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# A Study of the Existing City of Fremont Police Station and the Dodge County Sheriff's Department Properties to House a Future Joint Law Enforcement Center & Public Safety Answering Point (PSAP)

September 4th, 2021

A Study of the Existing
City of Fremont Police Station and the
Dodge County Sheriff's Department Properties
to house a future

# JOINT LAW ENFORCEMENT CENTER & PUBLIC SAFETY ANSWERING POINT (PSAP)

Fremont, Nebraska

September 3rd, 2021

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STUDY OF THE EXISTING CITY OF FREMONT POLICE STATION
AND THE DODGE COUNTY JUDICIAL CENTER SITES
TO HOUSE A FUTURE JOINT LAW ENFORCEMENT CENTER &
PUBLIC SAFETY ANSWERING POINT (PSAP)

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# Executive Summary

1.0

**ACKNOWLEDGEMENTS & EXECUTIVE SUMMARY**

Prochaska & Associates would like to thank Assistant City Administrator Shane Wimer, the Fremont City Council, and Sheriff Steve Hespen and the Dodge County Board, for the opportunity again to assist with this Study Document. Prochaska & Associates has enjoyed a professional relationship with the two entities, City and County, dating back to 2012, and we feel our familiarity with the existing facilities and personalities has given us a unique opportunity to be of service for this effort.

Our understanding of the task at-hand is to explore the potential of three separate locations in Fremont to accommodate the essential components of the previously-developed Facility Program of Spaces for hosting such a joint facility: the existing Police Station property, the existing Sheriff's Department property, and a "greenfield", or unbuilt site. We understand that the vacant property under consideration is the 29th & Yager site, or "Outlot A" of a development also termed "Fremont Technology Park", and we have been asked briefly in the past to look more closely at this site for purposes of placing this joint-use Facility Program at this location. Since we believe the joint facility fit fairly easily on the "Outlot A" property, we will therefore focus more on the relative potential to adapt the existing developed properties, and use cost and feasibility issues as a basis for comparing the three. It has been suggested that the citizens of Fremont and Dodge County might be sensitive to maintaining functioning viable buildings within the commercial core of town, particularly the essential services, meaning that our task will be to thoroughly vet the potential of the two in-town properties, and thereby allow a fairer comparison of the three.

As with all of our public Assessment work, we believe the focus should constantly be upon the eventual viability of any given project to the voting public. To this end, we see this effort as two-fold: the first being compilation of the basic data, and second, involvement of the public in the preliminary design process as much as is feasible. Before going to a Bond Campaign, we will always recommend a process where the press and other mass media is kept closely involved, and where all public opinion is welcomed, and if we are asked to assist with passage of such a Bond, we will advocate heavily for our use of our signature Community-based Planning Process. We find that the number one obstacle to Bond passage is a sense that the voter is often the least understanding of the real departmental needs. Direct involvement of the public via creation of a special Citizen's Committee in a pre-bond "pre-design" process, including a full discussion with them of the obvious pros and cons attributable to each property option is a must, so that each member will inform their immediate circle of business and personal acquaintances of their Committee experiences and degree of participation, thus providing the best form of publicity.

Stemming from 2012, Prochaska & Associates has become increasingly familiar with the details of the existing Fremont Police Department building and grounds, studying the Plans and premises of that property thoroughly, in an attempt to fit the PD as it wanted to be on that property, and with the least disruption. Several successive efforts to resolve police-only space problems were presented to favorable reviews, and only curtailed when our firm learned that the City of Fremont

wanted us to consider *instead* the potential for a joint-use facility with the Dodge County Sheriff's Department. This pre-existing familiarity with the existing PD property will mean our process for this Study can be shortened, and thus more economically completed.

When we were first informed of the desire to consider a joint-use facility with the County, we subsequently met with Sheriff Hespin and some of his staff to attempt to understand the current arrangement there, and the space needs the County would have if such a joint-use facility was to be considered. We toured the facility, and learned that much of the Jail housing stands empty, and is no longer used, with the exception of the short-term holding cells. We were informed that the inmates for Dodge County are currently being held longer-term at the Saunders County Jail, under a special arrangement involving also Saunders Inmate transport to and from Dodge for all necessary visits to Court.

Thus, our task at that time involved consideration of a true Jail Housing facility addressing the *actual* needs of the County, and allowing all of their inmates to remain in-County. In addition, we were charged with consideration of understanding and relocation of the other necessary functions of the Sheriff's Department offices to the potential joint-use facility. The resulting Facility Program of Spaces we generated at that time for the joint-use facility appears to remain essentially intact at the present time, and has ironically been provided to us for this present study for use in evaluation of the potential for utilizing the two existing in-town properties. Further, it has been suggested that assembly of additional land beyond each of those original property areas remains an option not removed from the table, if in fact the public sentiment is found to be in favor of preserving in-town real estate viability.

In summary, we believe that our familiarity with both the in-town Police Department and County Sheriff's Department facilities, plus our familiarity with previous efforts undertaken to properly vet the Technology Park property uniquely qualifies Prochaska & Associates to complete your study. In the body of this document we will undoubtedly reference at least some of the conclusions reached in prior documents produced by our firm.

A final word in this Executive Summary regarding Program Task 1, as described in the RFP, and referenced in our Proposal as well. Program (Task 1)(b), states: "Space for future Jail Component planning, assume a 100-bed jail of 40,000 square feet." We have stated in other correspondence that we feel the likelihood is significant that a proper *Needs Assessment* effort to predict a designed Inmate count would result in a much higher inmate count than this; however, we will attempt to indicate in this study both the 100-bed and a more realistic count as well.

**ENUMERATION OF SERVICES IN THE STUDY**

Regarding the organizational approach we will pursue to satisfy the requirements described in the RFP, our reporting will attempt to consider the following:

- Task 1 Services, Facility Program: the revised Facility Program, including allocations for off-street parking stalls, has been reproduced in Section 2 of this document, and we have

been advised that it need not be further revised, as our initial Program effort was reviewed and only slightly revised by others, and the revisions agreed upon by all parties;

- Task 2 Services, Document Existing Facilities: this portion will document the existing Facilities in Section 3, providing a full Building Assessment, including evaluation of building structural, mechanical, electrical, and plumbing systems, for each of the Sheriff's Offices and Jail, and for the Police Department facility. As our firm completed a full assessment for the Police Department facility in 2014, this documentation will be included as an Appendix to our report.
- Task 3 Services, Probable Development Scenarios: this portion will evaluate the two existing properties for their ability to accommodate the Joint Facility Program, as well as the "greenfield" Fremont Technology Park property in Section 4. Included will also be an evaluation of each property to accommodate the needed expansion of each stand-alone department, as described in the Facility Program.
- Task 4 Services, Development Scenario Comparison: This portion will also include preliminary development comparisons, in consideration of appropriate contribution to the "neighborhood" fabric, as well as for comparative project budget estimates, and estimates of probable soft cost in Section 5.
- Task 5 Services, Facilitate Project Advancement: upon determination of an "acceptable scenario" by the City and County, as defined by Task 3, this report will also evaluate options for project financing, as defined in the RFP document in Section 6.
- Appendix, as Prochaska & Associates has completed three prior efforts for both the City of Fremont and Dodge County, each of these documents will be made available in the Appendix.

# Task 1 – Verify Facility Program

2.0

# TASK 1: VERIFY FACILITY PROGRAM

**REPRODUCTION OF THE ACCEPTED REVISED PROGRAM**

Task 1 of the RFP Document asked for Prochaska & Associates to verify and revise, if necessary, the Facility Program provided. The original Facility Program document was provided to the City of Fremont by our firm in 2014, and was subsequently revised further, and then revised again by another design firm in consultation with the City and County. For this reason, we see little to object to in the Program, and the City of Fremont has since confirmed that the newer revised Program represents a reliable basis from which we can conduct this study. Therefore, that revised Program has been reproduced below (figures #1-5):

**FREMONE/DODGE JOINT LAW ENFORCEMENT FACILITY REVISED SPACE NEED PROGRAM**
**Police facility Design Group**
**May 21, 2020**

| | | Space Description | Existing | Staff | Proposed | Revised | Notes |
|---|---|---|---|---|---|---|---|
| | | **COMMON SPACES** | | | | | |
| 1 | 1 | Main Entrance Vestibule | | | 100 | 100 | airlock for energy efficiency & to reduce drafts |
| 2 | 2 | Public Lobby | | | 1,500 | 650 | natural light; general waiting space; bulletin board or video monitor; display for historical items, photos, separate reception windows for PD & SD facing lobby; access to public restrooms, janitor closet and interview rooms; access to stair/elevator if necessary |
| | 3 | Public Toilets | | | 360 | | 2 x 180 SF; accessible, by Lobby; drinking fountain |
| 3.1 | | Men's Public Toilet | | | | 180 | 3 toilets, 2 faucets ea. |
| 3.2 | | Women's Public Toilet | | | | 180 | 3 toilets, 2 faucets ea. |
| 4 | 4 | Interview Rooms | | | 540 | 180 | 6 @ 90 SF; change to 2 by Lobby should be close together; line-up room with one-way glass; provide soundproofing |
| | 5 | A/V & Case Prep Room | | | 120 | 0 | by interview rooms; 4 computer stations; editing equip |
| | 6 | Large Conference Room | | | 410 | 0 | 16 occupants; moved to Line 46 |
| | 7 | Small Conference Room | | | 160 | 0 | up to 6 occupants |
| 5 | 8 | Training/Meeting Room | 1,673 | | 1,300 | 1,650 | 75 max. seated at tables; use operable wall to divide into 35/40; locate by Lobby for public use; construct to storm shelter standards; kitchenette with cabinets, sink |
| 6 | 9 | Chair/Table Storage | | | 150 | 200 | pair of doors for table & chair storage carts |
| 7 | | Defensive Tactics Storage | | | | 0 | Support for use of MU Room |
| 8 | 10 | A/V Equipment | | | 40 | 40 | provide shelving |
| 9 | 11 | EOC Office | | | 0 | 0 | adjacent to Training Room for use in emergencies; wall-mounted TV |
| 10 | 12 | IT/Server Room | | | 200 | 250 | common room with separate server equipment for Police and Sheriff |

*Figure 1. Accepted Program of Spaces – Joint-use Facility*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | **Evidence** | | | | | |
| 11 | 13 | Technicians' Office | | 2 | 180 | 210 | two work stations, 4 file cabinets |
| 12 | 15 | Evidence Intake/Processing | | | 250 | 250 | Secure side; pass-through lockers, drying cabinet, |
| 13 | | Unsecured Evidence: Bag/Tag | | | | | Unsecured staff side |
| | 16 | General Property & Evidence | 1,864 | | 2 x 900 | | common department with mobile shelving, storage |
| 13.1 | | Evidence & Property: Sheriff | | | | 600 | mobile shelving increases storage by 100-120% |
| 13.2 | | Evidence & Property: Police | | | | 600 | mobile shelving increases storage by 100-120% |
| 14 | 17 | Firearms Storage | | | 120 | 140 | |
| 15 | 18 | Narcotics Storage | | | 160 | 160 | |
| 16 | 19 | Valuable Storage | | | 50 | | |
| 17 | 20 | Evidence Vehicles | | | 1,870 | 900 | four indoor spaces for vehicles, reduce to 2 vehicles |
| | 21 | Large Evidence Storage | | | 2 x 300 | | separate fenced areas for Police & Sheriff |
| 18.1 | | Large Evidence Storage: Sheriff | | | | 300 | |
| 18.2 | | Large Evidence Storage: Police | | | | 300 | |
| 19.1 | 22 | Large Evidence Drop No. 18.1a | | | 2 x 100 | 50 | |
| 19.2 | | Large Evidence Drop No. 18.1b | | | | 50 | |
| 19.3 | | Large Evidence Drop No. 18.2a | | | | 50 | |
| 19.4 | | Large Evidence Drop No. 18.2b | | | | 50 | |
| 20 | 23 | Evidence Processing Lab | | | 300 | 300 | fume hood, fuming chamber, eyewash, downflow work station, shower, floor drain, fire extinguisher, |
| 21 | 24 | Fitness Room | 1,148 | | 1,000 | 1,000 | near Defensive Arts Training and Lockers |
| 22 | 25 | Defensive Arts Training | | | 450 | 450 | open room with floor mats, wall protection |
| 23.1 | 26 | Armory | | | 300 | 175 | guns/long guns/cleanin/repair |
| 23.2 | | Ammunition | | | | 125 | Access through secure door in Armory |
| 24 | 27 | Break Room | 404 | | 450 | 450 | kitchenette, double sink, 2 refrigerators with ice, 2 microwaves, coffee, vending; 4 x 4-person tables; TV |
| 25 | | Wellness Room | | | | 80 | Quiet isolated location |
| 26.1 | 28 | Locker Room - Male | | | 1,700 | 1,040 | 80 full duty bag lockers; 5 full height 12 x 12 |
| 26.2 | | Toilets | | | | 180 | 3 toilets, 2 faucets ea |
| 26.3 | | Showers | | | | 90 | 2 individual showers |
| 27.1 | 29 | Locker Room - Female | | | 600 | 255 | total of 15 full height duty bag lockers; 10 full height |
| 27.2 | | Toilets | | | | 145 | 2 toilets, 2 faucets ea |
| 27.3 | | Showers | | | | 45 | 1 individual showers |
| 28 | 30 | Janitor Closet | | | 50 | 50 | near lobby restrooms |
| 29 | 31 | Special (Hazmat) Storage | | | 100 | 100 | for contaminated clothing (isolated shower/laundry) |
| 30 | 32 | Shredding Storage | | | 50 | 50 | store for 90 days |
| 31 | 33 | General Storage | 255 | | 1,500 | 1,000 | 750 SF PD + 750 SF SO (Quartermaster, Tactical) |
| | | **Common Space Continued** | | | | | |
| 32 | 34 | Mechanical Equipment Room | | | 800 | 1,200 | primary mech., plumbing equipment (ventilation equipment on roof or in penthouse) |
| 33 | 35 | Mechanical Chases | | | 200 | 200 | if 2 floors |
| 34 | 36 | Electrical Equipment Room | | | 200 | 200 | |
| 35 | 37 | Stairs (if 2 story) | | | 600 | 0 | If new construction is 2 story, provide 3 stairs; 3 x 200 SF; open Lobby stair + 2 enclosed egress |
| 36 | 38 | Elevator (if 2 story) | | | 70 | 0 | |
| 37 | 39 | Elevator Machine Rm (if 2 story) | | | 50 | 0 | machine equipment to operate hydraulic elevator |
| | | **Miscellaneous K9** | | | | | |
| 38 | 95 | K9 Kennel | 0 | | 64 | 125 | 3 dogs Sheriff, 2 Police; Sallyport, int/ext,1/2 sf shown |
| 39 | 96 | K9 Storage Room | 0 | | 100 | 100 | |
| 40 | 97 | Dog Wash Area | 0 | | 30 | 30 | |
| | 98 | Unassigned Space | 447 | | 0 | | formerly Juvenile Holding area |
| | | **Short-Term Holding** | | | | | |
| 41 | | Sally Port | | | | 900 | |
| 42 | | Secure Corridor | | | | 120 | |
| 43 | | Interrogation | | | | 80 | |
| 44 | | Adult Staging Cell No. 1 | | | | 35 | |
| 45 | | Adult Staging Cell No. 2 | | | | 35 | |
| 46 | | Adult Processing | | | | 180 | |
| 47 | | Toilet | | | | 65 | |
| 48 | | Juvenile Observation | | | | 120 | |
| 49 | | Juvenile Holding | | | | 35 | |
| | | **Common Spaces Subtotal** | | | **17,840** | **16,050** | |
| | | Circulation/Walls | | | 6,240 | 6,741 | Use approx. 35%, Revised to 42% |
| | | **Common Spaces Gross Area** | **16,187** | | **24,080** | **22,791** | |

*Figure 2. Accepted Program of Spaces – Joint-use Facility*

**POLICE DEPARTMENT**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | **Administrative Spaces** | | | | | |
| 50 | 40 | Reception/Office (Records) | 370 | 2+1 | 370 | 330 | by Lobby; 2 stations + 1 future station |
| 51 | 41 | Payroll Office/ Senior Office Associate | | 1 | 120 | 120 | |
| 52 | 42 | Mail/Copy/Work Area | | | 120 | 100 | |
| 53 | 43 | Case File Storage | 413 + | | 600 | 400 | new high density mobile files; locate next to admin. |
| 54 | | Receiving/Central Supply | | | 0 | 160 | Receipt and distribution of deliveries; adjacent Recept |
| | | **Administrative Offices** | | | | | |
| 55 | 44 | Chief Office | | 1 | 300 | 295 | should not be visible to public |
| | 41 | Payroll Office | | | | | moved back to line 41 |
| 56 | | Administrative Assistant, Clerical | | 0 | 0 | 125 | |
| 57 | 45 | Lieutenant, Administrative | | 1 | 180 | 180 | |
| 58 | 46 | Lieutenant, Professional Standards | | 1 | 180 | 180 | |
| | | Professional Standards Associate | | | 0 | 0 | deleted per original program |
| 59 | 6 | Large Conference Room | | | 410 | 0 | 16 occupants |
| | 47 | Lieutenant Office | | 1 | 180 | 0 | moved to line |
| | 48 | Sergeants' Office | | 2 | 160 | 0 | moved to line |
| | 49 | Sergeants' Office | | 2 | 160 | 0 | moved to line |
| | 50 | Addt'l Sergeants' Office | | 2 | 160 | 0 | moved to line |
| | | **Investigation** | | | | | |
| 60 | 51 | Waiting Area | | | 50 | 120 | a few chairs serving investigation area |
| 61 | 52 | Detective Bureau | | 4+2 | 600 | 530 | 4 stations existing; 2 future; 6x8 cubicles |
| 62 | 53 | Lieutenant Detective | | 1 | 180 | 180 | adjacent to Detective Bureau |
| 63 | | Senior Office Associate | | 1 | | 125 | |
| 64 | 54 | Drug Task Force | | 2 | 400 | 360 | 5 stations current need; 6x6 cubicles |
| 65 | 55 | Eye Wash Station | | | 5 | 0 | flush wall mount |
| 66 | 56 | Investigation Interview Rm. 1 | | | 90 | 75 | |
| 67 | 57 | Investigation Interview Rm. 2 | | | 90 | 75 | |
| 68 | | Investigation Interview Rm. 3 | | | 90 | 75 | |
| 69 | 58 | Suspect Toilet | | | 70 | 65 | near interview and waiting |
| 70 | 59 | Copier/File Area | | | 100 | 100 | 2 years of files in dept. |
| 71 | 60 | Archived File Storage | | | 100 | 100 | 7-10 years may be remote from dept. |
| 72 | 61 | Equipment Storage | | | 50 | 50 | GPS units, cameras, etc. |
| | | **Patrol** | | | | | |
| 73 | 47 | Lieutenant Office | | 1 | 180 | 180 | |
| 74 | 48 | Sergeants' Office | | 2 | 160 | 160 | 2 staff to share office (3 in existing) |
| 75 | 49 | Sergeants' Office | | 2 | 160 | 160 | 2 staff to share office (3 in existing) |
| 76 | 50 | Sergeants' Office | | 2 | 160 | 160 | 2 staff to share office |
| | 62 | Officer Report Area | 763 | | 1,000 | 0 | 7 officers/shift + 1 growth; 6'x8' cubicles |
| 77.1 | | Report Writing | | 25 (Inc. Reserves) | | 240 | 10 Report Writing Stations |
| 77.2 | | Briefing | | | | 330 | 15 Classroom seating |
| 78 | 63 | Storage Patrol Supplies | | | 50 | 80 | forms, batteries, flashlights, tasers, body cam, etc |
| | | **Specialty Areas** | | | | | |
| 79 | 64 | State Patrol Traffic/Drug | 315 | | 315 | 160 | 4 workstations; reduce to 2 workstations |
| | | **General Offices** | | | | | |
| | 65 | Payroll Office | | | 110 | 0 | |
| | 66 | Office workstations | 524 | | 500 | 0 | plan for 4 cubicles in open area |
| | | **Support Spaces** | | | | | |
| | 67 | Staff Toilets – 1st Flr | | | 440 | 0 | HC accessible; 2 @ 220 SF each; |
| 80.1 | | 2nd Flr Men's Staff Toilet | | | 0 | 180 | 3 toilets, 2 faucets |
| 80.2 | | 2nd Flr Women's Staff Toilet | | | 0 | 145 | 2 toilets, 2 faucets |
| | 68 | Staff Toilets – 2nd Flr | | | 360* | 0 | *provide if 2nd floor is used |
| 81.1 | | 1st Flr Men's Staff Toilet | | | 0 | 65 | single use |
| 81.2 | | 1st Flr Women's Staff Toilet | | | 0 | 65 | single use |
| 82 | 69 | Bulk Supply Storage Custodial | | | 200 | 160 | for Building Supplies |
| 83 | 70 | Janitor's Closet | | | 50 | 35 | currently w/ electrical; Common Spaces also has JC |
| 84 | 71 | Electrical Closet | | | 30 | 30 | |
| | | **Miscellaneous** | | | | | |
| | | Former Dispatch Area | | | 0 | 0 | former workspace, old equipment room; vault storage |
| | | Unused break room | | | 0 | 0 | unused 2nd floor break room |
| | | **Police Department Subtotal** | **6,772** | | **6,960** | **5,895** | |
| | | Circulation/Walls | 2,370 | | 2,440 | 2,476 | Use approx. 35%; Revised to 42% |
| | | **Police Dept. Gross Area** | **9,142** | | **9,400** | **8,371** | excludes common spaces, dispatch, garage |

*Figure 3. Accepted Program of Spaces – Joint-use Facility*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | **DISPATCH** | | | | | hardened space |
| | | **Communication/Dispatch** | | | | | |
| 85 | 72 | Dispatch | 843 PD | 12 | 850 | 675 | includes files |
| 86 | 73 | Communications Director | | 1 | 140 | | needs public access |
| 87 | 74 | Expansion | | | 800 | 675 | 4 future stations + misc |
| 88 | 75 | Break Room | | | 170 | 120 | dedicated to dispatch |
| 89 | | Wellness | | | | 80 | |
| 90 | 76 | Toilet | | | 70 | 65 | dedicated to dispatch |
| 91 | 77 | PSAP Equipment/Radios | | | 180 | 340 | Public Service Answering Point |
| | | **Dispatch Subtotal** | **1,097** | | **2,210** | **1,955** | |
| | | Circulation/Walls | 384 | | 770 | 821 | use approx. 35%, Revise to 42% |
| | | **Dispatch Gross Area** | **1,481** | | **2,980** | **2,776** | |
| | | **SHERIFF'S DEPARTMENT** | | | | | |
| | | **Public Spaces** | | | | | |
| | 78 | Video Visitation | 0 | | 260 | 0 | 15 to 20 stations; off Lobby |
| | | **Administrative Spaces** | | | | | |
| 92 | 79 | Reception/Office/ Records | 259 | 3+1 | 500 | 630 | by Lobby, 3 desks + 1 future, file cabinets |
| 93 | 80 | Administrative Office | | 1 | 120 | 120 | proxemity to Records and Sheriff |
| 94 | 81 | Mail/Copy/Work Area | | | 120 | 100 | |
| | 82 | File/Records Storage | 577 | | 600 | 0 | vertical cabinets only, moved to Records |
| 95 | | Receiving/ Central Supply | 0 | | 0 | 110 | Receipt and distribution of deliveries, adjacent Recept |
| | | **Sheriff's Department Offices** | | | | | |
| 96 | 83 | Sheriff's Office | | 1 | 300 | 295 | |
| 97 | 84 | Chief Deputy's Office | | 1 | 230 | 200 | |
| | | Administrative Office | | | 120 | 0 | moved back to line 80 |
| 98 | | Conference Room | | | 0 | 350 | Occupancy for 12 |
| 99 | 85 | Deputy Squad Room | | 16 | 560 | 400 | plan for 5 workstations (3 shifts – provide file |
| 100 | 86 | Investigators | | 2+2 | 450 | 370 | 2 now, plan for 4 freestanding desks 6x8 |
| 101 | | Interview Rm. 1 | | | | 75 | |
| 102 | | Interview Rm. 2 | | | | 75 | |
| 103 | 86 | Investigators | | 2+2 | 450 | 370 | 2 now, plan for 4 freestanding desks 6x8 |
| 104 | 87 | Sergeants' Office | | 6 | 600 | 410 | 4 now, plan for 5 freestanding desks, 6x6 |
| | 88 | Jail Administrator Office | | | 180 | 180 | |
| 105 | 89 | Civil Processor Office | | 1 | 120 | 125 | near Records |
| | | **Support Spaces** | | | | | |
| | 90 | Staff Toilets | 80 | | 440 | 0 | HC accessible; 2 @ 220 SF each |
| 106.1 | | Men's Staff Toilet | | | 0 | 180 | 3 toilets, 2 faucets |
| 106.2 | | Women's Staff Toilet | | | 0 | 180 | 3 toilets, 2 faucets |
| 107 | 91 | Bulk Supply Storage/ Custodial | | | 200 | 160 | |
| 108 | 92 | Janitor Closet | | | 50 | 50 | Common Spaces also has JC |
| 109 | 93 | Electrical Closet – 1st Fl | | | 40 | 40 | |
| 110 | 94 | Electrical Closet – 2nd Fl | | | 30 | 30 | if two story |
| | | **Miscellaneous** | | | | | |
| | 95 | K9 Kennel | 0 | | 64 | 0 | moved to line 38 |
| | 96 | K9 Storage Room | 0 | | 100 | 0 | moved to line 39 |
| | 97 | Dog Wash Area | 0 | | 30 | 0 | moved to line 40 |
| | 98 | Unassigned Space | 0 | | 0 | | formerly Juvenile Holding area |
| | | **Sheriff's Dept. Subtotal** | **2,977** | | **4,830** | **4,450** | |
| | | Circulation/Walls | 1,042 | | 1,690 | 1,869 | use approx. 35%, Revise to 42% |
| | | **Sheriff's Dept. Gross Area** | **4,019** | | **6,520** | **6,319** | excludes common spaces, garage |
| | | **BUILDING SUBTOTAL** | **Existing** | | **Proposed** | **Revised** | |
| | | **Common Spaces Subtotal** | **16,187** | | **24,080** | **22,791** | |
| | | **Police Department Subtotal** | **9,142** | | **9,400** | **8,371** | |
| | | **Dispatch Subtotal** | **1,481** | | **2,980** | **2,776** | |
| | | **Sheriff's Office Subtotal** | **4,019** | | **6,520** | **6,319** | |
| | | | **30,829** | | **42,980** | **40,257** | |

*Figure 4. Accepted Program of Spaces – Joint-use Facility*

| | | | | |
|---|---|---|---|---|
| **Multi-Use Vehicle Garage** | | | | Could be detached building; heated; 40 vehicles; drive through garage |
| Police Department | 5,912 | 8,660 | 8,400 | 28 vehicles in new garage (one is SWAT vehicle) |
| Sheriff's Office | 705 | 4,070 | 3,600 | 3 vehicles in old garage; 12 vehicles in new garage |
| Wash Bay/Storage | 0 | 1,180 | 500 | Single bay, full width |
| **Garage Subtotal** | **6,617** | **13,910** | **12,500** | |
| Circulation/Walls | 1,704 | 3,480 | 3,125 | Use approx. 25% |
| **Total Garage** | **8,321** | **17,390** | **15,625** | |
| **COMBINED TOTAL AREA** | **39,150** | **60,370** | **55,882** | |
| **VEHICLE PARKING** | | | | |
| **Outdoor Lots** | | | | |
| Common Public Parking | 20 | 40 | | 2 ADA spaces minimum; near main entrance |
| Police Department | 44 | 50 | | Fenced lot; includes office, officers & shift change; near employee entrance; dumpster enclosure |
| Sheriff's Office | 21 | 30 | | Fenced lot; includes office, officers & shift change; near employee entrance; dumpster enclosure; trailer parking space |

*Figure 5. Accepted Program of Spaces – Joint-use Facility*

The above area and department totals will be used to determine what portions of the existing Sheriff's Department and Police Department properties—buildings and site areas—might potentially be repurposed to accommodate a future joint-use facility. Our task will be to include both building utilization *and* site utilization, observing all of the current zoning and other site controlling parameters to evaluate the potentials of these properties, as well as the Technology Park "greenfield" property.

We have also been informed that much of the public concern stemming from the previous election might be for the lack of adequate preparation, or study of the two existing Police and Sheriff's Department properties, in that such an effort as this to keep existing building investments viable in the Fremont commercial core may not have been adequately considered. For this reason, we believe it will be important to evaluate adequately just how much value the public might place on the existing properties. For example, if the entire Facility Program areas cannot be placed on one or both the existing properties, can acquisition of additional adjacent properties also be considered? Obviously, the answer to this question depends upon whether land acquisition cost, in addition to other project costs, makes the total Bond cost appear too high to pass at the next designated election. Possibly, the sentiment issue surrounding viability of commercial properties in Fremont may in fact be important to the voter, but has not been adequately publicised. This planning study will attempt to include this additional option as well.

**ACCEPTANCE OF THE PROGRAM**

Referencing *Task 1, subparagraph "a"* of the RFP document, we have been informed that our predecessor firm has revised the Facility Program beyond that which we originally provided to the City of Fremont and Dodge County; and that the revisions have been fully discussed, justified, and agreed upon by all parties. It is our contention that the accuracy of the Program data beyond the initial formulation stage can best be tested during Schematic Design, so we have made this case to the Fremont Police Department leadership, and it has been agreed we will utilize the area figures in this planning document without further modification.

Regarding *Task 1, subparagraph "b"*, suggesting assuming space for a 100-bed Jail facility of 40,000sf, we would offer a prototypical Floor Plan for a mezzanine-style housing unit in other portions of this document

depicting a 104-bed self-contained Housing Unit, since this Housing Unit module is often critical in Jail layout.

# Task 2 – Document Existing Facilities

3.0

# TASK 2: DOCUMENT EXISTING FACILITIES

**FREMONT POLICE DEPARTMENT FACILITIES**

Prochaska & Associates first became acquainted with the Fremont Police facility in 2012, and we were charged at that time to assess the Building, as part of an overall effort to understand the full range of need beyond mere additional space. The results of that effort were concluded on October 30, 2014, with presentation and acceptance of our *Pre-final Draft*, and it is for this reason that Prochaska & Associates has been allowed to avoid this portion of the overall Study effort. This document and two subsequent follow-up documents have been included with this Study in the Appendix section.

**DODGE COUNTY JUDICIAL CENTER FACILITIES**

Prochaska & Associates met with Dodge County Sheriff, Steve Hespen at approximately 10:00am on July 12th, 2021, and toured the majority of the building. From Prochaska & Associates, Curt Field (architectural), Mike Hromanik (mechanical), Paul Ryan (plumbing), and Tom Hawk (electrical) also attended, and will author separate portions of this section. From Dodge County, Mr. Tim Walter, (building & grounds maintenance) assisted in the afternoon with the remainder of the tour.

**Site Evaluation & Judicial Center, General**

Our research suggests that the present Dodge County Courthouse, located at 435 North Park Avenue in Fremont, was built in 1917 and 1918, and was listed by the National Park Services on the National Register of Historic Places in 1990. It is considered to be an example of the Classic Revival style. Like a number of other courthouses of the era, it was constructed to have two full stories above a raised (partially exposed) basement, with a smaller third floor which it is said contained a Jail and likely Sheriff's residence (see Figure 1 below).


*Figure 1. Dodge County Courthouse*

The focus of this Study document, however, will be the Dodge County Judicial Building, which is located *behind* the courthouse, at 428 Broad Street, and connected to it via skywalk crossing an active alley.

Prochaska & Associates has obtained construction drawings for the Dodge County Judicial Center, which shows an official drawing release date of March 18th, 1985. The Judicial Center was constructed shortly thereafter to be a separate structure, but connected to the Courthouse at the third floor, and at the time of this writing, is approaching 36 years of age.

The Sheriff informs us that approximately 5,372sf of the ground, or Main Floor space was intended to be a new Sheriff's Offices, but was unfinished "shell space" for a time following completion, with the Sheriff moving in later (Construction Drawings for this space are dated 1991), and further, that this particular area was deemed undersized by staff from the beginning. The remaining items on the Main Floor are a 1,360sf Kitchen, a 334sf Laundry, a 664sf Mechanical Room with Loading Dock, a 694sf Staff Garage, and an approximately 780sf Vehicular Sallyport. Both the Sallyport and Loading Dock open to a standard 20 foot wide alley located between the Judicial Center building and the Courthouse. The secure route from the Sallyport to the Second Floor Booking Area involves use of either an Inmate Elevator, or Stairs.

The Second Floor is essentially the Jail Floor, comprising some 13,056 gsf, which was designed for a 44-bed capacity, and in a mezzanine configuration. There is a Master Control station with visual and camera observation capacity into all Cell areas and into a large central Waiting area. Arrestees are typically brought up the Vehicular Sallyport Elevator, and through Change-out into Booking, and thence to a Cell. There appear to be three Holding Cells in use, and an "Indoor Rec" area, also used for Group Holding purposes.

The Third floor contains additional County and District Courtrooms, and an approximately 2,676sf outdoor secured Inmate Exercise Yard. A view of the Judicial Center building from the south, taken from 4th Street looking north, is shown below:

*Figure 2. Judicial Center building behind Courthouse (Google Street View)*

The designed parking lot on the property contains room for approximately 14 stalls, with additional undesignated stalls across the alley on the Courthouse side holding another 7 stalls.

The two properties to the north of the Judicial Center, labeled on the 1985 drawings as "Miller's Conoco" and the "Westcourt Building", suggest that a former gas station building has now been re-purposed, and the Westcourt Building appears to be a Law Office today. We have been informed that the paved property boundary for these two structures extends nearly to the north wall of the Judicial Center, allowing private off-street parking for the present law office. The second building was not labeled during our property tour, but appears very much to be a re-clad gasoline station structure, so there may be reason for some concern that the below-grade gasoline storage tanks associated with the gas station may not have been mitigated, and might pose a soil contamination issue for the property development potential. The former pump islands are not easily evident today in the parking lot surrounding this structure, but the present-day paving and building placement would *suggest* that little was done to remove all remnants of the former station.

Other than these entities which share the block with the Courthouse, Judicial Center, and Law Offices, the surrounding neighborhood will be discussed at some length under Task 3: Development Scenarios. There is additional parking for the County government block staff, and presumably for surrounding businesses as well, across the North Park Avenue street, in the two-story David Kavich ramp, as well as parallel parking on the north and south streets, 4th and 5th Streets, and angled stalls on both sides of Park Avenue (see Figure 5, Task 3).

**Architectural and Functional Evaluation**

As the Judicial Center building was constructed in 1985-1986, the Building and Energy Codes would have mandated a minimum wall and roof insulation at that time. The Construction Drawings reveal reinforced concrete block construction, with brick veneer and "cavity wall insulation", totaling 14 inches in thickness. This leaves 2 inches nominally for insulation, which likely has a total R-value of 10 - 12. The same drawings depict approximately 6 to 8 inches of rigid roof insulation, which would likely result in an R-value of 30 to 38. Today's Energy Code for new Construction would require R-10 and R-30, so this aspect appears to be surprisingly compliant by today's standards.

Our examination of the roof during our tour determined that the ballasted EPDM roof may in fact be original, as suggested by the maintenance person, and it appears to need additional repair at present (see Figure 3 below).

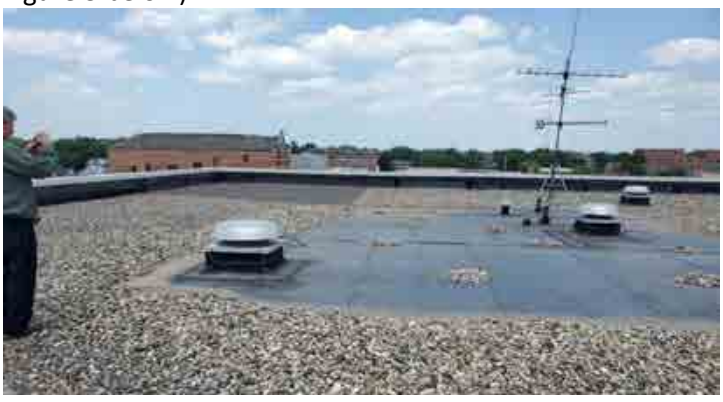

*Figure 3. Judicial Center roof: ballasted EPDM.*

Mr. Walter suggested that the roof membrane has been repeatedly patched, as evidenced by the removal of ballast in several areas to reveal the membrane joints, which have been recently re-patched in several locations. The roof is apparently not leaking at present, suggesting that the ballast has been temporarily left off to make inspection and further repairs more easily accomplished. The ballast depicted in Figure 3 above at the building corners consists of concrete

block “pavers”, which are deteriorating badly. The sheet metal parapet cap seems to be holding up, however, and the outer drip edge has a compound sheet metal hem to a continuous concealed sheet metal cleat, which is the correct, if somewhat less common way to seal this joint on the outer wall. This type of sheet metal parapet cap is undoubtedly another reason the building exterior wall seems to have held up so well over the previous 36 years.

From the roof, we were able to look down into the Inmate Exercise Court, which is covered by security fencing. This area was undoubtedly constructed at significant cost—to enable it to safely carry away precipitation—but we heard that it was somewhat painstakingly waterproofed in the relatively recent past, and also that it does not leak at present. The security fencing enclosure steel under-framing, and the exercise yard interior walls could also utilize repainting; however, the present condition is more understandable because it is no longer used by Inmates (see Figure 4 below). Maintaining this water-tight condition will be an ongoing and expensive task for the County, repeatedly re-visiting the issue of the lack of use.

*Figure 4. Inmate Exercise Area roof enclosure*

From the Construction Drawings and from our tour, the windows and glazing appear to be aluminum-framed, with insulating glass, which was commonly specified in 1985. Less likely is that the frames are thermally-broken, meaning they may get cold to the touch, or even ice up in extreme winter temperatures. Satisfaction of modern Energy Codes essentially requires thermally-broken frames, and even sophisticated glazing with a solar coefficient rating.

We observed no examples of deteriorating wall masonry during our tour, and the exterior concrete paving also appears to be relatively well-maintained. Overall, the building and grounds for both the Judicial Center and Courthouse appear to be well-maintained.

**Functional Evaluation**

It has already been stated that the space was determined to be too small for the Sheriff's staff and various other functions shortly after completion of that space. Further, while touring the Sheriff's Office areas, a general comment was made regarding the lack of adequate Storage in the space. A modern Sheriff's Offices would logically have a much larger place for both Evidence Processing and Evidence Storage, for example. While we were understandably not allowed access into the Property Room, we were able to see and measure it to be approximately 170sf on Floor Plans furnished to us for this space. There appears to be no true Evidence Processing area. There is also an approximately 490sf Storage Mezzanine above the Property Room, which is served by a pulldown stair in the ceiling of the adjacent Files Room, and is described as having low headroom. The inadequacy in size and ventilation of the Evidence Storage areas have caused complaints from the office staff regarding the smell of deteriorating marijuana.

The Plans depict an Elevator adjacent to the Entrance Vestibule and Waiting Area, accessed via a glass partitioned Elevator Lobby, which serves both the Second and Third Floors of the Justice Center. Staff can either escort arrestees to the Jail floor, or to the Courts floor via this route. The Plans also depict a small room (approximately 167sf) behind the entrance and Secretary Office, labeled "Dispatch" and accessed by a ramped corridor to a raised floor in the room. The PSAP is currently housed in the Fremont Police Building, and therefore, this room serves today as mainly as another Interview Room.

Several of our firm have also toured the former Juvenile Holding Facility, and Construction Documents transmitted to us for this facility are dated January of 2001. It is not clear if area for this function was salvaged from the Sheriff's Offices, or was pre-planned in the 1985 Documents. This area totals nearly 795sf, and it is our understanding that it is at present essentially unused, or rarely-used space. It is not completely clear why this might be, as claimed overcrowding experienced in the Sheriff's Office might have been relieved by modification of this space. The 2001 Drawings also depict a "Sheriff Meeting Room", as well as "Jail/Building & Grounds Storage" in this newer area, and we did not tour these spaces.

A short acknowledgement of the central issue regarding the function of the Judicial Center is appropriate here. While there is additional commentary on this topic elsewhere in this Study document, the issue as we understand it, simply stated, is that the 44-bed designed Inmate capacity is no longer valid, since the facility was closed by the Dodge County Board of Supervisors in 2011, and today the Second Floor is used as a Holding Facility only. Our research for this Study Document could not be as thorough as might seem appropriate to this topic, but it is our understanding that the design of the facility was seen by many in 2011 as inefficient and difficult to use or expand, in part because of the mezzanine-style Cell configuration, and particularly the Day Room and individual Cell design, which has entry to the Day Room by all parties from the half-level. In particular, the Cells can essentially *never* be made ADA-accessible; consequently, much of the Second Floor is used today for miscellaneous Storage functions.

Again, the facility today is for Inmate Holding purposes only, and an arrangement has been made since the Board closure to house all of Dodge County Inmates in Saunders County, a driving distance of about 22 miles. Further, Saunders County also handles all transporting of Inmates between the two facilities, meaning Dodge County Inmates can usually be held in the Judicial Center for no more than 24 -48 hours.

During our tour, we observed the vacant mezzanine-type cells and Day Rooms, often filled with boxed-type records storage. We were also shown a smaller group of 8 mezzanine Cells in the northeast corner of the floor which were said to be rarely used, and were thus maintained somewhat. A page taken from

the 1985 Construction Drawing set, perhaps difficult to read, has been marked up below to give an idea of the current usage of the Second Floor:

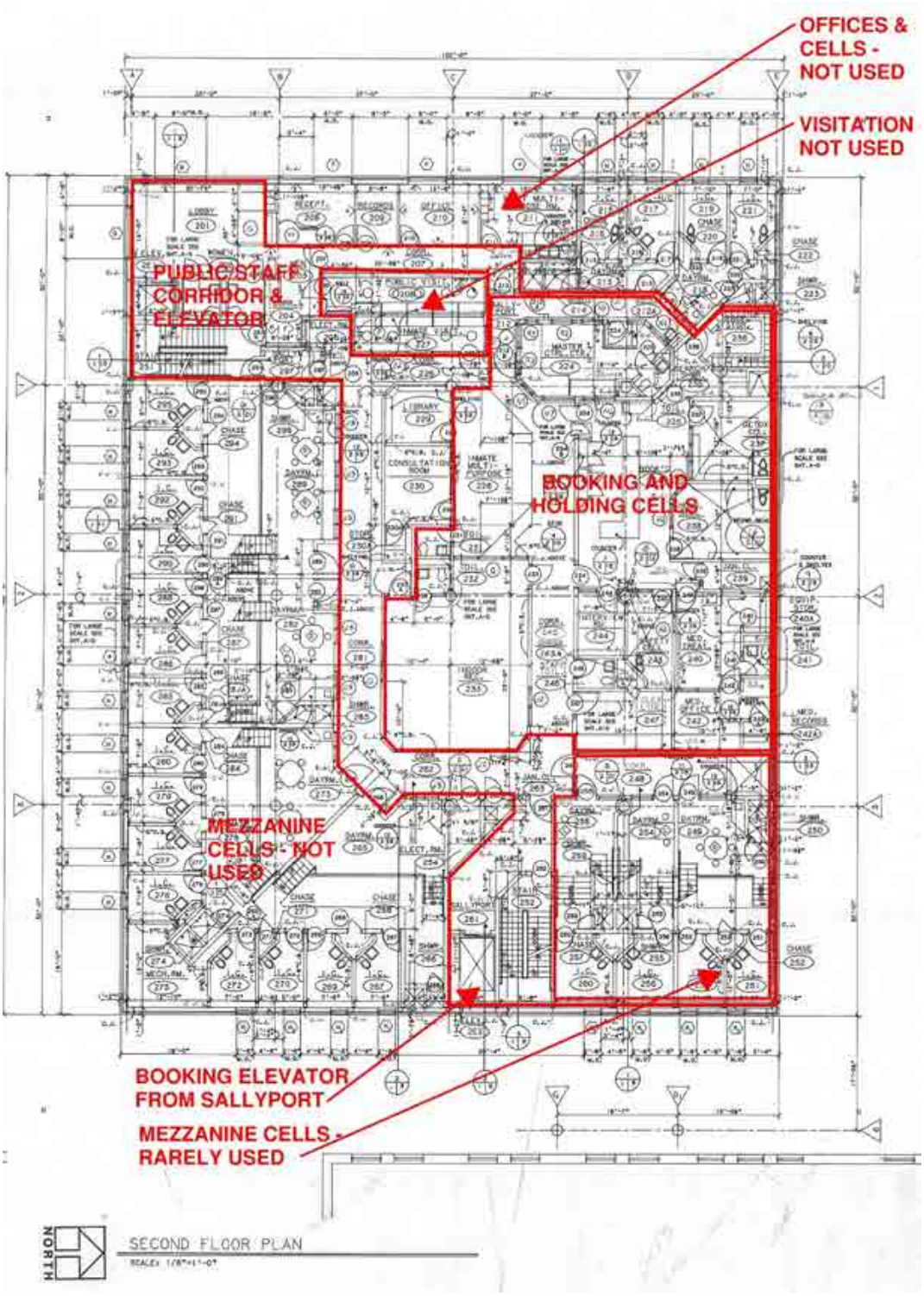


*Figure 5. Judicial Center Second Floor Usage*

Because of this reduced usage for Inmate holding, several other significant areas in the building are also not currently utilized: the Main Floor Kitchen, and Third Floor Exercise Court being the prime examples.

Our research has potentially not uncovered all of the issues surrounding the rationale employed by the County Board's closure decision. As mentioned elsewhere in this Study document, a partial quote taken from the May 4th, 2011 *Fremont Tribune* simply described the County Board reasoning for closing the Jail as: "An inefficient facility due to its limited size, high liability issues and six-digit cost savings…", but there certainly could be other equally good reasons as well. Therefore, our critique or suggestion of an alternate course in this Study document is possibly a step made with a degree of ignorance. The extent to which the existing facility appears to be currently inadequate, based upon items already described: undersized Sheriff's Office area, lack of adequate storage, unutilized or under-utilized Kitchen and Laundry, underused Juvenile Holding, and inefficient Cell/Day Room configuration, would seem to make the argument that repair or renovation might be a better long term solution than abandonment.

## PLUMBING SYSTEMS EVALUATION

**General Overview**

In addition to site utilities, plumbing systems include security and domestic plumbing fixtures, sanitary sewer and vent piping, storm sewer piping, domestic water piping, natural gas and fuel oil piping, fire protection systems, along with water heaters and water tempering equipment. The Fremont Department of Utilities is the local authority for the water, sanitary sewer and storm sewer systems, along with natural gas services in the City of Fremont.

- The City of Fremont has adopted the 2015 Uniform Plumbing Code and 2015 International Fuel Gas Code to regulate new plumbing installations. As regulatory requirements at the time the Dodge County Judicial Center was completed were different, or wavered for approved alternate considerations, existing plumbing systems affected by future major renovations will often need to be brought up to the current code.

**Sanitary Sewer System**

Dodge County Judicial Center is served by two sanitary sewer drain lines that interconnect with the city sanitary sewer system in the alley on the east. A 6" sanitary sewer line toward the south leaves the building below the floor of the vehicular sallyport. The other drain line is 4" in size as it exits the building below the boiler room floor and increases to 6" in size once outside the building.

The majority of plumbing fixtures and specialties drain to waste lines constructed of heavy weight cast iron soil piping with cast iron fittings joined by rubber sleeves and couplings with stainless steel bands. Vent piping is similarly constructed. Numerous underfloor vents without cleanouts are used in the original plumbing design. When stoppages occur, effluent can enter these lines risking blockage or reduction of the vent pipe circumference. A similar risk exists in waste piping serving plumbing fixtures in the jail cells and juvenile detention center that largely remain inactive.

Though the kitchen is no longer used, there is a grease interceptor to prevent fats, oils, and grease (FOG) from cooking operations from entering the drainage system. However, its interior location complicates the maintenance routine and it is smaller than typically permitted by modern day codes. If the kitchen operation is ever to resume, the size and location of the grease interceptor should be revisited. Also, no mud & sand interceptor is available to protect the buildup of sediments in the waste piping downstream of the floor drains in the vehicular sallyport.

Outside of the above described, sanitary sewer and plumbing vent systems are designed to be very long lasting and generally will not need repairs, except under extreme circumstances. However, as the original portion of the facility is over thirty-five years old, the building drain will become increasingly subject to corrosion, channeling, settling, and other anomalies. Given time, this can impede proper drainage and increase the propensity for stoppages and pipe failures.

A video camera inspection and other tests of the existing sanitary sewer system should be completed in conjunction with any future major renovation so that any deteriorated sections are identified and replaced.

**Storm Sewer System**

Storm water collected by existing primary roof drains is routed through piping that is identical in material construction to sanitary sewer and vent piping serving the building. An 8" storm sewer line conveying storm water from roof drains leaves the building below the floor of the vehicular sallyport and ties into a manhole interconnected with a 12" city storm sewer line laid on a north/south axis in the alley. Another 8" storm sewer line routes storm water received from a curb inlet in the parking lot on the south to another manhole in the alley.

*Figure 1: Primary roof drain with dome missing and field-fabricated wire mesh used to protect the secondary roof drain from debris.*

In the vast majority of cases, the secondary (overflow) roof drains are simply tied into storm sewer piping serving primary roof drains. Plumbing codes dictate that secondary roof drain systems shall have an end point of discharge that is separate from the primary roof drain system. Discharge is required to be above grade and in a location that can normally be observed by building occupants or maintenance personnel. Finally, the domes protecting the primary and secondary roof drains from debris are missing, and the secondary roof drains are only equipped with a field fabricated wire mesh.

**Water Service and Distribution**

An 8" water service line for Dodge County Judicial Center is obtained from an existing municipal water main buried along Park Avenue. The service line runs south of the existing Courthouse Building and splits into a 4" domestic water service line and a 4" fire line after feeding a fire hydrant with a 6" water line.

*Figure 2: Existing stacked water meters with fiber optic and other cabling strewn over the years contributes to cobbled appearance.*

The 4" domestic water service line is routed to the alley on the east and turns north a few feet from the eastern façade of the facility. The water line travels down the alley and then enters the building where it interconnects with stacked duplex water meters in the boiler room. Municipal water pressure at the site is approximately 78 psi.

The water service line is thought to be ductile iron on site and then constructed of galvanized steel pipe with threaded fittings prior to its interconnection with the water meters. The existing potable water distribution system beyond the water meters is constructed of copper piping and fittings with soldered joints.

A primary concern exists where plumbing fixtures in the jail cells and juvenile detention center are no longer used, as extended periods of inactivity for plumbing fixtures can lead to a variety of potential hazards. Specifically, stagnant water oxidizes metals that results in a perfect breeding ground for

Legionella, and other biofilm-forming bacteria that scavenge the metal surfaces of pipes. Beyond growth of bacteria, these conditions lead to corrosion that allows metals like lead to dissolve into the building's water system.

Flushing is recommended for any period of low water usage, even if for just a few days. However, flushing in concert with disinfection and water testing is the only way to ensure that water is safe for consumption.

In general, straight lengths of copper water piping are covered by fiberglass insulation that is ½" thick with an all-service jacket. PVC covers are often available to secure insulation at fittings. Though presumably adequate at the time, pipe insulation serving domestic hot water and domestic water recirculating piping is not thick enough to meet current energy codes.

Small segments of cold and hot water piping serving the water heaters were found to be bare. Lack of pipe insulation on cold water lines increases their propensity to sweat, and energy loss associated with bare domestic hot water piping is significant.

Though the existing 4" domestic water service is large enough for a major jail expansion, the water meters may need replacing to handle the higher peak water flow. The Municipal Utility may have other requirements associated with any major modifications to the domestic water service, including installation of a reduced pressure zone assembly type backflow preventer, along with a bypass line equipped with an isolation valve capable of being locked by the Utility.

**Water Heaters**

Domestic hot water and utility hot water for the building is supplied by two gas-fired water heaters manufactured by A.O. Smith. Neither water heater is the original. When replacement occurred, they were likely significantly downsized due to the decision to transfer most detainees to another facility and subsequent suspension of the kitchen operation. As such, the existing water heating systems do not have the necessary capacity required if the jails cells and kitchen were put back into operation, much less be adequate for a major expansion.

The water heater now serving the domestic hot water loop was replaced in 1995. It has a firing rate of 197 MBH on natural gas, storage capacity of 100 gallons, and 179.1 gallon/hour recovery at 100° F rise. A thermostatic mixing valve, manufactured by Symmons, is present in the domestic hot water system to mitigate against the risk of scalding.

The thermostatic mixing valve works to drop the delivery temperature from 130° F to 117° F. However, the higher water temperature being recorded at the cold water supply line indicates the integral check is not seating properly. The check should be removed and cleaned, along with any foreign material that has become lodged on the seat.

*Figure 3: Thermostatic mixing valve regulating domestic hot water temperature. Thermometer measuring cold water temperature reads 108 F, indicating the integral check is not seating properly.*

The remaining water heater was replaced in 2005 and is in good repair. The system was originally designed to provide the higher water temperatures required in the kitchen and laundry. As both operations are significantly curtailed, the newer water heater only has a firing rate of 75.1 MBH on natural gas, along with a storage capacity of 98 gallons, and 72.8 gallon/hour recovery at 100° F rise. Both systems use fractional horsepower pumps to recirculate hot water in the domestic hot water and utility hot water piping loops to minimize the time that building occupants have to wait for hot water.

**Plumbing Fixtures**

The existing security and domestic plumbing fixtures in the building are the largely original. With the exception of the electric water cooler on Second floor, the plumbing fixtures are in relatively good working condition. Repair and replacement measures for the existing plumbing fixtures has been mostly confined to faucets, flushometers, and other fittings.

Due to the infrequency of these replacements and the tenure in which they have occurred, a range of different faucets and other fittings are now in place. Unfortunately, this can compromise aesthetics, maintenance parts inventories, and service routines.

Fittings serving existing and any new plumbing fixtures should be standardized so that replacement parts can be properly stocked. Battery-operated or hardwired sensor-operated flushometers and faucets are recommended to help control the spread of infectious diseases in public areas (i.e., since the users make no physical content with the sensor-operated flushometer or electronic faucet).

Security plumbing fixtures in the original jail cells are constructed of vitreous china. In contrast, fixtures in the holding cells are constructed of stainless steel. While vitreous china performs satisfactorily in many applications, it is not considered suitable for detention facilities. Simply, vitreous china fixtures are easily broken and can become lethal weapons that are capable of inflicting severe injuries. As such, vandal and break-resistant penal plumbing fixtures made of stainless steel dominate the industry today.

***Figure 3 Water closet and lavatory constructed of vitreous china in one of the original jail cells.***

Though many existing security plumbing fixtures are currently not in use, they are susceptible to problems such as overflow events, water not shutting off, water not coming on, etc. In new design, electronic water control systems work to mitigate these concerns. Water management capabilities are centralized at a Host Work Station in Master Control that provide overflow detection and the ability to remotely shut off water supply to any security plumbing fixture whenever the need arises. The systems also allow program limits to frequency and/or the duration that water flow can be activated.

Though no longer in use, the kitchen is properly equipped with a three-compartment scullery sink with two swing faucets, along with a pre-rinse spray valve. However, the compartment drains do not discharge indirectly into a floor sink as is presently required by the Nebraska Food Code. A separate food prep sink may also be needed if cooking operations are resumed. Finally, recommend the hand sink be replaced with its modern day stainless steel equivalent. A hands-free electronic faucet is often desirable at the hand washing station.

**Natural Gas Service and Fuel Oil Piping**

As previously noted, the natural gas distribution system serving the Dodge County Judicial Center is supported by the City of Fremont. A 10 psig natural gas service line is extended from the Municipal Utility gas main buried along Park Avenue and runs south of the existing Courthouse Building to the facility's natural gas meter set on the east façade. A pressure reducing regulator serving the natural gas system is designed to reduce gas pressure from that maintained by the Utility to 0.5. psig, or less.

It was not determined whether the two existing natural gas meters piped in parallel was intended to provide redundancy or increase the capacity of the service. However, based upon a preliminary tabulation of nameplate data for the existing gas-fired boilers, water heaters, clothes dryer, and cooking equipment, it appears that the total connected natural gas load for the existing facility exceeds the nameplate capacity of the two existing natural gas meters.

Though the City's gas line to the facility may suffice, the existing infrastructure serving the building does not seem adequate to support any addition to the natural gas load at the building, much less an expansion

project. A new 2 psig natural gas system design would enable natural gas distribution system piping within the building to be smaller, reducing overall costs.

A 550-gallon fuel oil storage tank is buried below the south parking lot. 1" fuel oil supply and return lines are routed underground from this location to a day tank that serves the emergency generator-set. The buried storage tank's fuel oil gauge is no longer operational, dictating that the storage tank level be manually measured with a gauge stick.

Though permissible, use of an underground oil storage tank carries serious environmental, legal, and financial risks if a leak ever develops. The cost of cleaning the contaminated soil and water can stretch into tens of thousands of dollars. Of course, lawsuits can exponentially increase this financial burden if the leak affects any neighboring property. From a public steward point of reference, the implications of the environmental impact of an underground oil tank leak would not want to be overlooked either.

New emergency generators can be equipped with belly tanks that allow safe storage of fuel oil above grade. Proper abandonment or removal of the existing storage tank in conjunction with a new larger generator-set that can carry more critical electrical loads during a power outage is a scenario worth strong consideration, especially if accomplished in conjunction with a major expansion effort.

**Fire Protection Systems**

As previously described, a dedicated 4" fire line splits from the 8" water service line obtained from Park Avenue, and is routed underground to the wet pipe sprinkler system riser located along the eastern wall in the boiler room. The fire department connection is on north wall toward the alley.

Note that a 6" fire line is normally required to serve these systems, but this was presumably waived at that time, as only the Jail Cells, Dayrooms, Master Control, Booking, and other associated support spaces on the second floor and mezzanine levels, along with the Sheriff's Office, Dispatch, and Kitchen on first floor enjoy sprinkler coverage.

In general, it is not permissible to have more than 53,000 square feet on one level served by a single sprinkler riser. The footprint of Dodge County Judicial Center is approximately 13,056 square feet. Outside any implications the 4" fire line may have, it preliminarily appears as though the existing system could be extended to an expansion project.

In general, the extension of the existing fire protection system would consist of sprinkler heads installed in each room, corridor and stairwell, resulting in 100% sprinkler coverage. The wet pipe sprinkler system would continue to be monitored by a fire alarm panel, as would the new zones serving the expansion. It is recommended that the secured area(s) be put on an independent zone(s) that can be manually isolated if vandalism of the sprinkler system leads to a discharge event.

The existing sprinkler heads serving the Sheriff's Office are dated, and contribute to more industrial looking work spaces. The design of new commercial sprinkler heads place higher emphasis on aesthetics and even are available in a variety of colors and styles. It was noted that escutcheons are missing for some sprinkler heads in the second floor lobby area. One sprinkler head is not below the ceiling tile, which was notched to presumably facilitate activation. Further investigation is needed to determine if any of the sprinkler heads or other components are subject to recall.

Beyond the wet pipe sprinkler system, an Ansul fire extinguisher system is located above the ceiling on the west side of the kitchen hood. These systems normally use an electric solenoid valve to shut off gas to cooking equipment under the hood in the event of an emergency. In the case of a power outage, the normally open gas solenoid is typically closed. When power is restored, the valve will hold open again and any kitchen equipment having standing pilot lights will leak gas, if not manually re-lit. As the kitchen has not been operational for some time, it is very important to verify that gas is manually shut off to all gas-fired equipment (i.e., fryer, range, and convection oven) under the hood.

Finally, a clean agent (halon) fire suppression system can be used to serve as the first line of defense against potential fires where high value or sensitive equipment exists. Consideration for use of these types of systems may be prudent in Server Rooms, Evidence Storage, and other areas where no sprinkler protection exists or sprinkler head activation could cause more damage than a fire itself.

**Summation – Plumbing Systems**

Since the Dodge County Judicial Center has been generally well maintained, it is easy to forget that the building has been in operation for over thirty-five years. As such, much of the major plumbing equipment is past the end of its expected useful life, with the remaining equipment and materials approaching that end.

Serious consideration should be given to whether plumbing fixtures and some other components comprising the original plumbing system should be salvaged if a major renovation effort of the existing building is pursued. Simply, beyond sizing and some safety implications, the probability of future failures for original portions of the plumbing system may be too high to risk having to tear up renovated areas to make inevitable emergency plumbing system repairs.

## HVAC SYSTEMS EVALUATION

### SYSTEM OVERVIEW

**The Dodge County Judicial Center** utilizes a distributed water source heat pump system to provide heating and cooling to the facility. The facility has individual, ceiling-mounted water source heat pumps of varying sizes. Ventilation air is drawn into the individual units through outside air ductwork connected to numerous roof and wall-mounted intakes. Water for the heat pumps is circulated via 7-1/2 HP pumps (one operating, one standby), at a maximum flowrate of 226 gpm. The pumps utilizes variable frequency drives (VFD's) to modulate their flowrate based on demand from operating heat pumps.

***Circulation Pump for Water-Source Heat Pumps***

Heat rejection for cooling is provided by a Well, located on the northeast corner of the courthouse grounds. This Well was likely not part of the original construction, and data on the Well is unavailable. Originally, a roof-mounted fluid cooler rejected the heat from the heat pumps during cooling. The fluid cooler was sized for 1,356 MBH of heat rejection. This corresponds to approximately 85 tons of cooling capacity. We understand this rooftop fluid cooler was removed approximately 20 years ago and replaced by the Well system. If the Well is sized based on a similar capacity, and utilizes a 20 degree temperature rise, this will correspond to a flowrate of 136 gpm.

***Water Well for Water-Source Heat Pumps***

The Well water passes through a galvanized shell-and-tube heat exchanger, where it removes heat from the return water from the heat pumps while operating in cooling mode. We were informed that this heat exchanger was recently replaced.

***Galvanized Shell and Tube Heat Exchanger for Cooling***

A re-injection Well, intended for re-injection of the Well water back into the aquifer, is located adjacent to the parking lot on the south part of the property. However, we were informed that the re-injection well

did not function properly, and that the Well water after passing through the galvanized heat exchanger is instead discharged into the city's storm sewer.

***Re-injection Well (Unused)***

Based off of the original water source heat pump schedule, the heat pumps are sized around a flow of approximately 2.9 gpm per ton of cooling capacity. Given the total flow of capacity of 226 gpm, this correlates to a total system cooling capacity of approximately 80 tons. This is a similar result to the estimated 85 ton capacity based off of the fluid cooler data.

Heating for the facility is provided by two original Kewanee hot water boilers, with a scheduled output capacity of 450 MBH each. A small shell-and-tube heat exchanger transfers heat from the 180-degree heating hot water into the heat pump water. The heating heat exchanger is capable of transferring the full capacity of the boilers (900 MBH) to the heat pump water.

***Hot Water Boilers for Heating***

For heating and cooling of spaces, the facility utilizes horizontal water source heat pumps, which are typically mounted and concealed above the suspended ceiling. Ventilation air is provided via ductwork connecting to various wall and roof intakes. Ventilation air is drawn by the heat pump into the return air ductwork. This ventilation is therefore entering the heat pumps un-tempered, with all heating, cooling, and dehumidification occurring at the heat pumps themselves.

The controls appears to be an older Direct Digital Control (DDC) system, with components replaced intermittently, such that the current control system is a hybrid of older and newer components. As an example, a control panel which originally served the rooftop fluid cooler is still being utilized as part of the controls for the main circulating pumps.


***Controller originally for the now-removed Fluid Cooler.***

**EXISTING HVAC SYSTEMS EVALUATION**

The heating boilers are original, and operate at efficiencies below 80%. They unnecessarily utilize 180-degree hot water when 70 -80 degrees is all that is required for heat pumps operating in heating mode. The boilers should be replaced with condensing-type boilers which utilize colder water, and can operate at efficiencies up to 95%.

The Controls System should be completely revised with a common, upgraded system.

The water-source Heat Pump system has been well maintained, with most of the Heat Pumps being 2nd generation replacements of the original Heat Pumps installed. Water source Heat Pump systems are still very much utilized in new construction and renovations because of their efficiency and ease of maintenance and replacement. They are certainly not an obsolete system, such as are dual-duct or multi-zone systems often found in older buildings.

However, there still are significant deficiencies associated with other components of the facility's HVAC system. The primary example is the ventilation air system. Ventilation air is provided via ductwork connecting to various wall and roof intakes. The ventilation air is drawn by the individual heat pumps into their return air ductwork. Any heating, cooling, and dehumidification is occurring only at the Heat Pump. If the Heat Pump's compressor is not operating to heat or cool, then the un-tempered outside air will simply be mixed in with the return air and redistributed throughout the space. This unconditioned mixed air will cause swings in both the temperature and humidity of the space. It will inherently drive up the

space humidity levels in the summertime. These problems will many times be partially addressed by having the fan operate only when the compressor operates, even when the facility is occupied. However, this results in inadequate ventilation being furnished to the facility's occupants, as well as possibly providing an inadequate amount of make-up for the air exhausted from restrooms and other spaces. In that case, the exhausted air will be made up via infiltration through doors and windows, and the swings of temperature and humidity levels will still occur.

Another major problem with the existing ventilation inlets is that it is impossible to provide "free cooling" to the building by bringing in large quantities of outside air on cool days. This is called "economizer" operation, and is a major contributor to energy efficiency for an HVAC system. On a sunny 60-degree day, when other facilities simply bring in outside air to make the spaces comfortable, the current system will have to run the Heat Pump compressors. The 2015 International Energy Conservation Code, the current energy code adopted by the State of Nebraska, states that ***"The total supply capacity of all fan-cooling units not provided with economizers shall not exceed 20% of the total supply capacity of all fan-cooling units in the building, or 300,000 BTUH, whichever is greater."*** The current Judicial Center's Heat Pump system has ***NO*** economizer operating capability, and therefore does not meet the current energy code. Nor is there any good way to modify the existing system to add economizer capability. Doing so would essentially require substantial removal and reconfiguration of all the facility's duct systems.

Regarding the use of well water for cooling and partial heating of the facility, this is a very energy efficient means of providing cooling; however, it has several drawbacks. The first is in regards to the use of Well water and its inherent mineral content. The minerals cause build-up in the heat exchanger and thus cause the need for ongoing cleaning and maintenance. It also shortens the life of the heat exchanger, as seen with the recent installation of a galvanized shell and tube replacement unit. The system is also captive to the condition and level of the aquifer, and could cease to operate simply because of a drop in the groundwater level. If this occurred, there would be no alternate means of operating the system (however, given the close proximity of the Platte River to the site, groundwater level may never be an issue). The dumping of Well water into the storm sewer system after it passes through the heat exchanger is typically not permitted. A re-injection Well was installed with the original system, but it apparently did not operate correctly and has been abandoned. While the dumping of Well water into the storm sewer currently is accepted and "grandfathered", that may not be the case in the future. The Nebraska Department of Environmental Quality (NDEQ), as an example has been requiring operators of similar systems to apply for 5-year permits for the discharge of "single pass heat pump wastewater" into storm sewer systems. It is possible that in the future this type of system will not be allowed to operate, unless it utilizes a re-injection well to return the water to the aquifer.

In summary, the existing water source heat pump system is in good condition and operates efficiently. However, its associated ventilation system is deficient, in that it impedes control of temperature and humidity within the facility. The ventilation system is also obsolete by its inability to comply with the current energy code. The long term use of the well source for cooling water is doubtful in its current configuration. Any major renovation and/or addition to the facility will require a redesign and replacement of most of the existing HVAC system.

## ELECTRICAL SYSTEMS EVALUATION

### General Overview

Electrical systems serving Dodge County Judicial Center include the normal power system with a diesel engine-generator for backup power, along with lighting, security, communication, and fire alarm systems. Normal power is provided by Fremont Department of Utilities. Fremont projects are inspected by the State of Nebraska for Electrical and Fire. The backup generator fuel is stored in an underground 550 gallon tank.

The following terms are used in this study. 'Emergency' refers to those systems required for life safety. 'Standby' refers to Legally Required Standby Power, as required by local Authorities for critical operations and/or Optional Standby, which is not required by code.

### Normal Power System

Power originates from a pad mounted transformer on the south side of the building, and is routed underground to a Main Switchboard. The Main Switchboard has fused disconnect switches and was Manufactured by Federal Pacific Electrical (FPE). Federal Pacific is no longer in business and new parts are not available. It is not advisable to use "used" parts. This switchboard feeds a switchboard in the original courthouse, and that is also Federal Pacific.

The Main Switchboard is 2000A, 208/120V, 3 phase, 4 wire, and is a typical system type used. The main switchboard panel utilizes fused switches. While fuses provide better protection than circuit breakers, you need to keep replacement fuses. The larger fuses may not be in stock and could take a day or two to get, if spares are not kept on site.

*Main Switchboard*

The main switchboard then feeds multiple panels throughout the facility. Many of the appliance panels are also Federal Pacific, and should be replaced with new panels.

Newer Appliance and Lighting panels have been added throughout the facility due to the increased need for additional circuits. While the process of replacing the original panels has begun, it would be prudent to continue replacing the old panels as new breakers are no longer available for the original FPE panels.

### Backup Power System

Emergency/Standby Power originates from a 100KW Cummins engine-generator powered by diesel fuel. While the generator does not have a lot of hours on it, a 1985 generator could be difficult to get certain parts for. The generator would also not meet current EPA emissions standards. The generator only provides minimal backup power. The backup power system was not spilt into emergency and standby

systems, as required by current code. Any significant remodel would require a new generator, and since new switches and/or breakers are not available for the existing normal power electrical equipment, that would need replaced also.

*Fire Alarm Panel*

**Lighting**

Though the interior lighting system still contains some older T12 fluorescent lamps, efforts are being made to convert T12 and T8 fluorescent fixtures to more efficient LED (light-emitting diode) light fixtures. This is prudent as T12 and T8 lamps are being phased out. If a new facility and renovation project is pursued, an effort to upgrade all light fixtures to LED should be considered. In addition to improved energy efficiency and color rendition, LED light fixtures have much longer life than their fluorescent counterparts, reducing maintenance costs. LED lighting first cost is now less than the older fluorescent fixtures. Outdoor fixtures at exits are required to have Emergency power by current code, and this would need to be addressed if new exterior work is done.

**Security Camera System**

The head-end equipment has been replaced with a digital true server system. Any newer cameras are digital high definition. Many of the older analog cameras are still being used, and have been tied to the new system. Upgrades have been made where it was felt necessary and older cameras can be replaced as they fail. Overall, the camera system is sufficient for the needs of the facility.

*Figure 74: DMP Fire Alarm serviced by SEI*

**Fire Alarm System**

The original Johnson Controls system is very dated. The Fire Alarm is mainly providing protection for the jail, for Elevator recall, and alarm for Fire Sprinkler flow. The conventional zone system is very limited in capability. Any significant remodel would require a new Fire Alarm system.

**Jail Controls**

The analog system by Andover Controls is very hard to make changes to. It is also getting harder to get parts for the older analog systems. As long as the system keeps working, it still does the same thing that a new digital system would do.

**Communication Systems**
911 is no longer at this location, however, dispatch radios for the County are still located in this building. If considering a new site, then planning will be required for the antenna tower and radio equipment, whether they remain, are relocated, or replaced.

**Phone & Data Systems**
The existing data equipment has been upgraded and maintained to current standards with battery backup (UPS), extensive grounding, and dedicated air conditioning. Other than there not being a lot of room for expansion, it appears in good condition. Satellite data rooms can always be added in the event of a major remodel.

**Summation – Electrical Systems**
The Electrical systems at the Judicial Center are sufficiently doing the job at this time, but they are not very repairable or upgradeable. Failures of existing equipment could necessitate complete replacement of the equipment as replacement parts, are difficult to obtain for much of the equipment. Any kind of a major remodel would require all new electrical systems except for the Data/phone and possibly radio equipment.

Existing Electrical Appliance Panels should continue to be replaced and tied over to new panels until old panels no longer exist. Although the main switchboard is obsolete, it has replaceable fuses, and is safe to use. Replacement switches would not be available if one fails, which would cause substantial hardship to get things powered again.

Electrically there would be very little savings in remodeling the existing building.

# Task 3 – Probable Development Scenarios

4.0

# TASK 3: DEVELOPMENT SCENARIOS

**PLANNING OPTIONS – GENERAL CONSIDERATIONS**

Consideration of the future use potential of either the Sheriff's Department property, or the current Police Department property will entail establishment of a number of parameters:

1. Beginning with the assumption that each building is valuable in its current location, is the existing facility area entirely or partially useable, or easily adaptable for the future use?
2. Is there a portion of the existing structure which impedes a future re-purposing project, which can be relatively easily removed?
3. What is the potential of each property to support expansion of departmental-only requirements, as established by the Facility Program?
4. Is there a scenario where the existing property might support a Building Addition, to adequately accommodate the entire Facility Program for a Joint-Use facility?
5. In consideration of the entire property, or lot, is there room on the property for such an Addition, in combination also with the required off-street parking stalls, or would the acquisition of an adjacent property, or the closure of a through street facilitate the larger requirements of the Joint-use facility?
6. Presuming each facility is deemed *essential*, will all proposed work performed at the existing facilities allow the existing facility to remain operational during construction?
7. Will all new work assume the same general characteristics of adjacent or nearby development, or development characteristics limitations mandated by the Zoning District?

This document will attempt to separately consider each of the available three properties relative to the above parameters. Clearly, one option to consider when lot size is the constraint, is vertical construction. Large Justice/Detention facilities may be constructed in densely-populated, highly-developed urban centers, and this occurs relatively often, even though it may be more desirable to spread out such a facility horizontally.

Prochaska & Associates has spent significant time over the last several years considering the development potential of the existing Fremont Police Department property, if merely to handle the growth requirements for the Police Department alone, so consideration of the potential for this facility will be the first location evaluated. During our previous time spent in this effort, we looked at the entire property, as well as at adjacent street right-of-ways, and neighboring private property options for that expansion potential.

**EVALUATION OF POLICE DEPARTMENT PROPERTY AND NEIGHBORHOOD**

Below (Figure 1), a portion of the areas surrounding the two-story Fremont Police Station has been reproduced. The property zoning is "DC", or Downtown Commercial. When Prochaska & Associates was asked by the City of Fremont for our previous 2014 study efforts to evaluate the potential of the PD property to handle the growing program needs of the Department, our efforts were confined to consideration of surface parking lot area within the property boundary itself, possibly the surface lot across the North Park Avenue right-of-way, or potential closure of this portion of the Park Avenue street right-of-way. If this area is to be considered as a candidate for a Joint Police Department/Sheriff Department facility, all of these options should be kept on the table.

Referencing Figure 1 below, the existing Police Department property appears to be approximately a half city block, which, without precise property survey information, would appear from *Dodge County GIS mapping* information to be half of a 280feet by 280feet square, or 39,200sf. The total accepted program area for the Joint Police-Fire-PSAP is 55,882sf, meaning that a single-story design would *clearly not* fit within the property. However, if the existing two-story PD building was kept in-place (approx. 15,000gsf), the rear portion demolished, and the remainder of the program area divided into two stories, i.e., a possible two-story addition (less the 15,625sf Garage), an addition of 40,257gsf would roughly accomplish the program requirement, and when divided into two stories, would require a footprint of 20,440gsf. Assuming the back half of the existing Police Station would be removed, as was recommended by our 2014 study document, the remaining site area on the existing property would be approximately 30,500sf, leaving ample room for the 20,440sf footprint (see below).

As the approved Facility Program also suggests that such a joint-use facility should have space for 120 off-street parking stalls, appropriate space should be allocated for this size of a lot. Without consideration for other site constraints, such a parking lot might require a minimum of 36,000sf, depending upon configuration, so clearly will not fit in the existing property in addition to the Building Program area, thus requiring acquisition of additional land.

Referencing Figure 1 below, the size of the *entire* city block bounded by West 8th Street, North Park Avenue, North Broad Street, and East Military Avenue rights-of-way is approximately 280 feet by 280 feet, or 78,400sf. If a building configuration involving removal of a portion of the existing Police Station, and adding a two-story addition will essentially accommodate the program on the east side of the block, the needed 120-stall parking count could be accommodated on the *west* side of the block, on acquired land (please see Figure 2 below). Thus, if the entire city block could be used for such a project, a two-story Joint facility following the accepted Program could be placed at this location. Consideration of adding a 100-bed Jail facility to this city block would likely require acquisition of additional property, or willingness to construct taller structures. It is important to mention that the Downtown Commercial ("DC") zone will allow a building height maximum of 60ft.

Generally speaking, the location immediately south of John C. Fremont Park, which is also bounded by the Fremont City Auditorium to the west, the Keene Memorial Library close by to the north, and the Fremont Learning Center, also to the north, might make some sense for location of a joint law enforcement facility, simply to reinforce the civic nature of the neighborhood, and also reinforcing the City's commitment to investing in established neighborhoods. In addition, the neighborhood appears to be enjoying a measure of resurgence, as our tour reveals a converted building a short distance to the east, the Powerhouse Apartments, and a couple of fast food establishments, a *Subway* and an Ice Cream shop, to the south, and west, respectively.

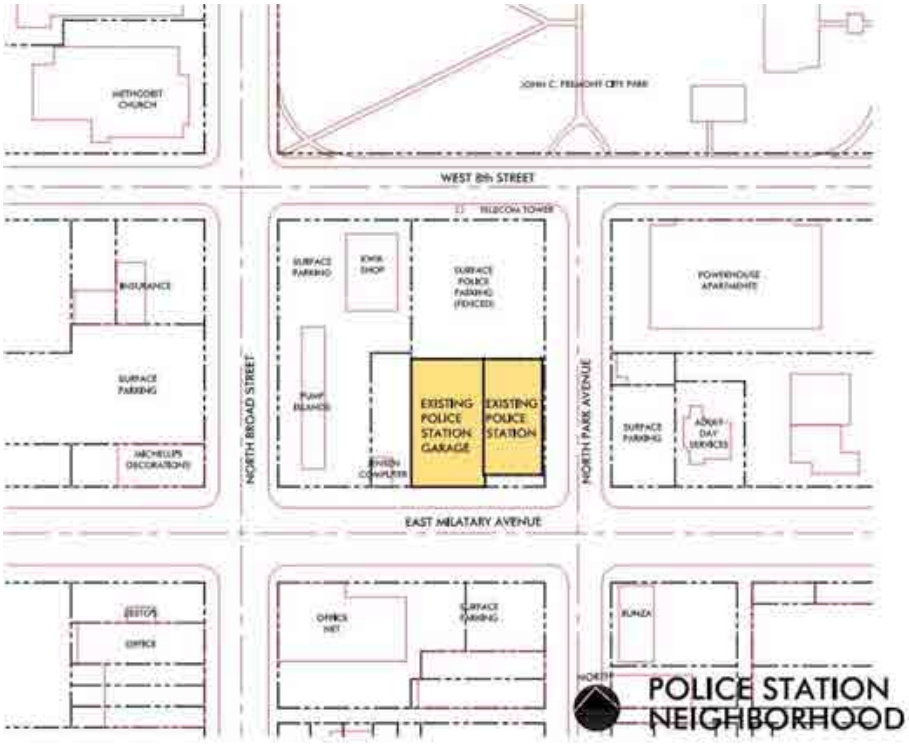


*Figure 1. Current neighborhood w/land usage surrounding the existing Police Station*

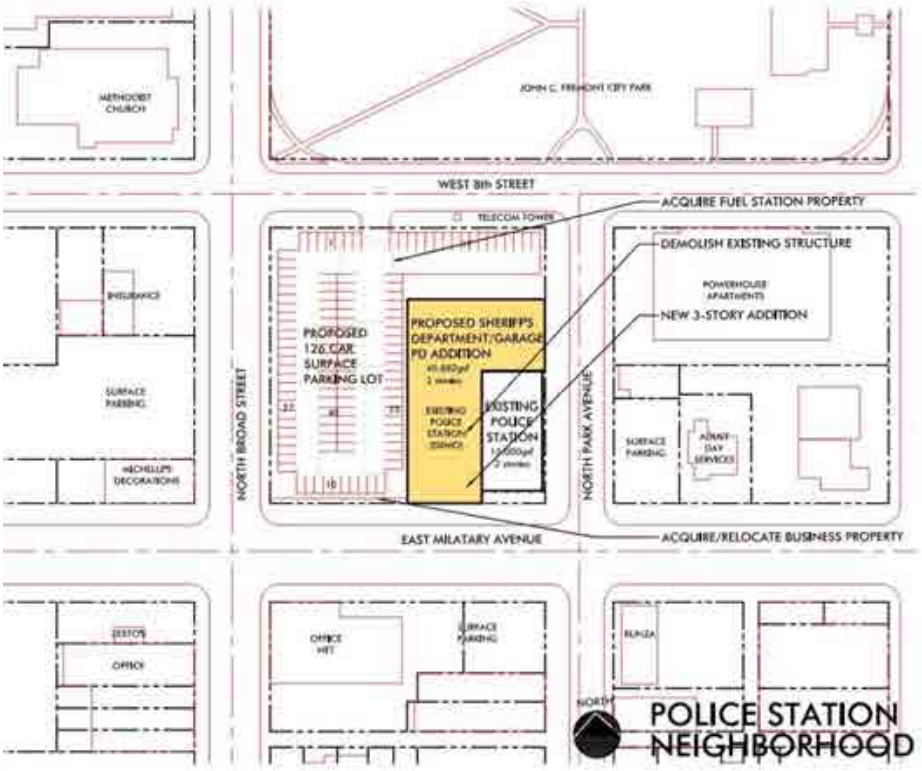


*Figure 2. Proposed changes to Police Station neighborhood – <u>without</u> the 100-bed Jail component*

**PROTOTYPICAL 100-BED JAIL PLAN**

Prochaska & Associates has developed a 104-bed mezzanine-style Housing Unit Floor Plan *prototype*, which dimensions about 94' x 144', and totals roughly to 13,450 sf, which would *appear to fit* on the City block, again if the adjacent two properties are acquired, and which would appear to also allow the same 126-stall parking lot as is depicted in Figure 2 above. The mezzanine configuration vertical dimension, at roughly 25 feet, is taller than a typical floor-to-floor dimension for an office, so the housing unit might be stacked somewhere within the addition, adding another floor to the Figure 2 configuration. This might potentially make this portion of the proposed Addition 54 feet tall (±), which is well under the 60 foot zone maximum. Please see Figures 3 and 4, for a floor plan of the housing unit, and then with a further revision of figure 2 above.

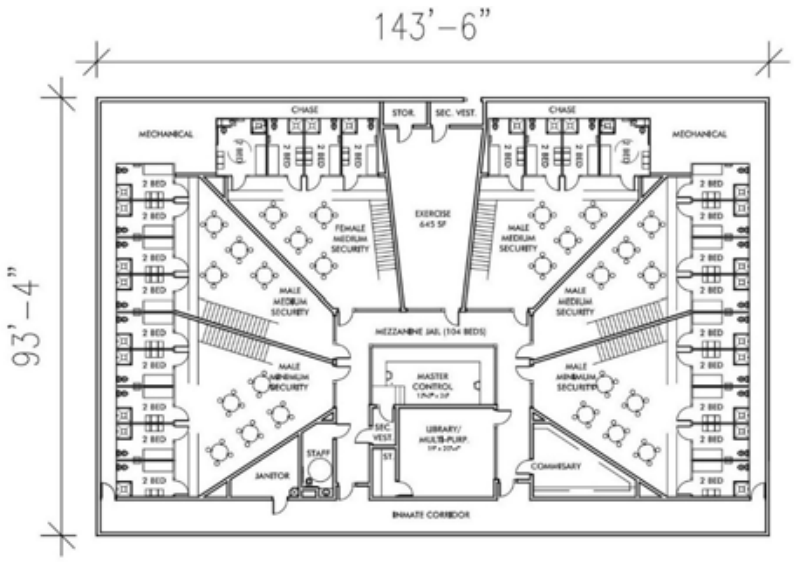


*Figure 3. Prototype 104-Bed Mezzanine style Housing Unit Plan*

Obviously, the 13,450sf prototypical Housing Unit depicted above is nowhere near the total area required to add a Jail facility to the Sheriff's Offices areas in the accepted program, but the efficient Housing Unit it is a serious determinant of an efficient Jail Plan, meaning the balance of the spaces needed, i.e., Kitchen, Laundry, etc., might better conform to the essentially 144-foot dimension than the reverse. While the balance of the Jail spaces deserve to be considered in similar Facility Program detail, this study will accept the 40,000sf figure offered in the RFP for planning purposes. Therefore, a single story mezzanine-style Jail Layout of 40,000sf might be conceived for this study to be 280ft x 144ft., or, if attempted on a tight property, might consider the prototype shape above to be all of, or a major portion of a single floor in a three-floor space.

Obviously, adding a 40,000sf jail space to the existing Police Department property means incorporating this into the rest of the Facility Program; thus, a total of 55,882sf + 40,000sf, or 95,882sf would be needed. Using the available space beyond the surface parking lot depicted, and assuming the existing PD building would remain in-place and functional, the available footprint area of 20,360sf means:

95,882sf – 15,000sf (existing PD facility) = 80,882sf
80,882sf / 20,360sf (available footprint) = 4 stories

Therefore, using the housing unit prototype depicted above, a four-story addition located behind the existing station would be required. Assuming a minimum typical floor-to-floor dimension of 16-feet, and a 25-foot vertical height for the Mezzanine housing unit, a possible building height of 70-feet would be required to fit into this footprint, and make the Figure 2 image work. With a relatively small degree of difficulty, the overall height might be reduced by 4 to 6 feet. As the DC Zoning allows a 60-foot

maximum building height, a waiver of this requirement would be necessary, or additional land acquisition would be needed (please see Figure 4 below).

Additional off-street parking beyond that required for the Sheriff's Office would be small, since inmates would typically require no stalls, and Jail-dedicated staff on premise at any one shift might be less than 10, we will presume for planning purposes that the 126-stall lot will suffice, or that additional stalls might be located within the street right-of-ways.

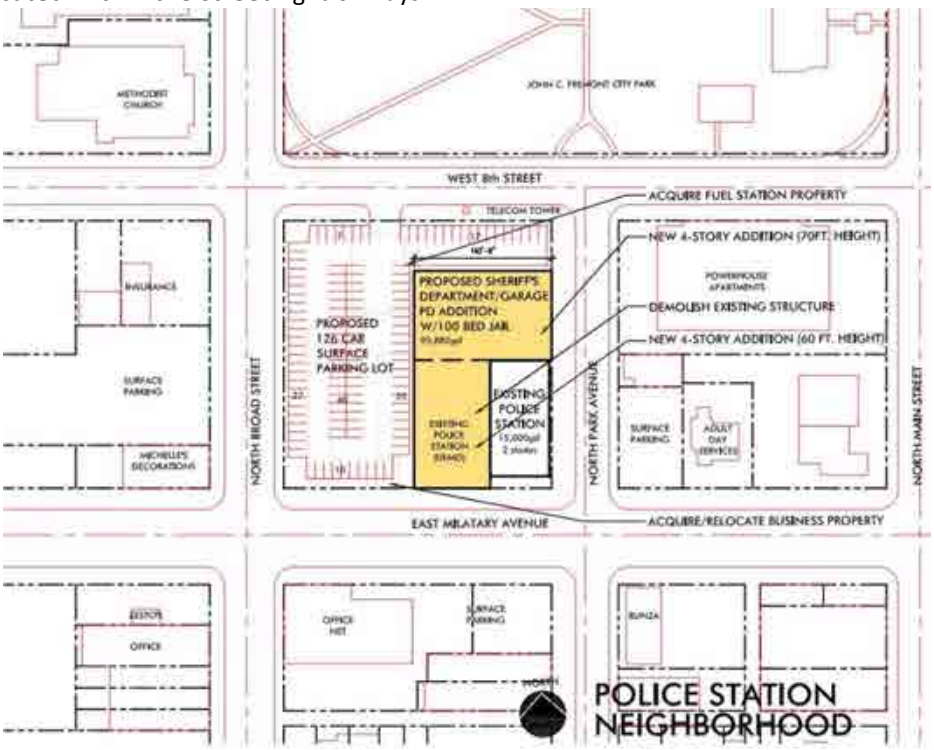


*Figure 4. Proposed changes to Police Station neighborhood – <u>with</u> the 100-bed Jail occupying a portion of the north end of the proposed addition*

In summary, if the properties west of the Police Department Building on the block are acquired, and *a four-story addition* is placed behind and north of the existing PD building, it would appear that the entire Facility Program area, plus the 100-bed Jail and the 126-stall (plus) surface parking lot *can be constructed* on this location. More importantly, it can be confidently stated that even if a smaller footprint, taller structure were to be considered, the land acquisition described cannot practically be avoided.

**<u>EVALUATION OF SHERIFF'S DEPARTMENT/COURTHOUSE PROPERTY AND NEIGHBORHOOD</u>**

Below (*Figure 5*), a portion of the Dodge County Courthouse and Judicial Center neighborhood is represented, and the potential for placement of a Joint Law Enforcement facility in this immediate area will be discussed. The property zoning is also "DC", or Downtown Commercial.

A casual evaluation of the Courthouse lot and surrounding properties reveals that a number of financial investments have been made in the recent past to assist with downtown neighborhood vitality. While the size of this city block also appears to be 280feet by 280 feet, or 39,200sf, half of the block is

effectively unavailable because of the historic Dodge County Courthouse positioned on its formal front lawn, and an intervening active alley, leaving an approximately 37,300sf area (again per *Dodge County GIS mapping*) on the west side of the alley containing the existing 1985 Judicial Center, which is a three-story structure housing two County Courtrooms and a District Courtroom on the Third Floor, and a 13,056sf, 44-bed Jail facility on the Second Floor. Much of the current facility is no longer in use, as the mezzanine cell design places all cells a half level away from the Dayrooms, meaning no cells are ADA-compliant. This appears to be the primary reasoning behind a present day determination of the facility as a Type I (96-hour maximum stay) Holding Facility only, and it is our understanding that *Nebraska Jail Standards* has now limited the facility's capacity to 16 for holding inmates prior to transport elsewhere. A partial quote taken from the May 4th, 2011 *Fremont Tribune* described the County Board reasoning for closing the Jail: "An inefficient facility due to its limited size, high liability issues and six-digit cost savings…". At present, it is known that the Saunders County Jail in nearby Wahoo, NE, has a formal working agreement to house all of Dodge County's Inmates requiring longer stays.

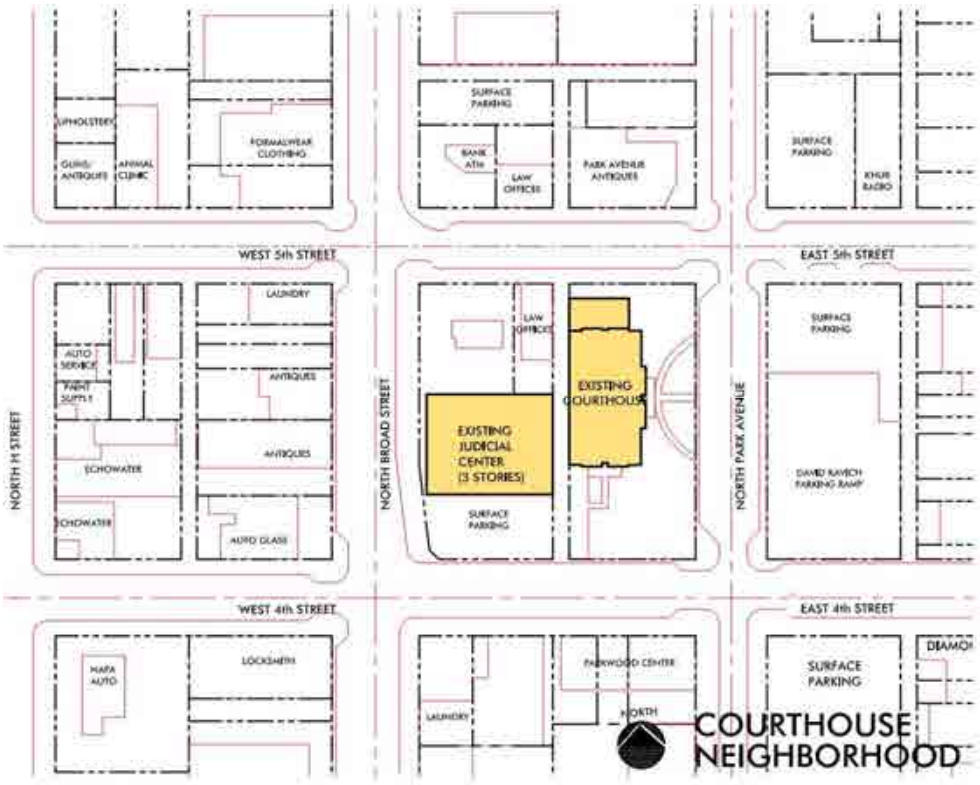


*Figure 5. Neighborhood surrounding the existing Courthouse and Judicial Center*

Regarding the issue of the Courthouse property potential, however, a working hypothesis might be that the Jail facility could theoretically return to use of ***all original 44 beds*** if there existed adequate *compliant* facilities in-County for the full Inmate requirement, meaning that some sort of *Addition* to the Jail, containing ADA-compliant cells, might be possible. A casual calculation of the entire remaining "footprint" area on the property immediately north of and adjacent to the existing 1985 facility is 16,226sf, including the alley dimension (or 14,350sf without the alley), and hypothetically, a Judicial Center Addition could be constructed here, but as with the PD area property, an existing two-story Law

Offices structure would require location to another off-site property. As with the PD property, the Downtown Commercial (DC) zone will allow a building height maximum of 60ft.

If such an addition to the north of the existing Jail were to be seen as feasible, all or the majority of the Sheriff's office areas might logically remain functioning in-place in the existing structure, displacing *some* of the Facility Program area. Also, as the three floors of the existing Judicial Center appear to comprise approximately 13,056gsf per floor, or 39,168gsf for the entire building, it is reasonable for planning purposes to presume that:

- 13,056gsf is reserved for Third Floor Courts functions, leaving the lower two floors
  *39,168gsf / 3 = 13,056gsf/floor*
- 44 of the total 100 beds required by the Request for Proposal (RFP) fit adequately into the existing mezzanine-style Second Floor, or in 13,056gsf, leaving 56 beds and 26,944sf of the Program remaining for location into a possible addition.
  *40,000sf – 13,056sf =* ***26,944sf remaining, needed for the Jail in the Addition***
- 5,864nsf of the Main Floor is currently utilized for Kitchen, Laundry, Mechanical, and Sallyport, which should also be subtracted from the balance of the 40,000sf required (in the RFP) for the Jail
  *26,944sf – 5,864nsf =* ***21,080sf of total required Jail space located in Addition***
- 5,483nsf of office space available on the First Floor for the Sheriff's Facility Program area of 6,319sf, leaving a balance of 836sf for expansion into a possible addition.
  *6,319nsf – 5,483nsf =* ***836nsf of total Sheriff's Office space located in the Addition***
- This means a possible addition could accommodate all but 21,080sf of the 100-bed Jail, and all but 836nsf of the Sheriff's Office, leaving the Program Area for the Fremont PD, PSAP, and Multi-Use Garage:
  *PD space @ 8,371sf + PSAP @ 2,776sf + Garage @ 15,625sf + Common Space @ 22,791sf =* ***49,563sf***
- This would size a possible addition to the existing Judicial Center at:
  *21,080sf (Jail space) + 836sf (Sheriff's Office) + 49,563sf =* ***71,479sf Total Addition***
- Thus, a 71,479sf Addition to the existing building @ 16,234sf/floor would be 4.4, or **5 floors tall**

Such a 5-story addition would likely be 4 stories @ 16 feet + the 25-foot high mezzanine jail housing unit, *or nearly 90 feet in height*, exceeding the 60-foot maximum allowed by the DC property Zoning (please see Figure 6 below).

This leaves an area needed for surface off-street parking as calculated by the accepted Facility Program described in Section 2 of this document. An accurate accounting of the potential for the two-story parking ramp located across North Park Avenue from the Courthouse (see David Kavich Parking Ramp, Figure 5) to impact the total parking needs may be beyond the scope of this document, but it is reasonable that the ramp was originally sized primarily to accommodate the present County government staff, including those of the Judicial Center, which, if the balance of a Joint-Use facility were to be constructed on the block, could reduce the Program off-street parking requirement somewhat.

The 25-foot height of the Mezzanine configuration, added to the floor area devoted to the balance of the Facility Program, will make the five-story Addition significantly taller than the original Justice Center, which is 48'-8" (according to the drawings), or the Courthouse structure, which appears to be about 60

feet tall. Such an addition to the Justice Center might extend over the Alley *to touch and allow multiple access points into the Courthouse*, or touch the Courthouse with a reduced height portion, depending upon detailed design, and Owner preference.

The general discussion for the PD property above has concluded that approximately a half block would be needed for the total 120-stall parking lot required by the Joint Facility Program, and this Study document would offer the suggestion that the City of Fremont and Dodge County might consider all, or a portion of the city block west of the Judicial Center, across North Broad Street, as a suitable candidate for a similar-sized surface parking lot. While the east side of this block appears to contain several viable businesses, it also contains several vacant structures, and all are clearly not "highest and best use", considering their proximity to the County government center, and particularly if a new Joint-Use facility might be constructed. As with the PD block discussion above, the typical City block size of 78,400sf, means that something like 107 surface stalls could be accommodated on the eastern half of the block, which from the GIS mapping could again be 39,200sf ±. The County GIS website also does not indicate an active north-south alley in this block, but there clearly is one, verified visually by a simple drive through the area (please see Figure 6 below).

The need for this quantity of surface parking by selection of the half block west of the Judicial Center across Broad Street might just as well have been met by selection of a similar area *south* of the Judicial Center across 4th Street, if pedestrian traffic crossing Broad Street is thought to be an issue.

In summary, a 5-story addition placed north of the existing Judicial Center, together with a return to full use of the existing Justice Center, might accommodate the Joint Police-Sheriff Department-PSAP Facility Program, and the remainder of the 100-bed Jail requirements, but would force the relocation of the private Law Office property there. If the existing Judicial Center could return to being fully used, the present staff might continue to park in the Kavich ramp, reducing the need for relocation of some, or all of the eastern half of the adjacent block across Broad Street. Further, the diagram in Figure 6 below will accommodate the 144-foot dimension of the 104-bed prototype shown in Figure 3 above.

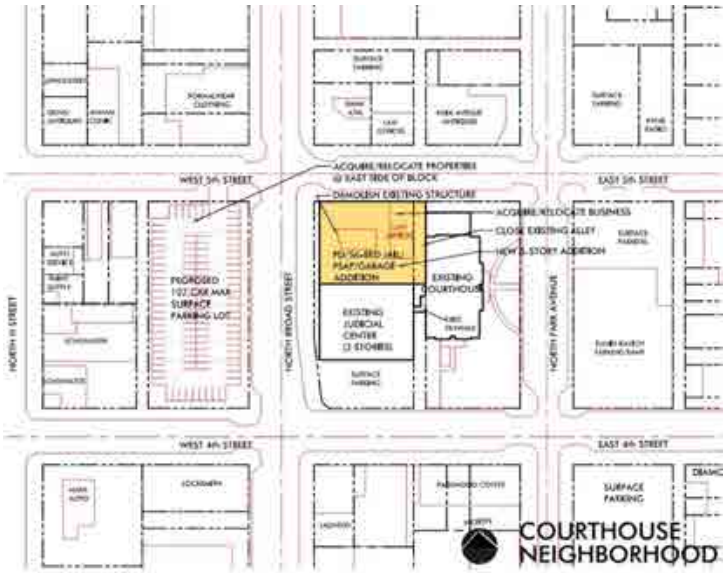


*Figure 6. Proposed changes to Courthouse neighborhood – <u>with</u> the 100-bed Jail occupying a portion of the north end of the proposed addition*

**EVALUATION OF FREMONT TECHNOLOGY PARK PROPERTY**

Development at the Fremont Technology Park Site in the near future will likely entail bringing utilities and extending paving to the property, as it appears to be under cultivation at present. Further, based upon *2020 Dodge County GIS mapping*, Yager Street running north-south at the west side of the property is the only improved road, with access to the Technology Park "Outlot A" parcel off an unimproved private drive located in the 29th Street right-of-way, or via North Lincoln Avenue, which appears to be improved and paved for only approximately 240 feet (±) north of the 27th Street right-of-way (r.o.w.). The North Lincoln Avenue approach must cross the Rawhide Creek, which is roughly coincidental with the 27th Street r.o.w. Rawhide Creek also imposes a "1% Annual Chance of flooding", or a 100-year floodplain, on a small portion of the property, which is identified on Figure 7 below. The entire property is comprised of approximately 590,607 sf., or 13.56 ± acres, and factoring out the utility easements and the floodplain boundary, the buildable area on the property is still approximately 521,777 sf., or about 12 acres.

Superficially, it must be observed that the entire Facility Program area, including that for the 100-bed Jail, the enclosed Garage, and the idealized parking lot area, totals:

| | |
|---|---|
| 55,882 sf | Police Department, Sheriff's Department, PSAP, Wash Bays, Garage |
| 40,000 sf | 100-Bed Mezzanine-style Jail |
| 44,165 sf | 126-Car surface Parking Lot (idealized) |
| 140,047 sf | Total Program Area |

The simplified math above indicates that the Total Program Area will fit *easily* on the buildable area of the Technology Park property, in a single-story configuration. Of course, this property would require further analysis for best placement of an idealized design. From initial analysis of the plat of the Fremont Technical Park property "Outlot A", and again from the *Dodge County GIS mapping, 2020 satellite view*, it would appear that there can likely be no direct property access from either Yager Street, Lincoln Avenue, or 27th Streets, at present. *Google Earth satellite view* depicts Lincoln Avenue paving no further north than the 27th Street r.o.w, and only private drive access occupying the 29th Street r.o.w. eastward from Yager Street. There appears to be direct frontage for this parcel on Yager Street, but the frontage is too narrow and too close to the 29th Street intersection to allow significant traffic access. Nor can there be any reasonable access from 27th, since this coincides with the Rawhide Creek. Therefore, continuation northward of the Lincoln Avenue paving, or major improvement of the 29th Street roadbed and paving east-west would be the logical access points.

A more developed plat for the Fremont Technology Park property, recently obtained, reveals a substantially larger area planned for the *future* Park than did our initial documents, depicting also proposed utilities locations, and future land additions. , but unless placement of this Joint-Use facility is delayed a significant amount of time, As the first few projects in such a development often bear the burden of extending much of the infrastructure cost, it is significant to learn that the City of Fremont has previously budgeted for street paving and utility infrastructure in this area. Despite this, the facility placement depicted on the northeast corner of "Outlot A" below remains the most logical and pragmatic.

The current *Fremont Zoning Map* considers all of this property to be "Business Park" (BP) zoning, and within the current city limits; 29th Street appears to be the current city limit at this location. The current surrounding adjacent zoning is "General Commercial" (GC) to the southwest, "Limited Industrial" (LI) to the south, as well as "Auto-Urban Residential" (AR) and "Urban Residential" (UR) south and east, across Lincoln Avenue. The larger development imagines additions both north and east, and does extend

westward to the Yager Street intersection. The more recent Technology Park plat reveals future additions proposed for inclusion with the "Outlot A" property, which would appear to require rezoning as subsequent additions are included.

Per the *Fremont Zoning Code*, Table #11-603.01.02, "Nonresidential and Mixed Use Setbacks", the BP zone requires a 35-foot front yard, a 15-foot side yard, a 25-foot street yard, and a 35-foot rear yard setback. If the City and County would wish for the balance of the "Outlot A" parcel to be made available for re-sale, or consideration by other buyers of unneeded area, a preliminary site design can be prepared to allow further scrutiny.

Again, please see Figure 7 below for a simple placement *in context* of the 55,882sf Facility Program area from Owner-provided information, as well as a simplified representation of the 40,000sf 100-bed jail area identified in the RFP Document. The 40,000sf have been depicted as a single-story area, and it will be assumed that the 94' x 144', 104-bed mezzanine-style Housing Unit shown in Figure 3 is either a more efficient, and therefore requires an even smaller footprint, or has been assumed by the 40,000sf figure. There is also a "proof-of-concept" depiction of the Program-required 120-stall off-street parking lot.

The decision to propose this particular placement on the northeast corner of the Technology Park "Outlot A" property was merely to consider minimizing the cost of additional street paving for access. The primary additional site parameters for the BP zone are then also shown, based upon a logical decision for the project "Front Yard". A more specifically designed shape for the 55,882sf Program area might make the facility fit into the "Outlot A" area closer to Yager Street, if this is desired. The property setback determinations are usually a simple function of selecting the "Front Yard", and the allocation on the property designated for storm water detention is primarily determined by the lowest useable point on the property.

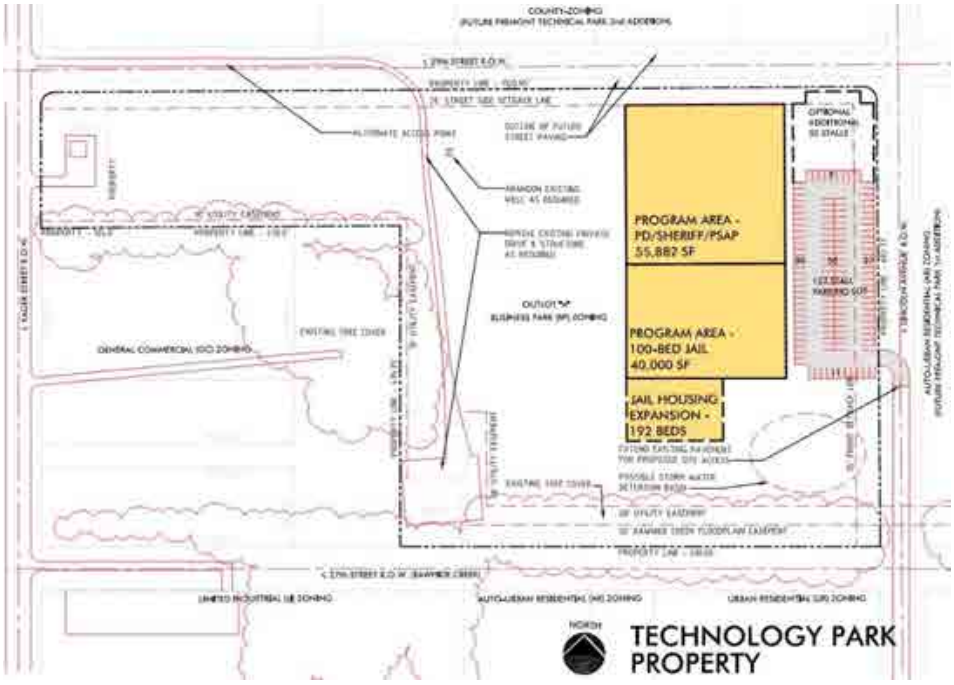


*Figure 7. Preliminary evaluation of Fremont Technical Park "Outlot A" property*

**OPTIONAL: CONSIDERATION OF LARGER-CAPACITY INMATE HOUSING**

Again referencing Figure 7 above, our experiences with other Nebraska counties and the research conducted for their *Needs Assessments*, which typically leads to a 10-, 20-, and 30-year Inmate Bed Count prediction, tells us that Dodge County is very likely to see a *substantially larger* prediction than 100 beds, were this research to be formally conducted. It is our understanding that the State of Nebraska requires a *Needs Assessment* to be performed if the County anticipates significant alteration or replacement of their Jail. As Prochaska & Associates has not been hired to perform a formal *Needs Assessment*, speculation of a more realistic inmate bed count in this document must be logical, but informal only.

Working closely with staff of *Nebraska Jail Standards*, a formal *Needs Assessment* was completed in 2019 for Adams County, Nebraska, for their existing Jail, located in Hastings. The 2019 population of Adams County was 31,363, with the 2019 population of Hastings at 24,906. Hastings and Adams County are similar in many ways to Fremont and Dodge County, which have 2019 populations of 36,565 (Dodge) and 31,363 (Adams), respectively. Our research conducted for Adams County in 2018 predicted *well over 154 beds*, fully-realized with the 20-year time frame, but that County Board opted to build only 154, and their bond passed primarily, we feel, because the county residents were concerned that their tax revenue was being sent to other counties, and that this transport and boarding cost would only rise significantly in the future. Calculations of the full cost of Inmate Transport for Adams County, factored for inflationary pressure over a similar 20-year period as the typical life of a voted Bond, far exceeded the cost of a new facility, properly-sized for the next 20 years of anticipated growth.

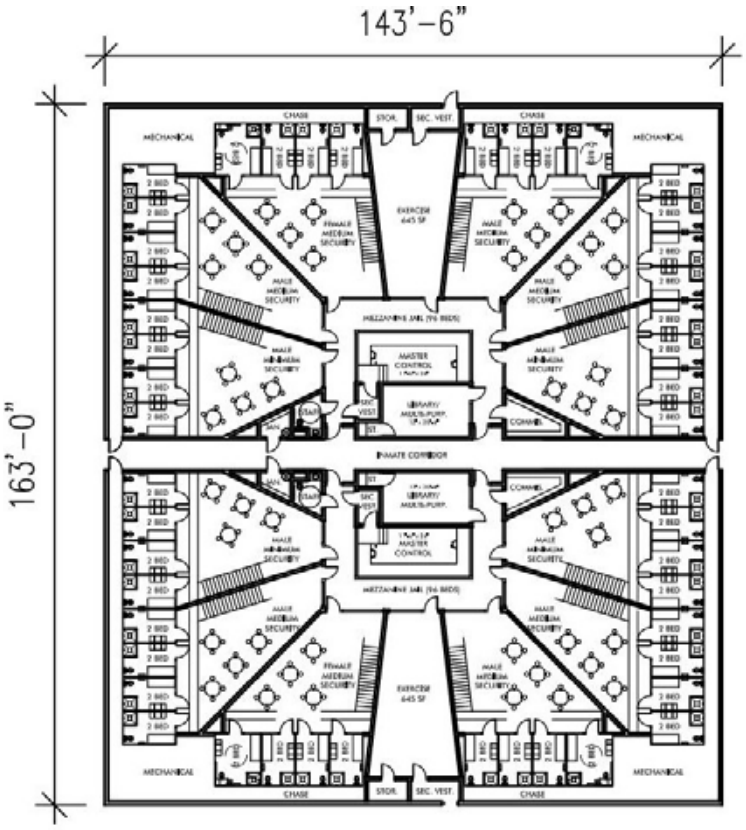


*Figure 8. 192-bed prototypical Housing unit*

By using this overly-simple comparison, Dodge County, at almost 1.2 times the population size of Adams County (1.17 actual) might be seen as likely to experience an Inmate population in 20 years of *over* 184 Inmates (1.2 x 154). Further, the *Needs Assessment* document also must carefully considers other demographic factors, such as community business vitality, commuting in- and out-of-county for employment purposes, and percentage of student-age population who elect to relocate out-of-county after High School graduation. Such a report would also factor in the close proximity of Fremont to Omaha, and the number of individuals who already commute between the cities for employment, rather than relocate.

It is for this reason that we have also depicted a larger Jail Housing Unit "Expansion" in Figure 7 to the 100-bed size requested by the Fremont RFP

Document. In both cases, we have considered an actual prototype mezzanine-style space, because this 2-level design would consume less property to achieve a greater bed count, as well as utilize fewer staff. As can be seen in Figure 7, the Jail Housing Expansion is based upon the 144ft-wide module, and would increase capacity to a maximum of 192 inmates in dual-occupancy cells. While this is clearly an oversimplification of the actual Inmate Housing needs of Dodge County, should a formal *Assessment* be undertaken, slight liberties were deemed acceptable for this planning document. The prototype for the 192-bed Unit can be seen in Figure 8 above.

More importantly, if this simple comparison is valid, the evaluations performed earlier in this Document for either the existing Police, or Sheriff's Department properties, reveal greater challenges and additional land acquisition requirements, in order to hold the number of Inmates Fremont and Dodge County are likely to see in the next 20 years, despite the acquisition of additional land depicted in each evaluation. If the larger Jail capacity is in fact needed, as we believe will be shown, the staff count will also need to increase, although not proportionally, so a larger parking lot option, depicted as a dashed line adjacent to the 127 stall lot to add 50 more stalls, has also been shown on the Figure 7 drawing.

**TASK 3(c) OPTION: EXPANSION/RENOVATION POTENTIAL OF SEPARATED FACILITIES**

We have been asked and have responded above to analyze the abilities of the three properties to support a Joint-Use PD/Sheriff/PSAP Facility Program, but Task 3(c) requests analysis of the properties to support expansion of their separate facilities as outlined in the accepted Facility Program. Since accommodating the combined Joint-Use Program is clearly the more challenging task, requiring potentially costly land acquisition, it is reasonable to evaluate the separate properties simply to accommodate the necessary expansion pressures each has faced, to enable a proper comparison.

**Police Department Property Evaluation**

Prochaska & Associates produced a document for the City of Fremont for the Police Department in 2014 (reproduced in Appendices "A - C" of this document) which took the position that the existing Police Garage located directly west of the existing Station could be torn down to make way for a 24,185sf Addition, which accommodated the PD expansion needs at the time, leaving the existing fenced Parking Lot intact.

The Task 1 Facility Program suggests the isolated expansion requirements for the Fremont Police and PSAP would be as follows:

| | | |
|---|---|---|
| Common Spaces Gross Area: | 22,791sf | (less efficient, if not "common" spaces) |
| Police Department Gross Area: | 8,371sf | |
| Dispatch Gross Area: | 2,776sf | |
| Vehicle Garage (Police only): | 8,400sf | |
| Wash Bay/Storage: | 500sf | |
| Total Program Area: | 42,838sf | |

The same task 1 Facility Program lists a requirement of 50 dedicated off-street Parking Stalls for the Police, and a "common Public Parking" count of 40, so, assuming the PD portion is half of that, a total of 70 stalls might be required for the expanded Police Department.

If the existing two-story 14,920sf Police Department facility were to be maintained in-place, the proposed Addition in our 2014 Report would enlarge that facility to 39,101sf, which is 3,737sf short of

the Task 1 Facility Program, as designated for the PD only. That earlier design called for a 2,524sf Mechanical Penthouse to be constructed atop the two story existing PD building, but our contention at that time was that the PD building was *originally designed for another possible floor*, so this option remains to accommodate the remaining shortfall; if an entire third floor were to be added to the existing Police Department facility, the total area of that 2014 design might increase to 46,560sf, exceeding the Facility Program requirement above (42,838sf) by 3,722sf. *In short, the existing site will accommodate the full Program of Spaces allocated to Police and Dispatch, assuming the existing facility remains operational, and the option to construct another floor remains acceptable.*

The P&A 2014 Report called for 49 stalls outside, behind a fenced enclosure, with another 19 stalls indoors, for a total of 68 stalls, just short of the 70 stall figure computed above.

**Courthouse/Judicial Center Property Evaluation**

The same Task 1 Facility Program suggests the isolated expansion requirements for the Dodge County Judicial Center would be as follows:

| | |
|---|---|
| Common Spaces Gross Area: | 22,791sf |
| Sheriff's Office Gross Area: | 6,319sf |
| 100-bed Jail: | 40,000sf |
| Vehicle Garage (Sheriff's Office only): | 3,600sf |
| Total Program Area: | 72,710sf |

The same task 1 Facility Program also lists a requirement of 30 dedicated off-street Parking Stalls for the Sheriff's Office, and a "common Public Parking" count of 40, so, assuming the Sheriff's Office portion is half of that, a total of 50 stalls might be required for the expanded Sheriff's Department.

Regarding the three-story Judicial Center building, if the two floors devoted to Jail and Sheriff's Offices were to be maintained in-place, this would contribute 26,112sf of the total 72,710sf Total Program Area above, leaving 46,598sf remaining. If the two smaller structures currently located there were removed, and the businesses relocated, a footprint area of 14,350sf (excluding the active alley) would become available, meaning the remaining program area devoted to the Sheriff's Department needs, including the 100-bed Jail, would fit in under three floors.

This calculation ignores the benefit derived from re-use of the existing 44-beds on the existing second floor, and it is logical to subtract both the first and second floor areas from the 40,000sf figure for the 100-bed Jail above, leaving an area to accommodate in a possible addition of 40,000sf – [(2)(13,056sf)], or 13,888sf. Again, with a recoverable footprint area of 14,350sf, it is reasonable to accommodate this 26,944sf area in a single floor. *In short, with the businesses relocated, the existing site will accommodate the full Program of Spaces allocated to Sheriff's Department and 100-bed Jail, and assuming the existing facility remains, and is returned to fully operational.*

As the existing Parking stall count available to the Judicial Center has already been calculated at 21, the stall shortfall is 29, which would need to be made up either on-street, or in the Kavich ramp. If on-street parking is not desirable for staff needs (as is often the case per local Zoning Codes), the relocation and removal of the more marginal businesses to create a 107-stall surface lot, on either the half lot across Broad Street, or on a similar area across 4th Street, can still be pursued.

**192-bed Jail (Optional)**

Earlier assumptions for a Jail of this size were based upon the 40,000sf figure for 100 beds, and our 154-bed Adams County facility, which is currently at 54,286sf, so we believe a 192-bed facility might require a total area of around 67,500sf, for planning purposes. Again, subtracting the 26,112sf of existing Jail space from the 67,500sf total, the larger 192-bed facility might be require an additional 41,388sf, meaning a proposed Addition placed to the north of approximately 3 stories (41,388sf / 14350 footprint = 2.88), and again, due to the mezzanine-style Dayroom ceiling height, potentially threatening the zone-based 60ft limitation, depending on matching floor-to-floor heights with the existing Judicial Center.

# Task 4 – Development Scenario Comparisons

5.0

# TASK 4: DEVELOPMENT SCENARIO COMPARISONS

**COMPARISON CRITERIA – GENERAL**

As has been mentioned in the previous section (Task 3, page 4.11), a proper comparison of the several development scenarios considered will necessarily involve some sort of weighting of the less-tangible aspects associated with each one, and a conclusion made within this Document without extensive community and staff input is beyond our capabilities. It has been theorized that support for a future voted referendum must involve adequate research into those issues influencing various Fremont/Dodge County public opinions, both pro and con, and then either attempt to "educate" the public to believe in the goal, or to follow those opinions more closely, and tailor a Project more towards what is learned. One further generalization: without proper publicity and public education, the results of any bond referendum will be highly unpredictable.

Of course, Referendum is not the only funding method available to the City and County. The Request for Proposals (RFP) document originally asked the successful firm to evaluate from a list of all possible options, including sales tax and grants. As Prochaska & Associates' area of experience has historically been with encouraging the public to voluntarily vote to increase his/her own taxes by explaining the need and wisdom of the proposed solution, this will be the primary focus we will take in this section.

Therefore, the criteria for *public* evaluation of the scenarios discussed under Task 3 earlier could be separated into the following headings:

- What option is best for the long-term health and vitality of the City and County?
- What option is the least expensive, in both the short and long term?
- With the cost issue removed, what solutions most fit into the surrounding neighborhoods?
- What is the downside "cost" of doing nothing?

In our experience, convincing the voters to agree to a tax increase seems often to be based upon explaining that every effort has been made to drive out cost for the selected option, and that the solution before them is therefore the most efficient use of public funds. When a choice is made available between lower and higher cost options, convincing a typical voter to agree to the higher cost is sadly often the more difficult path.

**LONG-TERM CITY HEALTH AND VITALITY PLANNING ISSUES**

It has been theorized that the voters may have disagreed with the City of Fremont in their rejection of the new "greenfield" site selected in the previous bond election for the joint-use facility, and in the same process, the City and County may have appeared to imply the *abandonment* of both the existing City Police Station and the County Judicial Center buildings. Both of these structures are arguably iconic public facilities, seemingly belonging in the more densely-developed central city core areas, for maximum public visibility, and to help maintain a sense of pride, and a strong and healthy image of the community. Possibly, the public understood that by voting for the relocation of both facilities, that there would also be *two abandoned structures* in the center of Fremont to either re-fill, or to ultimately tear down. Although this is clearly speculation, we believe this to be a very valid point, and have often encountered this phenomena ourselves. In our experience, abandoning functioning existing facilities is disturbing to many voters, so we have often striven to design a re-use function at the same time, and make this fact equally clear to voters going to the ballet booth. For example, many Counties have previously outgrown their Courthouses, and therefore have other various "orphan" departments spread out over several,

usually rented buildings in the community, so these far-flung entities could be conceivably consolidated into the newly vacated structure, once the original occupant moves out.

**POLICE DEPARTMENT NEIGHBORHOOD**

Looking at the existing Police Department neighborhood, the existing structure appears relatively land-locked, with reportedly too little space and too little off-street parking to adequately house itself. Prochaska & Associates has evaluated it and proposed solutions to address overcrowding since 2012. In addition, the surrounding neighborhood appears to have experienced some recent rejuvenation, with the re-habilitation of the nearby Powerhouse Apartments and the City Park and cultural facilities close by to the north. The cultural and pedestrian nature of the neighborhood seems to be enjoying an upswing, or to be poised for one.

While the Police Department property has been demonstrated by our 2014-2018 efforts to be expandable to its full Program-based size, from a City Planning point of view, the *ideal* use of the Police Department property would be for additional rental apartments, or condominiums, or maybe a restaurant, focusing on the park and the other surrounding available amenities, like the neighboring ice cream shop and fast-food businesses. From our earlier reporting and from discussion in the Task 3 section, we sought to describe precisely how the entire Program for a joint use facility might be accommodated on this property. We also sought to minimize the disturbance to the surrounding business properties; however, placing the entire Task 1 Program of Spaces for the Joint-use facility in this location would ultimately entail clearing the entire block, requiring a City purchase of the adjacent gas station and other small business, just to make way for the program-required surface parking. In other words, the cost of new construction must be added to the cost of purchase and demolition of the adjacent properties, at minimum, and a new structure exceeding the zoning height restriction and crowding the property line setbacks would also result. Once completed, there might remain some question as to the "fit" of the joint facility in this developing neighborhood. In other words, a large building complex could probably be made to fit here, but would likely not encourage more of the type of growth and re-invigoration the neighborhood seems in need of, or is currently enjoying.

**JUDICIAL CENTER/COURTHOUSE NEIGHBORHOOD**

Consideration of the Courthouse/Judicial Center property as a candidate for a future joint-use facility would make *serious* sense from a purely City Planning perspective, however challenging or expensive it might ultimately be, based upon the arguments made above, *that the citizens of the County expect civic-type facilities in their city core.* The iconic, possibly cherished nature of the historic Courthouse structure, with the partially abandoned Judicial Center building across the alley, might already seem an affront to some citizens, aware that the Jail building is substantially underutilized. This possible reaction may have been multiplied even further if the voters were asked to permit this facility to become fully abandoned, in favor of a new joint-use facility constructed on a "greenfield" property on the edge of town.

We have theorized in our Task 3 discussion above that in one option, the existing Jail Housing and First Floor spaces *might actually be returned to full service*, and then accompanied by a substantial addition containing inmate housing which is fully ADA-compliant (see Figure 6, Task 3). This would reduce the total inmate housing need by the 44 beds intended by the original Judicial Center design, thus seriously reducing a future project construction cost, and would also return the underutilized Kitchen and Laundry areas to full service. Our Task 3 discussion suggested that much of the remaining program could be

accommodated on the north half of the block, with a taller, interconnected structure, but more in keeping with the scale and appearance of the adjacent buildings. Further, many of the existing staff offices and surface parking spaces could remain in-use and substantially undisturbed while such an addition would be constructed.

The downside of this second option, to utilize the existing Courthouse and Judicial Center block more intensively, would unfortunately *also* involve the purchase and relocation of existing businesses. The "Law Offices" building on the north edge, and a smaller, former gas station structure will need to be purchased, and these businesses relocated, to realize the full potential of this block for multi-story construction. Also mentioned previously, there may even be buried underground fuel tanks to be mitigated and removed.

Recapping from the Task 3, Development Scenarios section, it was pointed out that while the entire Program can likely be made to fit on the Courthouse block north of the existing Judicial Center facility, the resulting building shape also exceeds the current zone-based height restriction, possibly requiring a Zoning Waiver.

While the existing Kavich Parking Ramp could certainly contribute meaningfully to reduce the Program of Spaces total stall count, but to accommodate the entire count, the need for additional surface parking area will remain substantial. The discussion in Task 3 of accommodating the entire Program requirements in this neighborhood also proposed the purchase by the City and County of the east half of the block across North Broad Street from the Judicial Center (or alternatively, the north half of the block across 4$^{th}$ Street), suggesting that many of these properties are currently either vacant or underutilized functionally, especially in context with the Courthouse across the street. A logical argument could likely be made for the greater benefit to surrounding neighborhood vitality in the Fremont city center, arising from a significant financial investment in the existing Judicial Center block, despite the loss of the current tax revenue for either of these adjacent half block areas.

A couple of slightly less important items should be mentioned, drawn from the Mechanical and Electrical Assessment portions of this Study, and regard the serviceability of these systems. The Mechanical Section reports that the primary heating and cooling system, water source heat pumps, currently discharge to the Fremont storm sewer system, and not to another Well, as was originally designed, which will likely require attention in the near future. Also, from the Electrical Assessment, some of the existing equipment is reported as obsolete and difficult to repair, or extend. The above area calculations assume that both the PD and Judicial Center facilities remain essentially unchanged, but some consideration for the capital cost of repair or replacement must be made.

**TECHNOLOGY PARK PROPERTY**

Again, a Dodge County/Fremont citizen might logically find greater satisfaction and willingness to vote in favor of a future Bond for a Joint-use facility in the Technology Park area, if it was also clear what the intended future uses would be for vacated Judicial Center and Police Department buildings. The benefits of a new facility in this location, coupled with the calculated savings derived from consolidation of other City and County departments, might make such a Bond Issue more appealing to the average voter. Of particular importance would be the contribution of the new usage to the voter's sense of civic pride.

The pros of such a joint-use facility on Technology Park property have been discussed extensively both before the previous Bond Election and afterwards, and between Prochaska & Associates and the City and County, as well as with the intervening design firm: (1) the facility could be constructed *without disturbance to the existing essential facilities or operations*. Assuming the investment in property purchase, public utilities, and other infrastructure in the Technology Park area has already been made, (2) the final cost to the City and County may in fact be *less to build new*, with the issue of business relocation factored into the discussion. (3) The ideal size of the lot, including planning for future expansion potential, can be calculated ahead of time during the planning and design stages, and would not be limited by other existing development.

The cons of such a project may have also been enumerated and factored into the City's and County's prior decision to go to Bond. However, from our perspective, the central issue confronting this option for a joint-use facility is the need for numerous Inmate transfers between the Courts facilities and a more remoted Jail; this type of transport has been shown in recent years to be a significant safety and expense concern for the Jail staff, *and similar concerns are being expressed on a much wider, even national platform.* The arguments in favor of constructing a new facility to house all of the current and future anticipated County Inmates, to save the spiraling cost of out-of-county boarding and transport is only reduced, but certainly *not eliminated*, by locating the two facilities significantly closer to one another in the same city. As long as the Courthouse facility remains in-use, transport costs and security risks arising from travel to and from a Technology Park property should be *significantly* reduced below current conditions, but certainly not eliminated.

**COST FACTOR COMPARISON**

Lacking more detailed design, comparative costs for use in evaluation of the above multiple options can only be considered in a fairly broad-brush manner in this Document. Because the Program of Spaces reproduced in Task 1 contains area values to which square-foot cost figures can be applied, a simplified basis of comparison can be offered, however. Further, the current (2021) extreme volatility of the construction industry, and regarding unpredictable material and labor costs specifically, makes the results of application of these square-foot figures more or less conceptual, at best. Lastly, little is known at this time of possible actual bidding and construction timeframes, so little can be gained by application of an actual inflation factor to present-day available square-foot figures. *For the purposes of this Planning Document, we have been asked to use a figure of five (5) years, at 3% inflation per year.*

We can begin with *R.S. Means*, a commonly used reference guide offering a nation-wide collection of square foot pricing of construction costs, broken down into differing building types, overall project scale (larger projects are often less expensive per square foot than smaller ones), and updated each calendar year. Predicting future costs from past data has not been *nearly* as difficult in the past, as it is at present. The Estimating industry commonly utilizes a guide like *Means*, and will also attempt to adapt the data to the particular local construction market in each project location, and will even attempt to apply an inflation factor, to project likely cost increases from January of each year forward, for either a part of a year, or for multiple years, until anticipated construction might begin. The United States construction Industry typically experiences an average, taken over multiple years, of 3% inflation, with some notable exceptions, i.e., depressed economic times, industry sector consolidation, or the current example of nearly *runaway* inflation in the second half of 2021. There are also *always* significant local pressures to consider as well, sometimes referred to as "micro-economics", such as shortages of labor force (due to multiple causes), extreme isolation of a given project area, union labor strikes, or

otherwise uncooperative or unresponsive tradespeople. The above disclaimer now stated, we will justify use of *R.S. Means* for comparative purposes only in this study, acknowledging its current limitations.

Based upon the Request for Proposals (RFP) language, containing the previously-accepted Program of Spaces, which requested study options for the Joint-Use facility with a 100-Bed Jail, the overall Program area for consideration at each property is:

| | |
|---|---|
| 55,882sf | Facility Program Total |
| 40,000sf | 100-Bed Jail |
| 95,882sf | Total Planning Area |

For purposes of using the *Means* cost estimating guide, it is useful to separate the above figures into either "Jail" costs, or "Police Station" costs, so the Facility Program Total figure above should be further subdivided to remove 1,570sf of "Short-term Holding" area to price it at the higher Jail rate, modifying the above figures to:

55,882sf – 1,570sf = 54,312sf
40,000sf + 1,570sf = 41,570sf

*R.S. Means* states that the January, 2021 square foot cost for a multi-story "Jail" of approximately 40,000sf should be close to $300/sf, and a "Police Station" (combined Fremont PD and Sheriff's non-jail areas) of approximately 54,000sf should be about $220/sf. Therefore, based upon the referenced data, the preliminary budget *hard cost* of the programmed Joint-use Facility, *excluding Site Costs*, as a stand-alone structure such as that planned for the **Technology Park option**, might be:

| | | |
|---|---|---|
| 54,312sf @ $220/sf = | $11,948,640 | *(calc. #1)* |
| 41,570sf @ $300/sf = | $12,471,000 | |
| Programmed Area Hard Cost | $24,419,640 | |

Cost credit should logically be given in each Task 3 Scenario for re-use of some or all of the existing structures. In the **Police Station Neighborhood Option**, it was assumed that a 15,000sf two-story portion of the existing station could remain intact and functional, and thus placing PD program area expansion, and all of the Sheriff's Department and Jail areas in the Addition. Therefore, by analysis of Figure 4 on page 4.5, the existing Police Station facility *conceptual* cost might compute this way:

| | | |
|---|---|---|
| (54,312sf -15,000sf) @ $220/sf = | $ 8,648,640 | *(calc. #2)* |
| 41,570sf @ $300/sf = | $12,471,000 | |
| Programmed Area Hard Cost | $21,119,640 | |

And for the **Courthouse Neighborhood option**, it has been proposed to re-use the existing Judicial Center in its entirety in tandem with a substantial addition containing 56 new inmate beds. If the entire structure can be utilized, excepting the Third Floor Courts, this logically removes two floors of approximately 13,056sf each, or 26,112sf from the Program: the second floor Housing area at $300/sf, and the first floor Offices and utility-type spaces at the $220/sf figure. Obviously, the existing facility will require a degree of at least light remodeling, but for planning purposes, the *conceptual* cost for the addition then looks this way:

| | | |
|---|---|---|
| (54,312sf – 13,056sf) @ $220/sf = | $ 9,076,320 | *(calc. #3)* |
| (41,570sf – 13,056sf) @ $300/sf = | $ 8,554,200 | |
| Programmed Area Hard Cost | $17,630,520 | |

As the RFP asked for both hard and soft cost predictions, our office usually uses a factor of 25% at this very early-stage planning. In the absence of actual negotiated purchase/relocation costs, the County Assessor's Office has been consulted for assessed property cost, and a factor to raise Assessed value to Market value has been calculated. Further, demolition cost can be broadly estimated (again, only for planning purposes, so that a value can be placed into the calculation. Thus, the remainder of the calculation would increase the above cost figures like this:

| Technology Park Property Development Option Budget | | *(calc. #4)* |
|---|---|---|
| Programmed Area Hard Cost: | $24,419,640 | |
| Property Purchase Cost: | $ *no cost (previously purchased)* | |
| Site Prep Cost Presumption @ 10%: | $ 2,441,964 | |
| Soft Cost Presumption @ 25%: | $ 6,104,910 | |
| Inflation for 5 years @ 3% per year: | $ 4,944,977 | |
| Total Budget**: | **$37,911,491** | |

| Police Station Neighborhood Development Option Budget | | *(calc. #5)* |
|---|---|---|
| Programmed Area Hard Cost: | $21,119,640 | |
| Remodel existing M&E Syst. (2 flrs): | $ 930,000 | |
| Purchase of Adjacent Properties:* | $ 1,251,294 | |
| Demolition & Clearing of Structures | $ 430,000 | |
| Parking Lot Construction (126 stalls): | $ 300,000 | |
| Soft Cost Presumption @ 25%: | $ 6,007,734 | |
| Inflation for 5 years @ 3% per year: | $ 4,505,800 | |
| Total Budget**: | **$34,544,468** | |

| Courthouse Neighborhood Development Option Budget | | *(calc. #6)* |
|---|---|---|
| Programmed Area Hard Cost: | $17,630,520 | |
| Remodel existing M&E Syst. (3 flrs): | $ 2,501,270 | |
| Purchase of Adjacent Properties* | $ 949,710 | |
| Demolition & Clearing of Structures | $ 464,000 | |
| Parking Lot Construction (107 stalls): | $ 250,000 | |
| Soft Cost Presumption @ 25%: | $ 5,448,875 | |
| Inflation for 5 years @ 3% per year: | $ 4,086,656 | |
| Total Bond Cost**: | **$31,331,031** | |

*Conspicuous in the above cost modeling are the "Purchase of Adjacent Properties" entries, which we have been encouraged to assume from *Assessed Value*, and when multiplied by a certain factor, determines *Market Value*. The Dodge County Assessors Office maintains that assessed values are above 90% of market value; however, for this document, "purchase price" has been assumed to be 1.25 times "assessed price", taken from the Assessor's public records. In reality, a forced, or *eminent domain* relocation of a thriving business can never be adequately compensated simply by payment of Market Value, so above-market compensation, or even relocation costs, might also be factored into the overall

cost. Structural Demolition cost is also a figure we must attempt at only very gross level, as all representations of existing off-property building area in the illustrations provided in this Document were taken from satellite analysis, and therefore should be seen as somewhat inaccurate.

**At this very early budgeting stage, large contingencies should also be applied to the above figures, such as 25%, or even higher. In addition, the above mentioned cautionary statements should certainly apply, regarding values for both normal inflation due to the unknown project Bidding and Construction timeframes, and also due to the inability of *R.S. Means* to have anticipated the recent extreme volatility in the construction industry at the time of this writing. As was stated above, these calculations should therefore be used as a tool only for very preliminary *comparative* planning purposes.

At the time of this writing (summer of 2021), "inflation" has at least reached temporary heights approaching the impossible. **Our recent real-world experience with analysis of *R.S. Means'* ability to predict construction cost during the current economy is that *it is order-of-magnitude only 71% of actual cost,* but this is by no means a predictable factor, so will not be used in this document.**

Another significant point impacting both cost and development potential for each of the existing Police and Sheriff's Department properties is the mid-term potential for growth in inmate bed requirements. In the absence of a formal *Needs Assessment* document, required by the State of Nebraska *Department of Jail Standards* prior to new construction or significant remodeling, our office has *surmised* a 20-year projection of 192-beds, rather than the 100-bed assumption stated in the RFP (see task 3, page 4.11). If essentially all of the difference in the cost modeling done above between a 100-bed facility and a 192-bed facility is logically at $300/sf, we feel the Program area total above is likely to be modified to around 67,500sf., meaning an additional budget increase for each of the development scenarios described above of:

(67,500sf – 40,000sf)@ $300/sf = $8,250,000 *(2021 figures)*

When planning appropriately for a new joint use facility, we believe this bed count to be closer to the more likely *Needs Assessment*-derived figure than the 100-bed figure used in the RFP.

**COMPARISON SUMMARY POINTS**

**1a. Police Department Property Development Scenario – Stand-alone Facility:**

- Per our 2014 submittal to the City of Fremont, *Fremont Police Station, Phase 1 Renovation or Replacement Analysis, Part 1 Needs Assessment* (Appendix A), renovation of the existing PD building was recommended, including demolishing the existing Garage, and despite a need for required Mechanical and Electrical systems replacement.
- The work can be phased to allow maximum time for staff to remain in operation.
- No additional property needed to be purchased.
- Per our 2017 submittal to the City of Fremont, *Phase 1 Renovation or Replacement Analysis*, *Budget Update* (Appendix B), suggested that this property could realize its then-anticipated potential as a stand-alone 35,559sf project for a cost figure of $8,082,090, including renovation and Soft Costs. Assuming 3% inflation per year, this would adjust to January of 2021 to **$9,051,941**, and for an additional 5 years into the future, using the average figure, would be **$10,409,732**.

**1b. Police Department Property Development Scenario – Stand-alone Facility:**

- Alternatively, use of the current *Task 1 Program of Spaces* figure of 42,838sf derived above (Task 3, p. 4.12), for a stand-alone facility, at current (2021) *R.S. Means* square foot costs of $220/sf would result in a cost of **$9,424,360.** The Bond Cost might therefore be calculated this way:

| | | |
|---|---|---|
| New Construction Hard Cost: | $ 9,424,360 | *(calc. #7)* |
| Demolish existing Garage: | $ 62,056 | |
| Remodel existing M&E Syst. (2 flrs): | $ 930,000 | |
| 5 years of inflation @ 3% per year: | $ 1,562,462 | |
| Total Construction Hard Cost: | $ 11,978,878 | |
| 25% Soft Cost Allowance: | $ 2,994,720 | |
| Property purchase assumption:* | $ 0 | |
| Total projected Bond Cost**: | **$ 14,973,598** | |

**2. Judicial Center Property Development Scenario – Stand-alone Facility:**

- The existing Facility requires mechanical and electrical work, and is not ADA-compliant.
- The total 40,000sf required for a 100-bed jail could be offset by re-use of the existing Judicial Center first and second floors, and the total 100-bed requirement might be reduced by the 44 existing beds available on the second floor, if the total required number of new Cells and Day Rooms can be made ADA-compliant.
- The existing facility, including the third floor Courts, and the current transport of inmates to Saunders County would remain in operation during an expansion project.
- To adequately house 100 beds, or even more (as we recommend), two structures will need to be torn down and the Law Offices Building (at minimum) will have to be purchased/relocated.
- Because there are only 21 existing parking stalls dedicated to the Judicial Center building, an additional 29 stalls, of the 50 stalls required by the Program of Spaces, will need to be made up by on-street parking (as now occurs), or a portion of the surrounding neighborhood will need to be purchased and demolished for a surface lot.
- Per our computation on page 4.13 of the *Task 3: Development Scenarios* section, the stand-alone facility of 72,710sf might be reduced by the 26,112sf of salvaged building space to remain, leaving a balance of 46,598sf. Of that area, 13,056sf (entire second floor) can be removed from the 40,000sf @ $300/sf, leaving 33,542sf @ $300/sf, or $10,062,600. Similarly, 13,056sf (entire first floor) might be removed from the 32,710sf remaining, leaving 19,654sf @ $220sf, or $4,323,880, and that total is **$14,386,480**. The Bond Cost can be calculated this way:

| | | |
|---|---|---|
| New Construction Hard Cost: | $ 14,386,480 | *(calc. #8)* |
| Demolish 2 existing structures: | $ 100,000 | |
| Remodel existing M&E Systems (3 flrs): | $ 2,501,270 | |
| Subtotal | $ 16,987,750 | |
| 5 years of inflation @ 3% per year: | $ 2,548,163 | |
| Total Construction Hard Cost: | $ 19,535,913 | |
| 25% Soft Cost Allowance: | $ 4,883,978 | |
| Property purchase assumption*: | $ 224,679 | |
| **Total projected Bond Cost**:** | **$ 24,644,570** | |

**3. Joint-use Police and Sheriff's Department Facility - Police Department Property:**

- A significant downtown property remains viable and in-use.
- The existing two-story 15,000sf PD facility can remain in operation during construction.
- The existing 10,140sf Garage structure will need to be demolished to make room for a large Addition.
- The adjacent Gas Station and Tattoo Parlor properties will need to be purchased, relocated, and demolished, to accommodate the required surface parking stalls.
- To include a 100-bed Jail, the resulting joint-use facility will require an Addition to the existing facility of *four* floors, which will likely exceed the DC Zone-based limitation of 60 feet.
- Per calculations shown in Task 3, p.4.4, and calculation #5 (page 5.6 above), the Joint-use facility Bond Cost is **$34,544,468**.

**4. Joint-use Police and Sheriff's Department Facility – Courthouse Property:**

- A significant downtown property remains in use.
- The existing three-story Judicial Center facility can remain in operation during construction.
- The Property containing the Law Offices north of the Judicial Center will need to be purchased and the business relocated. Relocation of the existing County structure has not been considered.
- Both the Law Offices and County structures will need to be demolished.
- To create enough surface parking to meet Program requirements, a half city block, either across Broad, or 4th Street, will need to be purchased, businesses relocated, and all structures demolished.
- The existing Judicial Center will ultimately require new HVAC and Electrical systems replacement.
- To house the remaining Program area requirements for both the PD and Sheriff's Department, and the remaining cells to total 100-beds, an Addition to the Judicial Center structure would be placed north of the existing facility, which would likely be at, or nearly *five* stories tall, and exceed the DC Zone-based limitation of 60 feet.
- Per calculation shown in Task 3, and in calculation #6, page 5.6 above, the Bond Cost for this scenario of work is estimated at **$31,331,031**.

**5. Joint-use Police and Sheriff's Department Facility – Technology Park Property:**

- Uses for the PD and Judicial Center Properties will need to be sought, and publicized as part of a possible Bond Campaign.
- Both the existing PD and Sheriff's Department facilities can remain in operation during construction.
- The property has already been purchased and utilities run, at no additional cost.
- There is more than adequate opportunity to construct the entire Program of Spaces and full off-street parking on the property, and a remaining portion of Outlot "A" can likely be sold off.
- Work efficiencies can be realized by co-locating Police and Sheriff Departments under one roof, with common shared spaces.
- Cost savings can be realized by construction of a *single* facility, vs cost for adding to/remodeling each facility separately.
- Per calculation shown in Task 3, and in calculation #4, page 5.6 above, the Bond Cost for this scenario of work is estimated at **$37,911,491**.

# Task 5 – Facilitate Owner in Project Advancement

6.0

# TASK 5: FACILITATE OWNER IN PROJECT ADVANCEMENT

**(THIS IS SEEN AS A FUTURE STEP – FOLLOWING OWNER DECISIONS)**

# Appendix

7.0

# APPENDIX: PREVIOUS P&A STUDIES OF FREMONT POLICE DEPARTMENT FACILITY

*Appendix A: Fremont Police Station: Phase 1 Renovation or Replacement Analysis, Part 1: Needs Assessment Pre-Final Draft, Prochaska & Associates, 58 pages, dated 10-30-2014.*

*Appendix B: Phase 1 Renovation or Replacement Analysis for the Fremont Police Department, Prochaska & Associates, 10 pages, dated 05-08-2017.*

*Appendix C: Joint Law Enforcement Center for Fremont Police Department & Dodge County Sheriff's Office, Assessment for New Facility on Greenfield Site, 21 pages, dated 05-29-2018.*

Prochaska & Associates

# FREMONT POLICE STATION

## PHASE 1 RENOVATION OR REPLACEMENT ANALYSIS

PART 1: NEEDS ASSESSMENT PRE-FINAL DRAFT

10-30-2014

prochaska & associates

planning

architecture

engineering

interiors

facility management

CITY OF FREMONT

NEBRASKA PATHFINDERS

Phase 1 Renovation or Replacement Analysis
for the
# FREMONT POLICE DEPARTMENT
Fremont, Nebraska

Part 1: Needs Assessment

*Pre-Final Draft*
October 30, 2014

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# Part 1 – Needs Assessment

2.0

# Introduction

This Part 1 – Needs Assessment section of the *Renovation or Replacement Analysis* for the Fremont Police Department (FPD) facility involved the following steps:

- An on-site investigation of the existing buildings to appraise the physical condition and serviceability of all existing systems including mechanical, electrical, structural and communications
- An evaluation of the functional and operational deficiencies of the existing buildings including a review of division and room sizes as well as space relationships
- Collection of existing blueprints of the buildings
- Collection of relevant City and County demographic data, population growth trends, economic development reports and expected strategic long term planning
- Distribution of *Questionnaires* and subsequent interviews of law enforcement personnel, dispatch and administrative staff, and other key stakeholders
- Development of a Space Program of required functions, rooms and spaces for the FPD based on current and projected staffing needs

The functional aspect of the Assessment deals with the operational efficiency of the facility. It addresses issues such as interdepartmental relationships, expansion capability and necessary improvement of systems within the space. General recommendations will be made concerning these issues. These recommendations will reflect building code and ADA accessibility deficiencies, unacceptable functional problems and areas simply requiring general improvement.

The staff interview process, combined with several tours of the FPD facility, provided information about current uses, limitations of space, secure storage, parking and it also brought to light future space planning needs yet be addressed.

Important resources used in the development of this Needs Assessment include the Nebraska Department of Labor *2013 Fremont Regional Review*, the *2013 FPD Annual Report* and especially the *2012 "Blueprint for Tomorrow" Fremont Comprehensive Plan.* Additional resources included the International Association of Chiefs of Police (IACP) *Police Facility Planning Guidelines*, a Michigan State University study sponsored by the US Dept. of Justice Community Oriented Policing Services (COPS) titled *A Performance-Based Approach to Police Staffing and Allocation*, and data from the FBI's Uniform Crime Reports for *Full-time Law Enforcement Officers by Region and Geographic Division by Population Group.*

# Goals

The principal purpose of the Needs Assessment portion of this study is to identify and understand current facility needs of the Fremont Police Department, as well as forecast reasonable projections of potential FPD growth. This will, in turn, facilitate the development of

solutions to these needs in the Part 2 Planning phase of this document. To accomplish this overall goal, the following tasks will be undertaken:

- Define present and future population trends of the community to determine the impact on future expansion of the FPD
- Evaluate historical community crime data to project trends that will impact the potential for future expansion of the Department
- Evaluate the existing FPD facility and its building systems as described above
- Evaluate site deficiencies and needs, including public, service vehicle and FPD staff site and facility access and parking requirements
- Develop a program of spaces and relationships for present staffing and operations while also anticipating the potential for growth in staffing
- Determine space and operational deficiencies in divisions and offices that currently affect the ability of the FPD to function efficiently
- Identify program elements that would benefit from improved security, temperature control, and improved privacy

This Needs Assessment of the existing facility, and the Part 2 Preliminary Concept Planning section that follows, provides the basis for an objective comparison of the merits of expanding and renovating the existing facility versus replacement of the facility on a new site elsewhere in Fremont.

# Site Evaluation

## Location


*Source: Google Maps*

The Fremont Police Department is located one block east of Highway 77/North Broad Street, at the northwest corner of the intersection of Military Avenue and North Park Avenue. The FPD campus comprises the eastern half of the block bounded by Military Avenue on the south, North Park Avenue on the east, West 8th Street to the north and private property along the west, which is bordered by North Broad Street.

While the current location was originally central to the city of Fremont, as the community has grown, the site is now somewhat southwest of the geographical center of the city limits. It still remains convenient to two key streets: North Broad Street/Highway 77 and Military Avenue.

The current zoning classification for the FPD property is "DC" Downtown Commercial. The Future Land Use Plan (*2012 Fremont Comprehensive Plan*) will revise the zoning designation to "Downtown (Urban)".

## Site Relationships

The two story 1966 building, which houses the FPD offices, occupies the south half of the FPD property. The public entrance faces North Park Avenue to the east. The north half of the site

contains a fenced staff parking lot. The office building has a rectangular footprint along a north-south axis.

The garage is essentially rectangular as well, abutting the west face of the FPD office building, and faces a recently redeveloped convenience store property to the northwest. One remaining commercial lot directly west of the garage contains a small computer repair shop and a large rear parking lot.

Most of the vicinity development is commercial in nature, except for John C. Fremont City Park to the north, and the historical former Fremont Power building to the northeast, which has been converted to the Power House apartments. The 911/Dispatch tower is inconveniently located on the roof of this apartment building

*Dispatch tower on Power House apartment building*

The Dodge County Courthouse and Jail (currently closed and used as a holding facility) are just three blocks south between 4th and 5th Streets, making the drop-off of FPD arrestees at the holding facility convenient.

**Expansion Potential**

While an urban site such as the current FPD site would appear difficult to expand at first glance compared to a new site, several opportunities for on-site expansion actually do exist. The north staff parking area could be used, but only if staff parking can accommodated elsewhere. It is

interesting to note that the 2012 Fremont Comprehensive Plan suggested a structured parking facility at this very location to anchor the north end of a new North Main Street "Civic Promenade" between John C. Fremont Park and 3rd Street.

While the majority of the property directly west of the FPD was recently redeveloped into a gas station/convenience store, the previously mentioned computer shop property west of the garage should be considered by the City as a passive acquisition if the owner would sell the property.

The garage facility itself has far outlived its useful life and, if demolished, offers an expansion footprint as large as the adjacent FPD office building.


*Three sections of garage facility*

Finally, a review of the original structural blueprints for the 1966 building indicates the building was designed and constructed to allow the addition of a third story, which has been confirmed by on-site inspection. This offers yet another option for expansion of the current facility. This will be discussed further in the Architectural Evaluation section of this assessment which follows.

**Site Drainage**

Overall, the immediate site slopes away from the building on all sides toward street storm drain inlets; which in turn are connected to the municipal storm water sewer system. The grading of the northern parking area sheds water to the north and east.

It was noted during staff interviews that building leaks have occurred in the northeast corner of the 1966 building via cracks in the paving in this area. It was reported that water was also entering building ductwork in this area as a result.

**Site Access**

Public access to the FPD building is via North Park Avenue on the east, which provides access to parallel parking along the street and to a parking lot on the east side of the street. ADA handicap access to the entrance is by a ramp that has been added to the north side of the entrance landing, although there is no curb cut access to the sidewalk from the street.

*Public Entrance of Fremont Police Department*

Staff access to the building is via the gated parking lot on the north and via the north doors into the garage and the link between the garage and main building. The south garage door is used primarily by the SWAT vehicle.

**Parking**

As mentioned previously, there is one concrete-paved surface parking lot on the FPD property at the north end of the site, which is used by staff. The lot is enclosed by a security fence and is gated, but the gate malfunctioned often and now remains open. The garage is used for additional FPD vehicles. Parking is inadequate for staff, and will be further reduced when the electrical transformer is relocated from the vault up to grade level.

Public parking is available via parallel parking along the west curb of North Park Avenue, as well as the previously mentioned surface lot directly across the street to the east. While this lot is not dedicated to the FPD, there are typically parking stalls available during FPD office hours. There are no dedicated ADA compliant parking spaces for the public.

This report acknowledges directives found in the Fremont City master plan suggesting that a combined Dodge County Sheriff's Department (DCSD) and FPD be considered. It was noted during staff interviews that the SWAT vehicle and K-9 unites are shared by the DCSD and FPD though both operate out of separate building locations. Part 2 Planning will need to resolve the already limited parking currently available on-site in order for this merger of the Departments to be feasible on this site.

**Landscaping**

There is minimal opportunity for landscaping along North Park Avenue, other than a narrow green strip between the building and sidewalk on the east and south sides.

**Signage**

Site signage is limited to metal letters attached to the face of the main entrance canopy of the FPD building and a 1970's vintage lighted vertical projecting sign (relocated from the former FPD building) attached to the southeast corner of the building. Identification of the facility as the FPD could be significantly improved.


*Sign mounted to southeast corner of FPD*

Miscellaneous metal informational signs are attached to posts and the fencing that surrounds the staff parking lot on the north.

**Site Lighting**

Outdoor building lighting consists of soffit lights in the roof overhang and entrance canopy. Site security lighting includes city street lights along surrounding streets, plus a building wall-pack type light and miscellaneous pole mounted fixtures at the north parking lot. Site lighting in general is inadequate and energy inefficient by current codes.

# Architectural Evaluation

## Background & Historical Context

The Fremont Police Department is located in a facility originally designed and constructed from 1966 to 1967 as an office building for the Fremont Department of Utilities. This building was built as an addition to an existing Department of Utilities garage structure. The garage is actually a series of three interconnected structures of unknown ages. Years later the Utilities Department relocated, and the Fremont City Offices moved into the building. In 1997, the FPD relocated into the facility where it has resided to this date.

The FPD occupied the former City Office building essentially "as is" and adapted their needs and functions to existing spaces as necessary. Changes since 1997 have been minor, except for an expansion and reconfiguration of Communications/Dispatch to the south end of the First Floor and the replacement of exterior windows, entrance doors and glazing.

## Building Areas

The area of the FPD facilities in gross square feet (GSF) are as follows:

| | |
|---|---|
| • Garage | 8,834 GSF |
| • 1967 Addition - Basement | 2,280 GSF |
| - First Floor | 7,988 GSF |
| - Second Floor | 7,428 GSF |
| TOTAL | 26,530 GSF |
| - Roof (potential Third Floor) | 7,428 GSF |

## Garage Building Architectural Systems

The west Garage structure is made up of three buildings/spaces of various ages that are joined together end to end. The southernmost structure which houses the weight room and SWAT vehicle is steel column and beam construction with exterior brick infill walls. The roof of the southern garage structure has a low-slope, mechanically attached EPDM membrane roof over the west half of the roof; the east half is standing seam metal. Roof water creatively drains west to the bottom of the standing seam to a trough structure; then north and dumps onto the downward west sloping bow truss roof where the water heads west and down to a gutter.

The middle building is possibly the oldest structure of the garage. It appears to be of brick masonry wall construction. There were once windows in the south, west and east walls as is evidenced by concrete block infill panels, with glass blocks installed above at regular intervals. Masonry wall pilasters are topped with wood bow trusses forming the roof understructure. The roof has been altered to have a sloped standing seam metal roof from the west wall of the 1966 building to where the bow truss curve slopes to the west, in an attempt to help direct rainwater to

the west and then down the curve of the bow truss to the west. Roof water is collected on the west edge of the roof and carried by a gutter to a downspout on the south end of the gutter.

The north end of the garage is concrete masonry unit construction. Walls are topped with a mechanically fastened low-slope membrane roof. Overlapping the northeast side of this roof is a standing seam metal roof that covers only the connector hallway below as it extends from below the bow truss space to the south and to the north exit door of the corridor below. Rain water is handled on the north side by gutter and a downspout at the northwest corner of the building. The north end of the building has leaked above the north door.

*Garage roofs looking south – note maze of roof runoff areas*

**1966 Building Architectural Systems**

The structure of the 1966 building consists of reinforced concrete construction. Floor and roof are concrete, bearing on concrete beams and columns which in turn transfer loads to concrete pile cap footings.

Of significance upon review of the original construction documents was the discovery that the original building structure was designed to accommodate the addition of a third floor: The roof deck is reinforced concrete and the concrete column reinforcing is extended through the roof and capped to permit the addition of third floor columns. These column caps are visible on the existing roof. Knock-out roof slab areas are noted on the roof plan for extending vertically the two stair towers and the elevator shaft. While the next phase of Planning may find that a third floor addition does not satisfy FPD functional needs, it is commendable that the City of Fremont had the foresight to invest in the future expansion potential of the building.

*Roof column caps for potential future Third Floor.*

A single story corridor link between the garage and the office tower was constructed as part of the 1966 building construction. In addition, the original 1966 construction included a small drive-up teller kiosk with covered canopy for payment of utility bills, which is no longer in use.

The 1966 building was reroofed in the early 1990s with a ballasted EPDM membrane roof, which, at that age, would be near the end of its useful life. The previously mentioned corridor between the offices and the garage was reroofed with new support structure and a standing seam metal roof over the north third of its length. This complexity of roofs is possibly reflected by reported roof leaks in this area of the building.

*Former teller kiosk/canopy, plus reroofed standing seam roof over corridor link to garage*

A partial basement houses mechanical and electrical equipment. The above grade First and Second Floors house the FPD offices. Floor to floor/roof heights are:

- Basement to First Floor..... 14'-10¼"
- First Floor to Second Floor..... 14'-0"
- Second Floor to Roof Deck (potential Third Floor) ..... 13'-8"

Exterior walls of the 1966 building are composed of 4" face brick with 8" concrete masonry back-up. Walls are insulated with 2" cavity insulation, which is inadequate by current energy codes. Narrow vertical windows border both sides of each exterior concrete column. Windows, as well as exterior entrance doors and glazing, were replaced in 2013 with aluminum frame units having tinted Low E insulated glass. Asbestos was discovered during the window replacement project and was abated.

Interior construction is predominantly metal studs with painted gypsum board finish. Exterior walls have painted gypsum board over metal furring strips attached to the exterior concrete masonry units. While most walls are painted, some are accented with the original stained wood paneling. Restroom walls are finished with ceramic tile.

*Typical interior finishes and signage*

Ceilings are typically suspended acoustic tile, with a few of painted gypsum board. Utilitarian spaces, such as the basement mechanical room have exposed structure.

Floor finishes are predominately carpet or resilient flooring, such as vinyl composition tile. Restroom floors are finished with ceramic mosaic tile. Wall base is typically vinyl. Asbestos floor tile was observed on intermediate stair landings and on the Second Floor in corridors and possibly under re-carpeted offices as well.

Interior doors and frames are typically the original 1966 stained wood doors and trim, except where rated openings are required (storage rooms, stairs) which are of rated hollow metal construction.

Interior signage is minimal, consisting typically of embossed plastic room names. Many are not ADA compliant in size, height above floor, location or are lacking raised letters and Braille characters. Other signage includes miscellaneous posted paper notices. Beginning with the First Floor entrance Vestibule, wayfinding by the public is difficult and confusing.

Any code deficiencies present at this time were likely not requirements under building codes used to design the original facility in 1966. Although codes affecting office occupancies are typically more lenient in comparison to educational and healthcare occupancies, any major renovation of the facility will eliminate any non-Life Safety code "grandfathering" that my apply and will require the renovated facility to be fully code-compliant. Unlike grandfathered items, ADA compliance has been required since 1992, where it is "readily achievable".

# Functional Evaluation

In addition to functional issues observed during on-site tours of the FPD facility, additional information was gathered using *Questionnaires* which were distributed to staff, followed by individual interviews.

The process of moving into any building that formerly housed other tenants or uses without remodeling that space to fit the new tenant's mission, operational and functional requirements typically results in compromises and inefficiencies for the new tenant. As was previously noted, the current FPD facility was designed in 1966 for the Fremont Utilities Department, which was later occupied by the Fremont City Offices. In 1997 the Fremont Police Department relocated to the building.

Most of the original 1966 wall configurations or later City Offices modifications were retained, despite specific operational needs of the FPD. However, the Fremont Police Department has shown flexibility in adapting to the existing layout over the years. While commendable, their adaptation has been at the expense of workflow and efficiency, public and staff privacy, security of both staff and crime-related evidence, staff comfort due to failing HVAC equipment and lack of temperature control, public wayfinding and negative perception due to lack of reception at the entrance, lack of public restrooms and ADA non-compliance, to mention a few key issues.

The Vestibule space acts as a lobby to visitors. Once inside the vestibule, signs direct visitors to a phone for further instructions, since the reception counter is on the Second Floor, further confusing visitors who previously used the former dispatch window. The Vestibule leads to the elevator Lobby; the elevator is the only access for the public to the Second Floor. Because of this, the inner vestibule doors to the Lobby are not locked during business hours, which compromises security because of the lack of a reception/control desk in the Lobby.

*Vestibule/Lobby with reception phone*

There are no Public Restrooms in the Lobby area, or anywhere else in the facility. The public must be escorted through secure areas to a staff restroom or directed to public restrooms in nearby buildings.

Immediately to the right of the elevator Lobby are the Patrol Offices. These are separated from the public only by reflective glass (with visibility into the offices, but not out of them, which compromises the officers' safety). In addition, there is only screen mesh in the transom above the doors, compromising both safety and audio privacy.

*Entrance to Patrol Area with reflective glass (wrong side) and screen mesh above doors*

Within the Patrol Area, issues include two overcrowded Sergeants' Offices, an open Officer Report Area that lacks audio and visual privacy, the Property and Evidence Technician Office, which is remote from the Evidence Storage in the garage, and an undersized Armory located in an electrical closet.

At the south end of the First Floor, the 911/Dispatch area was expanded and remodeled in 2013. This new Dispatch area is poised to become a regional dispatch center adding responsibilities for up to four surrounding counties. The Communications Director's office is nearby but lacks the ability to conveniently interact with Dispatch staff. While not far from the entrance Lobby, public access to the Director's office is difficult. The former Dispatch area is located in the center core of the First Floor, north of the new Dispatch area and now sits empty and underutilized. A vault in the former Dispatch area is inconveniently located.

The expansion of the Dispatch area reduced the size of the adjacent Training Room, which is now undersized for large staff meetings. Public access to this meeting room is no longer practical due to security issues and the lack of public toilets.

A corridor outside the Dispatch area provides access to the Link between the 1966 building and garage. This corridor is connected back to the Patrol Area as well. Various service rooms align the corridor along the west side, including a very small Break Room, a combination Interview/Breathalyzer/Fingerprinting room (which is undersized, inconvenient and not secure). Ideally, two Fingerprinting stations – one for convenient public access, such as job applications, and one for secure access by officers printing detainees – would be provided. The Interview room should be a separate room with acoustical privacy. This corridor also provides access to non-ADA compliant Staff Toilets and another dual-use Electrical Room and Janitor's Closet.

The Link between the garage and FPD office building provides egress from stairs at each end serving the Second Floor. This is also the only "locker" space for officer's personal storage and law enforcement equipment. In addition to the inconvenience of not having an actual Locker Room with showers, the lockers compromise circulation and fire egress through the corridor.

*Corridor Link between FPD offices and garage, with officer lockers*

The Second Floor is accessed by either of the two stairwells previously mentioned or by the Lobby elevator, which is not ADA compliant. The stairs and Link do provide convenient access to the garage and the north staff parking lot.

The remaining FPD offices are located on the Second Floor. They are served by a single off-set north/south Corridor, which provides access to the elevator and the stairwells at the northwest and southwest corners.

This Corridor serves as the Waiting area for anyone requiring assistance from the Office/Records Bureau (records, gun permits, occupancy/bike licenses and criminal background checks), as well as those waiting to see any of the officers located on the Second Floor. This "waiting area" obstructs the elevator door and compromises fire egress through the corridor. Finally, there is no discreet access to investigators in the Detective Bureau or Drug Task Force, unless they are escorted up one of the stairwells.

*Second Floor Corridor public "Waiting Area"*

The Office/Records Bureau area serves the public through one window to the Waiting Area. Privacy is often compromised because of congestion at this window. Ideally, this area would be located on the First Floor with convenient public access, adequate waiting space and accessible public restrooms.

While the open Office work area appears sufficient in size, its arrangement results in inefficiencies and interruptions. In addition to public reception and assistance, the Office staff manage multiple responsibilities for the Department. They are centrally located and convenient to the Chief and Lieutenants' offices. The Lieutenants' Offices are adequate in size, but could be located on the First Floor like the Office area.

The Chief's Office has an adjacent Conference Room that can be separated by a movable partition. While convenient for the Chief, the partition is acoustically substandard and is problematic when others need to use the Conference Room.

The adjacent Case File Storage room uses standard file cabinets. High-density mobile files would provide more efficient use of the space and capacity for growth. An office Supply Room in the northeast corner doubles as a Break Room. These should be separated, with a centrally located Supply Room also housing office copiers. A separate Vault off the open Office area stores uniforms, belts as well as copy paper.

An enclosed Payroll Office adjacent to the Office area provides confidentiality. A nearby Storage Room directly south of the north stairwell is underutilized, possibly due to the fact that access to the Women's Restroom is through this Storeroom.

The south end of the Second Floor is occupied by the Detective Bureau, Drug Task Force, a State Patrol office, two Interview Rooms, a congested File/Copy/Storage Alcove, the Men's Restroom and an unused former Lounge space.

*File/Copy/Storage Alcove adjacent to Interview Room*

The Detective Bureau is an open office area, and while it provides open communication between investigators, it compromises privacy during phone calls. The Interview Rooms across a narrow corridor from the detectives lack good acoustic privacy, and corridor noise is often picked up by

recording equipment. A Holding Room for overflow suspects when Interview Rooms are full would be helpful.

Like the Detective Bureau space, the Drug Task Force has an open office workspace, with similar trade-offs – it facilitates open dialogue at the expense of privacy. Again, the same issues with the Interview Rooms apply. In addition, it is difficult to discreetly bring suspects or informants to the area, except via the stairwell in the southwest corner.

*Typical Interview Room*

As was previously noted, the FPD relocated to the building with very little modification and adapted to existing rooms and spaces as needed. As a result, some spaces remain unused or underused, because of size or location (former Lounge, Storage Room outside Women's Restroom, Vault).

A partial basement at the north end of the 1966 building houses primarily mechanical and electrical equipment, although it has begun to accumulate overflow storage. Storage is prohibited in mechanical spaces by fire codes. Elevator equipment in the mechanical room must be in a separate room if it remains at its present location. Another complication occurred when the areaway at the northeast corner was sealed due to rain infiltration. As a result, replacement of the existing equipment in this basement space will be essentially impossible, and an alternative location for equipment will need to be found if a viable renovation option for this building can be developed. More information can be found in the Mechanical and Electrical System Evaluations which follow.

The garage building primarily stores FPD vehicles, and also houses the staff Exercise Room and Property and Evidence Storage, including storage of evidence-related vehicles. There is an access stair to a small basement room in the northeast corner of the north garage section which is presently used for parking meter storage. A diesel fired electrical backup generator is located near this basement stair.

The Fitness Room, while spacious enough, retains its "garage-like" atmosphere and lacks the finishes and professional environment expected in a law enforcement facility to encourage fitness activities.

*Fitness Room located in garage*

A mezzanine level in the north garage section is constructed of wood floor joists supported by steel beams and columns and is used for Evidence Storage. The Property & Evidence Technician's office is remotely and inconveniently located in the northeast corner of the Patrol Area on the First Floor. This office location is also adjacent to a very noisy outdoor condensing unit, which makes working in the office difficult during months using air conditioning. Since the Evidence Storage area in the garage is not temperature controlled, evidence needed for trial can be affected by hot and cold temperature extremes, putting it at-risk of being compromised through degradation. The mezzanine is shielded from the garage environment by only a polyethylene sheet barrier; the level of dust and contaminant control necessary for quality storage of crime related evidence becomes nearly impossible to achieve. Finally, the technician working on the Storage mezzanine in the summertime endures not only the dust and potential contaminants, but near unbearable heat.

*Evidence Storage mezzanine in garage*

FPD trash receptacles and dumpsters are located outside the north wall of the garage and are not in an enclosure. It was noted that a dumpster became mobile on an extremely windy day, causing damage to some employee vehicles. It was also reported that mice and insects enter the building through the garage area.

*Unenclosed dumpster and trash receptacles behind garage*

# Plumbing Systems Evaluation

## General Overview

In addition to site utilities, plumbing systems include plumbing fixtures, sanitary sewer and vent piping, domestic water supply piping, fuel oil piping, water heaters, and water conditioning equipment. Fremont Department of Utilities is the local authority for the water, sanitary sewer and storm sewer systems.

The office portion of the building was designed in 1966 to serve administration and support staff working for the Fremont Department of Utilities. The two-story addition was constructed in relative close proximity to three older buildings that constitute the garage portion of the facility.

When the office addition was built, the Fremont Department of Utilities did not supply natural gas to their service area. As such, the office addition was "all electric" and no provisions were made to bring natural gas service to the site.

The Fremont Department of Utilities began providing natural gas to their service territory in 1985. Since the Utility's electric rate tariff no longer provides price breaks for "all electric" buildings, it might be prudent to set a natural gas meter to serve any major remodeling effort or expansion project.

## Sanitary Sewer System

The office portion of the facility is served by a 5" building drain that exits approximately 5'-6" below the finished floor elevation to the south. The drain line is constructed of cast iron soil pipe and transitions to 6" vitrified clay pipe approximately 5'-0" away from the building edge.

The building drain interconnects with the City's sanitary sewer main buried along West Military Avenue. The invert elevation of the City's 10" sewer line is approximately 10'-0" below the finished floor elevation.

Plumbing fixtures and specialties drain to waste stacks constructed of heavy weight cast iron soil piping with bell-and-spigot type joints sealed with lead and oakum. Vent piping is primarily constructed of standard weight galvanized steel piping with threaded cast iron fittings. Except for minor repair and replacement measures undertaken over the years, sanitary sewer and vent piping is original.

Though vent terminals where passing through the roof are adequately sized to prevent frost closure, some plumbing vents extend only a few inches above the roof. Current code requires that all plumbing vents be extended at least 10" above the roof.

A duplex sewage ejector is available in the basement mechanical room to receive waste from floor drains, a service sink and an area drain. Effluent is lifted through a 2" forced main and interconnects with a 3" gravity drain that is then tied into the above described building drain.

No building plans are available for the older garage section. From on-site field observations, it appears a separate building drain serves a small number of floor drains and exits the building on the south in order to interconnect with the City's 10" sewer line along West Military Avenue.

Building drain and plumbing vent systems are also designed to be very long lasting and generally will not need repairs, except under extreme circumstances. However, as the garage portion of the facility is nearly a hundred years old, the building drain is likely subject to corrosion and leaks and in need of replacing

**Storm Sewer System**

In the office portion of the facility, storm water is collected through three 3" primary roof drains. No clear means for meeting the code requirement for secondary roof drainage systems was found. Piping serving primary roof drains interconnects with a vertical 6" storm pipe riser. The riser is sized and constructed to allow for future extension to a third floor, if needed. Storm drain piping is constructed of cast iron soil piping with bell-and-spigot type joints sealed with lead and oakum.

The above described riser is routed under floor to an 8" storm sewer drain line that leaves the building approximately 3'6" below the finished floor on the south. The storm sewer line interconnects with a 12" City storm sewer line along West Military Avenue. The City's storm sewer line has an invert elevation of approximately 4'-9" below the building's finished floor.

A smaller roof section over the southern end of the garage simply drains onto the center roof section that slopes to a drain gutter on the west. Storm water discharges through a 6" downspout leader into a concrete drainage trough that directs storm water runoff to the south. The garage's northern roof section is sloped to the north toward a drain gutter that ties into a 6" downspout leader that discharges to daylight at the northwest corner of the facility.

It was noted that the newer standing seam metal roof over the garage portion was extended over a connecting corridor between the two building sections. Once completed, the three primary roof drains serving the connecting link were no longer needed and abandoned in place.

The drive-thru canopy on the north is served by a 2" primary roof drain. No clear means for meeting the code requirement for secondary roof drainage systems are present. Primary storm drain piping is routed to a 2" downspout nozzle that discharges to grade in the southeast corner of the original Utility Teller building.

Prior to a chiller replacement project, city water supply was used as condenser water for a water-cooled chiller. When the original chiller was in operation, condenser return water was simply

drained into the storm drainage system. This drainage piping was abandoned in place when the now existing air-cooled chiller was installed more than a decade ago.

**Water Service and Distribution**

Water pressure in the City mains is approximately 70 psig. Pressure reducing valves are required to lower water pressure at the buildings (typically 55 psig). A water meter in the basement mechanical room serves the office section of the Fremont Police Department.

The water meter is fed by a 3-inch main that originates from an 8" City water main that runs along the west side of West Park Avenue on the east. Note that the City of Fremont has scheduled the replacement of the existing 8"water main with a new 8" line that will be located across the street, under the east sidewalk of West Park Avenue.

In addition to domestic water supply, the existing 3" water service serves a lawn irrigation system. The lawn irrigation system is properly equipped with a reduced pressure principal type backflow preventer to protect the City's and the building's potable water supply.

Water distribution piping in the mechanical room is bare as a result of a previous asbestos abatement effort. This leads to warmer water temperatures for the domestic cold water supply, making it less desirable to drink. Lack of pipe insulation also exacerbates the propensity for the cold water lines to sweat, increasing corrosion. Finally, energy losses associated with bare domestic hot water pipe are more than three times that of properly insulated pipe for smaller pipe sizes, and higher for larger pipe sizes.

Though water lines outside the mechanical room are insulated, the pipe insulation still contains asbestos. Whether reused, or demolished, asbestos-containing insulation serving affected water lines would need to be abated and replaced during any major remodeling project.

Another water meter is located in the Exercise Room of the garage section. The water meter was originally used by the City of Fremont Water Department to fill tanks. Though no floor plan information exists, it is understood that the 1-1/2" water service originates from a 6" water main that runs along West Military Avenue. No backflow prevention equipment exists for this service.

It is suspected that actual water usage from this garage service line is limited. As such, the likelihood that water can stand in this piping for extended periods of time poses some contamination concerns. The water line is extended from the water meter to three hose bibs and a quick fill line. Beyond being poorly supported in some areas, piping and appurtenances constituting this system are dated.

Though major inroads have been made on a legislative level to reduce lead content in plumbing piping and appurtenances, little can be done to mitigate the issue in older plumbing systems. Simply, older plumbing fixtures, brass fittings, and other plumbing components can leach lead into the potable water supply.

The galvanized steel piping used for water distribution in the office section, and even older piping serving the garage section, are additional arenas for concern. Specifically, elements such as cadmium may be present as impurities in the zinc used in the galvanizing process. Galvanized pipes can also accumulate lead from lead service lines (if ever used) which can be periodically released during pipe corrosion or disturbances such as water hammer.

To address concerns, it is recommended that a water sample be collected in both building sections for laboratory analyses. In the interim, drink and cook with cold water as hot water is more likely to cause leaching. Long term, begin to budget for replacement of water piping and other suspected components with modern day components that are subject to compliance with current legislative requirements. If the next phase of Preliminary Planning recommends renovation of the facility for FPD use, plumbing piping replacement should be included in the overall Project Budget.

If the garage is retained as part of a renovation project, consider tying any new plumbing fixtures and specialties in the garage into the larger water service to allow the existing smaller service to be removed. In addition to eliminating contamination and lead content issues, this measure will reduce meter related charges.

**Domestic Hot Water Systems**

Domestic hot water for the office portion is supplied by a 250-gallon storage tank manufactured by Richmond Engineering Company with an electric resistance type immersion heater manufactured by Chromalox. The water heater is original and a good candidate for replacement.

A 30-kW immersion heater serves the water heater and provides a 129 gallon/hour recovery at 100°F temperature rise. A fractional horsepower pump is used to recirculate hot water in the domestic hot water piping loop. The recirculating pump is manually controlled.

Beyond its age, the insulation jacket for the tank was removed during the asbestos abatement project. The bare tank is subject to considerable energy losses, likely necessitating that the system be maintained at a higher operating temperature (i.e., 135°F).

Good design would have the water heater(s) maintained at 140°F, then routed through thermostatic mixing valves that reduce the domestic supply to 110°F degrees for use at plumbing fixtures. This practice works to increase available hot water and precludes the growth of organisms in the storage tank that can lead to Legionnaire's Disease. A new thermostatic mixing valve would be required to accomplish this at the Fremont Police Department.

**Plumbing Fixtures**

The majority of plumbing fixtures in the building are the original. Though the fixtures themselves have performed admirably well, fixture fittings (faucets, flush mechanisms, etc.) have required some replacement over the years. Due to the infrequency of these replacements and the tenure in which they have occurred, a myriad of different vendor products are now in

place. Unfortunately, this compromises aesthetics and, more importantly, maintenance parts inventories and service routines.

The sinks in the kitchenettes on First and Second floors are part of a unique combination that includes a stove top and undercounter refrigerator. However, the porcelain sinks are small and dated in appearance. Lack of proper exhaust above the stove tops are amongst other concerns.

Though some progress has been made to change urinals and lavatory faucets to handicap accessible type, a number of issues still exist related to ADA requirements. New plumbing fixtures should be provided in renovated spaces that meet current guidelines.

Beyond accessibility issues, the original water closets in the facility require higher water consumption. It is estimated that the volume of water required to flush the dated fixtures ranges from 3.8 to 4.7 gallons per flush, including excess trail flow. For simplicity sake, this is two to three times the water required for their modern day standard equivalents. Codes would typically preclude reusing these fixtures in any major remodel.

The existing kitchenette sinks, wall mounted lavatories and water closets, faucets (where original), etc., contribute to a dated and overall institutional looking work environment. Though the sink in the Second floor break room, along with some urinals and service sinks could be reused; the remaining existing plumbing fixtures are good candidates for replacement.

Fittings serving any new fixtures should be standardized so that replacement parts can be properly stocked. Battery operated or hard wired sensor operated flushometers and faucets should also be considered to help control the spread of infectious diseases (i.e, since the users make no physical content with the flushometer or electronic faucet). Note that automatic mixing valves that mitigate the risk of scalding are now required by code in public restrooms.

The floor drains in the garage portion are nearly a hundred years old and in poor physical condition. Due to their age, floor drains in the garage and exercise room would not be equipped with trap seal primers. This can allow foul-smelling sewer gases to enter occupied areas whenever extended periods of nonuse occur.

Floor drains in the garage are also not properly tied into a mud & sand interceptor to protect the City's sanitary sewer system. New trench drains would also be more suitable for the current operation. The wall mounted vat in the garage discharges indirectly to an area floor drain which is no longer allowed by codes. Water piping near the vat is loose and easily swayed.

**Water Softening Equipment**

A small water softening system is available to condition the water supply to an electric boiler that produces steam for humidification at the main air handling unit. The system was manufactured by Clean Pluz which is no longer in business, increasing the difficulty of getting replacement parts.

Though the system is normally off during the cooling season, it appears to be operational. A separate water meter is used to track the amount of softened water being used by the humidification system. The steam line serving the humidifier is uninsulated, as well as the cold water inlet and soft cold water lines.

**Fuel Oil Supply System**

In the garage section, fuel oil is used to fire an existing 60-kW Kohler generator-set used for emergency power at the facility. The fuel oil storage system has a concrete bunker for secondary containment that appears to be in good repair.

**Potential for Expansion of the Fire Protection System**

There is not a wet pipe sprinkler system to provide fire protection services within the facility. Instead, fire extinguisher cabinets with fire extinguishers are strategically placed throughout the facility. A new fire protection system likely would be needed if a major remodel or expansion was to occur.

In general, the new fire protection system would consist of sprinkler heads installed in each room, corridor and stairwell, resulting in 100% sprinkler coverage of the facility. The new wet pipe sprinkler system would need to be monitored by a new fire alarm panel.

If a new sprinkler system is required, it would necessitate that a new 6" fire line be brought into the building. Though no issues were identified that would preclude this from occurring, the requirement for wet pipe sprinkler coverage should be properly budgeted for in the next phase of Planning.

In high value areas, such as Dispatch, server rooms, etc., sprinkler head activation could cause more damage than a fire itself. In these areas, consider installing a dry type fire suppression system as the first line of defense against fires.

**Potential for New Natural Gas Service**

As previously noted, the natural gas distribution system serving the City of Fremont Natural gas service is supported by the Fremont Department of Utilities. A 2" natural gas line was recently buried by the Utility along West 8th Street to serve the adjacent convenience store. As the service is maintained at 16 psig, some spare capacity exists.

Though some limitations are present, a new natural gas meter could be set on the north side of the facility to serve a new water heater, boilers and other gas-fired appliances. It is estimated that switching fuels from electricity to natural gas has the potential to reduce utility billings for heating energy by 35%, or more. A 2 psig design would allow natural gas distribution system piping within the building to be smaller, reducing overall costs.

**Summation**

Since the building has been generally well maintained, it is easy to forget that the building has been in operation for nearly fifty years. As such, much of the major plumbing equipment is well past the end of its expected period of useful life, with the remaining materials and equipment approaching that end. Little, if anything, should be salvaged during a renovation effort. Simply, beyond sizing and some safety implications, the probability of future failures in the existing plumbing system is too high to risk having to tear up renovated areas to make inevitable emergency plumbing system repairs.

# Mechanical (HVAC) Systems Evaluation

## 1966 Office Building HVAC Systems

The FPD office building HVAC system is only slightly changed from the original HVAC system installed in 1966. A chiller with approximately 50 tons of capacity generates 45 degree chilled water. This chilled water provides cooling for the office building through its circulation through a cooling coil in the basement air handler. This chiller is the only major HVAC component to be modified from what was originally installed. It appears that the original chiller was replaced around 1993. Both the original chiller and the 1993 chiller rejected their heat by running 50 gallons per minute (gpm) of domestic water through their condensing unit, then dumping the water to the sanitary sewer. This type of system wastes an enormous amount of domestic water and its use in new systems has been prohibited per code for quite some time. Around 2009 the chiller was modified with new compressors, and the "water dump" condenser was replaced with an air-cooled condensing unit which sits outside the northeast corner of the building.

*Existing chiller located in basement*

*Existing air-cooled condensing unit located outside the northeast corner of the building.*

The remaining components of the HVAC system are essentially original from the 1966 construction. A 12,000 cubic feet per minute (cfm) air handler provides conditioned air to the building. The air system is a "constant volume, dual duct" type, in which the air handler's return and supply fans run at a constant speed, regardless of the changing heating and cooling loads of the building. The supply fan feeds 2 different ducts; a "hot" duct and a 'cold" duct. The cold duct distributes air from the unit's cooling coil throughout the building, while the hot duct distributes air from the unit's heating coil. Heat is provided by a 150 kW multi-stage electric resistance coil. (The building is all electric with no natural gas.) Building spaces are served by a thermostat and a "mixing box." The mixing box has both a hot and cold duct connection. The temperature in the space is then maintained by mixing the appropriate amount of "cold" and 'hot" air. In the summer, the space may see 100% cold air, while in winter it may be mostly hot air. In intermediate conditions, the space would see a mix of hot and cold air.

Ventilation for the building is brought in via a roof intake. This intake is capable of providing 100% outside air to the air handler to allow it to operate in "economizer" mode to utilize fresh air for cooling on cool days. Excess air is relieved via the area way located at the northeast corner of the building.

*Original "dual-duct" air handler located in the basement.*

*Replacement 150 kW electric heating coil, still in crate.*

*A 48kW electric resistance boiler served by a water softener provides steam to the air handler for building humidification in winter.*

*Example of a "dual-duct" mixing box with both hot and cold duct connections. White streaking on box is from outside water leaking into the building, entering the ductwork, then the basement.*

*Roof mounted outside air intake for the air handler.*

*Area way for relieving air from the basement air handler. (This previously provided equipment access to the basement, but is now no longer usable for basement access.)*

*In spaces with heavy electronic equipment, such as Dispatch, separate ductless split system air conditioners have been added to provide additional cooling capacity.*

The temperature control system has been updated to a computerized "direct digital control" (DDC) system. The original system utilized pneumatic components. While the motorized actuators for the air handler's control dampers are still pneumatically driven, control logic is now processed electronically.

**Garage HVAC Systems**

Little in terms of HVAC equipment is present in the garage portion of the facility.

*A self contained package unit, manufactured by Rheem, provides 1,200 cfm of heating and cooling air to the exercise room.*

The Exercise Room system has approximately 3 tons of cooling capacity. Originally, the unit was equipped with 20-kW of electric resistance heating. However, it appears that the cooling coil was replaced and the unit was converted to a heat pump. The condensing unit serving the system is set in the garage, which contributes to overheating during the summer.

*An electric hanging unit heater provides minimal heating to the space over the winter.*

**Summation**

The office building's current HVAC system is a relic of the early 1960's era in which it was designed. In addition, it was designed for Fremont's local electrical utility. Electricity was cheap and plentiful. The all-electric features of the building extended to electrically heated sidewalks for melting winter-time ice and snow. However, if one set out today to design a new building that *maximizes* both energy consumption and associated cost, it would look very much like the existing HVAC system for the FPD building. Electric resistance is the most expensive way to furnish heat. For the last 25 years plus, larger commercial HVAC systems have been designed as variable-air-volume (VAV) systems, where airflow to spaces is reduced as the cooling loads in the space reduce. This allows the fans in the air handlers to slow down and thus greatly reduce their energy consumption. This same approach applies to heating and cooling water (hydronic) systems. As the heating or cooling load drops at a coil, the heating or cooling water flows to the coils are reduced, which in turn allows the pumps to slow down, again reducing energy consumption.

The existing HVAC system for this building has NONE of these features. From the air handler's two fans (supply and return) to the chilled water circulating pump, everything runs at a constant speed. And the all-electric resistance heat maximizes energy costs per unit of heat. Natural gas is a much less expensive means of heating air, steam or water. Without even considering the age and obsolescence of the existing equipment, complete replacement of the system would likely be cost justified simply from the energy savings achieved in the new HVAC system's operation.

But obsolescence is very much an issue. Except for the chiller/condensing unit, the HVAC equipment is original to the building. This equipment has reached the end of its useful life, with an increasing percentage of aged components working poorly, or not at all, with no replacement components available. In addition, the sealed area way prevents equipment access to the basement. With the failure of any one of the larger components of the HVAC system (i.e. the cooling coil, chiller evaporator bundle, etc.), it may be literally impossible to fix because of the inability to access the basement.

For multiple reasons (age, complexity, energy consumption), it is recommended that the building's HVAC system be completely replaced with an entirely new system. One replacement option would utilize a rooftop VAV air-conditioning unit serving a new duct system. The duct would feed variable-air-volume boxes, which would modulate the volume of air into spaces based on the required cooling loads. A gas-fired boiler with pumps would provide heating hot water to coils within these VAV boxes. The hot water flow to the VAV boxes would vary based on the required heating loads. A direct digital control (DDC) system would provide accurate and efficient control of all these components.

# Electrical Evaluation

## Normal Power System

The existing electrical system is served by open transformers in a vault below the parking lot, with the garage served by pole mounted transformers. These vault-type systems are no longer typically installed; safer enclosed systems are now predominant. The utility company has already planned to upgrade the open transformers and it would be ideal to do these upgrades when and if the FPD facility is renovated.

*Existing transformer vaults*

There are 2 services being fed from the transformer vault: a 240V, 3 phase service and a 240/120V, single phase service, which is atypical for current commercial facilities such as the FPD facility. A modern electrical service would typically be 208/120V, 3 phase. Two services were required in 1966 because a 240V, 3 phase service does not have 120V necessary to serve appliance panels.

These services terminate at main fused disconnects located in the main switchboard in the basement. The switchboard has 240V, 3 phase distribution sections on the right side that feed only 3 phase loads such as mechanical equipment and electric in floor heating. The left side of the switchboard has distribution for the 240/120V appliance panels which serve lighting, receptacles, etc. The switchboard is obsolete and new replacement parts are not available.

*Main switchgear in basement*

The garage has two 208/120V appliance panels fed from a single pullbox/CT cabinet. While these aging panels could still be used, the building will need to be combined into a single 208/120V service to meet current codes.

Appliance and lighting panels throughout the facility are mostly original although some newer satellite panels have been installed. The older panels should be replaced due to the age of the breakers. In order to maintain the existing functions, new panels must to be installed before the old panels can be removed.

**Emergency Power System**

Emergency power is provided by a 1990's era 60KW diesel generator. The generator has logged less than 1000 hours of service; a well maintained diesel generator should last at least 10,000 hours. Unfortunately, the engine is no longer manufactured and replacement parts may be difficult to obtain.

*Emergency generator located in garage*

The generator nameplate indicates 208/120V 3 phase power, but the transfer switch and panels are all single phase, therefore it was most likely converted to a single phase generator. While a typical 60KW generator should be able to provide 300A (amps), the FPD generator has only a 150A circuit breaker.

There are unusual circumstances surrounding the generator that make it difficult to assess options without a thorough investigation by an electrician. Because the generator us undersized at only 150A, it can provide only the very minimum required emergency back up. Due to the critical importance of a law enforcement and emergency/disaster response facility, a planned emergency system upgrade is recommended.

**Lighting**

Interior lighting has mostly been upgraded to more efficient T8 fluorescent lamps, but fixture lenses are quite discolored, reducing efficiency and color rendition. The 2x4 light fixtures are also being used for air distribution, which is not a modern design strategy. Separating the air distribution from the light fixtures provides for much easier replacement of light fixtures if necessary. Incandescent lamps have generally been replaced with self-ballasted compact fluorescent lamps.

Outdoor lighting does not properly light the entrances, does not have emergency backup as required by present codes, and is very difficult to maintain or repair.

*Typical original interior fluorescent light fixtures with discolored lenses*

*Original light fixtures in Vestibule – note only two are lit (exterior canopy similar)*

The main entrance canopy lighting is identical to the Vestibule lighting. Many of these lamps are no longer lit. In addition, heat lamps have been installed in the exterior canopy to reduce the slip hazard from icy steps and entrance tiles.

**Low Voltage Systems**

The Fire Alarm system is a very basic zone system and is missing modern features that reduce maintenance issues. The system does not have current code-required notification devices. The main panel is a combination burglar alarm and fire alarm panel. For facilities of this size a dedicated fire alarm system would typically be specified. There are no burglar alarm devices installed. The existing alarm system would not be able to monitor a fire sprinkler system, which will most likely be required by a major renovation

The video surveillance system is comprised of an older analog system, with a few newer digital cameras. The system should be combined into one digital system. A new one megapixel high definition digital camera system should be installed. The resolution on analog cameras is poor which makes it difficult to indentify assailants or weapons. New cameras would have the ability to zoom in on areas of particular interest.

The door access control system is a proximity card system and is limited to only the most critical doors. It should be increased to cover all desired doors. The current system is not centralized and information must be extracted at each card reader with a device such as a PDA. The stand alone system can be easily expanded. Consideration should be given to a centralized system that would allow information to be accessed from any authorized computer on the network.

The Dispatch equipment is fairly new and up to date, although it may need to be upgraded if the current FPD Dispatch center becomes a regional dispatch center.

**Phone & Data Systems**

Phone and Data systems are adequate, although a major renovation would require replacement of all cabling and outlets from the main equipment to the stations (excluding Dispatch).

**Elevator Equipment**

Elevator equipment is not in separate room, which is required by code.

**Summation**

In conclusion, except for Dispatch (which may require expansion), most electrical systems will require replacement if renovation of the FPD facility proves to be a feasible option.

# Utility Consumption History

The following table identifies the utility usage of the Fremont Police Department facility for one year, ending in August 2014, the most recent month available at the time of this study.

| Month | Outside Lights | | Electricity | | Demand | | Water/Sewer | |
|---|---|---|---|---|---|---|---|---|
| | kWh | Cost | kWh | Cost | kW | Cost | Gal. | Cost |
| September 2013 | 415 | $81.25 | 29,200 | $1,152.60 | 79.2 | $673.99 | 44,132 | $160.03 |
| October | 415 | $81.25 | 20,800 | $878.01 | 71.2 | $647.20 | 9,724 | $68.92 |
| November | 415 | $81.25 | 15,280 | $657.20 | 60.8 | $552.67 | 7,480 | $62.17 |
| December | 415 | $81.25 | 25,280 | $1,057.20 | 89.6 | $814.46 | 31,416 | $134.17 |
| January 2014 | 415 | $81.25 | 28,800 | $1,198.00 | 100.8 | $916.27 | 8,228 | $64.42 |
| February | 415 | $81.25 | 28,880 | $1,201.21 | 99.2 | $901.72 | 15,708 | $86.92 |
| March | 415 | $81.25 | 22,720 | $954.81 | 95.2 | $865.36 | 18,700 | $95.92 |
| April | 415 | $81.25 | 21,920 | $922.81 | 70.4 | $639.93 | 12,716 | $77.92 |
| May | 415 | $81.25 | 21,680 | 1,079.69 | 71.2 | $899.96 | 12,716 | $77.92 |
| June | 415 | $81.25 | 26,320 | $1,310.74 | 72.0 | $910.08 | 15,708 | $86.92 |
| July | 415 | $81.25 | 26,000 | $1,340.80 | 72.0 | $910.08 | 22,440 | $107.17 |
| August | 415 | $81.25 | 28,240 | $1,452.36 | 73.6 | $930.30 | 26,928 | $120.67 |
| **Year Total Sum** | **4,980** | **$975.00** | **295,120** | **$13,205.43** | **Avg./Mo .79.6** | **$9,662.02** | **225,896** | **$1,143.15** |

## Average Utility Costs

| Outside Lights: | Electricity: | Demand Charges: | Water/Sewer: |
|---|---|---|---|
| $0.196/kWh | $0.045/kWh | $10.12/kW | $0.005/Gal. |

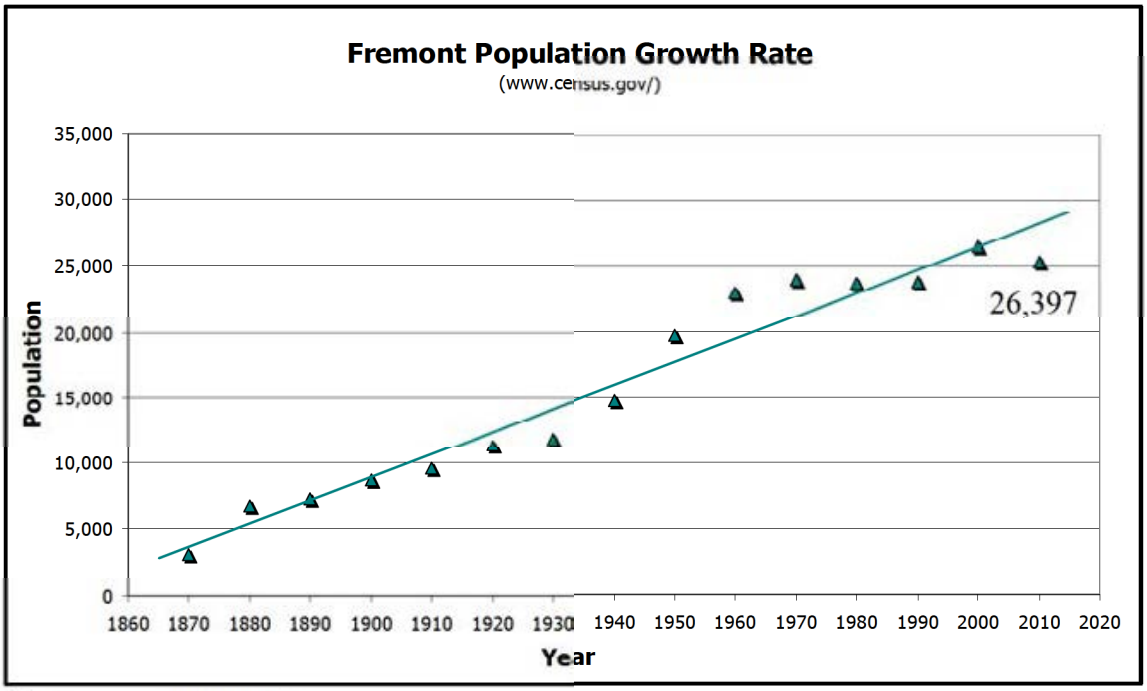
Analysts calculate the Energy Usage Index* for the facility to be 193,455 Btuh/$Ft^2$ which indicates opportunities exist to improve energy efficiency. On the other hand, electric utility rates are low and some mechanical systems are not capable of operating when they should be. Both of these factors contribute to surprisingly low annual utility costs. Though the Municipal Utility will continue to work hard to maintain competitive rates; a marked increase in energy costs would occur if mechanical systems were working properly to meet intended loads. New mechanical systems are needed to meet modern indoor air quality and other code requirements. Installing new energy efficient systems will provide a financial return on the investment, and allow building occupants to immediately enjoy the benefits of the new systems in place of the existing antiquated and maintenance prone equipment.

**The Energy Usage Index accounts for the total energy needed to produce electricity, not just site energy use. This is commonly done to provide fair comparisons to other buildings using natural gas, or if fuel switching to natural gas for heating is pursued.*

# City of Fremont Profile & Population Characteristics

As of the 2010 U.S. Census, the City of Fremont population was 26,397 inhabitants. Like other Nebraska communities near metropolitan centers like Omaha, Fremont has been shielded from the population declines experienced by most rural communities in the state.

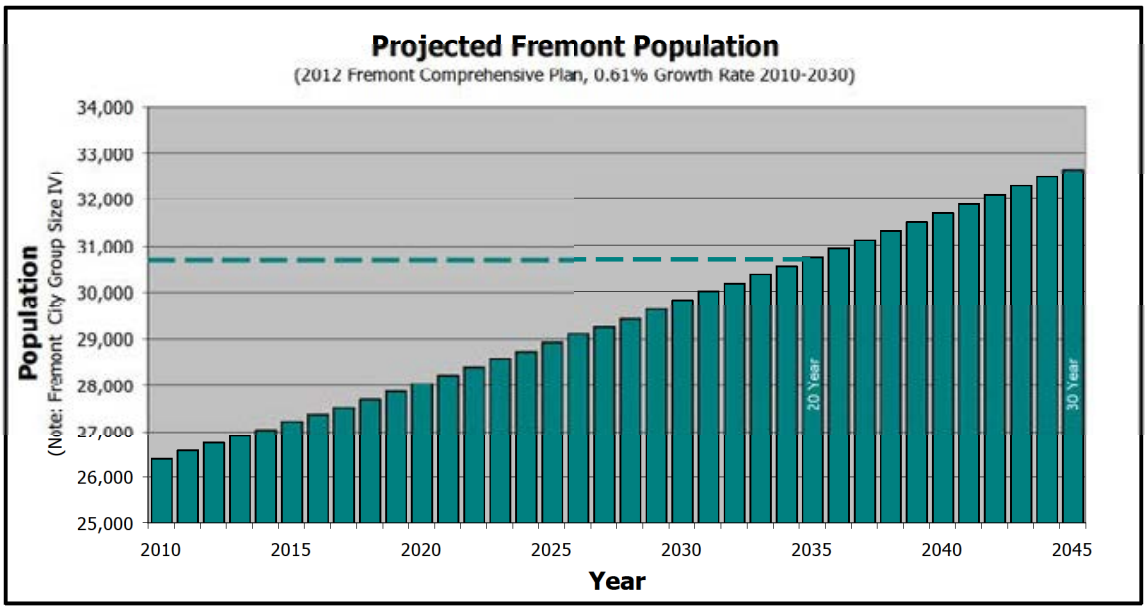
Since 1870, the overall growth trend for Fremont has been at a rate of 3.04% per year. Following the "baby boom" years in the 1950's and 1960's, the population declined slightly from 1970 through 1990, and has since fluctuated. The overall trend since the 1960's, though, has been positive. Since 2000, Fremont's population has increased by 1,223 residents.




*Source: www.census.gov/*

The 2012 *Fremont Comprehensive Plan* documented population statistics and projections for Fremont as well as Dodge County in great detail. Projections were based on four different methodologies to arrive at a midpoint e

According to the *Fremont Comprehensive Plan*, the City is projected to grow at a 0.61% compound annual growth rate between 2010 and 2030. By 2035, Fremont is projected to grow to 30,731 inhabitants. The following tables illustrate these population projections for the City of Fremont.




*Source: www.census.gov/ & 212 Fremont Comprehensive Plan*

| Year | Fremont Population |
|---|---|
| 2000 | 25,174 |
| 2005 | 25,786 |
| 2010 | 26,397 |
| 2015 | 27,212 |
| 2020 | 28,052 |
| 2025 | 28,918 |
| 2030 | 29,811 |
| **2035** | **30,731** |
| 2040 | 31,680 |
| 2045 | 32,658 |

The year 2035 is emphasized because it is twenty years out from 2015. Twenty years is often used as a target date because it is typically the debt service period for construction bonds. Part 2 Preliminary Concept Planning will include project budgets for feasible options and the associated bond rates and tax levies for these budgets over twenty years became very relevant to project financing and feasibility.

Along with other data, these population projections are subsequently used in the Staffing Projections section which follows later in this study.

# City of Fremont Crime Statistics

The following table illustrates crime statistics for the City of Fremont for the years 2000 to 2012, as compiled by USA.com from publicly available data.

| Crime | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Murders** | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Rapes** | 2 | 1 | 5 | 3 | 8 | 12 | 14 | 14 | 20 | 11 | 13 | 13 | 10 |
| **Robberies** | 3 | 2 | 9 | 7 | 8 | 2 | 1 | 2 | 5 | 4 | 5 | 4 | 1 |
| **Assaults** | 17 | 9 | 8 | 22 | 26 | 20 | 20 | 22 | 28 | 18 | 31 | 26 | 18 |
| **Burglaries** | 75 | 79 | 170 | 136 | 151 | 122 | 91 | 94 | 228 | 117 | 113 | 138 | 104 |
| **Thefts** | 752 | 739 | 859 | 782 | 704 | 676 | 592 | 619 | 717 | 685 | 662 | 560 | 555 |
| **Auto thefts** | 36 | 39 | 32 | 50 | 44 | 34 | 31 | 35 | 35 | 31 | 26 | 23 | 34 |
| **Arson** | 3 | 1 | 5 | 3 | 4 | 9 | 3 | 5 | 3 | 0 | 6 | 5 | 6 |
| **TOTALS** | **888** | **870** | **1088** | **1003** | **945** | **875** | **754** | **791** | **1036** | **866** | **856** | **769** | **728** |

*Source: www.usa.com/fremont-ne-crime-and-crime-rate.htm*

This crime data is used by USA.com to calculate a *"Crime Index Value"* for comparison of cities to national and state crime rates. A higher *Crime Index Value* indicates a higher rate of crimes. Using the most recent data available (2012), relevant average *Crime Index Values* are as follows:

- National Average Crime Rate 1,723.80
- Nebraska Average Crime Rate 1,418.48
- Fremont Average Crime Rate 1,307.13

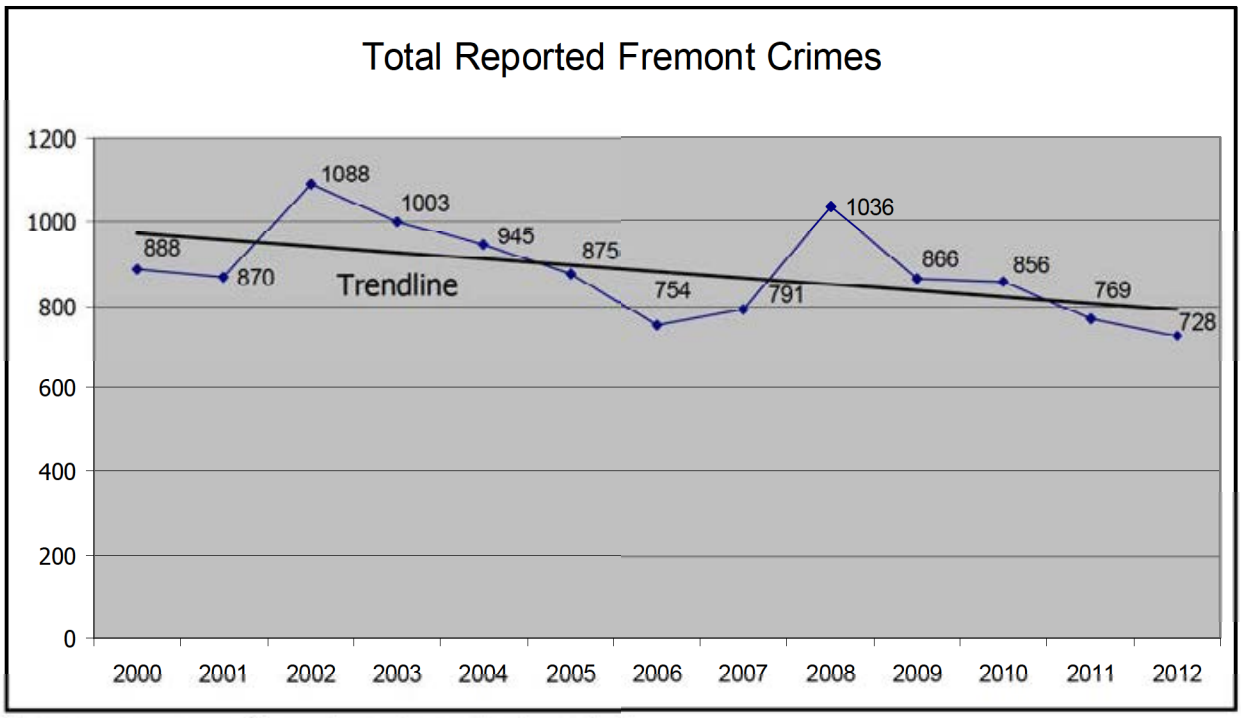
Fremont's 2012 Average Crime Rate is 24.2% lower than the National Average Crime Rate and 7.8% lower than the Nebraska Average Crime Rate. Out of 68 Nebraska cities with available Crime Index data, Fremont ranked #57 in 2012, or in the bottom 20%. As noted earlier, while its closer proximity to Omaha has shielded Fremont from the population declines faced by most rural Nebraska communities, the downside is that this same proximity likely has resulted in a higher crime rate.

**Crime Table Observations**

- Murder appears to be a rare occurrence in Fremont with only two (in 2006) being reported in the twelve year period.
- Rape occurrences, lower from 2000 through 2003, jumped to 8 in 2004, 12 in 2005 and continued in double digits to 2012, with a peak of 20 reported in 2008.
- Arson and robberies averaged 3.6 to 4 per year respectively over the 13 year table timeframe.
- Assaults were consistently in double digits in 11 of the 13 years reported, averaging 22.5 assaults per year over 11 years, with the other two years of 2001 and 2002 at uncharacteristic counts of 9 and 8.

- Burglaries rank second in frequency for Fremont, ranging from a low 0f 75 in 2000 to a peak of 228 in 2008. Average for the 13 reported years is 124.5 burglaries per year.
- Thefts, by far the number one crime committed in Fremont, were at triple digits in all 13 years, ranging from a high of 859 in 2002 to a low of 555 in the most recent reported year of 2012. Thefts averaged 707.9 per year between 2000 and 2009 before dropping to an average of 557.5 for 2011 and 2012, a reduction of over 20%.
- Aside from a spike of 50 thefts in 2003 and two low years of 26 and 23 thefts in 2010 and 2011 respectively, auto thefts averaged 35.1 per year over the other 10 years.
- Peak year for crimes in Fremont was 2002, with 1,088 total crimes reported; the most recent table year of 2012 had the lowest total crimes reported of 728, a reduction of 33% below the peak year.

The following chart illustrates the Total Crimes reported for Fremont from 2000 to 2012:




*Source: www.usa.com/fremont-ne-crime-and-crime-rate.htm*

The years reported appear to reflect 6-year cycles, with a peak in the second year of each cycle (2002 and 2008), then a downward trend following each peak until the cycle begins again. While this apparent "cycle" may be entirely coincidental over the 12 years of reported data, it appears to reflect an overall downward trend of reduced total crimes during the years illustrated.

# Staffing Projections

According to the 2013 *Fremont Police Department Annual Report*, the Fremont PD has an authorized strength of 39 full time officers, although it was reported that the PD has been currently unable to find suitable candidates to fill some vacated officer positions:

- 3 Administrative officers
- 6 Investigative officers
- 28 Uniformed Patrol officers
- 1 officer assigned to Fremont Public Schools
- 1 Evidence Technician officer (currently held by a civilian)

In addition to officers, the FPD currently has five administrative services office staff who provide support to the Department. Finally, the Fremont/Dodge County Communications Center (Dispatch) is staffed by 15 full and part time FPD and Dodge County Sheriff's Department dispatchers. As was previously noted, the Communications Center is poised to become a regional center, pending decisions by surrounding counties to transfer their dispatch responsibilities to the Fremont PD Center.

The continued growth of the City of Fremont will likewise impact the FPD and its services. Staffing Projections have been developed to assist the FPD and City in planning for this growth. The 2014 authorized officer count of 39 is used as a basis for these staffing projections.

Additional resources include the Fremont Population Projections previously discussed, along with data compiled by the FBI (from the Uniform Crime Reporting Program (*UCR*)) for their *2010 Crime in the United States* tabulation for "Full-time Law Enforcement Officers by Region and Geographic Division by Population Group". The following table and chart illustrate the "Law Enforcement Officers per 1,000 Inhabitants" from the FBI's database.

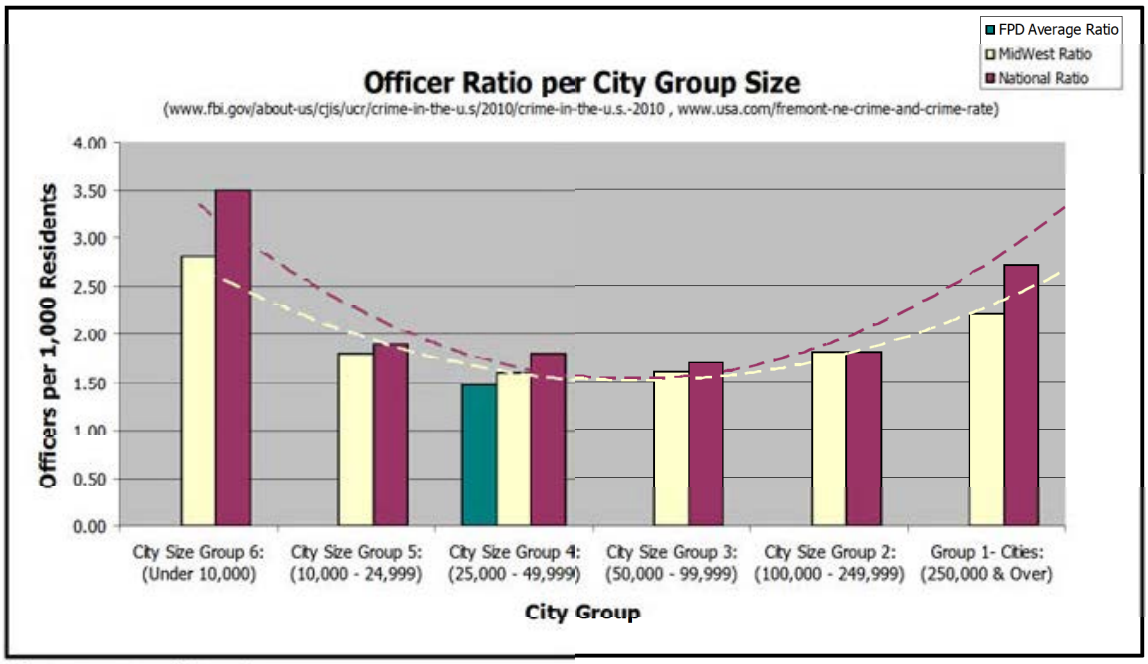
**Law Enforcement Officers per 1,000 Inhabitants per City Group Size**

| Region | City Size Group 6: (Under 10,000) | City Size Group 5: (10,000 - 24,999) | City Size Group 4: (25,000 - 49,999) | City Size Group 3: (50,000 - 99,999) | City Size Group 2: (100,000 - 249,999) | City Size Group 1: (250,000 & Over) |
|---|---|---|---|---|---|---|
| National Rate | 3.5 | 1.9 | 1.8 | 1.7 | 1.8 | 2.7 |
| MidWest Rate | 2.8 | 1.8 | 1.6 | 1.6 | 1.8 | 2.2 |
| FPD Ave. Rate | - | - | 1.47 | - | - | - |

*Source: www.fbi.gov/*

**Table Methodology:**

- *The information in this table is derived from law enforcement officer counts (as of October 31, 2010) submitted by participating agencies.*
- *The UCR Program defines law enforcement officers as individuals who ordinarily carry a firearm and a badge, have full arrest powers, and are paid from governmental funds set aside specifically to pay sworn law enforcement.*




*Source: www.fbi.gov/*

**Table Comments:**

- *This table provides the number and rate of sworn law enforcement officers broken down by region, geographic division, and population group.*
- *The totals for full-time law enforcement officers employed in metropolitan and nonmetropolitan county agencies are combined in this table.*
- *Suburban areas include law enforcement agencies in cities with less than 50,000 inhabitants and county law enforcement agencies that are within a Metropolitan Statistical Area.*
- *Suburban areas exclude all metropolitan agencies associated with a principal city. The agencies associated with suburban areas also appear in other groups within this table.*

Fremont's 2010 population of 26,397 fits the FBI category of *City Size Group IV* (25,000 to 49,999 inhabitants). Dividing this population by 1,000 and then dividing Fremont's authorized 39 officers by the result of 26.397 produces an average ratio of 1.47 officers per 1,000 Fremont inhabitants. This current ration is lower than either of the FBI's Midwest ratio of 1.6 and the National ratio of 1.7 for *Group IV* cities. Using the Midwest ratio of 1.6 officers per 1,000, Fremont's officer strength would increase by 3 officers from 39 to 42 full time officers. The National ratio of 1.7 would result in 45 officers. Again, these are average ratios for each of these categories. Individual city demographics within each Group likely result in variations from this average ratio.

It should be noted that the Midwest ratio of 1.6 for Fremont's *City Size Group IV* remains unchanged at 1.6 officers per 1,000 for *Group III* cities (50,000 to 99,999 inhabitants). In summary, using this ratio to increase FPD staffing to 42 officers over time should accommodate the City of Fremont well into the foreseeable future and beyond.

The following table illustrates these Staffing Projections, using the previously described Population Projections for Fremont, the FPD's historical growth history along with Midwest, National data from the FBI tabulation and the current 2014 authorized FPD officer strength of 39 officers as the baseline. The "Total Staff" column represents projected total staff (patrol officers plus administrative services staff), using the National Rate of 1.8 officers per 1,000 inhabitants. The National Rate provides an upper "bookend" projection.

**Patrol Officers Staffing Projections**

| Year | Fremont Population | Patrol Officers (Fremont Rate) | Patrol Officers (Midwest Rate) | Patrol Officers (National Rate) | Total Staff (National Rate) |
|---|---|---|---|---|---|
| 2000 | 25,174 | - | - | - | - |
| 2005 | 25,786 | - | - | - | - |
| 2010 | 26,397 | - | - | - | - |
| 2015 | 27,212 | 40 | 44 | 49 | 54 |
| 2020 | 28,052 | 41 | 45 | 50 | 55 |
| 2025 | 28,918 | 43 | 46 | 52 | 57 |
| 2030 | 29,811 | 44 | 48 | 54 | 59 |
| **2035** | **30,731** | **45** | **49** | **55** | **60** |
| 2040 | 31,680 | 47 | 51 | 57 | 62 |
| 2045 | 32,658 | 48 | 52 | 59 | 64 |

*Source: www.fbi.gov/ & www.census.gov/ & 212 Fremont Comprehensive Plan*

These Projections allow the City of Fremont to compare current staffing with other Midwest cities falling within the City Group 4 category. It is understood that current and future staffing for the FPD, as well as all City departments, is always subject to city budget constraints.

# Programming Summary

The following Program is a list of the space needs identified for the Fremont Police Department, based on current usage, stakeholder interviews, desired new amenities and potential growth needs.

The proposed net square footages (NSF) and overall facility size will vary from these target sizes when preliminary floor plans are developed, and are heavily influenced by the constraints of the existing facility or the shape and topography of alternative sites proposed for the facility.

| *Space Description* | *Existing Area (NSF)* | *Proposed Area (NSF)* | *Comments* |
|---|---|---|---|
| Administrative Offices | | | |
| Chief Office | 300 | 300 | should not be visible to public |
| Lieutenant Office | 212 | 180 | |
| Lieutenant Office | 203 | 180 | |
| Lieutenant Office | 177 | 180 | |
| Sergeants' Office | 163 | 160 | 2 staff to share office (3 in existing) |
| Sergeants' Office | 146 | 160 | 2 staff to share office (3 in existing) |
| Addt'l Sergeants' Office | 0 | 160 | 2 staff to share office |
| Investigation | | | |
| Waiting Area | 0 | 50 | Serves investigation area |
| Detective Bureau | 585 | 585 | 4 stations existing; may expand by 1; prefer cubicles |
| Lieutenant Detective | 142 | 180 | adjacent to Detective Bureau |
| Drug Task Force | 345 | 400 | 4 stations existing; may expand by 1; prefer cubicles |
| Eye Wash Station | 0 | 5 | |
| Interview Rm. 1 | 67 | 80 | |
| Interview Rm. 2 | 89 | 80 | |
| Hold/Forensic Intrvw 3 | 0 | 160 | also use for holding detainees |
| Suspect Toilet | 0 | 60 | |
| Copier/File Area | 77 | 100 | 2 years of files in dept. |
| Archived File Storage | basement | 100 | 7-10 years of files; may be remote from dept. |
| Equipment Storage | 0 | 50 | GPS units, cameras, etc. |
| Patrol | | | close to garage; consider 2nd floor |
| Officer Report Area | 763 | 1,000 | 7 officers/shift + 1 growth; 6'x8' cubicles |
| Storage | 0 | 50 | files, evidence bags, mail |
| Dispatch | 843 | 843 | includes files |
| Communications Dir. | 137 | 140 | needs public access |
| Expansion | 0 | 420 | 4 future stations + misc |
| Toilet | 0 | 60 | |
| PSAP Equipment | 117 | 150 | Public Service Answering Point |
| Evidence | | | |
| Technician Office | 155 | 150 | 2 files (1 file in existing) |
| Evidence Storage: | | | 2nd floor location acceptable |

| | | | |
|---|---|---|---|
| General | 605+1,103 | 3,300 | refr., freezr; climate controlled; pass-thru lckrs, desk |
| Evidence Vehicle | in garage | 375 | vehicle cage in garage |
| Large Evidence Stor. | in garage | 225 | storage cage in garage |
| Specialty Areas | | | |
| Intake | 134 | 150 | breathalyzer, fingerprinting |
| Interview | 0 | 80 | also use for intoxicated detainees |
| State Patrol Traffic/Drug | 315 | 315 | 4 workstations |
| Armory | 117 | 140 | |
| Antenna Control Room | 0 | 100 | currently remote location: First Wireless |
| IT/Server Room | in supply rm | 100 | existing IT equipment in bulk supply/break room |
| Garage/Vehicle Storage | 6,607 | 8,465 | maximize parking spaces; SWAT vehicle |
| General Offices | | | |
| Payroll Office | 107 | 110 | |
| Office workstations | 524 | 500 | plan for 4 cubicles in open area |
| Common Spaces | | | |
| Entrance Vestibule | 222 | 120 | |
| Lobby | 210 | 210 | display for historical items, photos |
| Public Toilets – 1st Flr | 0 | 120 | private male & female; HC accessible |
| Public Toilets – 2nd Flr | 0 | 120 | private male & female; HC accessible |
| Staff Toilets – 1st Flr | 230 | 330 | HC accessible |
| Staff Toilets – 2nd Flr | 330 | 330 | HC accessible |
| Waiting – 1st Flr | 187 | 180 | |
| Waiting – 2nd Flr | 134 | 120 | |
| Reception/Office | 370 | 370 | move to 1st floor for public access; 2 stations |
| Payroll Office | 107 | | |
| Break Room #1 | 136 | 180 | w/ vending; consider combining both break rooms |
| Break Room #2 | in supply rm | 180 | existing room combined w/ bulk supply/IT room |
| Mail/Copy/Work Area | 0 | 200 | |
| Shredding Storage | 0 | 50 | store for 90 days |
| Case File Storage | 413 + garage | 500 | use high density files; verify load; locate next to admin.; some files also currently in garage space |
| Bulk Supply Storage | 405 | 200 | currently combined w/ break room |
| Janitor's Closet – 1st Fl | 118 | 20 | currently combined w/ electrical |
| Janitor's Closet – 2nd Fl | 47 | 20 | currently combined w/ electrical |
| Electrical Closet – 1st Fl | 0 | 30 | |
| Electrical Closet – 2nd Fl | 0 | 30 | |
| Fitness Room | 1,148 | 800 | |
| Locker Room - Men | 0 | 500 | 50 full height lockers; single shower, toilet |
| Locker Room - Women | 0 | 350 | 20 full height lockers; single shower, toilet |
| Special Storage | 0 | 100 | for contaminated clothing |
| Conference Rooms | | | |
| Large Conf. Rm | 213 | 250 | verify desired occupancy; provide kitchenette |
| Small Conf. Rm | 0 | 150 | verify desired occupancy |
| Training/Meeting Room | 621 | 1,200 | 50 max. divide into 25/25; locate for public use |
| General Storage | 255 | 750 | |

| Miscellaneous | | | |
|---|---|---|---|
| Circulation, 1st Floor | 633 + 869 | 2,000 | |
| Circulation, 2nd Floor | 73+341+120 | 750 | |
| Vertical Circulation: | | | |
| Stair S 1 | 194 + 305 | 560 | extend for direct exit to exterior |
| Stair S-2 | 186 + 244+244 | 732 | extend for direct exit to exterior |
| New Stair S-3 | 0 | 200 + 200 | consider new stair for proposed space |
| Elevator | 48 + 48 | 96 | existing shaft has two stops |
| Elevator Equipment | basement | 70 | verify elevator type, shaft size & location |
| Mechanical Chases, 1st | 11+41 | 100 | |
| Mechanical Chases, 2nd | 13+41 | 100 | |
| Mechanical Equipment | 1,748 | 1,748 | currently in basement; consider rooftop equipment |
| Electrical Equipment | included | 50 | currently in basement & janitor closets |
| Former Dispatch Area | 457+173+108 | 0 | former workspace, old equipment room, vault storage |
| Unused break room | 204 | 0 | unused 2nd floor break room |
| | | | |
| Wall thickness, all floors | 1,250 | 1,700 | includes exterior wall thickness |
| | | | |
| **TOTAL AREA** | 26,530 | 35,559 | includes all floors + basement |

Program Notes:

1. The public should not access the 2nd floor unless a stair is moved or added next to the lobby, to prevent the public from having to pass through the first floor to access a stair. Emergency exiting from the second floor also requires access to a minimum of two compliant, egress stairs.
2. Existing elevator with center opening door is not compliant with ADA requirements for clear cab width and length. Column in corner of shaft reduces dimensions for replacement cab, but it may be possible to install a new handicapped accessible cab in the existing shaft. This must be verified with an elevator company. The door openings would likely need to be re-positioned for an off-center elevator door.
3. Existing stairs may be partially grandfathered due to the occupancy type remaining unchanged for the renovation. However, the existing stairs do not have direct exits to the exterior and will need to be extended somehow to provide new exit doors.

# Conclusion & Recommendation

The building currently occupied by the Fremont Police Department has served the City of Fremont well for nearly five decades. It has been home to three City tenants since its construction in 1966. In comparison to many modern office buildings, which are often built with an eye more towards cost than towards quality, the current FPD facility was well designed and constructed with a life expectancy befitting a governmental building.

But over time, every structure, even high-quality buildings, must overcome a dated appearance and keep pace with changing building codes and ever-improving technology. The "bones" of the FPD facility are in excellent shape. The rest of the facility's building systems, though, are in need of the familiar "extreme makeover".

In addition to outdated physical components, a dysfunctional building becomes an insidious waste of staff time and efficiency, with an often invisible but very real cost. While the current facility has served the FPD well since 1997, with each succeeding year the use of the facility "as is", without the benefit of renovation, reconfiguring space, or expansion has resulted in overcrowding in certain areas and inefficiencies in work flow.

Another critical issue that must be addressed during the conceptual planning phase is parking for staff, PD vehicles and the public. The current north staff parking area, the public parking lot across the street to the east and the current west garage area are all candidates for resolving these parking needs.

This Needs Assessment has documented in detail these facility issues, both physical and functional. The replacement and updating of dated or failing building finishes and systems is routine for renovation projects, even those that are a century old. Determining if the FPD building can accommodate the current and forecasted space needs and functionality of the Department is the goal of Part 2 of this Analysis.

The estimated square footage requirements listed in the Programming Summary (previous pages) total 35,559 gross square feet (GSF). The available square footage of the current FPD building, including the potential Third Floor, and garage footprint is 33,958 GSF, a deficit of only 1,601 GSF. This is within 5% of the target Program GSF. The current building areas appear able to accommodate the Program requirements and it is recommended that conceptual planning of this option proceed to confirm this.

Part 2 Planning will compare the feasibility and cost of renovating and expanding the current facility with the cost of an entirely new replacement FPD building on a new site elsewhere in Fremont. Regardless of the outcome, the current building has the potential to have the "odometer rolled back" and be given a "new lease on life" for either the City or another future Owner.

Phase 1 Renovation or Replacement Analysis
for the

# FREMONT POLICE DEPARTMENT

Fremont, Nebraska

*BUDGET UPDATE*
*May 8, 2017*

PROCHASKA & ASSOCIATES
Planning - Architecture - Engineering
Interiors & Facility Management

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PROCHASKA & ASSOCIATES

# FREMONT POLICE DEPARTMENT

FREMONT, NEBRASKA

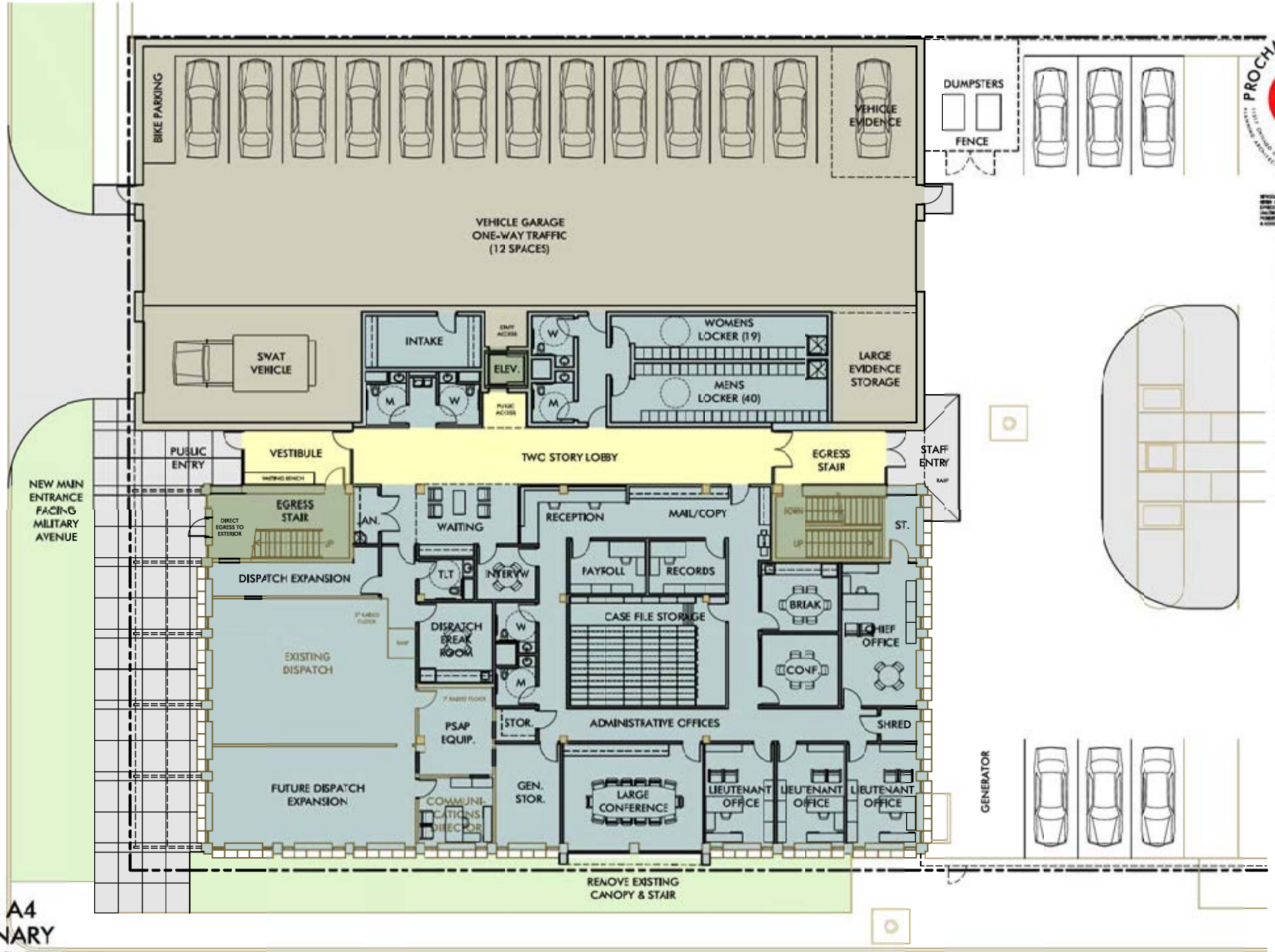
3.10 - A4




PLAN NORTH

## OPTION A4
## PRELIMINARY
## SITE/FLOOR PLAN

SCALE: 1" = 30'-0"




PLAN NORTH

# OPTION A4
# PRELIMINARY
# FIRST FLOOR PLAN

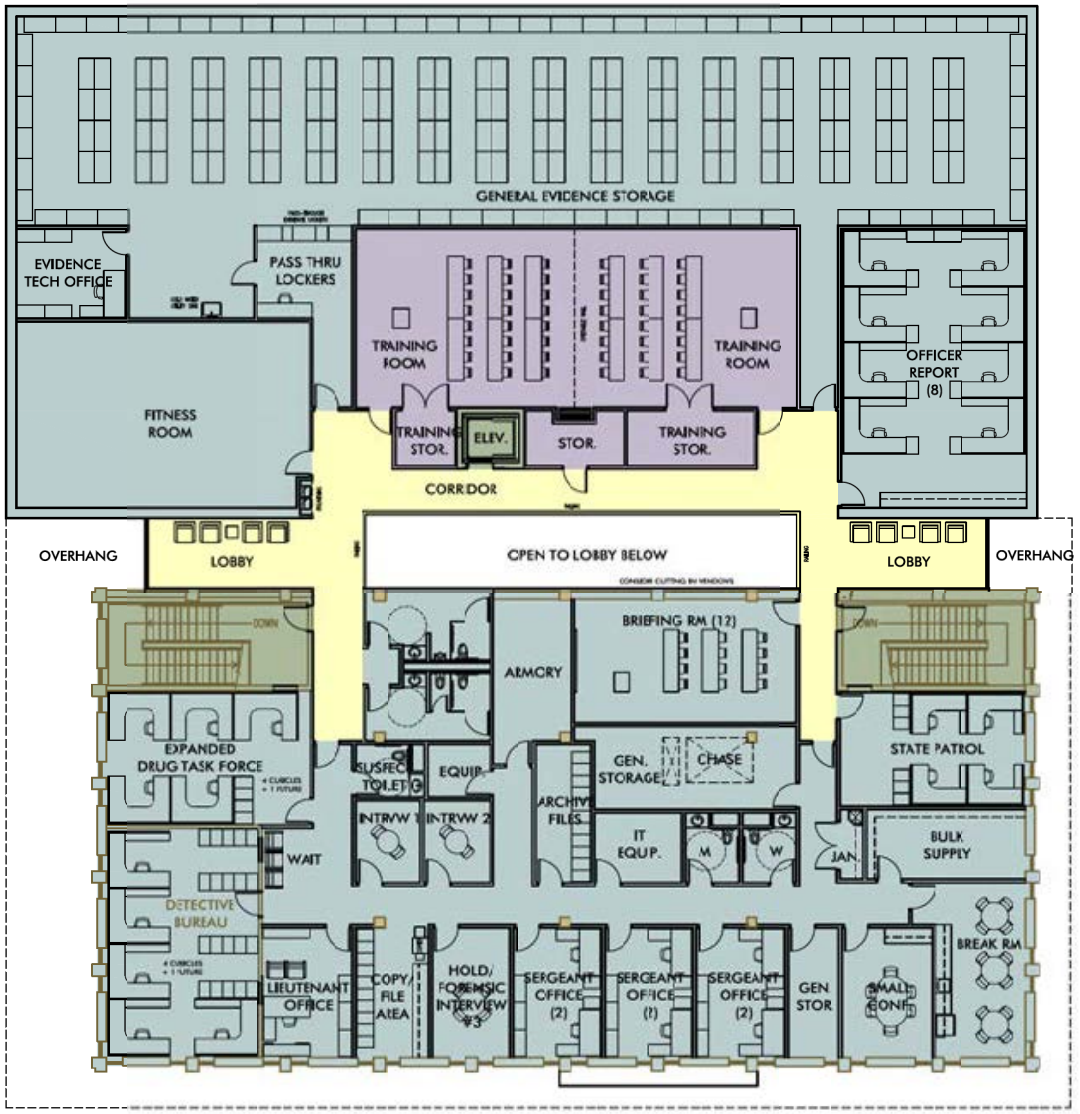
SCALE: 1/16" = 1'-0"

PROCHASKA & ASSOCIATES

# FREMONT POLICE DEPARTMENT

FREMONT, NEBRASKA

3.11 - A4




PLAN NORTH

## OPTION A4
## PRELIMINARY
## SECOND FLOOR PLAN

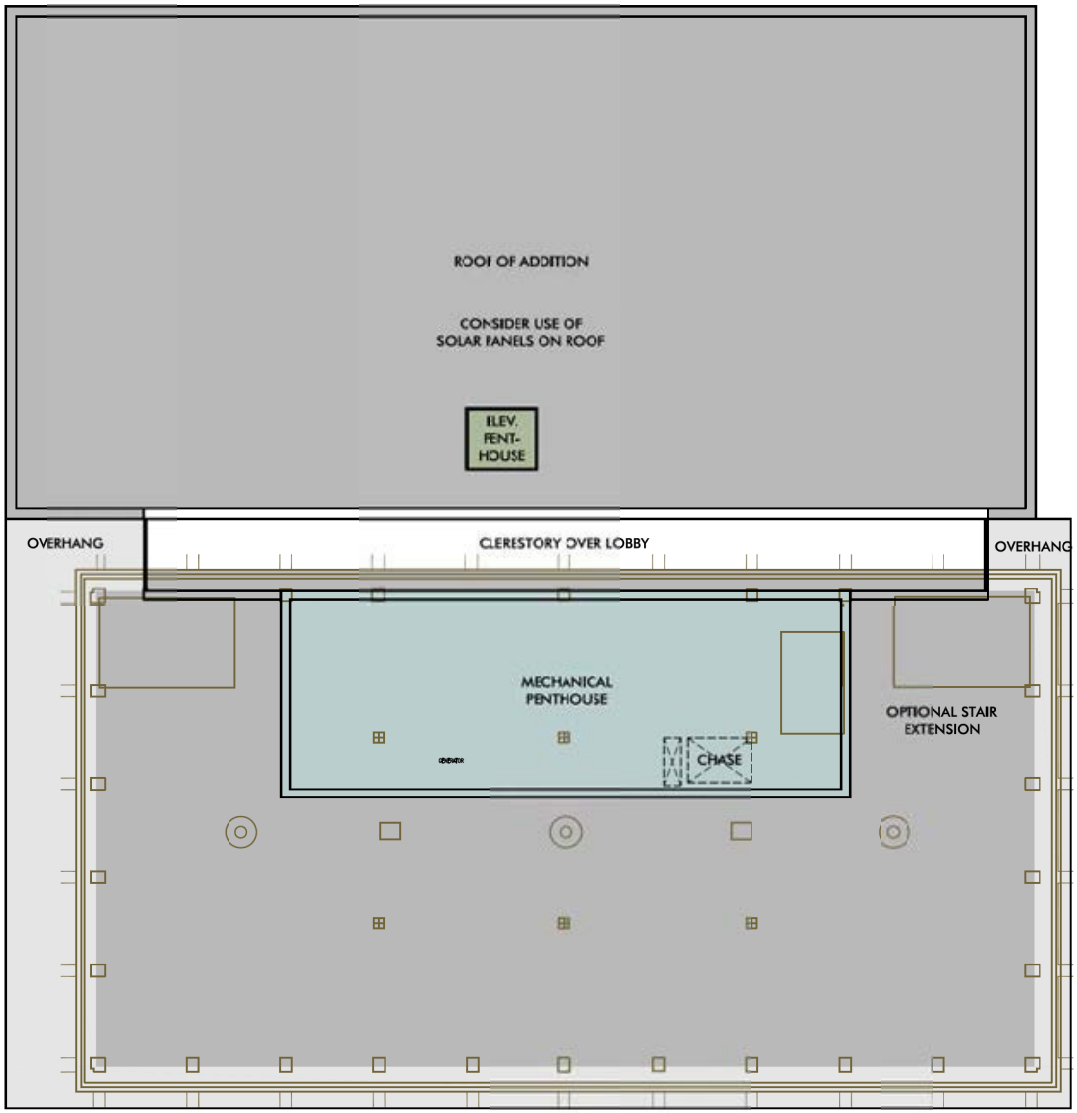
SCALE: 1/16" = 1'-0"

PROCHASKA & ASSOCIATES

# FREMONT POLICE DEPARTMENT

FREMONT, NEBRASKA

3.12 - A4




PLAN NORTH

## OPTION A4 PRELIMINARY ROOF PLAN

SCALE: 1/16" = 1'-0"

PROCHASKA & ASSOCIATES

# FREMONT POLICE DEPARTMENT

FREMONT, NEBRASKA

3.13 - A4

The Project Budget includes the estimated Construction Budget (Hard Costs) plus the estimated Project Overhead Budget (Soft Costs). Soft Costs are typically estimated as a percentage of the Construction Budget in the early planning stages of a Project, until more definitive costs have been estimated by the Owner and consultants. Some of the listed items may prove to be "not applicable". Soft Costs may include, but are not limited to, miscellaneous budget costs such as:

- Fiscal Agent/Bond Underwriter fees & Bond insurance, etc.
- Site Investigation (soil borings & geotechnical report)
- A/E Design & Contract Administration fees (Schematic Design, Design Development, Construction Documents, Bidding & Negotiation, Construction Administration)
- Construction phase testing & IBC (International Building Code) Special Inspections
- Reimbursable (out-of-pocket) consultant expenses (miscellaneous printing, telephone, postage, travel, etc.)
- Construction Document printing (plans & specifications) for bidding and construction
- State Agency (Fire Marshal, ADA, etc.) review fees *(if applicable)*
- Furnishings *(furniture, window coverings, etc.)*
- Fixtures/Equipment *(office equipment, evidence storage shelving, etc.)*
- Data/Communications equipment *(phones/computers/cabling/relocation of dispatch & tower)*
- Hazardous Materials Assessment & Abatement *(if applicable)*
- EPA "Stormwater Prevention Pollution Plan" (SWPPP) erosion inspections *(if applicable)*
- Additional property/land purchase cost *(if applicable)*
- Builder's Risk/All Risk insurance
- Construction phase contingency budget

## PRELIMINARY CONCEPT PLAN BUDGET SUMMARY

■ ***OPTION A4*: ADDITION & RENOVATION TO EXISTING PD FACILITY**

| | |
|---|---|
| Construction Budget (Hard Costs) | $ **6,465,670** |
| Project Overhead Budget (Soft Costs) | $ 1,616,420 |
| **Total Project Budget** | **$ 8,082,090*** |

**NOTE:* *The above Total Costs do not include:*

- *asbestos remediation, if necessary, prior to renovation of the existing building*
- *temporary staff relocation costs, if necessary*

Estimated construction costs are summarized below. Due to the nature of a Preliminary Design, costs are based on historical square foot costs, plus lump sum costs and allowances for special items. Costs are budgeted for the **Summer 2018** Construction Bid Market.

**Option A4** requires that the Police Department relocate to another facility during renovation of the existing facility, or that a construction phasing plan be developed to allow portions of the facility to be renovated in sequence. If the new west addition is constructed first, this may allow the new addition to be occupied first, permitting vacated space to be renovated next, and so on. It is unknown at this time if the existing facility contains any remaining hazardous materials, such as asbestos or lead paint, that would require abatement prior to renovation. These costs are excluded from the General Contractor's responsibility and would be part of the Soft Cost Budget. Following an Assessment by a certified hazardous materials consultant, the estimated cost of abating any hazardous materials can be determined.

## ■ *OPTION A4*: ADDITION & RENOVATION TO EXISTING PD FACILITY

**Project Budget Projection:**

**New Construction:**

**FIRST FLOOR**

| | | |
|---|---|---|
| Vehicle Garage (12 to 15 Spaces + Vehicle/Large Evidence Storage)<br>7,171 GSF at $149.06/SF | $ | 1,068,910 |
| Locker Rooms (Men's & Women's)<br>743 GSF at $232.73/SF | $ | 172,920 |
| Toilets (Public & Locker Room)<br>362 GSF at $232.73/SF | $ | 84,250 |
| Intake<br>193 GSF at $228.72/SF | $ | 44,140 |
| Lobby/Vestibules/Corridors<br>1,210 GSF at $218.68/SF | $ | 264,600 |
| Large Conference (old entrance infill)<br>181 GSF at $228.72/SF | $ | 41,400 |
| Elevator Shaft & Elevator Cab | $ | 85,970 |
| Sitework Allowance<br>(Grading/Drives/Sidewalks/Parking/Fencing, etc.) | $ | 105,500 |

**SECOND FLOOR**

| | | |
|---|---|---|
| Training Rooms (2)<br>1,353 GSF at $228.72/SF | $ | 309,460 |
| Training Room Storage<br>302 GSF at $160.50/SF | $ | 48,470 |
| Officer Report (8 workstations)<br>961 GSF at $220.69/SF | $ | 212,080 |
| Fitness Room<br>1,019 GSF at $228.72/SF | $ | 238,070 |
| General Evidence Storage/Pass-thru Lockers<br>4,279 GSF at $160.50/SF | $ | 686,780 |
| Evidence Tech Office<br>188 GSF at $220.69/SF | $ | 41,490 |
| Corridor/Lobbies<br>1,051 GSF at $218.68/SF | $ | 229,830 |
| Mechanical Equipment/Elevator Rooftop Penthouses<br>2,018 GSF at $170.53/SF | $ | 344,130 |
| Entrance Canopies/Exterior Upgrades<br>1,997 GSF at $110.35/SF | $ | 220,370 |

**Renovation:**

**FIRST FLOOR**

| | | |
|---|---|---|
| Waiting/Circulation<br>252 GSF at $152.48/SF | $ | 38,420 |
| Reception/Mail/Copy<br>193 GSF at $162.51/SF | $ | 31,360 |
| Payroll/Records<br>256 GSF at $154.48/SF | $ | 39,540 |
| Administrative Offices (Chief/Lieutenants)<br>922 GSF at $154.48/SF | $ | 142,430 |
| Large/Medium Conference/Interview Rooms<br>533 GSF at $160.50/SF | $ | 85,550 |

| | | |
|---|---|---|
| Break Room<br>165 GSF at $160.50/SF | $ | 26,480 |
| Case File Storage (High Density Rolling Files)<br>524 GSF at $160.50/SF | $ | 84,100 |
| Storage/Shredding<br>262 GSF at $112.35/SF | $ | 29,440 |
| Administrative Toilets (Men/Women)<br>140 GSF at $162.51/SF | $ | 22,750 |
| Administrative Circulation<br>802 GSF at $152.48/SF | $ | 122,290 |
| Dispatch (existing)<br>913 GSF at $24.08/SF | $ | 21,990 |
| Future Dispatch Expansion/Circulation<br>747 GSF at $18.06/SF | $ | 13,490 |
| Dispatch Break Room<br>177 GSF at $160.50/SF | $ | 28,410 |
| Dispatch Toilet (Unisex)/Janitors' Closet<br>123 GSF at $162.51/SF | $ | 19,990 |
| PSAP Equipment (Existing + Expansion)<br>201 GSF at $48.15/SF | $ | 9,680 |
| Communications Director's Office (Existing)<br>152 GSF at $62.19/SF | $ | 9,450 |
| Egress Stairs (2 existing)<br>555 GSF at $54.17/SF | $ | 30,060 |
| **SECOND FLOOR** | | |
| Detective Bureau (existing location)<br>597 GSF at $24.08/SF | $ | 14,380 |
| Offices (Expanded Drug Task Force/Lieutenant/Sergeants/State Patrol)<br>1,638 GSF at $116.36/SF | $ | 190,600 |
| Conference (Small/Briefing Room)<br>679 GSF at $160.50/SF | $ | 108,980 |

| | | |
|---|---|---|
| Interview Rooms (2 + Hold/Forensic)<br>393 GSF at $160.50/SF | $ | 63,080 |
| Copy/File Area<br>162 GSF at $112.35/SF | $ | 18,200 |
| Armory/IT Equip/Antennae Control Room<br>304 GSF at $116.36/SF | $ | 35,370 |
| Toilets (Public/Suspect/Staff/Janitors' Closet)<br>587 GSF at $162.51/SF | $ | 95,390 |
| Gen. Storage/Bulk Supply/Archive Files/Equipment<br>818 GSF at $112.35/SF | $ | 91,900 |
| Corridors<br>966 GSF at $152.48/SF | $ | 147,300 |
| Egress Stairs (2 existing)<br>582 GSF at $100.31/SF | $ | 58,380 |
| Demolition (Existing Garage, Entrance & Kiosk Canopies) | $ | 105,500 |

**Project Budget Totals:**

| | | |
|---|---|---|
| Construction Budget Subtotal | $ | 5,877,880 |
| Design Phase Contingency at 10% | $ | 587,790 |
| **Construction Budget Total (Hard Costs)** | **$** | **6,465,670** |
| Project Overhead Budget (Soft Costs) at 25%<br>(Includes: A/E Consultant Fees, Site Survey, Soil Borings, Movable Equipment & Interior Furnishings, Data/Communications Equipment & Cabling, Soil & Concrete Testing, Reimbursable Expenses, Construction Document Printing, Builder's Risk Insurance, Construction Contingency | $ | 1,616,420 |
| ***OPTION A4* Project Budget Total** | **$** | **8,082,090*** |

***NOTE:** ***The above Total Costs do not include:***

- ***asbestos remediation, if necessary, prior to renovation of the existing building***
- ***temporary staff relocation costs, if necessary***

Prochaska & Associates



# JOINT LAW ENFORCEMENT CENTER FOR FREMONT POLICE DEPARTMENT & DODGE COUNTY SHERIFF'S OFFICE

## ASSESSMENT FOR NEW FACILITY ON GREENFIELD SITE

prochaska
& associates

planning

architecture

engineering

interiors

facility
management

Joint Law Enforcement Center for

# FREMONT POLICE DEPARTMENT & DODGE COUNTY SHERIFF'S OFFICE

Fremont, Nebraska

March 29, 2018

PROCHASKA & ASSOCIATES
Planning - Architecture - Engineering
Interiors & Facility Management

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# Executive Summary

1.0

Prochaska & Associates would like to thank Assistant City Administrator Shane Wimer, Police Chief Jeff Elliott, Lieutenant Glen Still and Sheriff Steve Hespen for their assistance in developing the information in this document. This current study follows a *Renovation or Replacement Analysis* conducted by Prochaska & Associates for the Fremont Police Department, which involved a Part 1 Needs Assessment report and a Part 2 Preliminary Concept Planning document. Since occupying the building in 1997, the FPD essentially moved into the facility "as is", and adapted to spaces as they existed. As the staffing and workloads have grown, the lack of space and inability of the building to meet the current needs of the FPD have created serious inefficiencies. Coupled with an aging equipment infrastructure, the facility has reached a critical stage in its useful life. Although the *Analysis* found many ways to make improvements (demolition of the garage, construction of an addition and renovation of the existing building), the site still has many limitations. Construction would also have to occur while the building remained in use by the Police Department, which creates many complications for the construction manager/general contractor and police staff.

The current strategy to build a new facility on a greenfield site has many advantages. The Dodge County Sheriff's Office may now be a part of the project. By combining the Police and Sheriff's Office, many spaces can be shared in common, thus reducing the cost of construction. The Programming Summary within this document provides a list of these Common Spaces. A new site can also potentially provide great flexibility for future growth, including the possibility of a future jail. Public parking, staff parking, a vehicle garage, site entrances, a future sallyport, etc. can be shared between the two entities. The new site location will need to be strategic so staff may quickly respond to calls within the City of Fremont and Dodge County as well.

Part 2 of this document contains a Programming Summary, which lists all of the spaces anticipated for the facility. The spaces are categorized into Common Spaces, Police Department, Dispatch, Sheriff's Office and Vehicle Garage. It also lists parking needs. Part 3 discusses the site and provides a projection of the size needed based on the Program. Part 4 provides a budget for the joint facility, based on anticipated square foot costs for the programmed spaces.

The primary objective of this document is to assist the Fremont Police Department and Dodge County Sheriff's Office (and ultimately the City of Fremont and Dodge County), in planning for a new joint facility on a greenfield site. It is intended to resolve the space deficiencies, functional inadequacies and aged infrastructural issues facing the current facilities. A functional, code-compliant and secure facility will increase the efficiency of staff, improve staff safety and facilitate an improved, more user-friendly interaction with the public. The flexibility offered by a new facility design and site will help to serve the needs of the public as the crime rate continues to increase. At an appropriate time, Prochaska & Associates can also assist the County with a Needs Assessment for the future jail, providing an architectural/engineering review of the current facility and forecasting the jail spaces and sizes needed. Projections are based on both local and national statistics. This Assessment will predict the number of inmate beds needed and determines the inmate classifications to be planned for the new facility.

# Part 2 - Programming Summary

2.0

## PROGRAMMING SUMMARY

The following Program is a list of the combined space needs identified for the Fremont Police Department and the Dodge County Sheriff's Office, based on current usage, stakeholder interviews, desired new amenities and potential growth needs for a modern joint use Law Enforcement Center.

The proposed net square footages (NSF) and overall facility size will vary from these target sizes when preliminary concept floor plans are developed, and are heavily influenced by the shape and topography of the actual sites proposed for the facility. NOTE: Shaded spaces are currently excluded from total areas but should be added if the building is over one story.

| *Space Description* | *Existing Area (NSF)* | *Proposed Area (NSF)* | *Comments* |
|---|---|---|---|
| | | | |
| **COMMON SPACES** | | | |
| | | | |
| Main Entrance Vestibule | 222 PD + 79 SO | 100 | airlock for energy efficiency & to reduce drafts |
| Public Lobby | (210 + 187 + 134) PD + 191 SO | 1,500 | natural light; general waiting space; bulletin board or video monitor; display for historical items, photos, separate reception windows for PD & SD facing lobby; access to public restrooms, janitor closet and interview rooms; access to stair/elevator if necessary |
| Public Toilets | 0 PD + 0 SO | 360 | 2 x 180 SF; accessible M & F by Lobby; drinking fountains |
| Interview Rooms | (67 + 89)PD + 284 SO | 540 | 6 @ 90 SF; 2 by Lobby, 2 for Police, 2 for Sheriff; all 6 should be close together; line-up room with one-way glass; provide soundproofing |
| A/V & Case Prep Room | 0 PD + 0 SO | 120 | by interview rooms; 4 computer stations; editing equipment |
| Large Conference Room | 213 PD + 0 SO | 410 | up to 16 occupants; provide kitchenette |
| Small Conference Room | 0 PD + 0 SO | 160 | up to 6 occupants |
| Training/Meeting Room | 621 PD + 1,052 SO | 1,300 | 50 max. seated at tables; use operable wall to divide into 25/25; locate by Lobby for public use; construct to storm shelter standards; kitchenette with cabinets, sink |
| Chair/Table Storage | 0 PD + 0 SO | 150 | pair of doors for table & chair storage carts |
| A/V Equipment | 0 PD + 0 SO | 40 | provide shelving |
| EOC Office | 0 | 230 | adjacent to Training Room for use in emergencies; wall-mounted TV |
| IT/Server Room | (in break rm) PD + 0 SO | 200 | common room with separate server equipment for Police and Sheriff |
| Evidence | | | |
| Technicians' Office | 155 PD + 0 SO | 180 | two work stations, 4 file cabinets |
| Evidence Intake | 0 PD + 67 SO | 250 | pass-through lockers/refrig., drying cabinet, cabinets/counter, eyewash |
| Evidence Storage: | | | |
| General | (605 + 1,103) PD + 156 SO | 2 x 900 | common department with mobile shelving, storage racks, refrigerator; climate controlled |

| | | | |
|---|---|---|---|
| Firearms Storage | 0 | 120 | |
| Narcotics Storage | 0 | 160 | |
| Valuable Storage | 0 | 50 | |
| Evidence Vehicles | in PD garage | 1,870 | four indoor spaces for vehicles |
| Large Evidence Storage | in garage | 2 x 300 | separate fenced areas for Police & Sheriff |
| Large Evidence Drop | 0 | 2 x 100 | |
| Evidence Processing Lab | 0 | 300 | fume hood, fuming chamber, eyewash, downflow work station, shower, floor drain, fire extinguisher, large work sink |
| Fitness Room | 1,148 PD + 0 SO | 1,000 | near Defensive Arts Training |
| Defensive Arts Training | 0 | 450 | open room with floor mats, wall protection |
| Armory | 117 PD + 0 SO | 300 | separate shelving for gun/ammo/long guns storage for PD & SO; gun repair/cleaning bench |
| Break Room | 404 PD + 54 SO | 450 | kitchenette, double sink, 2 refrigerators with ice, 2 microwaves, coffee, vending; 4 x 4-person tables; TV |
| Locker Room - Male | Not dedicated room | 1,700 | total of 80 full height duty bag lockers; 5 full height 12 x 12 lockers; toilets, showers |
| Locker Room - Female | Not dedicated room | 600 | total of 15 full height duty bag lockers; 10 full height 12 x 12 lockers; toilets, showers |
| Janitor Closet | 118 PD + 0 SO | 50 | near lobby restrooms |
| Special (Hazmat) Storage | 0 | 100 | for contaminated clothing |
| Shredding Storage | 0 | 50 | store for 90 days |
| General Storage | 255 PD + 0 SO | 1,500 | 750 SF PD + 750 SF SO |
| Mechanical Equipment Room | 1,748 PD + 694 SO | 800 | primary mech., plumbing equipment (ventilation equipment on roof or in penthouse) |
| Mechanical Chases (include 1st floor only at existing SO) | (11 + 41 + 13 + 41) PD + 0 SO | 200 | if 2 floors |
| Electrical Equipment Room | (in basement) PD + 36 SO | 200 | |
| Stairs (if 2 story) (include 1st floor only at existing SO) | (194 + 305 + 186 + 244 + 244) PD + (144 + 176) SO | 600 | If new construction is 2 story, provide 3 stairs; 3 x 200 SF; open Lobby stair + 2 enclosed egress |
| Elevator (if 2 story) (include 1st floor only at existing SO) | (48 + 48) PD + 80 + 42 SO | 70 | |
| Elevator Machine Rm (if 2 story) | 30 PD + 70 + 64 SO | 50 | machine equipment to operate hydraulic elevator |
| | | | |
| **Common Spaces Subtotal** | 8,801 PD + 3,189 SO | 17,840 | Exclude shaded program items from total (add if new building is two story) |
| Circulation/Walls | 4,197 | 6,240 | Use approx. 35% |
| | | | |
| **Common Spaces Gross Area** | **16,187** | **24,080** | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | | | |
|---|---|---|---|
| **POLICE DEPARTMENT** | | | |
| | | | |
| **Administrative Spaces** | | | |
| Reception/Office | 370 | 370 | by Lobby; 2 stations |
| Payroll Office | 107 | 120 | |
| Mail/Copy/Work Area | 0 | 120 | |
| Case File Storage | 413 + garage | 600 | new high density mobile files; locate next to admin. |
| | | | |
| **Administrative Offices** | | | |
| Chief Office | 300 | 300 | should not be visible to public |
| Lieutenant Office | 212 | 180 | |
| Lieutenant Office | 203 | 180 | |
| Lieutenant Office | 177 | 180 | |
| Sergeants' Office | 163 | 160 | 2 staff to share office (3 in existing) |
| Sergeants' Office | 146 | 160 | 2 staff to share office (3 in existing) |
| Addt'l Sergeants' Office | 0 | 160 | 2 staff to share office |
| | | | |
| **Investigation** | | | |
| Waiting Area | 0 | 50 | a few chairs serving investigation area |
| Detective Bureau | 585 | 600 | 4 stations existing; may expand by 1; prefer cubicles |
| Lieutenant Detective | 142 | 180 | adjacent to Detective Bureau |
| Drug Task Force | 345 | 400 | 4 stations existing; may expand by 1; prefer cubicles |
| Eye Wash Station | 0 | 5 | |
| Investigation Interview Rm. 1 | 67 | 90 | |
| Investigation Interview Rm. 2 | 89 | 90 | |
| Suspect Toilet | 0 | 70 | |
| Copier/File Area | 77 | 100 | 2 years of files in dept. |
| Archived File Storage | basement | 100 | 7-10 years of files; may be remote from dept. |
| Equipment Storage | 0 | 50 | GPS units, cameras, etc. |
| | | | |
| **Patrol** | | | close to garage; consider 2nd floor |
| Officer Report Area | 763 | 1,000 | 7 officers/shift + 1 growth; 6'x8' cubicles |
| Storage | 0 | 50 | files, evidence bags, mail |
| | | | |
| **Specialty Areas** | | | |
| State Patrol Traffic/Drug | 315 | 315 | 4 workstations |
| | | | |
| **General Offices** | | | |
| Payroll Office | 107 | 110 | |
| Office workstations | 524 | 500 | plan for 4 cubicles in open area |
| | | | |
| **Support Spaces** | | | |
| Staff Toilets – 1st Flr | 230 | 440 | HC accessible; 2 @ 220 SF each; |
| Staff Toilets – 2nd Flr | 330 | 360* | *provide if 2nd floor is used |
| Bulk Supply Storage | in break rm | 200 | currently within break room |

| | | | |
|---|---|---|---|
| Janitor's Closet | 47 | 50 | currently w/ electrical; Common Spaces also has JC |
| Electrical Closet | in basement | 30 | |
| | | | |
| **Miscellaneous** | | | |
| Former Dispatch Area | 457+173+108 | 0 | former workspace, old equipment room, vault storage |
| Unused break room | 204 | 0 | unused 2nd floor break room |
| | | | |
| **Police Department Subtotal** | 6,772 | 6,960 | |
| Circulation/Walls | 2,370 | 2,440 | Use approx. 35% |
| | | | |
| **Police Dept. Gross Area** | **9,142** | **9,400** | excludes common spaces, dispatch, garage |
| | | | |
| | | | |
| **DISPATCH** | | | hardened space |
| | | | |
| **Communication/Dispatch** | | | |
| Dispatch | 843 PD | 850 | includes files |
| Communications Director | 137 PD | 140 | needs public access |
| Expansion | 0 PD | 800 | 4 future stations + misc |
| Break Room | 0 PD | 170 | dedicated to dispatch |
| Toilet | 0 PD | 70 | dedicated to dispatch |
| PSAP Equipment | 117 PD | 180 | Public Service Answering Point |
| | | | |
| **Dispatch Subtotal** | 1,097 | 2,210 | |
| Circulation/Walls | 384 | 770 | use approx. 35% |
| | | | |
| **Dispatch Gross Area** | **1,481** | **2,980** | |
| | | | |
| | | | |
| **SHERIFF'S DEPARTMENT** | | | |
| | | | |
| **Public Spaces** | | | |
| Video Visitation | 0 | 260 | 15 to 20 stations; off Lobby |
| | | | |
| **Administrative Spaces** | | | |
| Reception/Office | 259 | 370 | by Lobby; 3 desks now |
| Administrative Office | 60 | 120 | currently in cubicle; plan as office |
| Mail/Copy/Work Area | 23 | 120 | |
| File/Records Storage | 577 | 600 | high density mobile shelving |
| | | | |
| **Sheriff's Department Offices** | | | |
| Sheriff's Office | 180 | 300 | |
| Chief Deputy's Office | 165 | 230 | |
| Deputy Squad Room | 136 | 560 | plan for 5 workstations (3 shifts – provide file storage for each); existing desk size is good |

| | | | |
|---|---|---|---|
| Investigators | 234 | 450 | 2 now, plan for 4 freestanding desks (1 shift) |
| Sergeants' Office | 451 | 600 | 4 now, plan for 5 freestanding desks |
| Jail Administrator Office | 112 | 180 | |
| Civil Processor Office | 67 | 120 | |
| | | | |
| **Support Spaces** | | | |
| Staff Toilets | 80 | 440 | HC accessible; 2 @ 220 SF each |
| Bulk Supply Storage | 0 | 200 | |
| Janitor Closet | 148 | 50 | Common Spaces also has JC |
| Electrical Closet – 1st Fl | 38 | 40 | |
| Electrical Closet – 2nd Fl | 0 | 30* | *if two story |
| | | | |
| **Miscellaneous** | | | |
| K9 Kennel | 0 | 64 | up to 3 dogs; locate in garage or sallyport |
| K9 Storage Room | 0 | 100 | |
| Dog Wash Area | 0 | 30 | verify if needed |
| Unassigned Space | 447 | 0 | formerly Juvenile Holding area |
| | | | |
| **Sheriff's Dept. Subtotal** | 2,977 | 4,830 | |
| Circulation/Walls | 1,042 | 1,690 | use approx. 35% |
| | | | |
| **Sheriff's Dept. Gross Area** | **4,019** | **6,520** | excludes common spaces, garage |
| | | | |
| | | | |
| **VEHICLE PARKING** | | | |
| | | | |
| **Outdoor Lots** | | | |
| Common Public Parking | 20 PD<br>+ curb SO | 40 spaces | 2 ADA spaces minimum; near main entrance |
| Police Department | 44 | 50 spaces | Fenced lot; includes office, officers & shift change; near employee entrance; dumpster enclosure |
| Sheriff's Office | 21 | 30 spaces | Fenced lot; includes office, officers & shift change; near employee entrance; dumpster enclosure; trailer parking space |
| | | | |
| **Multi-Use Vehicle Garage** | | | Could be detached building; heated; 40 vehicles; drive through garage |
| Police Department | 5,912 | 8,660 | 28 vehicles in new garage (one is SWAT vehicle) |
| Sheriff's Office | 705 | 4,070 | 3 vehicles in old garage; 12 vehicles in new garage |
| Wash Bay/Storage | 0 | 1,180 | Single bay, full width |
| | | | |
| **Garage Subtotal** | 6,617 | 13,910 | |
| Circulation/Walls | 1,704 | 3,480 | Use approx. 25% |
| | | | |
| **Total Garage** | **8,321** | **17,390** | |
| | | | |

| | *Existing Area (GSF)* | *Proposed Area (GSF)* | |
|---|---|---|---|
| **COMBINED SUBTOTALS** | | | |
| | | | |
| **Common Spaces Subtotal** | **16,187** | **24,080** | |
| **Police Department Subtotal** | **9,142** | **9,400** | |
| **Dispatch Subtotal** | **1,481** | **2,980** | |
| **Sheriff's Office Subtotal** | **4,019** | **6,520** | |
| **Vehicle Garage Subtotal** | **8,321** | **17,390** | |
| | | | |
| **COMBINED TOTAL AREA** | **39,150** | **60,370** | existing PD = 26,531 gsf;<br>existing SO = 12,619 gsf (1st floor);<br>total existing = 39,150 gsf;<br>a future jail addition is not included in the new projected area |

# Part 3 – Site Size Projection

3.0

## SITE SIZE PROJECTION

The Programming Summary calculates a total square footage of 60,370 for the combined common spaces, police department, dispatch, sheriff's office and vehicle garage. To determine an appropriate site size for the proposed joint facility, it is assumed that the building will be built as a single story. Although a jail is not currently listed in the Programming Summary, it is desired to anticipate the possibility of a future jail addition. A Needs Assessment has not been performed at this time to determine a recommended jail size, so assumptions will need to be incorporated. A future jail will be a significant factor in the site planning, as it will be of substantial size in comparison to the rest of the facility. (Courtrooms are not included in this future expansion at this time.) In particular, it is ideal to build a jail and sheriff's office as a single story. The police department has greater flexibility to include an upper floor and could provide options in planning if it becomes necessary. Future expansion of the building should always be considered as well.

The vehicle garage is intended to be a partially heated parking structure for up to 40 vehicles and may be a freestanding building. A public parking lot of 40 spaces is planned, and separate fenced staff parking includes a total of 80 spaces for combined police/sheriff use. At least two drives should join an adjacent street to provide convenient access to and around the site, ideally incorporating a future two-bay, tandem drive-through sallyport (4 vehicles).

It is understood that the use of a greenfield site is anticipated, and the actual selection of a particular site will be upcoming. City zoning requirements and setbacks will vary based on the current zoning of the properties to be considered. The shape and slope of the property can also play a critical role in the functionality of the site and the size needed to accommodate the program. A simple rectangular shape will normally provide greater flexibility in planning than an oddly composed shape. Any existing utility easements can also have tremendous impact on a site's viability, especially if the easement crosses through the middle of the property. Existing creeks, drainage ditches, etc. will strongly impact how the site can be used. On-site space for storm water management also must be planned.

Two methods have been used to recommend a minimum site size. Facilities of similar size and composition have been referenced to compare their acreage. A basic site layout was also drawn using the known and future elements to assist in this projection, although the selected site will assuredly vary from this exercise.

Based on the preceding information and assumptions, it is recommended that a site of 9 to 10 acres should be pursued as a minimum site area (assuming a relatively flat, rectangular property shape). This size should accommodate the programmed elements and a future jail, as well as allow for some future expansion. If complicating factors are part of a potential site, a larger size may be necessary for suitable functionality.

# Part 4 – Cost Projections

4.0