside finished surface of surrounding partitions or enclosing elements and from the outline of the floor area for a space in an open area, includes casework, fixtures and door swings. Net areas do not include partitions or structural elements such as columns or column enclosures, or circulation or access space



Departmental Gross Square Feet (DGSF):

Department Gross Square Feet (DGSF) is a measure of an assemblage of rooms and spaces as assigned to a department or service and includes internal departmental and/or service circulation and partitions, columns, and projections enclosing the structural elements of the building within the departmental space. The boundary defining DGSF is drawn from the inside finish of the permanent exterior building walls to the center line of the department-separating wall partitions or to the centerline of corridors which separate and provide access to spaces in adjoining departments.

Departmental Grossing factors can vary significantly in facilities with diverse departmental uses; i.e. hospitals, police stations, etc.: public/common areas = 20%, administrative = 30%, investigations = 40%, holding = 50%, training = 25%, family practice = 40%, clinic = 40%, physical therapy = 35%, dental clinics = 40%, educational = 35%, information management = 35%, etc.

Building Gross Square Feet (BGSF): Building Gross Square Feet (BGSF) is the aggregate area of all enclosed floor areas and supporting structure and certain unenclosed areas which support the function of the building. BGSF includes all NSF or DGSF space, as well as the area of the exterior wall and structure; common and service spaces including elevators, stairs, and escalators, shafts and stacks, and mechanical spaces; and any other areas which make up the entire building.

NET TO GROSS CALCULATION METHODOLOGY

Building Gross SF is determined by the One-Step or Two-Step method:

A. One-Step method:

Net Square Feet to Building Gross Square Feet.

Define project areas further by calculating the gross components (MEP, Circulation, Walls, Half Areas and Flexibility).

Sum of Net SF (NSF) X Building Conversion Factor (1.35) = Building Gross SF (BGSF)

B. Two-Step method:

Departmental Net Square Feet to Departmental Gross Square Feet to Building Gross Square Feet.

Define project areas and help identify efficiencies in terms of functional characteristic, relationships and adjacencies, and floor plan designs.

(Dept Net SF (DNSF)) (Dept. Conversion Factor) = Dept Gross SF

Departmental Conversion Factors can range from 15% to 50%+

(DGSF)(Building Conversion factor) = Building Gross SF (BGSF)

Building Conversion factors:

administrative facility = 15%

hospitals/healthcare facility = 35%

SPACE & OPERATIONAL NEEDS ASSESSMENT



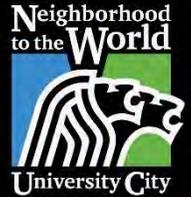
METHODOLOGY

■ CRITERIA:

■ STATE & NATIONAL POLICE DEPARTMENT FACILITY AND OPERATIONAL GUIDELINES (BEST PRACTICES)

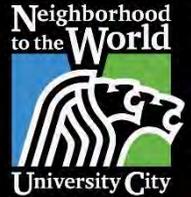
- Commission on Accreditation of Law Enforcement Agencies (CALEA)
- Missouri Police Chiefs Association (MOPCA)
 - *Missouri-Based Law Enforcement Agency Certification Program*
- Department of Justice (DOJ):
 - *PREA – Prisoner Rape Elimination Act*
 - *Design Guidelines – Forensic Labs*
 - *National Institute of Corrections – Jail Design Guidelines*
- Judicial Conference of the United States
 - *US Court Design Guidelines*
- NFPA
 - *NFPA 730 – Guide for Premises Security*
- Department of Defense (DOD):
 - *Emergency Operations Center Planning and Design – UFC 4-141-04*
 - *Minimum Anti-Terrorism Standards for Buildings – UFC 4-010-01*
- FEMA – Risk Management
- Department of Homeland Security
 - *NIMS National Incident Management Series*
- International Association of Chiefs of Police
 - *Police Facility Guidelines*
- International Association for Property and Evidence, Inc.
 - *Professional Standards*
- International Building Code
 - *Essential Services*

SPACE NEEDS ASSESSMENT



- **Process:**
 - Space Needs Questionnaire
 - Facility Tour
 - Departmental Interviews / Tours
 - Iterative Review Process

SPACE NEEDS ASSESSMENT



- **Summary:**

- **Staffing/Staffing Projection:**

- Current Total Staffing: 83

- Staffing Total Projection: 96

- Existing Facility Gross Square Footage Total: 42,713 sf

- University City Police Department & **Municipal Court**
2015 Space Needs Assessment Gross Square Footage Total: 37,779 sf
(23% Reduction from Initial Gross Square Footage of 49,200 s.f.)

Space	Staff		Space Standards		Comments
	Current	Proj'd.	Existing Police Facility Space Allocation (Square Feet)	2015 Space Needs Assessment (Square Feet)	
1. PUBLIC AREAS					
Net Area			--	3,735	
20% Internal Circulation Factor			--	747	
Subtotal: Public Areas	0	0	5,025	4,482	*Includes: Municipal Court Area @ Community Center
2. POLICE DEPARTMENT STAFF COMMON AREAS					
Net Area			--	2,750	
25% Internal Circulation Factor			--	688	
Subtotal: Staff Common Areas	0	0	1176	3,438	*Includes: Break Room and Adequate Locker Rooms w/ Restrooms and Showers
3. POLICE ADMINISTRATION					
Net Area			--	936	
30% Internal Circulation Factor			--	281	
Subtotal: Police Administration	2	2	637	1,217	*Includes: Admin Conference Room, File Room, Waiting, Restroom, and Work Room
4. BUREAU OF SERVICES					
Net Area			--	995	
30% Internal Circulation Factor			--	299	
Subtotal: Bureau of Services	2	3	798	1,294	*Includes: Support Services Assist, Quarter Master Storage, IT Work Room/Storage, and
5. RECORDS					
Net Area			--	824	
30% Internal Circulation Factor			--	247	
Subtotal: Records	3	3	1271	1,071	
6. COMMUNICATIONS (DISPATCH)					
Net Area			--	1,194	
35% Internal Circulation Factor			--	418	
Subtotal: Communications (Dispatch)	11	11	633	1,612	Offices, Conference Room/Quiet Room, Break Room, Training Alcove, Restroom
7. INVESTIGATIONS BUREAU					
Net Area			--	2,370	
30% Internal Circulation Factor			--	711	
Subtotal: Investigations Bureau	10	14	2,590	3,081	*Includes: 4 Interview Rooms, and Observation Work Station



Existing Facility Space Allocation & 2015 Space Needs Assessment





Existing Facility Space Allocation & 2015 Space Needs Assessment

8. PATROL					
Net Area			--	2,209	
30% Internal Circulation Factor			--	663	
Subtotal: Patrol	52	58	1476	2,872	*Includes: Shift Lieutenant Offices, Road Patrol Office, Juvenile Holding, Work Room, Briefing Room Properly Sized, and Kennel
9. HOLDING					
Net Area			--	2,347	
40% Internal Circulation Factor			--	939	
Subtotal: Holding	0	0	1,813	3,286	*Includes: Intake Vestibule, Prisoner Processing Area, Interrogation Rooms, Attorney/Client Interview Room, Separate Male/Female Holding Tank and Cells, Isolation
10. PROPERTY					
Net Area			--	2,222	
20% Internal Circulation Factor			--	444	
Subtotal: Property	0	0	2,861	2,666	
11. TRAINING -REQUIRED PERSONNEL AND FACILITIES INCLUDED ELSEWHERE IN ASSESSMENT					
Net Area			--	0	
25% Internal Circulation Factor			--	0	
Subtotal: Training	0	0	0	0	Included in Municipal Court and Recreation Center
12. COURT ADMINISTRATION OFFICE- SELF CONTAINED SUITE					
Net Area			--	824	
30% Internal Circulation Factor			--	247	
Subtotal: Court Administration	3	4	1,023	1,071	*Includes: Prosecutor Work Table, Staff Toilet (for use during Court, as well)
13. MISCELLANEOUS SPACES					
Net Area			--	3,284	
20% Internal Circulation Factor			--	657	
Subtotal: Miscellaneous Spaces	0	0	6,698	3,941	*Includes: Forensic Garage, FG Evidence Prep Area, Evidence Storage Room, and 2 Lane
14. BUILDING SUPPORT AREAS					
Net Area			--	2,452	
15% Internal Circulation Factor			--	368	
Subtotal: Building Support Areas	0	0	2,148	2,820	

POLICE DEPARTMENT / MUNICIPAL PARKING NEEDS ANALYSIS



Secure Parking

- Secure Civilian and “Official Visitor” Parking
- Police Vehicle Parking

45 Secure Spaces
24 Secure Spaces

Total Secure Parking

70 Spaces

Public/Visitor Parking

- Visitor Parking
- Municipal Court Parking

15 Spaces
100 Spaces

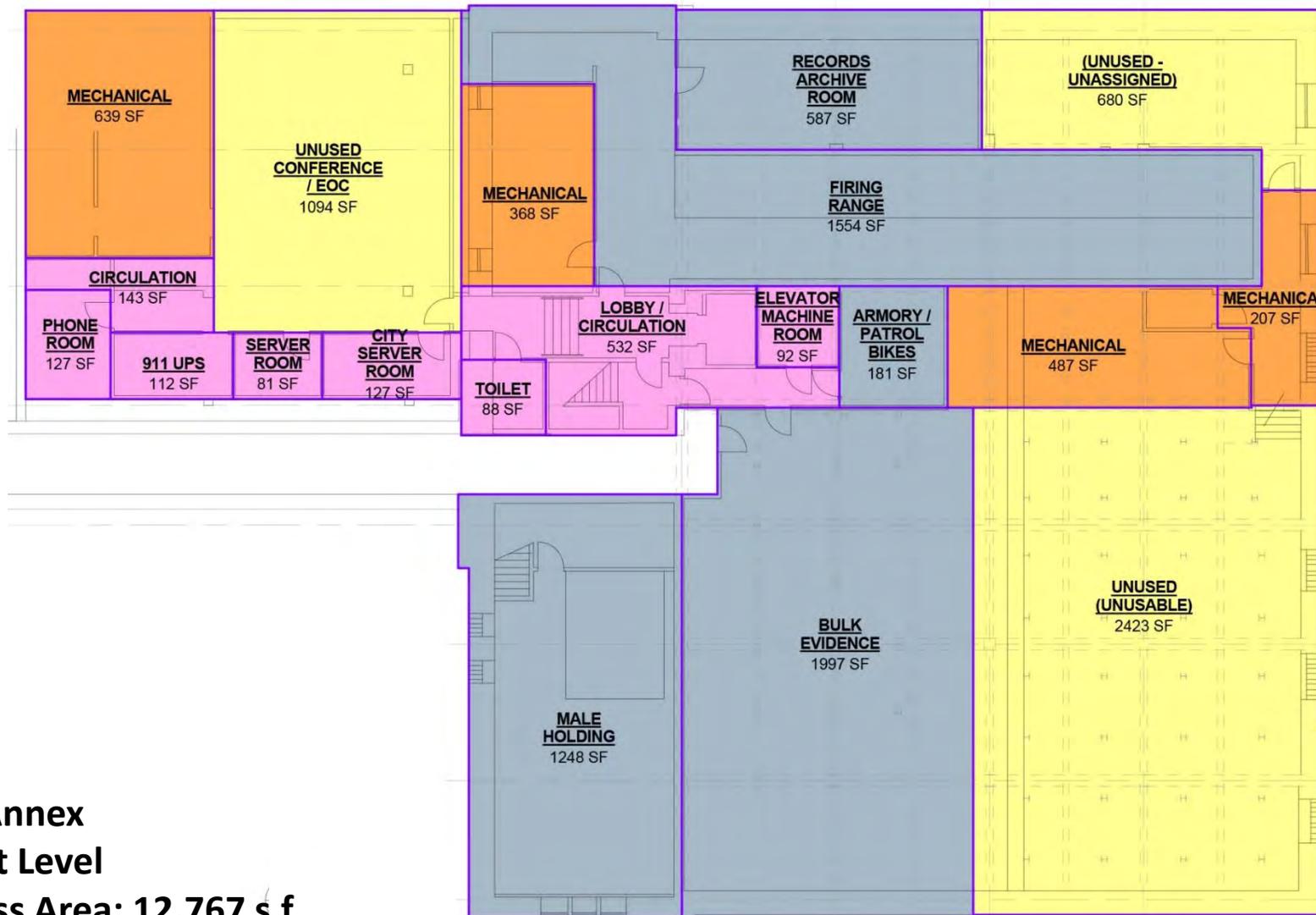
Total Public/Visitor Parking

115 Spaces

Total Site Parking for Police Department/Municipal Court

185 Spaces

Existing Facility Space Allocation

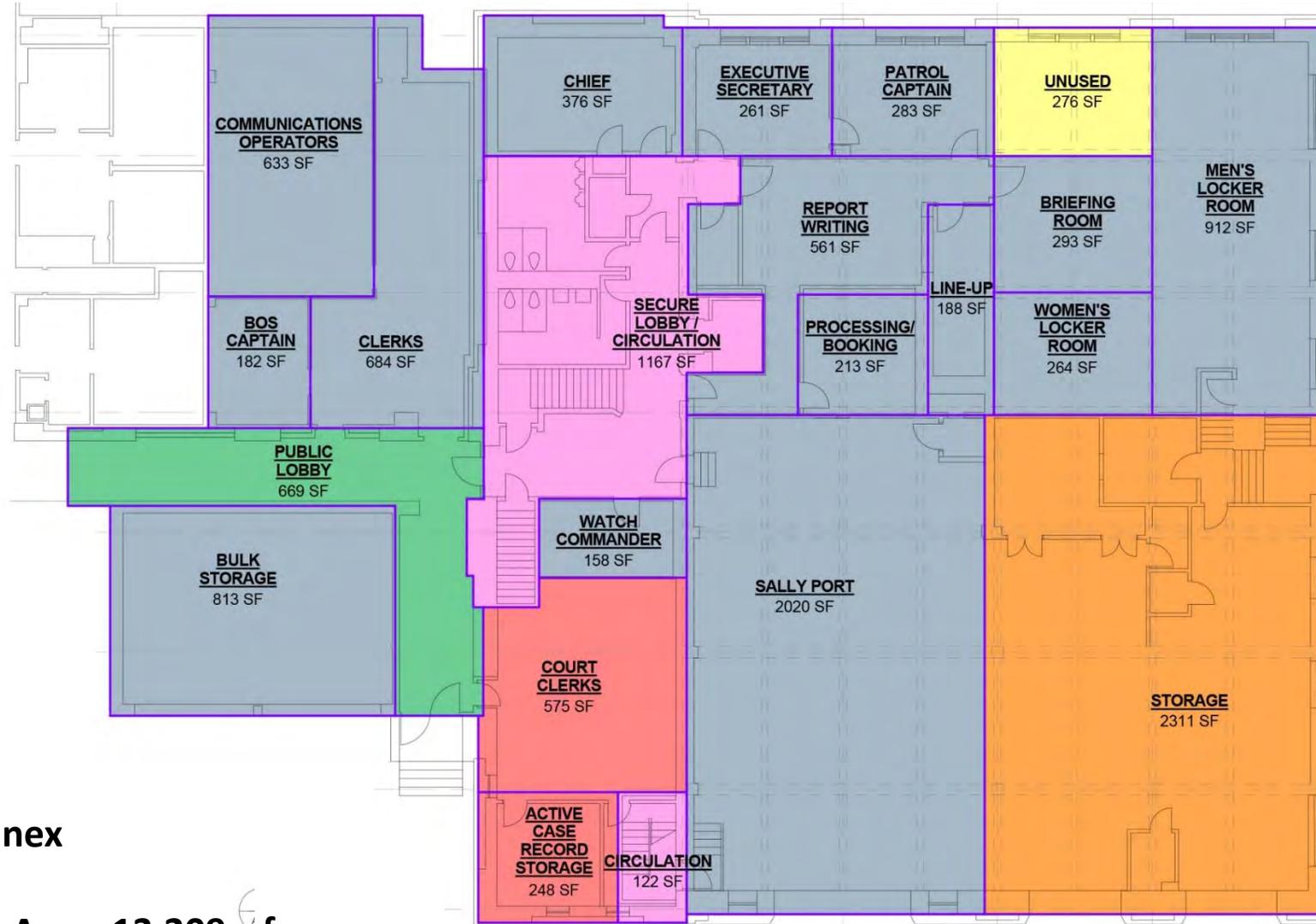


Existing Annex
Basement Level

Total Gross Area: 12,767 s.f.

Police Space Allocation: 9,664 s.f.

Existing Facility Space Allocation



Existing Annex

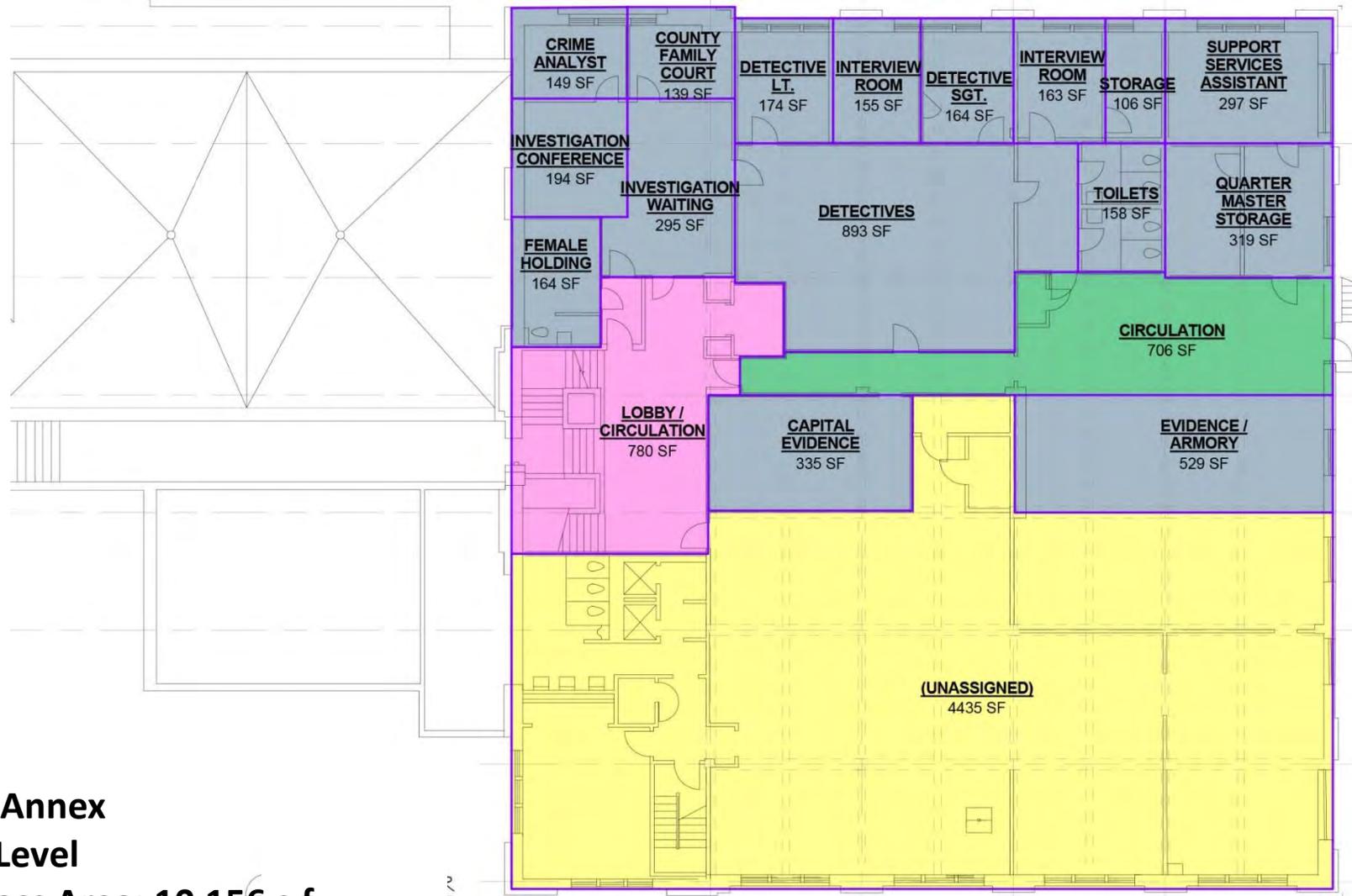
First Level

Total Gross Area: 13,209 s.f.

Police Space Allocation: 12,933 s.f.



Existing Facility Space Allocation



Existing Annex

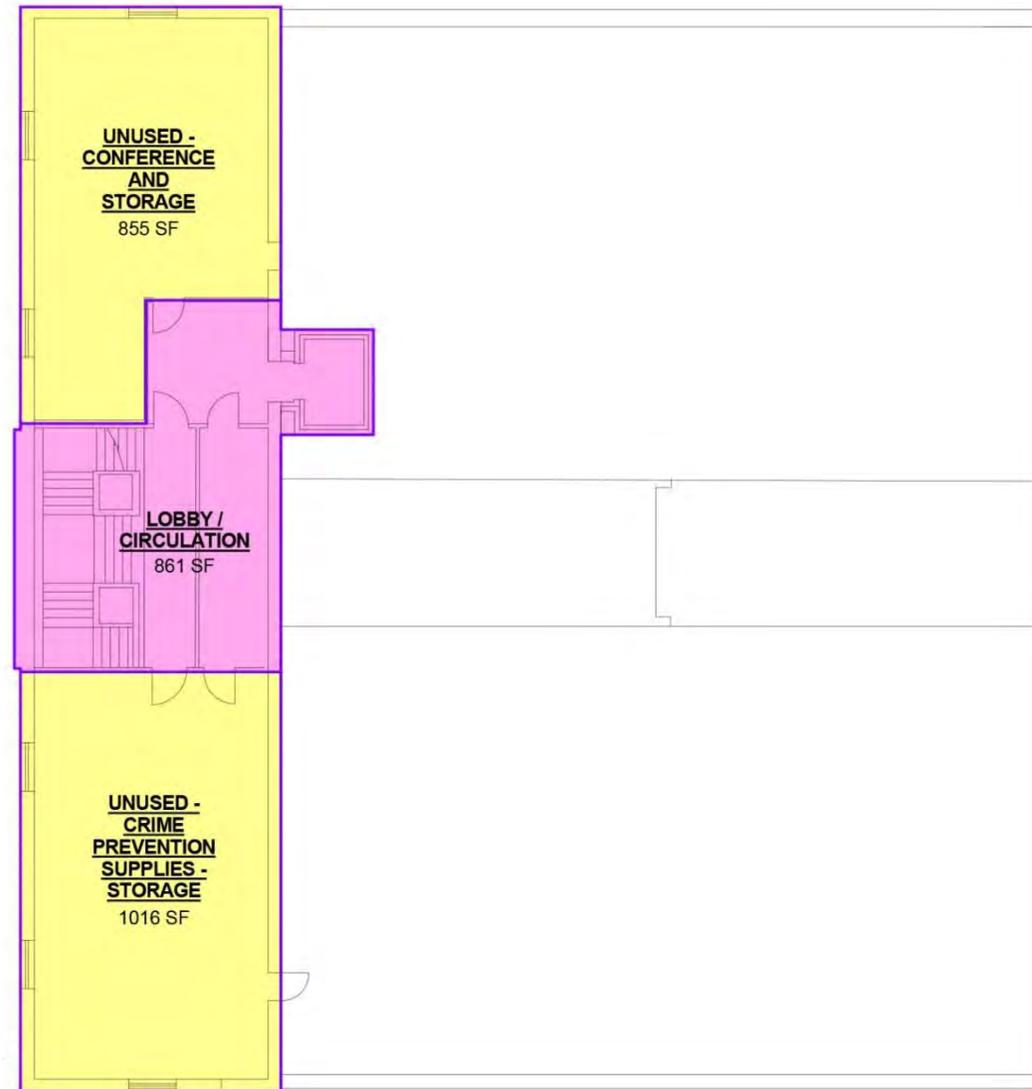
Second Level

Total Gross Area: 10,156 s.f.

Police Space Allocation: 5,721s.f.



Existing Facility Space Allocation



Existing Annex

Third Level

Total Gross Area: 2,732 s.f.

Police Space Allocation: 2,732 s.f.

Existing Police Facility Space Allocation & 2015 Space Needs Assessment Comparison - SUMMARY

Space	Staff		Space Standards		Comments
	Current	Proj'd.	Existing Police Facility Space Allocation (Square Feet)	2015 Space Needs Assessment (Square Feet)	
Total Net Area			--	26,142	
SUBTOTAL			--	32,851	
15% GROSS-UP FACTOR			--	4,928	Common Circulation, Structure, Shafts, Interior and Exterior Walls, etc.
TOTAL PROJECTED GROSS SF	83	95	--	37,779	
Exist. Annex Police Allocation Net Area			28,149	--	
Lobbies and Internal Circulation			3,785	--	
Total Net Area			31,934	--	
Unused/Unassigned Space			10,779	--	
TOTAL EXISTING GROSS SF UTILIZED			42,713	--	*Includes Existing, Used, Unused, Unassigned, Circulation, and Off-site Municipal Court and Court Archives
Exist. Annex Gross Square Footage			38,863	--	*Subtracting Off-Site Municipal Courts (3650sf) and Off-Site Court Records Storage (200sf)
Unusable Annex Square Footage in Future			12,767	--	Basement - Due to water/mold/flooding
Usable Exist. Annex Gross SF Available for Renovation			26,096	--	*Inefficiencies in planning the existing facility would yield an increase in overall required Gross SF



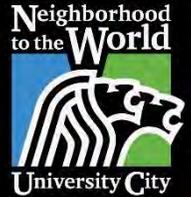
Existing Facility Space Allocation & 2015 Space Needs Assessment



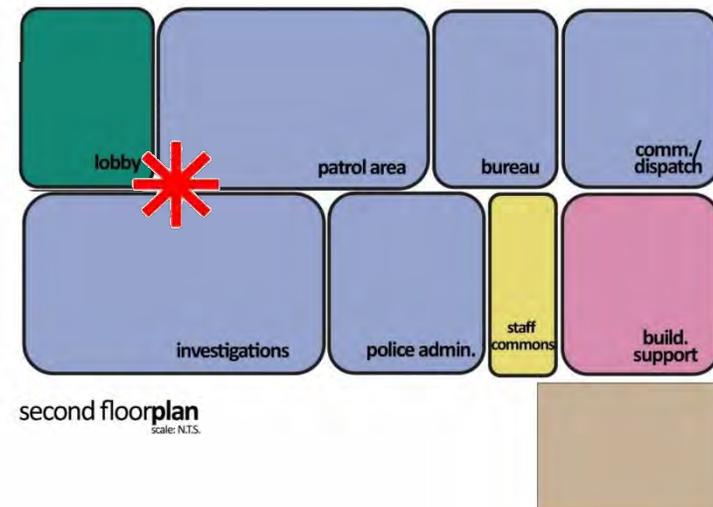
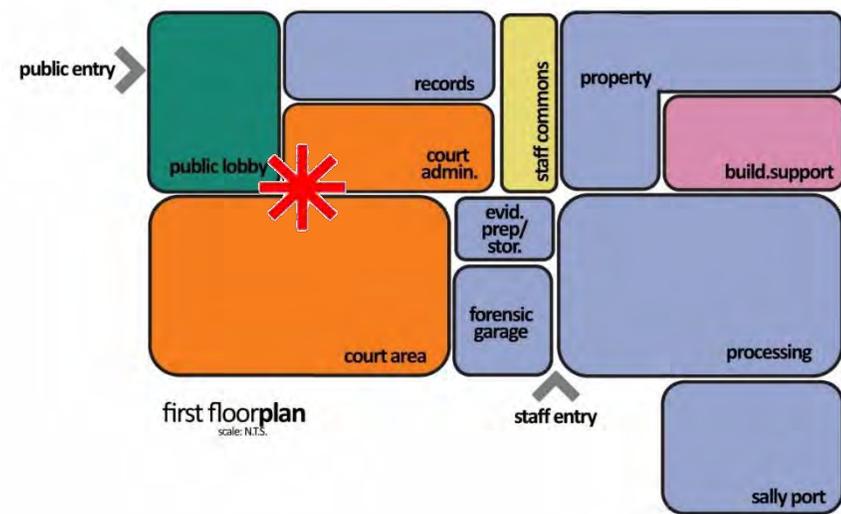


EXISTING POLICE DEPARTMENT and COURT ADMINISTRATION Operational Assessment

POLICE DEPARTMENT BASIC OPERATIONAL NEEDS



- Safety and Security – Site and Facility
 1. Separation of Police/Public/Prisoner Traffic Flow – Site and Facility
 2. Consolidated Evidence Processing & Storage
 3. Consolidated Prisoner Processing & Storage
 4. Efficient Work Flow and Appropriate Adjacencies



Conceptual Police Facility/Municipal Court

■ **SENATE BILL NO. 5:**

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Missouri Police Chiefs Association

- **Chapter 35 - Custodial (prisoner) Care Standards**
- **Chapter 36 - Communications (Dispatch) Security**
- **Chapter 29 - Training (adequate training space)**
- **Chapter 32 - Information Security**
(public lobby area; public in secure spaces; poor separation of public and staff)
- **Chapter 33 - Evidence (booking, processing, securing, and monitoring/auditing)**

Commission for Accreditation of Law Enforcement Agencies

- **Chapter 72 - Custodial (Prisoner) Care Standards**
- **Chapter 84 - Evidence**

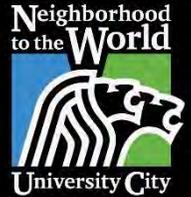
EXISTING SITE ASSESSMENT

■ Site Evaluation

1. Inadequate Setbacks from Public Ways
2. No Police/Public Vehicular or Pedestrian Separation – risk of Police / Public / Prisoner Physical Conflict
3. Inadequate Parking for Citizens, Staff, and Police



EXISTING VISITOR / EMPLOYEE PARKING ASSESSMENT



- Area #1 – 19 parking spaces
- Area #2 – 14 parking spaces
- Area #3 – 15 parking spaces (Visitor and Carpool spaces not counted)
- Area #4 – 24 parking spaces (School property)
- Area #5 – 15 parking spaces
- Area #6 – 6 parking spaces
- Area #7 – 16 parking spaces

109 Total Spaces – City Hall / Police Personnel
85 Total Spaces – w/o School Property

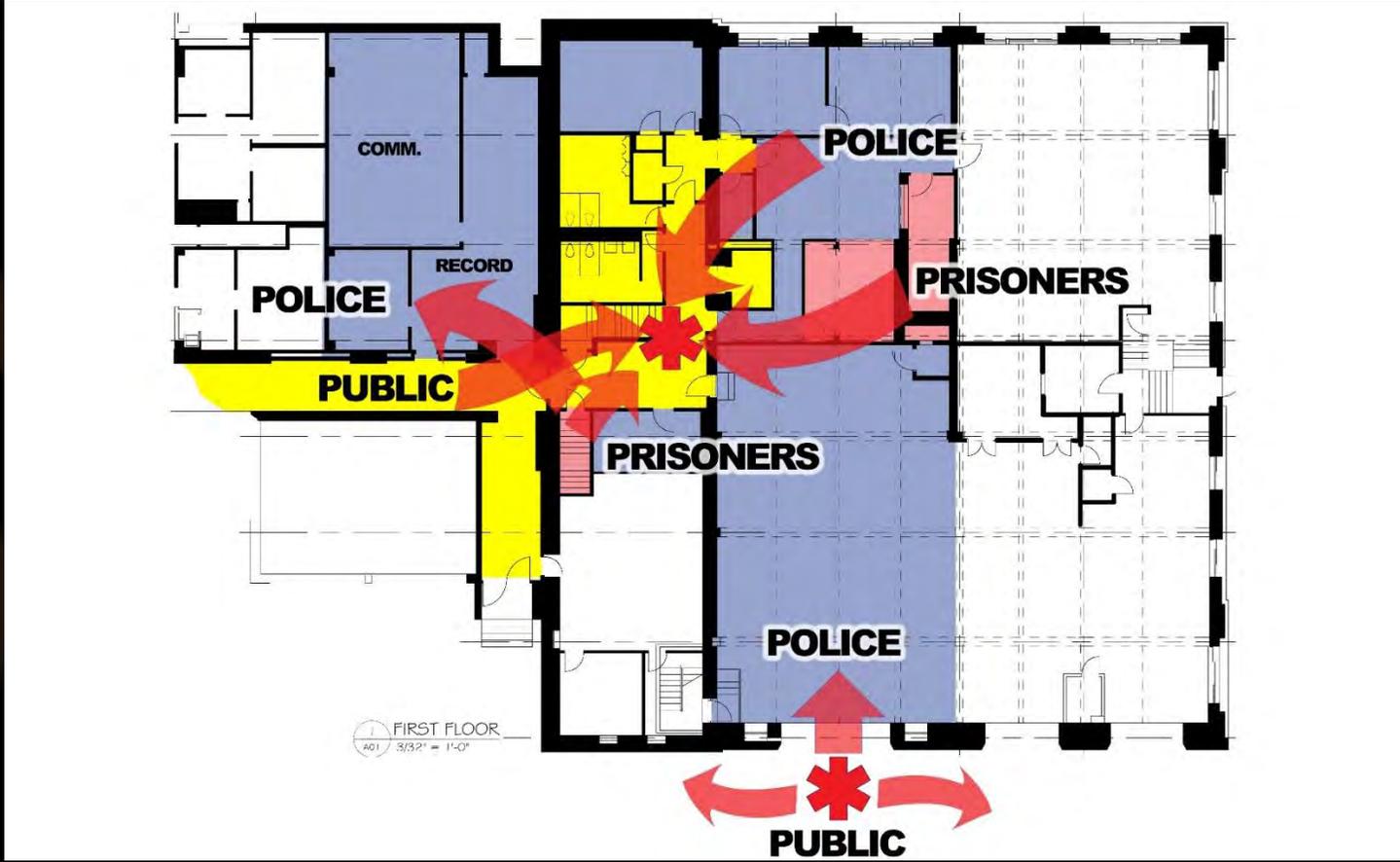


70 Spaces + Miscellaneous vehicles Recommended for Secure Police Alone
***185 total Spaces Recommended for Police & Municipal Court Facility**

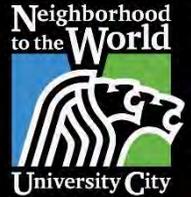
EXISTING POLICE DEPARTMENT ANNEX ASSESSMENT



- 1. Lack of Police/Public/Prisoner Circulation Separation – risk of physical conflict
- 2. Lack of Separation of Prisoner Processing and Police Operations – risk of physical conflict



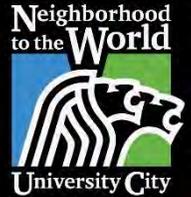
EXISTING POLICE DEPARTMENT ANNEX ASSESSMENT



- 3. Inefficient, Unsafe Work Flow and Department Adjacencies
- 4. Lack of Separation of Prisoner Processing and Police Operations



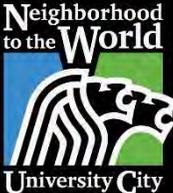
EXISTING POLICE DEPARTMENT ANNEX ASSESSMENT



5. Unhealthy / Unsafe Working Environment
6. Lack of Secure Transport of Prisoners to Cells – risk of physical conflict/harm to officers
7. Lack of ADA compliance – Police, Staff, Public or Prisoners



EXISTING POLICE DEPARTMENT ANNEX ASSESSMENT

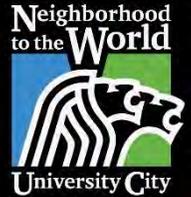


8. Prisoner Holding Cells Do Not Meet Current Standards a. Suicide Risk / Police Safety Risk /Sanitary Issues – sewer back-up

modern cell design



EXISTING POLICE DEPARTMENT ANNEX ASSESSMENT



9. Evidence Processing

- a. Not Contiguous
- b. Possible Chain of Custody Risk
- c. Lack of Observation

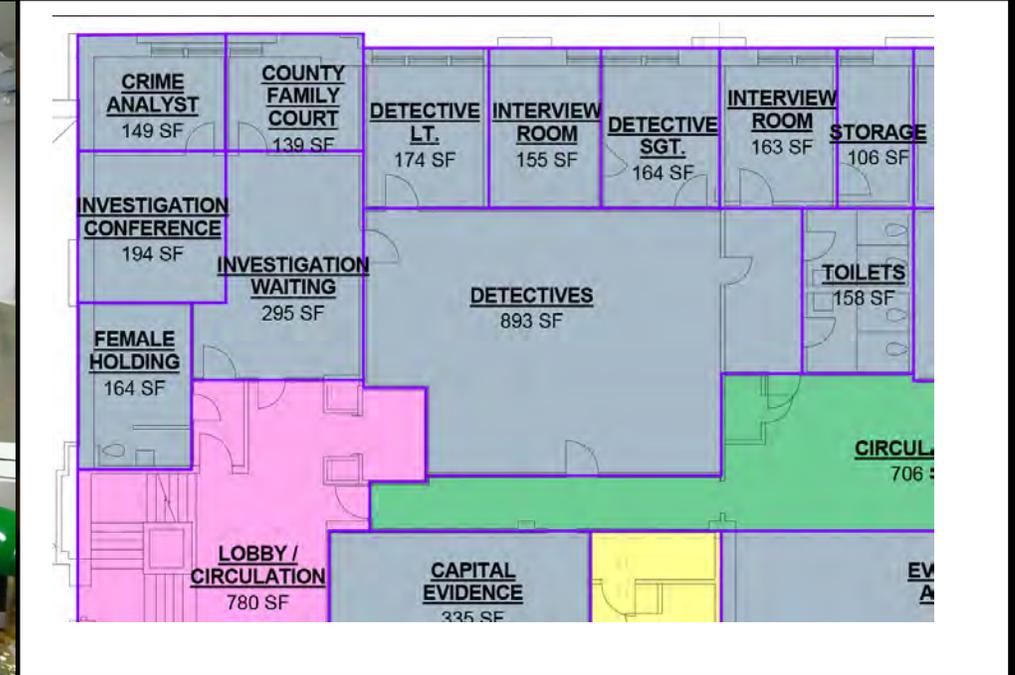
10. Evidence Storage

- a. Not Contiguous with Evidence Processing
- b. Lacks Proper Ventilation
- c. Inadequate Space for Proper Organization

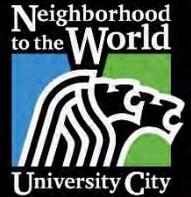
EXISTING POLICE DEPARTMENT ANNEX ASSESSMENT

11. Investigation Bureau

- a. Interview Rooms Accessed thru Bureau Detective Area
- b. Restrooms Accessed Through Detective Work Area



EXISTING POLICE DEPARTMENT ANNEX ASSESSMENT



12. Municipal Court –off Site

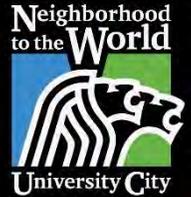
- a. Transfer of Records Outside of Secure Police Facility - risk
- b. Transfer of Money Outside of Secure Police Facility - risk
- c. Police/Courts Employees Outside of Secure Facility

13. Municipal Court on 5th Floor of City Hall Council Chamber - risk

- a. Access Concern – Elevator
- b. Queuing / Waiting – Security
- c. Lack of Security / Separation for Court /Police / City Hall Personnel
- d. Parking Concern



OPERATIONAL AND PHYSICAL EVALUATION CONCLUSIONS



1. Police Safety/Security Concerns
2. Police/Public/Prisoner Circulation Separation Concerns
3. Unhealthy Work Environment
4. Unsafe Work Environment
5. Work Flow/Processing Inefficiencies
6. Employee Satisfaction, Morale, Retention and Attraction Concerns

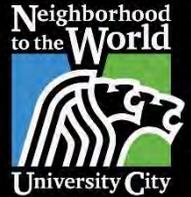




University City Police Department Municipal Courts Conceptual Development and Cost Estimate

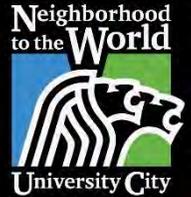
- ANNEX RENOVATION / ADDITION
- NEW FACILITY

CONCEPTUAL DEVELOPMENT CRITERIA



- **Planning Utilizing Established State and National Standards will Result in a:
Police Department Facility Complying with Required Standards and Meeting Modern Functional Needs**
 - Address ALL Safety & Security Requirements
 - Separation of Police/Public/Prisoner Circulation
 - Improved Operation Efficiencies
 - Improved Working Conditions
 - Improved Prisoner Processing
 - Improved Evidence Processing
 - Improved Employee Moral
 - Improved Employee Retention and Recruiting
 - Improved Community Service

COST ESTIMATING PROCESS



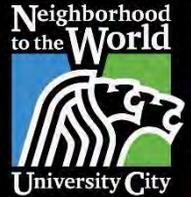
- **Similar Project Type Cost History Analysis:**
 - Past Municipal Police Departments Projects – Similar Project Types
 - Identified Cost/SF of each Project
 - Applied Cost Projection to 2016
 - Averaged the Cost/SF

COST HISTORY ANALYSIS



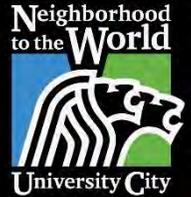
PAST PROJECTS	Year Bid	Building Gross Square Footage	Total Construction Cost	Projected Construction Cost (2016)	Projected Cost/SF (2016)	Comments
Police Only:						
Marshal, MI Law Enforcement Center	2014	35,823	\$8,997,278	\$10,657,276.00	\$297.50	Single Story; 3 Agency Shared Law Enforcement Center 110 Sworn/10 Civilian
Police Headquarters Oklahoma City	2013	88,625	\$22,631,310	\$26,806,787.00	\$302.47	3-Stories; No Sally Port, No Prisoner Processing 264 Sworn/24 Civilian
O'Fallon, MO Justice Center - Estimate	n/a	86,813	\$25,035,215	\$26,537,328.00	\$305.68	Projected 190 Sworn Staff, 259 Total Staff
Police Headquarters Sedalia, MO - Estimate	n/a	25,000	n/a	\$7,441,500.00	\$297.66	40 Sworn/10 Civilian; Limited Prisoner Processing No Municipal Court (in City Hall)
AVERAGE					\$300.83	

COST HISTORY ANALYSIS



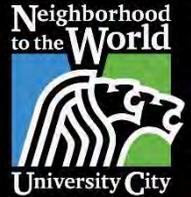
PAST PROJECTS	Year Bid	Building Gross		Projected Construction Cost (2016)	Projected Cost/SF (2016)		Comments
		Square Footage	Total Construction Cost				
Police/City Hall/Courts:							
Cottleville, MO	2006	15,900	\$4,298,000	\$5,565,575.00	\$350.04	Police/City Hall/Courts	LEED Certified; Site Complications
Bridgeton, MO	2010	42,773	\$9,429,000	\$10,864,090.00	\$253.99	Police/City Hall/Courts	Radio Tower; Closed Office Layout
Maryland Heights, MO	2008	67,000	\$13,200,000	\$15,795,534.00	\$235.75	Police/City Hall/Courts	Large Facility, Open Office Layout
Manchester, MO	2009	24,185	\$6,892,000	\$7,925,800.00	\$327.72	Police/City Hall/Courts	Large Facility, Open Office Layout
Frontenac, MO	2011	38,205	\$9,263,000	\$10,336,582.00	\$270.56	Police/City Hall/Fire	
Olivette Municipal Complex - Estimate	n/a	35,643	\$10,358,073	\$10,668,815.00	\$299.32	Police/City Hall/Courts/Fire	Four Department; Small SF
AVERAGE					\$289.56		
Police Department Renovations							
Clayton, MO	2011	60,000	\$17,000,000	\$22,211,027.00	\$370.18	Police Department; not built to Essential Services	60,000 sf Built Out, Remainder Shell Space
Lansing, MI	2011	74,700	\$18,553,771	\$24,241,077.00	\$324.51	Police Department/Municipal Courts (New Addition)	Essential Services not Considered at this point in Study
AVERAGE					\$347.35		

COST ESTIMATING | CONTROL



- **Columbia, Missouri Government Center - New City Hall Tower and Boone Renovation**
Budget \$22,000,000 Final Cost \$21,891,373
- **Howard & Gentry Historic Building Renovations Phase I - Columbia Govt Center Complex**
Budget \$2,820,000 Final Cost \$2,736,990
- **City of Bridgeton, Missouri - New Government Center & Police Headquarters**
Budget \$10,284,162 Final Cost \$10,229,087
- **City of Maryland Heights, Missouri - New Government Center & Police Headquarters**
Budget \$15,575,831 Final Cost \$14,538,722
- **City of Maryland Heights, Missouri - New Maintenance Facility**
Budget \$1,200,000 Final Cost \$1,135,024
- **City of Woodson Terrace - City Hall and Police Renovation**
Budget \$1,000,000 Final Cost \$1,015,167
- **City of Ladue - Fire House #2**
Budget \$2,200,000 Final Cost \$2,144,000

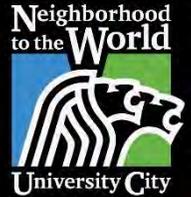
TOTAL PROGRAM BUDGET



- **BID COST/HARD COST**
 - A. **Construction Cost**
 - Building (including site work)
 - General Conditions
 - General Contractor Fee, Bonding, Insurance
 - Construction Contingency

- **SOFT COST (20-25% of Hard Cost)**
 - A. **Special Construction**
 - Site Demolition/Abatement
 - Permitting
 - Builder's Risk Insurance
 - Off-Site Utilities

TOTAL PROGRAM BUDGET



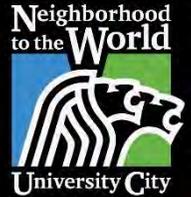
B. Furniture & Fixtures

- Furniture
- Owner Supplied Equipment
- Non-Permanent Appliances

C. Professional Services

- Environmental Consultants (Geotechnical, Hazardous Materials, etc)
- Survey/Civil Engineering Fees
- Architectural/Engineering Fees
- Materials Testing

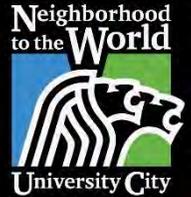
TOTAL PROGRAM BUDGET



D. Technology

- Phone/Hardware/Service
- Computer/Fiber Optics/Data Systems
- Communication Wiring
- Security Systems
- Audio Visual Systems
- Radio Dispatch

ANNEX RENOVATION / ADDITION CONCEPTUAL COST ESTIMATE



- **Complete Gut Renovation**
 - Address Physical Condition
 - Address Antiquated Systems
- **Require an Addition to Meet Space & Operational Needs**
 - The Existing Facility was NOT Originally Designed or Constructed to House a Police Department
 - Essential Services Structural Requirements
 - Column Spacing
 - Lack of Vertical Circulation – Stairs/Elevators
- **Site Security Concerns (Separations/Setbacks) Will Remain**
- **Police Secure Parking Concerns Will Remain – Setbacks/Quantity/Separation**
 - 45 +/- Secure Parking Spaces Provided
 - 70+ Secure Parking Spaces Required – Space Needs Analysis
- **City Hall Staff/Public Parking (Municipal Court) Concern – Quantity**
 - 46 +/- City Hall Staff/Public Parking Spaces Provided
 - 115 Public/Visitor Parking Spaces Required – Space Needs Analysis

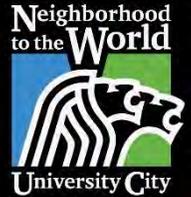
ANNEX RENOVATION / ADDITION CONCEPTUAL COST ESTIMATE



Renovation/Addition Construction Costs (2016 Dollars)				Cost/SF
Annex Building – Renovation (\$/sf)	\$300	26,096 sf	\$ 7,828,800	
Basement/3 rd Floor Renov	\$100	11,079 sf	\$ 1,107,900	
Building Addition	\$240	6,208 sf	\$ 1,489,920	
Annex Building – Façade Demo/Reconstruction (\$/sf)	\$95	10,062 sf	\$ 955,820	
Annex Building – Essential Services Structure			\$ 1,700,000	
Library Building - Renovation	\$300(1&2)	9,400 sf	\$ 2,820,000	
	\$100 (B)	4,700 sf	\$ 470,000	
Library Building – Façade Demo/Reconstruction	\$95	5,640 sf	\$ 535,800	
Library Building – Essential Services Structure			\$ 639,200	
Environmental Abatement			\$ 241,435	
Site (Retaining Walls Req'd)			\$ 500,000	
Subtotal Renovation Cost:			\$ 18,288,875	
Design Contingency(Unforeseen/Phasing)		15%	\$ 2,743,332	
Renovation/Addition Cost (Hard Cost)		43,383 sf	\$ 21,032,207	\$485
B. ALLOWANCE FOR SOFT COSTS	20%		\$ 4,206,441	
C. TOTAL PROJECT BUDGET (2016 Dollars)			25,238,648	\$582

- *CONSTRUCTION OF TEMPORARY FACILITY:
30,000 +/- SF @ \$200/SF = \$6,000,000
- *RENT: 30,000 +/- SF @ \$20/SF = \$1,200,000
(24 Months)
- *MOVING/STORAGE EXPENSES
- *INCREASED RISK OF UNFORSEEN CONDITIONS
- *HISTORICAL RECONSTRUCTION BIDDING IS
NOT VERY COMPETITIVE

NEW POLICE DEPARTMENT FACILITY CONCEPTUAL COST ESTIMATE



Total Cost \$12,463.387

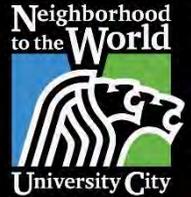
A. NEW Construction Costs (2016 Dollars)				Cost/SF
Building (\$/sf)	\$ 240	37,779 sf	\$ 9,066,960	
Site (per Acre)	\$ 150,000	2.5	\$ 375,000	
Subtotal - Building Cost			\$ 9,441,960	\$ 250.00
Design Contingency			10.0%	\$ 944,196
Building Construction Cost (Hard Cost)			\$ 10,386,156	\$ 275
B. ALLOWANCE FOR SOFT COSTS			20.0%	\$ 2,077,231
C. TOTAL PROJECT BUDGET (2016 Dollars)			\$ 12,463,387	\$ 330

*Plus Land Cost

* Alternate Bulk Evidence/Ancillary Storage: 2,500 sf Outbuilding @ \$70/sf = \$175,000
(Within Secure Parking Area; Outbuilding is less expensive to build than the main building.)

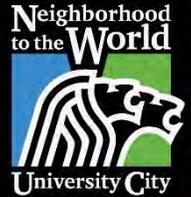
ANNEX FACILITY CONCEPTUAL COST ESTIMATE

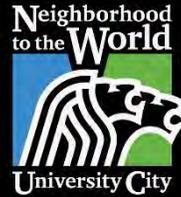
Annex Renovation – White Box



Renovation Construction Costs (2016 Dollars)				Cost/SF
Exterior Renovation	\$25/sf	(Masonry, Windows, Roof)		
Interior Renovation	\$80/sf			
Systems Replacement	\$60/sf			
Water/Structural Remediation	\$10/sf			
Demolition	\$5/sf			
Renovation Cost/SF	\$180/sf			
Annex Renovation:				
Floors 1, 2, & 3	\$180/sf	27,597 sf	\$4,967,460	
Basement	\$100/sf	12,767 sf	\$1,276,700	
Annex Renovation Subtotal			\$6,244,160	\$154/sf
Library Renovation:				
Floors 1 & 2	\$180/sf	9,400 sf	\$1,692,000	
Basement	\$100/sf	4,700 sf	\$470,000	
Library Renovation Subtotal			\$2,162,000	\$154/sf
Environmental Abatement			\$241,435	
Site Work Allowance			\$500,000	
Subtotal Renovation Cost:			\$9,147,595	
Design Contingency – Renovation		15%	\$1,372,140	
Renovation Total Construction Cost: (Hard Cost)			\$10,519,735	\$194/sf
Allowance for Renovation Soft Costs:		15%	\$1,577,960	
Total Project Cost – Renovation “White Box” (2016 Dollars)			\$12,097,695	\$222/sf

STRENGTHS / WEAKNESSES / OPPORTUNITIES / THREATS (S.W.O.T.) ANALYSIS





Next Steps



Neighborhood
to the World



University City

space**needs questionnaire**

for Police Department / Annex

“DRAFT”

Chiodini
ARCHITECTS

chiodini associates | planners | architecture | interior design | graphics
1401 south brentwood blvd. | saint louis, missouri 63144 | 314.725.5588 | www.chiodini.com

8. Furniture / Equipment:

List furniture and/or equipment, quantity and special sizes required for each department or area.

Examples include:

- A) Desks B) Credenza C) Bookcase D) Files E) Chair F) Guest Chairs
- G) Computer H) Telephone I) Printers J) Counter K) Sink

DEPARTMENT / AREA	FURNITURE / EQUIPEMENT

9. Specific Departmental Operations:

A. Administration: Please describe daily operations, including public interaction, training, administrative functions, access to other, etc. How does the public access your area? Does your department host an EOC? What don't you have that you feel you need to improve your operations?

B. Patrol Division: Please describe daily operations, including roll call, briefing, report writing, mail distribution, public interaction, etc

C. Investigations: Please describe daily operations, including briefing, public interaction, evidence processing, etc. Do you have any special task force needs? Where are older records kept? What don't you have that you feel you need to improve your operations?

D. Specialty Functions (Communications/Dispatch, Holding, Evidence, Front Desk, Training etc.): Please describe daily operations, including briefing, public interaction, evidence processing training needs, front desk, prisoner/holding/release, general security needs, etc. What don't you have that you feel you need to improve your operations? Attach additional pages if necessary.

10. Storage Requirements:

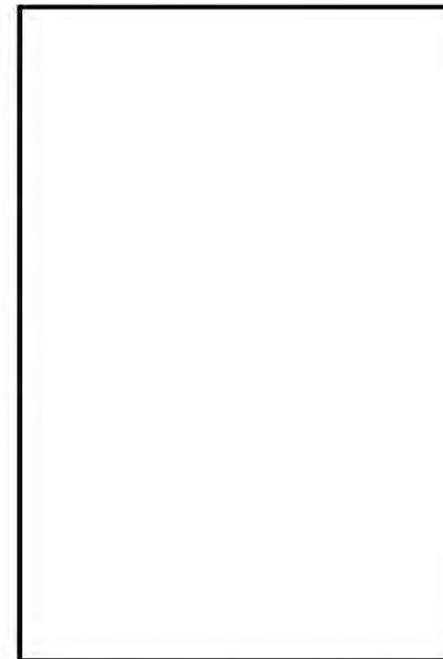
11. Additional Comments or Department Special Needs:

This space is provided for any comments or special needs that have not been included in areas above. Please describe any special configuration that your department needs for its operations:

12. Security Requirements:

14. Special Needs:

This area is provided for your notes or sketches of any special configuration that would aid in describing your thoughts about office standards or equipment for your operation.



Thank you very much for your input. If you need additional pages to describe further on any issue that you have relative to the needs assessment, feel free to do so.

*If you have any questions, please contact:
Chris Chiodini or Louis G. Chiodini (314) 725-5588*



University City Police Department						
	Space Name	Net Area	Occupants	Total Net Area SF		Program Requirements
	Lobby / Waiting Area	300	1	300		
Core	Public Restrooms	150	2	300		
	Staff Unisex Restrooms	50	3	150		
COP	Office for the Chief of Police	350	1	350		
	Administration Assistant	120	1	120		
	Captians Office	225	2	450		
	Waiting Area	100	1	100		adjacent to admin assist
Supervisors	Conference Room (COP)	200	1	200		
	Lieutenants	144	3	432		open office
	Sergeants	75	6	450		open office
Detective	Conference Room	200	1	200		
	Office for Detective Bureau Supervisors	144	2	288		
	Open office for detectives	64	8	512		open office
	Store Room	200	1	200		
	Regular Interview Room	110	4	440		sound proof/video capability
Shower/Locker	Interview Observation Room	175	1	175		
	Communications Division/dispatch	475	1	475		
	Dispatch Supervisor	144	1	144		office
Shower/Locker	Dispatch Restroom/break area	125	1	125		
	Male Locker Rooms	10	65	650		10 sf per locker -
	Male Restroom & Showers	275	1	275		2 showers
	Female Locker Rooms	10	30	300		10 sf per locker -
Shower/Locker	Female Restroom & Showers	275	1	275		2 showers
	Roll Call Room/Computer Training	550	1	550		10-12 people
Shower/Locker	Command Meeting Room/Emergency Management Facility	500	1	500		6 people
	Crime Analysis/Victim Service Office	300	1	300		accommodate 3 employees
Shower/Locker	Evidence Storage Facility	900	1	900		
	Evidence Facility Office	144	1	144		

University City Police Department						
Space Name	Net Area		Occupants	Total Net Area SF		Program Requirements
Weapons (arsenal) Storage	200		1	200		
Holding/Processing	Sally Port for Prisoner Pick ups and drop offs - Vehicle Processing	750	1	750		2 vehicle w/ storage
	Holding Facility	40	18	720		40 SF each; (18) prisoners minimum - 1 large 4-6p; 4 regular 2p; 1 female 4p
	Process Holding Area	368	1	368		Adjacent to Sally Port
	Detainee's Shower	75	1	75		Shared w/Detainee Unisex restroom
	Detainee's Unisex Restroom	75	1	75		
	Detainee / Visitor Room	120	1	120		
	Two (person) Station Pistol Range	125	2	250		25 x 5
Pistol Range Storage	100	1	100			
Office for Records Room Supervisor	144	1	144			
Records Room / Storage	800	1	800		3 records clerks - short term and long term storage	
Employee lunch room/employee lounge area	200	1	200			
Backup Generator room and Radio Base Stations Storage	0	1	0		Generator Outside of building	
Parking for Police Vehicles	0	1	0		29 police cars - min 30 staff	
				13,107		
Building Service	Mechanical	300	1	300		
	Electrical Services	250	1	250		
	Janitors	100	1	100		
	Tele/Data	100	1	100		
				750		
Totals	Net Area Square Foot				13857	
	Design Gross in SF Factor			20%	2771	Circulation, Structure Partitions
	Design Gross in SF Total				16628	
	Building Gross in SF Factor			10%	1663	
	Building Gross SF				18291	Total Square Foot

University City Police Department						
	low range		high range			
Building Construction Cost - s.f.	\$195.00	\$3,566,791.80	\$235.00	\$4,298,441.40		per sf costs -
Site Construction Contingency Allowance	5%	\$178,339.59	5%	\$214,922.07		
Soft Costs - A/E; Attny; Testing; Insurance; other professional fees	15%	\$535,018.77	15%	\$644,766.21		
Furniture, Fixtures, Equipment	10%	\$356,679.18	10%	\$429,844.14		
Sub Total - Project Cost		\$4,636,829.34		\$5,587,973.82		
Contingency	10%	\$463,682.93	10%	\$558,797.38		
Total - Project Cost		\$5,100,512.27		\$6,146,771.20		
Muni- Courts	Municipal Court	2000	1	2000		
	Court Clerks	800	1	800		
	Storage	75	1	75		
	Lobby	100	1	100		
	Judge / Attny Office	144	1	144		
	Restrooms	120	2	240		
						3359
ADD Municipal Courts Components (Square Footage from program abv)	\$195.00	\$655,005.00	\$235.00	\$789,365.00	3359	s.f. of program space
Site Construction Contingency Allowance	5%	\$32,750.25	5%	\$39,468.25		
Soft Cost due to ADDITION of Municipal Courts	15%	\$98,250.75	15%	\$118,404.75		
FF&E due to ADDITION of Municipal Courts	10%	\$65,500.50	10%	\$78,936.50		
Total - Project Cost - WITH Municipal Courts		\$5,952,018.77		\$7,172,945.70		
These estimates are based on a standard site development situation. It does not include excessive site development costs such as rock excavation, etc.						
The estimates above are based on limited information obtained by Archimages, Inc. on 8/25/11 and are to be used as a cost opinion based on historical data. Detailed Programming, Site Selection and limited preliminary design with the Owner is required to achieve accurate cost opinions.						



University City Police Department - Existing Building Renovation

Construction Category	Pricing Unit	Cost per Unit	Extended Cost	Comments
Building Exterior				
<u>Exterior Skin</u>				
Re-point all masonry, Recaulk				
Repair masonry, Reflash as required (415 lf x 30 h = 12,450 sf)	12,450 sf	\$20.00 /sf	\$249,000.00	
<u>Exterior Window Replacement</u>				
	30 ea	\$4,000.00 /ea	\$120,000.00	
<u>Exterior Stair from Second Floor</u>				
	1 ls	\$185,000.00 /lf	\$185,000.00	
<u>*** Copings/Roof Modifications</u>				
	750 lf	\$38.00 /lf	\$28,500.00	
<u>*** Foundation Drainage</u>				
	1 ls	\$30,000.00	\$30,000.00	
Building Interior Modifications				
<u>Interior Demolition</u>				
	27,276 sf	\$9.75 /sf	\$265,941.00	
<u>Mechanical Systems</u>				
	27,276 sf	\$25.00 /sf	\$681,900.00	
New Ductwork, New Systems				
New Separate Speciality Systems				
<u>Fire Protection Modifications</u>				
	27,276 sf	\$4.50 /sf	\$122,742.00	
Rework Existing Heads - Redesign				
<u>Plumbing Modifications</u>				
	27,276 sf	\$7.25 /sf	\$197,751.00	
Modify Existing Facilities				
Relocate Staff Facilities				
New Security Type Facilities				

University City Police Department

<u>Electrical Modifications</u>	27,276	sf	\$38.50	/sf	\$1,050,126.00	
Rework Electrical Systems Throughout						
New Wire, New Devices, New Fixtures						
*** Structural Repair Budget	27,276	sf	\$5.50	/sf	\$150,018.00	
<u>Interior Finishes</u>	27,276	sf	\$72.50	/sf	\$1,977,510.00	
Drywall Partitions, Doors, Locks						
Interior Finishes, Interior Windows						
Holding Cells, Locker Room,						
Building Construction Cost - Sub Total	27,276	sf			\$5,058,488.00	
					\$185.46	<i>estimated cost per s.f.</i>
Site Construction Contingency Allowance			1%		\$50,584.88	
Soft Costs - A/E; Attny; Testing; Insurance; other professional fees			15%		\$758,773.20	
Furniture, Fixtures, Equipment			10%		\$505,848.80	
Sub Total - Project Cost					\$6,373,694.88	
Contingency			10%		\$637,369.49	
Total - Project Cost	27,276	sf			\$7,011,064.37	
					\$257.04	<i>estimated cost per s.f.</i>
<p>*** The estimates are budgets only. Roofing, Foundation Waterproofing, and Structural items can become extensive rework should additional issues be discovered. Actual costs can vary greatly depending on actual findings.</p>						
<p>The cost opinion above is based on limited information obtained by Archimages, Inc. and is not based on any type of structural analysis, in-depth investigations or professional reports and are to be used as a cost opinion based on historical data. Detailed Programming, Structural Analysis and limited preliminary design with the Owner is required to achieve accurate cost opinions.</p>						

ARCHIMAGES (Observational Analysis – Inventory)

- No Operational Analysis
 - August 25, 2011

- **NEW POLICE FACILITY:**
- **18,291 GSF**; less than **50%** of the Existing Gross Utilized Square Footage of 42,713 GSF currently utilized.
 - There may be inefficiencies; but not this much.
- Gross up factors are LOW: 20% Design (Departmental) and 10% Building Gross (Building); 30% Total Gross Up Factor – more appropriate for a purely administrative facility; City Hall.
 - Minimum 20% for Administrative and up to 50% for Holding
 - Do not take into account the diversity of spaces in a Police Facility.
- Missing:
 - Bureau of Services (Entire Bureau Missing)
 - Support, Quarter Master Services, IT work room and Storage
 - Communications
 - Personnel; Communication Server Room
 - Investigations
 - St. Louis County – Family Court
 - Waiting, Restroom, Soft Interview

- Patrol
 - Report Writing, Patrol Equipment Storage, Weapons Cleaning, Kennel
- Holding
 - Interrogation Rooms, Line Up Room
 - Processing and holding is only 30% of Departmental Need.
 - No Bulk Evidence
- Miscellaneous:
 - Forensic Garage and Evidence Preparation Space
 - Minimal Sally Port; Department can have two full sized vans at once.
 - Firing Range – Should be 500 sf per lane (not 250 sf)
 - Missing – Control Room, Arms Cleaning, Target Storage, Ammo Storage, Toilet, Sound-lock, and Range Training Room
- General Lack of or insufficient allocation of Required Support Spaces:
 - Files, Storage, IT Server Rooms, Data/Communications, restrooms, elevator requirements, etc.
- High Range SF Construction Cost is Close to ours; however, Allowances, Soft Costs, and Contingencies (which in total seems very high) yields a Total Project Cost of **\$336/SF**
 - Their data is significantly off in square footage and operational requirements of the Department.
 - Budgets would need to be projected to 2016 dollars:
 - 14%: 2011 to 2014
 - 12%: October 2014 to October 2015
 - 2.6%: through January 2016

- **Municipal Court:**
- 3,359 NSF; **Does not appear to have ever had a GROSS UP FACTOR applied.**
 - With Gross Up: 4,367 GSF
- Lobby of 100 nsf is too small to process 150 to 200 people for court;
 - Security/Metal Detector.
 - 75 nsf for storage is insufficient; we have planned space for Multi-Function.
- **EXISTING ANNEX RENOVATION**
- No context for the 27,276 sf (Net square footage? Gross square footage?) Is there a program? How would the uses fit within the building?
- Any allowance for Municipal Court?
 - There really aren't any spaces within the existing facility that could accommodate a Municipal Court – column spacing, etc.
- Essential Services requirements and budgets are not addressed.
- Once more; 40% less space than they currently utilize; 42,713 GSF.
- MEP/FP Systems cost are more in line with new construction.
 - Indicate 'Modification' of systems; all systems need to be completely removed and replaced.
 - Indicates 'reworking' of existing fire protection heads; there is NO fire protection system within the existing building.
- No budget for hazardous material abatement.
- No budget for requirement of construction phasing.
- No clear budget for data/communication provisions.
- 10% Contingency for renovation is too low; 15% to 20% would be more realistic.

Room Schedule	
Name	Area
BASEMENT FLOOR PLAN	
BUREAU OF SERVICES	2,865 SF
CITY OFFICES	3,107 SF
CORRIDOR	453 SF
FIRING RANGE	2,487 SF
MECH. ROOM	835 SF
STORAGE	5,075 SF
	16,729 SF
FIRST FLOOR PLAN	
BUREAU OF FIELD OPERATIONS	3,715 SF
OPERATIONS	100 SF
LOCKDOWN	1,714 SF
DISPATCH	2,465 SF
EVIDENCE	971 SF
LOBBY	3,100 SF
LOCKUP	250 SF
MENS	1,620 SF
SALLYPORT	200 SF
WORKSHOPS	15,317 SF
MEZZANINE	
EVIDENCE	1,400 SF
MEZZANINE	1,400 SF
SECOND FLOOR PLAN	
ADMINISTRATION	2,456 SF
BUREAU OF INVESTIGATION	3,700 SF
CORRIDOR	1,100 SF
LOCKER ROOM	4,051 SF
MENS	200 SF
TRAINING	2,007 SF
WOMENS	200 SF
	16,707 SF
Grand total	46,974 SF



University City Police Department

	Area (SF)	Cost/SF	Total
Existing Building Renovation	30,750 s.f.	\$150.00	\$4,612,500.00
New Addition	18,500 s.f.	\$225.00	\$4,162,500.00
Subtotal			\$8,775,000.00
Historic Tax credit			-\$2,767,500.00

Total Construction Cost \$6,007,500.00

UNIVERSITY CITY POLICE DEPARTMENT

03/21/14

Room Schedule	
Name	Area
BASMENT FLOOR PLAN	
BUREAU OF SERVICES	2,890 SF
CITY OFFICES	3,167 SF
CORRIDOR	863 SF
FIRING RANGE	2,487 SF
MECHANICAL	805 SF
STORAGE	5,022 SF
	14,239 SF
FIRST FLOOR PLAN	
BUREAU OF FIELD OPERATIONS	3,716 SF
CORRIDOR	999 SF
DISPATCH	1,784 SF
EVIDENCE	2,420 SF
LOBBY	971 SF
LOCKUP	3,188 SF
MENS	275 SF
SALLYPORT	1,076 SF
WOMENS	200 SF
	15,117 SF
MEZZANINE	
EVIDENCE MEZZANINE	1,408 SF
	1,408 SF
SECOND FLOOR PLAN	
ADMINISTRATION	2,456 SF
BURGLARIE	1,729 SF
INVESTIGATION	1,005 SF
CORRIDOR	1,005 SF
LOCKER ROOM	4,951 SF
MENS	209 SF
TRAINING	2,027 SF
WOMENS	200 SF
	15,207 SF
Grand Total	46,971 SF



① SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

UNIVERSITY CITY POLICE DEPARTMENT
03/21/14

University City Police Department			
	Area (SF)	Cost/SF	Total
Existing Building Renovation	30,750 s.f.	\$150.00	\$4,612,500.00
New Addition	18,500 s.f.	\$225.00	\$4,162,500.00
		Subtotal	\$8,775,000.00
		Historic Tax credit	-\$2,767,500.00
		Total Construction Cost	\$6,007,500.00

Room Schedule	
Name	Area
BASEMENT FLOOR PLAN	
BUREAU OF SERVICES	2,828 SF
CITY OFFICES	3,167 SF
CORRIDOR	953 SF
FIRING RANGE	2,457 SF
MECHANICAL	605 SF
STORAGE	5,872 SF
FIRST FLOOR PLAN	
BUREAU OF FIELD OPERATIONS	3,715 SF
CORRIDOR	886 SF
DISPATCH	1,714 SF
EVIDENCE	2,105 SF
LOBBY	987 SF
LOCKUP	3,705 SF
MENS	216 SF
WALLSPORT	1,678 SF
WOMENS	200 SF
MEZZANINE	
EVIDENCE	1,408 SF
MEZZANINE	1,408 SF
SECOND FLOOR PLAN	
ADMINISTRATION	2,458 SF
BUREAU OF INVESTIGATION	3,720 SF
CORRIDOR	1,005 SF
LOCKER ROOM	4,961 SF
MENS	209 SF
TRAINING	2,967 SF
WOMENS	200 SF
Grand Total	46,871 SF



1) BASEMENT FLOOR PLAN
SCALE: 1/4" = 1'-0"

University City Police Department			
	Area (SF)	Cost/SF	Total
Existing Building Renovation	30,750 s.f.	\$150.00	\$4,612,500.00
New Addition	18,500 s.f.	\$225.00	\$4,162,500.00
		Subtotal	\$8,775,000.00
		Historic Tax credit	-\$2,767,500.00

Total Construction Cost \$6,007,500.00

Trivers Associates

- No Operational Analysis
- No Program Analysis

April 02, 2015

- Program was not coordinated with the Police Department
 - 46,971 sf (net or gross); is more than we have programmed even with Municipal Courts.
 - Municipal Court or Court Administration not included?
 - 'City Offices'?
 - Lobby should be adjacent to Administration, Records, and Courts
 - Dispatch and Bureau of Operations should not have direct Public contact
 - Bureau of Services and 'City Offices' in Basement Level?
 - Basement Storage Area is extremely large; does not account for water issues and limited head height.
 - Level changes within the existing facility don't seem to have been taken into account.
 - No Basement or Second floor lobby areas
 - Elevator is only on the secure side of the facility; no public elevator connection of all floors.
 - Sally Port is too large.
 - Firing Range is huge.

- Renovation Cost:
 - Does not seem to account for:
 - Complete replacement of all MEP systems
 - Addition of Fire Protection System
 - Demolition for Addition
 - Gut Demolition of Existing Facility
 - Hazardous Material Abatement
 - Essential Services Requirements
 - Phasing
 - Relocation
 - Contingency; unforeseen conditions
- New Addition:
 - Square foot cost is more geared to an administrative building rather than a police facility; safety and security.
- Appears to be a Construction Cost only estimate
 - No Soft Costs:
 - FF&E
 - Fees

Neighborhood
to the World



University City

University City Police Department Facility Analysis

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