

Lewis and Clark County Public Safety Facility

Helena, Montana



Preliminary Architecture Report

July 29, 2015



+





Slate Architecture
107 West Lawrence Street
Helena, Montana 59601
P | 406.457.0360
www.SlateArchitecture.com



Goldberg Group Architects, PC
805 N. 36th Street, Suite B
St Joseph, MO 64506
P | 816.233.9300
www.gga-pc.com



Table of Contents

		Page(s)
1.	Introduction	1-3
2.	Existing Facility Report	4
	a. Overall Layout and Design	5
	b. Vehicular Sallyport	5-6
	c. Kitchen	6
	d. Laundry	7
	e. Activity Yard	7
	f. Program/Library	8
	g. Booking/Holding	8-9
	h. Medical	10
	i. Visitation	10
	j. Dayrooms	10-11
	k. Cells	11
	l. Control Room	11-12
	m. Square Foot Requirements	12
	n. ADA Compliance	12
	o. Costs Issues	12-13
3.	Anticipated Inmate Population	14
	a. Introduction to Modern Population Trends	15-16
	b. Description of the Anticipated Inmate Population	17
	c. Projected Future Capacity Needs	17-18
	d. Inmate Population and Classifications	18
	e. Classification	18
4.	Site Selection	19
	a. Site Selection	20-22
	b. Civil Engineering	23-25
	c. Preliminary Site Plan	26
	Attachments at end of section;	
	City of Helena Site Images	
	City of Helena Utility Plan	
	City of Helena Site Analysis Matrix	
	Sanders Street Site Analysis Matrix	
	Greyn Site Analysis Matrix	
5.	Building Program Narrative	27
	a. Administration	28-29
	b. Public Space	29-30
	c. Visiting & Confidential Interview	30
	d. Vehicular Sallyport	30-31
	e. Maintenance	31
	f. Intake/Booking/Holding	31-32
	g. Release/Bondsman Lobby	32
	h. Food Service	32-33
	i. Laundry	33
	j. Program Open Office	33
	k. Program Rooms	33

l. Library	34
m. Computer Room	34
n. Medical & Mental Health Services	34
o. Indoor & Outdoor Exercise	35
p. Master Control Room	35
q. Inmate Housing	36-37
r. Inmate Movement within Facility	37
s. Building Systems	37-38
t. Security & Surveillance Systems	38
u. Maintenance/Evidence Processing Building	39
v. Structural Systems	39-40
w. Plumbing/Fire Protection Systems	41-44
x. Heating, Ventilating and Air Conditioning Systems	44-49
y. Electrical Systems	49-53
z. Security Electronics	53-67
aa. Sustainable LEED Overview	67-69

Attachments at end of section;

- Floor Plan – Overall
- Floor Plan – Booking & Intake
- Floor Plan – Detention Floor Plan
- Floor Plan – Public Entrance
- Floor Plan – Command/Operations
- Floor Plan – Administration
- Floor Plan – Kitchen & Laundry
- Floor Plan – 2nd Floor Mechanical Room
- Floor Plan – Evidence Storage
- Rendering – Front Perspective
- Rendering – Southwest Aerial Perspective
- Rendering – Southeast Aerial Perspective
- Rendering – Northwest Aerial Perspective
- Rendering – Northeast Aerial Perspective

6. Space Program	70
a. Program Chart	71-78
7. Existing Law Enforcement Center Renovation Narrative	79
a. Basement Renovations	80-81
b. Main Level Renovations	81-82
c. Second Level Renovations	82-85
d. Detention Mezzanine Renovations	85
e. Mechanical Floor Renovations	85
f. Structural System Renovations and Requirements	85-87

Attachments at end of section;

- Floor Plan – New Second Floor Plan

8. Staffing Analysis	88
a. Jail Design	89
b. Staffing Considerations	89
c. Standards to Consider	89-92
d. Applicability of Standards	92
e. Identifying the 24 Hour Post	93
f. Frequent Supervision	93
g. Electronic Surveillance as a Substitute	94

	h. Calculating the Shift Relief Factor_____	94
	i. Staffing Calculations_____	94-95
	j. Defining the Posts_____	96-98
9.	Costs _____	99
	a. Construction Costs_____	100
	b. Staffing_____	100-101
	c. General Funds for County Jail_____	101
	Attachments at end of section;	
	Yearly Jail Operations	
10.	Conclusion _____	102
	a. Conclusion_____	103

01

introduction

introduction

1. Introduction

The Board of Commissioners of Lewis & Clark County, Montana selected the team of Slate Architecture, Inc and Goldberg Group Architects, PC to develop the Preliminary Architecture Report (PAR) and design a new Public Safety Facility to replace the overcrowded and unsafe existing detention facility located within the Lewis and Clark County Law Enforcement Center.

Slate Architecture, located in Helena, MT, is a commercial architecture firm that is focused on government and healthcare sectors of architecture. Slate Architecture serves as the architect of record and will guide the local engineering teams as well as influence the exterior architecture of the new facility to reflect the regional Montana architecture found throughout Helena and the surrounding areas.

The Goldberg Group Architects, PC is based in St. Joseph, MO and has specialized in criminal justice architecture since 1985 with extensive architectural experience in planning, design, operations, financial planning, construction and transitioning. Goldberg Group Architects, PC has subcontracted with Weber & Associates, Inc. to assist with the PAR related to the planning, construction, and operation of a new detention facility in Helena, MT. Joe Weber of Weber & Associates has experience in all facets of criminal justice having worked in law enforcement for over 40 years completing his career as a Jail Administrator and Lieutenant with the Crawford County, MO Sheriff's Office. Mr. Weber's certifications from the U.S. Department of justice include Jail Resource Management, Law Enforcement Information-Technology Planning, and Purchasing and Managing Technology courses. Along the way he has amassed over 900 certified hours in corrections/detention training, qualifying himself to develop courses of instruction in Jail Administration, Suicide Prevention, Legal Issues for Correctional Officers and serving as Instructor for the Missouri Sheriff's Association.

The current Law Enforcement Center was built in 1984 to replace what is now the Myrna Loy Center. It has long surpassed its functional capacity of 58 beds as designed 30 years ago. The original plan called for 43 beds with 58 available to take into consideration the "peaking factor" when a spike in arrests was seen. To help alleviate the overcrowding and lack of bed space, additional beds were welded in an effort to "double bunk" inmates where possible. The new bed capacity remains at 70. The Average Daily Population (ADP) of the Lewis & Clark County Detention Center is typically above 80 inmates with at least an additional 20 held in other facilities around the state, which is a substantial cost to this county. A vast majority of people held at the Lewis & Clark County Detention Center are pretrial detainees, not convicted offenders. It is no longer feasible, appropriate nor constitutionally permitted to continue to incarcerate additional people to an already overcrowded facility. **For the safety of the people incarcerated** under the County's care, the safety of the public when decisions to arrest and detain are determined by the capacity of the detention center, and for the staff required to work in such an environment, the current Law Enforcement Center is no longer a viable solution.

In 2011, the ADP exceeded 70 inmates and it was starting to be evident that due to increased inmate population, lack of space for an increasing law enforcement (the Helena Police Department and L&C County Sheriff's Office share space) and a shortage of courtroom space that a study needed to be conducted to possibly renovate or build a new law enforcement facility. The current facility is poorly designed and as a result creates safety issues affecting inmates, staff and the general public. The planning of this 1984 jail facility was probably based upon specific dollar amount rather than a professional jail needs assessment and a consideration of effective jail designs utilizing more efficient inmate supervision methods. Currently the facility is overcrowded and does not provide sufficient staff or program space. The Elected Officials must provide the Sheriff sufficient staff for the jail to have a safe environment. Due to overcrowding, the current facility does not allow for effective separation of inmates requiring maximum security from others with lower security requirement.

On August 21, 2012, by Resolution no. 2012-116, the Board of County Commissioners created the Criminal Justice Coordinating Council (CJCC), the establishment of which was recommended by the National Institute of Corrections in their Jail and Justice Assessment Report dated May of 2011. The CJCC will be a permanent and continual Council whose responsibility it is to advise the Board of County Commissioners on the planning for, management of and evaluation of this Lewis & Clark County's criminal justice system. The CJCC established a Citizen's Advisory Council (CAC) by virtue of the authority granted to them by the County Commission to create advisory groups. The primary purpose of the CAC is to serve as a mechanism to include citizen input and recommendations as part of the CJCC's responsibility to study and then make improvements to the local criminal justice system so that it achieves the highest levels of public safety program cost and effectiveness.

This Preliminary Architecture Report outlines the need for a long awaited facility along with a probable cost of construction cost estimate associated with its construction. This study also includes planning and probable construction costs associated with the renovation of the existing Lewis & Clark Law Enforcement Facility. All design and spatial requirements set forth in this study take into consideration the minimum standards for National Fire Protection Codes, International Building Codes, Montana Title 81 Jail Standards, ADA (Americans with Disabilities Act), ACA (American Correctional Association) & PREA (Prison Rape Elimination Act).

02

existing facility

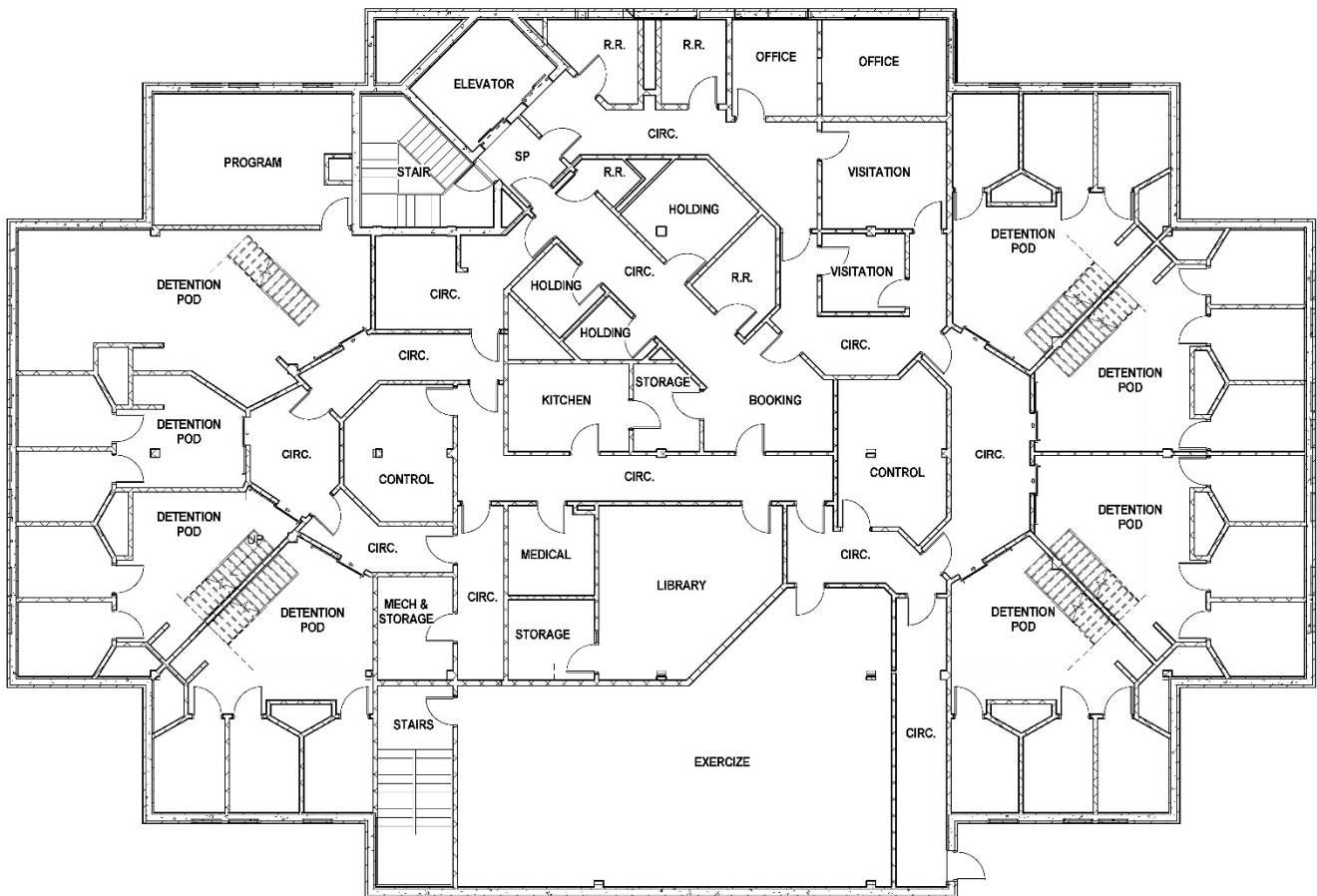
existing facility

2. Existing Facility Report

A. Overall Layout and Design

The existing 58 bed (upsized to 70) Law Enforcement Center in Lewis & Clark County Montana was built in 1984 and presents many concerns for safety and security that most out of date jails face today.

The Housing portion of the facility is designed with (8) pods for classification. Seven of these pods are cell based with the other pod having a dormitory style layout. Expansion within the existing perimeter is non-existent. Additional jail or administration space requires building expansion



Existing Jail Floor Plan

B. Vehicular Sallyport

The Vehicular Sallyport is located in the west side of the basement of the LEC and appears to be in working order. Access to the Intake area is through a long corridor and up an elevator. Typically it is best to have the Vehicular Sallyport located as close to the Intake area as possible and without stairs or elevators as this is the most common area for inmate on officer violence.

To access the adjacent Courthouse, inmates are walked outside the facility and into an unconditioned yet covered walkway. Once they are at the Courthouse the opportunity to cross paths with the public exists and there is not a secured holding area once they have arrived.



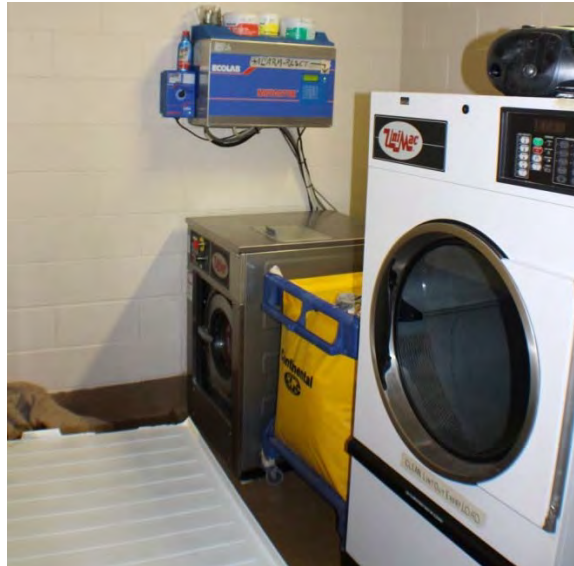
C. Kitchen

The kitchen is too small for the number of inmates and number of meals to be distributed. Additionally, it is not up to current health codes. It lacks the ability to adequately prepare enough meals to accommodate the current inmate population. Due to these issues, meals are prepared at the State of Montana Penitentiary by Department of Corrections inmates, flash frozen and sent to the Lewis & Clark County Detention Center. Meals are served by the Trustees. The location of the kitchen within the facility does not allow for ease of deliveries.



D. Laundry

The Laundry room is adequate in size. The units themselves are commercial grade and appear in good working condition. A separate room for storage of clean linens is not provided.



E. Activity Yard

The Activity Yard is centrally located and the roof is open to the outside with a security mesh covering. The openness creates issues of use during inclement weather and creates the need of snow removal within the yard. It also has created issues with contraband due to the close proximity of the adjacent street. Most of the yard is visible from the control room; however there are portions that can only be viewed via camera.



F. Program/Library

The Program / Library is centrally located on the housing floor of the facility. It has plenty of shelving for books and is equipped to serve as the video arraignment room. There is only one room so there is no ability to have several classes going on at the same time limiting the amount of programs the jail can offer the inmates



G. Booking / Holding

The Booking area of the existing facility is small in size and not able to adequately handle large volumes of Bookings. There is currently a small desk with not a lot of work room that can only handle one booking at a time.

There are (2) small holding cells and (1) Suicide watch cell which are well below Lewis and Clark County's current needs. There is a separate room for Dress-in/out and a fingerprinting room. The Inmate Property room is full and bags are hung in the hallway and are not secured. There is not secure storage for jail records and the security monitors are readily available for incoming inmates to see.



Booking Desk



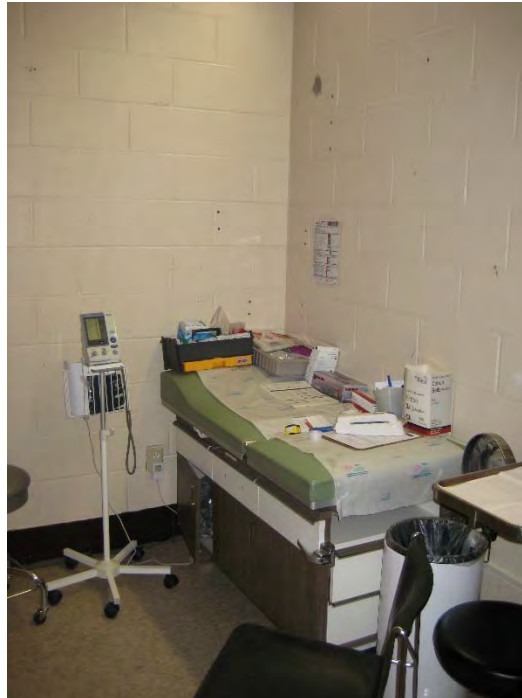
Holding Cell



Personal Property Storage

H. Medical

The facility has (1) room designated for a nurse's office / medical exam room. The equipment is inadequate and antiquated with very little storage available. The exam tables themselves are often used for storage (reference photo below). With no segregation cells provided; there is no way to isolate inmates with a contagious illness. The County contracts with SPECTRUM Medical for medical services. There is nursing coverage five days/week (approximately 40 hours) and mid-level availability (approximately 16 hours) throughout the week.



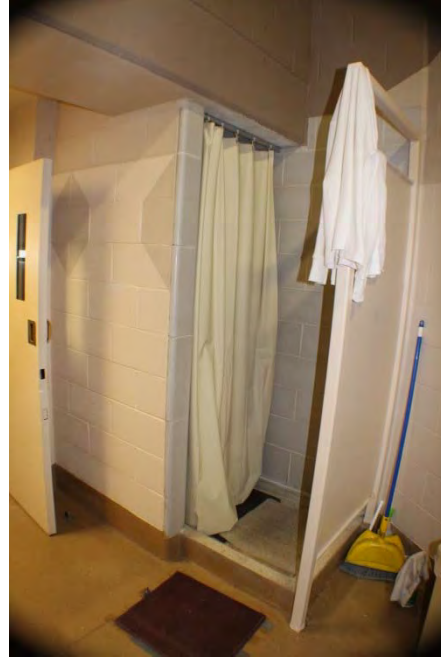
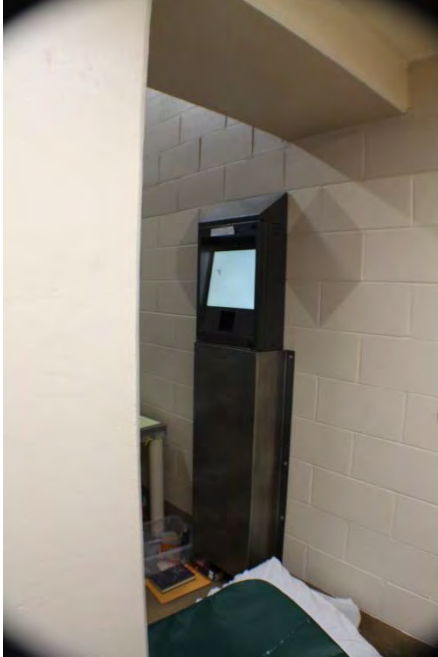
I. Visitation

There are currently two means for visitation with the inmates; video and non-contact. Three stations are available for public utilization and are located inside the Public Lobby and one station inside each Dayroom. In the non-contact visitation room, there is space for three (3) visits to happen at the same time.

There is one designated place for a contact attorney visit for a secure interview room. Yet, this space is also shared with finger printing. If the room is in use then visitation has to be arranged in an available room (such as the library) or in the corridor.

J. Dayrooms

The dayrooms are equipped with a detention grade table, inmate phone, kiosk for commissary/visits, a television and a shower. The space is sufficiently equipped and secure. Nine (9) showers have been recently renovated/retrofitted to address leaking issues. These upgrades have been completed at a cost of \$5,000 per shower.



K. Cells

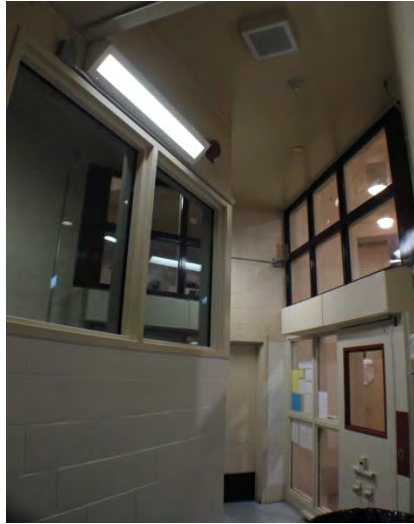
The cells are equipped with a toilet, a sink, a detention grade desk/stool, a window to the outside and a bed. Some of the cells are bunk bed units. These have been added over time after the building was built.



L. Control Room

There are two (2) elevated control rooms on the housing floor that have decent visibility of the pods and corridors. The physical size of the rooms are sufficient for the tasks performed within. The controls are antiquated and nowhere close to the technology of

today. The main complaint about these is that there is no restroom in either and anytime the officer takes a break, someone has to relieve them.



M. Square Foot Requirements

The cells are approximately 72 sf per cell and were originally designed for single occupancy. Seventy square feet (70 sf) total per cell must be provided if confinement exceeds 10 hours/day, otherwise 35 sf clear floor space is required. The cells meet both these requirements. For double bunking the cells must have 35 sf clear floor space if confinement exceeds 10 hour/day or 25 sf clear floor space if less than 10 hours. The cells meet the 25 sf clear requirement but not the 35 sf requirement meaning no inmates should be locked in their cell anytime other than night.

The Dayrooms were also sized for the cells to be single occupancy only and do not meet the minimum square footage if the cells were to be double bunked. The requirement is 35 sf/inmate and most dayrooms are about 140 sf short of meeting this requirement.

N. ADA Compliance

The existing jail does not meet ADA compliance as there are no barrier free accessible cells, toilets or showers. The Public Lobby has made some ADA accommodations. The public non-contact visitation room is not big enough for ADA compliance.

O. Cost Issues

One of the largest recently growing issues with the current Lewis & Clark County Jail is the need to board out inmates to other Counties. Until Fiscal Year 2011, the County did not need to pay out any money to other jurisdictions in order to board out inmates. During the 2012 and 2013 year they paid just \$2,070 and \$27,240, respectively. In 2014

this number jumped to \$194,650 and again in 2015 to \$232,746. With the steady increase in the volume of inmates, this number will only increase over time.

Refer to the chart on the next page for the statement from the Jail.

Outside Boarding Costs

	2014-2015	2013-2014	2012-2013	2011-2012	2010-2011	2009-2010	2008-2009
TOTALS	\$232,746.50	\$194,649.90	\$27,240.00	\$2,070.00	\$0.00	\$0.00	\$0.00

03

inmate
population

immate
population

3. Anticipated Inmate Population

A. Introduction to Modern Population Trends

The National Institute of Corrections Planning Guide notes that incarceration rates continue to rise nationwide. The publication provides some statistical information by region. It noted that in 1978, the national incarceration rate was 76 per 100,000 population, as compared with 54 for the Northeast, 49 for the Midwest, 98 for the South, and 100 for the West. The last year for which national data are available is 2005, when the national rate was 252 per 100,000 population, as compared with 178 for the Northeast, 187 for the Midwest, 341 for the South, and 235 for the West.

While this information is somewhat generalized, it is important to note that as a general rule, the need for jail space is exceeding the growth of jail space. Therefore, the problem of population management and overcrowding can be impacted by surrounding jurisdictions in the region.

Determining the size of a jail and projecting the future needs for space requires proper analysis of many different elements that all impact the jail in some form. Because some of these areas of responsibility are beyond the control of the jail administration the analysis becomes more difficult as more stakeholders are involved.

To start with meaningful data it is helpful to take a snapshot of the jail data at a particular time to determine how the jail is being used. A collection of these snapshots over regular intervals will provide trending information that is helpful in forecasting the jail's needs.

A snapshot of jail data should provide such information as:

- How many individuals are in jail?
- What is the relative proportion of misdemeanor versus felony charges/convictions?
- What percentage of jail beds does the jurisdiction devote to the sentenced population and to the pretrial population?
- For what reasons are inmates in jail for holds?
- What is the impact of probation violators on the jail?
- Which charges are most frequently represented?
- How many inmates are awaiting transfer to state prison and how long have they been waiting?
- What is the length of stay by reason for detention or by charge?

This information helps to determine average daily population, provides information on classification needs and trends, and gives an indication of the average length of stay in the facility.

To forecast the jail capacity three types of data or jail usage variables must be analyzed.

Those jail usage variables are:

1. Admissions (ADM) rate.
2. Average length of stay (ALOS).
3. Average daily population (ADP).

This data must then be adjusted by two other factors. Those adjustment factors are the peaking factor and the classification factor.

The peaking factor represents the potential for inmate population during peak times resulting from seasonal; activity, special operations, and other activity that would result in a higher than normal use of jail bed space.

The peaking factor anticipates facility demands based in part on an analysis of changes in average daily population, usually taking place during peak periods such as weekends, the end of the month, and the summer months when jail populations tend to climb. The jail must be prepared to have space available during such peak periods. Adjustments for peak periods are made by analyzing the high inmate counts against the average daily population to forecast the anticipated peak population.

The classification factor takes into account the flexibility needed to separate populations by characteristics such as gender, risk level, mental health, physical health, and disciplinary segregation. While the entire jail population may not have reached maximum capacity, any given classification may exceed capacity if the need for that classification isn't properly analyzed.

There is no single formula that can assure a jurisdiction that it will build adequate space for just the right number of additional beds. One rule of thumb is to apply a classification adjustment factor for each of the primary classification categories.

There are four main statistical forecasting models that meet acceptable industry standards. Those models are the regression (causal) model, rate and ratio model, jail exit analysis, and time-series model. The time series model has been found to be superior to the other models for predictive accuracy. This analysis has employed the time series model.

In tracking trends involving the average daily population, average length of stay, and number of admissions over a period of time, the jail's needs can be predicted through the application of data provided by the series averages provided through analysis of the numbers for each usage variable.

The average daily population is the target number for this analysis as it provides information as to the jail usage in terms of needed space. If the ADP numbers are not available they can be calculated by using a simple formula involving the average length of stay and the number of bookings. This also shows that movement in the trends of either of these numbers can have an impact on the future ADP and need for future jail space.

B. Description of the Anticipated Inmate Population

In order to determine the need for jail space for the anticipated jail population for Lewis & Clark County, data was supplied by the Lewis & Clark County Jail.

C. Projected Future Capacity Needs

An examination of the growth history for the current facility revealed a significant growth rate from 1991 to 2011. The average daily population increased from 35 inmates in 1991 to 81 inmates in 2011. This represents an overall growth rate of 131.4% or an average annual rate of 6.6%.

1991 ADP	35
2011 ADP	81
Growth	46
Growth Percentage	131.4%
Annual Growth	6.6%

The current average daily population is 116. By applying this average annual growth rate of 6.6% to the current average daily population, a growth projection has been reached estimating the needed jail space over the next 20 years. Those calculations include a 15% peaking factor to compensate for spikes in activity resulting in temporary population increases.

Annual Growth History (1991-2011)

6.60%

	<u>Current Trends</u>		<u>Reduction due to Diversion</u>	
	ADP	85% Rule	ADP	85% Rule
2015	116	136	116	136
2016	124	146	124	146
2017	132	155	132	155
2018	141	166	138	162
2019	150	176	144	169
2020	160	188	150	176
2021	171	201	156	184
2022	182	214	162	191
2023	194	228	168	198
2024	207	244	174	205
2025	220	259	180	212

Without diversion in place, the ADP projection indicates a need for 259 beds by 2025 allowing the necessary margin for a peaking factor of 15%. A peaking factor is used to plan for additional inmate capacity over and above the working capacity during an event such as a demonstration at the Capital. A jail of this size would accommodate the projected needs during that 10 year span while allowing some time for rehabilitation and other community oriented programs to develop and generate statistical data that will indicate the impact of such programs on the jail's future needs from that point forward.

D. Inmate Population and Classifications

The proposed facility would be an adult detention facility that would provide for the classification of inmates based on sex, threat level, and special needs containing multiple pods of varying sizes to provide maximum flexibility to accommodate each classification. Because each pod contains confinement cells, the capacity to further classify inmates can be expanded to successfully segregate the different classifications within the pod if necessary. In addition to the general housing area there will be a booking/holding area that will provide for close observation of at-risk inmates who may demonstrate critical risk factors such as suicidal ideation.

E. Classification

To alleviate any concern of a lawsuit, it is mandatory that all inmates admitted to jail facilities be subject to a meaningful classification process in assignment to housing, programs and related activities.

04



site selection

site selection

4. Site Selection

A. Site Selection

The current Lewis & Clark County Law Enforcement Center has many flaws due to space (interior and exterior), parking and security concerns. It desperately needs to be replaced. The current Law Enforcement Center is landlocked by the Courthouse and adjacent residential areas. After the current facility was created in 1984, no future planning was considered for expansion. As a result, the only available space to create an addition to the current facility is to increase in height, purchase adjacent lots, build on the "Commissioner's Garage" lot or create an addition north of the Courthouse (which would obliterate the sense of grand entry to the beautiful courthouse and remove a tremendous amount of parking, neither of which can be afforded). All these reasons coupled with the issues of the current jail that are outlined in this report have led to the recommendation by the design team to build a new facility that is a complete Public Safety Facility and includes the following spaces:

1. Detention Facility (and support spaces)
2. Sheriff's Office
 - a. Patrol Division
 - b. Investigative Division
 - c. Evidence
3. Civil
4. Records
5. Video Visitation
6. Video Arraignment Courtroom
7. Command/Operations
8. Maintenance/Evidence Storage Building

When the Slate Architecture/GGA team was selected by Lewis & Clark County they were asked to investigate the option of either adding to and renovating the existing Law Enforcement Center (LEC) or creating a new facility on a Greenfield Site (or Brownfield site as some are available). Following is a list of options, for both scenarios created during Workshop #1 held at the Emergency Operations Center on October 27 and 28, 2014.

The existing LEC site presents the following pros and cons:

- Pros:
 - a. Closer proximity to courthouse
 - b. Infrastructure mostly in place
- Cons:
 - a. Too tight of a site for building footprint resulting in having to add floors to make the detention bed count feasible.
 - b. Parking Concerns. Parking is already an issue at this location. The Sheriff's Office cannot hold a department wide meeting at the current LEC due to the lack of parking space for all staff, courthouse staff and visiting public.

- c. Additional open space available to construct a new detention facility is limited to the Commissioner's Garage area or the parking lot north of the Courthouse. Parking is at a premium at this site and land in addition to that available from the Commissioner's Garage would need to be purchased as well.
- d. Maintaining Sheriff's Office operations in the LEC still creates response time delays due to having to circumnavigate traffic within Helena when responding to incidents outside of city limits and other locations in the county.
- e. Even with an expansion, the Helena Police Department and Sheriff's Office will be required to continue to share office space and resources. While this continues to promote a great collaboration opportunity between both departments, it does not allow for needed and adequate growth of each department.
- f. No additional future expansion or growth is readily available.

A Brownfield Site presents the following pros and cons:

- Pros:
 - a. Ability to renovate portions of the existing Law Enforcement Center for additional court space and office use.
 - b. Located on the outskirts of the City of Helena allows for easier access and faster response times for Sheriff's Office Deputies.
 - c. Parking to serve all necessary needs of the Public Safety Facility.
 - d. Opportunity to expand the facility or allow future partner institutions (i.e. Fire Station for example) to be on the "campus."
- Cons:
 - a. Higher overall project costs due to allowance for utility extensions, site purchase and all new construction.
 - b. Site would have to be large enough for parking and expansion capabilities therefore limiting locations within the city limits.
 - c. Expense of transportation to bring inmates to the Courthouse if their hearing requires more than a video arraignment.

After taking into consideration all the facts, the Committee approved the idea of pursuing a site other than the existing Law Enforcement Center area. The Lewis & Clark County Commissioners agreed with this decision and as such, sites with a minimum of 15 acres were considered. The County Commissioners requested, via a news article in the *Helena Independent Record* that the County was considering any and all parcels with at least 15 acres available and the ability to readily connect to the City of Helena infrastructure.

The middle of November 2014 was established as the cutoff date to accept land proposals from the public. From a combination of land already in the queue plus additional parcels surfacing as a result of the Commissioner's request, 10 sites became

available. All but four (4) were removed for a combination of reasons mostly due to three main variables: (1) too small, (2) too far or deemed too costly from infrastructure and (3) general access or time of day access concerns.

Further vetting the four sites resulted in three locations rising to the top to make it to the final round of the site selection. The sites were; (1) a 33 acre City of Helena parcel located north of Custer Avenue and directly accessed off of the Frontage road paralleling Interstate 15, (2) a 41 acre Greyn family parcel directly east of the City of Helena lot and (3) a collaboration of three land owners situated along Sanders Street between Custer and Cedar Avenues with a combined total size of all three lots at 21 acres.

A synopsis of each site is as follows: *(Full matrix for each site included at the end of this section)*

1. **City of Helena.** This 33 acre parcel is a Brownfield site in use by the City of Helena Public Works as a storage and work area. There are construction materials (concrete, culverts, etc...) on the site and it is depressed approximately 10'-15' through the middle of the site. This location is not in the floodplain and the depression is not deep enough to warrant concern of flooding. Utilities are not available along the Frontage Road and as such will need to be connected to at a point nearest the newly constructed hotel. All new utilities will extend along the Frontage Road to serve the site. Access to and from the site will be easily permitted off of the Frontage Road.
2. **Greyn Family.** The 41 acre lot is directly east of the City of Helena and due north of the City of Helena Wastewater Treatment Plant. This is a Greenfield site devoted to pasturing cattle. It is level with power (necessitating a powerline easement) running through south side. There are no services to this site so infrastructure will be required to be established via an easement through the City of Helena site or straight south through an adjoining Greyn Family parcel.
3. **Sanders Street Site.** This 21 acre composite site has been offered by a collaboration of three landholders each holding a parcel of varying size to form a long narrow area of construction situated between Sanders Street and Interstate 15. The southern and largest parcel of the three sites is currently in use as a building materials dumping/sorting ground that will be cleaned up by the owners. The remaining two lots are Greenfield sites. All infrastructure needed to serve this site is in place along Sanders Street. The northern border and west across Sanders Street is bound by retail shops. Stormwater ponds border the site(s) south and directly east.

Selected site: Given the above information, the **City of Helena** site is the selected site. This site was selected over the Greyn Family site since it has easier access off the Frontage Road and infrastructure installation costs will not be as high. Although access and infrastructure are readily available to the Sanders Street site, the selection committee determined that this site is better suited to remain a business location and serve the adjacent retail area. The City of Helena site offers a lower depression area

that will be utilized to help bring the scale of the building down. An agreement between Lewis and Clark County and the City of Helena is under consideration at this time. Locating the Public Safety Facility at this site will allow a faster response time (further increasing the chances of saving lives

B. Civil Engineering

GENERAL

The facility is proposed to be constructed on the City of Helena property northeast of the Custer Interchange. The proposed site has historically been used by the City of Helena to dump debris and waste from Park and Road maintenance activities. In addition, a portion of the site is used as a gravel pit. Most of the site appears to be disturbed and portions of the site have been excavated to a depth of up to 15 feet below the elevations of the adjacent properties. An overhead power line is also located along the adjacent southern property boundary. In addition, debris and equipment are stored at several locations across the site.

As a basis for design of roads, water, and wastewater we have assumed that up to 288 inmates and 60 staff will be on-duty at any given time.

Water Infrastructure Evaluation

The facility is located outside of the existing City of Helena water service area. Therefore, extension of the City water mains will be required to provide adequate water supply for the facility. The proposed facility is assumed to require up to 3750 gallons per minute (gpm) to be available at the fire hydrants near the site. We anticipate that up to four (4) fire hydrants will be required around the perimeter of the facility. In addition, we have assumed that at least one 8-inch diameter fire service line will be required to provide fire flows to the building fire suppression system. In order to provide adequate fire flows and to provide a redundant water supply connection we anticipate that two 12-inch diameter water mains will be required. Under this scenario, one water main will connect to an existing 12-inch water main near the north end of Queen Anne Street. The other new water main will connect to another existing water main located within Washington Street. Based on our understanding of the static pressures and available water in this area of Helena, the combination of the two water main connections will likely provide adequate fire flow for the facility. An alternate to this approach would be to provide water using only one connection. This approach may provide the necessary fire flows, however, it would not provide a redundant connection in the event of a water main failure or maintenance activity. Based on conversations with the City of Helena Engineering Department, a redundant water supply connection will likely be required by the City.

Domestic service is anticipated to be provided via a 4 inch diameter water service line which will be routed through the facility mechanical room. The following table shows the potential domestic water use for the facility.

Projected Water Use				
Item	Units	Average Day Use/Each	Average Day Use (GPD)	Peak Hour (GPM)
Inmate	288	100	28,800	140
Staff	60	35	2,100	10.2
Totals	348	135	30,900	150.2

Wastewater Infrastructure Evaluation

The facility is located outside and down gradient of the existing City of Helena wastewater service area. Therefore, the most likely scenario for a connection to the City wastewater collection and treatment system would be to provide a new wastewater lift station and force main. Based on an assumption that 95 percent of the domestic water will eventually become wastewater, we have assumed that the flows presented in following table would be used to size the proposed wastewater lift station and associated force main. For the purposes of estimating costs we have assumed that a redundant pump lift station connection to a 6-inch diameter force main will be required to provide adequate wastewater pumping capability.

Projected Wastewater Flows				
Item	Units	Average Day Use/Each	Average Day Use (GPD)	Peak Hour (GPM)
Inmate	288	95	27,360	133
Staff	60	33.25	1,995	9.7
Totals	348	128.25	29,355	142.7

Transportation/Parking/Site Access Evaluation

Based on the understanding of the site, proposed use, and anticipated requirements to obtain an approach permit, we have performed a brief analysis of the anticipated transportation requirements for the project. We have assumed that over 95% of the incoming site traffic will approach from the **south**. We have also assumed that the total of three (3) staff shift changes per day, inmate transports, and miscellaneous deliveries would result in less than 300 vehicles per day traveling to and from the site. Based on this assumption, we do not believe improvements to the frontage road will be required to obtain an approach permit from the Montana Department of Transportation. However, due to the proposed water and wastewater piping that is anticipated to be

routed along and within the Frontage road, we believe approximately 2,000 linear feet of the frontage road will still require repair after pipeline installation.

The facility will provide up to 207 parking stalls for staff and visitors. In the designated public parking area there will be a total of 116 parking stalls with 5 being barrier-free stalls. In the designated staff parking area there will be a total of 91 parking stalls with 3 being barrier free stalls. The attached Exhibit 1 – Proposed Site Plan, shows the overall conceptual site layout.

Stormwater

Based on the amount of impervious surfaces, buildings, pavement, concrete, etc., we have assumed that all stormwater from the facility will be held in an on-site stormwater retention pond. For the purposes of evaluation, we have assumed that the stormwater retention facility will be sized to retain the 100 year, 24 hour storm, or a 2.9 inch rain event. Based on this type of rain event the total retention stormwater pond will need to hold 2.94 acre-feet of water. Due to the relatively gravelly subsoil conditions at the site, we assume that the pond water will be emptied by infiltration between rainfall events. Additional design details will be required in a later phase of the project.

Floodplain

Based on our research, the site is not located within the known 100-year or 500-year floodplain boundaries. However, because the site is located in an old gravel pit, the ground surface around the buildings will likely be approximately 10 feet below adjacent property elevations. There are a few irrigation ditches in the area and with that additional water in the area, the facility could be vulnerable to rising groundwater during very wet precipitation years. A geotechnical investigation will be required to determine the depth to groundwater.

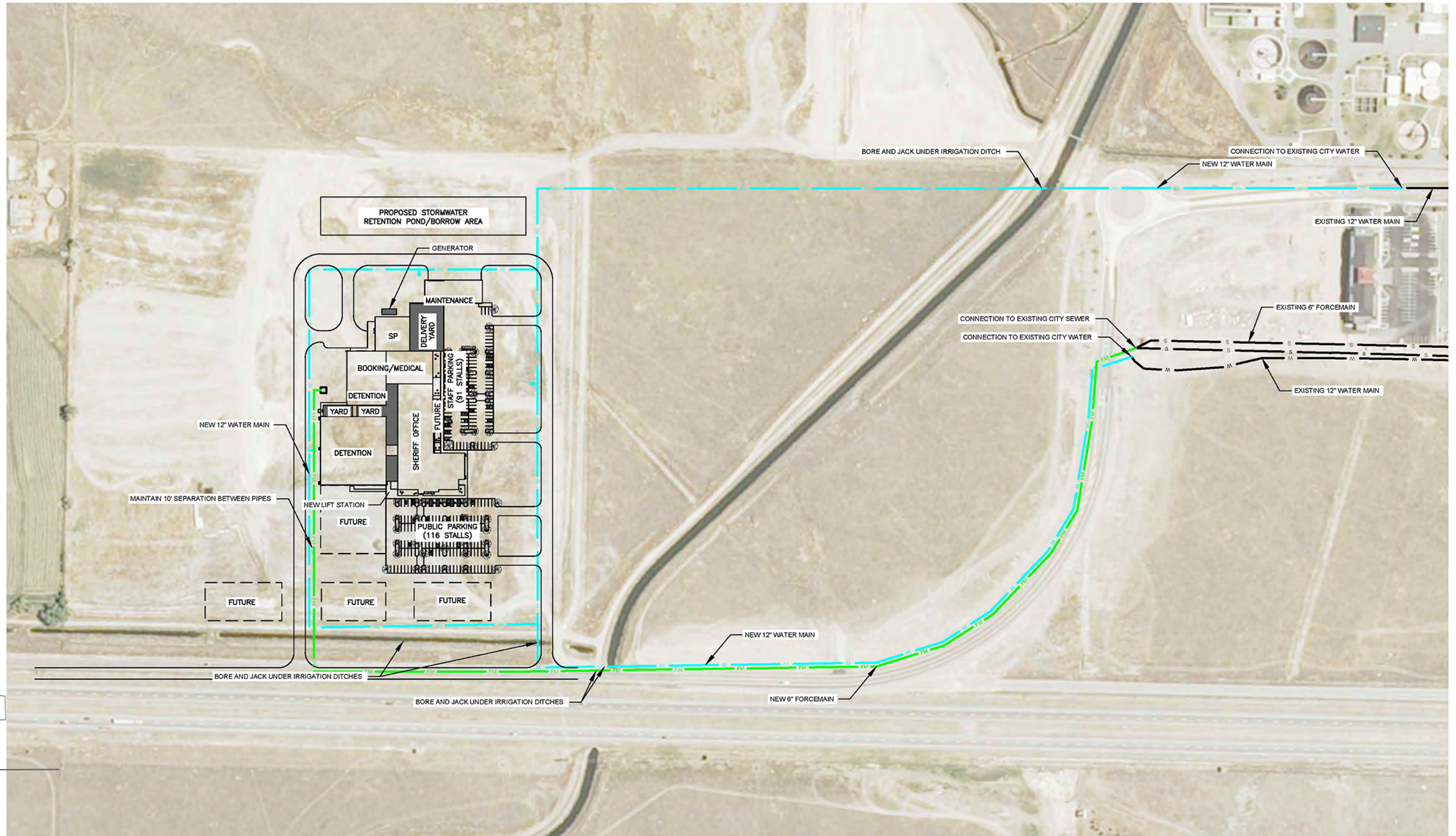
C. Preliminary Site Plan





CITY OF HELENA SITE IMAGES





UTILITY PLAN





Common Goals & Objectives		Potential Score	Assigned Score	Weight	Total	Scoring Notes	Reviewer Notes
1.0	Why is this site identified best suited to align the mission & vision of the Sheriff's Office with its goals and objectives.	10	8	5	40	Does the answer address the desire of the community to help us further the Mission and Vision through the alignment of community resources? Is the community fully aware of the need with respect to this site location?	Site offers access in two directions to I-15 (via Custer Ave interchange) and the Frontage Road north to Sierra Road and ultimately Lincoln Road. Utilities are in the immediate area.
2.0	What makes this site best strategically positioned to facilitate the fulfillment of the Lewis and Clark County Sheriff's office vision?	10	5	5	25	Does the Helena community understand the resources important to successfully fulfilling our vision.	Access is a key factor. Site size is adequate to suit building/site layout
3.0	Is this site part of a current Master Plan for current and future development?	10	10	5	50	Is this site (or portions thereof) under consideration by others? High score indicates - "no"	No. A study is underway with the City of Helena to consider all or part of this site for water treatment.
4.0	What is the greatest short-term obstacle or challenge that the Detention Center will face if this site is chosen? Long-term challenge?	10	10	4	40	Does the community objectively identify challenges? If yes - higher score.	Infrastructure installation. No long term challenges.
4.1	How would you recommend we overcome those challenges stated above (4.0)?	10	10	4	40	A low score reflects challenges that may not appear to be overcome by the answers provided.	Partnership with City of Helena
5.0	What are the views into the site from neighborhoods, arterials?	10	8	4	32	Public perception of what a jail "looks" like and how it will be visibly viewed from outside the site	Neighbors to the north but approximately a quarter mile away. East and south is pasture land. West is from Frontage Road that parallels I-15.
5.1	What are the views out from the site?	10	10	4	40	Surroundings are easily viewable for staff.	Neighbors to the north but approximately a quarter mile away. East and south is pasture land. West is the Frontage Road that parallels I-15.
6.0	Anticipated community's support, buy in (as a whole) and an aggregate sense of the owner to partner with the County to build on this site.	10	10	5	50	Do opinions or letters of support reflect a community wide perspective? Do they reflect individuals of influence that can help further the projects efforts in the Helena community? This score reflects all of these concerns as a whole.	TBD. City of Helena is open to selling. Public anxiety of this site likely to be lowest of all.
Total Goals & Objectives Score:		80	71	36	2556		
Common Goals & Objectives Weighted Average:				5	12780		

Transportation		Potential Score	Assigned Score	Weight	Total	Scoring Notes	Reviewer Notes
1.0	Identify distance from Courthouse to potential site.	10	6	5	30	How far from the Courthouse is the site? What is the route to take and are there alternates?	3.5 miles via Custer to Cedar exit then on N. Last Chance Gulch
1.1	How many physical stops (stop signs, stop lights) exist between the Courthouse and this site?	10	6	5		Confirm route and verify that obstructions are minimal.	Stop signs - 7; Stop lights - 6
2.0	Noise of adjacent transportation means (railroad, airline, interstate)	10	10	4	40	Where is the site located in reference to potentially noise level disturbances	interstate traffic
3.0	Distance for Emergency Medical Services from site	10	4	5		Is the site easily accessible for emergencies?	Easily accessible. Distance = approximately 4.5 miles
4.0	Is a shuttle, bus and or taxi stop available nearby?	10	1	5	5	When inmates are released, they are on their own. Many do not have anyone to pick them up or take them home.	Not currently.
Total Transportation Score:		50	27	24	648		
Transportation Weighted Average:				4	2592		

Property/Physical Building Site		Potential Score	Assigned Score	Weight	Total	Scoring Notes	Reviewer Notes
1.0	What is the exact location of the building site(s) being recommended /offered for consideration? Provide a map of the location(s).	10	8	5	40	Easy access on level ground will be ideal.	North side and near east property line. Set down in existing gravel pit. Can be built up as necessary/required.
2.0	Fully describe the sites attributes. Provide total size of site (acreage), natural or manmade barriers to development, environmental concerns, soil types/engineering reports, etc.	10	6	4	24	Is the site is on level ground and offers future expansion potential? Some variation is site attributes are acceptable. Completed geo tech report and environmental impact studies completed will be of benefit.	33.8 acres provides multiple opportunities for growth or additional county support functions. Current gravel pit and used for materials storage. No trees and all grassland.
3.0	Are all of the services and utilities currently available to this building site?	10	2	3	6	If utilities are already in place, a significant burden to L&C County will be lessened. A medium score would show that some utilities are in place or at least close to the site.	No. Anticipated services are along the Frontage Road. City of Helena WWTF is south of the property.
3.1	If not, what is the feasibility and cost associated with each service/utility being made available to this site?	10	6	4	24	Utility expansion for a facility this size will be expensive. Will the site/City of Helena offer assistance to bring utilities on to the site?	TBD
3.2	Timeframe to accomplish?	10	4	3	12	Within six months should be maximum. Anything longer will result in a lower score.	?
4.0	What local/regional zoning regulations pertain to this location?	10	10	3	30	City of Helena has jurisdiction. Confirm.	B-2 (NP). Will need to go through a Zoning change.
5.0	If this site offers an existing structure(s), please explain this sites(s) advantage(s) over a new construction (or partial) and how such costs are offset by this site? Demolition expense?	10	10	1	10	If an existing building is provided, how difficult will it be to renovate/modify/add to the building? Demolish instead? Cost associated with demolition?	NA
6.0	Are there any concerns (environmental or otherwise) related to this site that would require remediation of said concerns before the site could safely and legally be developed? Is this site a Brownfield development site?	10	6	3	18	Brownfield sites are acceptable. LEED points will be high if utilized. Will the proposer augment the resources required to make sure this site is buildable?	Potentially. Study and geotech underway by City of Helena.
6.1	Has an EPA study been conducted on the site?	10	2	3	6	Score medium if one has been completed. Score high if completed and no issues. Low score if not conducted. Will jurisdiction assist with the expense of making this a "clean site?"	?
7.0	Number of traffic barriers (stops, turns etc.)	10	10	4	40	The fewer stops and turns the easier it will be for HPD, Sheriff's office and other jurisdictions to access the site.	Thirteen (13) total
7.1	Total distance to site from major arterial roadway (I-15).	10	7	5	35	Is it adjacent to a major thoroughfare? Do visitors need to travel for some time/distance, through a residential area, before arriving? The shorter the distance the better.	Approximately 0.50 miles
8.0	What is the office parking availability? For staff? Public? Arresting officers (other jurisdictions)	10	10	4	40	Is parking easily divisible (and signed appropriately) to direct site users?	Will fit within site
8.1	Definite and isolated areas of site access are available.	10	10	3	30	Separate access between public and private available?	Yes
8.2	What are the Public access options?	10	10	5	50	Ability to direct visitors to designated parking areas.	Off of the Frontage Road
8.3	What are the Private/staff access options?	10	10	5	50	Dedicated staff parking is required.	Off of the Frontage Road
8.4	What service routes are available for access?	10	10	5	50	Service routes that do not intersect either public or private/staff routes must be available.	Off of the Frontage Road
9.0	Is this site susceptible to environmental concerns/natural disasters such as flooding, fault lines, etc.?	10	8	5	40	Floodplain construction will not be allowed.	Not in floodplain
10.0	Is there ample space for immediate and future expansion of the project site?	10	10	5	50	Expansion of the is likely necessary. The land will need to be available to support that expansion.	Abundant room for expansion
10.1	Are there accessible resources located immediate adjacent or near this site (bail bondsmen, attorney's offices, restaurants, etc...) that will support the detention facility?	10	4	3	12	Are partner businesses located within easy access to the site?	Not immediately adjacent but close.
11.0	Explain the merits of this site(s) and how its physical infrastructure endorses or supports the implementation of the L&C County Sheriff's Office.	10	6	4	24	What does this site have to offer over and above other sites?	Great access to I-15, City of Helena and the north Valley.
Total Property Physical Building Site Score:		200	149	77	11473		
Property/Physical Building Site Weighted Average:				5	57365		
			TOTAL		72737		

1. Assigned Score: 2, 4, 6, 8, or 10
 - 0 - Not Applicable or No Intent
 - 2 - Does little to enhance the Detention Facility project
 - 4 - Acceptable but will require more effort on the part of Lewis and Clark County
 - 6 - Good intent by to provide needed resources
 - 8 - High priority supported by Helena and Lewis & Clark County
 - 10 - Enhances/exceeds the mission of the L&C County Sheriff's office

2. Weighted Score: 1-5
 - 0 - No effect or negative value
 - 1 - Unlikely to offer value to the project
 - 2 - Little value to support the project
 - 3 - Necessary to support the project
 - 4 - Required to fulfill project
 - 5 - Enhances the mission/vision



Summary

Primary Information

Property Category: RP Subcategory: Real Property
 Geocode: 05-1888-17-1-01-25-0000 Assessment Code: 0000029853
 Primary Owner: Property Address:
 CITY OF HELENA ST
 316 N PARK AVE
 HELENA, MT 59601-5059 COS Parcel:

NOTE: See the Owner tab for all owner information

Certificate of Survey:
 Subdivisions:
 Legal Description:
 S17, T10 N, R03 W, PT SW NE
 Last Modified: 9/27/2014 6:05:58 PM

General Property Information

Neighborhood: 211 Property Type: EP - Exempt Property
 Living Units: 0 Levy District: 05-048702-0102
 Zonings: Ownership %: 100
 Linked Property: No linked properties exist for this property
 Exemptions: No exemptions exist for this property
 Condo Ownership: General: 0 Limited: 0

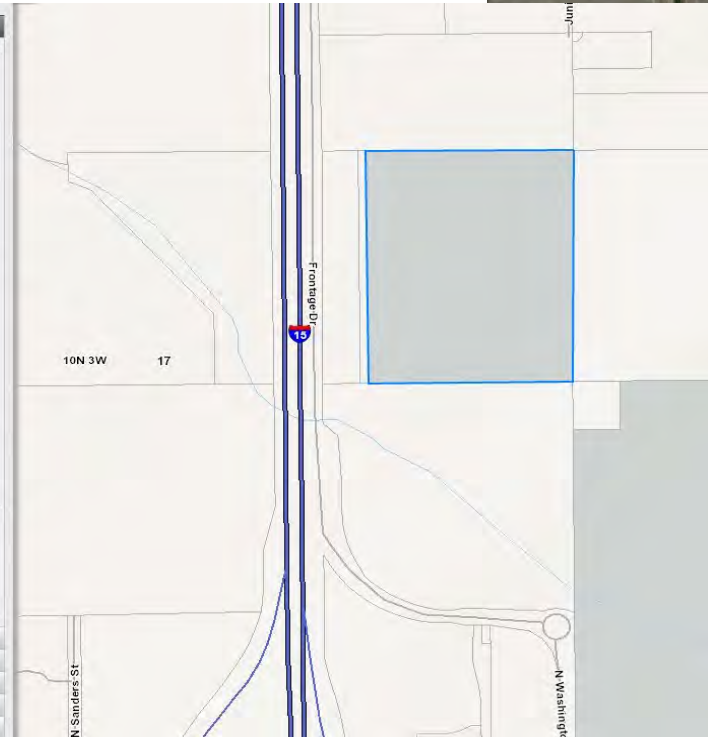
Property Factors

Topography: 1 Fronting: 0 - None
 Utilities: 0 Parking Type:
 Access: 0 Parking Quantity:
 Location: 0 - Rural Land Parking Proximity:

Land Summary

Land Type	Acres	Value
Grazing	0.000	00.00
Fallow	0.000	00.00
Irrigated	0.000	00.00
Continuous Crop	0.000	00.00
Wild Hay	0.000	00.00

Owners
 Appraisals
 Market Land Info
 Dwellings
 Other Buildings/Improvements





Common Goals & Objectives		Potential Score	Assigned Score	Weight	Total	Scoring Notes	Reviewer Notes
1.0	Why is this site identified best suited to align the mission & vision of the Sheriff's Office with its goals and objectives.	10	10	5	50	Does the answer address the desire of the community to help us further the Mission and Vision through the alignment of community resources? Is the community fully aware of the need with respect to this site location?	Site offers easy access in two directions to I-15 (Cedar and Custer) as well as easy intown access. Utilities are stubbed in and ready along Sanders Street
2.0	What makes this site best strategically positioned to facilitate the fulfillment of the Lewis and Clark County Sheriff's office vision?	10	10	5	50	Does the Helena community understand the resources important to successfully fulfilling our vision.	Easy access is a key factor. Site size is adequate to suit building/site layout
3.0	Is this site part of a current Master Plan for current and future development?	10	10	5	50	Is this site (or portions thereof) under consideration by others? High score indicates - "no"	On the edge of a current development. Talk of a future restaurant or hotel on the north side of the parcel (Wall land)
4.0	What is the greatest short-term obstacle or challenge that the Detention Center will face if this site is chosen? Long-term challenge?	10	6	4	24	Does the community objectively identify challenges? If yes - higher score.	High visibility location may concern public
4.1	How would you recommend we overcome those challenges stated above (4.0)?	10	10	4	40	A low score reflects challenges that may not appear to be overcome by the answers provided.	Good community discussion/ education
5.0	What are the views into the site from neighborhoods, arterials?	10	2	4	8	Public perception of what a jail "looks" like and how it will be visibly viewed from outside the site	Very transparent. Sanders on west and I-15 on east
5.1	What are the views out from the site?	10	8	4	32	Surroundings are easily viewable for staff.	Sportsman's Warehouse/const. yard/residential on the west, Scenic Brew/strip mall on the north, I-15 on the east (buffered by lagoon) and City of Helena holding ponds on the south
6.0	Anticipated community's support, buy in (as a whole) and an aggregate sense of the owner to partner with the County to build on this site.	10	2	5	10	Do opinions or letters of support reflect a community wide perspective? Do they reflect individuals of influence that can help further the projects efforts in the Helena community? This score reflects all of these concerns as a whole.	TBD. Owners group (3) is ready to make happen. With location adjacent to future retail possibilities, may be difficult sell to community.
Total Goals & Objectives Score:		80	58	36	2088		
Common Goals & Objectives Weighted Average:				5	10440		

Transportation		Potential Score	Assigned Score	Weight	Total	Scoring Notes	Reviewer Notes
1.0	Identify distance from Courthouse to potential site.	10	9	5	45	How far from the Courthouse is the site? What is the route to take and are there alternates?	2.58 miles via N. Last Chance Gulch
1.1	How many physical stops (stop signs, stop lights) exist between the Courthouse and this site?	10	8	5		Confirm route and verify that obstructions are minimal.	Stop signs - 5; Stop lights - 4
2.0	Noise of adjacent transportation means (railroad, airline, interstate)	10	9	4	36	Where is the site located in reference to potentially noise level disturbances	Interstate traffic, airline flight path
3.0	Distance for Emergency Medical Services from site	10	8	5		Is the site easily accessible for emergencies?	Easily accessible. Distance = 3.4 miles
4.0	Is a shuttle, bus and or taxi stop available nearby?	10	8	5	40	When inmates are released, they are on their own. Many do not have anyone to pick them up or take them home.	Not currently, Kmart close. Can be added.
Total Transportation Score:		50	42	24	1008		
Transportation Weighted Average:				4	4032		

Property/Physical Building Site		Potential Score	Assigned Score	Weight	Total	Scoring Notes	Reviewer Notes
1.0	What is the exact location of the building site(s) being recommended /offered for consideration? Provide a map of the location(s).	10	10	5	50	Easy access on level ground will be ideal.	North side (Wall) of combined parcel is low and fill will likely be needed. South North (Wall Property) = 11.6 ac.; Middle (Shulke Property) = 4.4 ac; South (Skinner Prop) = 11.03 ac
2.0	Fully describe the sites attributes. Provide total size of site (acreage), natural or manmade barriers to development, environmental concerns, soil types/engineering reports, etc.	10	9	4	36	Is the site is on level ground and offers future expansion potential? Some variation in site attributes are acceptable. Completed geo tech report and environmental impact studies completed will be of benefit.	
3.0	Are all of the services and utilities currently available to this building site?	10	9	3	27	If utilities are already in place, a significant burden to L&C County will be lessened. A medium score would show that some utilities are in place or at least close to the site.	Stubbed in when Sanders Street was added
3.1	If not, what is the feasibility and cost associated with each service/utility being made available to this site?	10	4	4	16	Utility expansion for a facility this size will be expensive. Will the site/City of Helena offer assistance to bring utilities on to the site?	Extend into site from Sanders Street
3.2	Timeframe to accomplish?	10	9	3	27	Within six months should be maximum. Anything longer will result in a lower score.	?
4.0	What local/regional zoning regulations pertain to this location?	10	10	3	30	City of Helena has jurisdiction. Confirm.	Wall- B-2 (NP); Shulke/Skinner - CLM (CUP)
5.0	If this site offers an existing structure(s), please explain this sites(s) advantage(s) over a new construction (or partial) and how such costs are offset by this site? Demolition expense?	10	10	1	10	If an existing building is provided, how difficult will it be to renovate/modify/add to the building? Demolish instead? Cost associated with demolition?	NA
6.0	Are there any concerns (environmental or otherwise) related to this site that would require remediation of said concerns before the site could safely and legally be developed? Is this site a Brownfield development site?	10	10	3	30	Brownfield sites are acceptable. LEED points will be high if utilized. Will the proposer augment the resources required to make sure this site is buildable?	Yes. Underway currently.
6.1	Has an EPA study been conducted on the site?	10	6	3	18	Score medium if one has been completed. Score high if completed and no issues. Low score if not conducted. Will jurisdiction assist with the expense of making this a "clean site?"	?
7.0	Number of traffic barriers (stops, turns etc.)	10	9	4	36	The fewer stops and turns the easier it will be for HPD, Sheriff's office and other jurisdictions to access the site.	Nine (9) total
7.1	Total distance to site from major arterial roadway (I-15).	10	10	5	50	Is it adjacent to a major thoroughfare? Do visitors need to travel for some time/distance, through a residential area, before arriving? The shorter the distance the better.	Approximately 0.25 miles
8.0	What is the office parking availability? For staff? Public? Arresting officers (other jurisdictions)	10	9	4	36	Is parking easily divisible (and signed appropriately) to direct site users?	Will fit within site
8.1	Definite and isolated areas of site access are available.	10	10	3	30	Separate access between public and private available?	Yes
8.2	What are the Public access options?	10	10	5	50	Ability to direct visitors to designated parking areas.	Off of Sanders Street
8.3	What are the Private/staff access options?	10	10	5	50	Dedicated staff parking is required.	Off of Sanders Street
8.4	What service routes are available for access?	10	10	5	50	Service routes that do not intersect either public or private/staff routes must be available.	Off of Sanders Street
9.0	Is this site susceptible to environmental concerns/natural disasters such as flooding, fault lines, etc.?	10	9	5	45	Floodplain construction will not be allowed.	Verify
10.0	Is there ample space for immediate and future expansion of the project site?	10	9	5	45	Expansion of the is likely necessary. The land will need to be available to support that expansion.	With inclusion of the north parcel, site is easily expandable. With middle and south lots expansion will be tight.
10.1	Are there accessible resources located immediate adjacent or near this site (bail bondsmen, attorney's offices, restaurants, etc...) that will support the detention facility?	10	10	3	30	Are partner businesses located within easy access to the site?	Yes. Adjacent strip mall (and those under consideration) will provide plenty of opportunity
11.0	Explain the merits of this site(s) and how its physical infrastructure endorses or supports the implementation of the L&C County Sheriff's Office.	10	10	4	40	What does this site have to offer over and above other sites?	Great access to I-15 and City of Helena. Infrastructure connections are readily available.
Total Property Physical Building Site Score:		200	183	77	14091		
Property/Physical Building Site Weighted Average:				5	70455		
TOTAL					84927		

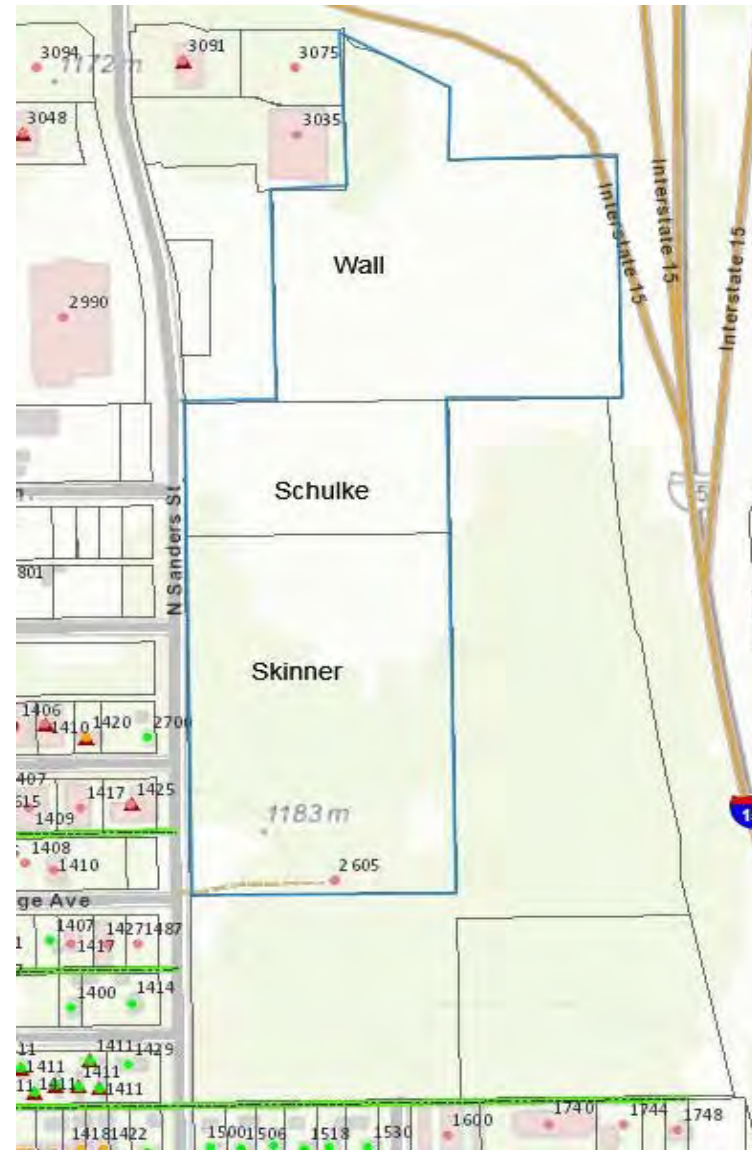
1. Assigned Score: 2, 4, 6, 8, or 10
 - 0 - Not Applicable or No Intent
 - 2 - Does little to enhance the Detention Facility project
 - 4 - Acceptable but will require more effort on the part of Lewis and Clark County
 - 6 - Good intent by to provide needed resources
 - 8 - High priority supported by Helena and Lewis & Clark County
 - 10 - Enhances/exceeds the mission of the L&C County Sheriff's office

2. Weighted Score: 1-5
 - 0 - No effect or negative value
 - 1 - Unlikely to offer value to the project
 - 2 - Little value to support the project
 - 3 - Necessary to support the project
 - 4 - Required to fulfill project
 - 5 - Enhances the mission/vision

Category	Value
Parcel Number	2990
Assessor's Parcel Number	2990
Legal Description	...
Area	...
Value	...

Category	Value
Parcel Number	1406
Assessor's Parcel Number	1406
Legal Description	...
Area	...
Value	...

Category	Value
Parcel Number	1411
Assessor's Parcel Number	1411
Legal Description	...
Area	...
Value	...





Common Goals & Objectives		Potential Score	Assigned Score	Weight	Total	Scoring Notes	Reviewer Notes
1.0	Why is this site identified best suited to align the mission & vision of the Sheriff's Office with its goals and objectives.	10	8	5	40	Does the answer address the desire of the community to help us further the Mission and Vision through the alignment of community resources? Is the community fully aware of the need with respect to this site location?	
2.0	What makes this site best strategically positioned to facilitate the fulfillment of the Lewis and Clark County Sheriff's office vision?	10	5	5	25	Does the Helena community understand the resources important to successfully fulfilling our vision.	Access is a key factor. Site size is adequate to suit building/site layout
3.0	Is this site part of a current Master Plan for current and future development?	10	10	5	50	Is this site (or portions thereof) under consideration by others? High score indicates - "no"	No
4.0	What is the greatest short-term obstacle or challenge that the Detention Center will face if this site is chosen? Long-term challenge?	10	10	4	40	Does the community objectively identify challenges? If yes - higher score.	Infrastructure installation. No long term challenges.
4.1	How would you recommend we overcome those challenges stated above (4.0)?	10	10	4	40	A low score reflects challenges that may not appear to be overcome by the answers provided.	None
5.0	What are the views into the site from neighborhoods, arterials?	10	10	4	40	Public perception of what a jail "looks" like and how it will be visibly viewed from outside the site	Further off the viewing corridor than City of Helena lot. Good.
5.1	What are the views out from the site?	10	10	4	40	Surroundings are easily viewable for staff.	Neighbors to the north but approximately a quarter mile away. East and south is pasture land. West is City of Helena site.
6.0	Anticipated community's support, buy in (as a whole) and an aggregate sense of the owner to partner with the County to build on this site.	10	9	5	45	Do opinions or letters of support reflect a community wide perspective? Do they reflect individuals of influence that can help further the projects efforts in the Helena community? This score reflects all of these concerns as a whole.	TBD.
Total Goals & Objectives Score:		80	72	36	2592		
Common Goals & Objectives Weighted Average:				5	12960		

Transportation		Potential Score	Assigned Score	Weight	Total	Scoring Notes	Reviewer Notes
1.0	Identify distance from Courthouse to potential site.	10	6	5	30	How far from the Courthouse is the site? What is the route to take and are there alternates?	3.5 miles via Custer to Cedar exit then on N. Last Chance Gulch
1.1	How many physical stops (stop signs, stop lights) exist between the Courthouse and this site?	10	8	5	40	Confirm route and verify that obstructions are minimal.	Stop signs - 7; Stop lights - 6
2.0	Noise of adjacent transportation means (railroad, airline, interstate)	10	8	4	32	Where is the site located in reference to potentially noise level disturbances	No major noise level concerns
3.0	Distance for Emergency Medical Services from site	10	4	5	20	Is the site easily accessible for emergencies?	Easily accessible. Distance = approximately 4.5 miles
4.0	Is a shuttle, bus and or taxi stop available nearby?	10	1	5	5	When inmates are released, they are on their own. Many do not have anyone to pick them up or take them home.	Not currently.
Total Transportation Score:		50	27	24	648		
Transportation Weighted Average:				4	2592		

Property/Physical Building Site		Potential Score	Assigned Score	Weight	Total	Scoring Notes	Reviewer Notes
1.0	What is the exact location of the building site(s) being recommended /offered for consideration? Provide a map of the location(s).	10	9	5	45	Easy access on level ground will be ideal.	Level ground. Good
2.0	Fully describe the sites attributes. Provide total size of site (acreage), natural or manmade barriers to development, environmental concerns, soil types/engineering reports, etc.	10	8	4	32	Is the site is on level ground and offers future expansion potential? Some variation in site attributes are acceptable. Completed geo tech report and environmental impact studies completed will be of benefit.	41 acres provides multiple opportunities for growth or additional county support functions. No trees and all grassland.
3.0	Are all of the services and utilities currently available to this building site?	10	2	3	6	If utilities are already in place, a significant burden to L&C County will be lessened. A medium score would show that some utilities are in place or at least close to the site.	No. Anticipated services are along the Frontage Road and then an easement to the site via the City of Helena lot. WWTF is south of the property.
3.1	If not, what is the feasibility and cost associated with each service/utility being made available to this site?	10	5	4	20	Utility expansion for a facility this size will be expensive. Will the site/City of Helena offer assistance to bring utilities on to the site?	TBD
3.2	Timeframe to accomplish?	10	5	3	15	Within six months should be maximum. Anything longer will result in a lower score.	Uncertain at this time
4.0	What local/regional zoning regulations pertain to this location?	10	10	3	30	City of Helena has jurisdiction. Confirm.	B-2 (NP). Will need to go through a Zoning change.
5.0	If this site offers an existing structure(s), please explain this sites advantage(s) over a new construction (or partial) and how such costs are offset by this site? Demolition expense?	10	10	1	10	If an existing building is provided, how difficult will it be to renovate/modify/add to the building? Demolish instead? Cost associated with demolition?	Greenfield site. No buildings exist.
6.0	Are there any concerns (environmental or otherwise) related to this site that would require remediation of said concerns before the site could safely and legally be developed? Is this site a Brownfield development site?	10	10	3	30	Brownfield sites are acceptable. LEED points will be high if utilized. Will the proposer augment the resources required to make sure this site is buildable?	Greenfield site. Proposer will make sure the site is buildable.
6.1	Has an EPA study been conducted on the site?	10	8	3	24	Score medium if one has been completed. Score high if completed and no issues. Low score if not conducted. Will jurisdiction assist with the expense of making this a "clean site?"	No. Likely not needed.
7.0	Number of traffic barriers (stops, turns etc.)	10	8	4	32	The fewer stops and turns the easier it will be for HPD, Sheriff's office and other jurisdictions to access the site.	Depends upon final access. Minimum 12 anticipated with 14 maximum.
7.1	Total distance to site from major arterial roadway (I-15).	10	6	5	30	Is it adjacent to a major thoroughfare? Do visitors need to travel for some time/distance, through a residential area, before arriving? The shorter the distance the better.	Approximately 0.75 miles
8.0	What is the office parking availability? For staff? Public? Arresting officers (other jurisdictions)	10	10	4	40	Is parking easily divisible (and signed appropriately) to direct site users?	Will fit within site
8.1	Definite and isolated areas of site access are available.	10	10	3	30	Separate access between public and private available?	Yes
8.2	What are the Public access options?	10	10	5	50	Ability to direct visitors to designated parking areas.	Off of Frontage Road
8.3	What are the Private/staff access options?	10	10	5	50	Dedicated staff parking is required.	Off of Frontage Road
8.4	What service routes are available for access?	10	10	5	50	Service routes that do not intersect either public or private/staff routes must be available.	Off of Frontage Road
9.0	Is this site susceptible to environmental concerns/natural disasters such as flooding, fault lines, etc.?	10	9	5	45	Floodplain construction will not be allowed.	No
10.0	Is there ample space for immediate and future expansion of the project site?	10	10	5	50	Expansion within the site is likely necessary. The land will need to be available to support that expansion.	Yes. Substantial room available
10.1	Are there accessible resources located immediate adjacent or near this site (bail bondsmen, attorney's offices, restaurants, etc..) that will support the detention facility?	10	4	3	12	Are partner businesses located within easy access to the site?	Not immediately adjacent but close.
11.0	Explain the merits of this site(s) and how its physical infrastructure endorses or supports the implementation of the L&C County Sheriff's Office.	10	7	4	28	What does this site have to offer over and above other sites?	Good access, Greenfield site.
Total Property Physical Building Site Score:		200	161	77	12397		
Property/Physical Building Site Weighted Average:				5	61985		
TOTAL					77537		

1. Assigned Score: 2, 4, 6, 8, or 10
 - 0 - Not Applicable or No Intent
 - 2 - Does little to enhance the Detention Facility project
 - 4 - Acceptable but will require more effort on the part of Lewis and Clark County
 - 6 - Good intent by to provide needed resources
 - 8 - High priority supported by Helena and Lewis & Clark County
 - 10 - Enhances/exceeds the mission of the L&C County Sheriff's office

2. Weighted Score: 1-5
 - 0 - No effect or negative value
 - 1 - Unlikely to offer value to the project
 - 2 - Little value to support the project
 - 3 - Necessary to support the project
 - 4 - Required to fulfill project
 - 5 - Enhances the mission/vision

Summary

Primary Information

Property Category: RP Subcategory: Real Property
 Geocode: 05-1888-17-1-04-01-0000 Assessment Code: 0000037871
 Primary Owner: Property Address:
 GREYN FAMILY LLC
 PO BOX 1286 COS Parcel:
 CHOTEAU, MT 59422-1286
NOTE: See the Owner tab for all owner information

Certificate of Survey:

Subdivision:

Legal Description:
 S17, T10 N, R03 W, SE4NE4
 Last Modified: 9/27/2014 6:05:38 PM

General Property Information

Neighborhood: 324 Property Type: VR - Vacant Land Rural
 Living Units: 0 Levy District: 05-248703-0103
 Zoning: 1 Ownership %: 100

Linked Property: No linked properties exist for this property

Exemptions: No exemptions exist for this property

Condo Ownership: General: 0 Limited: 0

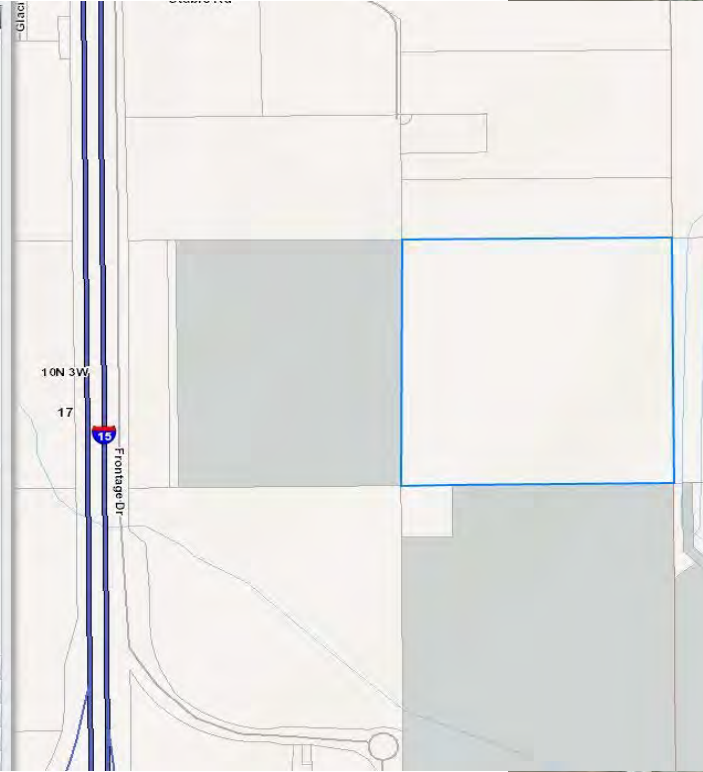
Property Factors

Topography: 8 Fronting: 0 - None
 Utilities: 7, 8 Parking Type:
 Access: 1 Parking Quantity:
 Location: 0 - Rural Land Parking Proximity:

Land Summary

Land Type	Acres	Value
Grazing	0.000	00.00
Fallow	0.000	00.00
Irrigated	0.000	00.00
Continuous Crop	0.000	00.00
Wild Hay	0.000	00.00

Owners
 Appraisals
 Market Land Info
 Dwellings
 Other Buildings/Improvements



05

building program

building program

5. Building Program Narrative

A. Administration

i. Sheriff's Administration

Spaces to be included are: Civil Division and Public Reception, Investigator's Office, Interview Rooms, Sheriff's Office, Patrol Division Office, Shared Roll Call Room, Book and Release Room, Break Room, Supply Room, Storage Room, Mail Room, IT Room, Training/Weight Room, Locker Rooms and Staff Toilets

1. **Civil Division** will serve as control of the public side of the facility and have views of the Public Lobby with interaction via pass through windows. This department will manage the Records Room, utilizing an adjacent office space to review records with the public when requested. Civil will also manage the Book & Release room when an individual is court ordered to report to the facility to be photographed, finger printed and released back into the community on their own recognizance. One additional office adjacent to Civil serves as a private office for functions such as Concealed Weapons Permit applications. A Copy/Fax Machine room is also provided in this space.
2. **Investigator Office** is an open office setting to facilitate collaboration. There are ten (10) work stations with one (1) Sergeant's Office. Direct access to the group of nine (9) **Interview Rooms** is achieved via a corridor. The location of the Interview Rooms creates three options for the public coming in off the street for questioning: (1) enter and exit through the front entry, (2) enter through front entry and exit out a side door (for safety) or (3) enter through the front entry and then arrested by officers and escorted to Booking. One toilet is directly available in this office.
3. **Evidence** space includes evidence storage lockers for officer check-in, an evidence lab and high bay evidence storage utilizing steel shelving.
4. **Sheriff's Office and Undersheriff's Office** need to be adjacent to each other and separated by a conference room. This space also includes the Finance Officer office and two Administrative Assistant desks.
5. The **Patrol Division** offers ten (10) open office work stations for deputies on shift. There are eight (8) Sergeant Offices and two (2) Captain's Offices around the perimeter.
6. A **Shared Roll Call** room between the Patrol Division and Detention Staff accommodates 24 people (seated).
7. **Break room** to be big enough for an eight (8) person table with an additional (4) person table and includes a countertop with a sink and refrigerator.
8. All toilets meet ADA. No showers will be included in the restrooms.
9. The **Information Technology** room is the single location for all computer systems and head end equipment for jail security electronics. This room houses the security function, door controls, camera controls, DVR and all necessary data terminations as required to operate the Public Safety Facility. This room is centrally located within the facility to allow easy, yet secure access while providing an optimum service network.

10. Building wide **Storage** for each department is built into this facility with a large open room separated by metal caging.
11. The **Training/Weight Room** is available for staff to use to maintain physical fitness and conduct fitness testing. A mock cell is also provided in this space to train for cell extractions.
12. **Locker Rooms** for men and women are available for the entire facility and provide direct access to both the corridor and training room.
13. Flex office space is built in to this plan for future use and is anticipated to support this facility for at least the next 50 years.

ii. **Detention Administration**

Spaces to be included are: Detention Staff Offices, Open Office, Storage and Staff Toilet.

1. The **Open Office** area is surrounded by a Jail Captain and Training Sergeant Office (1 each), two (2) Lieutenant offices and four (4) Sergeant offices to be within the secure perimeter of the jail.
2. Two (2) offices for the Jail Accountants.

B. Public Space

The **Public Space** is accessed on the west side of the facility directly off of the parking. This area will not be open 24/7 so video and kiosk availability will be provided for.

Spaces to be included are: Vestibule, Lobby, Video Visitation, Video Arraignment Courtroom, Conference Room, Offices, Small Conference Room, Operations/Command Room and Public Restrooms.

- i. **Public Vestibule** will be located on the west side of the building. The exterior door is to be open at all times and the interior door is to be locked after hours. Space for a Kiosk for commissary deposits and bonding will be provided. For after hour bonds, the Public will enter the Vestibule and talk to Central Control via the intercom. They will then be directed to insert money into the kiosk and meet them at the Vehicular Sallyport. No connections for Payphone are to be included.
- ii. Public **Lobby** is to provide (12) chairs for seating and have a space for a future x-ray scanner. A display of the history of the Lewis & Clark County Sheriff's Office will be provided throughout the lobby. No space will be provided for purse lockers. Public will be asked to keep all personal items not allowed in visitation rooms inside their cars.
- iii. A **Video Visitation** room is to be provided directly off the Lobby. The room will have space for (20) visitation stations and is ADA compliant.
- iv. A **Video Arraignment Courtroom** is available for a visiting Judge to conduct Court at this location or from the courthouse. This courtroom includes a bench, plaintiff and defendant desks, a gallery, office and small break out (conference) room. A witness stand, jury box and deliberation room are not part of this new facility.

- v. **Conference Room** to be located adjacent to Public Lobby.
- vi. Four (4) **Offices** off the lobby/along the south corridor are available as “touchdown” spaces for visiting professionals and/or programs such as DARE, Animal Control Officers and/or Violence Against Women Act (VAWA). One adjacent smaller Conference Room serves to support the offices or become an office if needed.
- vii. Men’s and Women’s ADA compliant **Restrooms** will be provided off of the Public Lobby. An ADA compliant drinking fountain (hi-low) will be provided outside of the restrooms.
- viii. A new **Operations and Command Center** will provide a location to command emergency situations and allow enough space for the entire Sheriff’s Office to gather for a Department wide meeting. This space and adjacent serving Kitchen will be available after hours and can be utilized by the public when not in use by the Sheriff’s Office. A Storage Room serves the Operations and Command room for table/chair and A/V storage needs.

C. Visiting & Confidential Interview

- i. The new facility will offer (2) types of visitation: Video and Contact Visitation.
- ii. The Public will only be allowed to visit via the video visitation system. There is a room with (20) Stations located adjacent to the Public Lobby for this use. All Day rooms will also be equipped with stations to limit inmate movement.
- iii. Attorneys will be allowed to visit with inmates via video or the Contact visitation room.
- iv. The Contact Visitation room will be located between the Public Lobby and the secure perimeter of the jail. Access from the Public side will be via a secure sallyport keeping the room itself secure.
- v. The larger Contact Visitation room will also double as an additional Video Arraignment room when necessary.

D. Vehicular Sallyport

- i. A new dual lane **Vehicular Sallyport** (VSP) will provide the flexibility for arresting officers to negotiate police vehicles around without clogging up the VSP or having to wait on others to move. Four (4) parking spaces are available inside the VSP that will allow the arresting officers a spot to clean their patrol vehicles as needed after an arrest or a place to park the detention transportation vehicles overnight. The four overhead doors are large enough to accommodate ambulance and bus traffic if needed.
- ii. A bollard with a camera and intercom will be added in the parking area to the south of the VSP that enables a patrol car to pull up and call to Central Control. Central Control then will operate the overhead door allowing the car into the VSP and then closing the door.

- iii. An **Armory** is provided within the VSP and is sized to accommodate future growth of the Sheriff's Office. Positioning the Armory in the VSP allows for the Detention Officers and Sheriff's Office the ability to assemble in a large open place to stage in the event of an emergency.
- iv. **Restrooms** to serve both inmates and detention officers are located with easy access off of the VSP. These restrooms are for arresting officers and transport officer's use. The inmate restrooms are also used when transporting inmates and a secure stop needs to be made when coming through Helena. By utilizing these restrooms, inmates do not need to be admitted into the facility while enroute to another location.
- v. Access to Delivery Yard on one side.
- vi. Direct access to Intake/Booking/Holding and Service Corridor/Kitchen.

E. Maintenance

- i. Directly adjacent to the Vehicular Sallyport is one bay with an overhead door.
- ii. Includes Maintenance Office and a Workshop/Tool Room at one end.

F. Intake/Booking/Holding

Spaces to be included are: (4) Medical/Isolation Holds, (6) Detox Cells, (2) Group Holding Cells, (1) Dress-out, (1) Dress-In, Inmate Property, Booking Desk Area, Inmate Waiting/Report, Live scan Station/Report, Equipment Room, Booking Office/Records Room, D.R.E., Interview Room, Staff Toilet, and Central Control.

- i. **Detox Cell** is to be sized to hold one (1) inmate. Cell is to be equipped with a Toilet/Lav. combination unit, 4" concrete raised slab for mattress, flushing floor drain.
- ii. **Group Holding Cell** is to be sized to hold 6-8 inmates. Cell is to be equipped with a Toilet/Lav. combination unit and securely mounted wall seating.
- iii. **Medical/Isolation Cells** are to be sized to hold one (1) inmate with a connection between the Intake/Booking/Holding. Each cell is to be equipped with a Toilet/Lav. combination unit, TB Light, and bunk.
- iv. Area will be provided for dressing out and in of inmates. Rooms include a shower, bench, and toilet. Space will be provided for storage of inmate issue uniforms and kits, or, if being released, will be issued personal effects.
- v. **Inmate Property** will be by property storage bags that hang from (2) tier hanging rods. Space is to be provided for maximum future capacity.
- vi. **Raised Booking Desk** is to be provided for processing of inmates. All holding cells should be viewable from this space. Eight (8) stations for inmates with a divider between are provided. Each station to have a steel stool. Loops are securely attached to the half-height wall to provide handcuffing of ankles. Space around/adjacent to the Raised Booking Desk

- will have the following provided: inmate phones and a kiosk station, Live Scan inmate identification station.
- vii. Four person **Interview Room** will be accessible from the Intake/Booking/Holding Area and the Report/Waiting Area.
 - viii. **D.R.E.** room for Drug searches/interviews is located adjacent to the report and SFST area. This space will be utilized for blood draws/testing.
 - ix. **Personal Property** space provided for initial storage of small property prior to entering Booking.
 - x. **Report Area** w/ Showers is directly located off of the Vehicular Sallyport. Includes two (2) showers, report station, metal detector, and seating with loops that are securely attached to the structure or bench to provide handcuffing of ankles.
 - xi. Inmates going through the **Report Station** will either move to the Intake/Booking/Holding or to the Medical Area via the Medical Waiting or Medical/Isolation Cell.
 - xii. Equipment Room for Booking Related Items to be provided near the Live Scan Area.
 - xiii. Central Control Room w/ Toilet
 - 1. Located in the Release/Bondsman Lobby and adjacent to the Intake/Booking/Holding.
 - 2. Windows along the four walls to allow for visibility in all directions.
 - 3. One (1) Unisex Toilet (ADA) directly connected to Central Control.
 - xiv. One (1) Staff Toilet to be along the perimeter of the Inmate Waiting Area.
 - xv. **Booking Office/Records** is located along the perimeter of the Inmate Waiting Area. This office will also serve as the Classification office.

G. Release/Bondsman Lobby

- i. Located adjacent to the Central Control Room and Secure Vestibule to Inmate Release. One four person **Conference Room** is located off the Lobby for use by the Bondsman. Gun Locker is in the Secure Vestibule to house weaponry prior to entry into the Lobby.

H. Food Service

- i. **Food Service** will be adjacent to the Vehicular Sallyport along the exterior of the building. It is anticipated that Trustees will continue to be involved in the food service preparation.
- ii. Space will be provided for Dishwashing, Food Preparation, Cook line, Beverage Station, Dry Storage, Walk-in Cooler / Freezer, Office, Breakdown, Cart Storage/Wash, Storage Rooms, Detention Break Room, (1) Staff Toilet, and (1) Janitor Closet.
- iii. **Detention Break Room** will seat (8) people and have refrigeration, microwave, sink, coffee maker, and cabinetry. It will be accessed off of the Secure Corridor and adjacent to the Kitchen.

- iv. Deliveries will be taken from inside the Vehicular Sallyport or from the Delivery Yard.

I. Laundry

- i. Laundry will be located near the Kitchen, Medical, and the service Corridor to the Vehicular Sallyport.
- ii. Commercial grade washer and dryers will be provided and they are to be sized for the future expansion housing capacity. There will be a header enclosing the back of the machines so that inmates will not have access to them.
- iii. The detergent tanks for the washers will be stored in the chase space behind the washers.
- iv. Open wire shelving units are to be provided within the Linen Room off the Laundry Room for storage of inmate uniforms and linens.
- v. Solid surface counters with upper and lower storage cabinets are to be provided. A deep tub sink will also be provided.

J. Program Open Office

- i. Located across the corridor from the Laundry Room and near the Service Corridor. This shared office will serve as a “touchdown” space for program administrators.

K. Program Rooms

- i. One (1) 12-person by Central Control with Storage. (1) Unisex Inmate Toilet provided across the corridor.
- ii. One (1) 12-person (by Male Trustee), off of Secured Sallyport with Office and Storage.
- iii. One (1) 12-person in the connection from the Inmate Housing Building and the Administration Building. One (1) Unisex Inmate Toilet designed to meet ADA guidelines provided within the Administration Building in the Secured Sallyport.

L. Library

- i. The Library is located near the Direct Male (40) space and across from the Secured Sallyport from the Computer Room. It will have shelving along the length of three walls with a portion on the fourth wall, two (2) tables and seating for eight (8) people.

M. Computer Room

- i. The Computer Room is located near the Direct Male (40) space with access from the Secured Sallyport. It will have stations along three walls for seven (7) computer stations total.

N. Medical & Mental Health Services

Medical Waiting serves as the nexus between the Intake/Booking/Holding Medical Isolation Cells, Report, and the rest of the Jail.

- i. **Nurse Station** will be provided with 2 work stations with plenty of room for records/filing storage, break area cabinetry/sink, one (1) Unisex Staff Toilet designed to meet ADA guidelines and access to a secured **Medication Storage Room**. Nurse Station is to be directly accessed from the Medical and Mental Health sides.
- ii. Two (2) **Medical Isolation Cells** separated with the Ante space in between are provided with a single bed, toilet, sink, and shower. Both are designed to meet ADA guidelines.
- iii. Two (2) **Medical Exam rooms** will be outfitted with Toilet/Lav combination units and an Exam table.
- iv. One (1) **Dental Exam Room** will be provided with hygiene chair, equipment, and cabinetry with hand washing sink.
- v. **Clean and Soiled Linen Room/Carts** shall be provided for both Medical and Mental Health sides. These spaces will be accessible from inside the Medical Waiting and Mental Health areas as well as from the corridor in close proximity to the Laundry Room.
- vi. **Screening Room** shall be accessible from both the Nurse Station and the Mental Health side and shall contain one shower.
- vii. Four (4) **Psych Observation Units** will be provided and each will contain one bunk and a separate toilet room for toilet/lav combination unit.
- viii. **Therapist's Office** will be located in close proximity to the Nurse's Station.
- ix. A kiosk will be provided inside the screening room for TeleMed services for Mental Health screenings.

O. Indoor & Outdoor Exercise

- i. Four (4) **Indoor Activity Spaces** will be provided for indoor exercise. Access will be gained through the main Housing Sallyport around Control. Two (2) will be visible from Master Control and will be accessed from the Secured Sallyport around the perimeter of Master Control. Two (2) Indoor Activity/Programming Spaces will be located off of the Direct Supervision Blocks.
- ii. Natural light is provided from windows and skylights.
- iii. Storage rooms for equipment will be provided in Master Control supervised spaces and in both Direct Supervision spaces.
- iv. Four (4) **Outdoor Exercise Yards** will be provided. Three (3) will be located in between the buildings. The fourth outdoor exercise yard is on the northeast corner of the Inmate Housing Building and is surrounded on the non-building sides with (2) layers of wall/fence. Each Outdoor Space is accessed through a Secure Sallyport.
Within the Inmate Housing Block, there will be a space designated for Future Expansion to house (44) cells. This space can be utilized as Activity Space until a future buildout is deemed necessary.

P. Master Control Room

Spaces to be included are: Master Control Room, Toilet, Fire Sprinkler control and Security Vestibule.

- i. **Master Control** is to be located with direct visual into the dayrooms, activity rooms, and main Secure Sallyports. Two (2) central stations are provided for control of the facility. At this station will be the touchscreen control monitor, intercom microphone, call up CCTV monitor & main CCTV monitor. From this station, the officer will have direct control of the entire facility including doors, cameras, intercoms, paging systems, etc. Inside the control room there will be a charging station for officer radios. The head end equipment for the controls will be inside the IT Room. The floor will be raised a minimum of 14" and have an ADA accessible ramp leading to it.
- ii. There will be an ADA accessible toilet located directly off the Master Control room.
- iii. Inside the Master Control Room, there will be a counter with a sink, under counter refrigerator and built in microwave.
- iv. Also inside the Master Control Room will be an alcove where the fire sprinkler risers will be located. In the event that a sprinkler head has been activated and it is determined that there is no fire danger and it needs to be shut off, the control officer can shut the sprinkler off from here.
- v. A Security Vestibule will be provided to the Control Room. This ensures that an inmate cannot inadvertently gain access to the Control Room.

Q. Inmate Housing

Inmate Housing is to be divided into the following categories:

- i. One (1) **Male Direct Supervision** pod with (40) Double Occupant Cells – Each cell is to be a pre-manufactured cell. Each cell will be equipped with a double bunk, desk with 2 seats, toilet, lavatory, shower, and a security window with 3 SF clear glazing to introduce sunlight from windows in Chase space. Adjacent to the cells will be a dayroom consisting of seating for (40) inmates and space for a Kiosk, television, inmate phones, Supervisor desk, Staff restroom and storage.
- ii. One (1) **Female Direct Supervision** pod with eighteen (18) Double Occupant Cells. Each cell is to be a pre-manufactured cell. Each cell will be equipped with a double bunk, desk with 2 seats, toilet, lavatory, shower, and a security window with 3 SF clear glazing to introduce sunlight from windows in Chase space. Adjacent to the cells will be a dayroom consisting of seating for (36) inmates & space for Kiosk, television, inmate phones, Supervisor desk, Staff restroom, and storage.
- iii. Four (4) **Male Pods Consisting** of (8, 8, 10, and 12) Double Occupant Cells - Each cell is to be a pre-manufactured cell. Each cell will be equipped with a double bunk, desk with 2 seats, toilet, lavatory, shower, and a security window with 3 SF clear glazing to introduce sunlight from windows in Chase space. Adjacent to the cells will be a dayroom consisting of seating for (16, 16, 20, & 24) inmates & space for Kiosk, television, and inmate phones.
- iv. One (1) **Male Trustee Pod Consisting** of (6) Double Occupant Cells - Each cell is to be a pre-manufactured cell. Each cell will be equipped with a double bunk, desk with 2 seats, toilet, lavatory, shower, and a security window with 3 SF clear glazing to introduce sunlight from windows in Chase space. Adjacent to the cells will be a dayroom consisting of seating for (12) inmates & space for Kiosk, television, and inmate phones.
- v. One (1) **Female Trustee Pod** Consisting of four (4) Double Occupant Cells - Each cell is to be a pre-manufactured cell. Each cell will be equipped with a double bunk, desk with 2 seats, toilet, lavatory, shower, and a security window with 3 SF clear glazing to introduce sunlight from windows in Chase space. Adjacent to the cells will be a dayroom consisting of seating for (8) inmates & space for Kiosk, television, and inmate phones.
- vi. One (1) **Female Pod Consisting** of (8) Double Occupant Cells - Each cell is to be a pre-manufactured cell. Each cell will be equipped with a double bunk, desk with 2 seats, toilet, lavatory, shower, and a security window with 3 SF clear glazing to introduce sunlight from windows in Chase space. Adjacent to the cells will be a dayroom consisting of seating for (16) inmates & space for Kiosk, television, and inmate phones.
- vii. Two (2) **Swing Pods** Consisting of (6 & 10) Double Occupant Cells - Each cell is to be a pre-manufactured cell. Each cell will be equipped with a double bunk, desk with 2 seats, toilet, lavatory, shower, and a security

window with 3 SF clear glazing to introduce sunlight from windows in Chase space. Adjacent to the cells will be a dayroom consisting of seating for (12 & 20) inmates & space for Kiosk, television, and inmate phones.

- viii. Two (2) **Segregation Pods** with (6 & 6) Double Occupant Cells – Each cell is to be a pre-manufactured cell. Each cell will be equipped with a double bunk, desk with 2 seats, toilet, lavatory, shower, and a security window with 3 SF clear glazing to introduce sunlight from windows in Chase space. Adjacent to the cells will be a dayroom consisting of seating for (12 & 12) inmates & space for Kiosk, television, and inmate phones.

R. Inmate Movement Within Facility

- i. Inmates will be contained to their own Cell and Dayroom space unless they are going to Activity, Program, Library, Computer, Court, and (Non) Contact Visitation or working in the Kitchen or Laundry. When inmates are moved to these spaces, they will be accompanied by the roving officer.
- ii. There is to be a secure perimeter around the jail with security grade walls that go full height and any penetrations larger than 5” secured with burglar bars or security screening. Whenever there is a door going through the secure perimeter, there shall be a security vestibule that also consists of security grade full height walls with security measures taken on any openings.
- iii. Any access into the secure perimeter must be allowed by the Master and Central Control Room officers only. No keypads or card access systems will be allowed for this.
- iv. The facility is to be designed so that inmates will never be outside the secure perimeter of the facility unless they are inside the Courtroom.

S. Building Systems

- i. Water to the toilet and lavatory in the cells is to be controlled by Master Control. They will have the ability to turn off the water per Dayroom.
- ii. Water to the showers inside the cells will also be controlled by Master Control. They will be on a normally closed solenoid and be turned on only when it is the allowed time for showers.
- iii. Sanitary sewer lines exiting the toilets in the cells will be equipped with a pinned cleanout immediately outside the cell. This will catch a majority of the items flushed down the toilet that are not supposed to be. It can also help identify who flushed the items.
- iv. A catch basin for a future sewage grinder will be installed outside the building.
- v. Mechanical systems to the housing areas will be zoned per Dayroom. This allows the ability that if one unit goes down, inmates can be moved to adjacent pods while the unit is being fixed.
- vi. Thermostats for the inmate areas will be controlled from Master Control

- vii. A smoke exhaust system will be in place to evacuate smoke in the case of a fire.
- viii. Fixtures within the secure perimeter and within reach of the inmates will be secure grade. Fixtures outside the secure perimeter and out of reach of inmates (10'+), will be non-secure grade.
- ix. Cell lighting will be by LED with nightlight function and be controlled from the touchscreen panel inside Central Control.
- x. Dayroom lighting will also be controlled from the touchscreen in Central Control and have a few fixtures designated as nightlights.
- xi. Motion censored lighting with night lights will be utilized to maximize energy efficiency.

T. Security & Surveillance Systems

- i. All doors within the secure perimeter that require operation for inmate movement will be controlled from the touchscreen inside Central Control. At each door will be an intercom so that inmate/officer can call in to control for permission to have the door unlocked. Once the intercom is pressed, the camera associated with the door will come up on the call-up monitor showing the Central Control officer who is at the door.
- ii. Doors that access the mechanical areas of the facility will be monitored so that the Central Control officer can see when someone has accessed those spaces.
- iii. Along with the intercoms at the doors, paging speakers will be provided in area such as Dayrooms, Kitchen & Booking, so that general announcements can be made by the staff.
- iv. Cameras will be provided throughout the facility to cover all areas within the secure perimeter of the facility minus cells, janitor closets and storage rooms. These will be monitored from Central Control.
- v. Duress buttons will be provided in the kitchen, medical exam, booking desk and attorney visitation. Pressing this will sound an alarm in Central Control and immediately bring up the camera associated with that room.
- vi. A watch tour system is being provided.
- vii. Card access doors will be limited to doors outside the secure perimeter.
- viii. Conduit and back box will be provided for the installation of an inmate phone system. Locations for these will be in every dayroom and booking.
- ix. Conduit and back box will be provided for the installation of inmate kiosk that will be used for visitation, video arraignment, TeleMed, law library & commissary. These will be located in each day room, booking, medical exam and attorney visitation.

U. Maintenance/Evidence Processing Building

The Maintenance and Evidence Processing Building is to be located on the property and will have 3 bays for vehicles, additional evidence storage, Office space with Janitor Closet and (1) Unisex Toilet designed to meet ADA Guidelines.

V. Structural Systems

i. Detention Area Building.

This structure is proposed to consist of a prefabricated metal building with a mechanical mezzanine above some portion of the main floor.

1. Foundation Structure

The foundation system proposed for the metal building is a concrete slab on grade floor with concrete foundation walls along the exterior perimeter of the building and integrated concrete piers at all the metal building column locations. Foundation walls will bear on continuous concrete strip footings that are below frost depth. At the column/concrete pier locations the concrete strip footings will be enlarged to square pad footings to support the large concentrated loads from above.

The interior bearing walls supporting the mezzanine will bear upon continuous concrete thickened slab footings. Thickened slab pad footings will be used for any column loads from the mezzanine. This foundation system may change depending on the results and recommendations of a site specific geotechnical report.

2. Mezzanine Framing/Floor Structure

The floor structure of the mechanical mezzanine is anticipated to be a concrete slab on metal decking. Depending on the size of the mezzanine, the concrete decking may need to be supported by steel bar joists, usually at 3' to 4' on center. Steel wide flange beams may be incorporated where larger openings are desired in the bearing wall structure.

The joists and decking will be supported on steel stud bearing wall framing bearing on the thickened slab continuous and pad footings referenced above.

3. Prefabricated Metal Building Shell

The prefabricated metal building shell will be designed by a metal building designer and contractor.

ii. Administrative Building

1. Foundation Structure

The foundation system proposed for the Administrative Building is a concrete slab on grade floor with concrete foundation walls along the exterior perimeter of the building. Foundation walls will bear on continuous concrete strip footings that are below frost depth. At any column locations the concrete strip footings may be enlarged to square pad footings to support any large concentrated loads from above. The exterior foundation wall may be formed to provide a ledge for the brick veneer to bear on.

Any interior bearing walls supporting the upper floor framing will bear upon continuous concrete thickened slab footings. Thickened slab pad footings will be used for any interior column loads.

This foundation system may change depending on the results and recommendations of a site specific geotechnical report.

2. Exterior Framing and Veneer

The exterior framing system for this building is anticipated to be steel stud wall framing. The entry area will most likely require structural steel to support the tall walls and glass. A brick veneer is proposed by the architect to cover the exterior walls and will be anchored back to the steel stud walls. This brick will be supported on a brick ledge provided by the concrete foundation walls.

3. Roof Framing

The roof is anticipated to be framed with metal decking supported by steel bar joists. The bar joists will bear on the exterior steel stud walls. Structural steel wide flange framing or a steel stud bearing wall along the center of the building is anticipated to support the interior of the bar joists. The interior structural steel framing will bear on steel columns on thickened slab pad footings. Any interior steel stud bearing walls will bear on thickened slab continuous footings.

4. Lateral System

At this time the lateral system anticipated for this structure is sheathed exterior steel stud walls. Sheathed interior walls may be required based on final lateral analysis.

W. PLUMBING/FIRE PROTECTION SYSTEMS

Exterior

i. Underground piping:

1. Domestic water and fire protection lines will be separate service entries to the building.
2. Sanitary building sewer with cleanouts will be provided at each location where a sanitary sewer exits the building. A grease interceptor will be provided for the kitchen waste line; a collection vault/pit will be provided at the exit of the housing area to collect flushed items for evidence. Once sewers leave the building or the vaults and interceptors, they will be picked up and extended as required to connect to new mains.
3. Roof drain leaders will be brought to the exterior of the building where they will be extended to storm lines that will be added to the site. Overflow drainage will be overland flow on to the project site.
4. Natural gas will be brought into the building from a new service provided by Northwestern Energy.

Interior

i. Sanitary Waste System

1. All sanitary wastes from plumbing fixtures and equipment will be collected and drained by gravity to an exterior building sewer.
2. Sanitary waste and vent piping will consist of no-hub cast iron soil pipe and fittings. Piping below grade and outside the building will be PVC.
3. Holding cell water closets shall be 4" drain pipe, at the connection point of these 4" line there shall be a screwed cap fitting that has a tungsten rod/pin that will extend into the piping to stop any flushed debris items (sheets, clothes, etc.).

ii. Storm Drainage System

1. Low slope roof areas will include roof drains that will be collected and routed to a building storm sewer. Overflow drains will be included as required and piped to and terminate with an above grade downspout nozzle.
2. Storm piping will consist of insulated cast iron soil pipe and fittings. Piping will be concealed in walls or chases where possible.

iii. Domestic Water Systems

1. The domestic water system will include a new domestic water service that will serve plumbing fixtures and equipment. Cold, hot and hot water circulating piping will be routed throughout the entire building as fixture locations dictate. Tempered water will serve detention fixtures and showers.
2. Domestic water piping will consist of insulated type L copper and fittings. Shut-off valves will be quarter turn ball type.
3. Remote domestic water shutdown in the housing will be single zone for the entire housing area. This will be controlled through the security touch screen. Manual valving within the chase will then allow specific cells to be isolated for repair work.

iv. Natural Gas System:

1. Natural gas will be distributed using schedule 40 black steel pipe. Service will be brought to the kitchen and laundry and into the mechanical room for the boilers and the domestic water heaters. Gas service will be a low pressure distribution system.

v. Plumbing Fixtures

1. Fixtures in cells will be provided by the cell manufacturer and will be stainless steel combination fixtures. Anti-flood feature will be provided with each flush valve.
2. All showers for inmate use will be pushbutton type, stainless steel showers with front access.
3. Fixtures for booking area will be stainless steel.
4. Fixtures for public and staff areas will be vitreous china, exposed sensor operated flush valves, and sensor operated faucets.
5. A flushing floor sink will be provided for the safety and or D.U.I. cell. A recessed hot and cold water hose bib assembly will be provided for cleaning of this cell.
6. Wall hydrants will be provided on the exterior of the building, a minimum of one on each side of the building.
7. Eyewash will be provided for laundry area chemical storage.
8. Sloan valves are preferred by the county maintenance staff.
9. County maintenance staff has issues with cleaning the current small diameter sink p-traps. They would like to try and determine an alternate approach to allow them to snake the drain in lieu of using acid.
10. The current detention combi-units are getting the bubbler plugged by straws and pencils. The county would like to investigate what options exist to prevent this.
11. County maintenance staff prefers touch controls on detention plumbing fixtures in lieu of push button.

12. A hot/cold domestic water hose bib will be provided in each mechanical room area of the enclosed chase behind the detention cells and at the vehicle sallyport.
13. A recessed and secured enclosure for a hose bib shall be provided for each outdoor recreation area and at the center of each of the housing units.

vi. Drains

1. Floor drains will be located adjacent to each shower on the lower level in the housing area. Free area will be provided in the hand rail system of the upper level to allow overflow water to be squeegeed to the lower level in the event of a flood.
2. Floor drains will be provided in both the vehicle sallyport and the vehicle evidence bays.
3. Equipment room drains will be provided throughout the mechanical room for drainage of the boiler, water heater and building water entry requirements.
4. A dry sump will be provided in the lower level of the control room in the event this area should ever flood. A pump will be required to empty this sump.
5. Area drain required in exercise room.
6. A floor drain will be provided in each mechanical room area of the enclosed chase behind the detention cells.

vii. Plumbing Equipment

1. Water heater system. The domestic hot water system will consist of a high efficiency gas fired water heater/storage tank that will be sized to operate at 140° F. This system will serve plumbing fixtures, laundry & kitchen. A booster heater will be required for the kitchen to produce 180° F water for dishwashing. The location and type of booster heater will be coordinated with the kitchen design. Thermal mixing valve will be located at the domestic water heating plant.

viii. Fire Protection

1. A wet automatic sprinkler system will be included for most of the entire building. Within the housing pods a zoned preaction sprinkler system with pressure monitoring shall be provided to minimize flooding of cells and allow for quicker maintenance staff response to a possible sprinkler discharge. The system will be served by the new separate service as indicated above under the Domestic water distribution system.
2. Piping will consist of black steel pipe with threaded cast iron and grooved type couplings for wet sprinklers and galvanized piping for pre-action systems. Sprinkler heads will be chrome pendant type in finished areas and security type in areas where inmates will exist.

3. A pre-action sprinkler system will be provided for the control room. The water will be fed from the building sprinkler water entry.
4. County maintenance staff prefers Nightraven sprinkler heads.
5. A deluge curtain may NOT be required for both sides of the control room and dayroom glass walls based on the planned use of rated, detention grade glass at these locations.
6. Will need to confirm water pressure and possible fire pump based on final site location.

X. HEATING, VENTILATING, AND AIR CONDITIONING SYSTEMS

The following is a brief description of the criteria that will be used to establish the minimum requirements for design the HVAC system:

i. Design Conditions:

Season	Winter	Summer
Indoor	72°F	75°F / 50% RH
Outdoor	-13°F	92.9°F db / 61.5°F wb

- ii. Minimum Outdoor Air Requirements will meet or exceed the requirements of the International Mechanical Code - 2012, Table 403.3 and the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) Standard 62.1 - 2010.

iii. General System Requirements and Components:

1. The majority of the building will be provided with heating and air conditioning. The general areas are:

- Sheriff's Office
- Booking & Holding
- Control Room
- Jail Housing Pods
- Vehicular Sallyport (space will be tempered only, not cooled to 75 degrees)
- Kitchen
- Laundry (space will be cooled as needed not to exceed 80 degrees)
- Electrical rooms (ventilation cooling only)
- Mechanical rooms (ventilation cooling only, freeze proof heating)

2. Areas to receive cooling only include:

- Major electronic equipment rooms

Security Electronics Rooms

3. Areas to receive heating only include:

Entrance Vestibules (location and final cooling loads of a vestibule will determine if mechanical cooling is needed.)

iv. Air Systems Description and Zoning:

1. The proposed mechanical system is a water-cooled heat recovery variable refrigerant flow (VRF) system (Daikin or approved equivalent) to cover all heating and cooling needs within the building. This system utilizes water cooled condensing units that would be located in the upper level mechanical room. These condensing units would utilize a ground source piping system or condenser water plant to accept or reject heat as needed. On the building side of the plant, this system utilizes a multiple pipe refrigerant transfer and distribution system to share heating and cooling with other spaces in the building and when needed, will accept or reject heat to the source side plant. The system operates similar to a heat pump system in that loads are transferred between heating and cooling zones prior to using source heating/cooling energy. The ability of the VRF system to transfer heating/cooling loads between zones yields enhanced energy efficiency.
2. The ventilation for the building can be done either through a dedicated outside air (DOAS) system or direct outside air connection to the various terminal units. Due to the high amount of exhaust air that will be needed either of these systems would utilize heat recovery to pre-heat/pre-cool the ambient air coming into the building. In addition to the heat recovery tempering coils would be provided as needed for neutral temperature air (70°F to 75°F).
3. All restrooms will be exhausted per the requirements of the 2012 International Mechanical Code. The exhaust would be routed through the DOAS unit to allow for the re-capture of energy from the exhaust air stream through the DOAS heat recovery section. One large DOAS unit would be provided for the majority of the building while each detention pod would have its own associated DOAS unit.
4. The laundry area will be served by a single zone constant volume make-up air system (MAU) consisting of filters, a hot water or gas-fired heat coil, a direct evaporative cooler, supply fan and exhaust fans. Connections will be made between the dryer exhaust and the lint collector provided by the laundry service consultant. The MAU will have a return air connection that will be controlled based on room pressure to account for the variation in operational dryers.

5. The kitchen area will be served by a constant volume make-up air system (MAU) with, filters, a hot water heating coil or gas fired heat exchanger, a direct evaporative cooler, supply fan and dedicated exhaust fans, kitchen hood and dish machine. The kitchen hoods will be provided by others. Supplemental un-occupied heating shall be provided through a cabinet unit heater.
 6. The vehicle Sallyport will be provided with a hot water or gas-fired make-up air system (with return section) for ventilation and for heat. The operation of the make-up air unit will be controlled by carbon monoxide and nitrogen dioxide sensors. Exhaust will be taken from near the floor to ensure that the vehicle exhaust fumes are properly exhausted. No cooling will be provided in this space.
- v. Condenser/Ground Loop Water System:
1. Ground Loop - This system would utilize a ground source loop field to accept/reject heat as needed. This field would be located under the paved parking lot. In an effort to reduce the loop field sizing and associated installation cost, the field will be sized to handle the lowest block load of the building whether it be heating or cooling. Any supplemental heating/cooling needed beyond the loop field will be provided by either high efficiency gas fired boilers or an exterior heat rejection device.
 2. Condenser Water Plant - If a ground loop piping system is not used then an exterior mounted cooling tower or dry cooler would be used to reject heat from the VRF plant. High efficiency gas fired boilers would inject heat as needed into the condenser water system.
 3. Water will be distributed throughout the building as needed using two variable speed parallel pumps. County maintenance staff prefers the use of Grundfos pumps.
- vi. Dedicated Exhaust Systems:
1. Dedicated exhaust systems will be provided in the kitchen as noted above, in the sally port and other locations as determined necessary for the space usage.
- vii. Humidification
1. Active control of building humidification is not provided.
- viii. Duct systems
1. The supply air ductwork system will be externally insulated. No lining will be used in the supply air stream. Any sound sensitive areas will be finalized with the owner and these ducts may contain lining.
 2. The return and exhaust air ductwork system will be internally lined were necessary for acoustics only.
 3. All transfer ducts will be lined for acoustics.

4. All ductwork larger than 8"x8" penetrating security walls will be provided with security bars. Where ductwork exists the building in either horizontal or vertical planes, security bars will be placed.
- ix. Filtration
1. All air handling units will be equipped with 2" pleated 30% pre-filters and 65 percent efficient cartridge filters.
- x. Terminal Heating Devices
1. A benefit of VRF systems is that there are numerous styles of terminals devices that can be used. The styles include: exposed, concealed, ducted, and non-ducted. These devices can also vary in use within the overall system to meet the individual space needs. For example a concealed ducted fan coil can be used within an office area to minimize visual impact and an exposed wall mounted unit can be provide within utility areas for ease of installation and maintenance. A VRF fan coil shall be provided for each temperature control zone needed.
 2. VRF Terminal options are as follows:
 3. Ceiling cassette – Open office areas, training rooms, auditoriums, storage rooms, vestibules, control room.
 4. Floor mounted exposed – Vestibules.
 5. Ducted above ceiling fan coil – Open office areas, training rooms, auditoriums, storage rooms, vestibules, control room.
 6. Air handling unit (furnace type) – Grouped detention cells, control room.
 7. Wall mounted exposed – IT rooms, offices.
- xi. Air Inlets and Outlets
1. All cells and holding rooms will have medium/maximum security grilles. These grilles will be provided with the precast cells.
 2. Where medium/maximum security grilles are located in potentially wet areas, such as showers, grilles will be specified to be stainless steel construction.
 3. Distribution approach to match the current law enforcement center facility which has supply air high and return/exhaust low behind the plumbing fixture. Any low supply or return grilles in cells will require the bottom of the duct collar to be slanted toward the cell. Liquids will drain toward the cells when inmates urinate in the stainless steel grilles.
- xii. Temperature Controls:
1. Direct digital controls (DDC) with electric/electronic actuation will be used to control the air handling units. Interface between the units and the DDC system will be via BACnet protocol. Possible wireless access within facility from iPads or other devices. Final allowance of

any remote access shall be determined with the county maintenance staff.

2. All terminal units to have DDC control.
3. All cabinet unit heaters and unit heaters are to have DDC control.
4. The mechanical system shall be provided with economizer controls as required by IECC 2012.
5. Space temperature will be sensed using DDC sensors located in the return/exhaust ducts in the holding rooms and the jail pod. Sensor will be located in an accessible location.
6. A minimum of 16 hours of temperature control training will be specified.
7. An engineered smoke control system will be provided in this project. The building will be broken into three distinct zones, housing, booking and the space between the two areas including the connecting corridor. The administration area is not part of the smoke control system. The engineered smoke control system will be integrated with fire/smoke detection system. Each fire sprinkler zone shall match a building smoke control zone as well. Upon receiving a signal from the smoke detection system, the engineered smoke control system will automatically exhaust the zone in alarm. Dedicated smoke exhaust fans will be used for this purpose. The adjacent zones will continue to operate in their normal sequence. Emergency power will be provided for the smoke control exhaust fans.

xiii. Indoor Air Quality

To summarize, all air handling systems will incorporate the following Indoor Air Quality features

1. Ventilation (outdoor air) quantities will follow the recommendations of ASHRAE 62.1-2010.
2. Ductwork will be constructed of sheet metal and will not be lined, except where necessary for acoustical purposes.
3. Ductwork is specified to be covered during construction.
4. Air handling units will be specified with stainless steel drain pans that are pitched in two directions.
5. Air handling units will be dual wall construction.
6. Air handling systems will be provided with cartridge final filters.
7. All VAV boxes will be designed with heating coils which allow a minimum airflow at all times without over cooling the space.

xiv. Snow melt

1. A snow melt system shall be provided for the public walkways, linked walkways, and the enclosed outdoor recreations areas. This system will consist of underground piping that provides heating water as needed based on outside air temperature and individual zone

temperature/moisture sensors. This system will operate with a 50% glycol solution to prevent any freezing and all system controls shall be part of the DDC system. The heating water for this system would be provided by the building supplemental boiler system.

Y. ELECTRICAL SYSTEMS

i. Electrical Service:

1. Based on 110,000 square foot of building the electrical service will require a 480Y/277V, 2000 amp electrical service and will terminate in an indoor freestanding switchboard. Electrical power will be obtained from local utility.
2. Based on sizing of future expansions for a total of 157,000 square foot the service would increase to 2500 amps.
3. Emergency power transfer switches and associated distribution panels as described below will be located in a dedicated emergency power equipment room to meet the requirements of NFPA 110 for Level 1 emergency standby power systems because of the smoke control system for the Detention Area.
4. Surge protection will be provided at the main switchboard.
5. Indoor and outdoor lighting will be fed at 277 volt. Motors 1/2 horsepower and larger at 480 volt, 3 phase.
6. A single transformer will be provided to step-down voltage for 208Y/120 volt to feed the remainder of loads for receptacles and motors smaller than 1/2 horsepower. In general, motors smaller than ½ horsepower will be fed at 120 volt, single phase.
7. Below slab conduits should be considered for future building expansions.

ii. Emergency Power:

1. Emergency power will be provided from a new standby, outdoor, weather protected, sound attenuated, diesel generator set with sub-base fuel tank. Power will be generated at 480Y/277 volts. Preliminary size is 2,000 kW.
2. An option to be considered is dual generators for redundancy with the ability to load shed should one generator become inoperable while running under emergency power. This also provides for shutting down one generator at a time for maintenance.
3. The generator will provide total backup of the entire facility.
4. A life safety branch will be provided with a dedicated transfer switch for life safety (code required emergency). The life safety branch is required to come on line within 10 seconds and the remainder of the building in 60 seconds or less. Usually, this can be completed for both in 15 seconds.
5. Surge protection will be provided on the emergency power distribution side in compliance with recent NEC requirements for life safety.

6. The life safety branch of emergency power will feed the following:
 - a. Exit lighting.
 - b. Emergency egress lighting
 - c. Fire alarm system
7. A remote generator alarm panel will be located in Central Control as this is a 24/7 occupied space.
8. Fuel supply storage will be provided for 24 hours of backup. This will require 160 gallons per hour at full load, 4,000 gallons total.
9. Emergency battery backup lighting will be provided in addition to emergency generator power at key security locations for the generator startup and transfer time duration and in the event of total normal and emergency power failure. Areas such as Emergency Generator room, Officer Control Stations and Booking Area are recommended to include these.
10. In addition to emergency generation, an uninterruptible power supply (UPS) will be provided for critical systems such as telephone/data service, security systems, fire alarm and others to be determined during design. The battery backup capacity is usually 20 to 30 minutes. *The sizing of the UPS for telephone/data requires input from the Technology Consultant of these systems. It may also impact the generator sizing.*

iii. Lighting:

1. Lighting will be provided to meet the requirements the Illuminating Engineering Society (IES) and the American Correctional Association (ACA) Standards for the detention areas.
2. Light sources indoors will primarily be energy saving LED in office and circulation spaces. Detention spaces will utilize 4' T8 fluorescent with electronic ballasts or LED light fixtures.
3. The jail officer control station and surrounding corridor will have dimmable fluorescent lighting to allow for adjustment to improve viewing into the dayrooms.
4. In general, lighting fixtures will be recessed 2' X 2' or 2' X 4' indirect perforated basket types in offices, conference rooms and similar areas.
5. Utility type areas and storage rooms will be lit with 2' X 4' recessed fixtures with 1/8" acrylic lensing where lay in ceilings are provided and strip type fluorescent in non-ceiling mechanical, electrical and storage rooms.
6. Compact LED down lights with silver reflectors will be used in areas to supplement the ambient lighting.
7. Other sources and fixtures will be considered and designed to enhance architectural features of the building, particularly the main lobby. These areas will be developed during the design phase.

iv. Jail Lighting Fixtures:

1. Jail lighting fixtures will be specified of construction for the applicable surrounding area and architectural durability of its location.
2. In general, fixtures accessible to inmates of the facility without supervision, such as inmate cells or holding cells, will be of maximum detention durability, constructed of 12 gauge steel, 0.375" clear tempered glass/polycarbonate laminate lensing with 0.125" high impact prismatic acrylic lens on the interior.
3. Areas with supervision but subject to vandalism, such as dayrooms, housing dormitories and toilet rooms will be surface mounted high impact polycarbonate units.
4. Areas with supervision and where the likelihood of vandalism is low will be standard lay-in type fluorescent with 0.187" high impact acrylic lens and tamperproof doorframes.
5. Cell night lighting will be integrated into the cell light fixture and consist of an LED light array and will be powered 24/7 so that no cell is ever in darkness. *This will need to be coordinated with Precast Cell Manufacturer.*
6. Cell normal lights will be controlled from the security touch screen as a group per dayroom both lower and upper cells.
7. The officer housing control station and surrounding corridor will be lit with 2' X 2' fluorescent fixtures with indirect distribution lenses. The center lamp will be dimmed and the two outer lamps will be switched.
8. Outdoor lighting sources consisting of LED is the most efficient. Outdoor lighting fixtures will be commercial types with tempered glass refractors. Pole type fixtures will be provided in parking areas and along building access walkways. Flag pole and building sign floodlights will be provided, if required. All exterior lighting will meet City of Helena dark sky requirements.
9. Energy efficiency will be designed to include the following:
 - a. Occupancy sensors in private offices/conference rooms and other locations where feasible.
 - b. Reduction of lighting by 50%, dual level switching or alternate switching.
 - c. Separate switching for lights adjacent to windows.
 - d. LED exit lights.

v. Receptacles:

1. Receptacles for convenience use will be provided as required and located to accommodate the location of furniture, appliance and other equipment needs.
2. Cover plates will be primarily thermoset plastic throughout the facility.
3. Cover plates in inmate occupied areas such as housing dayrooms and courts holding areas will be 10 gauge security plates.

4. A controlled GFCI receptacle is recommended to be located in each ADA cell for CPAP breathing apparatus users. This receptacle will be controlled through the security touch screen control system described below.
 5. Receptacles on emergency power will be red.
 6. All receptacles will be labeled with the panel and circuit number on the front of the cover plate.
 7. A welding outlet is recommended to be located in the Housing Unit corridor for any door frame or door repairs.
 8. Receptacles are generally circuited 6 to a circuit or as dictated by need such as vending machines, large copiers, refrigerators and other equipment.
 9. Some locations may require two compartment surface raceways for data/receptacles around the perimeter of the room depending on the density of receptacles and data outlets required.
- vi. Data/Voice Cable and Raceway System:
1. Telephone/data outlets will be provided at two locations in each private office. *Owner input is required regarding tele/data outlet locations.*
 2. Wall box for data outlets will consist of 4" square boxes with two gang plaster ring and 1" conduit to accessible ceiling.
 3. Data outlets jacks and cabling will be provided by the projects IT/Data Consultant.
 4. A cable tray and raceway system may be provided in office administration areas if the density of outlets require.
- vii. Fire Alarm:
1. The fire alarm system will be an addressable multiplex system. The main panel will be located in the electrical equipment room with remote annunciators in Central Control, Housing Control and the designated fire department response location.
 2. The fire alarm system will be interfaced to the engineered smoke control system described under HVAC. All initiation devices within a smoke zone shall initiate the automatic smoke control sequence. See HVAC for further explanation.
 3. All initiating devices will be individually identified on the system as to its device type and location. Pull stations at locations vulnerable to inmate access will be in locked boxes or key activated with detention staff required to carrying keys.
 4. Pull stations accessible to the public will be break glass types to deter false initiation.
 5. Sprinkler flow and tamper switches will be monitored by the system.

6. Each cell will be provided with a smoke detector mounted in the exhaust duct and accessible within the rear cell chase.
7. Alarm devices will consist of horns and strobes to meet the requirements of the Americans with Disabilities Act (ADA).

viii. Other Systems:

1. TV services will be provided as allowed by the county.

ix. Preferred Equipment or Vendors

1. Fire Alarm.

Z. SECURITY ELECTRONICS

i. Security Control System (SCS):

1. The Security Control System provides the integrated micro processing backbone for the various security control and monitoring functions within the facility.
2. The SCS consists of the microprocessor-based programmable logic controls (PLC's) along with their associated power supplies, UPS's, input/output cards, multiplex communicators and control relays. Each (PLC) is located within a boundary to be determined during the design process, generally one per building or control area not exceeding control or monitoring of +/- 150 doors. These processors are interconnected to communicate with one another to achieve the various alarms and controls via a copper or fiber optic local area network (LAN). Although interconnected to one another, the failure of the LAN will not affect the controls and monitoring of the individual processors location.
3. For this project, one PLC is all that is required.
4. This SCS system also includes a dedicated PC workstation. This PC will perform the recording and history logging of the controls assigned for recording keeping. Each designated control or alarm desired for record keeping is time stamped for alarm, acknowledging and reset.
5. The recording of all activity on the SCS is of benefit to the County, i.e., inmate complains that nobody answers his cell intercom or if a duress alarm or door alarm is initiated. This provides recorded backup and improves professionalism of the corrections officers. The record keeping is a hard disk backup which is downloaded periodically to compact disk.
6. We recommend that the security control system be designed using non-proprietary, off-the shelf equipment including programmable logic controllers (PLC's), touch screen control software, relays and power supplies. This insures that system parts can be purchased directly by the Owner from electrical distributors rather than relying on the original installer. In the event the original installer goes out of business or is no longer able to support the system there are other

companies that will be able to diagnosis problems and take corrective action.

ii. PC Touch Screen Graphics:

1. This technology has become the most reliable as the speed of computer processors has evolved and the cost of computer equipment and peripheral devices have declined. The earlier versions of these systems were slow in operation which resulted in leaving staff stranded at security doors while other functions were being performed. The computers were not able to regenerate the graphic screens fast enough to be effective.
2. The PC graphic control system consists of flat panel screens that can be touch screen or mouse-driven or both. The typical controls provided by this technology to name a few, include the following:
 - a. Door Control and Monitoring – Monitor each door for both door position and lock bolt position separately. Can be used by maintenance for diagnosis.
 - b. Door Hold Open.
 - c. Staff Access for local card access or key switch controlled doors.
 - d. Isolate door control. – Used to eliminate doors from a group unlock function. Emergency group release functions bypass this function.
 - e. Group Unlock/Group Relock – Unlock/Lock housing pod cell doors at one time.
 - f. Emergency Group Release – Release all cell doors sequentially one at a time. This function over-rides any other controls design for the cell doors.
 - g. Emergency Exit Control – One step process over normal door control.
 - h. Cell Intercom and isolate intercom – Each cell with an intercom can be isolated from sending an audible tone to the officer touch screen. The call still visibly annunciates and records.
 - i. Intercom to camera call-up – Minimizes camera monitors for those cameras responsible only for door operation.
 - j. Audio Tour – Sequentially listen to each cell intercom. Useful for monitoring sound of each cell in a lockdown situation.
 - k. Audio Record – Selectable record intercom conversations.
 - l. Duress alarm shutdown and transfer – Duress alarms at touch screen locations will automatically shut down the touch screen and transfer control and an alarm to an alternate or Central Control operator.
 - m. Zoom Controls – Many ways to access calls and alarms.

- n. Utility Controls – Cell lights, dayroom lights, receptacles, water controls, TV Power. Layered behind a Hidden Function screen. Reduces touch screen clutter.
- o. History Logging – Record each and every action on the security control system.
- p. Security Control Panels (User Interface)

3. Advantages:

- a. Can handle a larger quantity of controls in a given space versus hardwired graphic panels.
- b. Utility functions can be hidden on different layers and only called upon when needed. These are on/off functions such as lighting, TV power, shower controls, etc.
- c. More flexible to changes and updates to floor plans. The backgrounds are imported to the software as AutoCAD files.
- d. Allows for greater flexibility to transfer entire controls of one control station to another.
- e. No switches or Lexan overlays to wear out.

4. Disadvantages:

- a. Failure of the touch screen PC can leave a portion of your facility inoperable. Suggest spare PC loaded with all touch screen locations with auto-boot control.

iii. Door Monitoring and Control:

1. Security doors for the movement of staff and inmates should not be controlled from more than one location unless the security system design includes a failsafe method of transferring the controls from one location to another. Failure to do this can result in missed communication between the two locations.
2. Emergency group release of inmate cells should occur in the housing pod or building security control station if the pod or building is “indirect controlled”. In “direct controlled” housing pods or buildings it is recommended that these functions be located at Central Control. Doors under emergency group release should be sequenced 3 or 4 at a time in 2 or 3 second intervals. This achieves two objectives, one, it allows an orderly release which can more easily be managed by staff and two, reduces the power supply requirement for the door control equipment and emergency generator should it be necessary to perform this group release.
3. Emergency group release requires two actions by the operator to initiate this function. For hardwired control panels, either simultaneous pushbuttons requiring two hands to operate, key operated or flip cap type pushbuttons. For PC graphic controls, two

steps of icons and a series of pop-up windows requesting confirmation will be used.

4. Additional close coordination of door hardware and controls is a must and can save potential field problems. Modifications of door frames and hardware in the field is extremely expensive, often times requiring torching, grinding, welding, putty filling and refinishing. To reduce this risk, the contract documents should address the following:
 - a. Emphasis must be stressed in the specification for the verification and coordination of lock types provided by Division 8 and/or 11 and the controls provided by the security electronics contractor. Make the General Trade responsible for assigning a specific individual to perform this task.
 - b. Include responsibility for the terminations of devices. Depending on where the security electronic controls are specified in the documents, make sure there is clear definition of responsibility for this.
 - c. Architectural specs should detail what is provided with the detention frames, i.e. conduit, boxes, etc.
 - d. Allow sufficient time for the architect and security consultant to thoroughly review the door hardware, detention frames and security electronics.

iv. Card Access System:

1. A card access system will be provided to allow staff movement through lesser security doors and within the non-detention areas of the building. This also reduces the activity at central control and allows them to perform more critical security functions. The card access system would not be used for entering or exiting the jail perimeter, although there will be some non-jail areas outside the secure perimeter that would allow staff to enter and exit such as the jail administration area, staff entry, locker rooms and exercise areas.
2. The card access technology recommended uses a contactless proximity card reader. All actions are recorded to the history logging computer the same as the alarms for duress and door control.
3. Some options for this system to consider are a digital video identification badge system and color badge printer. By including this system, card access and employee identification are maintained on a single database.
4. There are two ways the system can be provided, one as a standalone system with wired integration with the security control system or directly integrated using RS-485 readers and integral servers to the PLC system. Which to choose is dependent upon the expectation of the county and plans of future expansion to other county owned buildings. If this project is a catalyst for a county-wide system then a

standalone system should be considered as these systems are more adaptable to expansion and integration to wide area networks that may already be in place between county buildings.

v. Door Movement Intercom:

1. Two type of technology to consider; a system using PLC controlled intercom amplifiers and relay boards or a system that is PC-based using digital processing. The intercom stations themselves are the same. The PC-based system allows for more flexibility in modifying intercom functions and allows features that are not easily provided with the PLC controlled intercom system such as interfacing to the in-house phone system, background music though the cell intercom with selectivity for radio channels and two levels of volume and transfer of entire housing pod intercoms from one control station to another. The PC-based system also allows for the interfacing of the facility-wide paging system, if provided.
2. Intercom stations for door control and cell/holding communication should be constructed to sustain the long term abuse placed upon them. A means must be provided for the protection of the speaker to insure its operation. The assembly should be constructed of heavy gauge material such as 11 gauge brushed stainless steel. Cross baffles should be provided to protect the speaker from projectiles and fluids. The call button should be of metal material and flush with the plate. The use of cast horn type speakers is not recommended as the audibility of these is poor.
3. Another consideration is to install a handset intercom station in indirect supervision housing pods so that inmates can have a confidential conversation with the officer station.
4. Intercom stations can be wall mounted in their own back box or within the detention door frame. Drawings should clearly indicate which devices are wall mounted and which are frame mounted. The detention contractor needs to be instructed in the specifications to coordinate these with the security electronic drawings.
5. Wall mounted stations in frequently occupied inmate areas should be security caulked all around, this is especially true of block constructed walls where a truly flat surface is difficult to achieve. Inmate cells and holding rooms should have all frames, escutcheons and cover plates security caulked.
6. For this project we are recommending a PLC-driven audio relay system because of the smaller size jail and less complexity for maintenance.

vi. Video Surveillance System:

1. A Video Surveillance System (VSS) provides the best means to increase staff efficiency improve security and reduce inmate aggressive behavior. Cameras which several years ago were considered a luxury are now installed in greater numbers for this reason.
2. The significant decrease in costs of video equipment has made these systems more affordable. It will provide the watchful eyes where a fixed staff position would be impractical. However, camera locations should never be considered as a substitute for the most crucial security functions where direct staff supervision can be accommodated without disturbing the architecturally designed inmate or staff traffic patterns. Even then, there may be some locations where the security function is so critical as to require architectural changes.
3. As we develop the security electronic systems and understand the processes and occupant flow, we will then be able to determine total camera quantities and control.
4. The following is a list of VSS requirements that should be considered:
 - a. Cameras should be IP-based and controlled and recorded by an Ethernet-based server/switching system. Cameras can be feed from Ethernet switches using POE (Power over Ethernet) cabling.
 - b. All cameras should be color and megapixel or HD.
 - c. Exterior cameras are available that automatically switch between color and black and white when the light levels are extremely low. These cameras are better suited to displaying a usable picture than straight color cameras.
 - d. Cameras located where the main purpose is for verification of a door control request via an intercom call will be controlled for viewing to a dedicated monitor or monitors depending upon whether there are one or two cameras viewing the door. This reduces the overall monitor quantity.
 - e. Camera monitors will use quad split and multi-view monitors cameras on a single monitor or several monitors. Sequencing is also an option but should only be considered for less critical camera locations. There may be certain camera locations, depending upon the nature of their view that could be viewed at more than one monitor location.

- f. On screen identification of each camera position is recommended. Each camera scene should include a physical descriptive line, date and time. This must also be provided on the digital video recording system for any potential litigation.
- g. Intercom call-up monitor/s should be located at hands-on control level for improved viewing by the operator. Monitors are recommended to be 27" for quad split and 42" for multi-view and overall surveillance. Generally, the quantity of cameras to be viewed on a monitor will depend on the security importance of the camera.
- h. Controls will be microprocessor based, software driven with camera select and pan-tilt-zoom controls via a single joystick operation. Monitors must be situated to provide the operator easy viewing access while maintaining other functions within the operators control. Depending on the camera quantity and functions, this may be a dedicated staff position.
- i. Cameras should be considered where the possibility of an altercation between inmates and staff and between inmates and each other may present itself. Usually a camera noticed will be a deterrent to any unacceptable activity. The camera may also capture, via digital video recording, any misconduct which could be used to justify disciplinary action. Cameras designed to be covert are most effective since the occupants of the area cannot determine the camera position. Cameras with smoked domes work well in these locations, however, do not hold up well to direct attack.
- j. The use of auto-pan cameras should be discouraged because they accelerate camera maintenance. Preset positioning may be an option where a camera is covering more than one critical function on a time cycle basis or where a single camera could be used to respond to an intercom/door control from several locations.
- k. Camera housings will be selected based upon their location and application. There are minimum, medium and maximum camera housings for various applications such as recessed ceilings, surface wall mount, corner mount and others. Standard covert dome type cameras are recommended for most locations with higher security housings for camera locations accessible to inmates.
- l. The competent training and use of the camera system must be well maintained. The systems benefits can only be realized by the efficiency of the operator. Cameras where positioned, to

provide a secure environment for staff or visitors must not be neglected by the operator. Any camera positioned as such, cannot create a false sense of security. That security must be real. The use of dummy cameras should not be considered.

- m. Rough-in locations for future cameras should be considered where a camera positioned now would only be a luxury. The rough-in of cameras should be provided anywhere the future possibility exists of staff reduction or the need for improved security surveillance could develop. The Central Control location must also take into consideration for potential future cameras for the sizing of monitors and controls.

vii. Network Video Recording (NVR):

1. An NVR system is strongly recommended. This system is peripheral to the video control equipment that operates the jail. These systems provide their Owner's accountability by recording all camera activity within the facility. Should an altercation or dispute occur which is in view of a camera, the Owner would have some evidence for potential disciplinary action.
2. These systems basically consist of a PC with multiple hard drives and a software program. The hard drives are sized depending on the camera quantity and the time duration at which the Owner desires to maintain a video library. Thirty days of recording time is usually sufficient provided that procedures are in place to insure that staff search and download the recorded images when an event occurs.
3. The following lists some these system features:
 - a. Record on motion. Can be programmed to only record cameras with activity. This helps to reduce hard drive space, which reduces cost.
 - b. Can be interfaced to the facilities LAN system to allow any number of operators to access the system from their desk PC. Access to the software operating configuration can be programmed for several levels of security. The operator can access recorded video or view cameras live. The PC may need to have the appropriate video accelerators, graphic display cards and system operating speed dictated by the NVR manufacturer. Most modern PC has these capabilities.
 - c. Searching of recorded video is easier. The software allows various commands for searching the video, such as all camera activity at a specific date and time or time span.
 - d. Video can be downloaded to standard DVD disk or exported to standard Jpeg or H.264 movie clip file that can be e-mailed.

Recording is encrypted which will not allow for any altering to the original digital recording.

- e. Selected cameras can be programmed to higher record rates in response to alarms, such as a duress alarm or a door alarm. Cameras can also be programmed to record at higher rates at specific time schedules.

viii. Audio/Video Recording System:

1. These are systems usually installed in Intoxilyzer and Interview rooms.
2. The system consists of the following:
 - a. A camera either visible or covert such as a camera that is hidden in a wall thermostat, ceiling smoke detector or other device.
 - b. A wall mounted boundary type microphone.
 - c. A motion sensor to automatically activate the recording or a wall mounted pushbutton to manually activate the system.
 - d. An AV interface device.
3. A DVR recording device that records both audio and video.
4. The DVR can be interfaced to the facilities LAN system to allow any number of operators to access the system from their desktop PC. Access to the software operating configuration can be programmed for several levels of security.
5. The software time stamps and encrypts the recording. Any attempt to digitally modify recorded video will render it unusable. The software also allows for transcribing notations to the recorded video.
6. This system if provided must be properly coordinated in advance to insure that the camera and microphone are located for the best quality sound and picture. Special consideration should be given to the acoustic qualities of the room.

ix. Duress Alarm:

1. The use of duress alarms at all security control locations is necessary. Each control location with access to a security control panel or touch screen shall have a hardwired emergency pushbutton to alert Central Control to a potential security risk. When a duress alarm is initiated at a location of a hardwired control panel or touch screen, they automatically shut down and alert Central Control. The intent of these duress alarms is an attack on the control location itself.
2. As the security plan develops, there will discussion on the locations where wall mounted pushbuttons or under desk/counter manual

alarms may be desired in addition to those at the security control locations.

3. Wireless duress alarms provide mobile staff with the ability to alert Central Control to an individual requiring assistance. These systems consist of a body mounted transmitter, either belt worn or neck lanyard and a receiver mounted in the area of coverage. There are three main technologies used, infrared, radio frequency and ultrasonic. Infrared requires a line of sight from the transmitter to the receiver and therefore does not work well in the jail environment. Both radio frequency and ultrasonic do not require line of sight. Radio frequency can penetrate walls and structures which can create alarms in several adjacent zones where receivers are located. This is not desirable in jails where seconds can mean the difference between aggressive behavior and an altercation. Ultrasonic does not penetrate walls or structures and does not require line of sight which makes this technology more ideal for the jail environment. However, none of these technologies are perfect and even under the most ideal installations, weak spots may exist. In the commissioning of these systems, staff must be made aware of these weak spots.
 4. It is recommended that wireless duress alarms be provided in the dayrooms and booking area as these are the most likely locations for an attack on an officer. Locating this system throughout the entire facility is a costly option that may not have a good return on investment especially if it is the intent of the facility to also carry radios with man down features.
- x. Spare Parts:
1. Each system specified will include a spare parts list for parts to be provided, cataloged, shrink-wrapped and turned over to the Owner for storage.
 2. The spare parts are necessary to insure continued functioning of the systems. Expect minor failures, especially within the first six months of operation as most defects in equipment will usually occur within this time period. This is especially true to the adjustment of door hardware. Maintenance staff must also reorder any spare parts used to maintain a stockpile.
- xi. Security Control Contractor:
1. The integration of these systems is most critical to the successful operation of the facility. Although individually, these systems can be easily provided by a number of local contractors, it's the integration that requires the most expertise. These facilities and the integration of systems are custom and the selection of this contractor is critical to insure that only qualified, experienced contractors are considered.

2. These contractors are generally custom fabricators for the security control panels or touch screens and door/intercom functions. The need for experienced, competent and financially secure security contractors is a must for success of the security system and long-term operability and maintenance. It is recommended that these contractor's meet pre-qualification requirements that are included in our specifications.

xii. The Security Design Process:

1. Once a floor plan is developed, three meetings are scheduled for the development of the security systems:
 - a. Meeting 1 – Review the floor plans and discuss all the processes in the building such as intake/booking, classification, clothes out, evidence processing, food distribution, laundry operations, medical unit, etc. We need to understand how the Sheriff's Office wants the jail to operate and guide them on the application of system or equipment to improve the staff efficiency, communications and security. A detailed review of each door location will be done to address the security degree required, frame gauge, locks and options available on the doors such as pass-thru's, cuff-ports, shutters, glass, etc. Discuss who controls these doors from where. This meeting occurs in the design development phase.
 - b. Meeting 2 – This is a repeat of the meeting 1 and is critical because as the building floor plan develops changes will occur that need to be revisited in respect to security. This meeting occurs in the middle of construction document phase.
2. A holistic approach to security design is necessary including a review of the architectural drawings for any suggested changes necessary to insure a safe and secure environment for both staff and inmates.
3. Coordination of engineering disciplines is critical, below are some issues to avoid conflicts in the field:
 - a. That the security electronic controls match the door hardware. Close coordination required between the hardware schedules and the controls.
 - b. Verify what is door frame mounted and wall mounted.
 - c. Review mechanical drawings for camera locations to verify that cameras are not located behind unit heaters, piping or ductwork.
 - d. Review Architectural drawings for ceiling types so the light fixture construction and speakers or cameras include the right security housing for the ceiling type.

- e. Review Architectural details of the control station millwork to insure that all equipment is accounted for and equipment locations are included.
- f. Review Architectural elevations for the mounting heights of all equipment that is wall mounted.
- g. Review Electrical drawings for required connections to the security equipment. Also, coordinate the required UPS power backup sizing is adequate.
- h. Review and coordinate equipment room sizes for the security electronics equipment. This should be done early in the project to insure that rooms are located in proximity to the control stations and are secured.
- i. Review and coordinate cooling requirements with the mechanical consultant for maintaining security electronic equipment rooms on dedicated split AC systems.

xiii. Other Considerations:

- 1. The following items are included to address other non-security electronics, physical issues that when combined with these systems, enhances the security as a whole.
- 2. Light Fixture Construction:
 - a. Consideration must be given to the light fixture construction according to the degree of vulnerability to attack at its given location. In addition, bidding documents must clearly describe or detail the mounting of these fixtures to ensure a secure installation. The majority of fixture vandalism can be attributed to poor installation resulting in its entire removal from its mounting rather than the destruction of the fixture itself.
 - b. The following fixture construction is recommended:
 - i. Maximum Security - 12 gauge steel with 0.375" or 0.50" Lexan or clear tempered glass with .125" DR high impact acrylic overlay.
 - ii. Medium Security - 14 gauge steel with 0.250" Lexan or clear tempered glass with .125" DR high impact acrylic overlay.
 - iii. Minimum Security - 16 gauge steel with 0.187" high impact acrylic lens. These are generally fixtures located in areas where inmates may have access to them without supervision. There are many locations in the minimum security environment where standard vandal proof type fixtures can be used which is more cost effective.

3. There are varied preferences to the use of Lexan versus tempered glass. Lexan can be melted with an open flame distorting the lensing and emitting toxic vapors. Clear tempered glass can be shattered if the lens retention system within the fixture does not provide an even pressure across the pane of glass. When properly installed with even pressure, it is difficult to shatter. Lexan is easier to replace and more readily available for replacement. It can be purchased by the maintenance staff and field cut to fit. Tempered glass is more difficult to replace, it must be purchased to fit because tempered glass requires heat treating after it is cut to size. With either lens, it is recommended that spare lenses be specified to be provided by the manufacturer of the light fixtures.
4. Support and administrative areas accessible to inmates under direct supervision such as classrooms, activity, meeting rooms, etc. should have their door frames secured with tamperproof screws to protect access to the lamps. They should also be specified with high impact DR acrylic lensing. Fluorescent lamps with a broken end can make lethal weapons.

xiv. Security Fasteners:

1. All exposed fasteners must be security type. To ensure compatibility between various contractors, architectural specification (usually 11190) should specify the type to be utilized and parameters for locations on the project and all other divisions of contract should refer to that section. This will eliminate multiple types being provided and the tools required to service them.
2. Torxhead with center pin is recommended.

xv. Cell Door Identification:

1. Each cell door controlled from a security station should include a stenciled identification on the door to correspond with the location on the security control touch screen or panel. This expedites the control process, especially under a stress related control action such as a cell extraction or cell fire alarm.
2. Additionally, the fire alarm system should be programmed so that the identification is identical on both systems.

xvi. Existing Facility Remodel

1. The existing facility is served by non-centralized water source heat pumps. The existing detention center level of the facility will be remodeled as needed after the new facility is built. The remaining areas will be remodeled into additional court rooms, office space, restrooms, and other support spaces.

2. Card Access

- a. A card access door locking and monitoring system will be provided to separate the public to department locations.
- b. The system will include a PC graphic monitoring station for the alarming of doors and duress alarms (described below) located in the building.
- c. Card readers will be provided at electrified door locations. Electrified hardware and monitoring door contacts will be provided by Division 8.
- d. Centralized access control panels will be provided on both floors of the building in the IT closets. Power supplies for electrified hardware will be provided by the security system supplier and located to each access control panel. The only exception is those door locations with electrified exit devices (pushbars). Power supplies for those doors will be provided by the hardware supplier in Division 8.

3. Duress Alarm

- a. Concealed wired duress alarms will be located on the underside of counters and desks for all department reception areas, Judge's Chambers, District Attorney Office's and at the counters of the Judge, Court Clerk and Bailiff station of each courtroom.

4. Video Surveillance

- a. Cameras will be provided to monitor public spaces. Cameras inside the building will be located in courtrooms, corridors, lobby and main stair, exterior card access locations and in the corridors to court holding from the jail and in the courts holding cells. Cameras outside the building will be provided around the perimeter of the building and view parking lots and main entry areas.
- b. Cameras will be IP-based, high resolution, wide dynamic range, auto-focus, auto-iris with vari-focal lenses. Cameras will primarily be fixed indoors and pan/tilt/zoom outdoors. Camera locations outdoors will be day/night cameras for automatic transition from color to black and white under low light level conditions.
- c. Cameras will be recorded 24/7 to an IP-based Ethernet video server and network recorder. This system can be interfaced to the Counties local area network for access to live and recorded video to designated PC location with the video

network software installed. Cameras will be fed with Cat. 6 data communications cable to a copper patch panel.

- d. Cameras will be fed via Power over Ethernet (POE) and located in the IT rooms of both floors. For exterior cameras, mid-span power injectors will be used to feed the camera power.
- e. It will need to be determined who within the County will be responsible for Courthouse Security. Most times, it is either in the Sheriff's 911/Dispatch Center or in a Courthouse Security Office or Security Clearance Post, if one is provided, and sometimes in two locations. Access to the card access and video surveillance system will be on a dedicated PC at the monitoring location of the designated monitoring location.

AA. SUSTAINABLE/LEED OVERVIEW

While it has not been specifically requested to pursue LEED Accreditation for the new Lewis & Clark County Public Safety Facility, this building is designed with key resourceful practices in mind. Following are potential opportunities that will be implemented in the new Public Safety Facility to create a safe, energy efficient, sustainable and responsible building.

- i. Location, Transportation and Site:
 - 1. The selected site is a Brownfield site. This is land that has been previously used for industrial purposes or some commercial uses. Utilizing this site means that undeveloped land around Helena either used for agriculture or left to evolve naturally will be left in its natural state and not used.
 - 2. Building orientation is key. The Public Safety Facility is oriented on an east/west axis. This orientation allows for the best daylight and energy harvesting available resulting in lower energy needs on the power grid. With a majority of the building faces (and open offices) on the south side, the sun will provide optimum heat and daylight, naturally, for the facility.
 - 3. To encourage staff and public use of bicycles there will be a bike storage location. For the staff there will also be lockers and showers. A public transit stop will also be included in the design available for public and staff use.
 - 4. The Site design will utilize appropriate site lighting to reduce light pollution on the surrounding environment. The hard surfaces will

utilize materials and thoughtful placement of shade trees to reduce the negative repercussions of the heat island effect.

ii. Water Efficiency:

1. The plumbing system will be provided with lower flow water fixtures were applicable to reduce building water use.
2. Landscaping will utilize drought resistant plant species to reduce the need for heavy water usage. It is also possible to manage the natural rainfall by diverting or collecting the water that falls on the hard surfaces and use for irrigation.

iii. Energy and Atmosphere:

1. The proposed mechanical system is a high efficiency system that allows for multiple ways of heat recovery and energy savings to increase efficiency and reduced utility usage. One method is by utilizing heat recovery capabilities in the air handling system that will recapture heat from the return/exhaust air stream and use this heat to preheat the incoming air stream. Lastly, the proposed variable refrigerant Volume (VRV) system has heat recovery capabilities as well which allow for spaces within the building to share heating and cooling capabilities to different areas as needed. These VRV systems typical can show a minimum of 25% energy savings in comparison to a code minimum building.
2. We have developed roof system that optimal for the construction of photovoltaic (PV) panel arrays. If implemented on this project this panel system will offset the electrical usage of the building by producing electricity as the PV arrays harness the power of the sun.
3. There is a large amount of energy efficient lighting already planned for this project. However, if desired there is the opportunity to install LED lighting throughout the entire building, which will further reduce the energy usage.

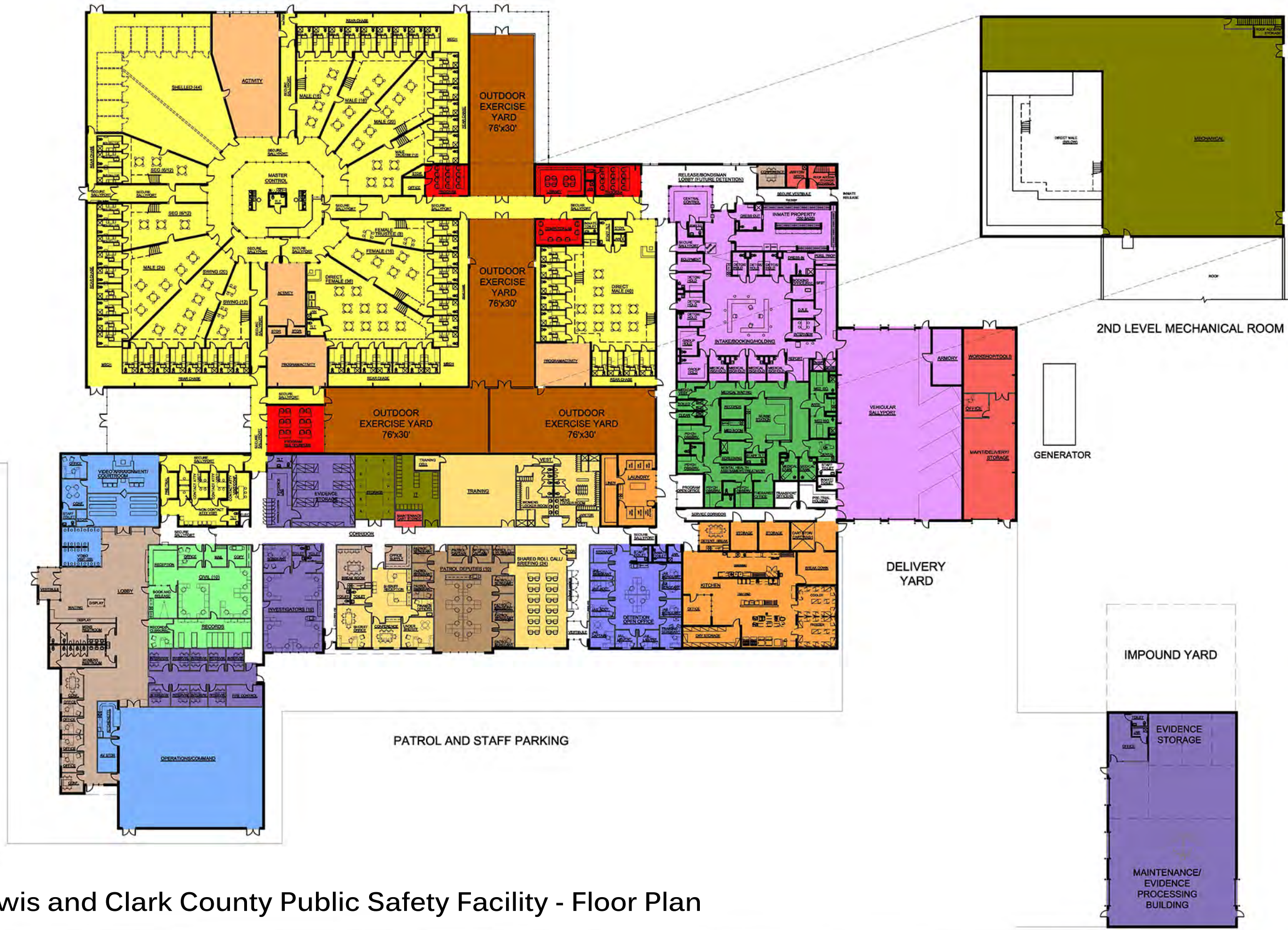
iv. Materials and Resources

1. The new Public Safety Facility will incorporate as much locally produced and harvested materials as possible. During the construction sequence, collection and recycling of construction waste will be implemented on the project to reduce the impact on our local landfill.
2. Strategically located recycling stations will placed throughout the facility for public and staff use after the building is operational.

v. Indoor Environmental Quality

1. The use of low VOC (Volatile Organic Compounds) materials will be utilized in all aspects of this project. Doing so will help ensure the health and safety for both the public and sheriff's staff that will be utilizing this facility.
2. This facility will integrate automatic daylight harvesting throughout the detention center and administrative areas. The addition of interior photocells located in daylighting zones will automatically reduce light levels adjacent to windows when adequate natural light is available saving energy costs.
3. User lighting and thermal controls will be developed to allow for minor modification of spaces which can allow for more desirable conditions and increased productivity.
4. The acoustical design will also be developed to provide both comfort and privacy.

In addition to the sustainable strategies that are described, we are also prepared to measure these techniques using the Leadership in Energy and Environmental Design (LEED) rating system, which is a certification program that recognizes best-in-class building strategies and practices.



Area Legend

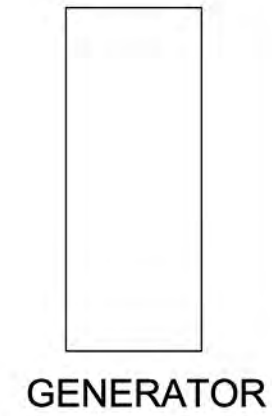
- Public
- Operations/Command
- Civil Division
- Detective, Interview Evidence
- Detention
- Sheriffs Office
- Mechanical & Storage
- Patrol Division
- Detention Offices
- Kitchen & Laundry
- Medical
- Sally-port, Booking Intake & Holding
- Program Space
- Outdoor Exercise
- Indoor Exercise
- Maintenance

Lewis and Clark County Public Safety Facility - Floor Plan



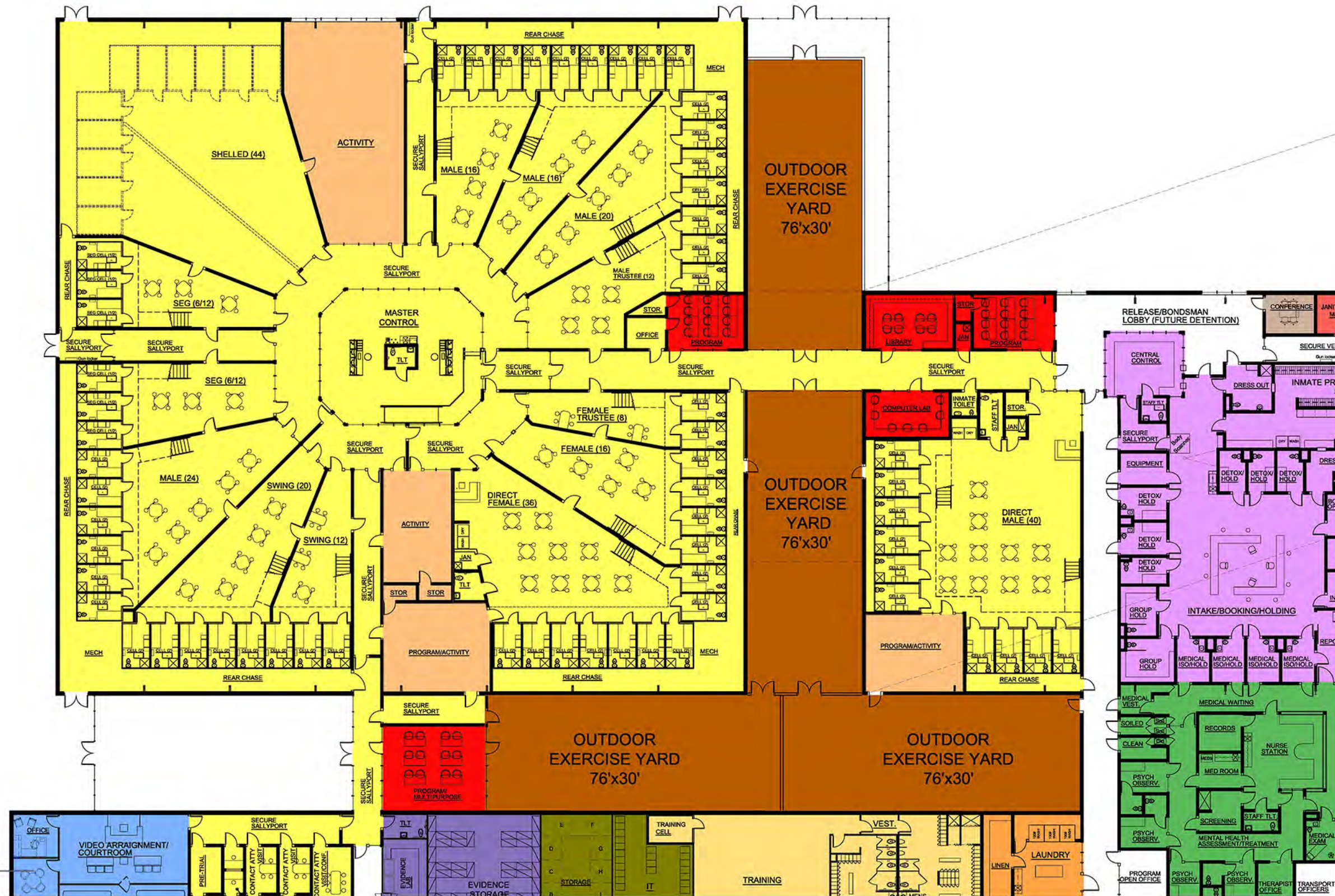
Area Legend

- Public
- Operations/Command
- Civil Division
- Detective, Interview Evidence
- Detention
- Sheriffs Office
- Mechanical & Storage
- Patrol Division
- Detention Offices
- Kitchen & Laundry
- Medical
- Sally-port, Booking Intake & Holding
- Program Space
- Outdoor Exercise
- Indoor Exercise
- Maintenance



Lewis and Clark County Public Safety Facility - Booking & Intake

Not To Scale



Area Legend

- Public
- Operations/Command
- Civil Division
- Detective, Interview Evidence
- Detention
- Sheriffs Office
- Mechanical & Storage
- Patrol Division
- Detention Offices
- Kitchen & Laundry
- Medical
- Sally-port, Booking Intake & Holding
- Program Space
- Outdoor Exercise
- Indoor Exercise
- Maintenance

Lewis and Clark County Public Safety Facility - Detention Floor Plan

Not To Scale

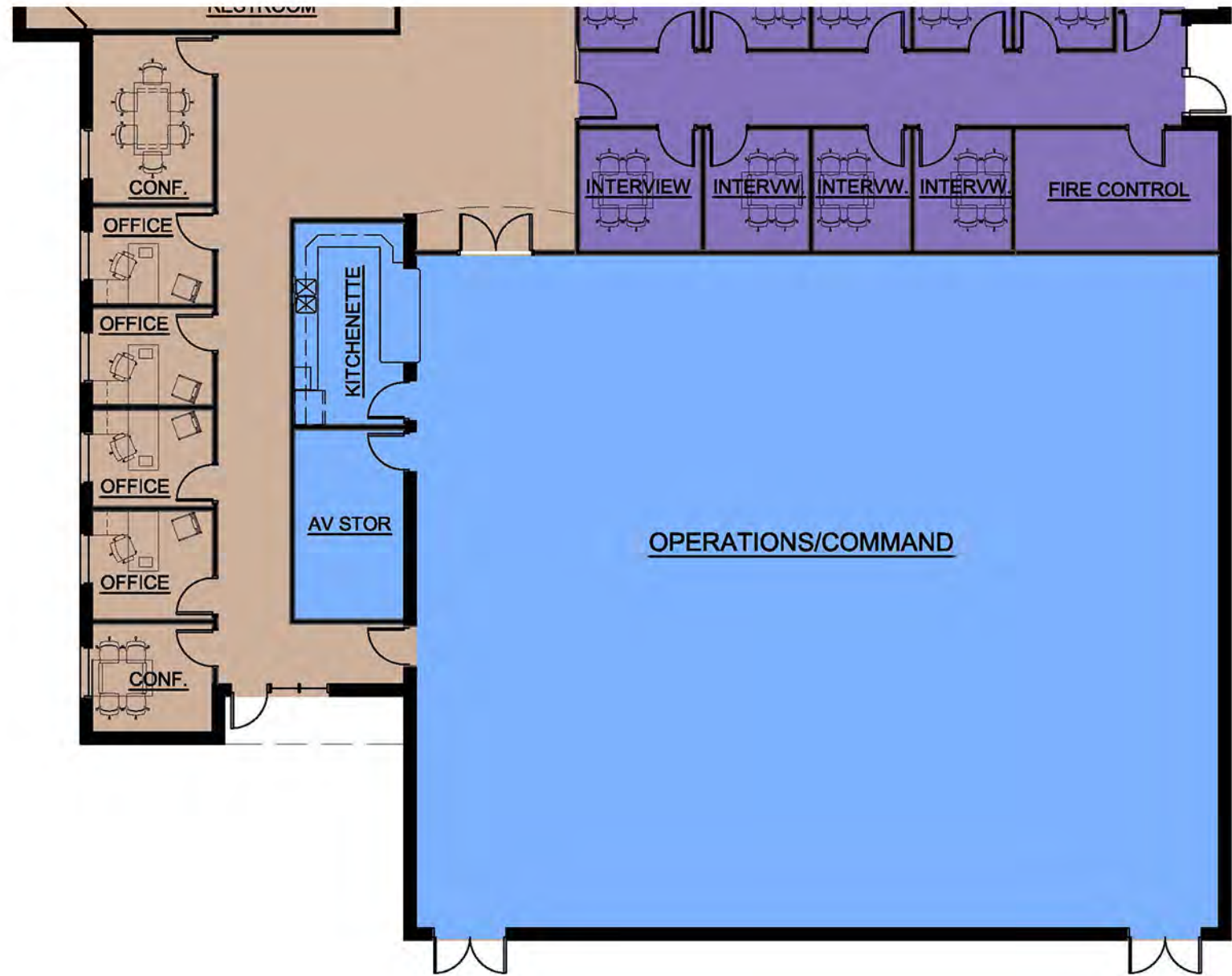


Area Legend

- Public
- Operations/Command
- Civil Division
- Detective, Interview Evidence
- Detention
- Sheriffs Office
- Mechanical & Storage
- Patrol Division
- Detention Offices
- Kitchen & Laundry
- Medical
- Sally-port, Booking Intake & Holding
- Program Space
- Outdoor Exercise
- Indoor Exercise
- Maintenance

Lewis and Clark County Public Safety Facility - Public Entrance

Not To Scale



Area Legend

- Public
- Operations/Command
- Civil Division
- Detective, Interview Evidence
- Detention
- Sheriffs Office
- Mechanical & Storage
- Patrol Division
- Detention Offices
- Kitchen & Laundry
- Medical
- Sally-port, Booking Intake & Holding
- Program Space
- Outdoor Exercise
- Indoor Exercise
- Maintenance

Lewis and Clark County Public Safety Facility - Command Center

Not To Scale



Area Legend

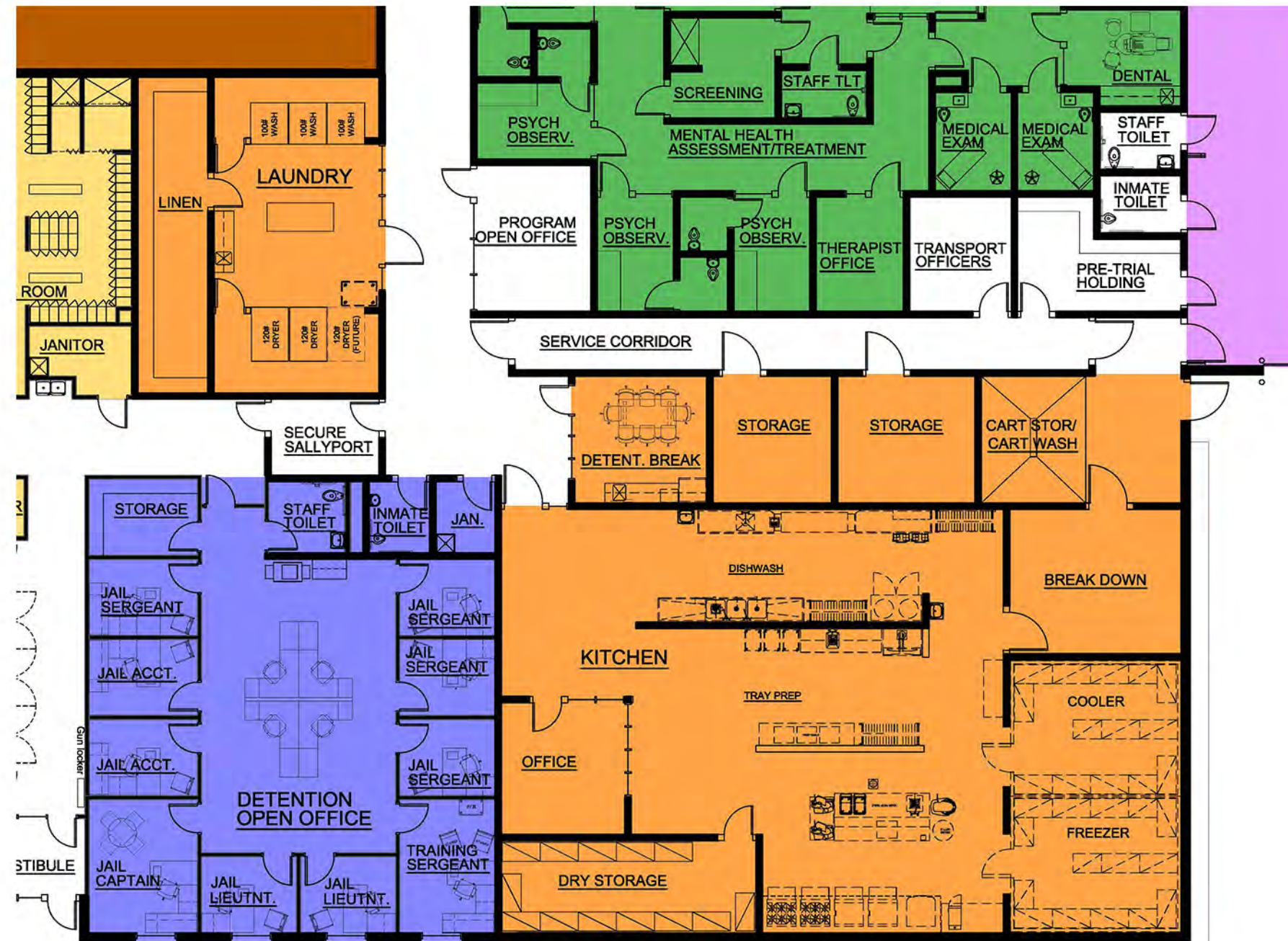
- Public
- Operations/Command
- Civil Division
- Detective, Interview Evidence
- Detention
- Sheriffs Office
- Mechanical & Storage
- Patrol Division
- Detention Offices
- Kitchen & Laundry
- Medical
- Sally-port, Booking Intake & Holding
- Program Space
- Outdoor Exercise
- Indoor Exercise
- Maintenance



Lewis and Clark County Public Safety Facility - Administration

Not To Scale



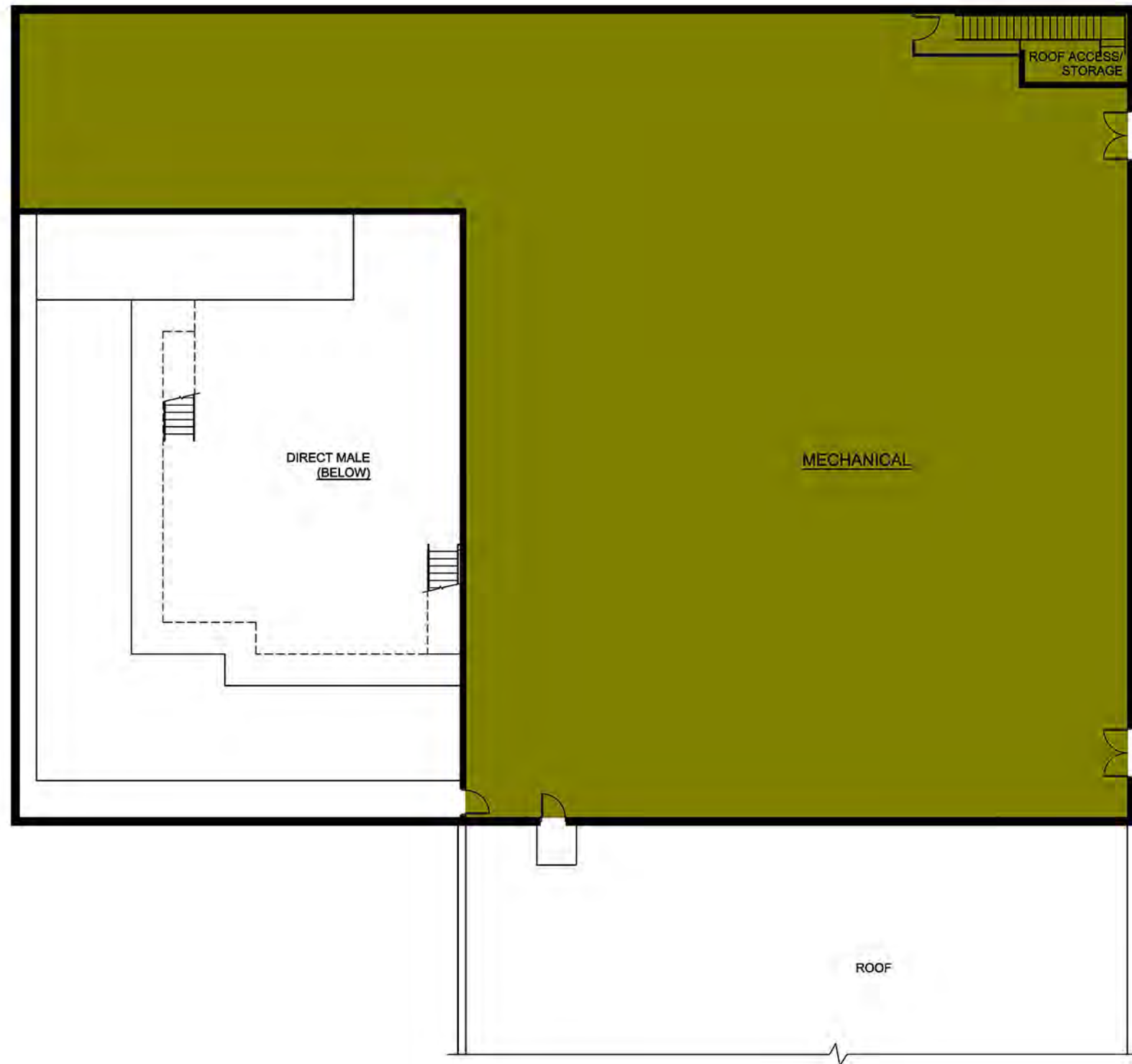


Area Legend

- Public
- Operations/Command
- Civil Division
- Detective, Interview Evidence
- Detention
- Sheriffs Office
- Mechanical & Storage
- Patrol Division
- Detention Offices
- Kitchen & Laundry
- Medical
- Sally-port, Booking Intake & Holding
- Program Space
- Outdoor Exercise
- Indoor Exercise
- Maintenance

Lewis and Clark County Public Safety Facility - Kitchen and Laundry

Not To Scale



Area Legend

- Public
- Operations/Command
- Civil Division
- Detective, Interview Evidence
- Detention
- Sheriffs Office
- Mechanical & Storage
- Patrol Division
- Detention Offices
- Kitchen & Laundry
- Medical
- Sally-port, Booking Intake & Holding
- Program Space
- Outdoor Exercise
- Indoor Exercise
- Maintenance

Lewis and Clark County Public Safety Facility - 2nd Floor Mechanical Room

Not To Scale

IMPOUND YARD

EVIDENCE STORAGE

MAINTENANCE/
EVIDENCE
PROCESSING
BUILDING

TOILET
JAN
OFFICE

Area Legend

- Public
- Operations/Command
- Civil Division
- Detective, Interview Evidence
- Detention
- Sheriffs Office
- Mechanical & Storage
- Patrol Division
- Detention Offices
- Kitchen & Laundry
- Medical
- Sally-port, Booking Intake & Holding
- Program Space
- Outdoor Exercise
- Indoor Exercise
- Maintenance

Lewis and Clark County Public Safety Facility - Evidence Storage

Not To Scale



Lewis and Clark County Public Safety Facility - Front Perspective



Lewis and Clark County Public Safety Facility - Southwest Aerial Perspective



Lewis and Clark County Public Safety Facility - Southeast Aerial Perspective



Lewis and Clark County Public Safety Facility - Northwest Aerial Persp



Lewis and Clark County Public Safety Facility - Northeast Aerial Perspective

06

space program

space program

6. Space Program

Area Description	Approximate Size	Number of Areas	Net sf
Component: (a) Administration			
Jail Captain Office	11'-5" X 14'-0"	1	160
Training Sergeant	10'-0" X 14'-0"	1	140
Jail Lieutenant	10'-0" X 8'-0"	2	160
Jail Sergeant	10'-0" X 8'-0"	3	240
Jail Sergeant	11'-5" X 8'-0"	1	91
Jail Accountant	11'-5" X 8'-0"	2	182
Open Office	20'-5" X 31'-10"	1	650
Toilet	8'-0" X 6'-9"	1	54
Storage	11'-5" X 8'-0"	1	91
Shared Roll Call/Briefing	24'-0" X 47'-8"	1	1,144
Storage	3'-9" X 6'-0"	1	23
Patrol Open Office	26'-10" X 41'-3"	1	1,107
Patrol Sergeant	10'-0" X 8'-0"	7	560
Patrol Lieutenant	10'-0" X 8'-0"	1	80
Special Operations Captain	10'-0" X 8'-0"	1	80
Patrol Captain	10'-0" X 8'-0"	1	80
Sheriff's Office	16'-0" X 19'-8"	1	315
Under Sheriff	14'-11" X 14'-0"	1	209
Conference	13'-4" X 14'-0"	1	187
Reception	18'-3" X 22'-0"	1	402
Finance Officer	10'-0" X 8'-0"	1	80
Toilet	9'-5" X 7'-2"	1	68
Investigator Open Office	27'-5" X 36'-5"	1	999
Sergeant	13'-0" X 12'-10"	1	167
Toilet	6'-0" X 7'-5"	1	45
Interview	8'-0" X 10'-0"	5	400
Interview	8'-7" X 10'-0"	2	172
Interview	10'-0" X 10'-0"	2	200
Evidence Lab	11'-3" X 27'-0"	1	304
Evidence Storage (in building)	29'-0" X 33'-5"	1	969
Civil Reception	13'-3" X 18'-7"	1	246
Civil Open Office	34'-0" X 23'-7"	1	802
CWP	11'-9" X 10'-0"	1	118
Copy	8'-11" X 10'-0"	1	89
Booking/Release	13'-3" X 15'-0"	1	199
Clerk/Records Reception	11'-3" X 13'-8"	1	154
Records	35'-11" X 13'-8"	1	491

Training	35'-2" X 33'-5"	1	1,175
Training Cell (included in IT)	12'-0" X 7'-5"	1	89
Men's Locker Room	21'-1" X 33'-5"	1	702
Women's Locker Room	17'-2" X 28'-0"	1	481
Office Supply	11'-10" X 10'-10"	1	128
Break Room	16'-0" X 20'-0"	1	320
Break Room Toilet	6'-0" X 7'-2"	1	43
Staff Toilet	7'-5" X 7'-5"	1	55
Mail	12'-6" X 10'-0"	1	125
Janitor (included in Men's Locker Room)	10'-9" X 7'-3"	1	78
IT	20'-7" X 33'-5"	1	688
Maint. Cart Storage (included in IT)	12'-7" X 7'-2"	1	90
Large Storage w/ Fenced Bays	18'-2" X 30'-0"	1	545
Storage Cabinets at Roll Call/Briefing	2'-0" X 6'-0"	3	36
Subtotal (not including Janitor, Maint. Cart Storage, and Training Cell)			15,756
Walls & Circulation (30%)			4,727
Totals			20,483

Component: (b) Public Space

Operations and Command	66'-10" X 56'-0"	1	3,742
A/V & Storage	9'-1" X 15'-9"	1	143
Kitchenette	9'-1" X 16'-9"	1	152
Support Office	10'-0" X 8'-0"	3	240
Support Office	10'-0" X 9'-0"	1	90
Support Conference	10'-0" X 9'-0"	1	90
Support Conference	10'-0" X 14'-0"	1	140
Waiting (includes display space)	25'-7" X 11'-2"	1	286
Men's Restroom	25'-7" X 9'-5"	1	241
Women's Restroom	25'-7" X 10'-1"	1	258
Video Visitation	18'-5" X 18'-5"	1	339
Public Lobby	21'-4" X 81'-0"	1	1,729
Video Arraignment/Courtroom	33'-4" X 33'-5"	1	1,114
Judge's Office	11'-7" X 11'-0"	1	127
Conference	11'-7" X 13'-9"	1	159
Storage	11'-7" X 7'-10"	1	91
Pre-Trial Holding	8'-0" X 12'-0"	1	96
Non-Contact Visitation	5'-0" X 12'-0"	1	60
Contact Visitation	8'-0" X 12'-0"	2	192
Contact Visitation	10'-0" X 17'-0"	1	170
Waiting	31'-0" X 12'-2"	1	377

Toilet	5'-0" X 7'-2"	1	36
Subtotal			9,872
Walls & Circulation (5%)			494
Totals			10,366

Component: (c) Vehicular Sallyport

Vehicular Sallyport	58'-0" X 89'-0"	1	5,162
Armory (included in V. Sallyport)	13'-8" X 26'-0"	1	355
Staff Toilet	8'-6" X 6'-0"	1	51
Inmate Toilet	8'-6" X 6'-0"	1	51
Pre-Trial Holding	17'-2" X 12'-0"	1	206
Transportation Officers	10'-8" X 12'-0"	1	128
Subtotal (not including Armory)			5,598
Walls & Circulation (5%)			280
Totals			5,878

Component: (d) Maintenance/Delivery/Storage

Maintenance/Delivery Storage	24'-0" X 58'-9"	1	1,410
Office (included in M/D/S)	11'-7" X 11'-2"	1	129
Workshop	24'-0" X 29'-9"	1	714
Subtotal (not including Office)			2,124
Walls & Circulation (5%)			106
Totals			2,230

Component: (e) Intake/Booking/Holding

Central Control	19'-8" X 16'-0"	1	315
Staff Toilet	6'-7" X 6'-0"	1	39
Inmate Property	34'-0" X 21'-4"	1	726
Dress-Out	12'-0" X 8'-0"	1	96
Dress-In	15'-6" X 10'-8"	1	165
Personal Property	9'-8" X 5'-7"	1	54
Live Scan	12'-4" X 25'-0"	1	309
Equipment	12'-0" X 8'-3"	1	99
Detox/Hold	12'-0" X 8'-5"	2	202
Detox/Hold	12'-0" X 6'-10"	1	82
Detox/Hold	6'-10" X 10'-8"	3	219
Booking Office	10'-0" X 10'-10"	1	108
D.R.E.	10'-0" X 8'-0"	1	80
Interview	10'-0" X 9'-4"	1	93
SFST	9'-8" X 44'-7"	1	431
Report	10'-4" X 18'-8"	1	193

Shower	5'-0" X 5'-0"	2	50
Group Hold	9'-4" X 12'-11"	1	121
Group Hold	14'-0" X 11'-4"	1	159
Medical Isolation/Hold	8'-5" X 11'-4"	4	95
Intake/Booking/Holding	40'-4" X 36'-10"	1	1,486
Subtotal			5,215
Walls & Circulation (30%)			1,565
Totals			6,780
Component: (f) Release/Bondsman			
Bondsman Lobby	20'-4" X 16'-4"	1	332
Conference	12'-8" X 8'-8"	1	110
Subtotal			442
Walls & Circulation (30%)			133
Totals			575
Component: (g) Food Service			
Detention Break	13'-10" X 13'-4"	1	184
Storage	12'-5" X 13'-4"	1	166
Storage	14'-5" X 13'-4"	1	192
Cart Wash	11'-0" X 13'-4"	1	147
Cooler/Freezer	18'-0" X 28'-7"	1	514
Break Down	18'-0" X 15'-2"	1	273
Kitchen	52'-9" X 44'-6"	1	2,347
Office (included in Kitchen)	13'-0" X 13'-10"	1	180
Dry Storage (included in Kitchen)	26'-9" X 9'-8"	1	259
Subtotal (not including Office and Dry Storage)			3,823
Walls & Circulation (30%)			1,147
Totals			4,970
Component: (h) Laundry			
Laundry (Including Chase, Equipment, & Work Space)	17'-4" X 33'-2"	1	575
Linen Storage	7'-4" X 33'-2"	1	243
Subtotal			818
Walls & Circulation (5%)			41
Totals			859
Component: (i) Program Office			
Program Office	12'-0" X 15'-4"	1	184
Walls & Circulation (5%)			9
Totals			193

Component: (j) Program Spaces			
Program/Multi-Purpose	26'-5" X 22'-0"	1	581
Inmate Toilet	11'-3" X 6'-0"	1	68
Program	20'-10" X 13'-11"	1	290
Storage	4'-0" X 6'-11"	1	28
Inmate Toilet	6'-8" X 6'-2"	1	41
Program	19'-9" X 14'-0"	1	277
Office	10'-0" X 8'-0"	1	80
Storage	10'-0" X 5'-4"	1	53
Subtotal			1,418
Walls & Circulation (5%)			71
Totals			1,489
Component: (k) Library			
Library	22'-8" X 13'-11"	1	316
Walls & Circulation (5%)			16
Totals			332
Component: (l) Computer			
Computer	21'-7" X 10'-2"	1	219
Walls & Circulation (5%)			11
Totals			230
Component: (m) Medical & Mental Health Services			
Soiled	12'-0" X 4'-8"	1	56
Clean	12'-0" X 5'-8"	1	68
Psych Observation	12'-0" X 8'-0"	4	384
Psych Observation Toilets	5'-8" X 5'-0"	4	113
Therapist	9'-2" X 12'-0"	1	110
Nurse Station	22'-6" X 21'-0"	1	473
Records	11'-0" X 9'-6"	1	105
Med Room	11'-0" X 9'-0"	1	99
Screening	11'-0" X 10'-6"	1	116
Toilet	8'-11" X 5'-0"	1	45
Med/Exam	8'-0" X 10'-4"	2	165
Exam	12'-0" X 8'-0"	1	96
Dental Exam	12'-0" X 10'-1"	1	120
Med Isolation	12'-0" X 8'-0"	1	96
Med Isolation	12'-0" X 6'-8"	1	80
Ante	12'-0" X 5'-0"	1	60
Subtotal			2,206

Walls & Circulation (5%)			110
Totals			2,316
Component: (n) Indoor & Outdoor Exercise			
Outdoor Exercise Yards	30'-0" X 76'-0"	4	9,120
Future Expansion/Activity		1	3,686
Activity		1	515
Program/Activity		1	592
Storage	8'-6" X 4'-0"	2	68
Activity		1	1,511
Subtotal			15,492
Walls & Circulation (5%)			775
Totals			16,267
Component: (o) Inmate Commissary			
None			
Component: (p) Master Control Room			
Control (includes Toilet, Coffee Alcove, Sprinkler Riser)	41'-7" X 34'-7"	1	1,438
Toilet	7'-4" X 5'-4"	1	39
Security Vest	16'-11" X 10'-0"	1	169
Subtotal (not including Toilet)			1,607
Walls & Circulation (3%)			48
Totals			1,655
Component: (q) Inmate Housing			
Double Occupant Cells	80 sf	122	9,760
Direct Supervision Male:			
Dayroom (including Supervisor)			2,125
Storage			33
Janitor			18
Staff Toilet			61
Washer/Dryer Niche			27
Mezzanine			361
Male Dayroom			742
Mezzanine			106
Male Dayroom			871
Mezzanine			122
Male Dayroom			986
Mezzanine			139
Male Trustee Dayroom			788
Mezzanine			85

Female Trustee Dayroom	445
Mezzanine	57
Female Dayroom	963
Mezzanine	130
Direct Supervision Female:	
Dayroom (including Supervisor)	1,554
Mezzanine	240
Washer/Dryer Niche	26
Janitor Closet	27
Staff Toilet	53
Swing Dayroom	550
Mezzanine	81
Swing Dayroom	1,006
Mezzanine	141
Male Dayroom	1,154
Mezzanine	167
Segregation Dayroom	702
Mezzanine	86
Segregation Dayroom	611
Mezzanine	90
<hr/>	
Subtotal	24,037
Walls & Circulation (20%)	4,807
Totals	28,844

Component: (s) Building Systems			
--	--	--	--

Chase	66'-11" X 4'-0"	1	268
Mechanical	12'-11" X 16'-1"	1	208
Chase	4'-5" X 52'-1"	1	71
Chase	4'-6" X 59'-6"	1	268
Mechanical	13'-0" X 16'-9"	1	218
Chase	52'-3" X 4'-6"	1	235
Chase	59'-6" X 4'-6"	1	268
Mechanical	16'-2" X 16'-10"	1	272
Chase	4'-5" X 66'-11"	1	295
Chase	4'-5" X 23'-3"	1	103
Chase	2'-2" X 44'-9"	1	97
Chase	22'-9" X 4'-8"	1	106
Fire Control	16'-11" X 10'-0"	1	169
Electrical	4'-4" X 7'-2"	1	31
Janitor Closet	4'-0" X 6'-5"	1	26
Janitor Closet/Mechanical	9'-4" X 8'-8"	1	81

Roof Access/Mech/Storage	13'-0" X 8'-8"	1	113
--------------------------	----------------	---	-----

Subtotal			2,829
Walls & Circulation (5%)			141
Totals			2,970

Notes: Refer to Component (a) for Janitor Closet at Locker Rooms. Refer to Component (q) for Janitor Closets at Direct Supervision Pods. Refer to Component (b) for A/V Storage. Refer to Component (a) for IT.

**Total Programmed Square Feet
(does not include Mechanical
Mezzanine) 108,680**

Component: (u) Maintenance/Evidence Processing Building			
Evidence Storage	40'-7" X 24'-1"	1	977
3-bay Maintenance	59'-0" X 76'-6"	1	4,514
Office	18'-0" X 24'-11"	1	449
Toilet (included in Office)	7'-4" X 6'-0"	1	44
Janitor (included in Office)	7'-4" X 3'-6"	1	26
Subtotal (not including Toilet & Janitor)			5,940
Walls & Circulation (2%)			119
Totals			6,059

Total Programmed Square Feet 6,059

07

existing
renovation

existing
renovation

7. Existing Law Enforcement Center **Renovation Narrative**

A. Basement Renovations

For this PAR we have included minor renovations of this floor. There are no anticipated changes to room sizes or relocation/demolition of walls on this floor. The changes are as follows:

- i. **Floor Finishes** will be updated and existing finishes will be demolished. The new flooring will include;
 1. All Offices & Meeting Room: 18"x18" Carpet tiles
 2. Corridors: Luxury vinyl tile
 3. Exercise Room, Staff Lounge, Locker Rooms: Luxury vinyl tile
 4. Stairs: Luxury vinyl tile on the floor and resilient stair coverings
 5. Storage & Mechanical: No floor finishes anticipated.

- ii. **Wall Finishes** will be updated. The new wall finishes will include:
 1. All Offices & Meeting Room: Paint all walls with low VOC paint with one accent wall in each room.
 2. Corridors: Paint all walls with low VOC paint.
 3. Exercise Room, Staff Lounge: Paint all walls with low VOC paint.
 4. Locker Rooms: Ceramic wall tile on all walls up to four feet above finish floor with low VOC paint above.
 5. Stairs: Paint all walls with low VOC paint.
 6. Storage & Mechanical: Paint all walls with low VOC paint.

- iii. **Ceiling Finishes** will be protected and left in place with minor modifications as follows;
 1. Acoustical Ceiling Tiles (ACT): Protect existing ceiling tiles and track systems. Replace existing tiles that are damaged prior to or during construction.
 2. Gypsum ceilings: All gypsum ceiling are to be painted with low VOC paint.
 3. Exposed structure: All rooms with exposed structure are to be painted with low VOC paint.

- iv. **Elevators** will be protected and left in place. Only new flooring will be changed to match the new corridor flooring.
- v. **Architectural Casework** will be replaced with new plastic laminate casework. Casework in addition to what already exists is not anticipated.
- vi. **Furnishing Fixtures & Equipment** work is not included in this scope of this PAR.
- vii. **Mechanical Systems** will be protected and left in place with minor modifications.
- viii. **Plumbing Systems** will be protected and left in place with minor modifications.

- ix. **Fire Suppression** will be protected and left in place with minor modifications.
- x. **Electrical Systems** will be protected and left in place with minor modifications.
- xi. **IT/Data Systems** will be protected and left in place with minor modifications.

B. Main Level Renovations

With the Sheriff's Office moving to the new facility, the Sheriff office space will be vacated and the Helena Police Department will be able to expand into these spaces. The offsite move allows for the needed expansion for the Helena Police Department's missions and staffing needs.

The renovation of this floor could be extensive and include all-encompassing space modifications including the demolition of all non-load bearing walls. If desired this would be a great time to do so. However, for this PAR we have included minor renovations of this floor. There are no anticipated changes to room sizes or relocation/demolition of walls on this floor. The changes to this floor are as follows;

- i. **Floor Finishes** will be updated and existing finishes will be demolished. The new flooring will include:
 - 1. All Offices & Conference rooms: 18"x18" Carpet tiles
 - 2. Corridors: Luxury vinyl tile
 - 3. Evidence, Interview Rooms & Restrooms: Luxury vinyl tile
 - 4. Stairs: Luxury vinyl tile on the floor and resilient stair coverings
 - 5. Storage & Mechanical: No floor finishes anticipated
- ii. **Wall Finishes** will be updated. The new wall finishes will include:
 - 1. All Offices & Conferences rooms: Paint all walls with low VOC paint with one accent wall in each room.
 - 2. Corridors: Paint all walls with low VOC paint.
 - 3. Evidence, Interview Rooms: Paint all walls with low VOC paint.
 - 4. Restrooms: Ceramic wall tile on all walls up to four feet above finish floor with low VOC paint above.
 - 5. Stairs: Paint all walls with low VOC paint.
 - 6. Storage & Mechanical: Paint all walls with low VOC paint.
- iii. **Ceiling Finishes** will be protected and left in place with minor modifications as follows:
 - 1. Acoustical Ceiling Tiles (ACT): Protect existing ceiling tiles and track systems. Replace existing tiles that are damaged prior or during construction.
 - 2. Gypsum ceilings: All gypsum ceiling are to be painted with low VOC paint.

3. Exposed structure: All rooms with exposed structure are to be painted with low VOC paint.
- iv. **Elevators** will be protected and left in place. Only new flooring will be changed to match the new corridor flooring.
- v. **Architectural Casework** will be replaced with new plastic laminate casework. Casework in addition to what already exists is not anticipated.
- vi. **Furnishing Fixtures & Equipment** work is not included in this scope of this PAR.
- vii. **Mechanical Systems** will be protected and left in place with minor modifications.
- viii. **Plumbing Systems** will be protected and left in place with minor modifications.
- ix. **Fire Suppression** will be protected and left in place with minor modifications.
- x. **Electrical Systems** will be protected and left in place with minor modifications.
- xi. **IT/Data Systems** will be protected and left in place with minor modifications.

C. Second Level Renovations

With the Detention Center moving, this entire floor will be completely renovated for new use. This space will ideally be used for the expansion of the court system with two new courts constructed. There will also be additional office space to be utilized as needed to support the anticipated court function. Please refer to the attached schematic floor plan at the end of this section for additional information.

Demolition: The demolition of this floor will be extensive. Only the structural elements, stairs, and elevators will be reused. The remaining walls, floor finishes, ceilings and systems will be completely demolished and prepared for the new construction.

New Construction:

i. Program of Spaces

1. Circulation:

Elevators and Stairs will be protected and left in place receiving new flooring. Walls and ceilings will be painted. See main level finishes for details. No other modifications are anticipated.

Corridors and Halls will be new with new finishes.

Flooring: 18X18 Carpet Tiling

Wall Finish: Painted wall with low VOC paint.

Ceilings: Acoustical Ceiling Tiles (ACT) on a suspended track system.

2. **Conference/Meeting** will consist of all the deliberation rooms, conference rooms and meeting rooms. The finishes will be standard but will have current IT and Audio Visual systems.

Flooring: 18X18 Carpet Tiling

Wall Finish: Painted wall with low VOC paint. Includes one accent painted wall.

Ceilings: Acoustical Ceiling Tiles (ACT) on a suspended track system.

3. **Courtrooms** will be designed for a full juried court. New wood benches will be a part of the scope of work. The finishes will be high end and will have current IT and Audio Visual systems.

Flooring: 18X18 Carpet Tiling

Wall Finish: Stained wood paneling and railings, partitions will be blended with painted walls with low VOC paint.

Ceilings: Decorative ceiling systems will be used. Either decorative suspended acoustical ceilings or wood panel ceilings will be considered.

4. **Exterior Link Connection** will remain for connectivity to the existing courthouse, renovated for public use (not just detainees) and will be fully enclosed. New windows and finishes will be constructed.
5. **Holding cells** will be provided behind each courtroom and will have a toilet/lav combo with built-in desk and chair located in the room.
6. **Office** space will be constructed in the facility to help meet the needs of the expanded court system. It is recommended that if new individual offices are required that demountable partitions be used to allow for future modifications. These offices will have meet the current IT/data requirements.

Flooring: 18X18 Carpet Tiling

Wall Finish: Painted walls with low VOC paint.

Ceilings: Acoustical Ceiling Tiles (ACT) on a suspended track system.

7. **Public Area** consists of the waiting area used by juries and public prior to access into the court rooms. There may be a receptionist in this room. The finishes will be as follows:

Flooring: 18X18 Carpet Tiling

Wall Finish: Painted wall with low VOC paint.

Ceilings: Acoustical Ceiling Tiles (ACT) on a suspended track system.

8. **Restrooms** will be constructed to meet the new plumbing requirements with low flow fixtures. New plastic laminate toilet partitions will be installed for privacy. The counters will be constructed with solid surface and under mount sinks.

Flooring: Ceramic tiles.

Wall Finish: Full height ceramic tiles on the walls with field and accent tiles in the design.

Ceilings: Gypsum suspended track system will be constructed in the restroom and painted with low VOC paint.

9. **Storage/Mech** will be constructed to meet the needs of the new facility.

Flooring: Sealed concrete floor

Wall Finish: Painted wall with low VOC paint.

Ceilings: Unfinished to structure. Paint exposed structure and exposed MEP conduits, ducts, etc.

ii. Construction Systems

1. **Wall Construction** will be metal studs with 5/8" gypsum wall board on both sides. The cavities of the walls will be filled with sound batting.
2. **Ceiling Construction** will be a mix of ACT and suspended gypsum systems.
3. **Doors** will be solid core wood with hollow metal frames.
4. **Windows** will be completely replaced and existing detention window openings will be enlarged in height. New windows will be aluminum framed windows with dual pane Low-E glazing.
5. **Mechanical Systems.** The existing facility is served by non-centralized water source heat pumps. The existing detention center level of the facility will be remodeled as needed after the new facility is built. The remaining areas will be remodeled into additional court rooms, office space, restrooms, and other support spaces.

The intent will be to use the existing system as much as possible since the heat pumps were just replaced within the last 5 years. However, final equipment sizing and reuse capabilities will be determined during the initial project design stages and building load calculations are completed.

Existing condenser water loop system and plants will be reused as well. The age of this equipment is unknown but is assumed to be fairly new based on the recent terminal device upgrade. The final sizing of this equipment will also be determined after building load calculations are complete.

6. **Plumbing Systems** new restrooms will be added. All fixtures will be low flow and meet current code requirements. Piping and systems will be upgraded as needed.
7. **Fire Suppression** will be modified as needed to meet the new design.
8. **Electrical Systems** in the Basement and First Floor levels will be upgraded with new, more efficient light fixtures, which will be the extent of electrical system work on those levels.

It is anticipated that the majority of the Second Floor will entail revised or new electrical systems such as power, lighting, distribution, fire alarm, telecommunications, CCTV, audio/visual, and security (refer to Security Electronics section). The intent will be to utilize existing electrical distribution beyond the Second Floor to extent possible, although some renovation/replacement of existing equipment should be expected.

D. Detention Mezzanine Renovations

The detention mezzanine is no longer needed and will be completely demolished.

E. Mechanical Floor Renovations

The mechanical floor will remain with minimal renovations except those needed to update the mechanical systems, fire suppression systems and electrical systems in the rest of the building.

F. Structural System Renovations and Requirements

i. Observed Structural System

Based on our limited visual observation and the original structural drawings, the existing structural system for the Detention Facility consists of the following:

The foundation system consists of reinforced concrete basement walls and piers on reinforced continuous concrete strip footings and reinforced concrete pad footings. Interior concrete columns bear on reinforced concrete pad footings.

The exterior bearing walls of the structure consist of reinforced CMU walls with brick veneer.

The floor framing system for the first, second and attic levels consists of reinforced concrete slabs supported on reinforced concrete beams. These beams are supported by reinforced concrete columns at the interior and concrete piers and concrete columns near the exterior perimeter.

The second floor contains a mezzanine in the same areas of that level. We assume that these mezzanines are framed with similar construction as the main and upper floors. This mezzanine is slated to be demolished.

The roof framing system for the structure consists of light gage metal roof joists supported by steel wide flange beams and CMU exterior walls. The light gage metal roof joists are sheathed with wood sheathing.

The basement, first, second and attic levels all have reinforced CMU masonry partition walls. Based on our limited observation, these walls appear to be non-load bearing and also do not contribute to the lateral force resisting system of the structure.

The lateral force resisting system of the structure appears to consist of a combination of reinforced CMU exterior shear walls and concrete basement shear walls. The connections of the concrete beams and concrete columns may offer some lateral support but we cannot confirm that at this time.

ii. Summary of Proposed Structural Changes

Based on the preliminary drawings and summary, it appears that the only structure related changes will be the demolition of most of the interior CMU partition walls on the Second Floor. Based on the structural review of the proposed plan it appears that all existing structural concrete columns, floor beams, floor slab and exterior CMU walls will remain. As stated earlier, we believe that these walls are non-structural in nature and their demolition does not constitute a structural alteration. A more in depth analysis will need to be performed to verify these conditions.

iii. Summary of Structural Analyses

Based on provisions in the 2012 IEBC, following is a summary of the structural analyses/design that is required for the proposed project.

This project is classified as Alteration-Level 3 as the work area exceeds 50 percent of the aggregate area of the building. The project will comply with Section 907 of the 2012 IEBC. A summary of the requirements of this section is below. We will still need to perform an in-depth survey of the proposed project to verify the following statements:

1. 907.2 New Structural Elements

No new structural elements are anticipated at this time.

2. 907.3 Existing Structural Elements Carrying Gravity Loads

Alterations shall not reduce the capacity of existing gravity load-carrying structural elements.

The proposed plan does not appear to reduce the capacity of the existing gravity load elements.

Existing structural elements supporting additional gravity loads as a result of the alterations, including the effects of snow drift, shall comply with the IBC.

The proposed alterations do not appear to increase the existing dead or live loads so we don't anticipate requiring existing elements to comply with the current IBC.

3. **907.4 Existing Structural Elements Resisting Lateral Loads**

All existing elements of the lateral force-resisting system shall comply with the following sections.

907.4.1 Evaluation and analysis

An engineering evaluation and analysis that establishes the structural adequacy of the altered structure shall be prepared by a registered design professional and submitted to the code official.

A licensed structural engineer will be required to prepare this evaluation and report.

907.4.4 Wall anchors for concrete and masonry buildings

For any building assigned to Seismic Design Category D, E or F with a structural system consisting of concrete or reinforced masonry walls with a flexible roof diaphragm, the alteration work shall include the installation of wall anchors at the roof line to resist the reduced IBC-level seismic forces, unless an evaluation demonstrates compliance of existing wall anchorage.

A licensed structural engineer will be required to evaluate the adequacy of the existing wall anchorage. This can be performed during our evaluation and report for Section 907.4.1



- AREA LEGEND**
- CIRCULATION
 - CONFERENCE/MEETING
 - COURTROOM
 - EXTERIOR CONNECTION
 - HOLDING & S/P
 - OFFICE
 - PUBLIC
 - RESTROOMS
 - STORAGE/MECH

1 SECOND FLOOR PLAN
3/32" = 1'-0"

**LEWIS AND CLARK COUNTY PUBLIC SAFETY FACILITY PAR
EXISTING FACILITY - NEW SECOND FLOOR PLAN**

08

staffing analysis

staffing analysis

8. Staffing Analysis

A. Jail Design

In today's world of corrections, the most common jail design in small to midsized jails is the radial podular design. This design allows for remote supervision rather than direct supervision and can be accommodated with a lesser number of staff.

B. Staffing Considerations

There are many things to consider when developing a staffing plan for a facility. The National Institute of Corrections recommends consideration of the following:

- State/agency mandate for budget reductions.
- Personnel agreements and union contracts.
- State and professional standards (e.g., American Correctional Association standards) applicable to the facility.
- New laws regarding provision of services for inmates.
- New administrative regulations governing staff workload, holidays, classifications, and so forth.
- Change in the agency's mission.
- Change in the agency's administrator.
- Contracts for services and other functions at the facility.

C. Standards to consider

Regulatory Standards

There are two sets of regulatory standards that provide guidance for the staffing of a detention facility. Those standards are provided by the Prison Rape Elimination Act of 2003 (945 USC 15601) and the American Corrections Association. In addition to those standards, officials can gain insight as to the court's position on staffing by reviewing applicable case law.

ACA Standards

The American Corrections Association uses their standard 4-ALDF-2A-14 as a performance based standard and 1-CORE-2A-09 as a minimum standard for meeting acceptable criteria for staffing. A recent U.S. Appeals Court decision (Cody v. Hillard) concluded that the ACA standards can be used to determine constitutional requirements.

The Core Standard for staffing is as follows:

Sufficient Staff

1-CORE-2A-09 (Ref. 4-ALDF-2A-14)

Sufficient staff, including a designated supervisor, are provided at all times to perform functions relating to staff safety and the security, custody, and supervision of inmates as needed to operate the facility in conformance with the standards.

This standard requires a designated supervisor "at all times" along with a sufficient amount of correctional staff. Industry standard provides for 3 levels of supervision with at least one level being constant. The sufficient number of staff can be determined based on the philosophy of operation and the programs provided.

The ACA standard 3-ALDF-1C-03 provides some guidance in determining this number by stating the following:

Staffing Requirements

3-ALDF-1C-03

Staffing requirements for all categories of personnel are determined on an ongoing basis to ensure that inmates have access to staff, programs, and services. Staffing requirements should be determined on more than inmate population figures and should include review of staffing needs for health care, academic, vocational, recreation, library, and religious programs and services. Workload ratios reflect such factors as goals, legal requirements, character, and needs of the inmates supervised, and other duties required of staff. Workloads should be sufficiently low to provide access to staff and effective services.

A staffing plan for the Lewis & Clark County Adult Detention Facility should consider all of these factors and provide staffing and supervision at a sufficient level to meet the security and program objectives.

PREA Standards

The Prison Rape Elimination Act of 2003 (945 USC 15601) also known as PREA provided for a commission to develop standards to be adopted by the U.S. Attorney General to detect, prevent, and respond to rapes that take place in prisons and other detention facilities. Standard § 115.13 of this act addresses staffing and sets forth the following provisions:

§ 115.13 Supervision and monitoring.

- (a) The agency shall ensure that each facility it operates shall develop, document, and make its best efforts to comply on a regular basis with a staffing plan that provides for adequate levels of staffing, and, where applicable, video monitoring, to protect inmates against sexual abuse. In

calculating adequate staffing levels and determining the need for video monitoring, facilities shall take into consideration:

- (1) Generally accepted detention and correctional practices;
- (2) Any judicial findings of inadequacy;
- (3) Any findings of inadequacy from Federal investigative agencies;
- (4) Any findings of inadequacy from internal or external oversight bodies;
- (5) All components of the facility's physical plant (including "blind-spots" or areas where staff or inmates may be isolated);
- (6) The composition of the inmate population;
- (7) The number and placement of supervisory staff;
- (8) Institution programs occurring on a particular shift;
- (9) Any applicable State or local laws, regulations, or standards;
- (10) The prevalence of substantiated and unsubstantiated incidents of sexual abuse; and
- (11) Any other relevant factors.

(b) In circumstances where the staffing plan is not complied with, the facility shall document and justify all deviations from the plan.

(c) Whenever necessary, but no less frequently than once each year, for each facility the agency operates, in consultation with the PREA coordinator required by § 115.11, the agency shall assess, determine, and document whether adjustments are needed to:

- (1) The staffing plan established pursuant to paragraph (a) of this section;
- (2) The facility's deployment of video monitoring systems and other monitoring technologies; and
- (3) The resources the facility has available to commit to ensure adherence to the staffing plan.

(d) Each agency operating a facility shall implement a policy and practice of having intermediate-level or higher-level supervisors conduct and document unannounced rounds to identify and deter staff sexual abuse and sexual harassment. Such policy and practice shall be implemented for night shifts as well as day shifts. Each agency shall have a policy to prohibit staff from alerting other staff members that these supervisory rounds are occurring, unless such announcement is related to the legitimate operational functions of the facility.

This standard also requires "adequate" staffing along with supervision of staff to ensure compliance. The main focus of this standard is to provide enough security to be able to respond to sexual assaults with adequate numbers of staff in a timely manner and to provide adequate supervision to ensure that inappropriate relationships do not develop between staff and inmates.

Court Cases

There have been numerous court cases that address the issue of staffing. The holdings of key court decisions that address staffing may be summarized as follows:

Staff must be provided

- To protect prisoners (from themselves and from other prisoners);
- To make regular visits to prisoner-occupied areas and to maintain communication with prisoners;
- To respond to prisoner calls for assistance;
- To classify and separate prisoners;
- To ensure the safety of prisoners at all times;
- To maintain security;
- To process and supervise female prisoners;
- To operate electronic surveillance;
- To ensure that all required prisoner activities, services, and programs are delivered (medical, exercise, visits, etc.).

Courts have frequently found jail administrators and elected officials liable for incidents that have resulted from inadequate staffing. Costly damage awards have often been levied when staff and officials are found negligent in selecting, retaining, assigning, and supervising staff.

D. Applicability of Standards

An analysis of the standards set forth in the previous section would indicate a need to apply the following principles to a staffing plan for the Lewis & Clark County Jail project.

1. A certain amount of posts must be designated to accommodate the need for 24 hour supervision of inmates.
2. There must be female officers to supervise female inmates.
3. Electronic surveillance can't be used as a substitute for personal staff supervision.
4. Staff must be placed where they can respond to an emergency in a timely manner

E. Identifying the 24 hour post

The National Institute of Corrections notes that in all staffing decisions, risk can override any other consideration about adding or removing staff. Staffing decision makers must base their post evaluations and recommendations on sound correctional principles that emphasize correctional agencies' mission to protect the public and to maintain safety and security for staff and inmates. It is imperative that the agency has a plan that orchestrates the proper placement and functioning of all security staff at all times so that no one gets hurt and no one escapes during facility operations, programs, and services.

The staffing plan for the Lewis & Clark County Jail project will require the identification of a number of posts to provide for 24 hour supervision. Those 24 hour posts will be broken down into three different areas of responsibility. Consisting of:

1. Officers who patrol the facility and provide personal observation and supervision of the inmates;
2. Control room officers who provide constant video surveillance and operate the electronic components of the jail's security system; and
3. Booking officers who receive process arrestees and assist in the classification process.

F. Frequent Supervision

Because the jail officers have other duties in addition to the supervision of inmates and frequent rounds of the facility to ensure the facility's security, a sufficient number of officers must be provided to perform those tasks without impairing the officers' ability to perform the personal supervision of the inmates at the required frequency. To do so may require additional staff for certain times when the jail experiences a greater amount of activity. Such times would include:

- The activity that takes place during business hours;
- The passing of meals;
- The passing of medication;
- Visitation;
- Recreation;
- Going to court; and
- Any inmate movement.

G. Electronic Surveillance as a Substitute

To avoid the dilemma that takes place when staff is prone to rely on video surveillance as a substitute for personal observation, the staffing plan must consider the amount of personnel to replace the absence of staff due to both scheduled and unscheduled time off. Sufficient staff must be provided and the staffing plan must take into consideration a shift relief factor so as to accommodate for the times when staffing would otherwise be insufficient due to holidays, vacation time, sick leave, or any other time off.

H. Calculating the Shift Relief Factor

The process of providing for coverage of the normal staff absence is referred to as the shift relief factor. While there are various ways to calculate the shift relief factor the method used in this analysis is the Net Annual Work Hours (NAWH) method. The method NAWH uses to calculate the number of hour's staff is employed to work per year (e.g., 40 hours per week \times 52.14 weeks per year) minus the average number of hours a staff person is unavailable to work per year. Because NAWH is based on hours it can be more precise yields a more accurate estimate of staff availability.

There are three basic steps in calculating shift relief factors using NAWH:

1. Calculate NAWH to determine the average number of hours staff are available to work per year.
2. Calculate the number of hours the post must be staffed per year.
3. Divide the number of hours the post must be staffed per year by the NAWH.

I. Staffing Calculations

In calculating the amount of personnel needed to fill each position it is important to determine the shift relief factor. This is done by taking into account the amount of time the average employee accrues for vacation, holidays, sick days, and any other benefits resulting in time off. The following table illustrates the shift relief factor for the positions at the proposed Lewis & Clark County Detention Center.

Staffing analysis

Employee Benefits (annual)	Annual Days	Hrs
Vacation Days	15	120
Compensatory Time	5	40
Sick Leave	5	40
Training Time Off	10	80
Personal Days	1.5	12
<hr/>		
Annual Benefit in Days	36.5	292
NAWH	2086	Net Annual Work Hours (365/7=weeks, weeks*40 =hours)
Shift Relief	292	Benefit hours not worked
<hr/>		
Hrs Worked	1794	
	86%	% of total hours worked
Annual Work Days (8 Hour Equivalent)	260.71	
Additional Benefit Cost	14%	
Work Hrs. in 7 Day week	168	
Average work week	40	
Personnel for 40 hr. staffing	4.2	
Additional Benefit Cost	0.59	
<hr/>		
Staffing needed per 24 Hr. position	4.79	

This table demonstrates a need for 4.79 personnel to fill a position continuously (24/7).

J. Defining the Posts

To accommodate the need for continuous observation certain full time posts must be defined. Those posts are defined as follows:

- Shift Supervisor
- Security (Roving Officers)
- Master Control
- Direct Supervision Post
- Booking Officer
- Escort Officer

All corrections officers should be cross trained and be capable of performing all of the duties required to maintain a fully operational jail. Some of those duties are described herein.

The Booking Officer's duties include but are not limited to:

- Receiving arrestees
- Obtaining the required booking information
- Seeing to the appropriate classification and housing assignments
- Supervising inmates in the holding areas
- Maintaining the appropriate Booking records
- Dealing with the paperwork from the courts
- Performing the required tasks associated with bonding inmates
- Perform additional duties as assigned by the Administrator and the Sheriff.

The Detention/Roving Officer's duties include but are not limited to:

- Maintaining security in the detention area
- Supervising the inmates
- Making regular jail checks
- Receive all inmates assigned to his/her area.
- Maintain inmate property.
- Assist inmates in placing approved telephone calls.
- Supervise trustees.
- Supervise the feeding of inmates.
- Assist in jail searches.
- Collect and distribute inmate mail.
- Operate and inspect all security devices and assigned equipment.
- Compile requested reports.
- Report any unusual occurrences, activities or potential problem situations.
- Perform and document inmate head counts.
- Perform additional duties as assigned by the Administrator and the Sheriff.

The Control Room Officer's duties include but are not limited to:

- Maintaining constant video observation of the detention area
- Operate the electronic control devices that maintain jail security
- Control access to the secure area of the jail

- Maintain communication through both telephone and radio devices
- Make the proper notifications in the event of an emergency
- Perform additional duties as assigned by the Administrator and the Sheriff.

To comply with the applicable standards, it is recommended that the jail be staffed with 48 detention officers. Due to a schedule that is unique to each facility, posts can be filled with a combination of full and part time officers. Those post and shift breakdowns are shown in the following table:

Security/Custody Positions (24/7 Coverage)		
1	Shift Supervisor	4.8
2	Security (roving officers)	9.6
2	Master Control	9.6
2	Direct Supervision Post	9.6
2	Booking Officer	9.6
1	Escort Officer	4.8
		47.9

The administrative and support staff will operate on a separate schedule that will provide the facility with administrative support during normal business hours.

Those positions are indicated by the table below:

Administrative Positions (40/week coverage)		
1	Jail Administrator	1
1	Accounting Technician	1
		2

Program Staff (40/week coverage)		
1	Program Coordinator	1
1	Program Assistant	1
2	Classification Officers	2
		4

Support Staff (40/week coverage)

2	Court Officers	2
2	Food Service - Cook	2
1	Maintenance	1
<hr/>		5

The jail administrator will work the normal day shift during business hours serving in both an administrative and supervisory capacity.

The administrative assistant will work the normal day shift during business hours performing clerical tasks.

The transport/escort officers will provide transport inmates to other locations and assist with all other inmate movement.

The cooks will be paid support staff.

The total number of personnel required for the facility operation is 59.

09

costs

9. Costs

A. Construction Costs

i. New Facility Construction Costs;

Jail, Mezzanine & Detention Support (57,677 square feet @ \$345/sf)	\$19,898,565
Administration & Public Area (29,370 square feet @ \$215/sf)	\$6,314,550
Vehicular Sallyport (7,609 square feet @ \$155/sf)	\$1,179,395
Support Building (Storage/Evidence/Vehicle) (6,000 square feet @ \$100/sf)	\$600,000
Total Building Costs	\$27,992,510
Site Development Costs <i>(Survey, Utilities, Geotechnical, Fencing)</i>	\$3,366,000
Testing & Inspections	\$50,000
Fixtures, Furnishings & Equipment (4%)	\$1,256,340
Soft Cost (A/E Fees, Expenses & Permitting)	\$2,939,836
<u>Inflation & Contingency (15%)</u>	<u>\$5,340,703</u>
Total Construction Costs	\$40,945,389

ii. Existing Facility Renovation Costs;

Renovation Costs (30,580 square feet @ \$88/sf)	\$2,699,188
Fixtures, Furnishings & Equipment (4%)	\$107,968
Soft Cost (A/E Fees, Expenses & Permitting)	\$299,366
<u>Inflation & Contingency (15%)</u>	<u>\$404,878</u>
Total Construction Cost	\$3,511,400

B. Staffing

Recommended staffing and estimated cost for the project is indicated in the following table.

Projected Staffing Needs

	Administrative Positions (40/week coverage)		Salary	Total Cost
1	Jail Administrator	1	\$109,700.00	\$109,700.00
1	Accounting Technician	1	\$62,500.00	\$62,500.00
		2		\$172,200.00

Program Staff (40/week coverage)			Salary	Total Cost
1	Program Coordinator	1	\$40,000.00	\$40,000.00
1	Program Assistant	1	\$32,000.00	\$32,000.00
2	Classification Officers	2	\$67,000.00	\$134,000.00
		4		\$206,000.00

Support Staff (40/week coverage)			Salary	Total Cost
2	Sworn Deputies/Court Officers	2	\$92,000.00	\$184,000.00
2	Food Service - Cook	2	\$46,000.00	\$92,000.00
1	Maintenance	1	\$64,600.00	\$64,600.00
		5		\$340,600.00

Security/Custody Positions (24/7 Coverage)			Salary	Total Cost
1	Shift Supervisor	4.8	\$80,000.00	\$384,000.00
2	Security (roving officers)	9.6	\$67,000.00	\$643,200.00
2	Master Control	9.6	\$67,000.00	\$643,200.00
2	Direct Supervision Post	9.6	\$67,000.00	\$643,200.00
2	Booking Officer	9.6	\$67,000.00	\$643,200.00
1	Escort Officer	4.8	\$67,000.00	\$321,600.00
		48		\$3,278,400.00

Total Staff Needed 59 **Total Cost** \$3,997,200.00

(Total Current Staff 27.0 Total Costs \$1,169,344.44)

C. General Funds for County Jail

(Refer to following chart)

Yearly Jail Operations

			<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>		
			Exist Jail	Exist Jail	Exist Jail	Transition Yr	New Jail	New Jail	New Jail	New Jail	New Jail	New Jail	New Jail	New Jail		
	In House Beds		80	80	80	132	138	144	150	156	162	168	174	180		
1) Staffing																
a)	Jail Administrator	@ \$109,700	1		109,700	111,894	114,132	116,415	118,743	121,118	123,540	126,011	128,531	131,102		
b)	Detention Sergeants	@ \$80,000	1		80,000	81,600	83,232	84,897	86,595	88,326	90,093	91,895	93,733	95,607		
c)	Detention Officers	@ \$67,000	25		1,675,000	1,708,500	1,742,670	1,777,523	1,813,074	1,849,335	1,886,322	1,924,048	1,962,529	2,001,780		
d)	Accounting Tech	@ \$62,500	1		62,500	63,750	65,025	66,326	67,652	69,005	70,385	71,793	73,229	74,693		
e)	Sworn Deputies	@ \$92,000	2		184,000	187,680	191,434	195,262	199,168	203,151	207,214	211,358	215,585	219,897		
f)	Food Service Techs	@ \$46,000	2		92,000	93,840	95,717	97,631	99,584	101,575	103,607	105,679	107,793	109,949		
g)	Program Coordinator	@ \$40,000	1		40,000	40,800	41,616	42,448	43,297	44,163	45,046	45,947	46,866	47,804		
h)	Asst. Program Coordinator	@ \$32,000	1		32,000	32,640	33,293	33,959	34,638	35,331	36,037	36,758	37,493	38,243		
i)	Maintenance	@ \$64,600	1		64,600	65,892	67,210	68,554	69,925	71,324	72,750	74,205	75,689	77,203		
					\$1,776,338	\$1,776,338	2,339,800	2,483,014	2,532,675	2,583,328	2,634,995	2,687,695	2,741,449	2,796,278		
Additional Costs:																
	Early Intervention Commander					45,000	45,900	46,818	47,754	48,709	49,684	50,677	51,691	52,725		
	Mental Health(therapist/case manager)					200,000	204,000	208,080	212,242	216,486	220,816	225,232	229,737	234,332		
	Pretrial Services					245,000	249,900	254,898	259,996	265,196	270,500	275,910	281,428	287,057		
	Stability Funding					145,000	147,900	150,858	153,875	156,953	160,092	163,294	166,559	169,891		
	Total Other					635,000	647,700	660,654	673,867	687,344	701,091	715,113	729,415	744,004		
	Total Staffing and Other					3,021,596	3,082,028	3,143,668	3,206,542	3,270,673	3,336,086	3,402,808	3,470,864	3,540,281		
2) Jail Operations																
a) Clothing & Meals																
	Meal costs	\$2.58 / meal	85% avg occup / 365 days		\$225,274	\$225,274	\$225,274	\$316,976	\$331,384	\$345,792	\$360,200	\$374,608	\$389,016	\$403,424	\$417,832	\$432,240
	Jail Supplies	\$614 / inmate	85% avg occup / 365 days		\$49,113	\$50,000	\$50,000	\$50,000	\$0**	\$75,154	\$78,285	\$81,416	\$84,548	\$87,679	\$90,811	\$93,942
	Clothing & Meals Sub-total				\$274,387	\$275,274	\$275,274	\$366,976	\$331,384	\$420,946	\$438,485	\$456,025	\$473,564	\$491,103	\$508,643	\$526,182
b) Prisoner Medical																
	All non-reimbursed medical ***				\$296,858	\$296,859	\$296,860	\$340,000	\$360,000	\$380,000	\$400,000	\$420,000	\$440,000	\$460,000	\$480,000	\$500,000
	Medical Sub-total				\$296,858	\$296,859	\$296,860	\$340,000	\$360,000	\$380,000	\$400,000	\$420,000	\$440,000	\$460,000	\$480,000	\$500,000
c) Incidental & Miscellaneous Expenses																
	Shared Resource Expenditures				\$84,198	\$85,000	\$85,000	\$85,000	\$85,000	\$85,000	\$85,000	\$85,000	\$85,000	\$85,000	\$85,000	\$85,000
	Inmate Boarding Costs*				\$0	\$100,000	\$100,000	\$0	0	0	0	0	0	0	0	0
	Other Fixed Costs				\$254,997	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
	Gasoline				\$11,599	\$12,000	\$12,500	\$13,000	\$13,500	\$14,000	\$14,500	\$15,000	\$15,500	\$16,000	\$16,500	\$17,000
	Equipment over \$5000				\$23,086	\$23,000	\$23,000	\$0**	\$0**	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
	Liability Insurance				\$40,316	\$41,000	\$41,000	\$41,000	\$41,000	\$41,000	\$41,000	\$41,000	\$41,000	\$41,000	\$41,000	\$41,000
	Utilities @2.11/sq ft				\$12,898	\$13,000	\$13,000	\$227,591	\$227,591	\$227,591	\$227,591	\$227,591	\$227,591	\$227,591	\$227,591	\$227,591
	Professional Dues & Memberships				\$232	\$250	\$250	\$548	\$573	\$598	\$623	\$647	\$672	\$697	\$722	\$747
	Equipment Maintenance & Repair				\$14,082	\$15,000	\$15,000	\$7,500	\$0**	\$0**	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
	Travel & Training				\$16,108	\$16,500	\$17,000	\$17,500	\$18,000	\$18,500	\$19,000	\$19,500	\$20,000	\$20,500	\$21,000	\$21,500
	Office Supplies / Postage				\$12,269	\$12,500	\$13,000	\$13,500	\$14,000	\$14,500	\$15,000	\$15,500	\$16,000	\$16,500	\$17,000	\$17,500
	Incidental Sub-total				\$469,785	\$568,250	\$569,750	\$655,639	\$649,664	\$676,189	\$707,713	\$709,238	\$710,763	\$712,288	\$713,813	\$715,338
Total Operations for new Facility			\$0	\$0	\$1,141,884	\$4,384,211	\$4,423,076	\$4,620,803	\$4,752,741	\$4,855,936	\$4,960,413	\$5,066,199	\$5,173,320	\$5,281,802		

* Reimbursed by State in 2014, for 2015 & 2016 reimbursement goes down \$27 / day / inmate

** Initial supply includes F, F & E budget: replacement costs only included in this budget

*** Emergency room & medications costs are billed to the inmate.

No Dental treatment is allowed unless inmate pays directly.

10

conclusion

10. Conclusion

We express our sincere appreciation to Lewis & Clark County Commissioners Andy Hunthausen, Susan Good Geise and Mike Murray; Sheriff Leo Dutton, Undersheriff Dave Rau, Jail Administrator Captain Jason Grimmis, and their staff for their time and input. Without their assistance, we would not have been able to complete this study as quickly and efficiently as has been the case.

A new jail is needed because the current facility is undersized causing Lewis & Clark County to pay other jurisdictions to board out their inmates. This costed the county in excess of \$200,000 in 2014 and will increase every year going forward. The current facility does not allow for expansion so renovation and/or expansion is not an option therefore new construction is the only viable option. Due to the information included in this report, it is recommended that Lewis and Clark County replace the current jail facility with a new 244 bed facility of radial podular design, meeting the most current ACA, NDOC, PREA and ADA standards for conditions of confinement, and that will meet the County's needs for inmate housing presently and in the foreseeable future. Additionally, the radial-podular design allows for greater staff efficiency and safety, while allowing for separation and classification of a broader custody range of inmates.

The new detention facility will be located on the same site jointly with and incorporating a new facility for the Sheriff's Office handling administration, staff offices and public visitations. With 33 acres available, additional room is available on site to handle any future expansion needs.

The proposed design will incorporate a new, modern courtroom within the Public Safety Facility. Renovating the existing Law Enforcement Center will free up space allowing for the expansion of the Courthouse for at least two courtrooms, other County services and offices.



Slate Architecture
107 West Lawrence Street
Helena, Montana 59601
P | 406.457.0360
www.SlateArchitecture.com



Goldberg Group Architects, PC
805 N. 36th Street, Suite B
St Joseph, MO 64506
P | 816.233.9300
www.gga-pc.com





Slate Architecture
107 West Lawrence Street
Helena, Montana 59601
P | 406.457.0360
www.SlateArchitecture.com



Goldberg Group Architects, PC
805 N. 36th Street, Suite B
St Joseph, MO 64506
P | 816.233.9300
www.gga-pc.com

