

RECEIVED

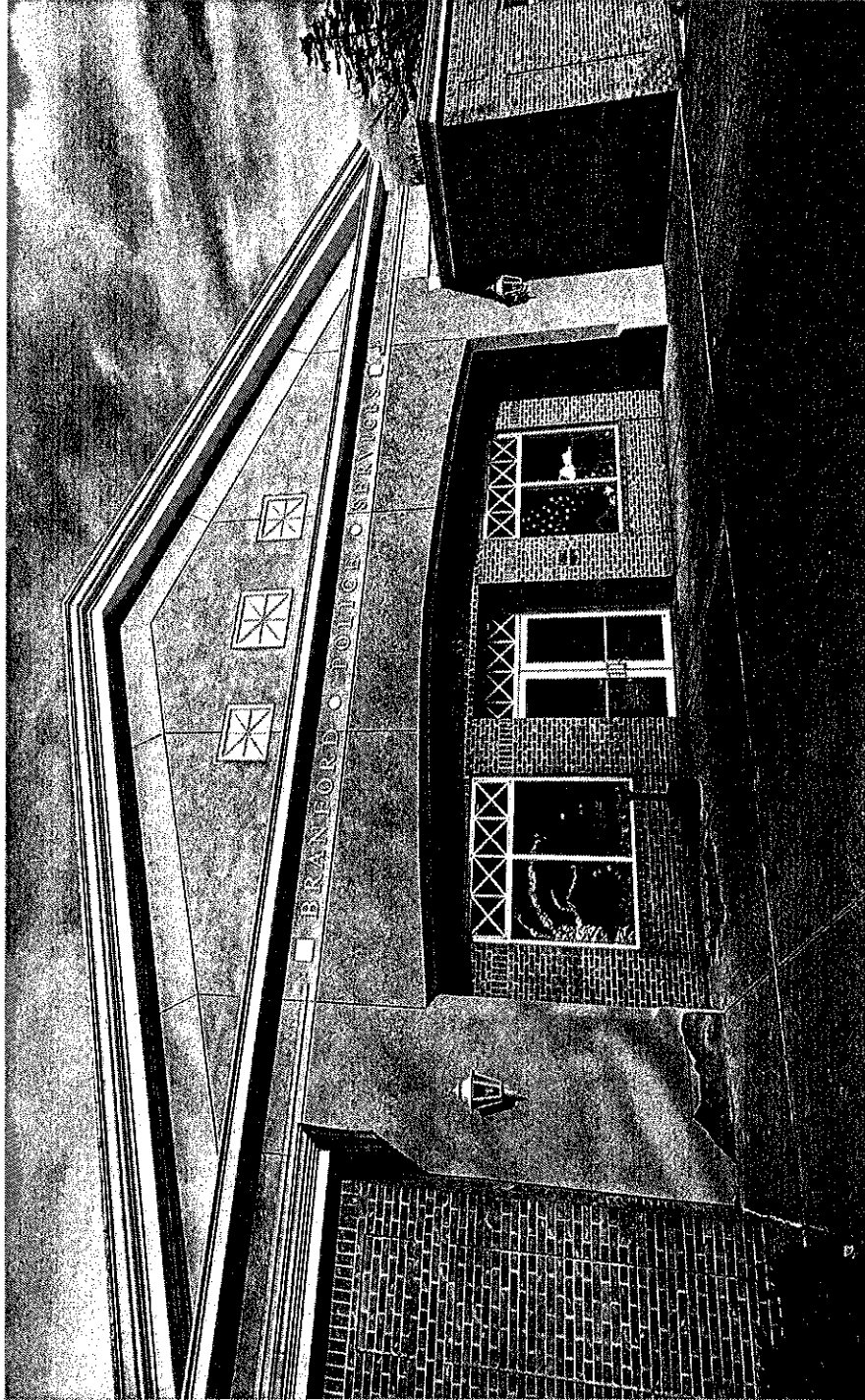
Item #7

NOV 22 2023

BRANFORD TOWN CLERK

Branford Police Department

REMEDICATION PROPOSAL



Overview

- Introduction
- Quick Facts
- Path to Proposal
- Choice of Direction
- Steps Taken
- Photo Walkthrough – existing conditions
- Conclusion
- Q&A

Introduction

- Chief Jonathan Mulhern / Deputy Chief John Alves
- Brian Humes, AIA, LEED AP
 - Jacunski Humes Architects, LLC
 - Extensive experience in the area of Public Safety Facility Design
 - Jacunski Humes Architects, LLC currently has more active Public Safety Projects than any other architectural firm within New England.
 - Planned and design of over ninety (90) municipal police / fire / EMS facilities
 - Established a national reputation in the field of Public Safety Facility Planning and Design

Downes Construction Company

- Chosen by the Public Building Commission on Nov. 18th, 2022
- Extensive experience in construction of public safety buildings
- Contract for:
 - Preconstruction services of a Construction Manager
 - Professional estimating services by the Construction Manager
 - Provide a detailed design development cost estimate
 - Constructability review of the documents
 - Development of an anticipated schedule

Police Building : Quick Facts

- 1995 – Police department – new construction/ occupancy – 28yrs ago
- Approx. 25,000 - Square foot building – Police and town’s E-911 center
- Presently - 52 Officers, 10 telecommunicators, 1 police social worker, 4 part time Officers, 2 I.T., 1 Crime Analyst, 4 Records Clerks.
- 2008 – Lead remediation, HVAC and range upgrades to the range located on Harrison Ave - (15 YRS)
- 2013 – Communication upgrades to radio system
- 2017 – 10 Roof top gas fired units and one dedicated outdoor air unit replaced – HVAC issues to discuss

Background – Path to Proposal

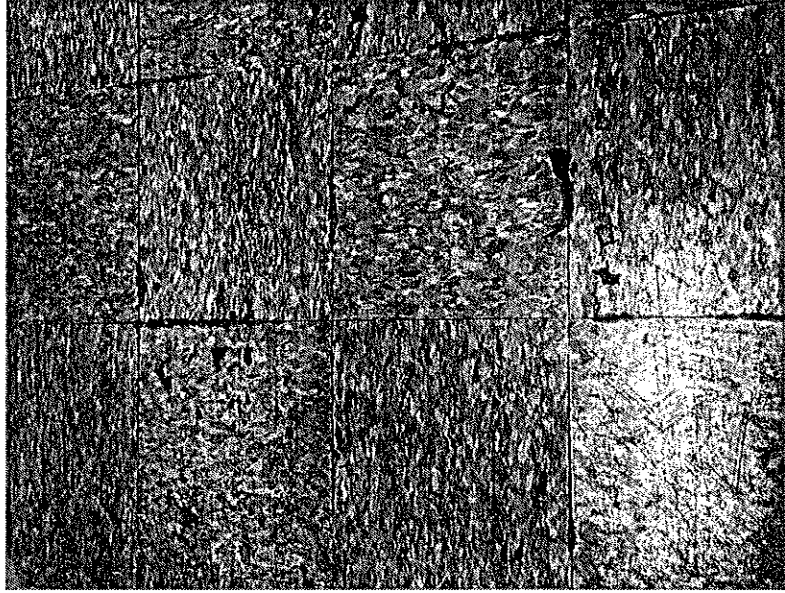
- Historically, very high level of moisture within the building especially on lower level
- Short term attempts/ solutions to rectify moisture in lower level, to include running fans, and portable de-humidifiers.
- High levels of humidity resulted in lack of adhesion of flooring tiles to slab, bubbles, blisters and crack on areas that have epoxy coated floors, rust to lockers, rust on equipment stored inside (guns, cuffs, batons); moisture can compromise the integrity of the Officer's bullet proof vests; mold discovered underneath flooring; dirty duct work throughout building

• Background – Path to Proposal

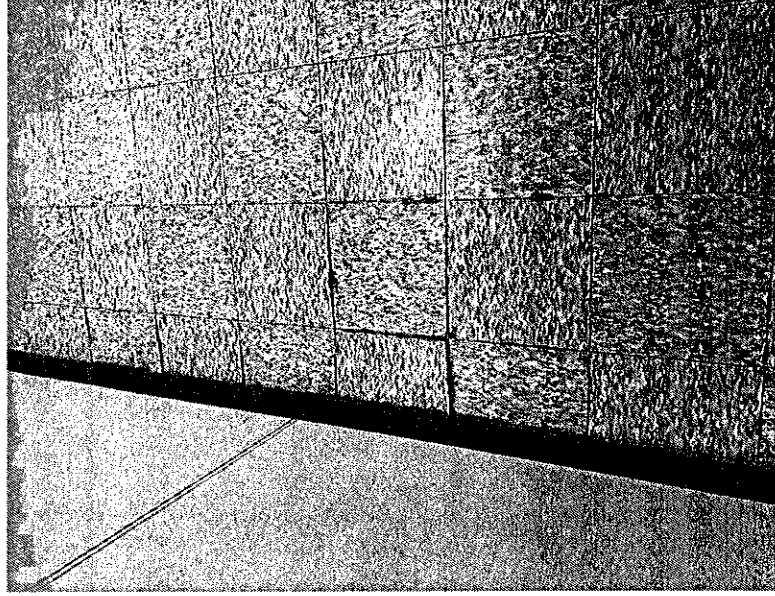
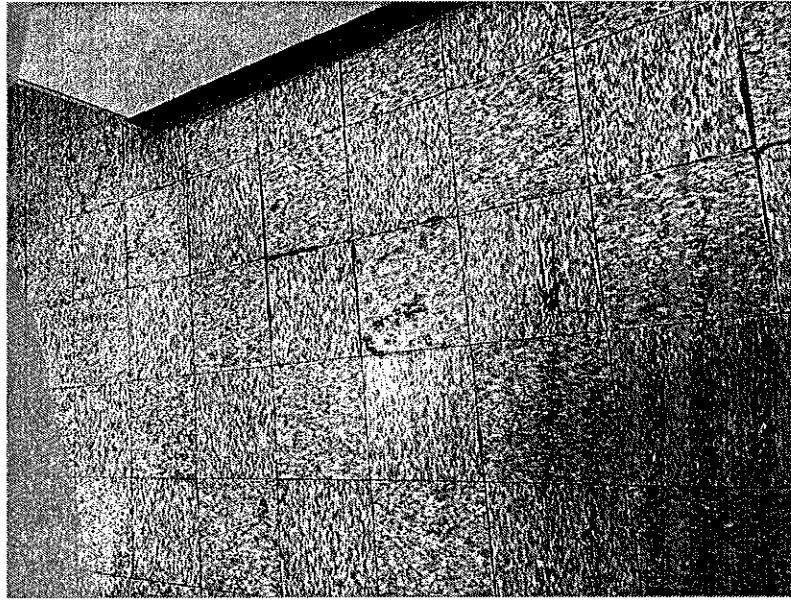
2019- Slab Moisture Investigation performed by Hoffman Architects

- Report produced May 2020
- Specific tests related to concrete slab moisture were completed at selected locations throughout the lower level
- Findings – Moisture vapor transmission rate (MVER) between 8.6-13.7 pounds per 1000 square feet – As a comparison, sheet and tile manufactures don't allow their materials to be placed when MVER levels exceed 2-3 pounds per 1000 square feet.
- Typically, a vapor barrier membrane is placed on top of a compacted sub-base prior to the pouring of a concrete slab – Hoffman Architects professional opinion that the slab was cast without an effective vapor barrier – primary reason for the excessive water vapor transmission through the slab – Later determined by Downes to be the case
- The fix – “negative side waterproofing” – all flooring is removed – shot blasted – and specific coating products applied to resist specific moisture transmission rates

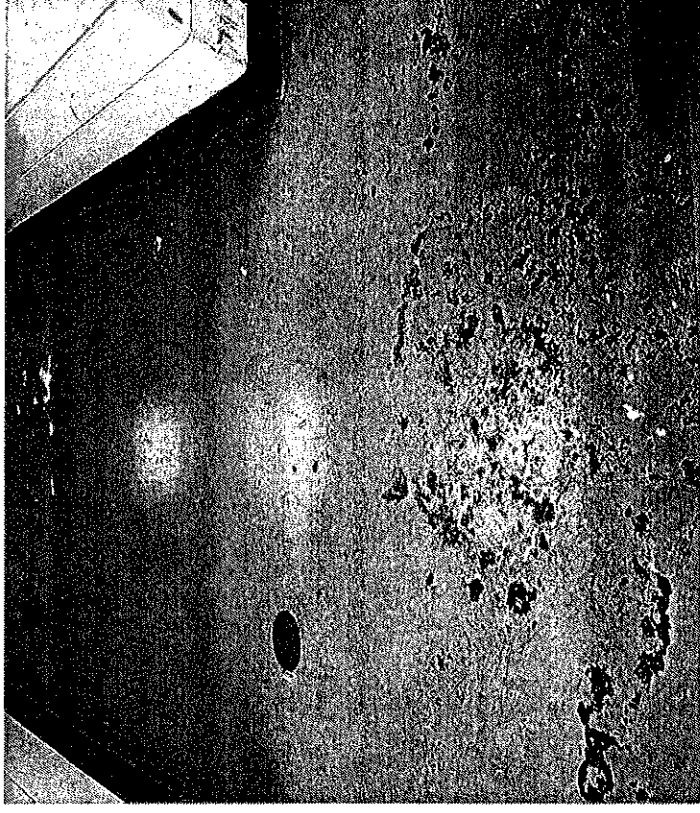
Lower Level Floors



Lower Level Floors



Lower Level Floors – continued



Lower Level Floors – continued

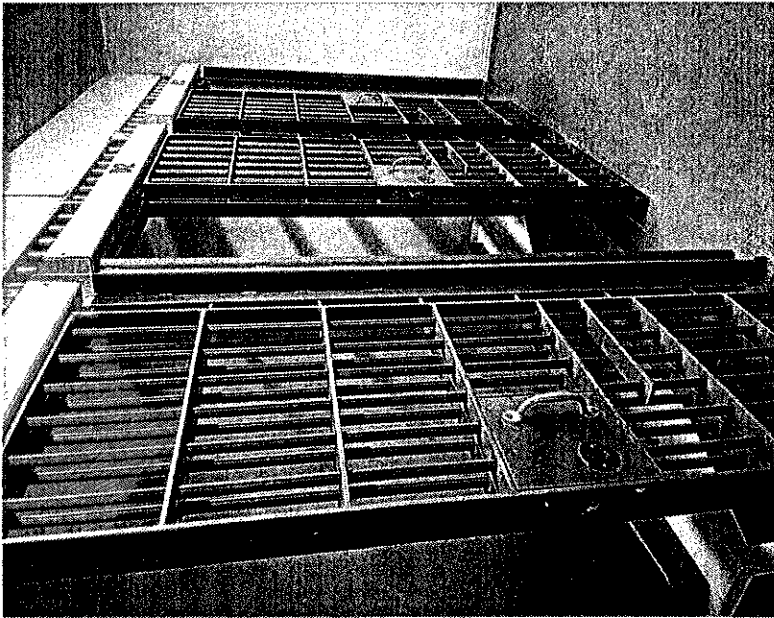
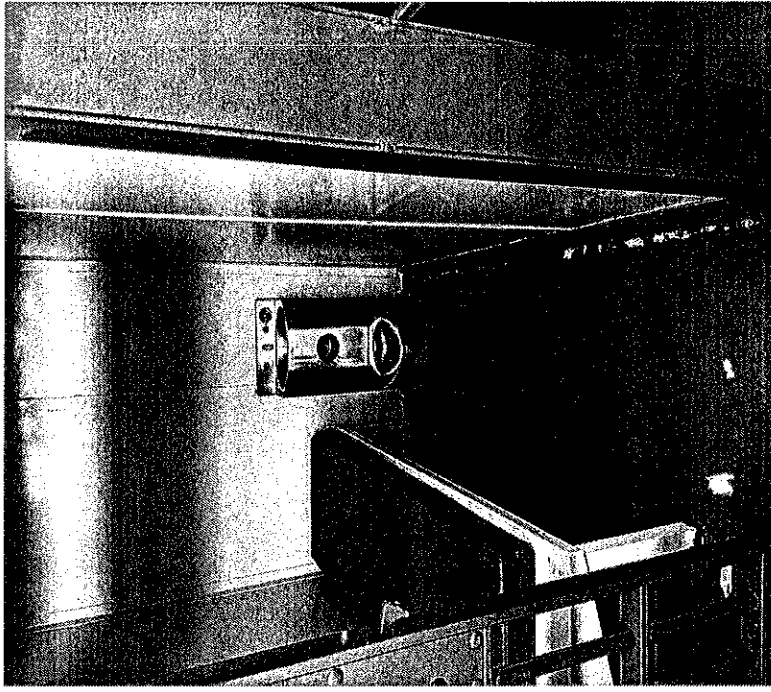
- High rate of vapor emissions – results in excess humidity
- Slippery floors
- Failure of flooring adhesive properties
- Mold
- Dirty duct work – HVAC

Background – Path to Proposal

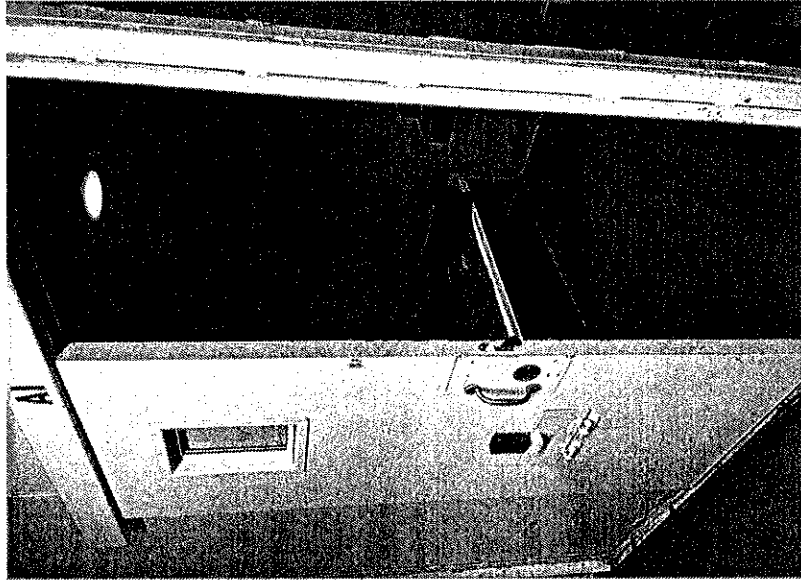
Cell Blocks – Exposure

- Current cell blocks original to the Harrison Ave Police Department
- Old style bars – illegal in some states – need solid doors
- Susceptible to hanging – routinely have arrestees placing clothing around neck/bars
- Injuries sustained from banging head on bars
- Cells lack adequate ventilation / fresh air return
- No fire suppression
- Choke/ hanging points inside cell
- Entry/ egress – too small for extraction purposes
- 14 cells - Too many cells – wasted space
- Fixtures in cells are original to building and at end of useful life expectancy

Cell Block



"Bio- Hazard" Cell



- 2 Bio-hazard cells
- Solid door – now utilized as our main cell block
- Wider entry
- Lacks adequate ventilation
- Lacks fire suppression
- Fixtures at end of useful life
- Older design of fixtures allows hanging/choke points

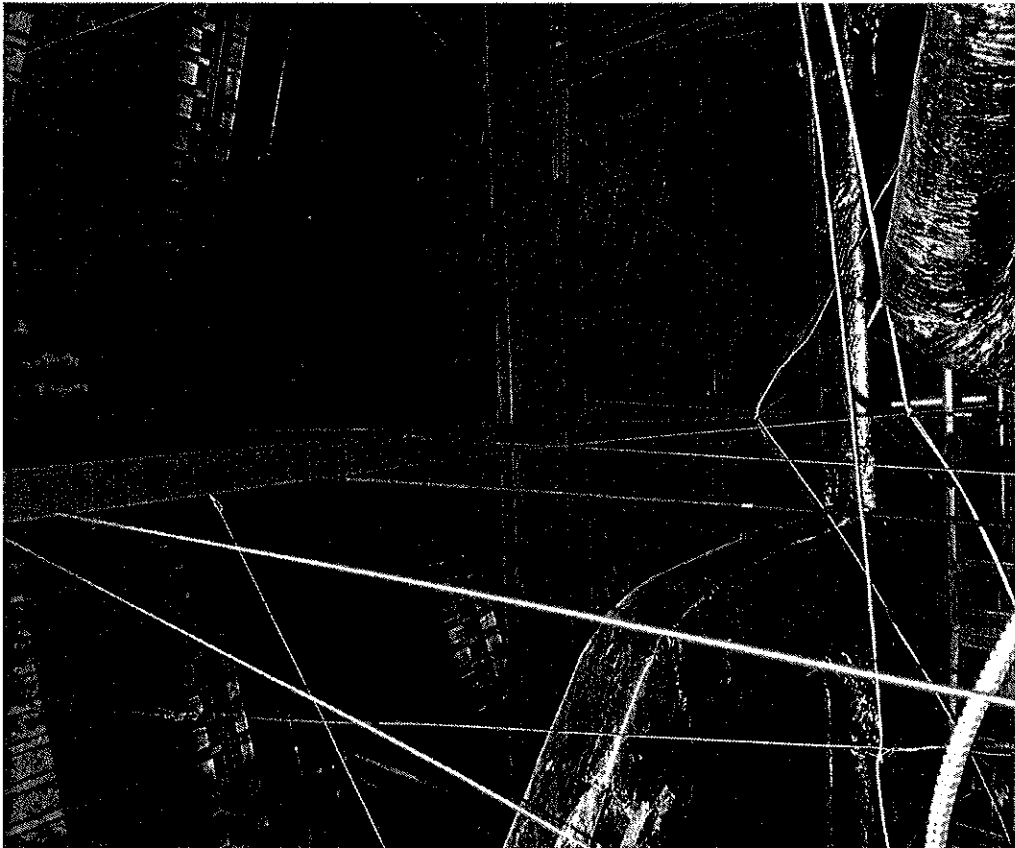
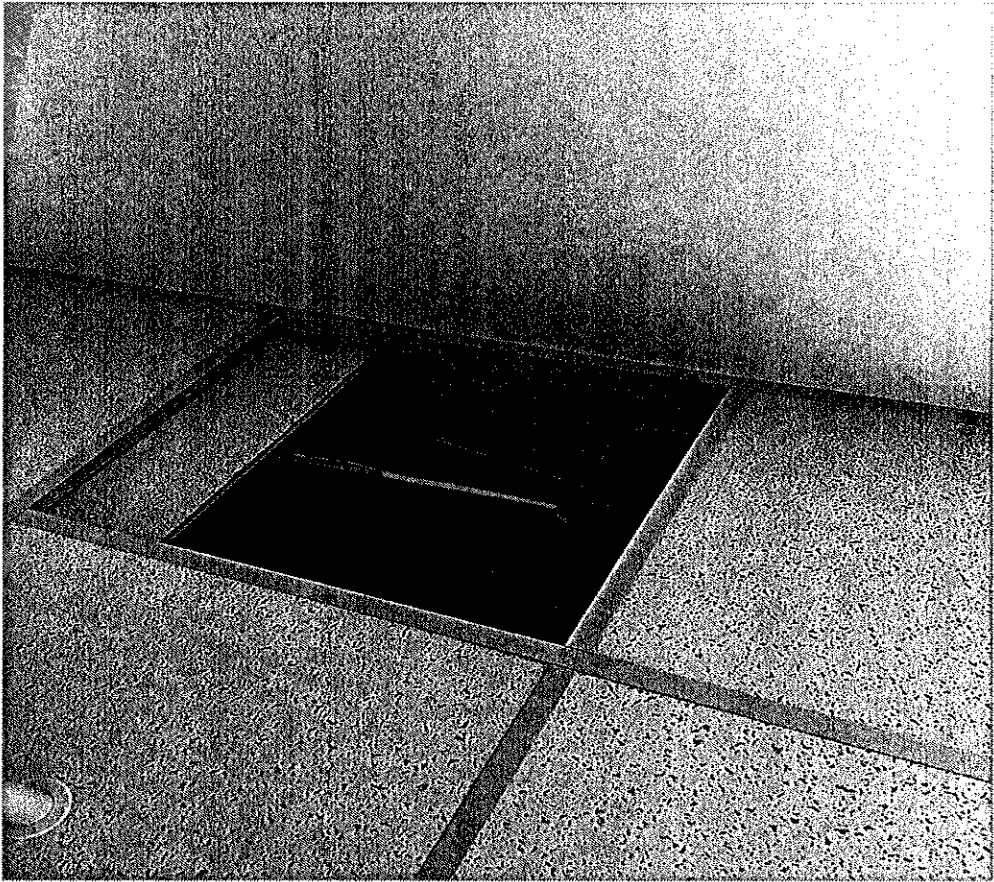
Background – Path to Proposal Female Locker Room – Space needs

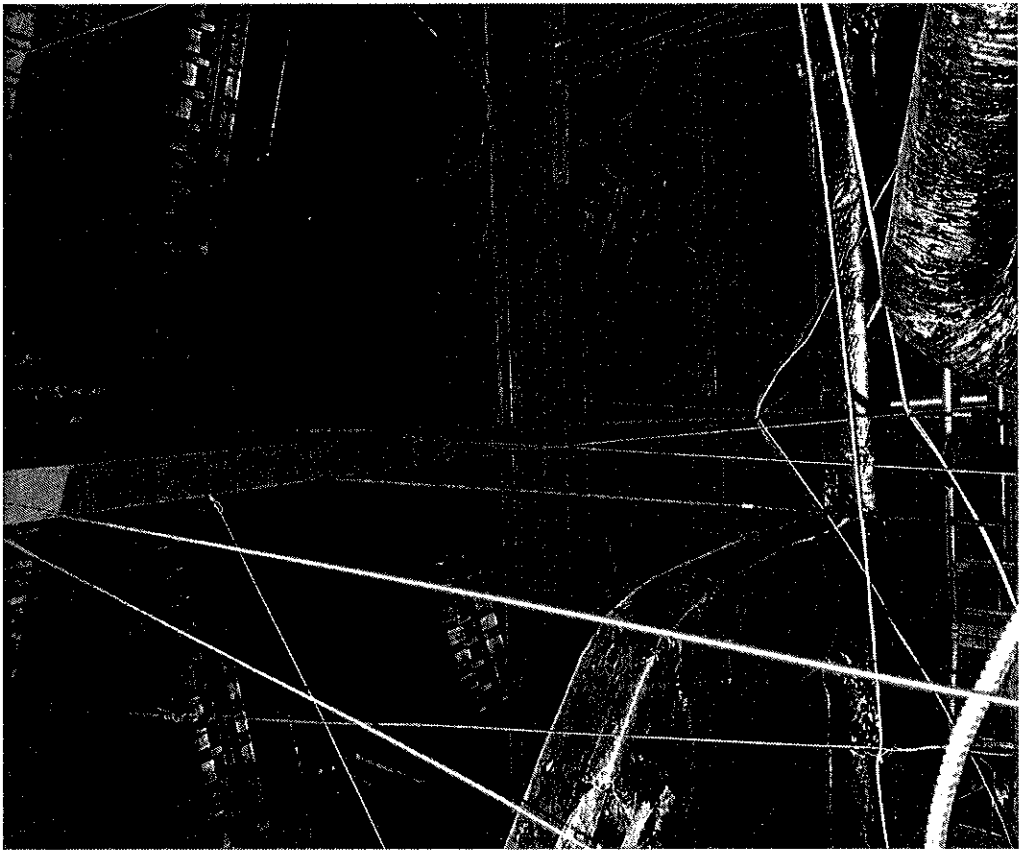
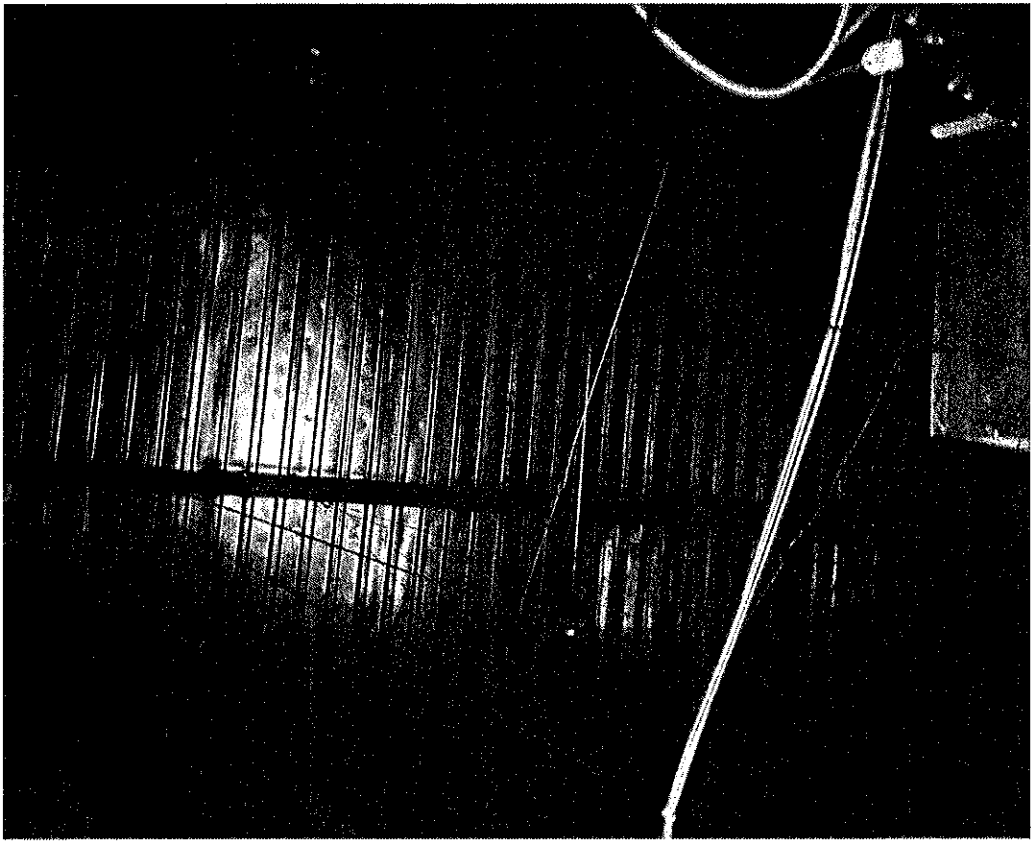
- 1995- Two female Officers – 12 lockers
- 2023- have 10 female officers – represents 20% of Officers
- Need to increase space
- Running out of space/ lockers



HVAC

- Minor changes to the floor plan over the years have affected the balance of the HVAC
- Gas fired rooftop units currently service the building – RTUs are single zone, constant volume systems – comfort issues exist because temp control is based on the occupancy/ settings in the room that contains the thermostat (one thermostat controls multiple rooms)
- No dehumidification capabilities on current system
- Some clearance issues were identified as out of code (exhaust fans to dedicated outdoor air intake for cell block)
- Uninsulated Space above ceiling tiles





Physical fitness – space needs

- Mental health and wellness is a major focus and consideration of police leadership around the nation.
- The ability to provide an adequate space for physical fitness is a must in police agencies and is tied directly to the health and safety of officers.
- The current space is heavily used, inadequate to support its usage and must be expanded to meet the needs of the department.
- Quality of air concerns and mold growth has been experienced due to high vapor levels on the lower floor.

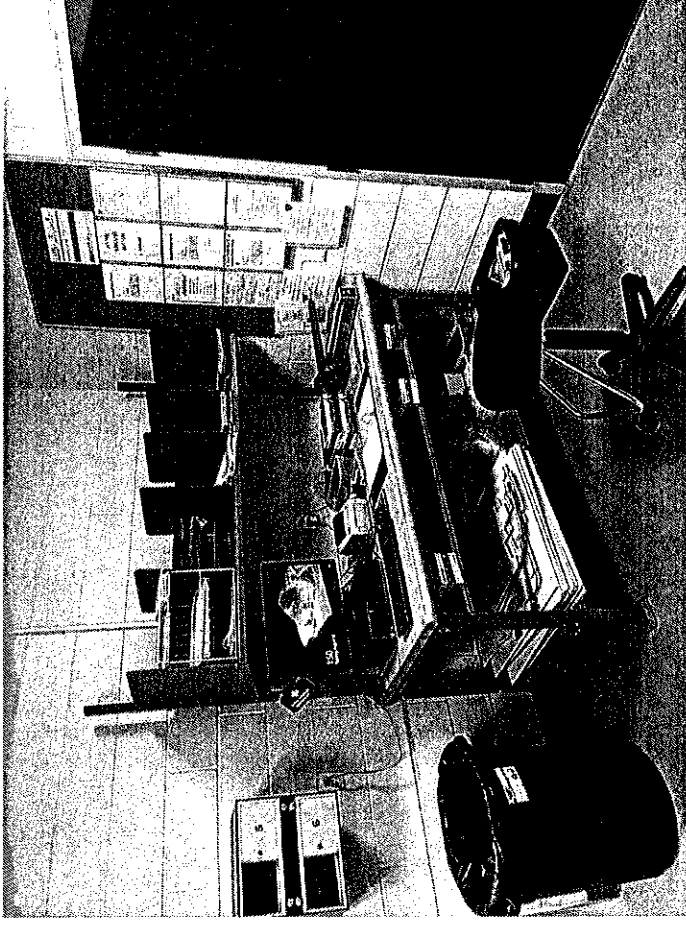
Report Writing –space needs

- Major increase in modern day policing in terms of reporting
- Small room with two stations serves the entire Patrol Division – 65% of Agency
- Often both stations are occupied



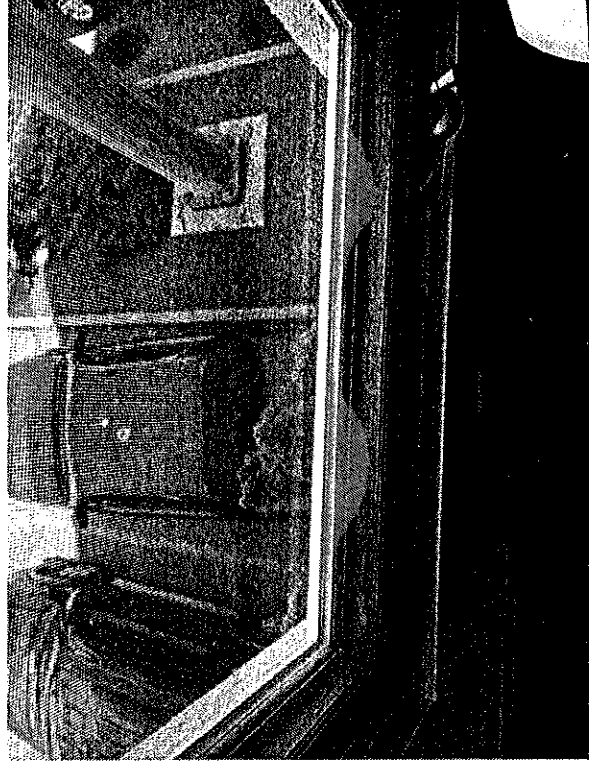
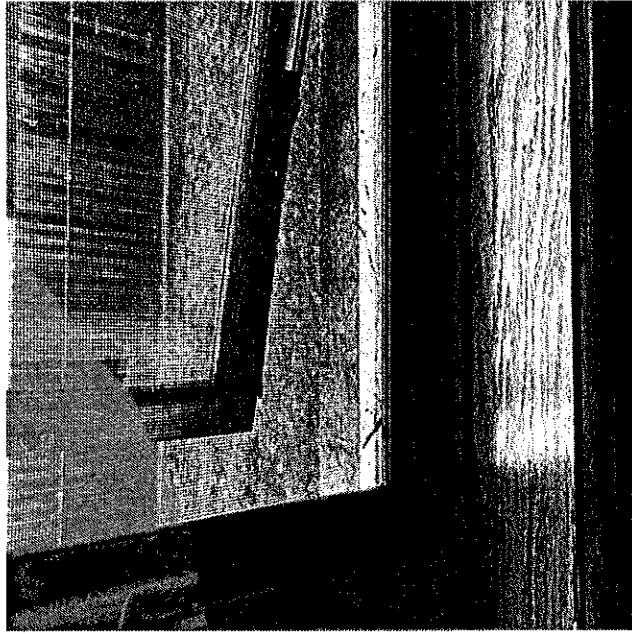
Evidence processing – space needs

- Area serves entire patrol division and detectives.
- Better utilization/ allocation of space in our proposal



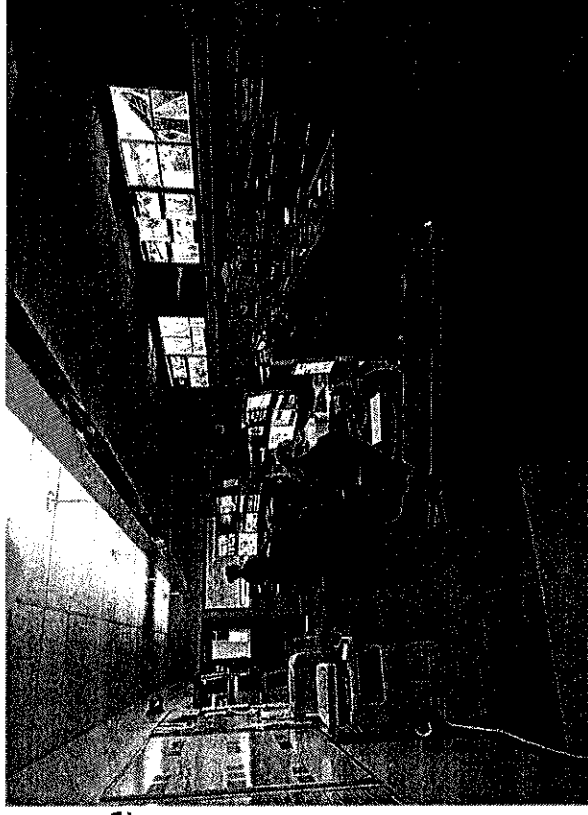
Main Floor

- Windows – original to building - residential grade



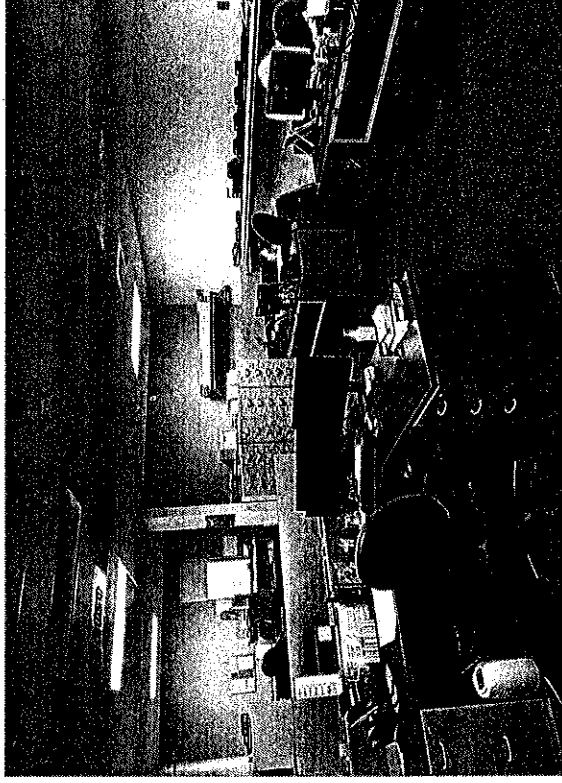
Dispatch – space needs

- 24/7/365 – operation – PD,FD,EMS
- Dispatchers are confined to the space during their shift
- Increase in technologies to monitor requiring more space
- Comforts needed – locker space/food storage
- Direct access to restrooms
- Additional Work Station – growing demands on police, fire, ems



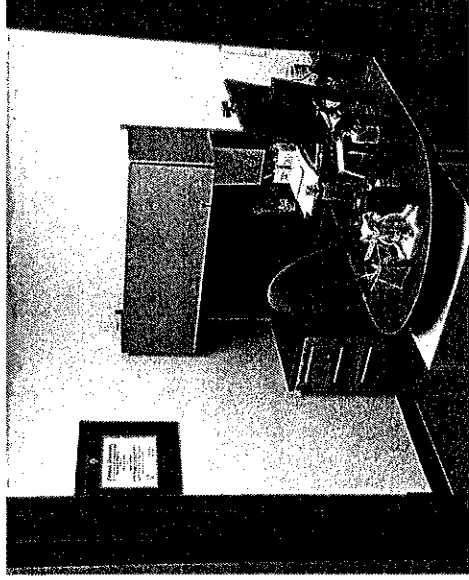
Records – space needs

- Too much space currently allocated to records
- One full time clerk
- 3 part time staff
- Records increasingly becoming digital
- Officers type reports/ complete most records



Offices - Main Floor – space needs

- Re-allocation (re-organization) of square footage is needed
- Over the years, closets have been built, offices/walls added – HVAC balance
- Growth -Police social worker = closet / 2 employees from I.T/ Crime Analyst

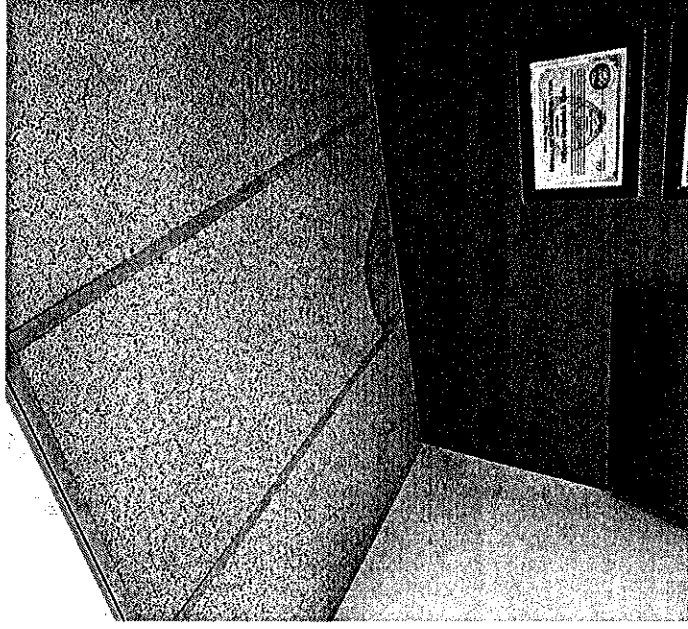
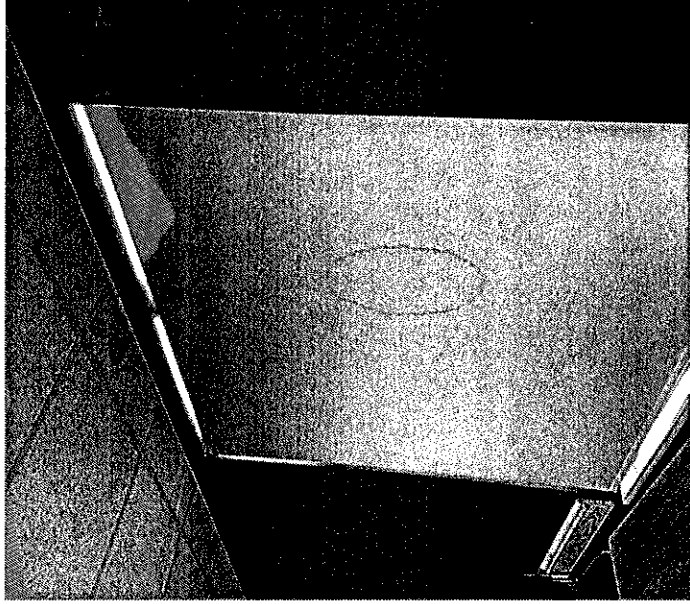
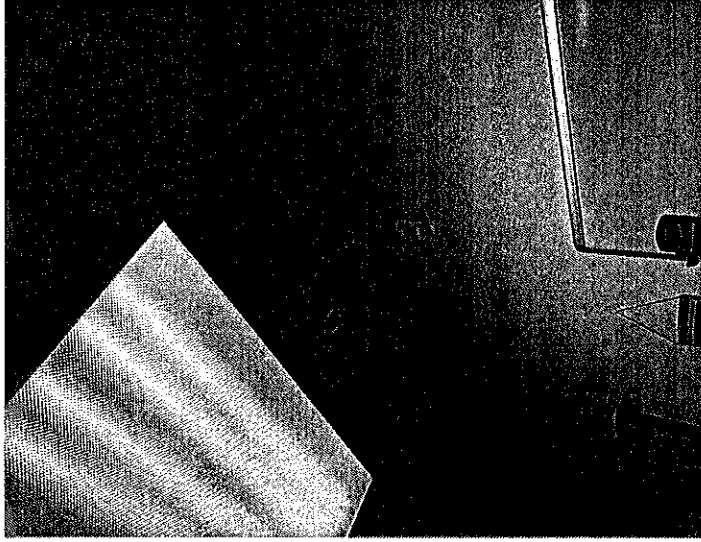


Offices - Main Floor – space needs

- Re-allocation (re-organization) of square footage is needed
 - Additional main floor considerations:
 - Better use of space
 - Pass offices to enter restrooms – (relocating doors to corridor)
 - EOC center now used as one oversized office
 - Placement of Captains Offices/ Admin Lt. in closer proximity – remove from building interior – Lt. Office too large – needs for IT, Social Worker
 - Juvenile Cell Block – no longer utilized – wasted space – need for ADA assessable restroom

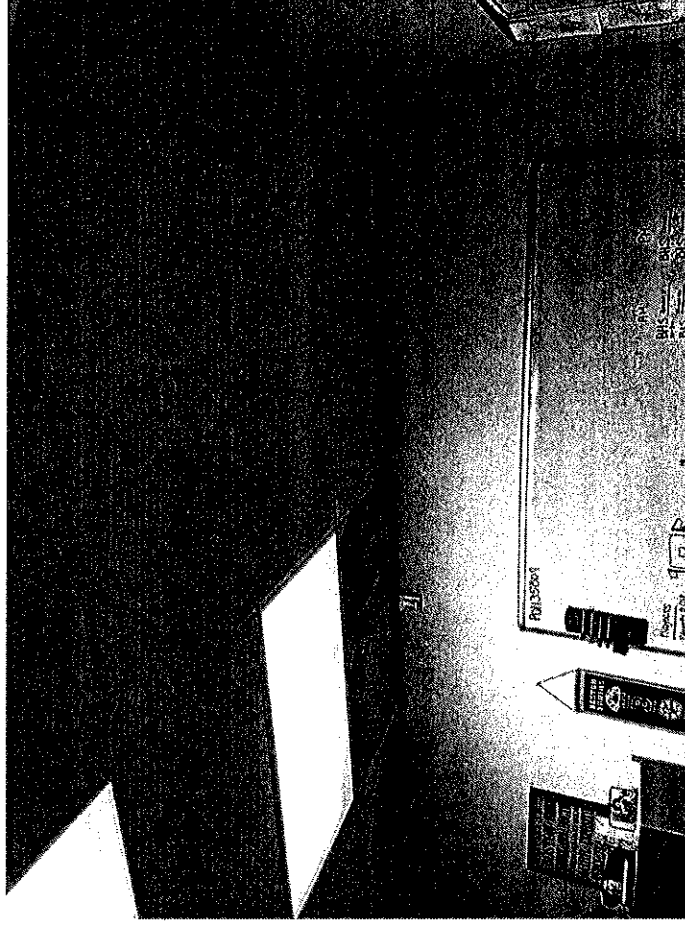
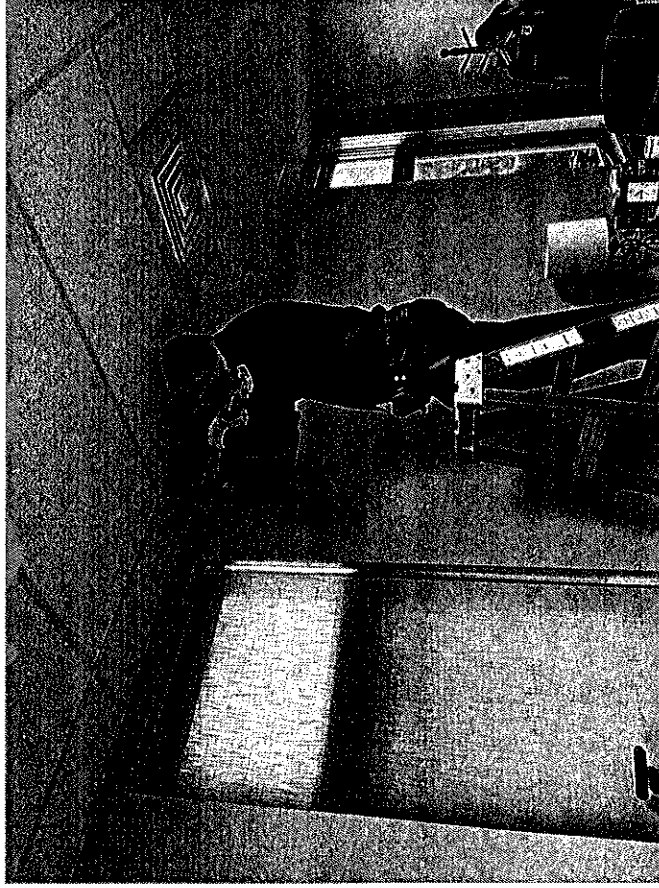
Exterior

- Roof – water leaks observed throughout the building



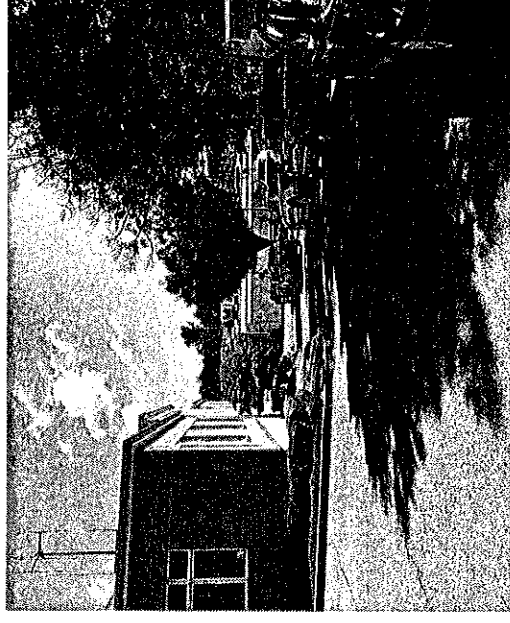
Exterior

- Roof – water leaks observed throughout the building

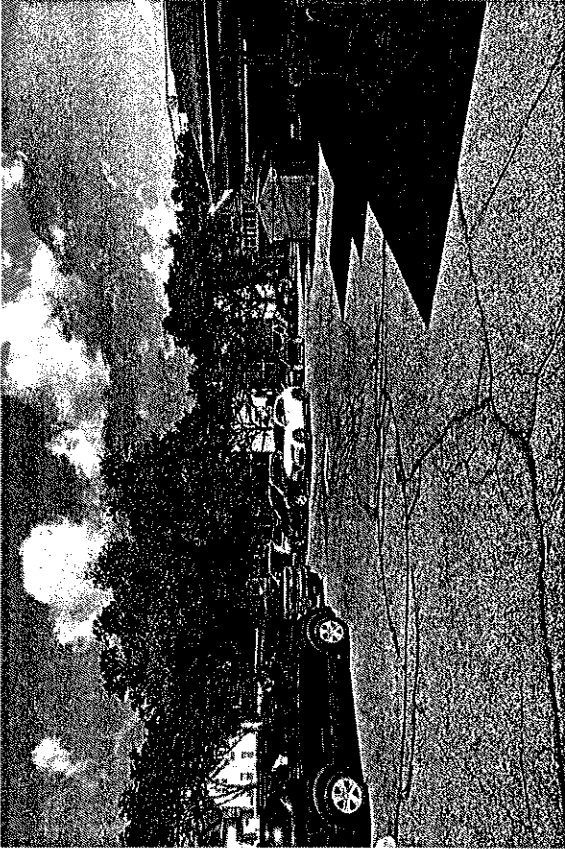
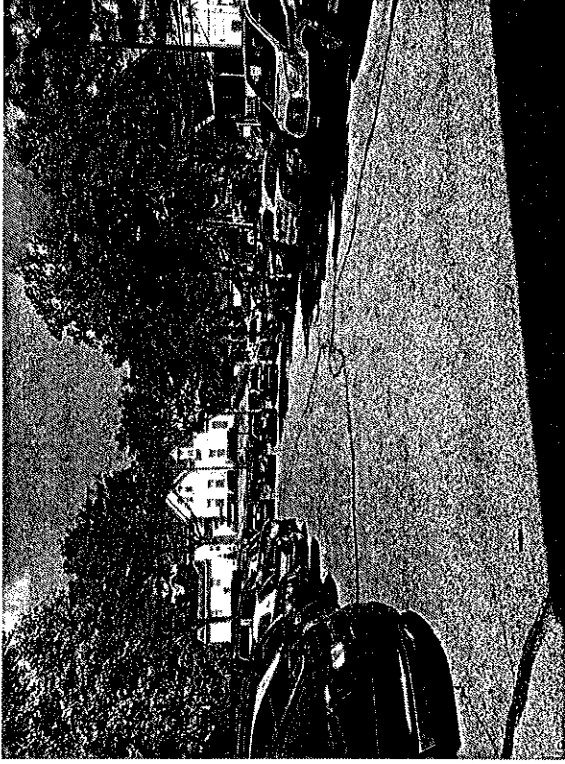


Exterior

- Public Parking – currently limited three spaces / one handicapped – forces public to park in back lot and walk up the side hill
- Lack of security (stalking, 1st amendment audits, damage to private vehicles, mental health issues)
- Lack of police parking
- Risk mitigation

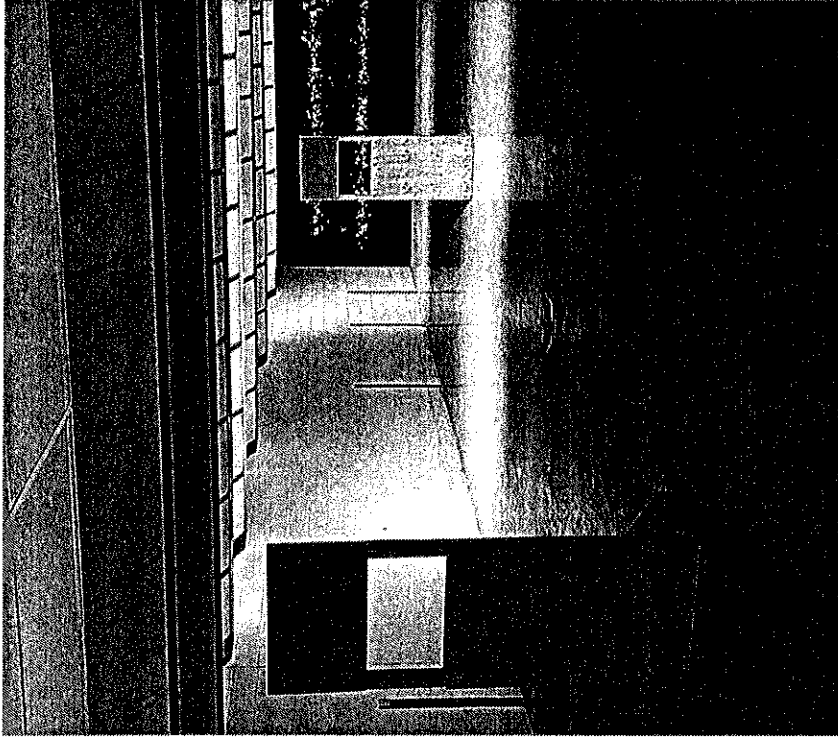


Rear Parking Lot



Firearms Range

- Located at garage of building – 45 Harrison Ave
- Extensive use – Officers mandated annual recertification training
- Range time is becoming more expensive/less available to find off sight
- In-door facility can be used regardless of weather
- Unlimited access in the event an officer needs remedial training
- Current equipment – 5-8 years will reach its useful life expectancy



Energy Related Goals

- Project will be a major update and re-organization of the building as it approaches its 30th anniversary.
- Working with the Clean Energy Committee – scope of the project will include energy related enhancements
 - Energy efficiency improvements
 - Electrification – solar power options - HVAC – Solar panels
 - Take advantage of Eversource Energize CT Path 2
 - Whole building energy use intensity reduction / Electrification / Incentives

General

- Focus of the project is based on the operational needs of department
- Design incorporates a better use of existing space
- Project will be phased to limit disruption of a 24/7/365 operation one time
- This brief presentation just touches the surface of the scope of the project
- Proposal is long term solution to update the building and prepare for another 30- 50 years of service
- Improve energy efficiency and use of clean energy