

**Town of Valdese
Town Council Public Safety
Building Workshop
Old Rock School - Auditorium
400 Main St. W, Valdese
Tuesday, February 15, 2022
6:00 P.M.**

- 1. Call Meeting to Order**
- 2. Invocation**
- 3. Pledge of Allegiance**

- 4. Welcome**
Charlie Watts, Mayor

- 5. Current Facility Repair Analysis**
Marty Beal, Principal Architect with CBSA Architects

- 6. New Construction Analysis**
Marty Beal, Principal Architect with CBSA Architects

- 7. Financing Plan**
Bo Weichel, Finance Director

BREAK

- 8. Public Comment/Q & A**
*Comments are limited to 5 minutes
Please use the microphone when speaking
State name and address*

- 9. Adjournment**



TOWN OF VALDESE PUBLIC SAFETY BUILDING EVALUATION

Version:	Final
Date of Issue:	February 10, 2022
Prepared By:	CBSA Architects
Prepared For:	Town of Valdese

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2 Executive Summary

Visits were made to review the Public Safety Building and former Town Hall Building located at 121 Faet Street SW on January 7, 2022, and February 2, 2022, by CBSA Architects. A visit was made on January 12, 2022, by CBSA Architects and Taylor & Viola Structural Engineers. Previous reports prepared for the Town of Valdese from other architects and engineers have been reviewed prior to visiting the buildings. Various issues and concerns are presented within the Town's previous reports. We have met with staff members from the Town of Valdese Fire Department and Police Department. They have shared their concern about issues present within the buildings. In general, our visual observations support staff concerns and findings within previous reports. We have expanded our report beyond the existing building to compare it with a new facility designed to respond to the current needs identified by Police and Fire.

The purpose of this evaluation is to determine the feasibility to repair the building for continued use as a public safety facility. Exterior masonry walls will need to be repaired to bring load bearing masonry walls back to their original load carrying capability. The building is not compliant with current handicap accessibility requirements. There are environmental issues associated with the floor drainage out of the Fire Apparatus Bay which will need to be resolved to become compliant with Town of Valdese requirements. Building renovations will include upgrading of various building systems such as plumbing, HVAC, and electrical systems.

Various issues are present within the building needing repair and renovation. New building signage can be provided to help upgrade the image of a newly renovated facility. The Police and Fire Kitchen needs renovation. A new generator system is required so that the entire facility can be served by emergency power. Steel frame bracing will be required to provide seismic reinforcing to comply as a Category 4 Essential Facility. Asbestos existing and abatement will be required prior to renovation work. Interior finishes are out of date and have degraded to a point they need replacing. No ventilation system or carbon monoxide detection system is present within the Apparatus Bay. Existing windows are old, not energy efficient, and need to be replaced. General renovations are needed to upgrade office space. A fire sprinkler system is needed due to the bunk room which was not part of a original building design.

Our Opinion of Probable Cost of Construction to repair and renovate the existing facility into a Category 4 Essential Facility is \$6,484,199. This cost includes repair and renovations cost, soft cost, furnishings, and equipment. It also includes cost to construct a temporary facility to relocate the fire department vehicles, equipment to a temporary facility while renovation work takes place. *The cost includes a North Carolina Grant in the amount of \$500,000 to be applied towards the project.*

Prior to this report a building program was developed and a Schematic Floor Plan designed based upon the Fire and Police Departments' current and future operational needs. The existing building is approximately 16,818 square feet. The proposed new facility design is approximately 24,500 square feet. There is a program disparity of approximately 7,644 square feet within the existing facility. After the existing building is newly renovated this space deficiency will remain.

Our Opinion of Probable Cost for a new facility providing space adequate to meet the current needs of fire and police is approximately \$7,744,982. This includes site development, construction cost, soft cost, furnishings, and equipment. Approximately \$196,932 has been paid out to date. A North Carolina Grant for \$500,000 will be used to pay toward the project cost. Remaining project cost to date is approximately \$7,048,050.

3 Condition of Existing Building

The reference building is composed of three (3) different buildings constructed at different periods in history. South Building was constructed in 1978 and contains Valdese Police Department, administrative offices for Valdese Fire Department and two (2) drive thru apparatus bays for the Fire Department. Center Building was constructed in 1926. Fire Department occupies most of this building. It is a two-story structure and contains two (2) back-in apparatus bays, bay support, and storage space on the lower level. The upper level is accessed by stairways located on the east and west sides of the building. Training Room, Bunk Room, Day Room, Locker Room, Toilet, and various Storage Rooms are located on the upper level. North Building was constructed in 1975 as the former Town Hall. The current building stands vacant since Town Hall relocated.

The exterior load bearing walls have cracked at various locations throughout the facility. The load bearing capacity is compromised; however, the South Building appears to be in a worse condition than the North Building. Walls reveal both horizontal and vertical cracks within the interior and exterior wythes of masonry. Horizontal cracks occur on the exterior at 16" on center pattern due to the horizontal joint reinforcing rusting and causing the mortar joint to spall away from the wall. This is a common occurrence since joint reinforcing during this time of construction was not galvanized. Moisture within the wall compounded with freeze and thaw cycles eventually cause the mortar joint to crack. It appears that this problem has been partially addressed on previous occasion. Mortar joints within the south wall appear to be repaired at the 16" on center pattern for approximately ten (10) courses across the wall between finish floor and bearing elevation for roof structure. Along the interior of the same wall evidence shows horizontal mortar joint spalling and reveals that the joint reinforcing has broken allowing the interior and exterior wythes to separate allowing the wall to displace out of a true vertical plane. Vertical cracks are present on the east, south, and west interior walls extending through brick as well as mortar joints. Vertical joints appear to have separated in a range of 1/16"-3/16". There is breakage through brick measuring greater than 1/2" in selected locations. Exterior masonry walls of the South Building appear to be in worse condition followed by the North Building.

Please refer to Appendix B for supporting photographs and diagrams.

4 Building Repairs and Accessibility Renovations

Exterior Wall Repairs

The exterior load bearing masonry walls have developed various types of cracks. Vertical cracks are present on the interior brick. Mortar joints are spalling due to the corrosion of steel wall ties on the exterior brick wall. Wall ties appear to have degraded to a point where they have broken and no longer tie the inner and outer brick together as one wall. This failure has reduced the load carrying ability of the wall from its original design. The exterior wall is showing signs of deformation and appears out of plane upon visual observation. This condition is present along the east, south, and west walls of the south building where police and fire administration currently reside. The same condition exists along the east, north, and west walls of the north building which was the former town hall.

One solution for wall repair is to “stitch” the inner and outer wythes of masonry back together using a stainless steel helical wall tie. These helical anchors are drill screwed into the wall from the exterior side of the wall. The anchor extends through the wall into the inner wythe of masonry and connects both wythes of masonry. The entry point will leave a counter sunk screw head on the exterior face of the wall. A mortar patch will fill the wall penetration. Helical anchors will be installed in a pattern 16” on center in both horizontal and vertical directions. Existing mortar joints will be removed by grinding mortar out to a depth necessary to reapply mortar and tuck point the joint back in place. Mortar will need to be carefully prepared to match the color of the existing mortar to reduce the contrast in mortar color. A letter from Taylor & Viola Structural Engineers is attached with this report to provide more information and a professional opinion.

This method of wall repair will return the wall back to the original load bearing condition at time of original construction. The North Carolina Existing Building Code allows this type of repair since the building is existing and there is no change in occupancy. This repair does not provide seismic reinforcing which is required to brace the wall and be compliant as a Category 4 Essential Facility.

Parapet Replacement

Along the east façade of South Building the horizontal mortar joint has deteriorated along the roof bearing elevation of the masonry wall. The parapet wall is broken at the bearing elevation and extends 2’-0” beyond. There is concern that the parapet wall is at risk since the wall has no positive anchorage to the building structure and the top of wall is not supported to resist lateral movement. We recommend that the parapet wall be removed and reinstalled so that it can be anchored to the building structure. This will be necessary along the full east elevation of South Building and extend approximately 10’-0” westward along the south elevation. The roof will need to be modified and patched to allow parapet wall replacement.

Exterior Doors

Three hollow metal door and frame assemblies appear to be corroding and need to be replaced. At one of the assembly locations the anchor straps which are laid into the masonry wall to anchor the frame in place appears to have rusted and broken. The door frame assembly can move within the wall and is not anchored secure.

Police Upgrades

Chief of Police indicates that once any building improvements are undertaken there are spaces within the building which need to be improved as required by Commission on Accreditation for Law Enforcement Agencies (CALEA). The Armory, Evidence Storage and IT Rooms need to be isolated from the surrounding building. Currently the walls around each space extend through the ceiling but do not extend to the roof deck.

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These walls will need to extend up and seal to the roof deck to secure each space and prevent access into the spaces from above the ceiling. The Armory and Evidence Storage will be required to have their own separate HVAC system which only serves the individual space and is not connected to adjacent building systems. Existing ceilings around these spaces will need to be removed so that work can take place above the ceiling. This work will create a disruption for both fire and police but may be able to take place while building remains occupied.

Fire Sprinkler

The existing building is not protected by a fire sprinkler system. Due to the nature of firefighters sleeping at the fire station as part of their job, a new facility is required to be equipped with a fire sprinkler system. The 1926 building does not appear to have been designed with sleeping arrangements. The 1978 renovations did not include a Bunk Room. The current Bunk Room space was indicated as an office which apparently was later converted into sleeping quarters for fire fighters. To provide a sprinkler system a new fire water service will need to be installed equipped with a hot box and back flow preventer. A riser and riser controls are required. This new sprinkler system will be retrofitted into the existing building to provide full building coverage.

Apparatus Bay Floor Drainage

The two drive through Apparatus Bays within the South Building are equipped with four floor drains. The two back-in bays within the Center Building are not equipped with floor drains. The floors drains are piped under ground out the east side of the building and flow south connecting to the storm drainage and eventually spills to daylight on the south side of Massey Street beyond the railroad track near Town Hall. Current day building code requires the floor drains to flow through a sand/oil interceptor prior to draining into the sanitary sewer system to be properly treated by wastewater treatment. Currently truck and Bay floor washing spill untreated into the environment creating an environmental issue and violating Town of Valdese requirements for storm water control.

We recommend installation of a new floor drain system within all four Apparatus Bays. The Bay floor will need to be removed to reverse the system flow out the east side of the building where a sand/oil interceptor will be installed then connect into the public sanitary sewer system. This work will be evasive and required fire trucks and equipment to be temporarily relocated until work is complete.

A new floor slab will be installed to be compliant with the building code. The existing 5" unreinforced slab will be replaced with an 8" reinforced concrete slab. With the new slab a new concrete floor finish will be provided.

The concrete apron in front of the Bay doors on the West side of the building will be removed to allow installation of the sand/oil interceptor and sewer lines from the interior floor drainage system. A new 8" reinforced concrete apron will be installed.

Water Leak

Roof drains which are routed into and down within the cavity of the exterior masonry walls flowing to the southeast corner of the building and spilling into the storm drainage system. Offices within the southeast corner of the police department previously experienced water rising from under the slab up through the joint between the concrete floor slab and exterior wall. This event seems to have occurred during a heavy rain event with significant amount of water entering the building. We speculate that a roof drainpipe running down within the exterior masonry wall cavity may have developed a leak running either within the wall cavity or below the floor slab. Owner indicates that previous exploration reveals that the subgrade might be

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approximately 12" below the top of the floor slab. The subgrade may have washed out from bottom side of slab. The source of this event has not been verified. A possible solution is to reroute roof drainage above ceiling and extending drainpipe through the exterior wall and run it down along the exterior of the building and connecting with the existing storm drainage. Perimeter office ceilings are anticipated to be removed along three exterior walls to install drain piping above the ceiling. This work will create a disruption for both fire and police.

Handicap Accessibility Renovation

All existing toilet and shower facilities within the building are not compliant with current day handicap accessibility requirements. The front and rear entrance doors to the North building are not compliant with current day handicap accessibility requirements. We understand that if federal money will be used to finance this renovation project, the building will be required to comply with the American Disabilities Act Accessibility Guidelines. All toilets are recommended to be demolished as required and renovated compliant. The North Building storefront entrance systems will be modified with compliant door widths. The rear door does not have adequate clearance for proper access. It is anticipated that the door recess may have to be removed and the door relocated in line with the east exterior wall.

An elevator to serve the second floor may need to be provided. An elevator will most likely be an addition to the existing building. Construction work for an elevator will include elevator equipment, elevator shaft, machine room, plumbing, HVAC, and electrical work associated with elevator installation. A building connection and corridor will need to be made to allow access from building to elevator lobby.

Asbestos Abatement

Vinyl asbestos tile has previously been removed from the first floor of the west stair. The adhesive from the tile remains exposed on the concrete floor. We recommend testing the potential hazard and abating if positive for asbestos as part of building repairs.

Please refer to Appendix B for supporting photographs and diagrams.

5 General Building Renovations

General building renovation will be in addition to building repair and accessibility renovation but can occur at the same time. With a newly renovated facility a new exterior building sign can be provided. General renovations will be evasive work and may require a portion of the building wall to be removed in order to gain access into the building interior with tools, material, and equipment.

The building interior will need to be fully demolished to create necessary space to construct steel frame braces which will help provide the necessary means to convert the structure to a Category 4 Essential Facility. Much of the floor slab will need to be removed so that footings can be installed to erect the frames and connect to the existing foundation. Bracing frames will need to anchor to exterior walls and roof structure.

Building systems will need to be upgraded during this renovation. The mechanical systems are old. The mechanical equipment is inoperable within the North Building. Systems are operating within the Center and South Buildings, yet they are receiving constant maintenance. As the system ages, parts are becoming obsolete. Maintenance has been deferred anticipating a new facility to replace the existing. Plumbing piping is old and there are many issues with the sewer piping. Repairs are necessary. There are issues with slow drainage which may be due to corrosion within the pipe. Underground sewer piping can be replaced in many locations where the floor slab will be removed for renovation. There are issues with the existing electrical system. Wiring is old. Light fixtures are old. Maintenance is continuous. New LED lighting can be installed throughout the building as well as replacing life safety equipment such as exit lights and emergency lights. There is a 100 kw back-up power generator which serves the South Building and portion of the Center Building. The existing generator does not have adequate excess power to pick up the remaining building load. A larger generator will need to be installed to provide a full building emergency generator. This will require a new transfer switch as well as electrical work to make proper connections.

Finishes are old and appear to have reached their life expectancy. Ceiling panels are stained from roof leaks. Vinyl floor tile is detaching from the floor. Walls need fresh paint. The second floor has carpet in several spaces. The belief is that underneath the carpet there may be asbestos floor tile and the adhesive which will need to be abated upon carpet demolition.

The Apparatus Bays are not equipped with any type of mechanical ventilation system. A new general ventilation system and carbon monoxide detection system will be installed. A new vehicle exhaust system will be provided for each vehicle bay. This will help prevent vehicle exhaust fumes within the bay areas and reduce the amount of exhaust from entering the living and work areas. The existing bays are small in width and contain low ceilings. Space is limited to install all of the required equipment for each of these systems.

Existing window on the second floor are old and not energy efficient. New metal operable windows will be installed to provide greater efficiency and less maintenance.

Please refer to Appendix B for supporting photographs and diagrams.

6 Logistics

It is our opinion that there will be at point during the renovation process that the building or at least portions of the building will need to be vacated so that work can take place. This will require police and/or fire to temporarily relocate out of their current occupied space or maybe even out of the building. One possible scenario might be a phased construction sequence which can reduce the number of relocations required for a final building occupancy.

Phase A

The old town hall building (North Building) is currently vacant. Renovate this building for Police. This will not give police any additional space. Their space needs remain deficient, but they will have a newly renovated space which is safe, and police will only need to relocate one time.

Phase B

Once police move out of their current location, renovation can begin within the southern portion of South Building. Fire Administration may be able to remain while this work is installed. When work is complete, fire administration can move into the southern portion of the South Building prior to beginning Phase C.

Phase C

This work will renovate the remaining South Building and the Center Building. Prior to beginning this work Fire will need to move out of the Center Building due to the extent of renovation work. Fire vehicles and equipment will need to relocate to some temporary structure until renovation of the Center Building is complete. A temporary structure may need to be constructed to house vehicles and equipment. One possible site may be across Faet Street where a temporary facility might be built. If construction is required for a temporary facility it will need to occur within Phase A/B to be ready for occupancy at beginning of Phase C.

7 Operational Requirements

The following is a list of issues and deficiencies lacking within the existing building. These observations were made during program development for a new building.

1. The 42-year-old & 95-year-old buildings are overcrowded and do not support efficient or safe fire and police operations.
2. These problems compromise ability for services to be delivered to the public in a safe, secure, and efficient manner.
3. Many functions are required to share small & crowded spaces.
4. There is limited opportunity for internal training, community activities, and many other functions.
5. The building in question is a combination of three structures. Cracks are present in most exterior walls. Cracks seem to be worse in the 1978 addition (police) and moving towards the fire department, but the entire structure is compromised.
6. Instead of there being a single storage area, items are separated into several small storage areas. SCBA compressor, gear storage, and ice machine are located within the Apparatus Bay. Truck exhaust creates risk for contamination.
7. Turn-out gear storage within Apparatus Bay. Truck exhaust creates hazardous contaminants.
8. Lack of sufficient areas for Storage Support is forcing the diversion of some Apparatus equipment, materials and supplies to improvised locations, impairing operational efficiency.
9. The Fire & Police Departments do not have a Fitness/Exercise area. Employees must leave the station to travel to a gym. The public gym is not always open during times that firefighters can attend and does not have afterhours access.
10. There is very little hands-on training that can be completed at existing building.
11. The Dayroom is only big enough for two people so when extra personnel are on duty there is not room. This does not support efficient fire and police operations.
12. The Fire Sleeping area is too far away from the bays and located on a second level. The existing facility has one large sleeping area which is not ideal when you have a combination of female and male employees. Only one bathroom and shower in the sleeping area.
13. Lockers are insufficient in number and size.
14. The Administration offices are small and spread in the facility.
15. One workstation for all the Patrol officers and is not sufficient.
16. Storage space which it located in the different building.
17. Administrative support lacks space for conference room, interview rooms, supply storage, file cabinets, copy machine.

18. Patrol functions lack needed grouping for operational efficiency.
19. The existing Police facility lacks Report Writing space.
20. The existing Police do not have a dedicated Roll Call room. Spaces are not large enough for all personnel involved in shift briefings.
21. Police Training is conducted off-site. Certain training needs are better conducted in-house.
22. The Police Department lacks a Locker Room with sufficient space to accommodate officer uniforms, personnel equipment, boots, and other needed items.
23. The Police Department do not have an arrestee Processing/Holding area.
24. Absence of a Sallyport for prisoner transfer at the Police facility is brings with it a serious security risk.
25. Evidence Storage is overly congested and operationally inefficient due to the existing building space. Evidence storage with sensitive evidence items is accessed from the Break Room, and some evidence lockers are located in the Break room due to the lack of space.
26. Evidence Storage and evidence related areas lack Pass-through lockers, Bag and Tag area, separation of the Drug, Valuable, Weapon storage. Evidence Storage has no logging system.
27. Break Room is too small and lacking in needed features, i.e., sink, oven, dishwasher, microwave, refrigerator, icemaker, and sufficient vending machines. All these features are presently located in the Kitchen on the Fire Department side. It is very insufficient in location for required access and in needed features.
28. The entire Fingerprint and photo ID area lack secured separation from civilian use.
29. Central location is needed for printer, copier, scanners, fax, and shredder.
30. Storage areas are located outside of the building, and this restricts access on a daily basis. Each Police Department unit requires storage for different purposes. Among the needs are archival storage, equipment/supplies.
31. Functionality of the Records Division is to work as a large open space with individual work areas. Administrative Assistant serves two Departments Police and Fire. Existing support areas currently in dire need additional space with no means for expansions in the present building configuration.
32. Lobby is overly congested and operationally inefficient due to the existing building space availability and configuration.
33. Rear of the police department is unsecure in the parking lot. Anyone can enter Police Parking lot in the rear of the department. Police employees must enter through traffic into the parking lot even though there are signs. Officers cannot see if anyone is outside the door before exiting the building. The rear door has no way of observing what or who is on the other side. No camera system is in place. No surveillance ability is provided. Police parking does not have a secure fenced parking lot.

8 Comparison

A new facility will provide approximately 24,500 square feet to meet current needs and a portion of future needs. Renovation of the existing building provides approximately 16,818 square feet of space. The existing building is approximately 7,644 square feet deficient in meeting current needs.

The increase in area will provide police with a sally port and secure processing and holding area. These components will assist in providing a safe and secure environment to bring arrestees into the building while maintaining security and the safety of other building occupants.

Fire Department will gain greater flexibility with a new four bay vehicle storage area which will be surrounded by isolated storage areas to locate equipment such as turn-out gear, SCBA filling equipment, and ice machine. Equipment is housed within a controlled environment out of the exhaust contaminated vehicle storage bay. Vehicle bays will better support the equipment for general ventilation and vehicle exhaust systems.

The existing facility does not provide gender separated locker and shower rooms nor sleeping quarters. A new facility will accommodate separate locker rooms and shower rooms for both fire and police. Individual sleeping rooms provide gender separated space.

Please refer to Appendix C for additional space needs and summary comparisons.

9 Opinion of Probable Cost

The project cost for renovating the existing facility (16,818 sf) is anticipated to be \$6,484,199. The cost includes building repair, accessibility upgrades, and building renovations to provide a Category 4 Essential Facility. Project cost includes soft costs, furnishings, equipment, and construction of a temporary structure to relocate fire fighting vehicles and equipment while renovation work is in progress. The project cost includes a North Carolina State Grant of \$500,000 to be used to pay toward the project.

The project cost for building a new facility (24,500 sf) is anticipated to be \$7,744,982. The cost includes site development work, building construction, soft costs, furnishings, equipment, land purchase, and demolition of the existing mill building. Approximately \$196,932 has been paid toward project costs to date. There will be a North Carolina State Grant of \$500,000 which will be used to pay toward the project. The outstanding project cost to date is approximately \$7,048,050.

Please refer to Appendix D and E for additional cost information.

Please call with any questions.

Sincerely,



Marty Beal, AIA, LEED AP BD+C

cc. Mr. Seth Eckard – Town of Valdese Manager
Mr. Jack Moss – Town of Valdese Chief of Police
Mr. Greg Stafford – Town of Valdese Fire Chief
File Copy



JAMES S. TATE, P.E. JASON M. REEP, P.E. JOSHUA J. WINCHESTER, S. E. J. KIRK VIOLA, P.E. VANCE D. CARRIGAN, P.E.

February 11, 2022

Marty Beal
CBSA Architects
226 2nd St NW
Hickory, NC 28601

RE: Valdese Fire and Rescue Building
 Structural Evaluation

Dear Mr. Beal

Per your request we visited the above referenced site on January 27, 2022. The purpose of our visit was to review the condition of the existing brick walls and to verify if the building was structurally sound. Our office conducted a visual observation of the building and did not perform any destructive or intrusive testing.

The existing building consists of three portions. An existing administrative building, a firehouse and a police station. The first two portions of the building were constructed of CMU and brick or brick and brick cavity walls on a presumed shallow foundation. These two buildings had very minor damage and were in good condition structurally.

The third building which was the police department is constructed with brick and brick cavity walls on a presumed shallow foundation. This portion of the building had significant damage to the brick and is currently not structurally stable.

The police building consists of 10" typical bonded brick walls. The brick is laid in a running bond fashion on the inner and outer wythes and is tied together every 16" with wire ties. At the top of the wall the parapet is covered with roof membrane. As the wall passes the floor slab, it appears to not be tied together at this point.

The walls show a lot of signs of damage; however, it is the same thing happening in multiple places. The walls have numerous horizontal joint cracks and movement at the joints with the wire ties. The damage is manifesting itself through out of plain movement, horizontal cracks, and separation between the wall and floor.

Careful observation of the damage reveals that the actual cause of the movement is due to the failure of the wire ties which allows separation of the inner and outer wythes. In essence the outer wythe is no longer structural and the building's

support system is using the 4" inner wythe only. Based on calculations, the inner wythe of brick only has approximately 15% of the capacity of the bonded wall and is significantly overstressed in its current state and when lateral loads (seismic and wind) are applied it is in danger of collapse.

In our opinion, one of the primary reasons that the wire ties have failed is due to water leaking into the brick from the roof parapet. When looking at the walls and the roof parapet from the multistory fire department building, it is apparent that water intrusion under previously applied coping and roofing was allowed to continue for an extended period at some point in the building's history. The water accumulated in the cavity and the freeze thaw cycle as well as rust damaged the wire ties causing them to fail.

Based on observations and calculations, we strongly recommend that the brick walls be repaired prior to continuing occupancy in the building. This repair would not bring the building up to current code for a category IV structure, however it would allow it to be occupied without fear of collapse. Based on previous work we would recommend utilizing HELIFIX anchors or the equivalent to re-bond the brick. These anchors should be installed on a 16"x16" grid around the entire perimeter wall full height of the police building. After installation, the walls will need to be waterproofed as recommended by a consultant to ensure that intrusion does not continue to happen.

After this repair is complete the building would meet the structural code for when it was built, but it would not meet the current code that would allow it to be renovated with the current occupancy. The current code would require that all of the structure be retrofitted with seismic reinforcement and tied to the wall and roof structure with lateral bracing elements. Historically, on a building of this size and construction this type can prove to be more work and cost than what it is worth and relocation or razing and reconstructing is the better option. A repaired building may extend the life span an additional 20 years with proper maintenance. A building retrofitted with seismic reinforcing and tied to the exterior wall and roof structure with lateral bracing elements and compliant as a Category 4 Essential Facility may extend the life span an additional 40 years if properly maintained. A new facility is anticipated to project a minimum 50-year life span as a Category 4 Essential Facility

If you have any questions or need further help, feel free to contact our office.

Kindest Regards,

TAYLOR & VIOLA
STRUCTURAL ENGINEERS, P.C.
James S. Tate, P.E.

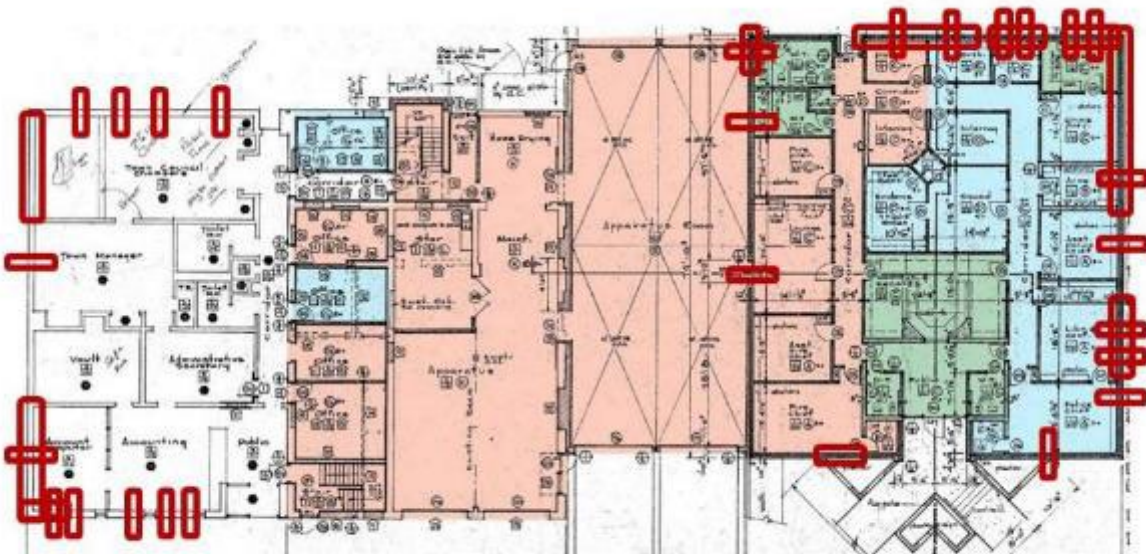


02.11.2022

BUILDING REPAIRS AND ACCESSIBILITY



EXISTING BUILDING



INTERIOR MASONRY WALL CRACKS



INTERIOR VERTICAL WALL CRACKS (POLICE)



INTERIOR VERTICAL WALL CRACKS (POLICE)



INTERIOR VERTICAL WALL CRACKS (POLICE)



INTERIOR VERTICAL WALLS CRACKS (POLICE)



INTERIOR WALL DISPLACEMENT (POLICE)



SOUTH WALL – PREVIOUS HORIZONTAL WALL CRACK REPAIR



EXTERIOR HORIZONTAL WALL CRACK REPAIR



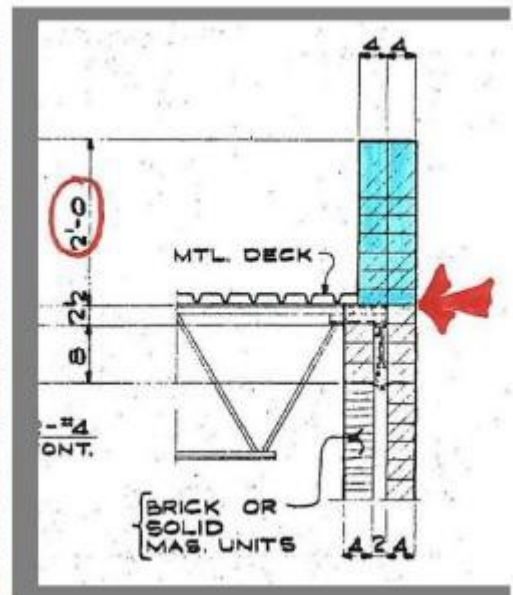
EAST WALL CRACKS



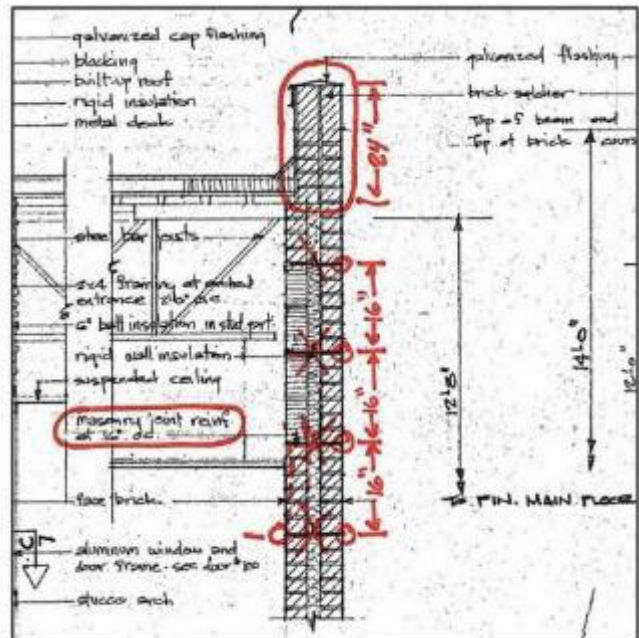
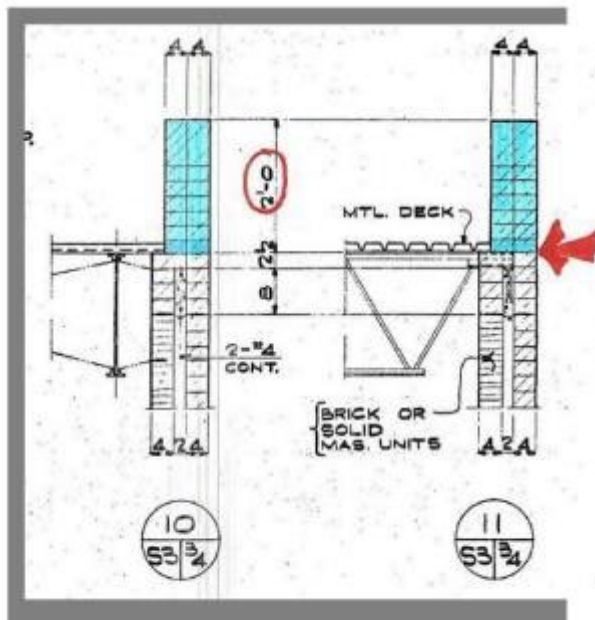
EAST WALL CANOPY / CRACKS



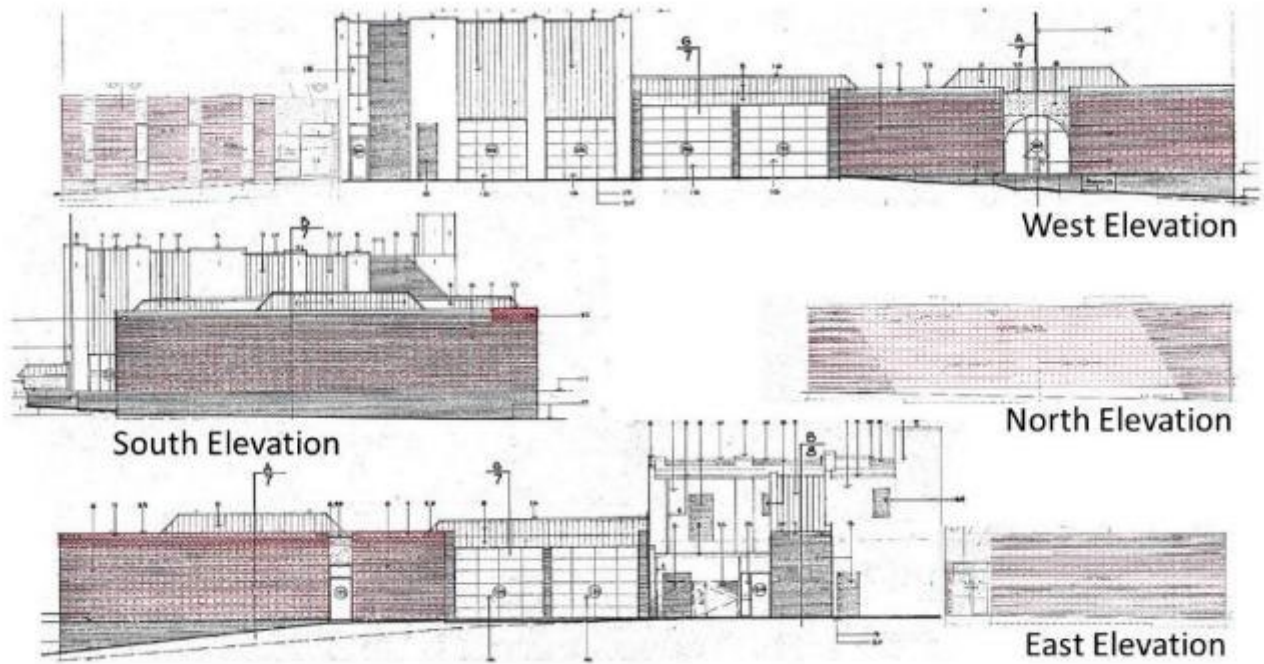
NORTH WALL CRACKS



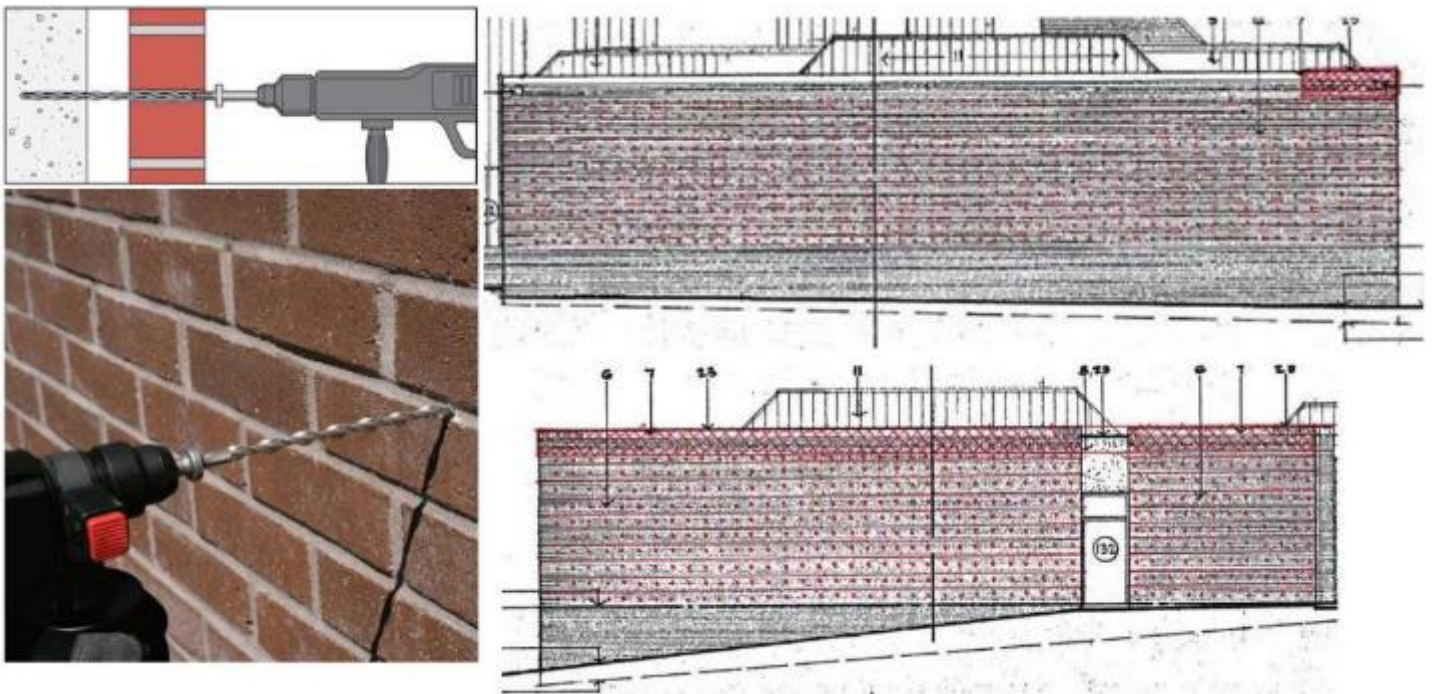
EAST WALL PARAPET



WALL CRACK DIAGRAM



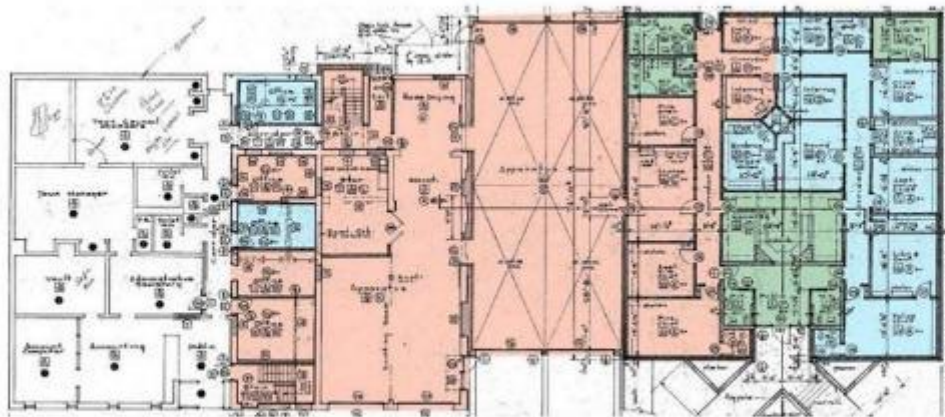
WALL REPAIR



WALL REPAIR



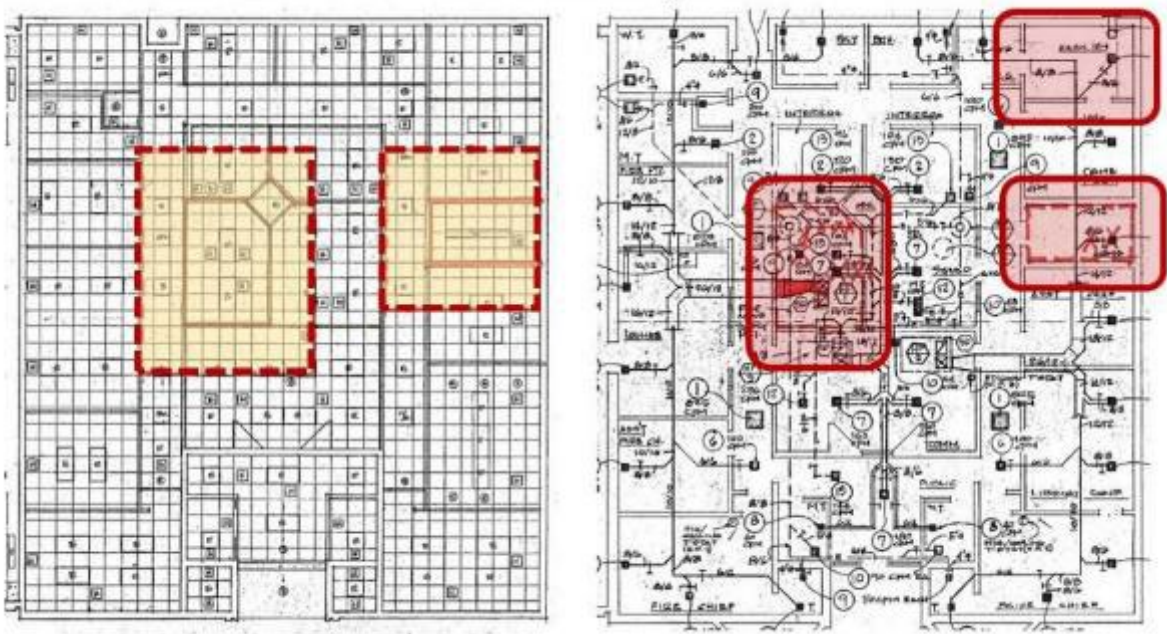
REPLACE EXTERIOR STEEL DOORS & FRAMES



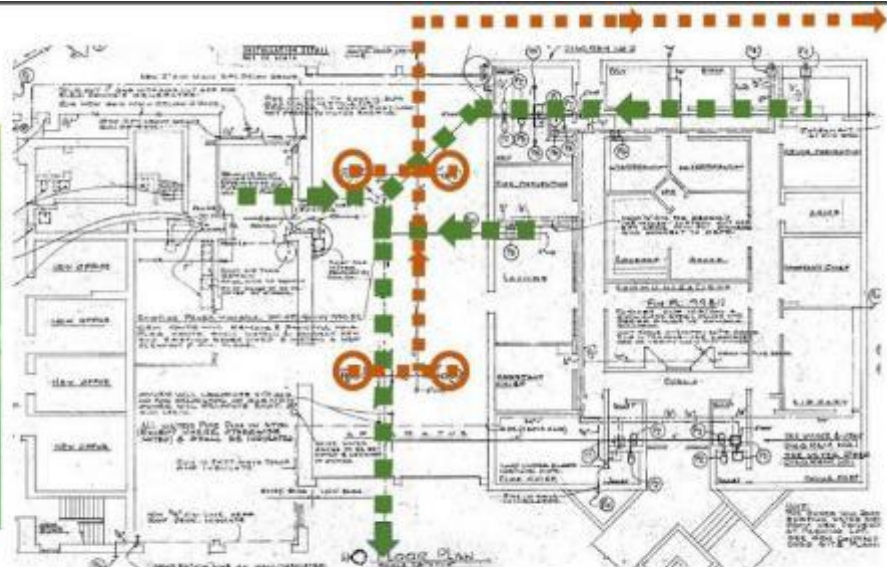
Full Building Coverage
Riser Controls
Backflow/Hotbox
Fire Water Service
Fire Alarm
Monitoring

FIRE SPRINKLER

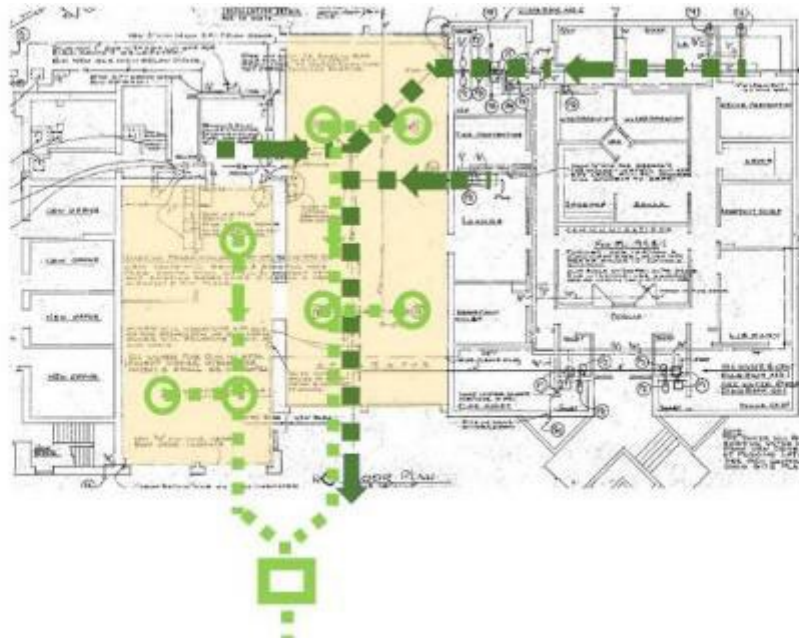
Commission on Accreditation for Law Enforcement Agencies



POLICE UPGRADE / CALEA REQUIREMENTS



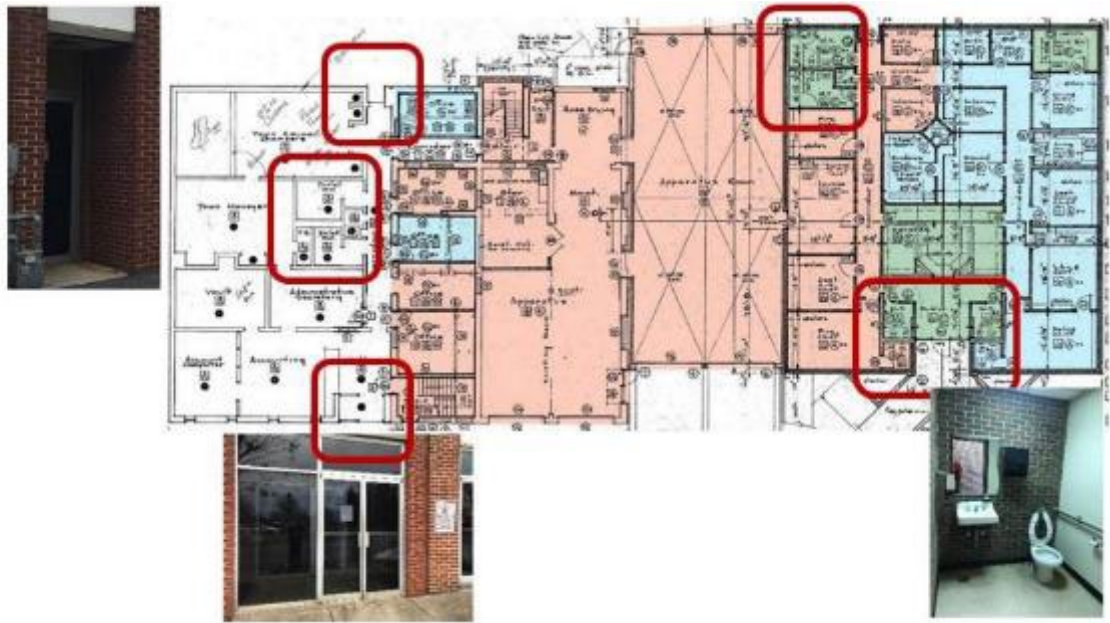
BUILDING RENOVATIONS – ENVIRONMENTAL RISK



BUILDING RENOVATIONS – NEW FLOOR DRAINAGE



WATER LEAK



ACCESSIBILITY RENOVATION – FLOOR 1



ACCESSIBILITY RENOVATION – FLOOR 2

BUILDING RENOVATIONS

Replace Exterior Building Sign
Police & Fire Kitchen Renovation (Shared Space)
HVAC (Obsolete / Maintenance)
Plumbing (Maintenance)



BUILDING RENOVATIONS

Upgrade Electrical (Power & Lighting)
Upgrade Life Safety Exit & Egress Lighting
Emergency Back-up Power Generator (Partial)



BUILDING RENOVATIONS

Steel Bracing Frames (Category 4 Essential Facility)
Asbestos Abatement
Interior Finishes (Floors, Walls, Ceilings)



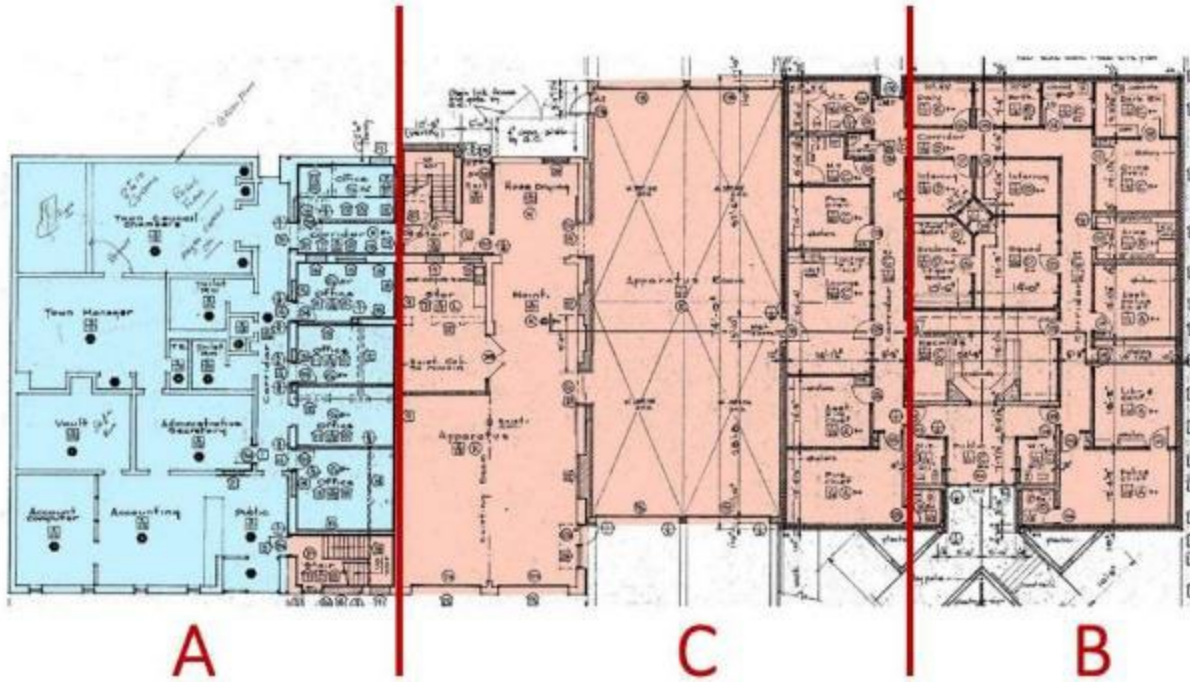
BUILDING RENOVATIONS

- Apparatus Bay Floor Finish
- Apparatus Bay Vehicle Exhaust System
- Replace Existing Windows
- Police & Fire Office Renovations



BUILDING RENOVATIONS

LOGISTICS



LOGISTICS

COMPARISON

AREA SUMMARY COMPARISON			
	Existing Building	20 Year Need	Schematic Plan
A. Police Department			
A1 Administrative	385	722	767
A2 Records	300	300	272
A3 Investigations	0	103	147
A4 Patrol	588	772	907
A5 Break Rooms	205	200	240
A6 Inmate / Holding	130	638	508
A7 Bail/Prison	0	880	900
A8 Property / Evidence	153	483	506
A9 Locker Rooms	0	550	577
A10 Storage	544	680	518
B. Fire Department			
B1 Administration	683	980	801
B2 Operations - Work Area	75	150	160
B3 Operations - Support Areas	924	1380	1397
B4 Locker Rooms / Towels	495	538	515
B5 Apparatus Bay	3374	6400	6400
B6 Support Storage	1380	1400	1039
C. Shared Areas			
C1 Lobby	290	712	538
C2 Training Room	485	1754	1217
C3 Forensic	0	750	404
D. Subtotal			
	10055	19424	18861
E. Dept. & Building Grossing Factor			
	8763	8960	9021
<small>Includes departmental & building circulation, mechanical & electrical areas, building structure, and exterior envelope.</small>			
F. Total Gross Square Footage			
	16818	28384	24882
	Deficient	(9566)	(7644)
		-36%	-31%

Comparison

 >30% Deficient

BUILDING COMPARISON

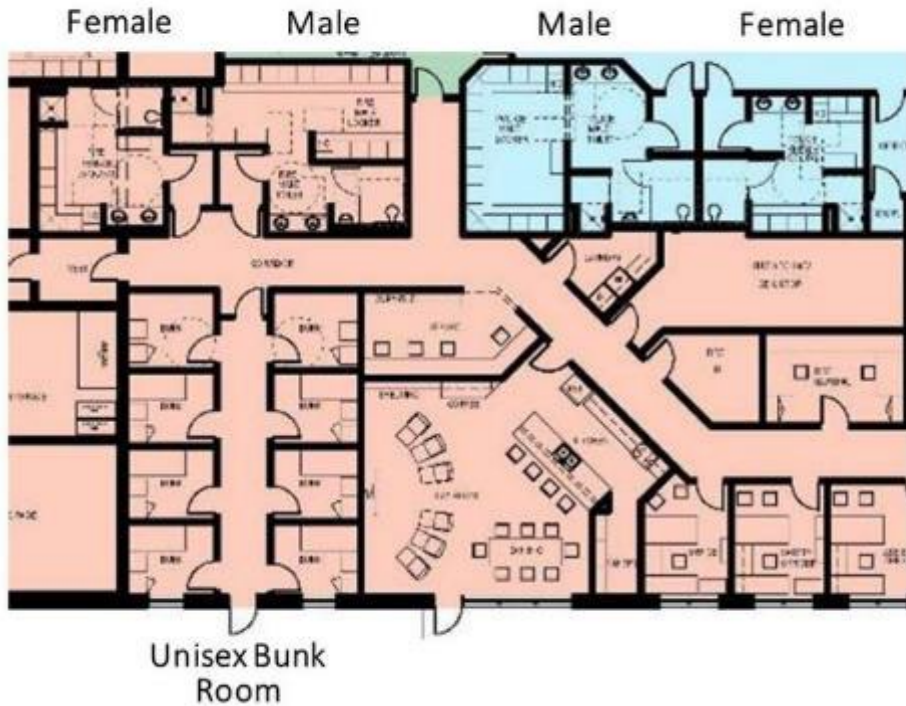




Gender Separation

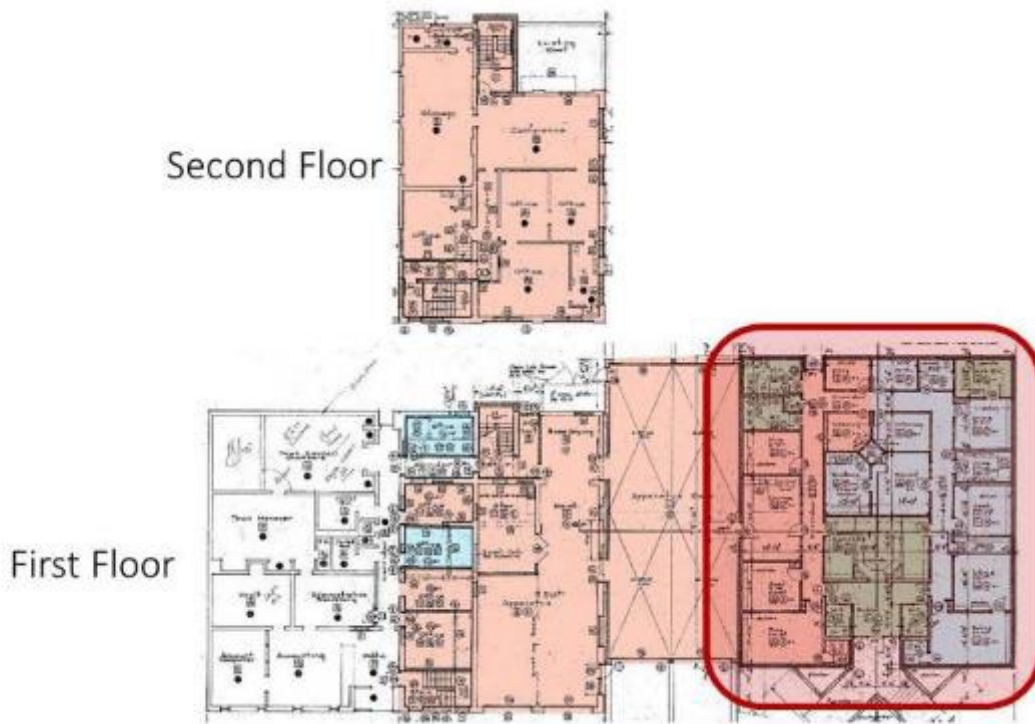
Separate Bunk Room & Locker Room

GENDER SEPARATION

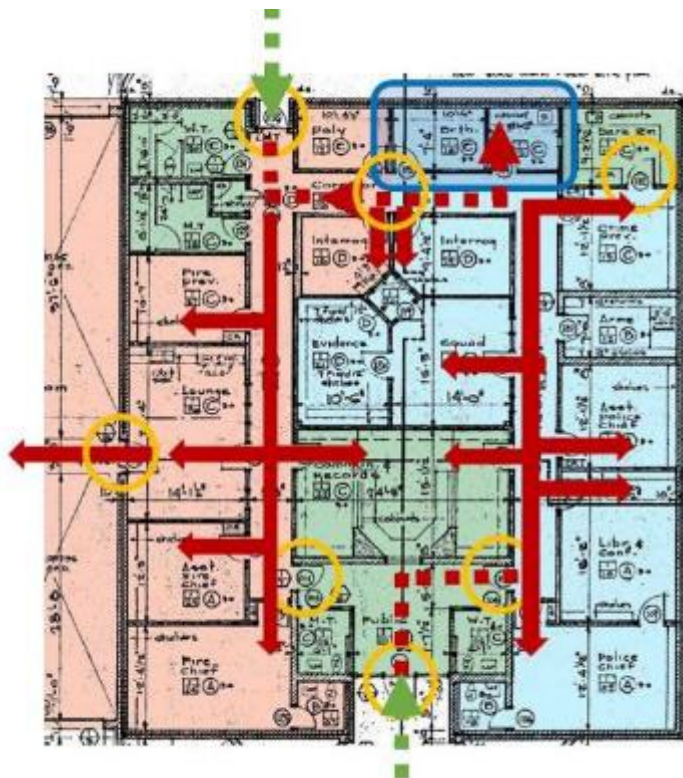


Gender Separation

Separate Bunk Room & Locker Room



EXISTING BUILDING



Security
Safety
Risk

Existing Police
Processing

SECURITY / SAFETY RISK



PROPOSED NEW FACILITY



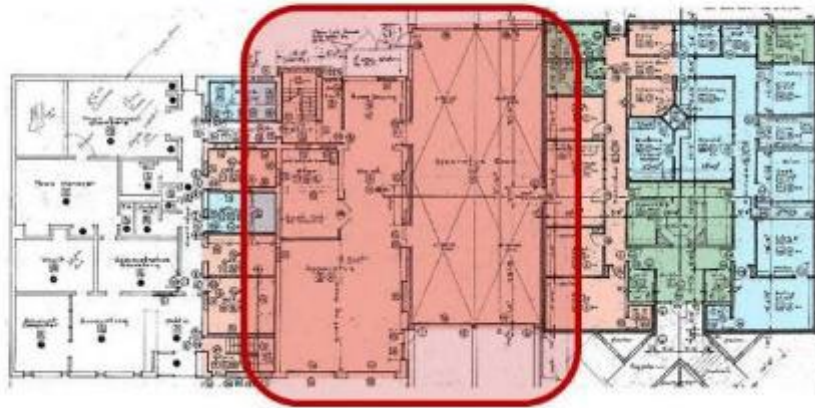
Reduce Risk:
Secure Processing & Holding

REDUCE RISK

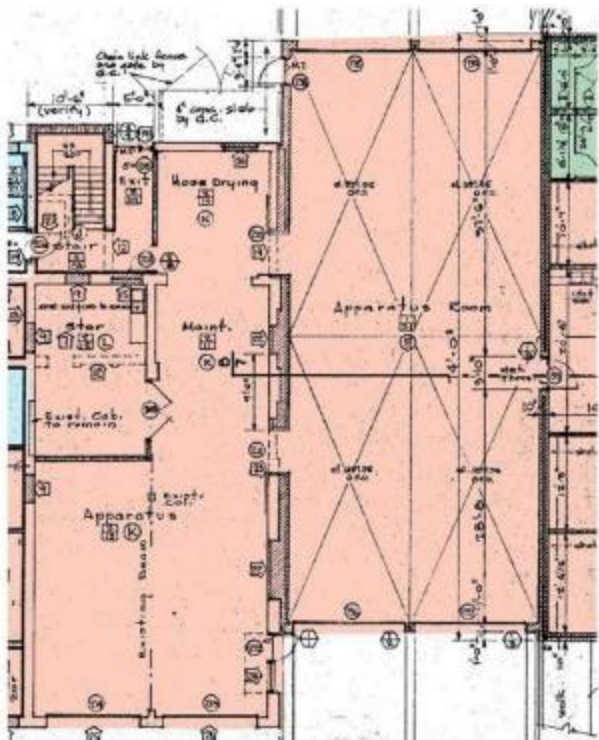
Second Floor



First Floor



EXISTING BUILDING



Health Risk:
Existing Condition



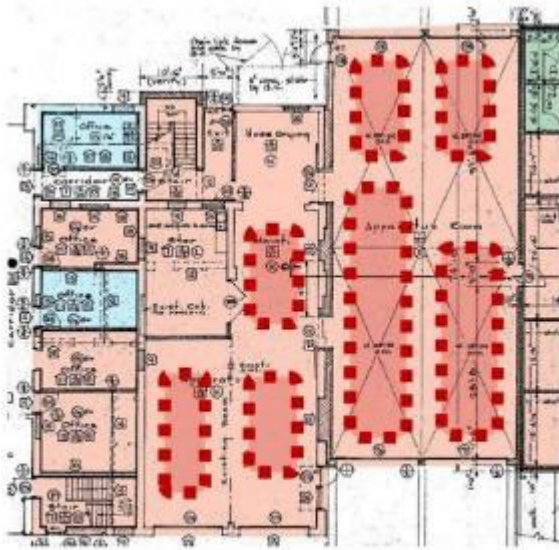
VEHICLE EXHAUST CONTAMINATION



PROPOSED NEW FACILITY

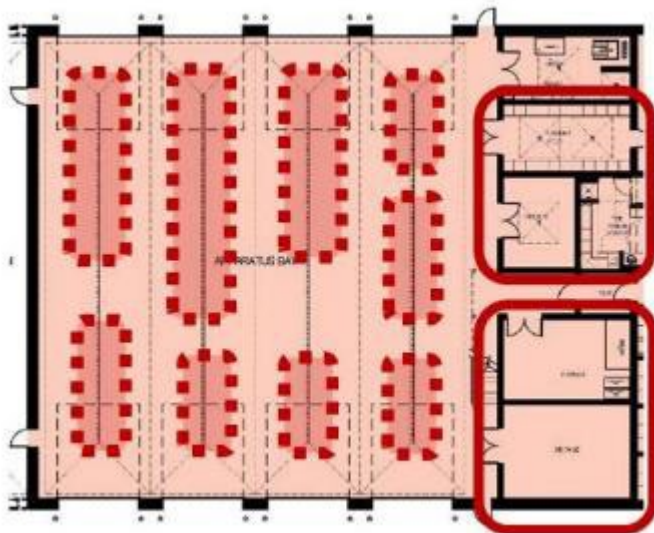


PROPOSED NEW FACILITY – ISOLATED STORAGE



- (2) drive thru bay (15'-0" x 70'-0")
- (2) back-in bays
- Store (7) vehicles
- Limited Flexibility (30'-0" x 70'-0")
- Retrofit Vehicle Exhaust & Ventilation
- Storage remote from Bay

EXISTING FACILITY – FIRE TRUCK BAYS

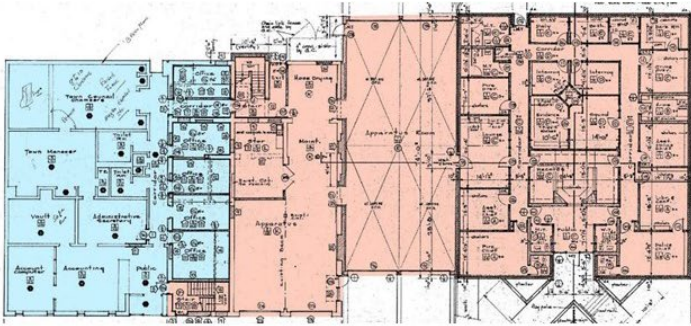


- (4) drive thru bay (20'-0" x 80'-0")
- (8) back-in bays
- Store (8) vehicles & (1) trailer
- Greater Flexibility (80'-0" x 80'-0")
- Equipped w/ Vehicle Exhaust & Ventilation
- Storage adjacent to Bay
- Tilt Cab

PROPOSED NEW FACILITY – FIRE TRUCK BAYS

OPINION OF PROBABLE COST OF CONSTRUCTION

EXISTING BUILDING – OPINION OF PROBABLE COST



16,818 sf
\$6,484,199

Renovation Cost
Soft Cost
Furnishing & Equipment
Temporary Structure Cost (Relocation)
Includes NC State Grant

NEW BUILDING – OPINION OF PROBABLE COST



24,500 sf
\$7,048,050

Building Cost
Site Development Cost
Soft Cost
Furnishing & Equipment
Includes NC State Grant

AREA SUMMARY COMPARISON					Existing Building	20 Year Need	Schematic Plan
A. Police Department							
A1	Adminstrative			385	722	787	
A2	Records			360	339	272	
A3	Investigations			0	103	147	
A4	Patrol			588	772	907	
A5	Break Room			205	200	240	
A6	Intake / Holding			139	638	508	
A7	Sallyport			0	880	900	
A8	Property / Evidence			153	480	526	
A9	Locker Rooms			0	550	577	
A10	Storage			544	680	518	
B. Fire Department							
B1	Adminstration			680	960	891	
B2	Operations - Work Area			73	150	160	
B3	Operations - Support Areas			924	1390	1397	
B4	Locker Rooms / Toilets			495	538	515	
B5	Apparatus Bay			3374	6400	6400	
B6	Support Storage			1360	1406	1939	
C. Shared Areas							
C1	Lobby			290	712	536	
C2	Training Room			485	1754	1217	
C3	Fitness			0	750	424	
D. Subtotal					10055	19424	18861
E. Dept. & Building Grossing Factor					6763	6960	5621
	Includes departmental & building circulation, mechanical & electrical areas, building structure, and exterior envelope.						
F. Total Gross Square Footage					16818	26384	24482
				Deficient	(9566)	(7664)	
					-36%	-31%	



2/10/2022

EXISTING BUILDING RENOVATION OPINION OF PROBABLE COST						
Town of Valdese						
CBSA Project No. 2020.009						
Discription		Qty	Unit	Unit Cost	=	Cost
Phase 1 Repair & Accessibility		1	ea	X 1,749,530	=	1,749,530
Phase 2 Renovation		1	ea	X 3,219,815	=	3,219,815
Construction Renovation Cost						4,969,345
Temporary Construction for Fire Relocation		8,000	sf	X 150	=	1,200,000
Total Construction Cost						6,169,345
Soft Cost						
Design Fees		1	X	431,854	=	431,854
	Architectural					
	Civil Engineering					
	Expense Allowance					
	MEP Engineering					
	Programming					
	Interior Design					
	USDA Assistance Allowance					
	Additional Owner Meeting Allowance					
	3D Model					
	Survey					
	Landscape Design					
	Additional Site Visits					
	Record Drawing Allowance					
	Coordinate Geotech & Spcl Insp					
	Expense Allowance					
	Survey	1	x	3,000	=	3,000
	Geotechnical	1	x	10,000	=	10,000
	Special Inspections	1	x	20,000	=	20,000
Furnishings / Equipment		1	x	350,000	=	350,000
Total Soft Costs						814,854
SUBTOTAL						6,984,199
STATE GRANT						(500,000)
TOTAL PROJECT COST						6,484,199



2/9/2022

PHASE 1									
Existing Building Repair & Accessibility									
Valdese Public Safety Facility									
Exterior Wall Repair			Quantity	Unit	X	Cost	=	Subtotal	Subtotal
	East Wall								
		Joint Repair							\$44,732.00
		Rack Joint / Tuck Point	1228	lf	X	\$12.00	=	\$14,736.00	
		Helical wall ties	854	ea	X	\$28.00	=	\$23,912.00	
		Clean-up	2028	sf	X	\$3.00	=	\$6,084.00	
		Parapet Demolition	150	sf	X	\$65.00	=	\$9,750.00	
		New Masonry Parapet	100	lf	X	\$100.00	=	\$10,000.00	
		Roof Patch	260	sf	X	\$9.00	=	\$2,340.00	
		Roof Edge Trim	80	lf	X	\$10.00	=	\$800.00	
		Clean-up	150	sf	X	\$3.00	=	\$450.00	
	South Wall								
		Joint Repair							\$21,980.00
		Rake Joint / Tuck Point	150	lf	X	\$12.00	=	\$1,800.00	
		Helical wall ties	560	ea	X	\$28.00	=	\$15,680.00	
		Clean-up	1500	sf	X	\$3.00	=	\$4,500.00	
	West Wall								
		Joint Repair							\$32,100.00
		Rake Joint / Tuck Point	1030	lf	X	\$12.00	=	\$12,360.00	
		Helical wall ties	705	ea	X	\$28.00	=	\$19,740.00	
		Clean-up	2028	sf	X	\$3.00	=	\$6,084.00	
	North Wall								
		Joint Repair							\$30,568.00
		Rake Joint / Tuck Point	814	lf	X	\$12.00	=	\$9,768.00	
		Helical wall ties	616	ea	X	\$28.00	=	\$17,248.00	
		Clean-up	1184	sf	X	\$3.00	=	\$3,552.00	
									\$30,568.00
		Subtotal							\$183,288.00
Police Up-grades			Quantity	Unit	X	Cost	=	Subtotal	Subtotal
	Evidence Storage								
		Ceiling Demolition	616	sf	X	\$4.00	=	\$2,464.00	
		Floor Demolition	165	sf	X	\$3.00	=	\$495.00	
		HVAC Demo	1	ea	X	\$1,000.00	=	\$1,000.00	
		New HVAC	1	ea	X	\$4,000.00	=	\$4,000.00	
		New Wall Extension	52	lf	X	\$50.00	=	\$2,600.00	
		Electrical Demolition	165	sf	X	\$4.00	=	\$660.00	
		Electrical Lighting	165	sf	X	\$9.00	=	\$1,485.00	
		New Ceiling	616	sf	X	\$6.75	=	\$4,158.00	
		New Floor	165	sf	X	\$6.00	=	\$990.00	
		New Base	52	lf	X	\$3.65	=	\$189.80	
		Clean-up	616	sf	X	\$2.00	=	\$1,232.00	
									\$19,273.80
	Armory								
		Ceiling Demolition	464	sf	X	\$4.00	=	\$1,856.00	
		Floor Demolition	112	sf	X	\$3.00	=	\$336.00	
		HVAC Demo	1	ea	X	\$1,000.00	=	\$1,000.00	
		New HVAC	1	ea	X	\$4,000.00	=	\$4,000.00	
		New Wall Extension	44	lf	X	\$50.00	=	\$2,200.00	
		Electrical Demolition	112	sf	X	\$4.00	=	\$448.00	
		Electrcial Lighting	112	sf	X	\$9.00	=	\$1,008.00	
		New Ceiling	464	sf	X	\$6.75	=	\$3,132.00	
		New Floor	112	sf	X	\$6.00	=	\$672.00	
		New Base	44	lf	X	\$3.65	=	\$160.60	
		Clean-up	464	sf	X	\$2.00	=	\$928.00	
									\$15,740.60
		Subtotal							\$35,014.40
Exterior Door Replacement			Quantity	Unit	X	Cost	=	Subtotal	Subtotal

	Demolition		3	ea	X	\$1,000.00	=	\$3,000.00	
	New Frame & Door		3	ea	X	\$2,800.00	=	\$8,400.00	
	Hardware		3	ea	X	\$1,500.00	=	\$4,500.00	
	Paint		3	ea	X	\$300.00	=	\$900.00	
	Glazing		3	ea	X	\$1,000.00	=	\$3,000.00	
	Subtotal								\$19,800.00
Asbestos Adhesive Abatement			Quantity	Unit	X	Cost	=	Subtotal	Subtotal
	Rear Corridor		100	sf	X	\$5.00	=	\$500.00	
	Front Stair Floor 1		130	sf	X	\$5.00	=	\$650.00	
	Front Stair Landing		35	sf	X	\$5.00	=	\$500.00	
	Permit		1	ea	X	\$500.00	=	\$500.00	
	Clearance		265	sf	X	\$1.00	=	\$265.00	
	Subtotal								\$2,415.00
Roof Drainage Leak			Quantity	Unit	X	Cost	=	Subtotal	Subtotal
	Ceiling demolition		2400	sf	X	\$4.00	=	\$9,600.00	
	Electrical Demolition		2400	sf	X	\$4.00	=	\$9,600.00	
	6" Roof drain piping		230	lf	X	\$60.00	=	\$13,800.00	
	New Ceiling		2400	sf	X	\$6.75	=	\$16,200.00	
	Lighting		2400	sf	X	\$9.00	=	\$21,600.00	
	Subtotal								\$70,800.00
Apparatus Bay Drainage			Quantity	Unit	X	Cost	=	Subtotal	Subtotal
	Interior Floor Demolition		3644	sf	X	\$15.00	=	\$54,660.00	
	Exterior Slab Demolition		1650	sf	X	\$15.00	=	\$24,750.00	
	Plumbing								
	Floor Drains		8	ea	X	\$250.00	=	\$2,000.00	
	Floor Drain Lines 4"		210	lf	X	\$80.00	=	\$16,800.00	
	Sand/Oil Interceptor		1	ea	X	\$10,000.00	=	\$10,000.00	
	Interior Floor Slab - 8" reinf		3644	sf	X	\$14.00	=	\$51,016.00	
	Exterior Slab - 8" reinf		1650	sf	X	\$14.00	=	\$23,100.00	
	Interior Floor Finish		3644	sf	X	\$8.00	=	\$29,152.00	
	Subtotal								\$211,478.00
Fire Sprinkler System			Quantity	Unit	X	Cost	=	Subtotal	Subtotal
	Floor 1		13,618	sf	X	\$3.50	=	\$47,663.00	
	Floor 2		3,200	sf	X	\$3.50	=	\$11,200.00	
	Riser Controls		1	ea	X	\$6,000.00	=	\$6,000.00	
	Backflow / Hotbox		1	ea	X	\$8,000.00	=	\$8,000.00	
	Fire Alarm System		16,818.00	sf	X	\$2.00	=	\$33,636.00	
	Subtotal								\$72,863.00
Restrooms			Quantity	Unit	X	Cost	=	Subtotal	Subtotal
	Fire/Police Toilet								
	Plumbing Demolition		7	ea	X	\$500.00	=	\$3,500.00	
	Tilt Partition Demolition		4	ea	X	\$100.00	=	\$400.00	
	Interior Partition Demolition		42	lf	X	\$25.00	=	\$1,050.00	
	Ceiling Demolition		240	sf	X	\$4.00	=	\$960.00	
	Electrical Demolition		240	sf	X	\$4.00	=	\$960.00	
	HVAC Demolition		240	sf	X	\$4.00	=	\$960.00	
	Concrete Slab Demolition		280	sf	X	\$15.00	=	\$4,200.00	
	Plumbing New		6	ea	X	\$3,000.00	=	\$18,000.00	
	Electrical New		280	sf	X	\$8.00	=	\$2,240.00	
	HVAC New		280	sf	X	\$10.00	=	\$2,800.00	
	Interior Partition New		28	lf	X	\$105.00	=	\$2,940.00	
	Toilet Accessories		15	ea	X	\$250.00	=	\$3,750.00	
	Toilet Partition		4	ea	X	\$1,500.00	=	\$6,000.00	
	Concrete Floor Patch		280	sf	X	\$8.00	=	\$2,240.00	
	New Floor Tile		280	sf	X	\$17.00	=	\$4,760.00	
	New Wall Tile		500	sf	X	\$17.00	=	\$8,500.00	
	New Ceiling		280	sf	X	\$6.75	=	\$1,890.00	
	Frame Door Hardware		2	ea	X	\$2,500.00	=	\$5,000.00	
	Subtotal								\$70,150.00
	Lobby Toilets								
	Plumbing Demolition		4	ea	X	\$500.00	=	\$2,000.00	
	Tilt Partition Demolition		0	ea	X	\$100.00	=	\$0.00	
	Interior Partition Demolition		28	lf	X	\$25.00	=	\$700.00	
	Ceiling Demolition		100	sf	X	\$4.00	=	\$400.00	

		Electrical Demolition	100	sf	X	\$4.00	=	\$400.00	
		HVAC Demolition	100	ea	X	\$4.00	=	\$400.00	
		Concrete Slab Demolition	100	sf	X	\$15.00	=	\$1,500.00	
		Plumbing New	4	ea	X	\$3,000.00	=	\$12,000.00	
		Electrical New	130	sf	X	\$8.00	=	\$1,040.00	
		HVAC New	130	sf	X	\$10.00	=	\$1,300.00	
		Interior Partition New	32	lf	X	\$101.00	=	\$3,232.00	
		Toilet Accessories	14	ea	X	\$250.00	=	\$3,500.00	
		Toilet Partition	0	ea	X	\$1,500.00	=	\$0.00	
		Concrete Floor Patch	130	sf	X	\$8.00	=	\$1,040.00	
		New Floor Tile	64	sf	X	\$17.00	=	\$1,088.00	
		New Wall Tile	320	sf	X	\$17.00	=	\$5,440.00	
		New Ceiling	130	sf	X	\$6.75	=	\$877.50	
		Frame Door Hardware	2	ea	X	\$2,500.00	=	\$5,000.00	
	Subtotal								\$39,917.50
	Fire Chief Toilet								
		Plumbing Demolition	2	ea	X	\$500.00	=	\$1,000.00	
		Interior Brick Partition Demo	12	sf	X	\$100.00	=	\$1,200.00	
		Ceiling Demolition	36	sf	X	\$4.00	=	\$144.00	
		Electrical Demolition	36	sf	X	\$4.00	=	\$144.00	
		HVAC Demolition	36	sf	X	\$4.00	=	\$144.00	
		Concrete Slab Demolition	36	sf	X	\$15.00	=	\$540.00	
		Plumbing New	2	ea	X	\$3,000.00	=	\$6,000.00	
		Electrical New	64	sf	X	\$9.00	=	\$576.00	
		HVAC New	64	sf	X	\$10.00	=	\$640.00	
		Interior Partition New	16	lf	X	\$101.00	=	\$1,616.00	
		Toilet Accessories	7	ea	X	\$250.00	=	\$1,750.00	
		Toilet Partition	0	ea	X	\$1,500.00	=	\$0.00	
		Floor Patch	64	sf	X	\$8.00	=	\$512.00	
		Floor Finish New	64	sf	X	\$17.00	=	\$1,088.00	
		Wall Finish New	80	sf	X	\$17.00	=	\$1,360.00	
		Ceiling Finish New	64	sf	X	\$6.75	=	\$432.00	
		Frame Door Hardware	1	ea	X	\$2,500.00	=	\$2,500.00	
	Subtotal								\$19,646.00
	Police Chief Toilet								
		Plumbing Demolition	2	ea	X	\$500.00	=	\$1,000.00	
		Interior Brick Partition Demo	12	sf	X	\$100.00	=	\$1,200.00	
		Ceiling Demolition	36	sf	X	\$4.00	=	\$144.00	
		Electrical Demolition	36	sf	X	\$4.00	=	\$144.00	
		HVAC Demolition	36	sf	X	\$4.00	=	\$144.00	
		Concrete Slab Demolition	36	sf	X	\$15.00	=	\$540.00	
		Plumbing New	2	ea	X	\$3,000.00	=	\$6,000.00	
		Electrical New	64	sf	X	\$9.00	=	\$576.00	
		HVAC New	64	sf	X	\$10.00	=	\$640.00	
		Interior Partition New	16	lf	X	\$101.00	=	\$1,616.00	
		Toilet Accessories	7	ea	X	\$250.00	=	\$1,750.00	
		Toilet Partition	0	ea	X	\$1,500.00	=	\$0.00	
		Floor Patch	64	sf	X	\$8.00	=	\$512.00	
		Floor Finish New	64	sf	X	\$17.00	=	\$1,088.00	
		Wall Finish New	80	sf	X	\$17.00	=	\$1,360.00	
		Ceiling Finish New	64	sf	X	\$6.75	=	\$432.00	
		Frame Door Hardware	1	ea	X	\$2,500.00	=	\$2,500.00	
	Subtotal								\$19,646.00
	Fire Shower								
		Plumbing Demolition	5	ea	X	\$500.00	=	\$2,500.00	
		Tlt Partition Demolition	0	lf	X	\$100.00	=	\$0.00	
		Interior Partition Demolition	25	lf	X	\$25.00	=	\$625.00	
		Ceiling Demolition	126	sf	X	\$4.00	=	\$504.00	
		Electrical Demolition	126	sf	X	\$4.00	=	\$504.00	
		HVAC Demolition	126	sf	X	\$4.00	=	\$504.00	
		Wall Finish Demolition	288	sf	X	\$12.00	=	\$3,456.00	
		Floor Finish Demolition	126	sf	X	\$12.00	=	\$1,512.00	
		Concrete Slab Demolition	126	sf	X	\$15.00	=	\$1,890.00	
		Plumbing New	5	ea	X	\$3,000.00	=	\$15,000.00	

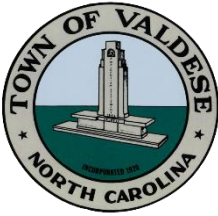
PHASE 2									
Existing Building Renovation									
Valdese Public Safety Facility									
Vehicle Exhaust System									
			Quantity	Unit	X	Cost	=	Subtotal	Subtotal
	Exhaust System		4	ea	X	\$10,000.00	=	\$40,000.00	
	Electrical Work		4	ea	X	\$1,500.00	=	\$6,000.00	
	Subtotal								\$46,000.00
Asbestos Abatement									
			Quantity	Unit	X	Cost	=	Subtotal	Subtotal
	Floor 2		3125	sf	X	\$5.00	=	\$15,625.00	
	Permit		1	ea	X	\$500.00	=	\$500.00	
	Clearance		3125	sf	X	\$1.00	=	\$3,125.00	
	Subtotal								\$19,250.00
New Floor									
			Quantity	Unit	X	Cost	=	Subtotal	Subtotal
	VCT - S Bldg		4060	sf	X	\$5.00	=	\$20,300.00	
	VCT - Center Bldg Flr 1		1200	sf	X	\$5.00	=	\$6,000.00	
	VCT - Center Bldg Flr 2		1120	sf	X	\$5.00	=	\$5,600.00	
	VCT - N Bldg		2917	sf	X	\$5.00	=	\$14,585.00	
	Carpet Squares- Center Bldg Flr 2		2044	sf	X	\$7.00	=	\$14,308.00	
	Base - S Bldg		1820	lf	X	\$3.75	=	\$6,825.00	
	Base - Center Bldg Flr 1		500	lf	X	\$3.75	=	\$1,875.00	
	Base - Center Bldg Flr 2		1270	lf	X	\$3.75	=	\$4,762.50	
	Base - N Bldg		1270	lf	X	\$3.75	=	\$4,762.50	
	Subtotal								\$79,018.00
General Renovation									
			Quantity	Unit	X	Cost	=	Subtotal	Subtotal
	Interior Demolition - S Bldg		4536	sf	X	\$5.00	=	\$22,680.00	
	Interior Demolition - Center Bldg		3164	sf	X	\$5.00	=	\$15,820.00	
	Interior Demolition - N Bldg		3080	sf	X	\$5.00	=	\$15,400.00	
	New Drywall Partition - S Bldg		600	lf	X	\$101.00	=	\$60,600.00	
	New Drywall Partition - Center Bldg		70	lf	X	\$101.00	=	\$7,070.00	
	New Drywall Partition - N Bldg		200	lf	X	\$101.00	=	\$20,200.00	
	Exterior Wall Furring S Bldg		200	lf	X	\$48.00	=	\$9,600.00	
	Doors/Frames/ Hardware		60	ea	X	\$2,500.00	=	\$150,000.00	
	Electrical - S Bldg Apparatus		2517	sf	X	\$15.00	=	\$37,755.00	
	Electrical - S Bldg Office		4532	sf	X	\$20.00	=	\$90,640.00	
	Electrical Demolition - S Bldg		7049	sf	X	\$5.00	=	\$35,245.00	
	Electrical - Center Bldg Apparatus		1718	sf	X	\$15.00	=	\$25,770.00	
	Electrical - Center Bldg Office Flr 2		3164	sf	X	\$20.00	=	\$63,280.00	
	Electrical - Center Bldg Office Flr 1		1718	sf	X	\$20.00	=	\$34,360.00	
	Electrical Demolition - Center Bldg		6600	sf	X	\$5.00	=	\$33,000.00	
	Electrical - N Bldg		3169	sf	X	\$20.00	=	\$63,380.00	
	Electrical Demolition - N Bldg		3169	sf	X	\$5.00	=	\$15,845.00	
	HVAC S Bldg Apparatus		1	ea	X	\$36,000.00	=	\$36,000.00	
	HVAC S Bldg Office		13	ton	X	\$4,000.00	=	\$52,000.00	
	HVAC Demolition - S Bldg		7049	sf	X	\$4.00	=	\$28,196.00	
	HVAC Center Bldg Apparatus		1	ea	X	\$27,000.00	=	\$27,000.00	
	HVAC Center Bldg Office Flr 2		12.5	ton	X	\$4,000.00	=	\$50,000.00	
	HVAC Center Bldg Office Flr 1		6	ton	X	\$4,000.00	=	\$24,000.00	
	HVAC Demolition - Center Bldg		6600	sf	X	\$4.00	=	\$26,400.00	
	HVAC N Bldg		12	ton	X	\$4,000.00	=	\$48,000.00	
	HVAC Demolition - N Bldg		3169	sf	X	\$4.00	=	\$12,676.00	
	Floor 2 Plumbing Demolition		50	lf	X	\$5.00	=	\$250.00	
	Floor 2 Plumbing		50	lf	X	\$60.00	=	\$3,000.00	
	Floor 1 Slab Demolition		2450	sf	X	\$15.00	=	\$36,750.00	
	Floor 1 Plumbing		250	lf	X	\$75.00	=	\$18,750.00	
	Floor 1 Plumbing Demolition		250	lf	X	\$5.00	=	\$1,250.00	
	Slab Patch		2450	sf	X	\$8.00	=	\$19,600.00	
	Casework - Shelving		70	lf	X	\$400.00	=	\$28,000.00	
	Casework - Cabinets & Counters		22	lf	X	\$400.00	=	\$8,800.00	
	Roof Replacement		16900	sf	X	\$4.00	=	\$67,600.00	
	Roof Edge Trim		668	lf	X	\$8.00	=	\$5,344.00	

	Subtotal									\$1,194,261.00
Window Replacement			Quantity	Unit	X	Cost	=	Subtotal	Subtotal	
	Remove existng windows		6	ea	X	\$500.00	=	\$3,000.00		
	Install new windows		6	ea	X	\$1,450.00	=	\$8,700.00		
	Subtotal									\$11,700.00
Generator			Quantity	Unit	X	Cost	=	Subtotal	Subtotal	
	Add North & Center Buildings									
	Remove Existing Generator		1	ea	X	\$10,000.00	=	\$10,000.00		
	Remove Existing Transfer Switch		1	ea	X	\$5,000.00	=	\$5,000.00		
	Replace Generator		1	ea	X	\$90,000.00	=	\$90,000.00		
	Replace Transfer Switch		1	ea	X	\$15,000.00	=	\$15,000.00		
	Misc Electrical		1	ea	X	\$20,000.00	=	\$20,000.00		
	Subtotal									\$140,000.00
Structural Moment Frame			Quantity	Unit	X	Cost	=	Subtotal	Subtotal	
	Old Town Hall (N Bldg)		1	ea	X	\$180,000.00	=	\$180,000.00		
	2-Story (Center Bldg)		1	ea	X	\$250,000.00	=	\$240,000.00		
	Police / Fire (S Bldg)		1	ea	X	\$360,000.00	=	\$350,000.00		
	Subtotal									\$770,000.00
Mobilization										\$90,000.00
Subtotal										\$2,350,229.00
General Conditions			12	%						\$282,027.48
Design Fees			10	%						\$235,022.90
General Contingency			15	%						\$352,534.35
TOTAL EXISTING BUILDING RENOVATION										\$3,219,813.73
GRAND TOTAL										\$4,969,342.34



2/10/2022

PROPOSED NEW VALDESE PUBLIC SAFETY - OPINION OF PROBABLE COST						
Town of Valdese						
CBSA Project No. 2020.009						
Discription		Qty	Unit	Unit Cost	=	Cost
Site Development		1	x	1,140,000	=	1,140,000
Building		24,500	sf	210	=	5,145,000
Construction Cost						6,285,000
Existing Mill Demolition	Alternate Bid	1	x	450,000	=	450,000
Soft Cost						
	Design Fees	1	x	444,600	=	444,600
	Architectural					
	Civil Engineering					
	Structural Engineering					
	MEP Engineering					
	Programming					
	Interior Design					
	USDA Assistance Allowance					
	Additional Owner Meeting Allowance					
	3D Model					
	Survey					
	Landscape Design					
	Additional Site Visits					
	Record Drawing Allowance					
	Coordinate Geotech & Spcl Insp					
	Expense Allowance					
	Supplemental Environmental Services	1	x	18,000	=	18,000
	Additional Survey	1	x	7,250	=	7,250
	Geotechnical	1	x	12,000	=	12,000
	Special Inspections	1	x	30,000	=	30,000
Furnishings / Equipment		1	x	400,000	=	400,000
Total Soft Costs						911,850
Land Purchase		1	x	98,132	=	98,132
SUBTOTAL						7,744,982
PAID OUT TO DATE						(196,932)
STATE GRANT						(500,000)
TOTAL PROJECT COST						7,048,050



Public Safety Building Information Session

Frequently Asked Questions

1. Why did the Town of Valdese purchase a piece of Property on Pineburr Avenue to build a new Public Safety Facility when property on Main Street could have been donated to the Town at no cost?

Due to its smaller size and topography, the cost to develop the donated property on Main Street for a new Public Safety Facility would cost more than purchasing property on Pineburr Avenue and developing it for a new facility. The additional cost on Main Street was related to more extensive retaining walls, site grading, constructing an access drive to Main Street, and modifications to the Main Street – Laurel Street Intersection. These additional requirements which were not necessary for the Pineburr site were estimated and the Main Street site total estimated cost for comparison came in at approximately \$620,000 more than the Pineburr alternative.

2. Why locate a Public Safety Facility on Pineburr Avenue outside of the immediate downtown area?

Due to a lack of available properties large enough for a facility, the Pineburr property was available for purchase. This location provides fire department access to Laurel Street leading north and east to an area of town where the fire department currently responds to many calls. The Pineburr location allows easier access for maneuvering fire equipment from Main Street onto Laurel Street than compared to access to Laurel Street from the Rostan property on Main Street.

3. Why do we need more operational space?

Additional space is necessary based on current industry standards for operations of comparable fire and police operations, including requirements established by the North Carolina Building Code, American Disabilities Act, etc. The overall space needs were developed and tabulated in the initial Space Needs study that began with early architectural evaluations by Stewart, Cooper, Newell Architects in 2018.

4. Can the existing Public Safety Building be renovated rather than build a new Public Safety Facility?

The existing Public Safety Building can be renovated; however, it will be costly to renovate and not gain any space for additional operational needs that is provided in a new facility design.

5. What is the cost to renovate the existing building compared to a new facility?

The Opinion of Probable Cost to renovate the existing Public Safety Facility is approximately \$5,784,199. The Opinion of Probable Cost for a new facility is approximately \$7,048,050 (includes demolition of Pineburr Mill).

6. The existing Fire Department has four Apparatus Bays, and a new facility is planned to have four Apparatus Bays. Why not keep the existing building?



The four bays of the existing facility provide two drive through bays and two back-in bays and is limited to store seven vehicles. A new facility provides four larger drive through bays which can be used as eight back-in bays to store eight vehicles and provide greater flexibility. The new facility design is allowing for one additional bay to be added in the future based upon anticipated growth and vehicles.

Further, the existing facility's overhead doors are smaller than most modern installed doors which limits the size and type of future equipment that could be stored. Also, space to maneuver around vehicles in the existing bays is tight, and limits access to vehicles making regular apparatus and equipment checks and maintenance more difficult.

7. Why not separate the police and fire and build a smaller new facility for either police or fire and renovate the existing building for police or fire?

A cost savings is created by housing both departments in one facility, by sharing mechanical systems and common areas.

8. What is wrong with the existing Public Safety Building?

The existing facility is composed of three buildings built in 1926, 1975, and 1978. There are structural issues placing the buildings at risk which need to be addressed. The exterior walls are compromised and need at minimum structural repair. If structural repairs are made the building remains non-compliant as a Category 4 Essential Facility. It is possible to renovate the building into a Category 4 Essential Facility, but the interior will need to be demolished so that evasive structural renovations can occur. The interior can then be upfitted as new space; however, interior space will be reduced due to the additional structure added within the building. The existing building currently does not provide adequate space to support efficient, secure, and safe operations for public safety services.

Building systems such as plumbing, electrical, and HVAC receive constant maintenance. Equipment and parts are aged and becoming obsolete. The police and fire departments have evolved and outgrown the space provided within the original design. The building is overcrowded in many instances with spaces being used for multiple functions creating risks. Some of their space needs are not provided which compromises safety for building occupants. Interior finishes are degraded and in need of replacement. Only a portion of the building is supported by an emergency power generator.

The existing facility can be renovated to address the issues noted above, but it will be an expensive venture to update a facility which will still not provide the space needed to support the operations of fire and police.

Finally, as has been discussed at length, the exterior walls are structurally compromised and in need of extensive repair or complete replacement to bring the building's structural integrity up to current seismic standards.

9. Can the existing Public Safety Building be repaired?

The building can be repaired in accordance with the North Carolina Existing Building Code, but it will only meet the original built condition. It will not meet the structural requirements of a current day Category 4 Essential Facility as required by Chapter 16 of the North Carolina Building Code for all fire and police



stations or other emergency related facilities that must be protected during natural disasters. The building will need to be thoroughly renovated to structurally comply with current day facility and seismic category requirements.

10. Why is the proposed new Public Safety Facility so much larger than the existing Public Safety Building?

A Space Needs Assessment was conducted with the Police and Fire Departments at the beginning of the project's scoping phase in 2018 and continued with subsequent architectural evaluations through 2020/2021 to determine their current operational needs and anticipated future 20-year needs. From this evaluation, a building program was developed to identify space sizes to allow department operations based on current industry standards. A new building plan was developed to address the 20-year needs. The plan was reduced in size to reduce cost and does not fully address 20 -year needs. The reduced plan mainly addresses space for current needs yet some of the current needs are not provided within the existing building.

The Space Needs Assessment posted on the Town of Valdese website in October 2021.

Not every town has the same space needs for a police department and/or fire station. The same industry standards are normally applied to address space needs pertaining to the function. A town in a neighboring community, with a smaller population of approximately 3,500 has a new police station based upon space needs approximately 10,000 square feet and is planning to build a fire station based upon space needs of approximately 22,800 square feet. The proposed Valdese Public Safety Facility is approximately 24,500 square feet somewhat smaller compared to a smaller town's facilities at approximately 32,800 square feet.

11. Are there any environmental, health, safety, and welfare issues with continued use of the existing Public Safety Building?

There is evidence that asbestos remains within the building and will need to be abated. The fire department must manage several risks. Turn-out gear is stored within the Apparatus Bays which creates a health hazard due to vehicle exhaust being absorbed into the turn-out gear and its link to carcinogens causing cancer. Breathing tanks are being filled within the Apparatus Bays risking contamination from vehicle exhaust. Ice machine is located within the Apparatus Bays risking contamination from vehicle exhaust. Currently access from the Apparatus Bays into office and living areas are not controlled by ventilated airlock vestibules. Vehicle exhaust can enter the office and living areas. These issues are addressed within the new building design to provide a safer working environment for police and fire fighters.

New facility will be designed with general ventilation, carbon monoxide detection, and a vehicle exhaust system in the Apparatus Bays. Current building bays do not have any type of ventilation and are limited in width and height reducing the ability to retrofit a vehicle exhaust and general ventilation systems.

Apparatus Bay floor drains into the storm drainage system rather than drain through a sand/oil separator into the sanitary sewer system. Truck and floor washing hence spill into the environment untreated and violating environmental regulations.



The structural condition of the building is compromised and at risk due to exterior load bearing wall damage. The walls are broken beyond their original structural condition and need repair to return to their original design. The facility will need to be modified with additional steel bracing to comply with current day requirements as a Category 4 Essential Facility.

12. What will be provided within the new Public Safety Facility which is not provided in the existing Public Safety Building?

The police will be provided with a secure area to bring arrestees into the building and not compromise safety of building occupants. Arrestee interview, processing, and holding areas will be provided within an isolated secure area and not allow entry into the building proper. Space is provided for documenting and tagging evidence, evidence collection, and proper segregated evidence storage.

More office space is provided for both departments. Storage space is more efficiently provided for fire department so that turn-out gear, ice machine, and breathing tank filling can be provided within an isolated controlled environment protected from vehicle exhaust.

Apparatus Bays are larger with larger bay doors for easier vehicle access and exit of building and greater accommodation for future larger equipment. Bay space is larger allowing more flexible work around vehicles and equipment.

Currently police conduct large training events off site. Fire is limited to approximately 20 people within their training room. A new facility provides a larger Training Room which can be shared by Police and Fire accommodating up to 40 people. Currently departments have thirty-five members who would attend these trainings. This will allow Police to remain at station and fire can conduct inter department training on site as well comfortably conduct department meetings.

Fire currently has 1 shared bunk room, 1 shower facility, and 1 shared locker room for male and female firefighters to share. New facility will provide individual bunk rooms and gender separate locker rooms and restrooms to accommodate male and female fire fighters working together.

Currently departments use the recreation center for fitness training. A new facility will provide a fitness room to be shared by police and fire. With fitness room on site, fire and police can remain at the facility and work-out sessions become more flexible. Adequate storage locations for police weapons and equipment is necessary for employee and public safety. The proposal for a new facility would include locker rooms which would provide safe storage options for police.

Police and Fire share a Lobby, Training Room, and Fitness Room within the new facility design; however, police and fire operation areas are totally separate to comply with CJIS (Criminal Justice Information System) requirements. This is not the case at the existing facility.

13. What are the projected life spans of repair, renovation, and new construction?

A renovated building that includes seismic retrofit to a Category 4 Essential Facility may extend the life span of 40 years if properly maintained. A new facility is anticipated to project a minimum 50-year life span as a Category 4 Essential Facility.

14. Why were temporary repairs presented to Town Council in 2018 not implemented?



Town Council concluded that a more permanent solution was important to pursue. Town Council encouraged staff to research long term solutions to ensure employee safety and financial responsibility of tax payer dollars.

15. Do all three buildings have the same structural issues? If not, why demo all - could old town hall be saved and used for police - build smaller new location for fire?

Some of the same structural issues are present in varying degrees of severity within all three buildings. The 1978 building shared by police and fire appears to be the most compromised structure. The 1975 old town hall has similar issues but could be salvaged, repaired, and renovated for police, but the old town hall is too small so there would need to be an addition to the old town hall section to provide the additional required space.

In this scenario a new fire facility will need to be constructed first. The police will need to remain at present location while the center 2-story building is demolished following fire department's exit from the building. The building demolition will be necessary to create space for an addition to the old town hall since police require more space than town hall provides. There will be challenges renovating the old town hall since there are 3 interior bearing walls which support cantilevered beams supporting the roof structure. Once old town hall repairs, renovations, and addition is complete, police can move into new facility and the old facility can be demolished.

16. If construction of a new facility is based on the future, approximately 20 years, how have the public safety departments grown since the current building was built? What were the determining factors for this growth?

The proposed new facility does not address all 20-year needs. The 20-year need design was scaled back to help control cost. The proposed design mainly addresses current needs which are not being met within the existing facility.

Police and fire shared with other town functions a two-story building approximately 4,200 square feet in 1926. The building later expanded to approximately 5,600 square feet. In 1978 the facility expanded again into what is now 16,818 square feet. As the town has grown over the years, public safety services have expanded to address the growing needs of the town. Personnel and equipment have increased to address growth. Public Safety services have expanded over time. Various types of training have developed requiring space to equip public safety providers with educational and physical training needs. As fire equipment and vehicles are replaced, sizes continue to increase in size as equipment capabilities increase. History has identified health risks associated living within a fire station environment. These risks can be addressed with more space and mechanical means. Police departments require additional space to provide a safe and secure environment for occupants, evidence collection, and evidence storage.

The old town hall was built around 1975 and contains approximately 3,200 square feet but is currently vacant and unused by fire or police.

In the early 80's, the fire department responded to less than 100 calls per year, which were fire related only. In 1985, the department began the First Responder program which increased the call volume. Now, the department also responds to rescue emergencies, hazardous materials releases, service calls (trees



down, child/animal locked in vehicles, smoke detectors, etc.), plus conducts fire inspections according to state law requirements, more fire education, fire investigations, hydrant maintenance, and Safe Kids/car seat checks. Training and certification requirements have increased tremendously over the last 20 years.

The police department was originally built to accommodate eight officers. Currently, the department has increased to 13 fulltime officers, one administrative assistant, and ten reserves. The department utilizes meeting spaces in facilities not directly controlled by the police department (ex. Town Hall Community Room). The North Carolina training standards has increased requiring additional training for officers annually.

17. What is the estimated cost for demolition of the current Public Safety building and former Town Hall? When would this occur? What will happen to the land it occupies?

An estimated cost to demolish the current Public Safety Facility is \$175,000. These funds are planned in the CIP for 2024-2025. Demolition plans could be set for once new construction and a complete move of both departments is finished. A portion of the demolition cost could also be recouped by selling the land the current facility occupies.

18. Have other buildings and locations been explored prior to the comparison of Pineburr vs. renovation of the current facility?

Prior to the Pineburr site, studies were conducted for a new facility to be located on property at the intersection of Main and Eldred. Prior to that, studies were conducted to add and renovate the existing facility at its current location and included the possible renovation of various other buildings within the downtown area for various parts of Public Safety.

See information posted on Town of Valdese website in October 2021 for additional information.

19. Why move locations to an area surrounded by residential? On average, how many times a day would the citizens living nearby hear sirens?

The abandoned industrial site was chosen mainly due to a lack of available properties large enough for a new facility. Currently there are houses across the street from the existing fire station and residents in Old World Bakery apartments, Baker apartments, and apartments/residences on the second floor of Main St that get affected every time the trucks go out.

Siren events can be heard on average one to one and a half times per day. Some days there may be eight calls, some days none. During a siren event there may be up to four vehicles leaving the station with flashing lights and sirens. A lot of medical calls are dispatched as "routine traffic" so lights and sirens are not engaged.

20. What is the anticipated budget impact for operations and maintenance of a new facility?

A new facility will be more energy efficient which has the potential to reduce facility operating costs. With the increase in square footage, there is an anticipated slight increase that would occur with electricity and gas usage.

21. Will the USDA fund a renovation project of the existing public safety building?



Yes, renovations are eligible improvements for USDA funding just like new construction.

22. If the USDA funds are used on the existing facility, will any “special” requirements need to be met?

Yes, if USDA funds any renovation of the existing facility the entire facility will have to be modified to comply with ADA (Americans with Disabilities Act) requirements.

23. Will the term of the loan to USDA be a 30-year loan or 40-year loan?

The standard loan term whether renovation or new construction is 30 years. If the Applicant’s local economic factors from US Census Data like population, median household income, etc. demonstrate financial need and the project’s life cycle exceeds 40 years a 40-year term is possible.

24. What is the likely rate of interest for a USDA loan?

Rates are adjusted by the USDA quarterly and follow the bond market. The rate for USDA loans through 12/31/21 was 2.125% APR. The rates are subject to change depending on application date.

25. If USDA funding is not utilized, what other options for funding exist?

Local private lending is an option. Staff has inquired about private lending for a renovation project and it is possible, however, terms of repayment are much different from the USDA terms. Local private lending would be available for 3.1% APR and repayable over a 7-year term.

26. Why not tear down the existing public safety building and construct a new facility on the same site?

Because the architectural needs survey results indicate that more square footage is needed currently that is feasible to be located on the current public safety site. Also, using the existing site would require the creation of temporary operations facilities for both the fire and police departments for the duration of demolition and reconstruction.

27. How will the fire and police departments respond to calls from the Pineburr property? Is the Pineburr location response time adequate?

Police access could utilize Pineburr to the east or west as well as out to Ribet in the north and west. Fire access out is likely to utilize Ribet but could return by either Ribet or Pineburr. Chief Moss and Chief Stafford have both verified that response times from the Pineburr site would be adequate to cover the Town’s corporate limits.

28. Can the demolition of the existing mill building on the Pineburr property be included in the overall project financing through USDA?

Yes, demolition costs are eligible for the overall project work, including disposal of any hazardous materials found in the building. The current plan is to bid demolition in the main project to be completed concurrently with the other construction activities but bid the demolition as an add-alternate to give the Town the opportunity to omit the demolition work if the project’s construction costs are more than the budgeted funds.

29. What is the estimated cost for demolition of the existing mill building on the Pineburr property?



Preliminary estimates of the cost to demolish the existing mill building are approximately \$450,000 and that cost has been included in the current new facility project budget.

30. Will the Town have to abate any hazardous waste at the Pineburr location?

No, all environmental inspections have been performed and came back clear for any hazardous waste.





Valdese Public Safety Building Evaluation

Outline

Building Repairs and Accessibility

Building Renovations

Logistics

Operation Requirements

Comparison

Opinion of Probable Cost

Building Repairs and Accessibility

Wall Cracks

Parapet

Exterior Doors

Police Upgrades

Fire Sprinkler

Floor Drainage

Water Leaks

Accessibility

Toilets

Entrance

Exit

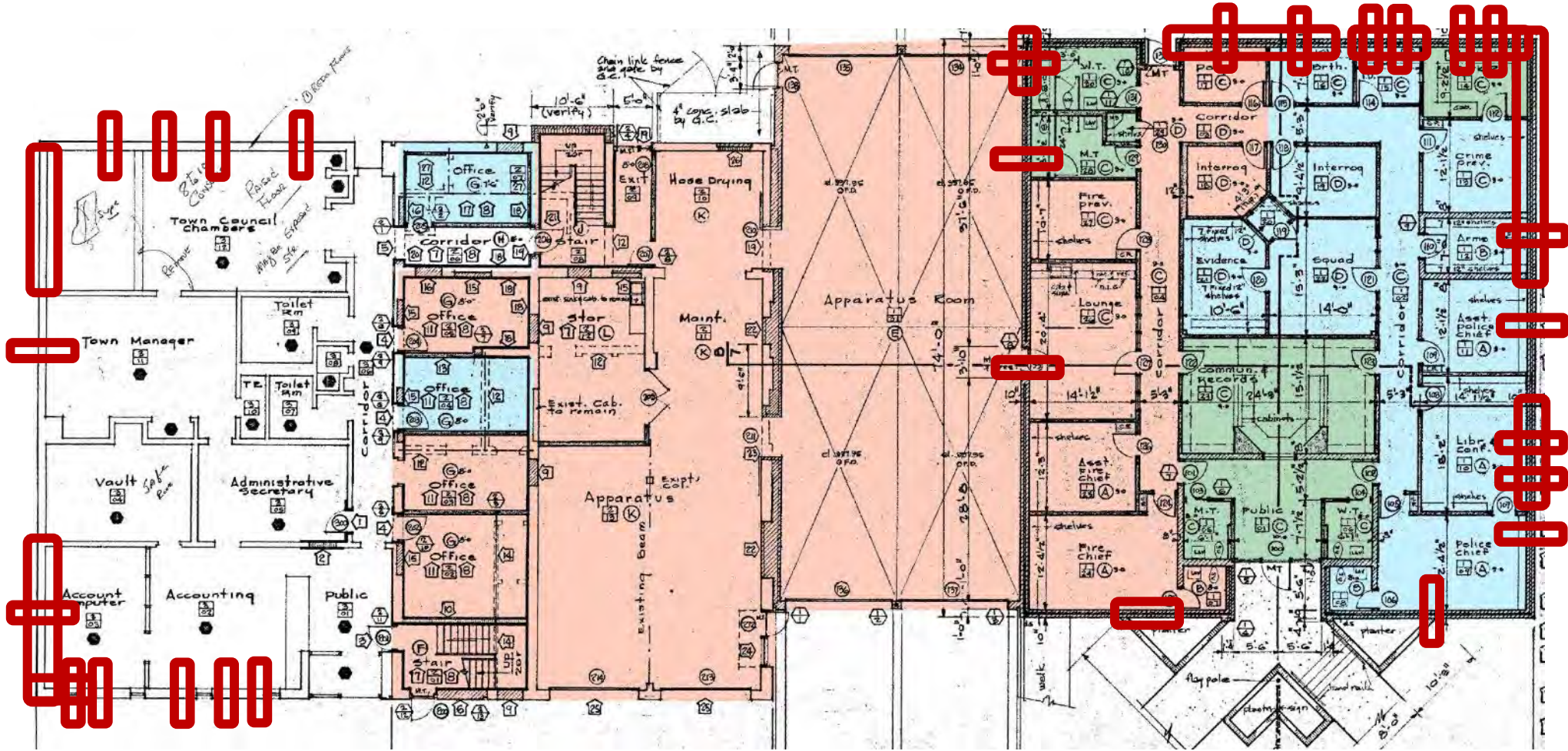
Shower

Elevator

Existing Building



Interior Masonry Wall Cracks



Interior Vertical Wall Cracks (Police)



Interior Horizontal Wall Cracks (Police)



Interior Vertical Wall Cracks (Police)

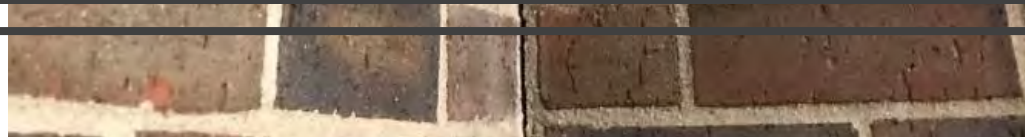
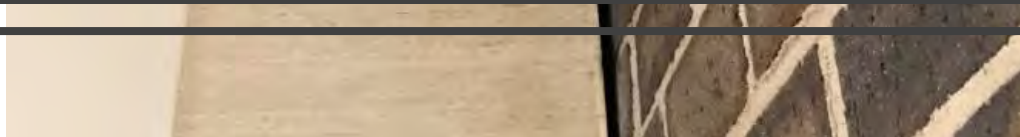


Interior Vertical Wall Cracks (Police)





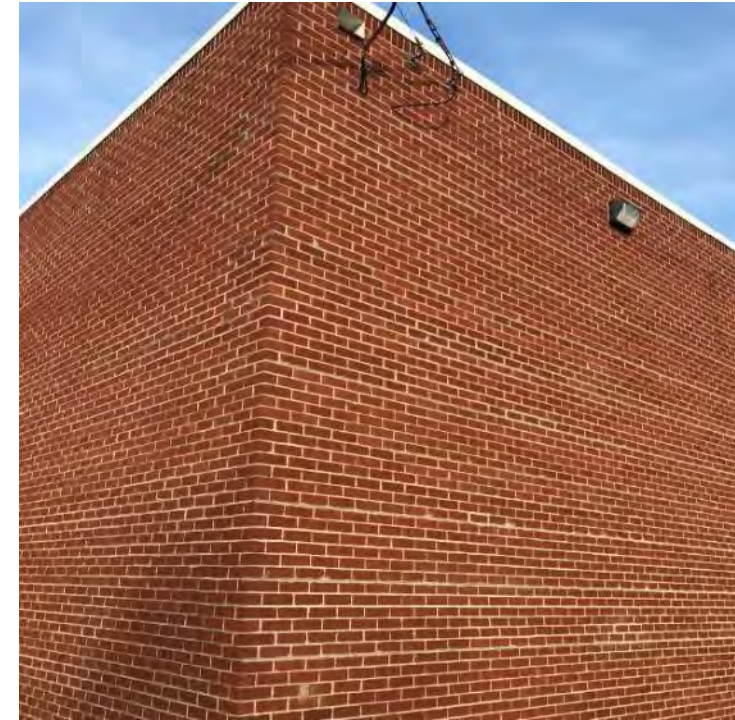
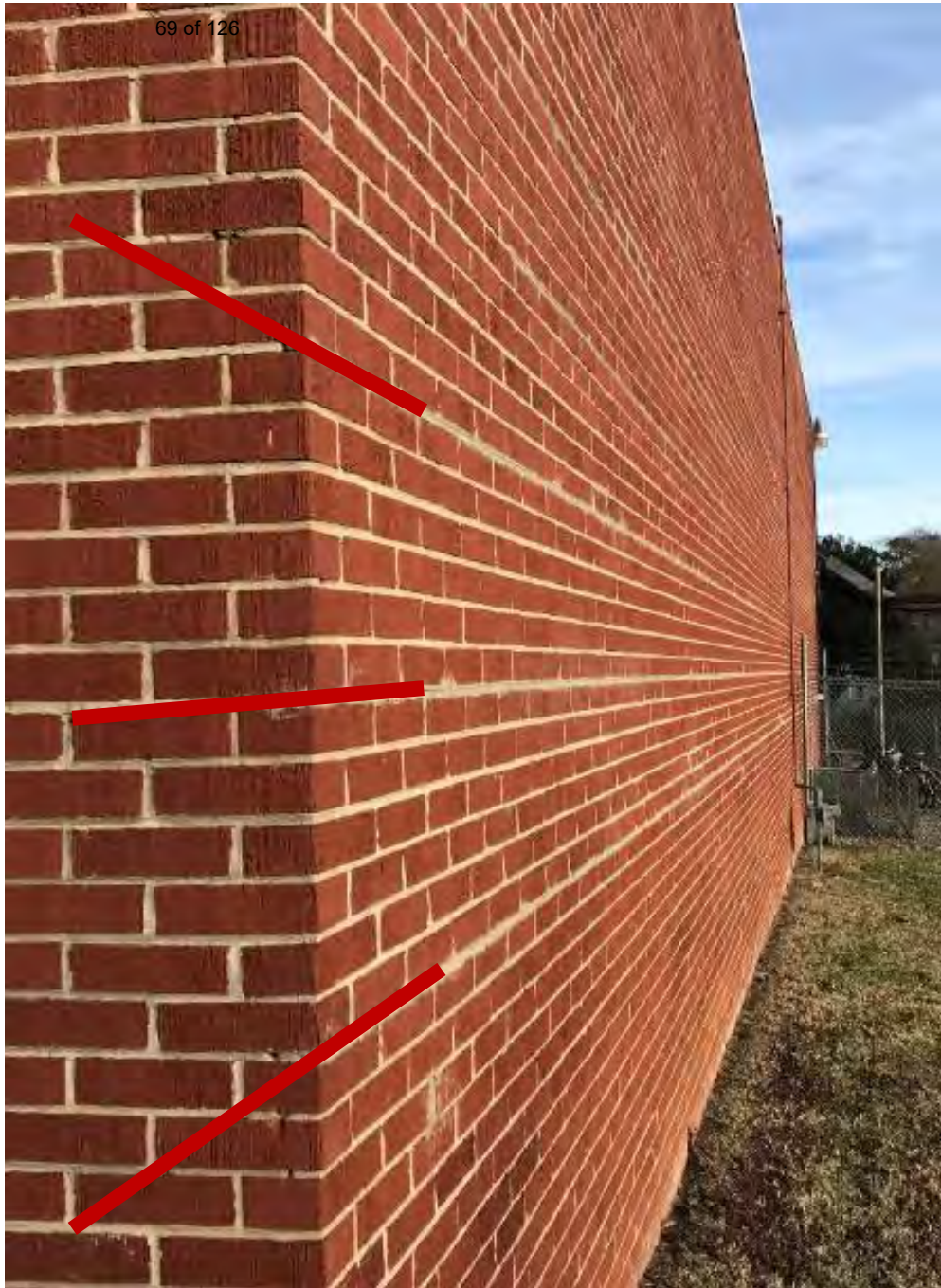
Interior Wall Displacement (Police)



South Wall

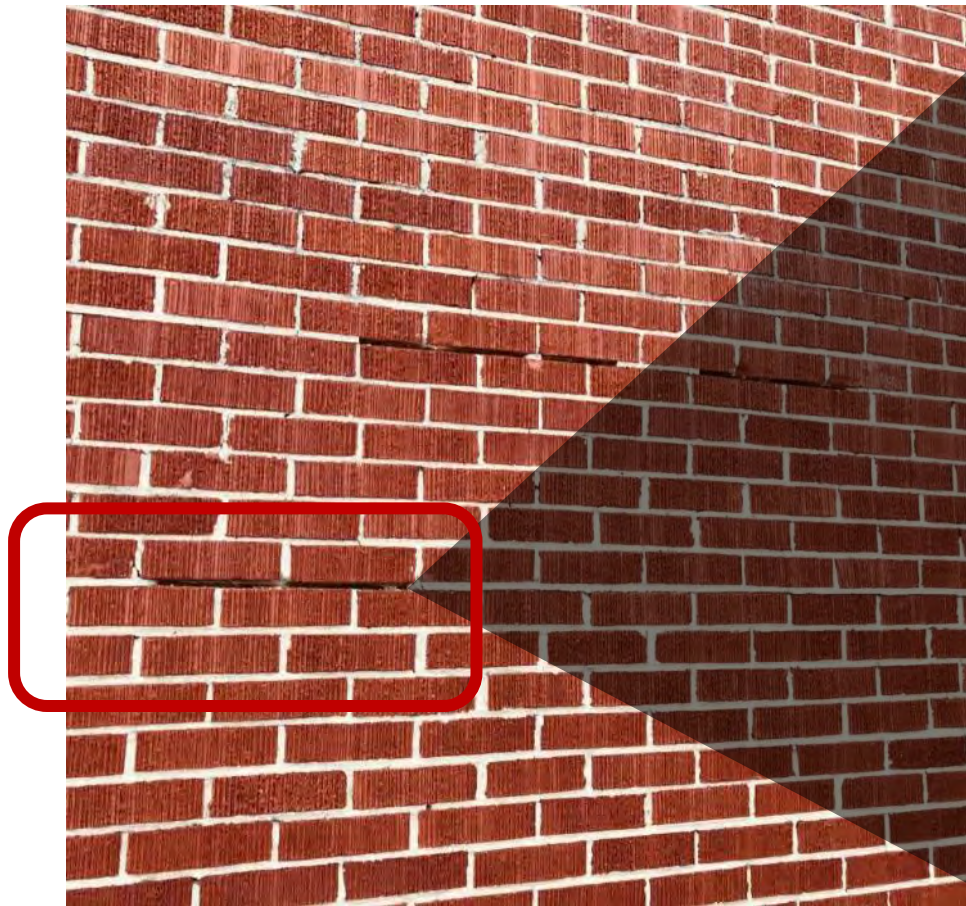
Previous Horizontal Wall Crack Repair





Exterior Horizontal Wall Crack Repair

East Wall Cracks



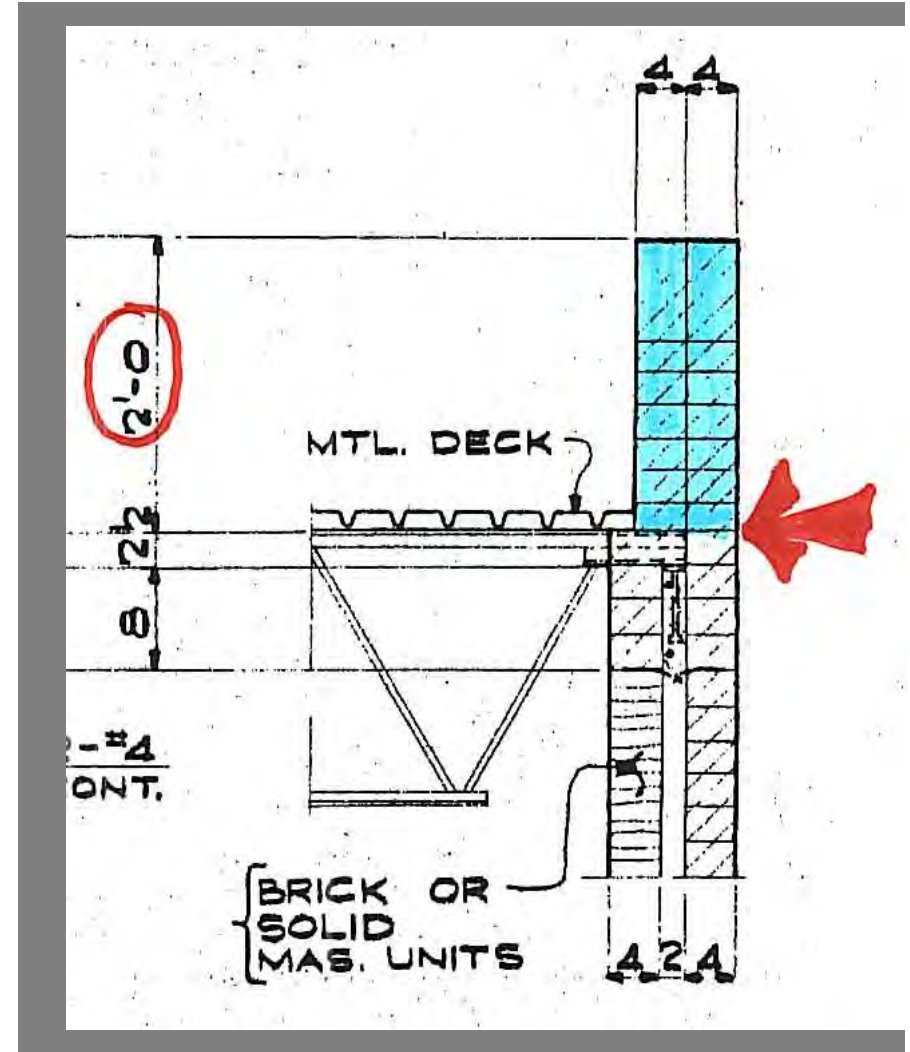
East Wall Canopy/Cracks



North Wall Cracks

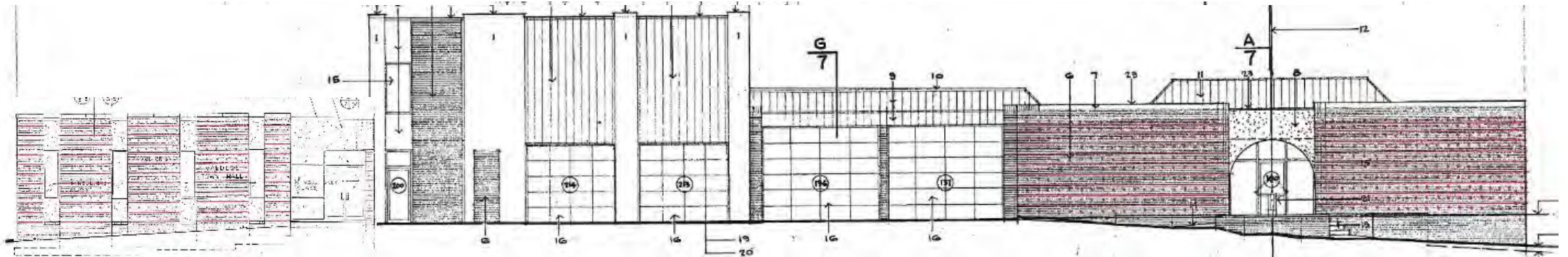


East Wall Parapet

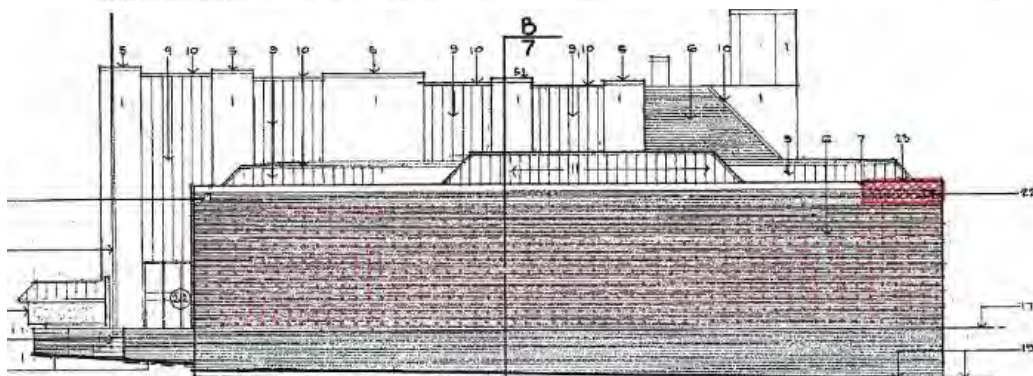


Wall Repair

75 of 126



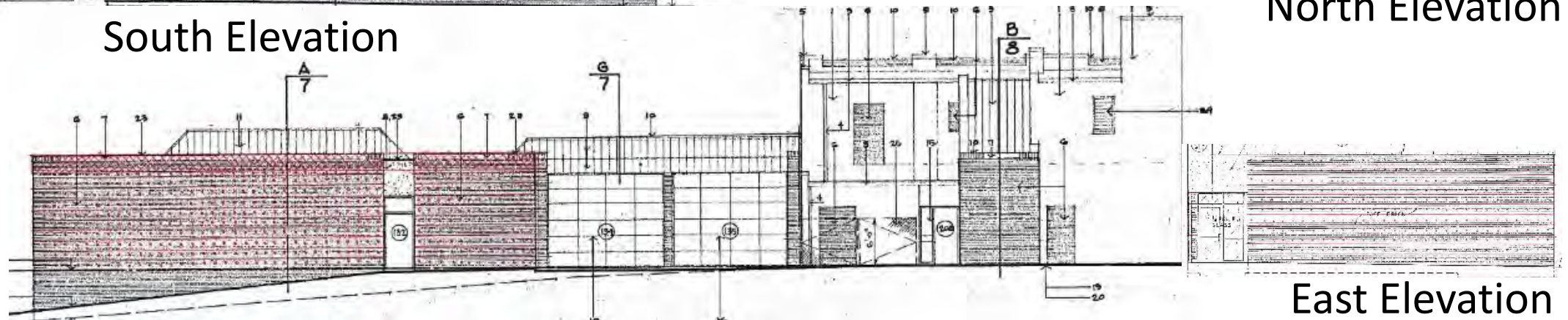
West Elevation



South Elevation



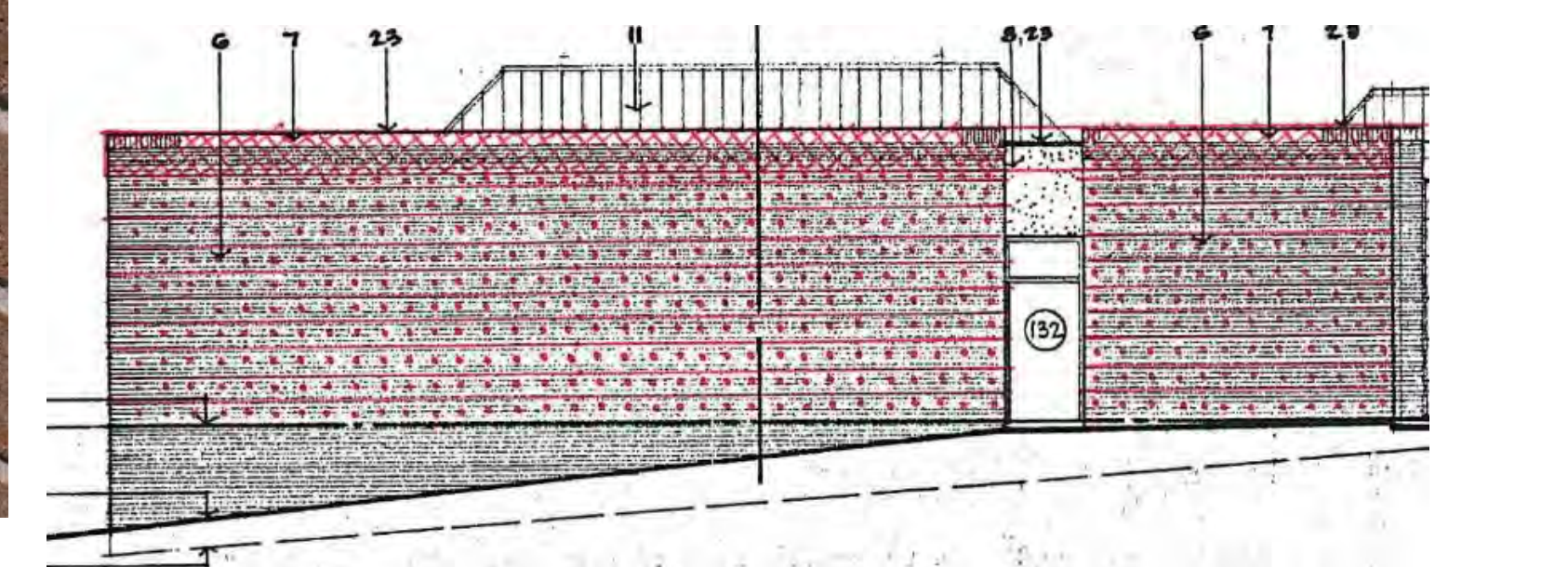
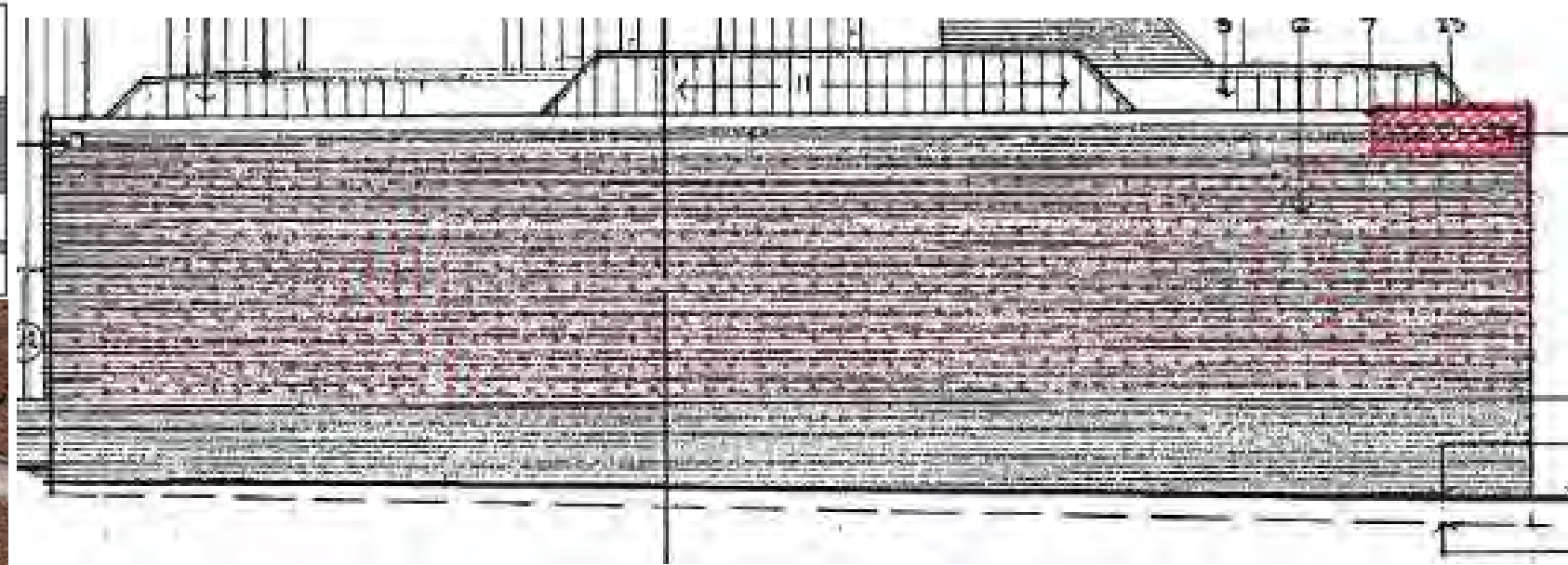
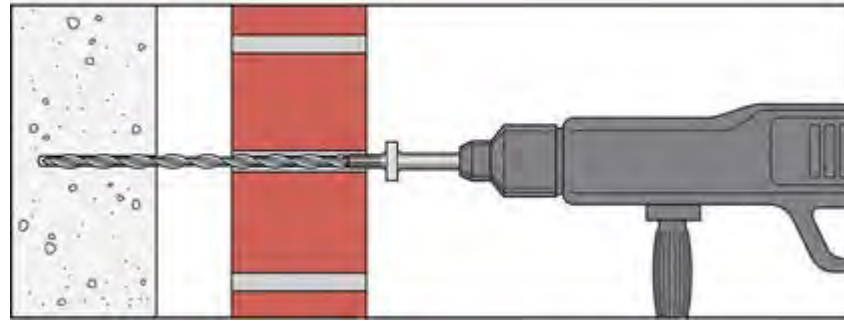
North Elevation



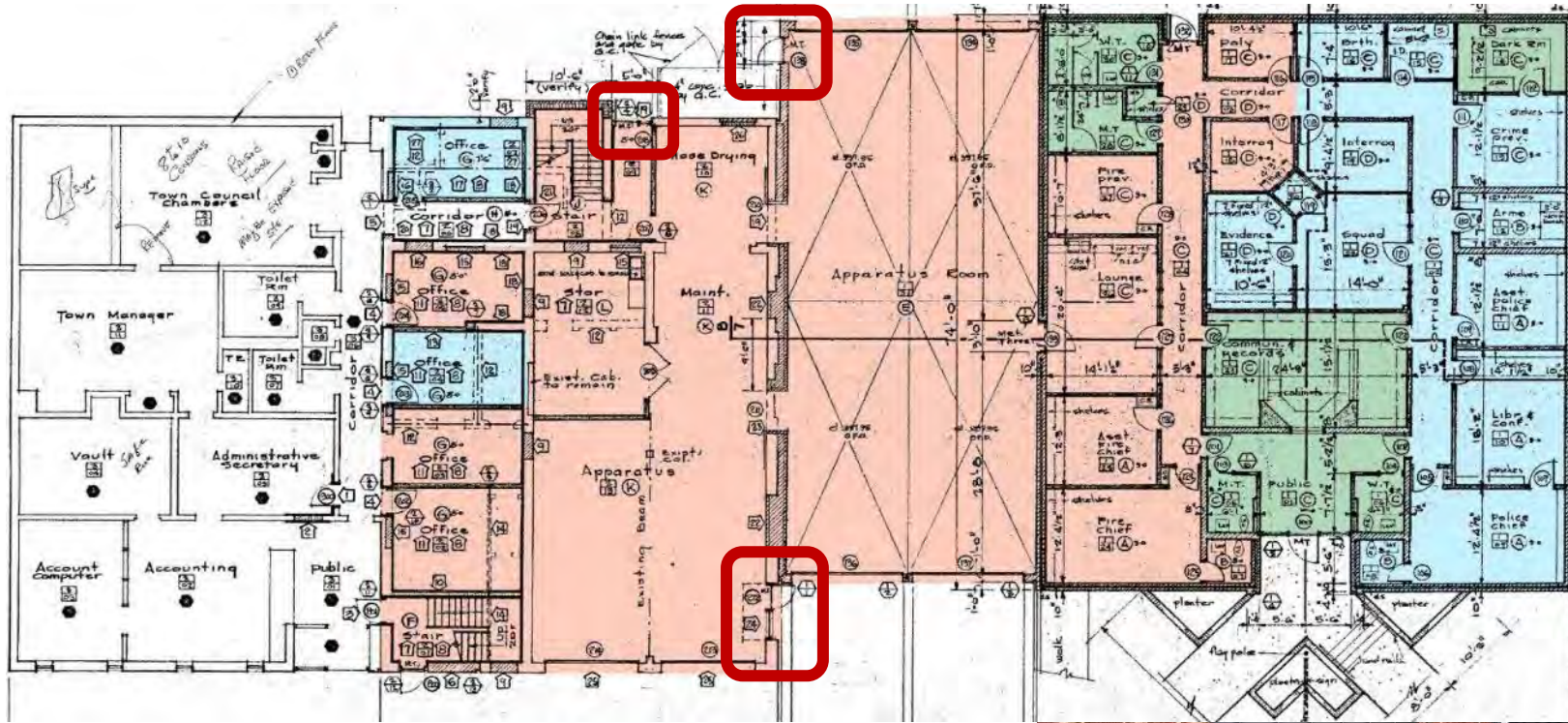
East Elevation

Wall Repair

76 of 126

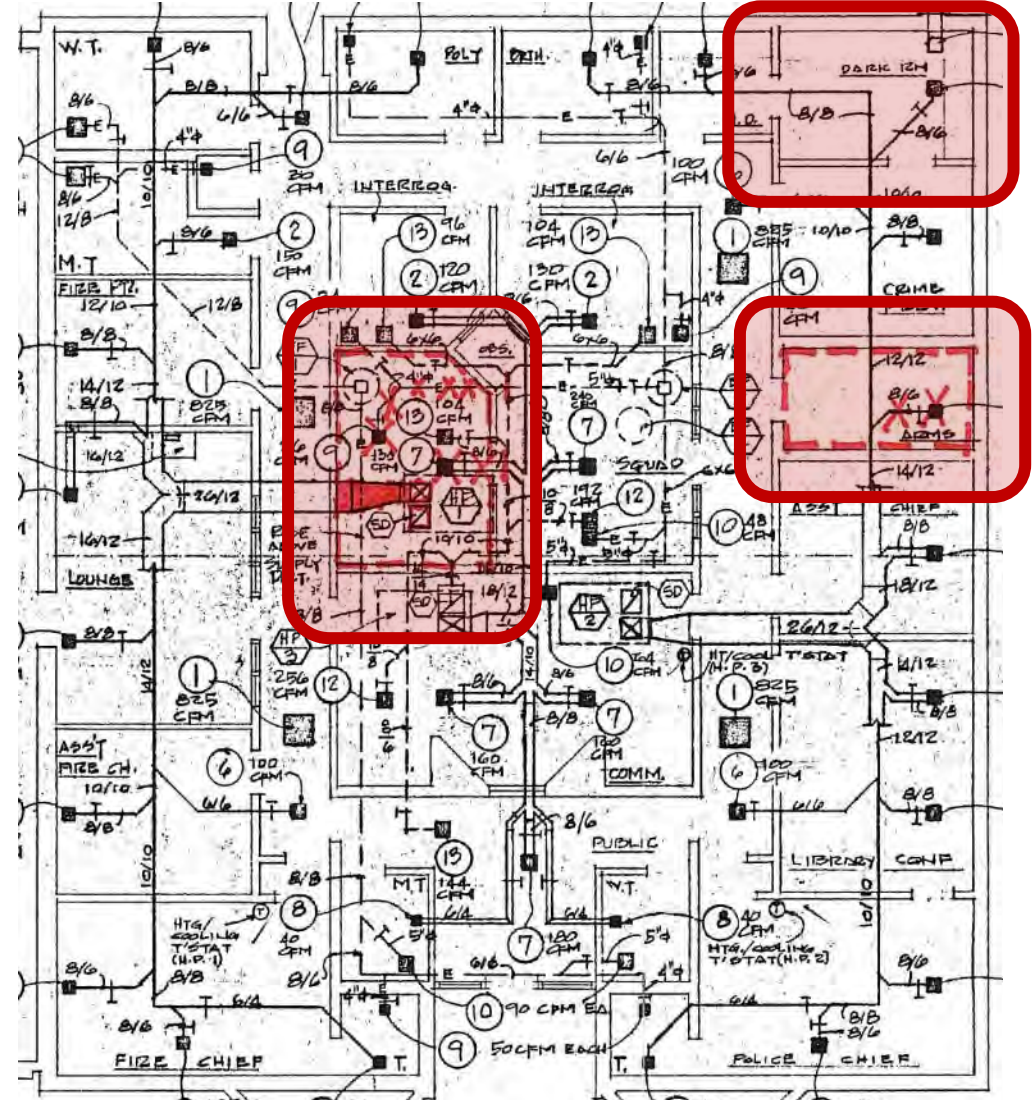
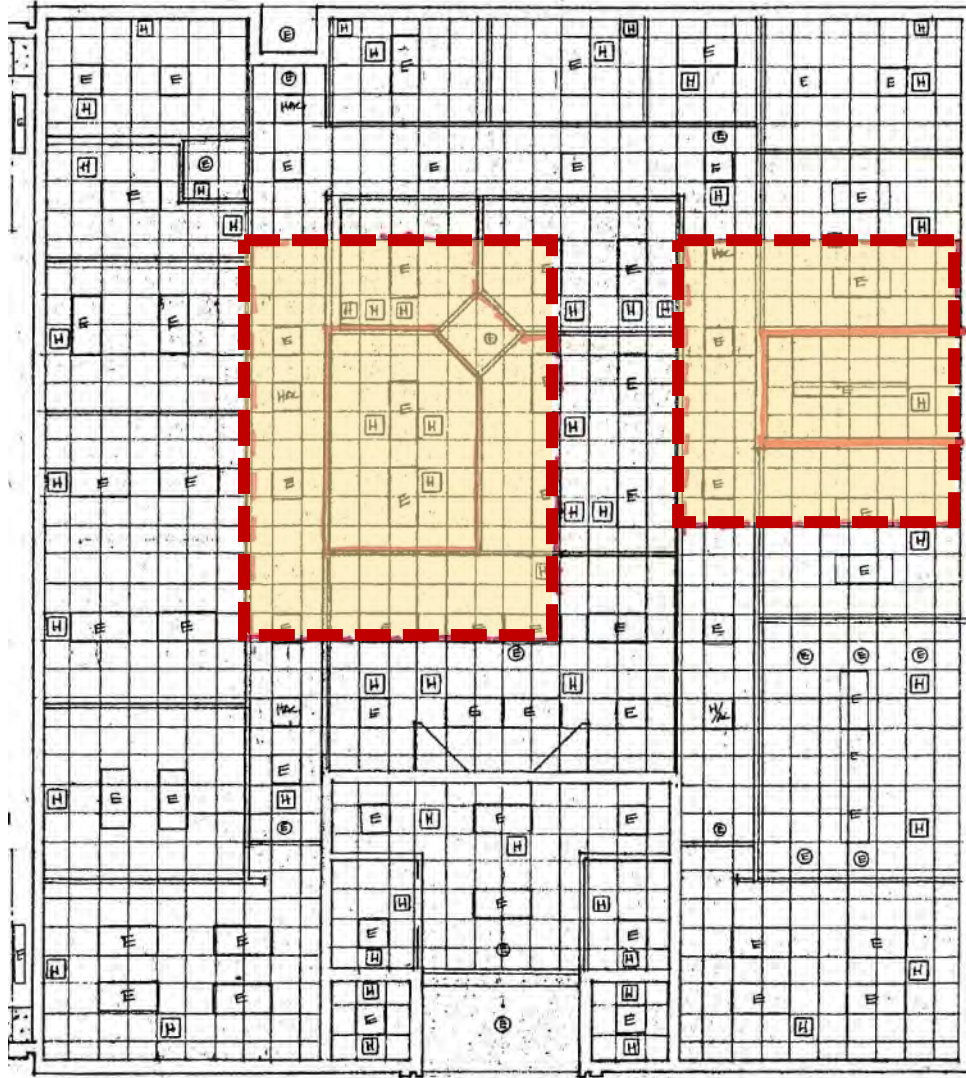


77 of 126 Replace Exterior Steel Doors & Frames

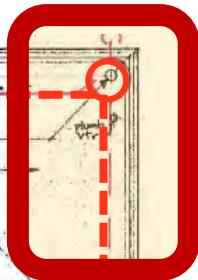
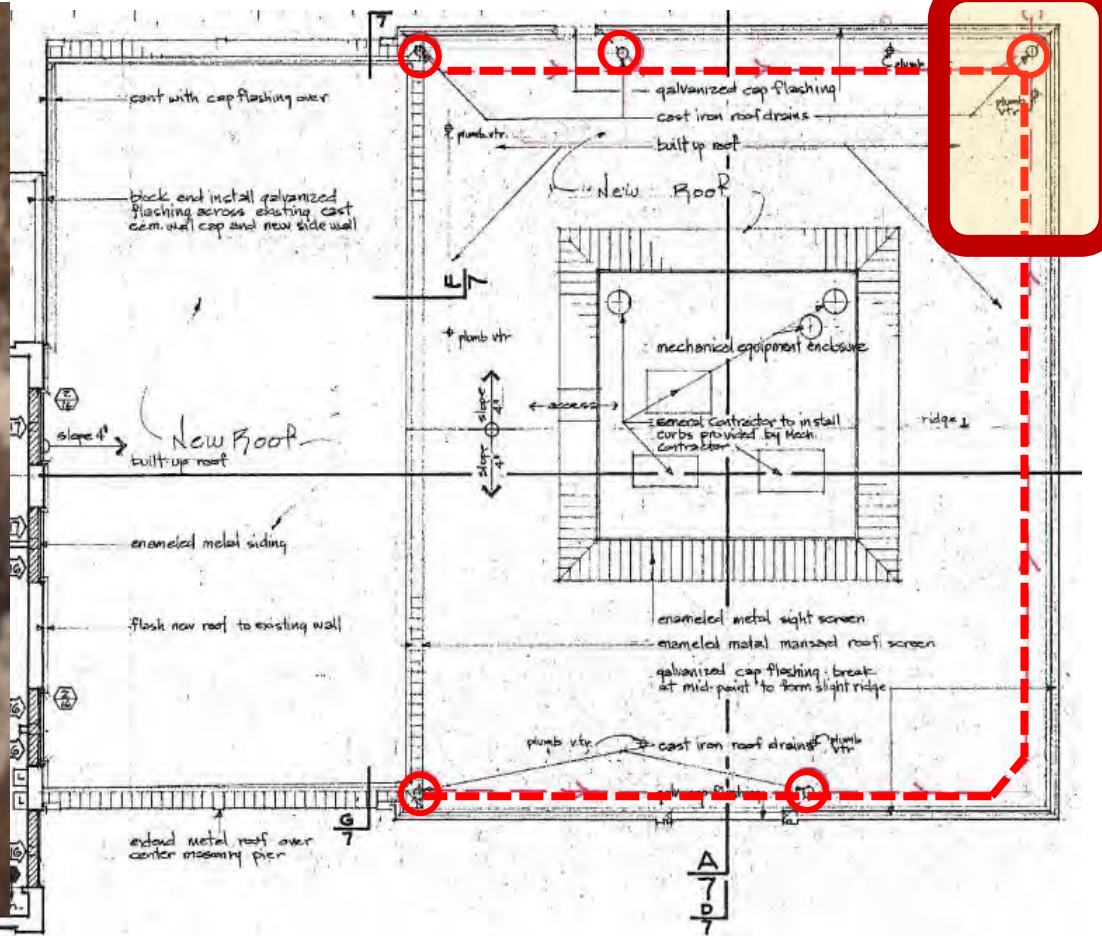


Police Upgrade / CALEA Requirements

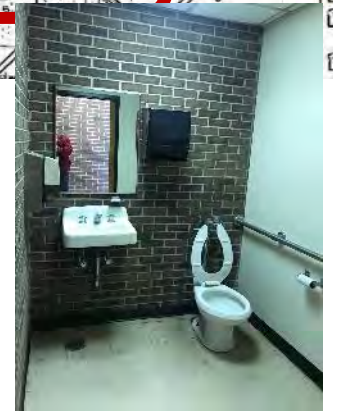
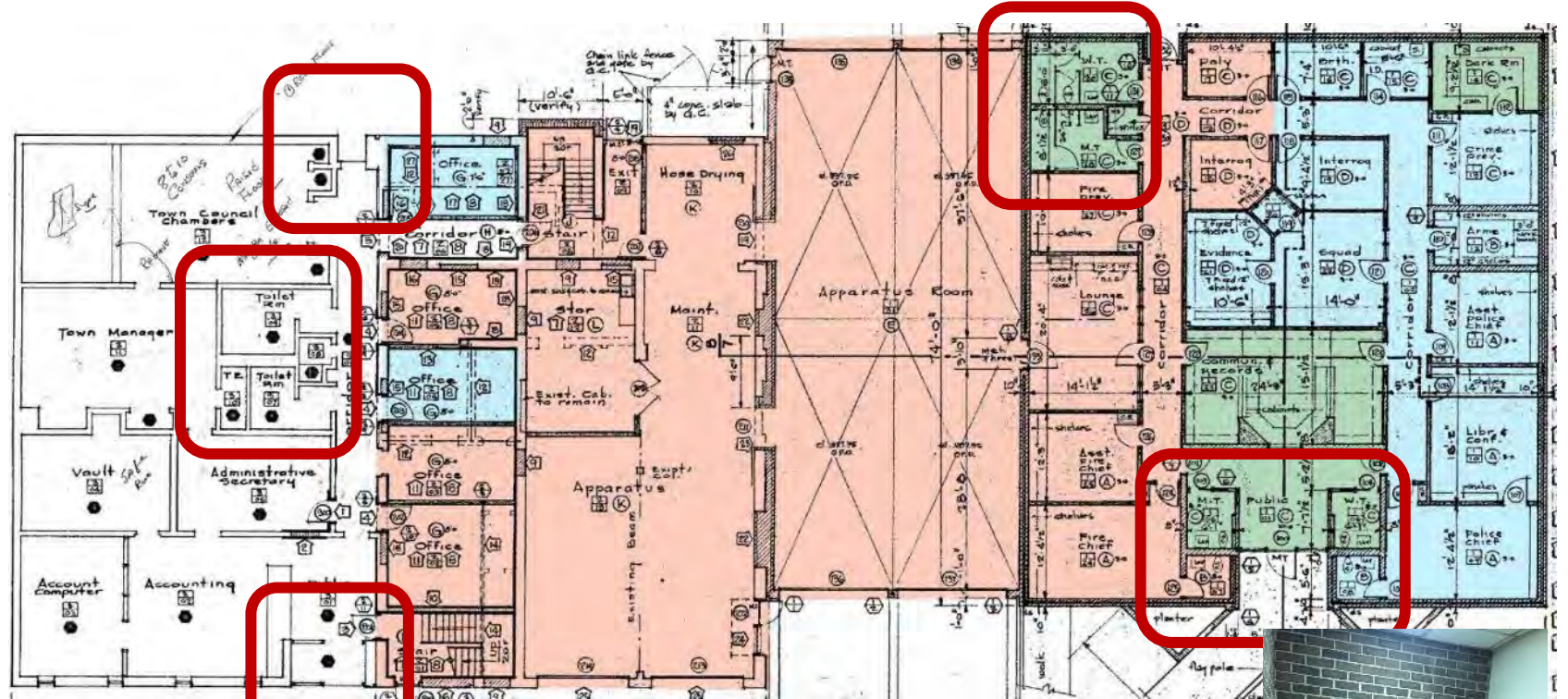
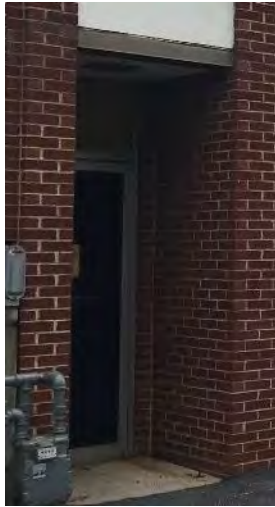
Commission on Accreditation for Law Enforcement Agencies



Water Leak

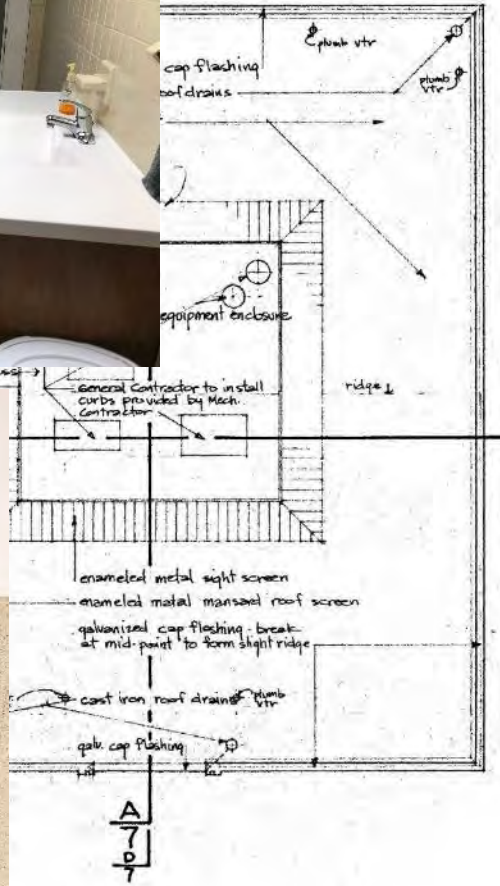
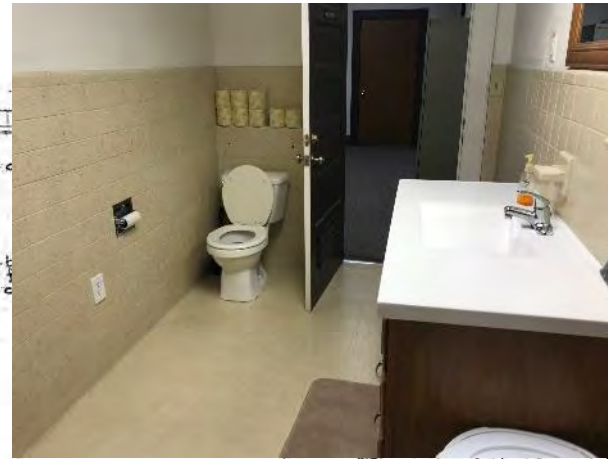
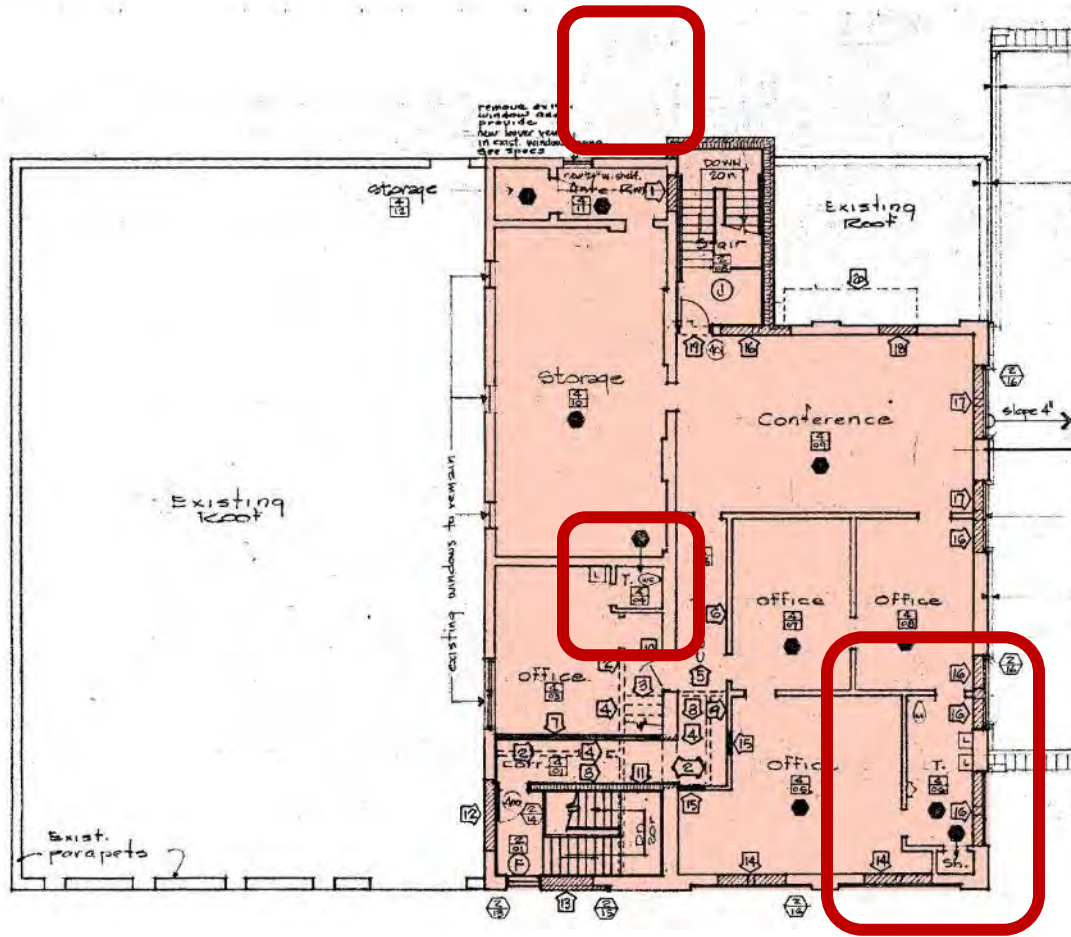


Accessibility Renovation – Floor 1



Accessibility Renovation – Floor 2

Elevator



Building Renovations

Building Renovations

- Replace Exterior Building Sign
- Police & Fire Kitchen Renovation (Shared Space)
- HVAC (Obsolete / Maintenance)
- Plumbing (Maintenance)



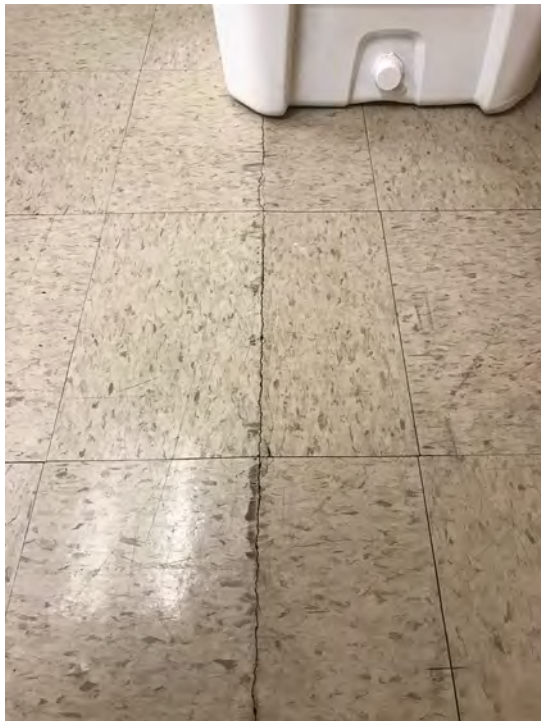
Building Renovations

Upgrade Electrical (Power & Lighting)
Upgrade Life Safety Exit & Egress Lighting
Emergency Back-up Power Generator (Partial)



Building Renovations

Steel Bracing Frames (Category 4 Essential Facility)
Asbestos Abatement
Interior Finishes (Floors, Walls, Ceilings)



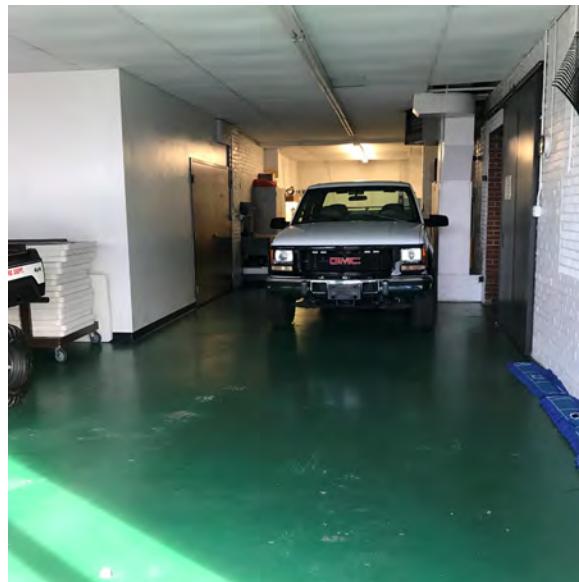
Building Renovations

Apparatus Bay Floor Finish

Apparatus Bay Vehicle Exhaust System

Replace Existing Windows

Police & Fire Office Renovations

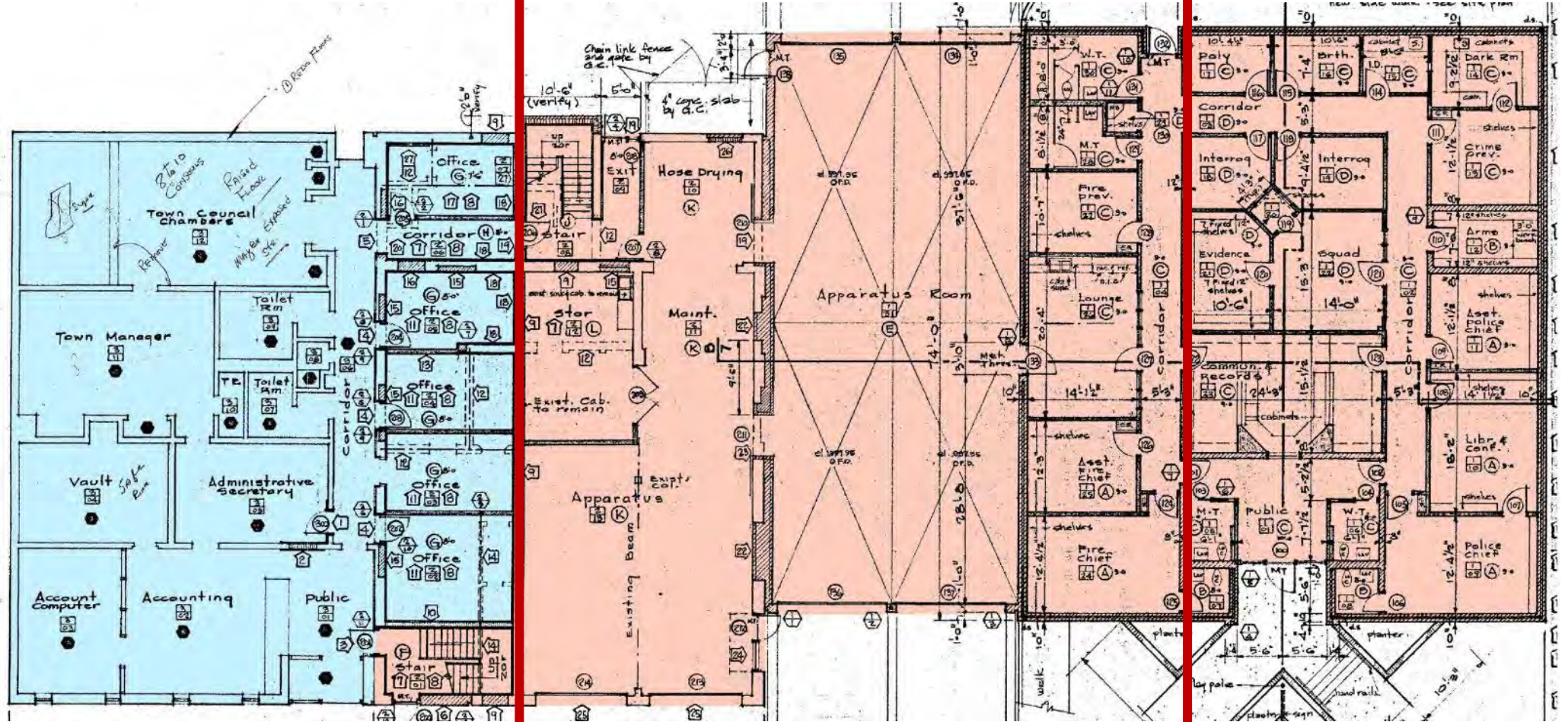


Relocation During Renovation

Phase Renovation to Reduce Relocation

Logistics

Logistics



A

C

B

Operational Requirements

93 of 126 Overview of Existing Facility Problems

- ❑ The 42-year-old & 95-year-old buildings are overcrowded and ***do not support efficient or safe fire and police operations.***
- ❑ These problems ***compromise ability for services to be delivered to the public in a safe, secure, and efficient manner.***
- ❑ Many functions are required to ***share small & crowded spaces.***
- ❑ There is ***limited opportunity*** for internal training, community activities, and many other functions.
- ❑ The building in question is a combination of three structures. Cracks are present in most exterior walls. Cracks seem to be worse in the 1978 addition (police) and moving towards the fire department, but ***the entire structure is compromised.***
- ❑ Instead of there being a single storage area, items are ***separated into several small storage areas.*** SCBA compressor, gear storage, and ice machine are located within the Apparatus Bay. ***Truck exhaust creates risk for contamination.***
- ❑ Turn-out gear storage within Apparatus Bay. ***Truck exhaust creates hazardous contaminants.***
- ❑ Lack of sufficient areas for Storage Support is ***forcing the diversion of some Apparatus equipment, materials and supplies to improvised locations, impairing operational efficiency.***
- ❑ The Fire & Police Departments ***do not have a Fitness/Exercise area.*** Employees must leave the station to travel to a gym. The public gym is not always open during times that firefighters can attend and does not have after hours access.
- ❑ There is very little hands-on training that can be completed at existing building.

94 of 126 Overview of Existing Facility Problems

- ❑ The Dayroom is only big enough for two people so when extra personnel are on duty there is not room. ***This does not support efficient fire and police operations.***
- ❑ The ***Fire Sleeping area is too far away from the bays and located on a second level.*** The existing facility has ***one large sleeping area*** which is not ideal when you have a ***combination of female and male employees.*** Only one bathroom and shower in the sleeping area.
- ❑ ***Lockers are insufficient in number and size.***
- ❑ The Administration offices are small and spread in the facility.
- ❑ ***One workstation for all the Patrol officers and is not sufficient.***
- ❑ ***Storage space which it located in the different building.***
- ❑ ***Administrative support lacks space for conference room, interview rooms, supply storage, file cabinets, copy machine.***
- ❑ ***Patrol functions lack needed grouping for operational efficiency.***
- ❑ ***The existing Police facility lacks Report Writing space.***

95 of 126 Overview of Existing Facility Problems

- The existing Police do not have a dedicated Roll Call room. Spaces are not large enough for all personnel involved in shift briefings.*
- Police Training is conducted off-site. *Certain training needs are better conducted in-house.*
- The Police Department lacks a Locker Room with sufficient space to accommodate officer uniforms, personnel equipment, boots, and other needed items.*
- The Police Department do not have an arrestee Processing/Holding area.*
- Absence of a Sallyport for prisoner transfer at the Police facility is brings with it a serious security risk.*
- Evidence Storage is overly congested and operationally inefficient due to the existing building space. Evidence storage with sensitive evidence items is accessed from the Break Room, and some evidence lockers are located in the Break room due to the lack of space.*
- Evidence Storage and evidence related areas lack Pass-through lockers, Bag and Tag area, separation of the Drug, Valuable, Weapon storage. Evidence Storage has no logging system.*
- Break Room is too small and lacking in needed features, i.e., sink, oven, dishwasher, microwave, refrigerator, icemaker, and sufficient vending machines. All these features are presently located in the Kitchen on the Fire Department side. It is very insufficient in location for required access and in needed features.

Overview of Existing Facility Problems

- The entire Fingerprint and photo ID area lack secured separation from civilian use.*
- Central location is needed for printer, copier, scanners, fax, and shredder.
- Storage areas are located outside of the building, and this restricts access on a daily basis. Each Police Department unit requires storage for different purposes. Among the needs are archival storage, equipment/supplies .
- Functionality of the **Records Division** is to work as a large open space with individual work areas. Administrative Assistant serves two Departments Police and Fire. Existing support areas currently in dire need additional space with no means for expansions in the present building configuration.
- Lobby** is overly congested and operationally inefficient due to the existing building space availability and configuration.
- Rear of the police department is unsecure in the parking lot. Anyone can enter Police Parking lot in the rear of the department. Police employees must enter through traffic into the parking lot even though there are signs. Officers cannot see if anyone is outside the door before exiting the building. The rear door has no way of observing what or who is on the other side. No camera system is in place. No surveillance ability is provided. Police parking does not have a secure fenced parking lot.*

Comparison

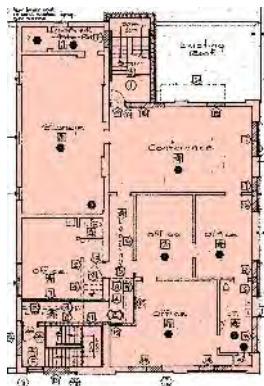
AREA SUMMARY COMPARISON			Existing Building	20 Year Need	Schematic Plan
A. Police Department					
A1	Administrative		385	722	787
A2	Records		360	339	272
A3	Investigations		0	103	147
A4	Patrol		588	772	907
A5	Break Room		205	200	240
A6	Intake / Holding		139	638	508
A7	Sallyport		0	880	900
A8	Property / Evidence		153	480	526
A9	Locker Rooms		0	550	577
A10	Storage		544	680	518
B. Fire Department					
B1	Administration		680	960	891
B2	Operations - Work Area		73	150	160
B3	Operations - Support Areas		924	1390	1397
B4	Locker Rooms / Toilets		495	538	515
B5	Apparatus Bay		3374	6400	6400
B6	Support Storage		1360	1406	1939
C. Shared Areas					
C1	Lobby		290	712	536
C2	Training Room		485	1754	1217
C3	Fitness		0	750	424
D. Subtotal			10055	19424	18861
E. Dept. & Building Grossing Factor			6763	6960	5621
Includes departmental & building circulation, mechanical & electrical areas, building structure, and exterior envelope.					
F. Total Gross Square Footage			16818	26384	24482
			Defficient	(9566)	(7664)
				-36%	-31%

Comparison

>30% Deficient

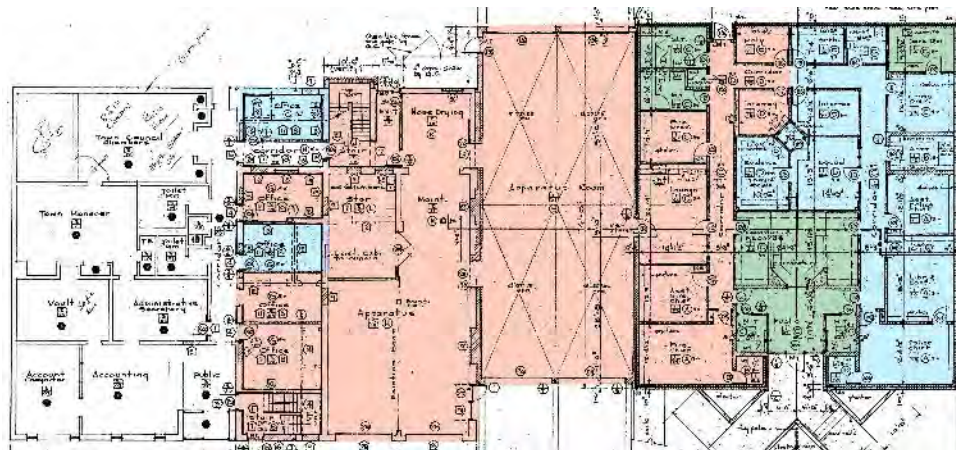
Building Comparison

99 of 126



Existing
16,818 sf
(7644 sf)

Second Floor



First Floor

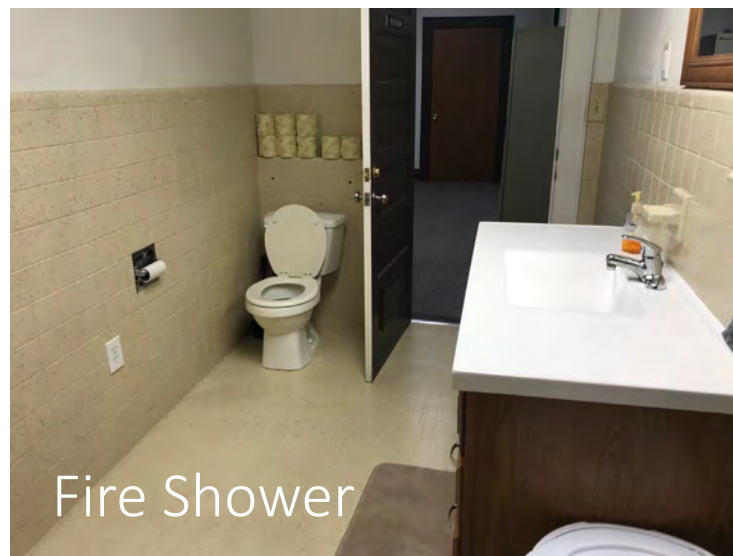
Proposed
24,500 sf



First Floor



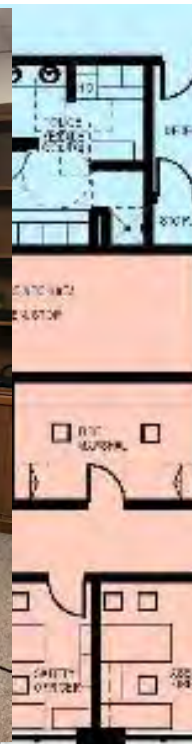
Fire Lockers



Fire Shower



Police Lockers



Gender Separation

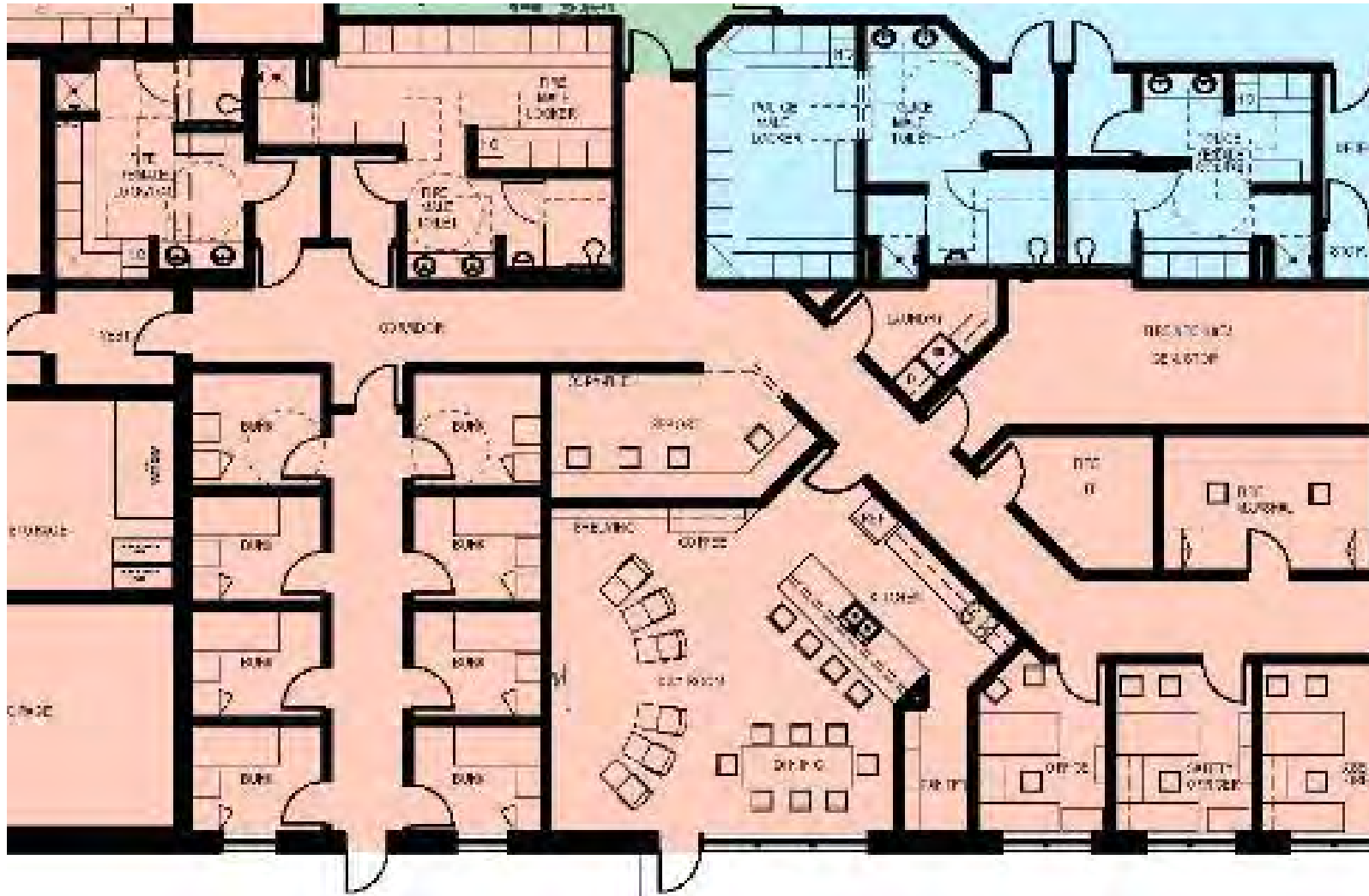
Separate Bunk Room & Locker Room

Female

Male

Male

Female



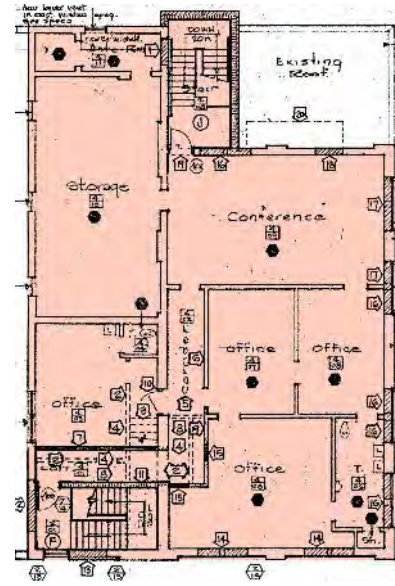
Unisex Bunk Room

Gender Separation

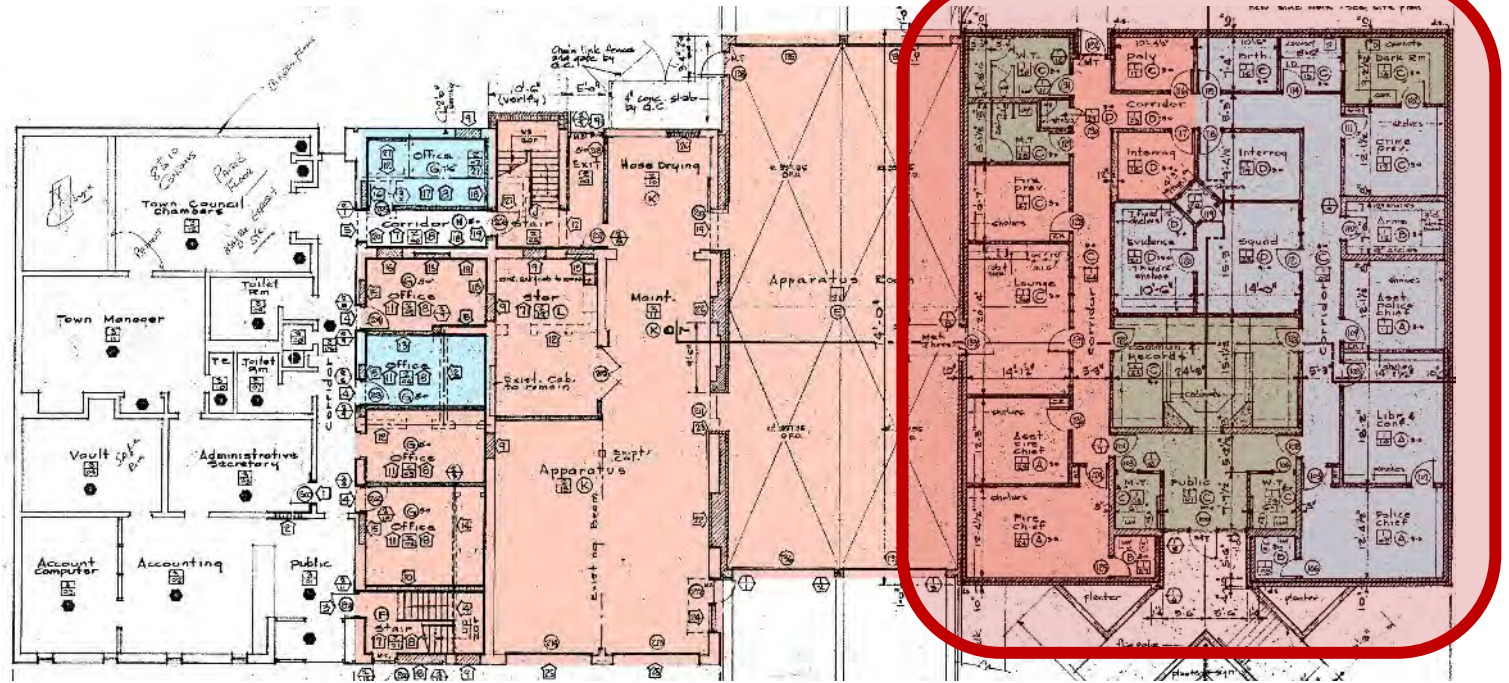
Separate Bunk Room & Locker Room

Existing Building

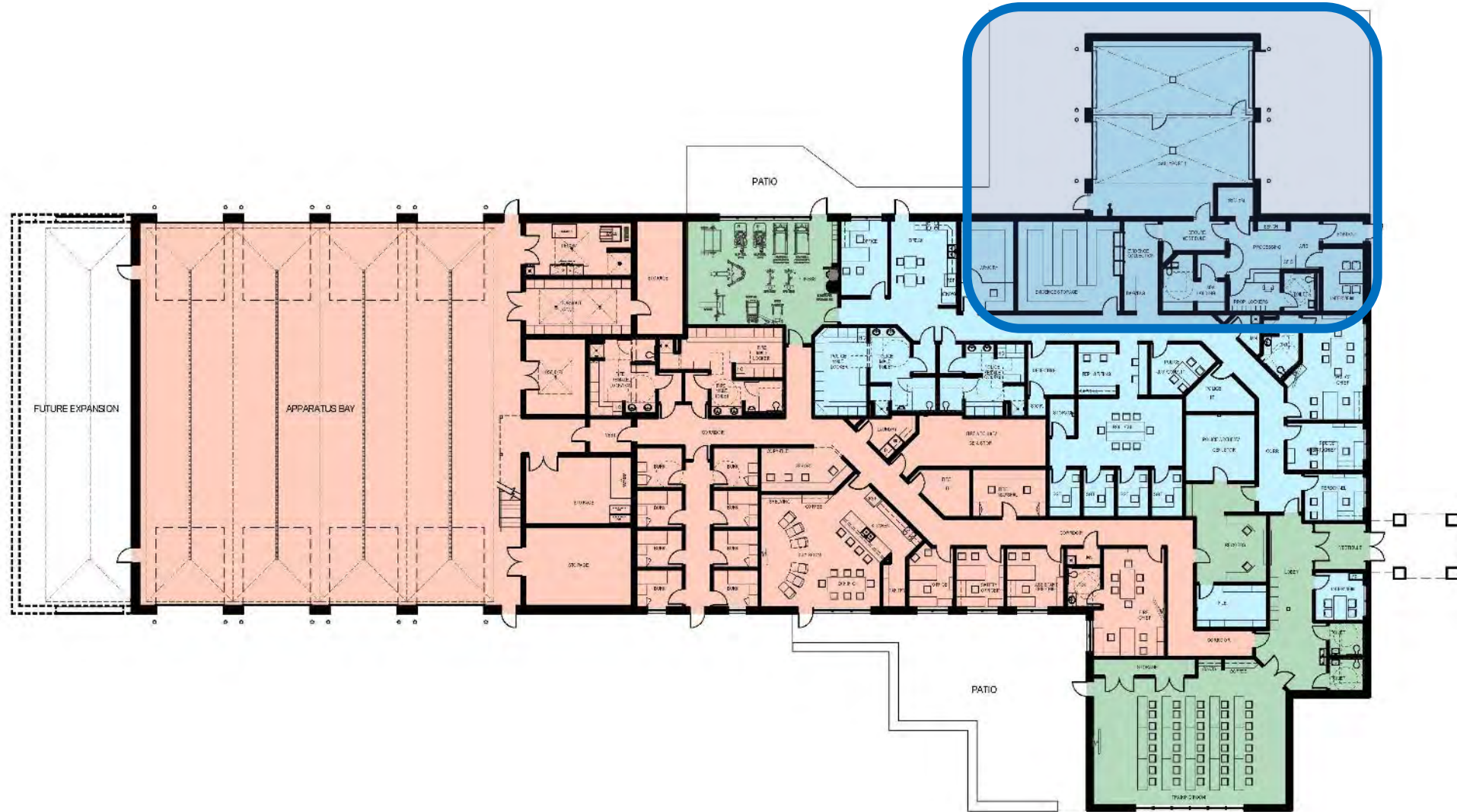
Second Floor

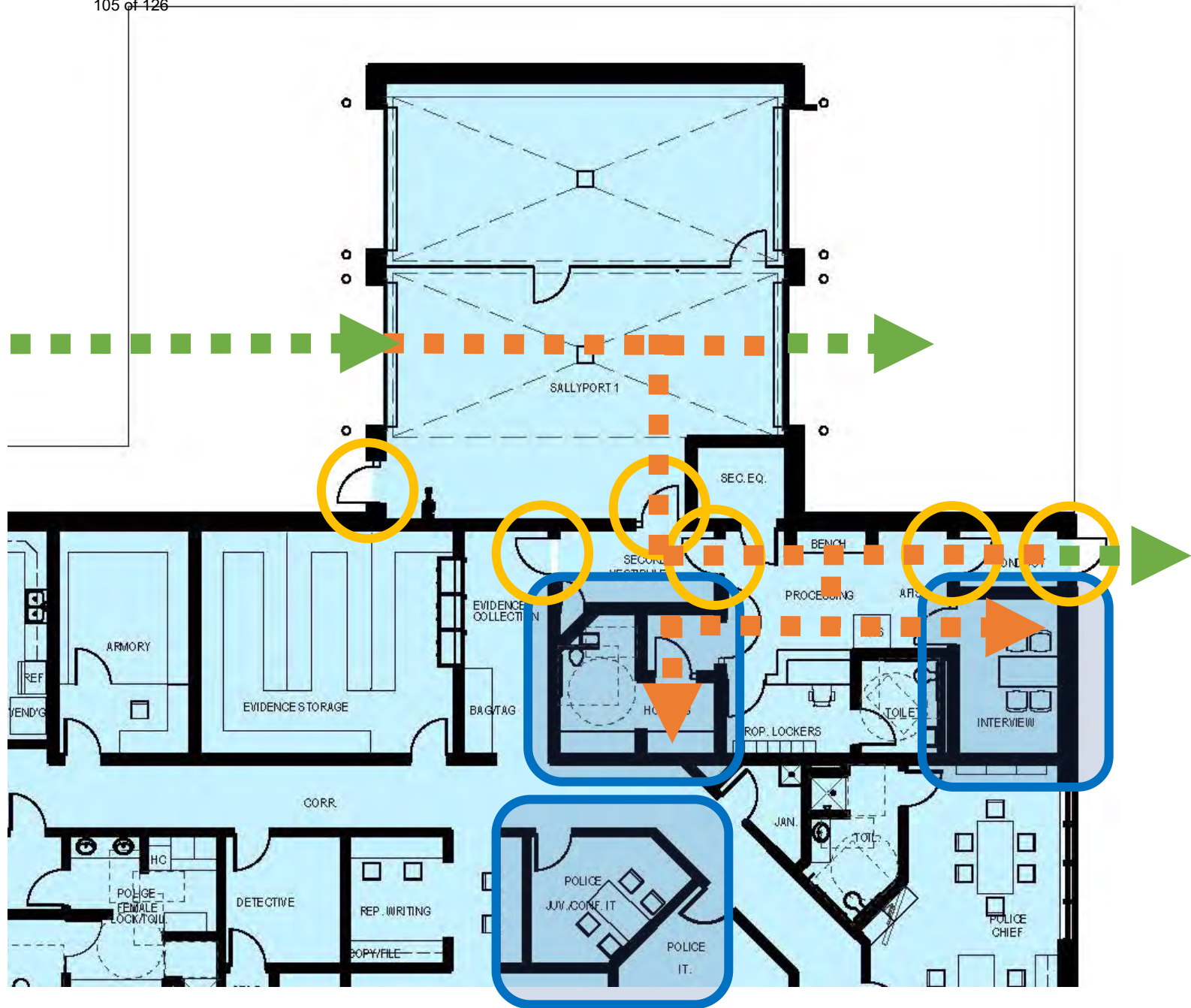


First Floor



Proposed New Facility



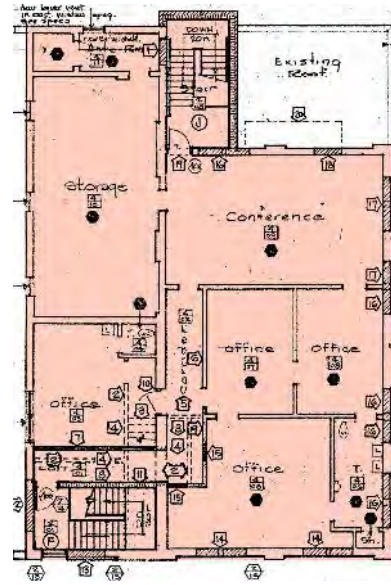


Reduce
Risk:

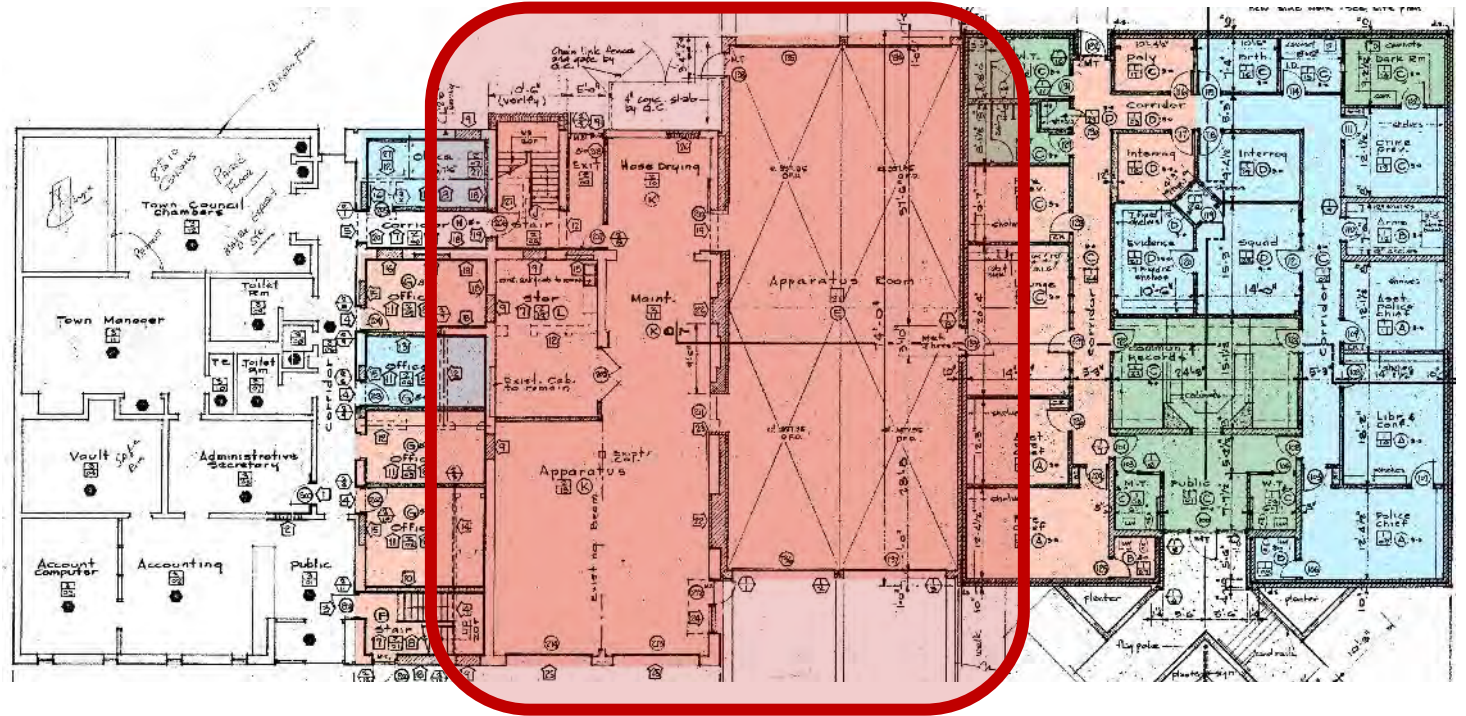
Secure Processing
& Holding

Existing Building

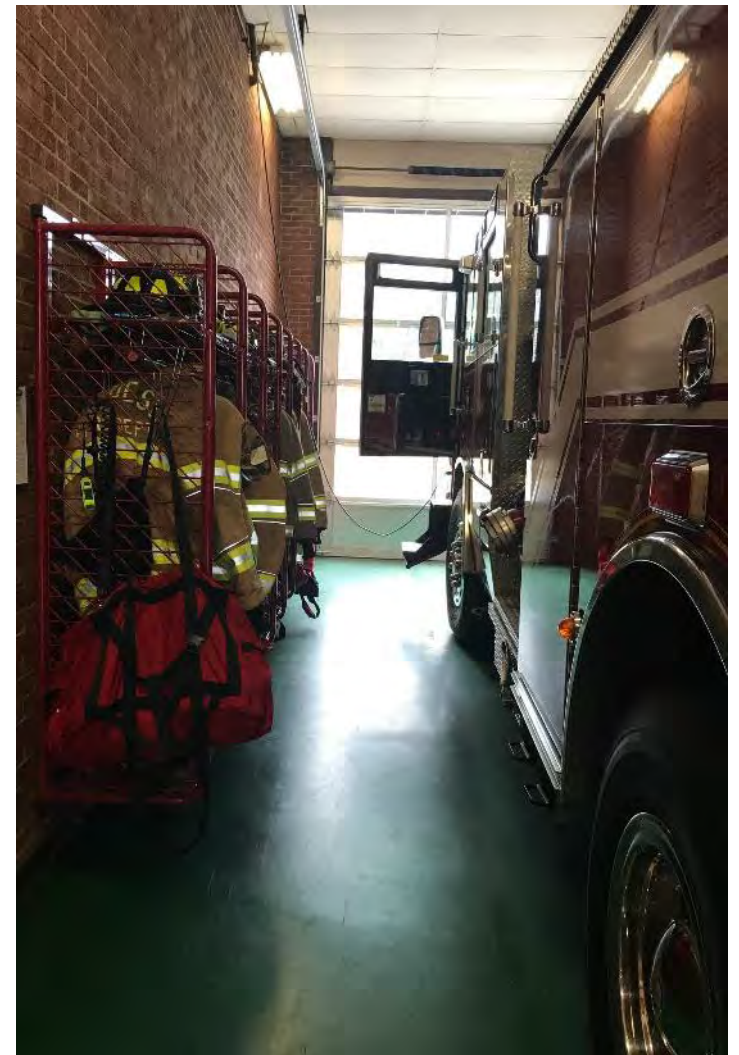
Second Floor



First Floor



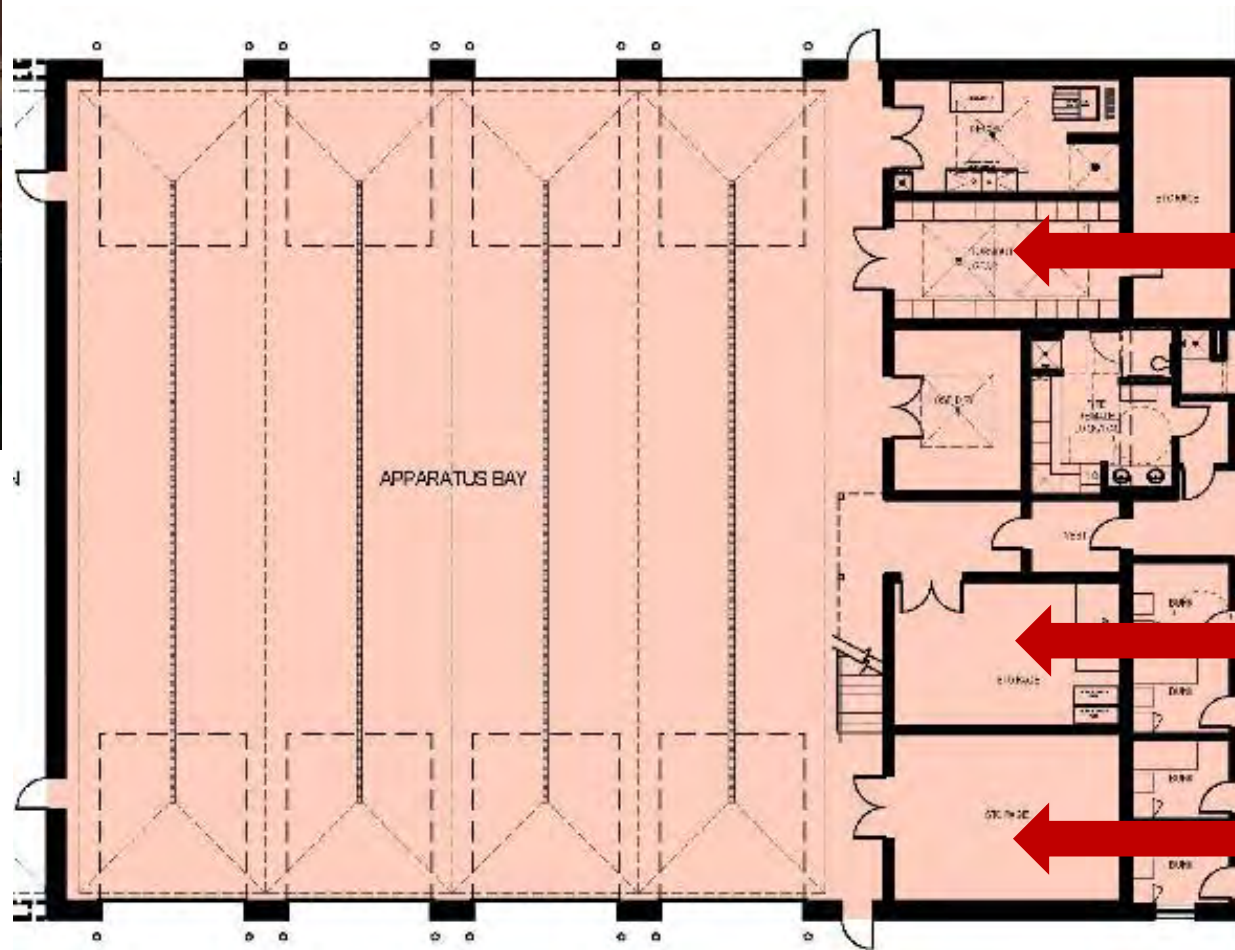
Vehicle Exhaust Contamination



Proposed New Facility



Proposed New Facility – Isolated Storage

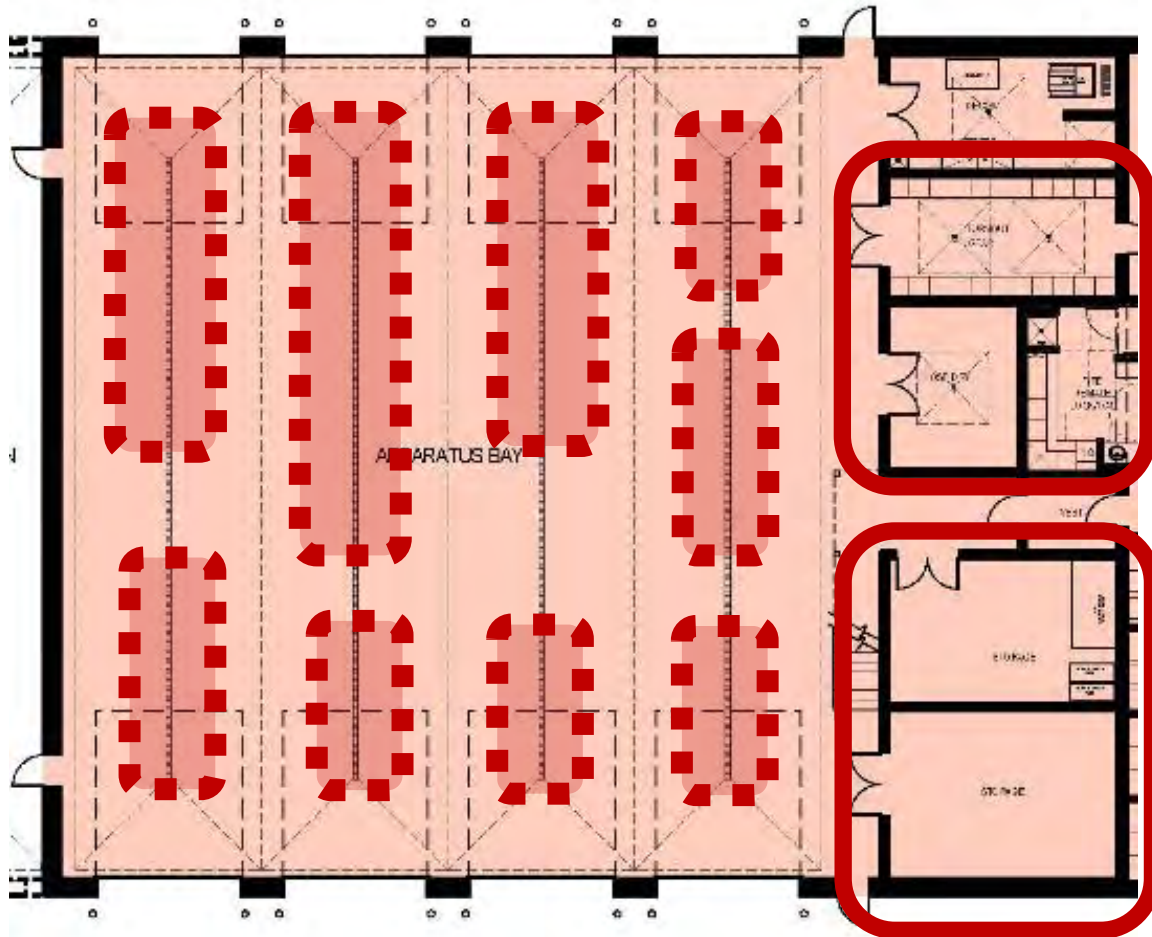


Turnout Gear

SCBA Tank Fill

Ice Machine

Proposed New Facility – Fire Truck Bays



- (4) drive thru bay (20'-0" x 80'-0")
- (8) back-in bays
- Store (8) vehicles & (1) trailer
- Greater Flexibility (80'-0" x 80'-0")
- Equipped w/ Vehicle Exhaust & Ventilation
- Storage adjacent to Bay
- Tilt Cab

Opinion of Probable Cost of Construction

New Building – Opinion of Probable Cost



24,500 sf
\$7,048,050

Building Cost
Site Development Cost
Soft Cost
Furnishing & Equipment
Includes NC State Grant

Thank you for your time.

VALDESE PUBLIC SAFETY FACILITY

FINANCIAL OVERVIEW

FINANCIAL OVERVIEW

Regulations

Debt

Economic Outlook

Financing Comparison

HOW ARE TOWN FINANCES REGULATED?

- **General Statutes**
(Local Budget Fiscal Control Act – Section 159)
- **Required to receive an annual audit**
- **Various reporting requirements throughout the fiscal year**
- **LGC (Local Government Commission) is a department of the State Treasurers Office. Authority of all local governments throughout the State.**

LGC Must approve debt for the unit of government before obtaining a loan

HOW ARE TOWN FINANCES REGULATED?

- Town must follow GAAP (Generally Accepted Accounting Principles)
- Under GAAP, the Town must follow **FUND ACCOUNTING**

General Fund

Utility Fund



Fire & Police

GENERAL FUND DEBT

	Annual Payment	Years Remaining
Fire Engine (USDA)	26,908	2
Fire Ladder Truck (USDA)	52,761	16
Trucks & Equip-Street (Truist)	53,743	4
Town Hall (USDA)	88,878	29
Splash Park (USDA)	19,483	36
Patrol Vehicles (Truist)	18,471	3
Total	260,244	
Debt to Budget Ratio	4.28%	

GENERAL FUND VS HOUSEHOLD DEBT RATIO

Per the U.S. Census Bureau (www.census.gov) for **BURKE COUNTY**:

- Median Household Income = \$44,557
- Median Monthly Mortgage = \$691 (\$8,292 per year)
- If a mortgage was the only debt within the household, then the debt ratio for a median household in Burke County would be $8,292 / 44,557 = 18.61\%$

This does not include any other debt such as credit cards or vehicle loans

Current Town Debt
4.28 %

Burke Median Household Debt
18.61 %

LEGAL DEBT MARGIN

North Carolina General Statutes (regulated by the LGC) limits the amount of debt that a unit of government can issue to **8%** of the total assessed value of taxable property located within the Town's boundaries.

For 2021, the legal debt margin for Valdese is **\$25,987,838**

Combining the General and Utility fund outstanding debt amounts to **\$10,348,915**

Currently using **40%** of the allowable debt margin per State guidelines

ECONOMIC OUTLOOK - LOCAL

CURRENT PROJECTS

	Tax Value
Pine Crossing	\$ 9,800,000
Tron Place	8,000,000
Historic Valdese Weavers Mill	12,000,000
2021 Residential Construction	5,503,874
Total	\$ 35,303,874
Tax Revenue	\$ 192,406

FUTURE PROJECTS

Lakefront Subdivisions
Valdese Bluffs
Edelweiss subdivision

ECONOMIC OUTLOOK - NATIONAL

DELAYING WILL INCREASE COSTS

- Economists anticipate GDP growing nearly 4% in 2022
- Ongoing tense relations with China pose material availability/cost risk
- Increased wages and shortage of labor for construction companies
- Federal Reserve interest rate hikes through 2022

FINANCING COMPARISON

	New Construction	Renovation
Loan Amount	7,048,050	6,484,199
Term of Loan	40	40
Rate	2.25%	2.25%
Annual Payment	269,076	247,550

Either Option Will Not Require a Tax Increase or Cuts to Existing Services