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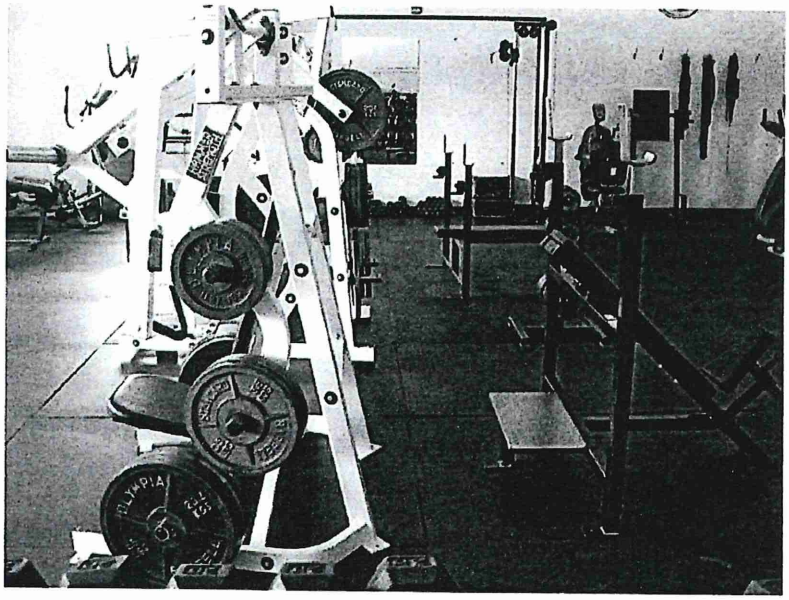
DESIGN REPORT

Study Classroom Repurposing for Dormitory

MCF - Willow River / Moose Lake



INSPEC No. 213519
RECS No. 78WR0004
February 27, 2015

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C15-0018

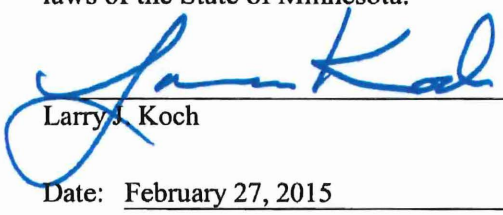
Consultant's Report

Study Classroom Repurposing for Dormitory
MCF - Willow River / Moose Lake

INSPEC No. 213519
RECS No. 78WR0004

February 27, 2015

I hereby certify that this report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Architect under the laws of the State of Minnesota.



Larry J. Koch

Date: February 27, 2015 Lic. No.: 20115

Reviewed by: _____ _____
Date

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Executive Summary

This report details the existing conditions and proposed options for adding a 46 bed dormitory to the CIP program at MCF-Willow River/Moose Lake.

The project team commissioned to perform the work is led by INSPEC. INSPEC will be supported by Ericksen Ellison and Associates Engineers, Inc., who will provide mechanical, plumbing, and electrical engineering, Robert Rippe & Associates for food service consultation, and Professional Project Management for cost consulting. The design committee for MCF-Willow River/Moose Lake includes the following individuals: Becky Dooley – Warden – MCF-Willow River/Moose Lake, Nate Knutson – Program Manager - CIP, Candy Adamczak – Program Director - CIP, Keith Beal – Physical Plant Director, Greg Anderson – Electrical, Ed Daoust – Mechanical. Minnesota Department of Corrections was represented by William Montgomery – Capital Resource Manager and the Minnesota Department of Administration Real Estate and Construction Services by Doug Kelley – Project Manager.

The project outlined here is a component of a phased plan to provide a new 46 bed dormitory in the existing Barracks and Activities Building. The study takes into consideration the facility support functions that will be impacted by this twenty percentage increase in volunteer offenders for the Challenge Incarceration Program (CIP) at MCF-Willow River/Moose Lake. This includes: food service, laundry, exercise and staffing.

The report is divided into the following sections:

- **Existing Conditions**
  - Description of each area of the correctional facility in this study.
- **Proposed Architecture / Building Systems**
  - Description of the requirements for each area to accommodate the new plan. This includes architectural, food service, laundry, mechanical, plumbing, and electrical engineering.
- **Building Codes and Standards**
  - Review of the code constraints and standards with which the remodeling must comply.
- **Schedule**
  - Proposed design, construction document, bidding and construction schedule.
- **Construction and Project Costs**
  - Statement of probable construction and project cost.
- **Appendix**
  - Supporting documents and information.

The goal of this study is to determine a remodeling option for the addition of 46 dormitory beds. This will require relocation of the offender weight room to a remodeled and expansion space at the

Maintenance Building and remodeling the current exercise space for a 46 bed dormitory plus restrooms and showers to meet State standards.

Concurrent with this study, the facility is studying the overall Barracks building HVAC system due to moisture issues that are present. Ericksen Ellison and Associates is conducting that study and will dovetail their findings with the requirements necessary with this proposed project to prevent any overlap.

In 2011, MCF-Willow River/Moose Lake commissioned a study for a new multi-purpose building to be located at the Willow River facility, adjacent to the current Administration Building. The study was part of overall long term planning for the facility to meet the needs of this growing program. The Multi-Purpose Building would provide much needed space for classrooms, library, visiting, public safety, program training and storage space. The capital cost of the project ranged from $2 million to $3.3 million in the two following options:

Option A – 6,642 SF estimated at $2,009,812 (Cost with escalation to today = $2,572,000 to $2,634,000)

Multi-purpose space (activities, visit, PT, graduation, intake)
Security office, offender and visitor restrooms
General Storage
No education space

Options B – 11,750 SF at $3,344,531 (Cost with escalation to today = $4,281,000 - $4,385,000)

Multi-purpose space (activities, visit, PT, graduation, intake)
Security office, offender and visitor restrooms
General Storage
Education Classrooms and Library

The Study Classroom Repurposing for Dormitory outlined here will increase the need for program space for the Challenge Incarceration Program. The Multi-Purpose Building project has not been funded at this time.

Recommendation

The recommendation by the study group is to implement Option 2 for expanding the program to add 46 beds. This option proposes to convert the existing Weight Room to a dormitory and move the Weight Room to a remodeled and expanded space in the current Maintenance Building. Restrooms and showers for the new dorm will be located on the south side of the vacated space, which is adjacent to staff restrooms and locker rooms, where water and utilities can be extended to serve the fixtures. The Maintenance Building will contribute the north maintenance bay for remodeling. A small expansion to the north will provide the remaining square footage required to house the program as currently equipped and operated. An offender restroom is included with a mezzanine space above to accommodate storage space for the maintenance department lost to the remodel.

The expansion will require some remodeling in the food service and laundry support areas to accommodate the 20% increase to the C.I.P program in Willow River.

The evaluation revealed that the food service department has adequate square footage for the expansion but existing conditions in hot food production and storage will require renovation. Much of the existing equipment is at the end of its expected life and should be replaced. At a minimum, the facility will need to bring the operation into compliance with health department requirements and with NFPA codes for the exhaust hood and cooking equipment. Replacing the exhaust hood creates an opportunity to reconfigure the hot food and baking functions in order to address food safety and staff safety concerns, and improve the overall efficiency of the department.

The overall food service recommendation for this project is to address flow issues and code violations in the hot food production area, and replace older equipment. However, due to budget constraints a full renovation may not be feasible. Robert Rippe & Associates, Inc. has developed three design options that improve the Food Service Department at MCF Willow River. The first option is ideal, but comes at a higher cost. The remaining options address the major issues at lower costs. With any of these options, the department renovations will need to correct code deficiencies.

Any work in the kitchen will require temporary food service accommodations. We anticipate the kitchen will be down for three months. The exhaust hood, oven area of the kitchen will be partitioned off during construction but the preparation area will be able to be used. The first scenario will be to get assistance from MCF-Moose Lake or Moose Lake MSOP to prepare meals and ship them to Willow River for re-heat and final preparation. This would be the most cost effective solution. The second scenario, if the other facilities do not have capacity, is to rent a food preparation or temporary kitchen truck for the food service. Estimated costs are as follows:

Rental - $16,500 per month – assuming that only cooking and walk-in refrigerator is needed
One time charges:
Set-up, tear-down: $15,000- 26,000
Transportation: $9,000 – 15,000
High end is for a single unit modular; low end is for a wheeled unit

An allowance for the wheeled option has been provided in the cost models.

The laundry program operates from 6 am to 9 pm seven days a week, with the current offender population. Any increase in offenders will require expansion or adjustments to the operations. Adjustments to the operations would need to include sending out a portion of the laundry to either MCF-Moose Lake or MCF-Faribault. A more efficient, long term option is to expand the current laundry approximately 4 feet into the storage space to the east and add one extractor and one dryer. This is the preferred option by the study team.

Two cost models are provided. Each cost model is further broken down into to two components, the remodel and addition to the Maintenance Building and the remodeling at the Barracks and Activities Building.

Cost Model #1 or preferred scope of work option, includes extensive remodeling in the food service area, replacing dining room tables and providing a storage mezzanine in the Maintenance Building to make up for loss of the space given over to the Weight Room.

For cost Model #1the probable project cost for the Maintenance Building is $572,230. The probable project cost for the Barracks and Activities Building is $1,272,084. Total for Cost Model #1 is $1,844,314. These costs includes 12% for general conditions, 4% for contractor overhead and

profit, a 7% cost escalation, 5% for work inside a secure facility, a 10% design contingency, 10% for design fees, 10% construction contingency, an allowance for hazardous material survey and remediation, an allowance for furniture (bunks, mattresses, wardrobes) and an allowance for temporary food service accommodations.

The second, Cost Model #2 cost option is considered the bare minimum needed to accommodate the 46 additional volunteer offenders added to the CIP at Willow River. This option replaces the exhaust hood, corrects code deficiencies and adds the minimum amount of equipment necessary to operate the food service, does not replace the dining room tables, and deletes the storage mezzanine at the Maintenance Building.

Cost Model #2 has a probable project cost for the Maintenance Building is $536,138. The probable project cost for the Barracks and Activities Building of $1,046,822. Total for Cost Model #2 is $1,582,960. These costs includes 12% for general conditions, 4% for contractor overhead and profit, a 7% cost escalation, 5% for work inside a secure facility, a 10% design contingency, 10% for design fees, 10% construction contingency, an allowance for hazardous material survey and remediation, an allowance for furniture (bunks, mattresses, wardrobes) and an allowance for temporary food service accommodations.

The construction will be in two phases (one GC bid). Phase 1 will be construction of the addition and remodeling at the Maintenance Building. At the conclusion of this phase, the weight room equipment will be moved to its new location and the dormitory restrooms and showers, food service and laundry construction will commence. Overall length of the construction phase is anticipated to be between eight and twelve months.

Table of Contents

Study Classroom Repurposing for Dormitory

Prepared for Minnesota Department of Administration - Minnesota Correctional Facilities

1.0 Existing Conditions - Background

Mandated by the Minnesota State Legislature in 1992 (Minnesota Statute 244.17), the Challenge Incarceration Program (CIP) at Willow River is a minimum security voluntary pre-release program boot camp program that allows non-violent offenders who qualify to earn early release. There are three phases to the program: Phase 1 is a six-month, intensive program for up to 180 non-violent drug and property male offenders. Programming components include education, critical thinking skills development, chemical dependency programming, and rigorous physical exercise. Phases 2 and 3, supervised release phases, are generally six months in duration and served in the community.

This study will investigate cost effective design options that will add 46 beds to the facility in the shortest time possible.

Option 1: Remodel Classroom Building

The initial intent of the study was to investigate the required remodeling and costs for converting the existing wood framed Classroom Building to a dormitory and move the classrooms to the current Property area and move Property to the north bay of the Maintenance Building. This option would require remodeling two buildings in addition to remodeling and expansion of the Classroom Building and relocation of two existing support programs/areas. In addition, the location of the new dormitory remote from the existing three dormitories would be inefficient for offender movement, staffing efficiency and security. After internal discussion it was felt this option would be costly and disruptive.

Option 2: Remodel Weight Room for new Dormitory

As a result of the discussion from Option 1, it was determined that the most efficient operational way to expand was to find a space within the existing Barracks Building for the new dormitory. The current Weight Room located in the north-west corner of the building provides the square footage required for the 46 beds plus the required restroom and showers, is located in a convenient location for staffing and security, and requires less remodeling than if the dormitory was to be located in a different building, in addition to the operational impacts.

The weight room was then to take the place of the classrooms in the existing Offender Property Building after Property was moved to the Maintenance Building and the Weight Room remodeled for the new dormitory. This still requires two programs to move.

After the study team conducted a site visit to the facility and toured the Offender Property Building and the Maintenance Building a discussion was held regarding the necessity of moving two programs. The team determined that remodeling costs could be reduced and less disruption to the CIP program realized if the Offender Property area and space were left in place and the Maintenance Building had a small addition and remodeling to house

the Weight Room. A component of this determination was the reduction in available space for Offender Property if relocated to the Maintenance Building.

This quickly evolved to leaving that structure and program in place and moving the Weight Room to the Maintenance Building.

The proposed planned sequence of program moves is as follows:

1) Weight Room to Maintenance: Addition to the north of the Maintenance Building and remodeling the north-bay for the Weight Room.

2) Dormitory (new Barracks #4) to Weight Room: Addition of restrooms and showers to the north of the existing staff locker rooms within the existing weight room (to take advantage of the existing plumbing) and adding a roof supported air handling unit in the space.

1.1 Maintenance Building

Existing Conditions - Architectural

Built in 1983, the Maintenance Building is a pre-engineered steel building measuring 50 feet by 80 feet, oriented in the north-south direction. The base of the walls is concrete block to 4'-0" above finished floor, with steel framing above. The roof is steel framed with a steel standing seam roof. The building is insulated with spray foam insulation, which is exposed. The exterior is concrete block to 4'-0" and metal panel above. On the south side of the structure is a 32 foot by 24 foot office with a restroom. The maintenance side of the structure is divided into four 20 foot wide bays, with the south three bays having concrete floors sloped to a center trench drain. The northern-most bay has a flat floor that contains steel rails in the floor. There is a small wood framed storage mezzanine in the southeast corner of the south bay. The structure is approximately 20 feet high at the gabled roof peak and 14 feet high at the eave lines, which run north to south. Twelve foot overhead doors on the west elevation provide vehicle access to the 3 north bays. The south bay is accessed by a man door on the west.

Existing Maintenance Bldg. North Bay

Existing Conditions - Mechanical

Heating and ventilating of the garage/shop space is provided by gas fired unit heaters suspended from the roof structure. There is no mechanical cooling associated with the garage/shop space.

Domestic hot water is supplied to the existing fixtures from a small gas fired water heater sized to address only the existing water usage.

The existing campus wide Building Automation System (BAS) is not extended to control or monitor the equipment or spaces within the maintenance building.

The maintenance building is not sprinkled.

Existing Conditions - Electrical Systems

The building is fed off the campus electrical system and is fully backed up by the existing 700 KW campus generator. This generator was recently installed and will have adequate capacity for the remodeling and additions being suggested. The facility has a 120/208 volt three phase, 2,000 amp service. Service is centrally located in a weather proof enclosure and has spare breakers for future expansion. All equipment is from the original construction and has been well maintained and is in good condition.

Existing Conditions – Hazardous Materials

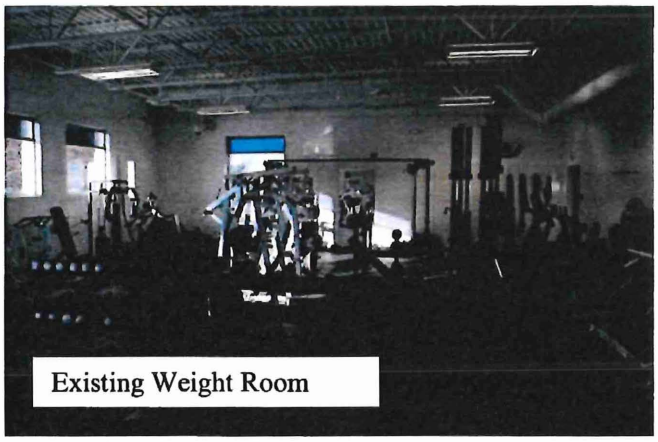
A limited scope asbestos survey report on the CIP maintenance garage was conducted in December of 2001 (dated 12-5 2001). The report was done by Angstrom Analytical, Inc.

In the report there was no asbestos found in the interior spray on insulation, ductwork insulation, sheetrock, sheetrock tape, sheetrock compound, window caulk, exterior caulk or exterior decorative panel with troweled on material and rock.

1.2 Barracks Building

Existing Conditions - Architectural

The Barracks Building, completed and occupied in 2007, is a concrete slab on grade, one level structure with a second level mechanical room. The exterior cavity walls are concrete block (CMU) interior and decorative concrete block exterior with steel joists and metal deck roof. The mezzanine is located above the laundry room and is structured with a precast concrete floor in addition to the CMU cavity walls and steel joist and metal deck roof.



Existing Weight Room

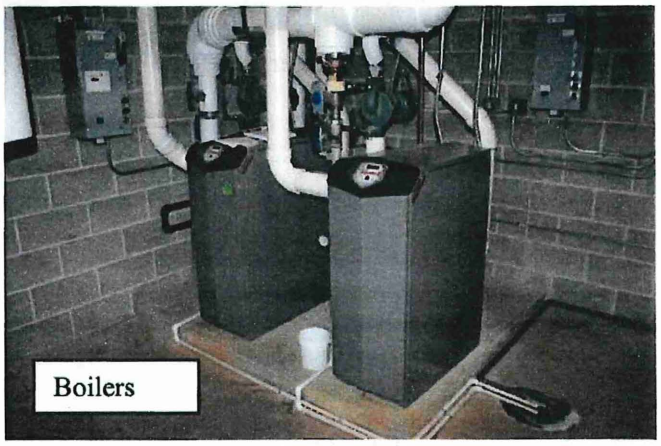
The building consists of three sixty bed dormitories, each have restrooms and showers for the 60 offenders housed. The interiors are concrete floors with vinyl composition tile, painted concrete block walls, and painted, exposed structure ceiling. The security control desk and staff office, located in the center of the building, visually controls the building entrance, entrances to each dormitory. The desk also has visual control of an interior, double loaded corridor off of which is; the staff locker room/restroom corridor; staff support offices and spaces; the laundry, dining/activities room and the exercise room. The food service area is located off the dining/activities room and is housed in an older structure. The Barracks Building is in very good condition. The exercise room is a space approximately 35 feet wide by 58 feet long for a total of just over 2,000 square feet.

The food service function is addressed in further detail in a separate section of this study. We have included budget costs to replace the dining room tables in the Activities Room. These tables, which fold flush into the wall, are sized for junior high sized people and not adult men.

The laundry currently houses one 25 lb. extractor, three 30 lb. extractors and five 75 lb. gas fired dryers. The laundry is operated non-stop from 6 am to 9 pm seven days a week.

The proposed project is to convert the exercise room to a 46 bed dormitory with required restroom and showers.

Existing Conditions - Mechanical


Boilers

Heating, ventilation, and cooling (HVAC) of the existing weight room is tied into the main constant volume central station air handler. To provide some level of individual space control, duct mounted reheat coils are installed in multiple ductwork branches to temper the air into individual spaces. The existing air handler is located in a penthouse mechanical room. Much of the supply ductwork is exposed within the space. The return air is ducted back to the air handler from multiple points within the building. A refrigerant (DX) unit serving the air handler is on grade near the building. A standalone air to air energy recovery ventilator is installed to provide fresh outside air to the main air handler while exhausting the showers and restrooms throughout the building. This equipment was installed during the original 2006 construction of the barracks building. Recently there have been issues with temperature and humidity control within the building. This is being addressed in a separate study.

Heating and ventilation of the existing kitchen is provided by a roof mounted make-up air unit. This unit is gas fired and provides make-up air for the kitchen exhaust system. The existing kitchen hood vents up to a roof mounted exhaust fan. The exhaust fan and the make-up air unit are interlocked to run as a package. This equipment is original to the kitchen which is much older than the 2006 addition.

Hydronic hot water is circulated to the various pieces of HVAC equipment to provide heat to the building. This heating water is generated via two gas fired condensing boilers located in the mechanic penthouse. Heating water is circulated throughout the building by a pair of fully redundant pumps. This equipment was installed during the original 2006 construction of the barracks building.

Domestic hot water is provided to the building via two commercial gas fired water heaters located in the mechanical penthouse. This equipment was installed during the original 2006 construction of the barracks building.

Domestic hot water is provided to the kitchen via a single commercial gas fired water heater located in the basement beneath the kitchen. This equipment is original to the kitchen which is much older than the 2006 addition.

The barracks building is fully sprinkled.

The existing campus wide Building Automation System (BAS) fully controls and monitors all of the equipment and spaces within the barracks building.

Existing Conditions - Electrical Systems


Electrical

The building is fed off the campus electrical system and is fully backed up by the existing 700 KW campus generator. This generator was recently installed and will have adequate capacity for the remodeling and additions being suggested. The facility has a 120/208 volt three phase, 2,000 amp service. Service is centrally located in a weather proof enclosure and has spare breakers for future expansion. Barracks building has a Siemens fire alarm panel. Facility is in the process of completing installation of a new IP camera and recording system. System is expandable to accommodate additional cameras in the added and remodeled spaces. All equipment is from the original construction and has been well maintained and is in good condition.

Existing Conditions - Hazardous Materials

Due to the construction of this building occurring in 2006/2007, hazardous materials are not anticipated in the new structure. However, part of the building's food service area was constructed at least 30 years ago (exact date is not known). A Limited Scope Asbestos Survey was conducted by Angstrom Analytical Inc. in December of 2001. This survey identified Chrysotile Asbestos in floor tile adhesive and some ceiling and wall panels. Confirmation that this material was removed prior to the Barracks Building construction should be determined prior to any remodeling options selected. This study has included an allowance for this work.

2.0 Proposed Architecture / Building Systems

2.1 Maintenance Building

Architectural – Option 2

Phase One of the proposed project starts with the remodeling and addition to the Maintenance Building. A 20 foot wide by 50 foot long addition to the north will go along side remodeling the north maintenance bay to provide an area 40 feet wide by 50 feet long equaling 2,000 square feet for the new exercise room. The structure will be built to match the existing building with a concrete masonry stem wall to 4 feet above finished floor and a steel framed structure above. The wall structure will include framing, insulation and painted gypsum board on the interior. The roof structure will align with the existing structure for economy and ease of construction, even though the exercise space does not require the height. A 2'x4' acoustic panel ceiling will be provided. The steel rails in the existing concrete floor slab will be removed and the slab repaired to accept the rubber floor mats to be relocated from the current exercise room. The existing overhead door will be infilled with an insulated steel stud and metal panel wall.

An offender restroom will be constructed on the east end in the adjacent maintenance bay. The sanitary sewer line will exit on the east side of the building and be routed south in the grass area to the east and tie into the existing sanitary line on the south side of the building.

Summary of square footage – Remodel existing north maintenance bay = 1,000 sf
Remodel north east corner center maintenance bay for restroom = 120 sf
New addition = 1,000 sf

See appendix for a listing of the current equipment.

Mechanical

Plumbing Systems:

The existing domestic and sanitary sewer systems will remain unchanged. This included the piping and the associated fixtures.

The new restroom will be provided with a new wall hung china lavatory, a new wall mounted china urinal, and a new wall mounted china flush valve toilet. New domestic cold water piping will be provided to connect the new fixtures to the existing domestic water service at the building. A new instantaneous electric water heater will be installed to provide hot water for the restroom lavatory. This new water heater will be capable of 1.25 gpm flow with a 75°F water temperature rise.

The new plumbing fixtures will be connected to the existing sanitary sewer system. A floor drain will be provided within the new restroom. These floor drains and the new fixtures will be connected to the existing sanitary sewer system. The connection to the existing sanitary sewer system will extend around the East side of the existing building in order to limit the intrusions on the remaining space in the building.

There is little documentation available on the existing natural gas service for this building. The added load from the new weight room rooftop unit may require that the existing service be replaced (or supplemented) to properly serve the building.

Fire Suppression System:

There is no existing fire suppression system within the existing maintenance building. Conversion of a portion of the building to a weight room does not, by the building code, require a fire sprinkler system to be installed. However, a new wet type fire suppression system is an option if the facility or Owner so chooses. If desired, we would recommend that it be installed throughout the building (including the areas that will remain as maintenance space). This includes piping, hangers, valves, flow sensors, tamper switches, and sprinkler heads. Standard type sprinkler heads will be used throughout the entire space. The existing building water service is not adequate to provide the flow and/or pressure required to fully sprinkle the remodeled building. To address this, a new 4" water service would be extended to the building to provide the required water flow and pressure. The fire protection system has not been included in the proposed cost of construction models.

Restroom Exhaust:

The new restroom will be provided with a new inline exhaust fan to provide the code required room exhaust. The unit will be capable of approximately 75 CFM of exhaust. This exhaust fan will be interlocked with the room lighting controls.

Weight Room and Restroom HVAC:

One of the existing gas fired unit heaters will require relocation to keep it out of the new weight room space. Additionally an existing outside air intake louver will require a section of ductwork to extend back into the remaining maintenance space. The remainder of the systems in the maintenance space will remain unchanged.

A new packaged rooftop unit will be installed on the roof of the addition. The unit will be capable of approximately 2,000 cfm airflow with 350 cfm of outside air. Approximately 60 MBH of heating will be provided via gas fired burner within the new fan coil unit. The unit will have approximately 5 tons of cooling via a DX coil. New ductwork will be added to provide air distribution to the new restroom and to the weight room. New roof penetrations will be made to provide for supply and return air ductwork.

The unit will be provided with electronic controls that will be integrated into the existing campus wide BAS for scheduling and control.

Electrical

Electrical work in the Maintenance Building for new exercise room will include new light fixtures and new outlets for exercise equipment requiring a receptacle. All new electrical will be connected to the existing electrical panel located at the south end of the building. New mechanical HVAC equipment will be connected to the building panelboard. No changes to the existing electrical distribution system will be required.

Electronic Safety and Security:

Existing facility IP camera viewing and recording system will be modified and added to provide cameras in all offender areas. The existing Genetec Omnicast recording system has adequate capacity for additional cameras and new camera licenses will be provided for additional cameras. New IP cameras to match cameras in the remainder of the facility will be provided. A new fiber optic cable will need to be installed between the Barracks Building and the Maintenance Building to connect new cameras in the weight room to the existing camera network.

Doors will have manual hardware with no remote locking capabilities.

2.2 Barracks Building

Architectural

The existing exercise room will be converted to a fourth dormitory in the Barracks Building to house up to 46 offenders in the C.I.P program. The exercise room is a space approximately 35 feet wide by 58 feet long for a total of just over 2,000 square feet.

The existing pair of hollow metal doors will be removed and a new hollow metal door with sidelight will be installed to the east in the existing corridor. The shifting of this door is necessary to add required unencumbered space into the dormitory to accommodate the 46 offenders. This shift will also provide necessary space at the entrance for the dormitory's bulletin board and make it less crowded entering and leaving the space.

The restrooms and showers will be located inside the room in order to tie into the existing plumbing systems serving the staff restrooms and lockers. Two toilets and two urinals along with four lavatories will be constructed with painted concrete masonry units (CMU) and a seamless epoxy floor finish, in the same manner as the existing offender restrooms in the other three dorms. Six showers are required, however eight will be provided to enhance operations and offender flow at peak periods. The showers will be constructed group style in an open shower room, again to replicate the other shower rooms. Two existing windows will be removed and infilled with a CMU cavity wall to match the existing wall.

A utility/mud room with a floor sink will be provided just inside the dorm entrance for cleaning equipment, clothing and boots.

Three ironing stations will be provided along the corridor inside the dormitory to the east side of the room. The stations are constructed of CMU to approximately 34" above the finished floor, with a fold down ironing board.

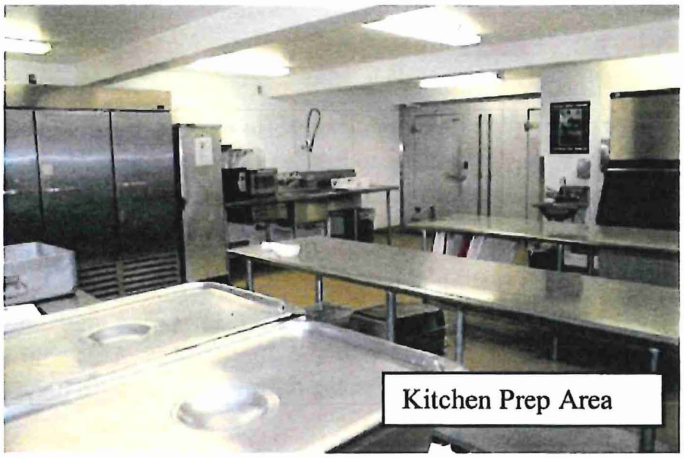
The remainder of the space will house the 46 new beds, bunk bed style. Per building code requirements, a second exit from the space will be required to be added. The existing second exit does not meet current building codes. The exit will be constructed within an existing window opening by removing the wall below the opening and infilling with a thermally broken door and frame within the opening. The existing floor finish is vinyl composition tile and will remain as such, with any required repairs. The ceiling will remain the painted exposed structure. Half dome mirrors, for security purposes, will be added in optimum locations determined after installation of the furniture.

Summary of square footage:

Available = 2110 sf
Utility/Mud Room = 442 sf
Furniture (bunks/wardrobes) = 478 sf
Unencumbered space = 1150 sf required (46 x 25)
1191 sf provided

FOOD SERVICE

I. EXECUTIVE SUMMARY


Kitchen Prep Area

An assessment of the food service operations for MCF Moose Lake Willow River was prompted by plans to expand the facility by 46 beds. The evaluation revealed that the food service department has adequate square footage for the expansion but existing conditions in hot food production and storage will require renovation. Much of the existing equipment is at the end of its expected life and should be replaced. At a minimum, the facility will need to bring the operation into compliance with health department requirements and with NFPA codes for the exhaust hood and cooking equipment. Replacing the exhaust hood creates an opportunity to reconfigure the hot food and baking functions in order to address food safety and staff safety concerns, and improve the overall function of the department.

II. INTRODUCTION

Minnesota Correctional Facility (MCF) Willow River has requested a feasibility study to evaluate the Food Service Department at their minimum security facility located in Willow River, Minnesota. A one day site visit and study was conducted by Robert Rippe & Associates, Inc., a design firm based in Minneapolis, Minnesota. The following report is based on this site visit (which took place January 7, 2015) and information provided by Larry Koch (Inspec), Becky Dooley (Warden), Nate Knutson (MCF), Candy Adamczak (MCF), Doug Kelley (RECS), Bill Montgomery (DOC) and other key staff. Department space configurations are based on existing building plans received from Inspec. The following sections outline the study's objectives, assessment and recommendations provided by Robert Rippe & Associates, Inc.

A. OBJECTIVES

MCF Willow River is planning to add 46 beds to its facility. The objectives of this study are to:

- Determine the adequacy of the Food Service Department for accommodating additional offenders
- Identify problem areas with the current kitchen design, layout, and/or equipment
- Provide recommendations for addressing problem areas
- Provide a schematic design, equipment list and cost estimate for proposed solutions

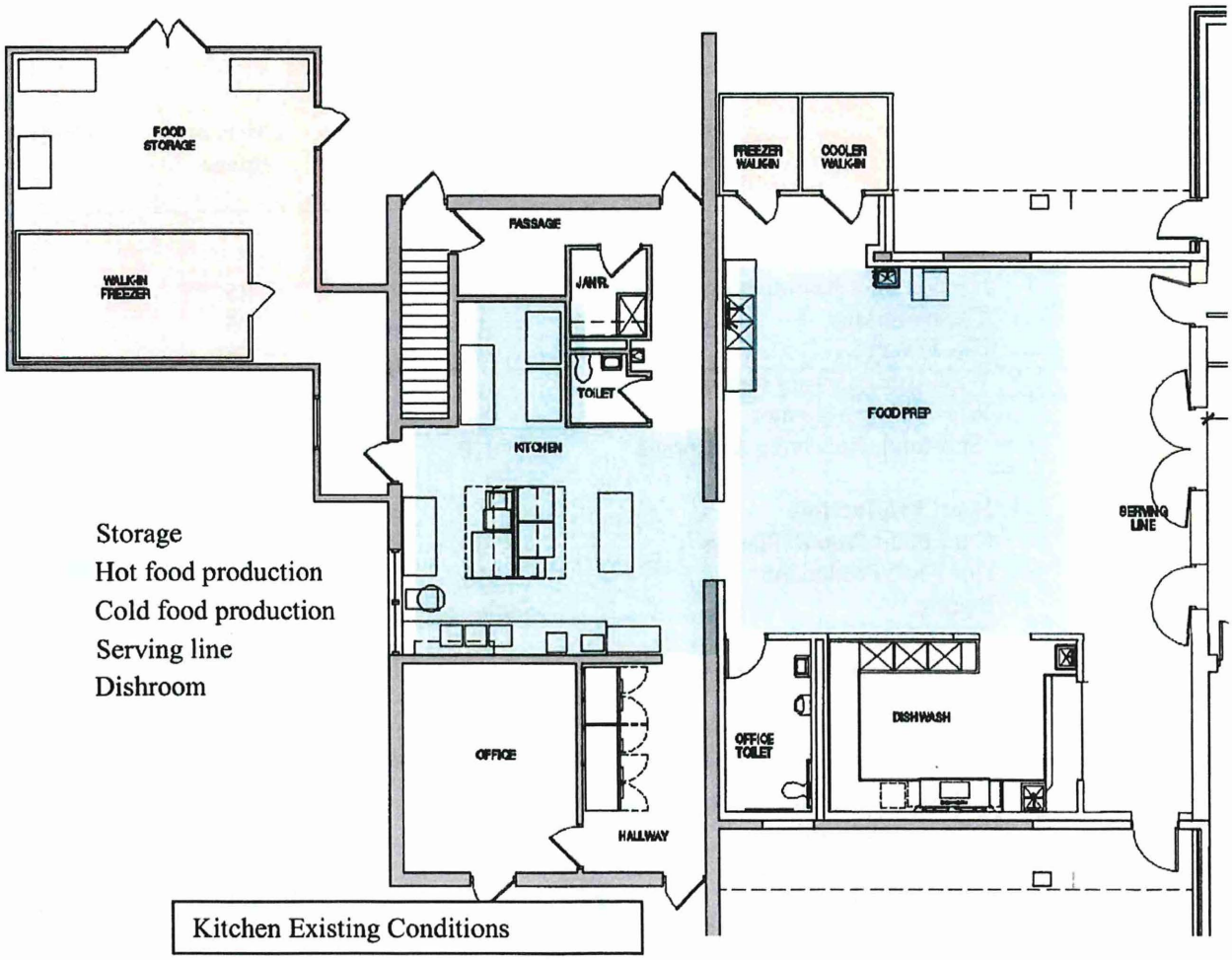
B. FACILITY OVERVIEW

MCF Willow River is a minimum security facility that runs the Challenge Incarceration Program (CIP). CIP is a boot camp program for non-violent offenders which includes education, critical thinking skills development, chemical dependency programming, and rigorous physical exercise.

The Food Service Department at MCF Willow River currently serves 180 offenders three meals a day. The facility expects to add 46 beds for a total of 226 offenders. This equates

to about 675 offender meals plus 15-20 staff meals per day. The menu is a non-select, five week rotation and meals are typically served cafeteria style in two, 30 minute shifts. The department currently operates with 3 cooks, a supervisor and a director. The rest of the labor is supplied by offenders within the facility. The offenders at MCF Willow River also participate in gardening in order to supply the facility with fresh produce. In discussions with staff on site, one of the future goals is to further expand the gardening program. In addition to gardening, the facility composts leftover food waste for use in the garden.

The current kitchen layout consists of receiving and storage, hot and cold food production, serving line and warewashing (see diagram of existing kitchen below) for a total of approximately 3,560 square feet. The department configuration results in a significant amount of space devoted to circulation corridors. The dishroom, cold production area and serving line were relocated to former dining space as part of a 2006 renovation. Hot food production and storage areas were not included in the 2006 project. The dining room is located next to the kitchen and doubles as the activity room. It includes pocket tables that fold out during meal service with seating for approximately 64-80 offenders at a time.



Kitchen Existing Conditions

C. DESIGN CRITERIA

Food service facilities are sized for the peak meal volumes. The peak offender meal volume at MCF Moose Lake Willow River will increase 25% from 180 to 226 meals per meal period. Locations and adjacencies of the kitchen workcenter, serving area, dining room and warewashing are important for efficiency and safety.

Food service design criteria considers the flow of food, beginning with raw product deliveries, through production and service, to clean up and trash removal. For operational efficiency and staff safety, workspaces should be self-contained with clearly defined traffic aisles and work aisles. Work spaces should be equipped with ready access to ingredients, sinks, refrigeration and function-specific equipment.

Additional key design criteria consider food safety. Preventing food contamination and providing for strict temperature control of potentially hazardous foods is essential to minimize the risk of foodborne illness. Hot and cold food holding equipment, warewashing equipment, sink locations, lighting and room finishes are considerations for food safety.

III. SPACE PROGRAM

Space program for a 226-bed correctional facility with 15-20 staff meals per day.

Area		Proposed Programmed Space	Current Space	Comments
A.	**Receiving**			
	Receiving & Returnables	25	25	
	Trash Staging	30	15	
	Dry Storage	275	270	
	Walk-in/Reach-in Freezer	100	236	
	Walk-in Refrigerator	180	225	
	Sub-total, Receiving & Storage	610	771	
B.	**Food Production**			
	Cold Food Prep & Plating	250	285	
	Hot Food Production	350	260	
	Baking	Included	72	
	Pan Storage	20	Included	
	Sub-total, Food Production	620	617	
C.	**Sanitation**			
	Tray Drop	100	80	
	Dishwashing/Soiled Carts	160	285	
	Pot and Pan Wash	100	Included	
	Mop Closet/Detergent Storage	40	42	
	Trash/Recycle	20	Included	
	Sub-total, Sanitation	420	407	

Area		Proposed Programmed Space	Current Space	Comments
D.	**Support**			
	Office	120	200	
	Staff Restroom	60	90	
	Offender Restroom	30	35	
	Sub-total, Support	210	325	
	Kitchen, Sub-total	1,860	2120	
	Circulation (33%)	614	1102*	
	Kitchen Design Gross Square Footage (DGSF)	2,473	3222	
			*52% circulation	
E.	**Cafeteria**			
	Serving Area	500	350	
	Sub-total, Cafeteria	500	305	
	Circulation (10%)	50	31	
	Cafeteria DGSF	600	336	
	Total, Kitchen & Cafeteria DGSF	3,074	3,558	

IV. ASSESSMENT

Robert Rippe & Associates, Inc. reviewed the current food service operation at MCF Willow River. The following sections summarize the results of this assessment with regard to overall space and each major workcenter within the department.

A. SPACE

Food service departments are sized according to peak meal volume and adjusted for multiple variables. Space requirements will vary according to facility-specific operations. Examples of these variables include:

- Production methods: cook chill versus cook serve, convenience versus scratch, in-house baking
- Staff requirements: lockers, rest rooms, offices
- Configuration and shape of space

Robert Rippe has developed and uses a space programming data base that tracks requirements for efficient food service operations relative to peak meal volumes. These metrics are regularly updated to reflect project experience and outcomes. The space program in this report compares the current space to estimated program requirements.

Current State:
The overall size of the Food Service Department includes adequate square footage to accommodate the additional 46 offenders with modifications.

Findings:
The flow of the kitchen is inefficient and potentially unsafe. Traffic aisles (versus work aisles) should be clearly defined throughout the space. Hot food production is slightly undersized and is located in the back of the kitchen, furthest from the serving line. The adjacencies of food production and refrigerated storage are important for maintaining safe food temperatures. Improved adjacencies of food production and serving can reduce hold time, improve food quality and decrease the amount of holding equipment. Circulation in the hot food area is through work aisles which increase the risk for slips, falls and burns.

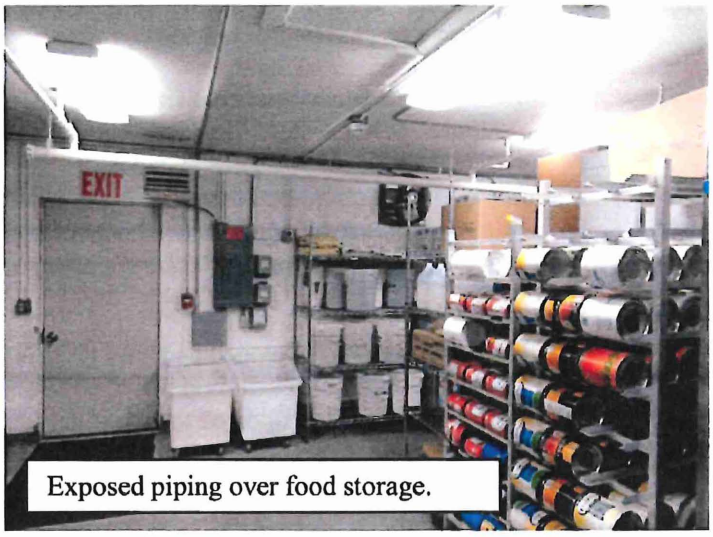
Recommendations:

- Reconfigure kitchen layout to improve adjacencies between the key workcenters outlined above
- Provide clearly defined traffic aisles and work aisles
- Improve efficiency of workcenters and storage by reducing unnecessary circulation

B. RECEIVING & STORAGE

Current State:
Storage space in the MCF Willow River kitchen is located in two main areas. The first is located in the receiving area of the kitchen and is connected to hot food production by a short corridor. This area consists of double doors to the outside for receiving, a dry storage area and a walk-in refrigerator. The remaining storage is located in the cold food production area and consists of a small walk-in refrigerator and a small walk-in freezer.

Findings:
Because walk-in freezer space is very limited, there are multiple reach-in freezers located throughout the facility – most of which are located in the dry storage. These reach-in freezers are difficult to load and unload with cases of product. The dry storage area also has the exposed plumbing and conduit. The Minnesota Food Code Part 4626.0305 3-05.12 states that food shall not be stored under a leaking water line or under a line on which water has condensed. Part 4626.0300 3-305.11 of the Minnesota Food Code states that food shall be protected from contamination by storing food where it is not exposed to splash, dust or other contamination. Part 4626.1340 6-201.12.11 of the Minnesota Food Code states that utility service lines and pipes shall not be unnecessarily exposed, and exposed lines shall be installed so that they do not obstruct cleaning of ceilings.



Exposed piping over food storage.

Recommendations:

- Replace capacity or reach-in freezers with walk-in freezer space to reduce space needed, improve product storage and food quality by providing more consistent temperatures.
- Conceal exposed pipes in dry storage area with a ceiling made up of lay-in, scrubbable ceiling tiles.

C. HOT FOOD PRODUCTION & BAKING

Current State:

The hot food production area at MCF Willow River includes the following cooking equipment: range, grill, 2-section combi oven, and two steamers. This area also includes a three compartment sink with covers used for workspace. Support equipment includes two conveyor toasters, bread slicer, slicer and mixer. Underneath the sinks, there are several large buckets used to collect food scraps for composting. MCF Willow River proofs, bakes and slices bread on site and toast is served daily for breakfast. Coffee equipment for the serving line, including the brewer, grinder and shuttles are located in this area; shuttles are moved to the serving counter for meal periods.

Findings:

Overall, much of the equipment in the hot food production area is near or beyond its expected life and may need to be replaced. The MCF Willow River staff is concerned about the cost associated with replacing this equipment, including the costs associated with altering utility connections or hoods, and bringing the kitchen space up to code.

Another concern, from a design and safety standpoint, is the flow in the hot food production area. Work aisles are not well defined and the space is very cramped. The cooking equipment is set up under a double-sided hood with the range and grill on one side and the ovens and steamers on the other. This layout is not optimal from an efficiency standpoint as staff has to circle around from side to side to access all of the equipment.

The final major need for this area is to ensure the facility meets Health Department and building codes. The following list outlines some of the issues noted with this space.

- NFPA requires exhaust hoods to overhang cooking equipment by at least six inches
- Minnesota Food Code Part 4626.1335 6-201.11 states that floors, walls and ceilings must be in good repair and finishes must be smooth, non-perforated and easily cleanable. The exposed wood beams do not meet this code and should be replaced

Recommendations:

- Replace existing equipment that is near or beyond its expected life
- Relocate toasters and coffee equipment outside hot production and closer to the serving line
- Reconfigure cooking equipment layout for easy access and sight lines to each piece.
- Replace exhaust hoods with equipment that meets code.
- Ensure Health Department and building codes are met by replacing wood beams, and repairing floors, walls and ceilings as required.

D. COLD FOOD PRODUCTION

Current State:
The cold food production area is fairly large and was largely renovated in 2006. This area consists of a prep counter with disposer and spray rinse, a small walk-in refrigerator and freezer, a 3-section refrigerator, an ice maker, a mobile warming cabinet and three mobile worktables.

Findings:
The prep sink and counter space in this area is adequate for washing and slicing the fresh produce coming in from the garden.

There are no significant Health Department concerns within the cold food area, however, some of the equipment is near or beyond its expected life and may need to be replaced. This equipment includes the 3-section refrigerator and the ice maker.

Recommendations:

- Replace existing equipment that is near or beyond its expected life
- Add a wash station outside in order to remove field dirt before produce from the garden enters the building

E. SANITATION

Current State:
The dishroom at MCF Willow River includes a dishmachine and three compartment pot and pan sink. This area was also part of the 2006 renovation. The dishroom is located in an acceptable location next to the cold prep area and adjacent to the dining room and sized appropriately for the meal volume.

Findings:
One of the issues in this area is the dishmachine itself. The Food Service Director stated that he has had issues with the machine since its purchase in 2006. However, in reviewing the service records with a representative from Hobart, the repairs seemed to be typical of a machine this age. This dishmachine is currently nine years old, operates seven days a week and may need to be replaced.

The staff have reported issues with excessive heat and humidity in this area which leads to condensation on walls and ceilings; we observed frost on the interior of the building door adjacent this space. This would be a health code concern since it creates conditions for mold growth. The dishmachine has exhaust ducts at the load and unload ends of the machine. Fans should be sized to exhaust 200 cfm and 400 cfm respectively. In addition, there are latent and sensible heat gains from the equipment that need to be accounted for in the room's ventilation.

Recommendations:

- Replace existing dishmachine
- Engineers to review air exchange in dishroom

F. SERVING

Current State:
The serving line is located within the cold food production area, adjacent to the dining room. This area was also renovated in 2006. The serving line consists of a 5-well hot counter, a long serving counter and a table for cup/mug storage. Although a cold well was planned for the 2006 renovation, it was not installed. Prior to service, cold foods are held in refrigeration located nearby. However, during serving the facility currently holds milk and other cold foods on the line using pans of ice.

Findings:
The concern in this area, again, is the age of the equipment, specifically the hot food counter. This piece of equipment may need to be replaced in the near future. The size of the serving line is sufficient in accommodating the extra 45 offenders that will be added to the facility. However, meal periods may need to be extended and broken into a greater number of shifts. A milk cooler could be added to the end of the line for holding crates of milk. These would better handle the volume, eliminate wet conditions from the use of ice and hold milk at consistent temperatures.

Recommendations:
- Replace existing equipment that is near or beyond its expected life
- Add a milk/cold food cooler to the serving line to ensure proper temperature control during meal service

IV. DISCUSSION

The Food Service Department at MCF Willow River is of adequate size to accommodate 46 additional offenders. However, the department layout will require renovation to function properly and meet code. The current kitchen layout has issues with flow and overall inefficiency. The renovation completed in 2006 left the hot food production and storage areas untouched with a number of Health Department code violations. The majority of the equipment is approaching the end of its useful life and is essential for daily meal production.

The overall recommendation for this project is to address flow issues and code violations in the hot food production area, and replace older equipment. Robert Rippe & Associates, Inc. has developed three design options that improve the Food Service Department at MCF Willow River. The first option is ideal, but comes at a higher cost. The remaining options address the major issues at lower costs. With any of these options, the department renovations will need to correct code deficiencies.

The sections below describe each of the proposed options.

A. OPTION 1 - DRAWING FS-1

In all three options, the hot food production area is combined with the bakery so that workspace, pan storage and cooking equipment can be shared. The hot food production area has improved work flows and sight lines to the rest of the department. The workstation is equipped with a hand sink, utility sinks and a double sided workcounter.

The offender's restroom is eliminated; the janitor's closet and trash are relocated to the receiving/storage area. This space is repurposed for dry storage near the cooks using high density shelving; supplies and can racks remain in the receiving area. For cleaning produce from the facilities garden, a mobile soak sink and hose bibb are included outside. The reach-in freezers are replaced with a walk-in freezer of the same capacity near the hot food/bakery workcenter. Additional space for the expanded hot food area is created by rotating the office; the window and natural light are preserved in the space.

In the cold food work space, the two conveyor toasters are relocated to one workcounter with a bread cabinet adjacent. Two mobile warmers are located adjacent the remaining two workcounters. The toasters and warmers are powered using drop cords from the ceiling. This configuration frees up space along the wall for a workcounter to hold the coffee brewing equipment.

In the cost estimate, replacements have been included for all equipment nearing ending of life and for equipment needed to support increased meal production.

B. OPTION 2 – DRAWING FS-2

This option does not relocate the restroom and janitor's closet resulting in a slightly smaller walk-in freezer. All dry storage remains in its current location with improved space for shelving due to eliminating the reach-in freezers. For cleaning produce from the facilities garden, a mobile soak sink and hose bibb are included outside.

In the cold food work space, the two conveyor toasters are relocated to one workcounter with a bread cabinet adjacent. Two mobile warmers are located adjacent the remaining two workcounters. The toasters and warmers are powered using drop cords from the ceiling. This configuration frees up space along the wall for a workcounter to hold the coffee brewing equipment.

In the cost estimate, replacements have been included for only limited equipment nearing ending of life and for equipment needed to support increased meal production.

C. OPTION 3 – DRAWING FS-3

This option eliminates the walk-in freezer and relocates two freezers to the space adjacent the mop closet. The receiving and storage area is unchanged and does not include a hose bibb and mobile soak sink.

In the cold food work space, the two conveyor toasters are relocated to one workcounter with a bread cabinet adjacent. Two mobile warmers are located adjacent the remaining two workcounters. The toasters and warmers are powered using drop cords from the ceiling. This configuration frees up space along the wall for a workcounter to hold the coffee brewing equipment.

In the cost estimate, no replacements have been included for equipment nearing ending of life. Only equipment needed to support increased meal production has been included.

V. SCHEMATIC DESIGN – SEE ATTACHED FOOD SERVICE OPTION DRAWINGS

VI. EQUIPMENT LIST & COST ESTIMATE

QTY	EQUIPMENT	COMMENTS	OPTION 1	OPTION 2	OPTION 3
Receiving & Storage					
1	Hose Bibb	By Mechanical	$0	$0	$0
1	Mobile Sink		$1,250	$1,250	$0
Lot	Trash Bin		Existing	Existing	Existing
Lot	Compost Bin		$150	$150	$0
Lot	Dry Storage Shelving		Existing	Existing	Existing
2	Can Rack		Existing	Existing	Existing
1	Walk-in Refrigerator		Existing	Existing	Existing
1	Refrigerator System		Existing	Existing	Existing
Lot	Refrigerator/Freezer Shelving		Existing	Existing	Existing
1	Walk-in Freezer		$11,800	$9,800	$0
1	Freezer System		$9,000	$8,000	$0
Lot	Freezer Shelving		$3,400	$3,000	$0
1	High Density Shelving		$2,900	$0	$0
Hot Production					
1	Hand Sink		$700	$700	$700
1	Pan Shelving		Existing	Existing	Existing
1	Baking Workcounter	One new	$3,000	$3,000	Future
3	Ingredient Bin		Existing	Existing	Existing
1	Cooks' Workcounter w/ sinks		$10,700	$10,700	$10,700
1	Meat Slicer		$7,300	Future	Future
1	Mixer, 40 Quart		$13,000	$13,000	Future
1	Exhaust Hood		$13,300	$13,300	$13,300
1	Fire Protection System		$4,600	$4,600	$4,600
1	Steamer, 2-Sec.		$18,500	$18,500	$18,500
1	Convection Oven, 2-Sec.		$13,700	$13,700	$13,700
1	Range, 48"		$8,100	$8,100	$8,100
1	Grill, 48"		$8,100	$8,100	$8,100
Cold Food					
1	Walk-in Refrigerator/Freezer		Existing	Existing	Existing
1	Refrigeration System		Existing	Existing	Existing
1	Freezer System		Existing	Existing	Existing
Lot	Refrigerator/Freezer Shelving		Existing	Existing	Existing
1	Workcounter w/Prep Sinks		Existing	Existing	Existing
2	Mobile Bakery Cabinet	One new	$2,700	$2,700	Future
1	Reach-in Refrigerator, 3-Sec.		Existing	Existing	Existing
3	Worktable w/Undershelf		Existing	Existing	Existing
2	Mobile Heated Cabinet		$4,000	$4,000	Future
1	Bread Slicer		Relocate	Relocate	Relocate
1	Hand Sink		Existing	Existing	Existing
1	Ice Maker w/Bin		$4,400	$4,400	Future

QTY	EQUIPMENT	COMMENTS	OPTION 1	OPTION 2	OPTION 3
1	Coffee Workcounter		Relocate	Relocate	Relocate
1	Coffee Grinder		Relocate	Relocate	Relocate
1	Coffee Brewer		Relocate	Relocate	Relocate
2	Conveyor Toaster		$3,400	$3,400	Future
1	Tray Shelf		Relocate	Relocate	Relocate
1	Hot Food Counter, 5-Well		$7,000	$7,000	Future
1	Utility Counter		Existing	Existing	Existing
1	Milk Cooler		$4,000	$4,000	Future
	Total		$155,000	$141,400	$77,700

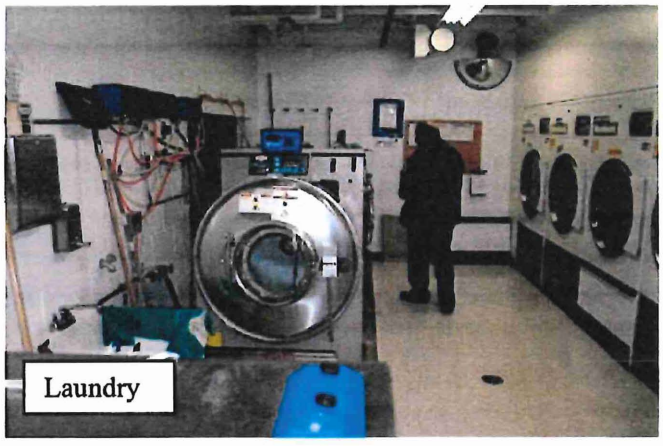
VII. FOOD SERVICE CONCLUSIONS

While Option One is recommended, we have developed two additional options that have lower food service equipment costs and construction costs. Option Two eliminates removal of the rest room and mop closet to create storage for food supplies near the production areas. Option Three eliminates the walk-in freezer that is needed to replace multiple reach-in freezers and improve frozen storage and defers some equipment replacements.

Option One results in the most functional food service department possible, without undoing work from the 2006 renovation and is the recommended approach for this project.

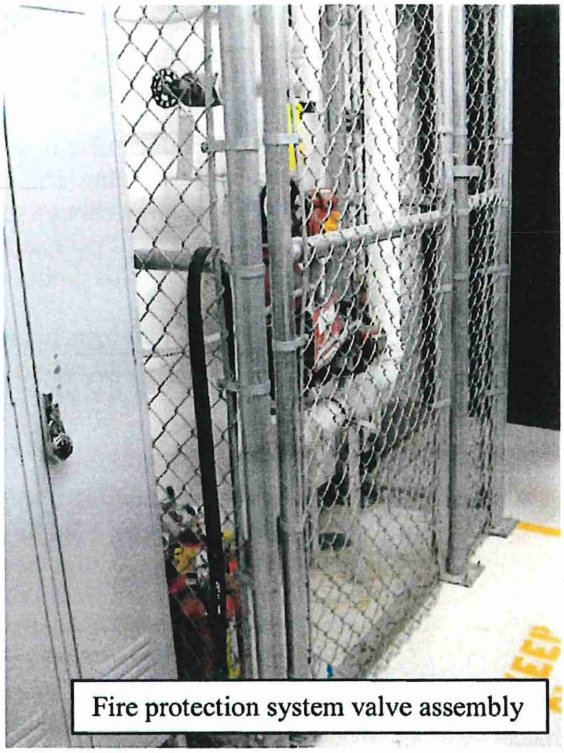
Laundry

The existing laundry does not have the capacity to handle the increased load of 46 additional offenders. The current operation runs almost non-stop. Adjacent to the east is a storage room which contains the fire protection system valve assembly, a water softener storage tank, access to the laundry room trench drain chase and the rear side of the gas fired dryers. Two potential options to provide laundry service are:


Laundry

Option #1 – Divert some components of the laundry (ie: bedding) to MCF-Moose Lake, if they have the capacity. Note presently a component of MCF-Moose Lake's laundry is shipped to MCF-Faribault. If MCF-Moose Lake is unable to accommodate additional laundry, the Department of Corrections main laundry facility is located at MCF- Faribault, and therefore these laundry components would need to be sent to that facility.

Option #2 – Expand the existing laundry east into the storage room and add a 45 lb. extractor and a 75 lb. dryer. This can be accommodated by shifting the fire protection valve assembly to the north east corner of the storage room. The water service piping for the assembly enters the room from overhead and the relocation would not require cutting into floors etc. The existing CMU wall is not load bearing and therefore will be removed and a new wall constructed three feet to the east. The new extractor can be located on the east side of the existing extractors and the waste water piping routed to the existing trench drain without having to extending the drain. The new dryer will be added to the east of the existing dryers and the access door will be shifted to accommodate.



Fire protection system valve assembly

Mechanical

Plumbing Systems:

The existing water heating system within the building does not have enough capacity to handle the additional 46 people in the proposed space. An additional gas fired fully condensing water heater will be installed in the second level mechanical room and be tied into the existing hot water storage tank and piping system. The new water heater will match the existing units in capacity to simplify installation and balancing (400 gallons per hour of usage).

The new rest/shower rooms will be provided with new stainless steel wall hung drinking fountains, new detention shower fixtures, new wall hung china lavatories, new wall mounted china urinals, and new wall mounted china flush valve toilets. New domestic water piping will be provided to supply the new plumbing fixtures and tie them into the existing hot and cold systems. The new plumbing fixture will be connected to the existing sanitary sewer system.

Floor drains will be provided within the new shower room, restroom, and mud room. Additional floor drains will be provided in the corridor connecting the shower and the restroom and within the barracks are proper to aid in drainage during floor cleaning. These floor drains will be connected to the existing sanitary sewer system.

The remodeled kitchen spaces will be provided with new stainless steel service sinks, new wall mounted china hand sinks, and floor drains. New domestic water piping will be provided to supply the new plumbing fixtures and tie them into the existing hot and cold systems.

The existing kitchen drainage passes through a grease interceptor located in the basement below the kitchen. This grease interceptor is original to the kitchen (installed prior to 2006) and is nearing end of life. A new grease interceptor will be installed in the same

location as the existing and the new kitchen fixtures and floor drains will be connected to it as required by current codes. The system will be able to store a minimum of 142 pounds of grease at a flow rate of 35 gpm.

There is little documentation available on the existing natural gas service for the kitchen portion of the building. Due to that, it is unlikely that the existing natural gas service for the kitchen is large enough to serve the additional kitchen equipment and the new make-up air unit. A new 2 psi natural gas service will be extended from the main to replace the existing service. This piping will be approximately 1" in size.

The existing natural gas piping service for the main barracks building has enough additional capacity to serve the additional domestic water heater that will be added as part of this remodel.

Fire Suppression System:

The existing building is fully sprinkled. The existing fire suppression system will require minor modifications to address the new wall locations and equipment. Security type heads will be used within the spaces with a ceiling (shower, restroom, mud room, kitchen, etc) to minimize potential for inmate damage. The rest of the building will utilize standard type sprinkler heads.

Barracks HVAC:

The existing ductwork within the existing weight room will be retained, cleaned and reused. The 16" diameter ductwork feeding the existing weight room will be selectively demolished back to the 18" diameter main. The remaining ductwork in the hallway will remain to serve the existing staff locker rooms.

The existing temperature senor within the existing weight room will be relocated to the existing staff locker rooms as the existing ductwork will now only serve that space. The existing ductwork and existing duct mounted reheat coil will be rebalanced to provide only the required airflow necessary for the existing staff locker rooms.
Due to issues with humidity and temperature control throughout the existing building, the remodeled spaces will be provided with a separate air handling system. This will prevent humidity/temperature issues within the newly remodeled space and, by reducing the load on the existing air handler, should help the situation in the rest of the building. An indoor fan coil unit will be suspended from the existing roof structure within the remodeled space. The unit will be capable of approximately 2,000 cfm airflow with 740 cfm of outside air. This high outside air volume is due to the required exhaust rates for the new showers and rest rooms. Approximately 80 MBH of heating will be provided via a hydronic heating coil that will be connected to the existing building hydronic heating system. The unit will have approximately 5 tons of cooling via a DX coil. New ductwork will be added to provide air distribution to the new shower, restrooms and to connect to the existing ductwork within the new barracks space. New roof penetrations will be made to provide for outside air and relief air. A new DX condensing unit will be provided for cooling and can be mounted on the roof or on grade.

The new unit will be provided with electronic controls that will be integrated into the existing campus wide BAS for scheduling and control. Under normal operation, the new outside and relief air opening will be closed and the necessary outside and relief air will be addressed by the restroom/shower room/mud room energy recovery system. Under economizer mode, the new outside and relief air opening will be opened to provide additional airflow needed for free cooling.

Restroom/Shower Room/Mud Room Exhaust:

The new rest, shower, and mud rooms require exhaust to be code compliant. The total exhaust necessary for the new spaces is approximately 750 cfm. This volume is adequate to ensure that the humidity generated within these spaces is isolated to prevent humidity issues in the remainder of the building. Because this is a large amount of exhaust for a relatively small space, an energy recovery unit will be used to provide the required exhaust while also tempering the outside make-up air being sent to the new fan coil unit within the barracks space.

The new unit will be provided with electronic controls that will be integrated into the existing campus wide BAS for scheduling and control.

Kitchen HVAC:

The existing kitchen exhaust hood, exhaust fan, make-up air unit and associated ductwork, piping, and controls will be demolished. This equipment is original to the building, undersized for the proposed kitchen equipment, and not in the correct location for the proposed kitchen equipment.

A new kitchen hood exhaust system will be installed to provide the code required exhaust for the cooking equipment. The new exhaust fan will be roof mounted upblast style design to work in high temperature cooling environment. The associated exhaust ductwork will be constructed of welded steel and provided with two layers of fire wrapping. The new kitchen hood will have the code required overhangs to ventilate the cooking equipment. The new kitchen hood will be provided with an ansul fire protection system. The exhaust fan and hood will have a capacity of approximately 7,000 cfm.

A new direct fired gas make-up air unit will be installed to provide the code required make-up air to the kitchen. New supply air ductwork and diffusers will be providing throughout the kitchen. The unit will have a capacity of approximately 7,000 cfm.

The new equipment will be provided with electronic controls that will be integrated into the existing campus wide BAS for monitoring only.

Electrical

Electrical work in the Barracks Building new dormitory will include new light fixtures, including nightlights and emergency lights to match existing dormitories. Existing electrical outlets and fire alarm devices will also be added similar to other dormitories. A new feeder connection from the existing facility electrical service will be provided for new mechanical air handling and cooling equipment.

Electrical work in the renovated kitchen will require new connections to new kitchen equipment and mechanical equipment. A new electrical panelboard will be provided connected to the existing facility service.

Electronic Safety and Security:

Existing facility IP camera viewing and recording system will be modified and added to provide cameras in all offender areas. The existing Genetec Omnicast recording system has adequate capacity for additional cameras and new camera licenses will be provided for additional cameras. New IP cameras to match cameras in the remainder of the facility will be provided.

Doors will have manual hardware with no remote locking capabilities.

3.0 BUILDING CODES AND STANDARDS

The proposed remodeling of will comply with all current and applicable codes and standards as follows:

- International Building Code with MN Amendments
- National Electrical Code
- Minnesota State Board of Health
- Local Applicable Ordinances
- International Mechanical Code with MN Amendments
- Minneapolis Plumbing Code
- National Fire Protection Association
- Minnesota Energy Code
- OSHA
- Americans with Disabilities Act
- American Correctional Association Standards For Adult Correctional Boot Camp Programs 4th Edition

Maintenance Building

The existing Maintenance Building was constructed in 1983 and most likely under the 1979 Uniform Building Code (it is unlikely that the 1982 code had yet been adopted by the State). The structure is a masonry and steel structure totaling 4,592 square feet. Under the current code we had assessed the building as follows:

Chapter 3 –Use and Occupancy: Section 311.2 Moderate Hazard Storage - S1 Existing Building Construction Type: Type IIB with a Fire Separation Distance is greater than 30 feet (Table 602) No automatic sprinkler system

Chapter 5 – General Building Heights and Areas:
Existing Structure: Construction Type IIB One Story – S1 occupancy 4,592 sf 17,500 sf Four Stories Allowed
The proposed remodeling and addition will be a 'B' occupancy.
Per Table 503 Type II B Construction - Proposed is an addition of 1,000 square feet and remodeling of existing 1,000 square feet for a total of 2,000 square feet. The total area allowed is 23,000 sf per story with up to 4 stories.
The remaining 3,592 square feet of the Maintenance Building will remain as an S1 occupancy. Per Section Table 508.3.3 a separation between the occupancies is not required.

Chapter 9 – Automatic Sprinkler Systems: The addition and remodeling of the Maintenance Building does not meet the thresholds stated in Section 903.2.8 requiring an automatic sprinkler system.

Chapter 10 - Means of Egress: Section 1004: Occupant Load Table 1004.1.1 Exercise Rooms equal 50 square feet per occupant. Therefore 2000 square feet / 50 occupants equals 40 total occupants.

Section 1015 – Exit and Exit Access Doorways: Table 1015.1 - 'B' occupancies with greater than 49 occupants require more than one exit. Although only one exit door is required, 2 will be provided.

Chapter 29 – Plumbing Fixtures: Table 2902.1 - The current code, for 'B' occupancies, requires one fixture for the first fifty occupants and one for each 50 occupants thereafter, for water closets. Lavatories are 1 per 40 for the first 80 and1 per 80 for the reminder exceeding 80. One drinking fountain for each one hundred occupants and a one service sink are required. The code also requires separate facilities for men and women. The option shown for the addition and remodeling provides one restroom with a water closet, urinal, lavatory and a drinking fountain. The building has an existing staff restroom and a utility sink. Although considered a mix used 'B' and 'S1' occupancy, the overall facility is a men's correctional institution and therefore we would recommend applying for a variance to the code to eliminate the women's restroom in the new Exercise Room.

Barracks and Activities and Food Service Building

The below code review information has been condensed to that information or sections that the remodeling of the existing Barracks and Activities and Food Service Building (hereafter referenced simply as the Barracks Building) impact.

The Existing Barracks and Activities Building was completed in 2007 under the 2003 Minnesota State Building Code which adopted the 2003 International Building Code with State Amendments. The building was constructed with the existing food service building attached to the north. The food service space is as follows:

Chapter 3 –Use and Occupancy:

Original Food Service Building:
- Construction Type – V-B (Fully Sprinkled)
- Occupancies – B, S1
- Total square footage – 5,067 sf (Basement = 1,316sf Ground Floor 3,751sf)

Barracks and Activities Building:
- I3 Condition 1 (which allows construction as an R occupancy) A2, B, F1, I3, S1, R2
- Total square footage – 23,563sf (Ground Floor 22,330 sf Mezzanine = 1,233 sf)

Chapter 5 – General Building Heights and Areas:

A two hour fire wall was constructed separating the existing building from the Barracks Building. The Barracks Building was constructed as follows:
Occupancies –

The current Exercise area is a 'B' occupancy and will be changed to R2. The occupant load for the room as a B occupancy is 1/50 which is the same for R2 occupancies, therefore the occupant load for the space remains unchanged at 64 occupants.

Chapter 10 - Means of Egress: Section 1014 - Exit Access of the current code (IBC 2006 and MN 2007) indicates that egress for the Exercise Room may not be through intervening spaces unless that space is an accessory space (1014.2.1). This is a change from the 2003 IBC and State of Minnesota code under which the building was constructed. The second point of egress from the Exercise Room is through the Activity Room, which is not an accessory space to the new R2

dormitory proposed in this study. Therefore a second exit to the exterior will be added through the expansion of one of the existing windows.

Chapter 29 – Plumbing Fixtures: The current code, for I3 occupancies, requires one fixture per fifteen occupants for water closets, lavatories and showers, plus one drinking fountain for each one hundred occupants and a one service sink. The American Correctional Associations (ACA) Standards for Adult Correctional Boot Camp Programs is more restrictive, and have been adopted by the Minnesota Department of Corrections for incorporation at this facility. The below standards are required:

- ACA 1-ABC-2C-01 Sleeping Area - 46 beds – unencumbered space 25 sf per occupant
- ACA 1-ABC-2C-02 Dayroom – 35 sf per occupant (The current Activities Room = 4500 sf complies)
- ACA 1-ABC-2C-04 Toilets - 4 toilets (1/12 - 1/2 maybe urinals) 4 provided
- ACA 1-ABC-2C-05 Washbasins - 4 lavatories (1/12) 4 provided
- ACA 1-ABC-2C-06 Showers - 6 showers (1/8) 8 provided

A service sink, although not specifically required for this remodeling, as there are several available, will be provided for operational efficiency.

4.0 Schedule

The following schedule is based on acceptance of this Study Report on February 27, 2015 and the project design phase solicitation and notice to proceed for design services occurring by June 1, 2015.
The design stages may need to be slightly adjusted based on the extent of work undertaken at the food service area. We have provided a length of time in weeks for each phase should the notice to proceed occur at date different from that stated.

February 27, 2015:	Study Report complete
June 1, 2015:	Design contract for project executed
June 1 – July 31, 2015	Hazardous Material Abatement (If necessary)
June 1 – June 30, 2015:	Schematic Design (4 weeks)
July 1 – July 31, 2015	Design Development (4 Weeks)
August 3 – August 28, 2015:	Construction Documents (8 Weeks)
August 31, 2015:	Project out for Bids – Bid Period (4 Weeks)
September 24, 2015:	Mechanical / Electrical Bid Opening
October 1, 2015:	General Construction Bid Opening
November 1, 2015:	Construction commences
November 1, 2015 – March 31, 2016:	Phase 1 – Maintenance
April 1 - August 1, 2016:	Phase 2 – Dormitory / Food / Service / Laundry

5.0 COSTS

The Study Estimate includes the costs based on the information available at this point of the process. The Schematic Design, Design Development and Construction Document Phases will continue to track these costs to keep in alignment with the budget.

5.1 Probable Cost of Construction – Cost Model #1

Maintenance Building

Construction Cost	$385,574
Design Contingency (10%)	$ 38,557
Cost Escalation (7% of subtotal)	$ 30,019
Secure Environment (5% of subtotal)	$ 22,708
Construction Contingency (10% of subtotal)	$ 47,686
Sub-Total Construction Cost	***$ 524,544***
Furniture /Equipment (Allowance)	$ 25,000
Professional Fees (10% of Construction)	$ 47,686
Sub-Total Project Cost	***$572,230***

Barracks and Activities Building

Construction Cost	$756,621
Design Contingency (10%)	$ 75,662
Cost Escalation (7% of subtotal)	$ 58,260
Secure Environment (5% of subtotal)	$ 44,527
Construction Contingency (10% of subtotal)	$ 93,507
Sub-Total Construction Cost	**$1,028,577**
Hazardous Material Abatement (Allowance)	$ 10,000
Furniture / Equipment (Allowance)	$ 50,000
Temporary Food Service (4 month temp. Kitchen rental)	$ 90,000
Professional Fees (10% of Construction)	$ 93,507
Sub-Total Project Cost	***$1,272,084***

Cost Model #1 Total Project Cost	***$1,844,314***

5.2 Probable Cost of Construction – Cost Model #2

Maintenance Building

Construction Cost	$344,410
Design Contingency (10%)	$ 34,441
Cost Escalation (7% of subtotal)	$ 26,814
Secure Environment (5% of subtotal)	$ 20,283
Construction Contingency (10% of subtotal)	$ 42,595
Total Construction Cost	***$ 468,543***
Furniture /Equipment (Allowance)	$ 25,000
Professional Fees (10% of Construction)	$ 42,595
Sub-Total Project Cost	***$ 536,138***

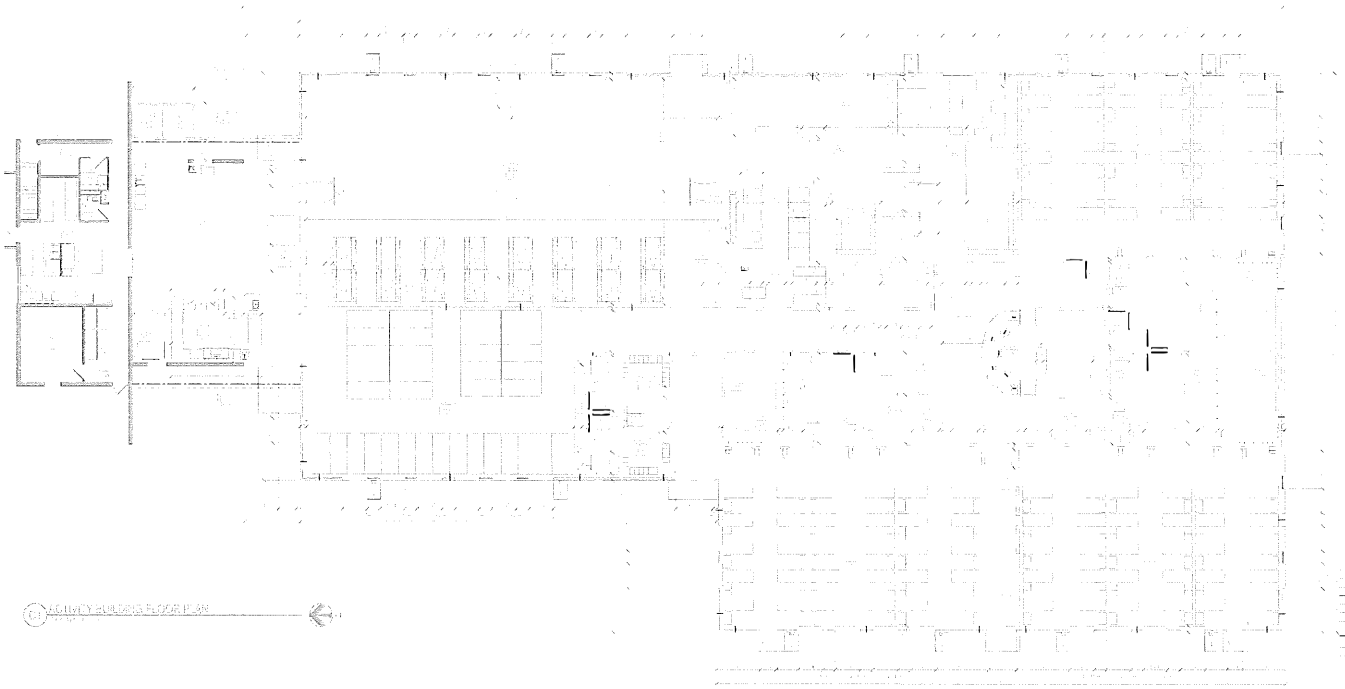
Barracks and Activities Building

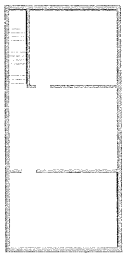
Construction Cost	$626,979
Design Contingency (10%)	$ 62,698
Cost Escalation (7% of subtotal)	$ 48,277
Secure Environment (5% of subtotal)	$ 36,898
Construction Contingency (10% of subtotal)	$ 77,485
Total Construction Cost	***$852,337***
Hazardous Material Abatement (Allowance)	$ 10,000
Furniture / Equipment (Allowance)	$ 50,000
Temporary Food Service (2 month temp. Kitchen rental)	$ 57,000
Professional Fees (10% of Construction)	$ 77,485
Sub-Total Project Cost	***$1,046,822***

Cost Model #2 Total Project Cost	***$1,582,960***

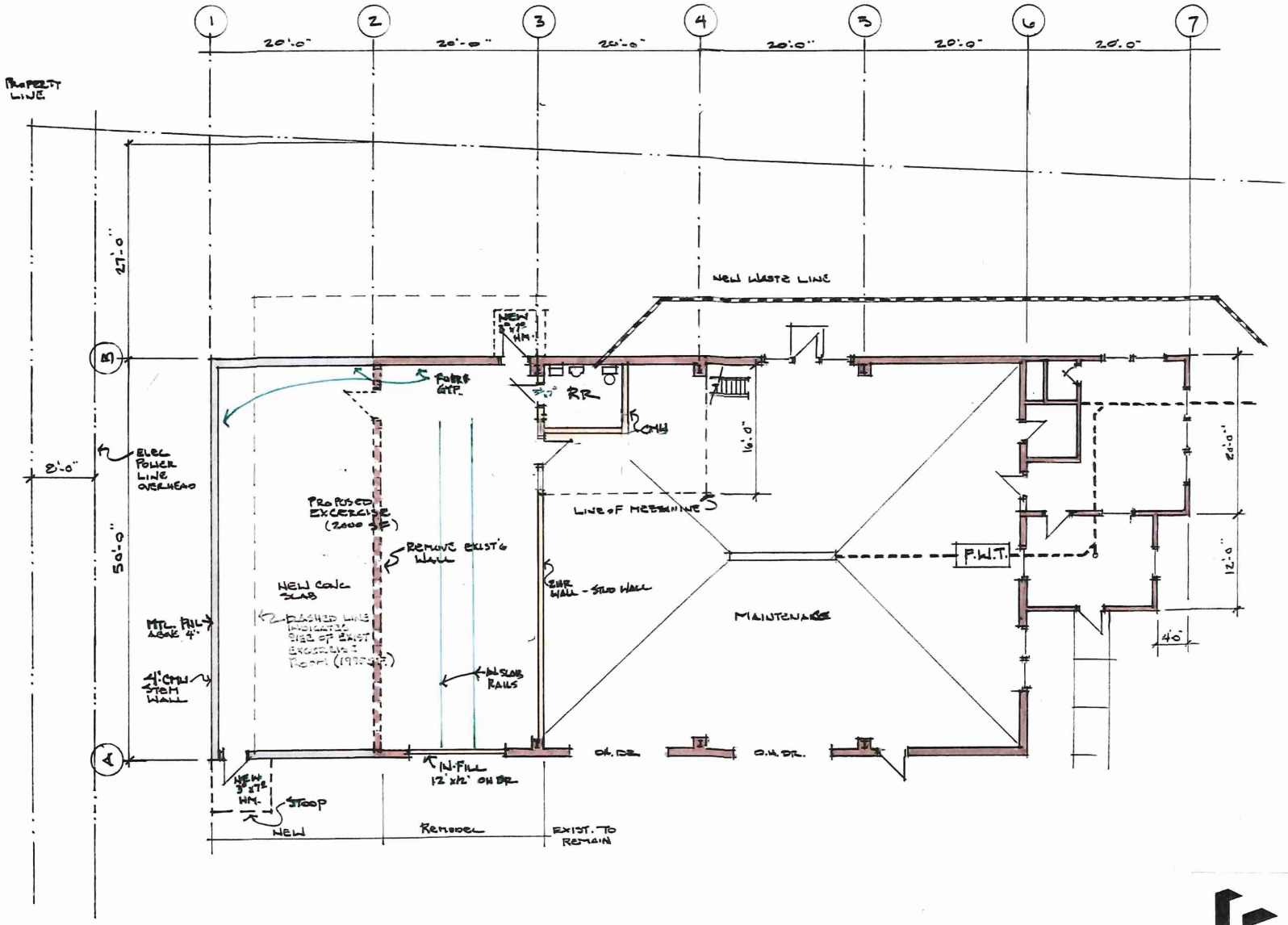
Appendix A

Design Diagrams





EX-1



WILLOW RIVER / MOOSE LAKE - BARRACKS STUDY. EXCERCISE OPTIONS

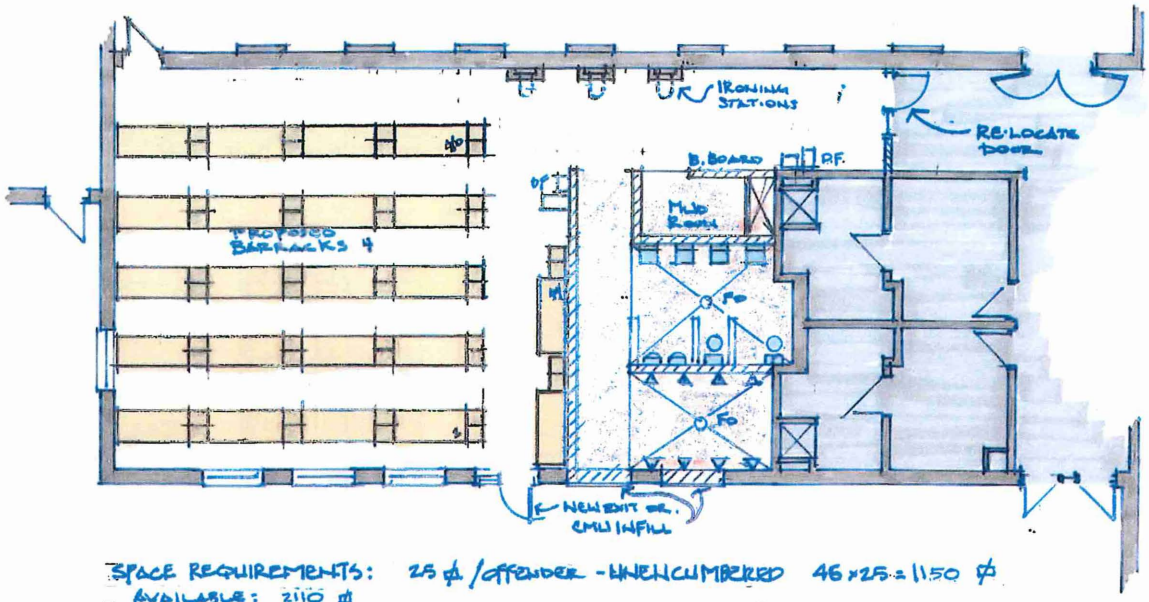
SC: 1/8"=1'-0"

02.02.15

0' 4' 8'

NORTH

INSPEC
3801 Duluth Street
Minneapolis, MN 55422



SPACE REQUIREMENTS: 25 ☐/OFFENDER - UNENCUMBERED 46 x 25 = 1150 ☐

AVAILABLE: 2110 ☐

FURNITURE: 478 ☐

UNENCUMBERED SPACE = 1191 ☐

RESTROOM / MUDROOM = 462 ☐

STUDY FOR DORMITORY - BARRACKS 4 OPTION #1

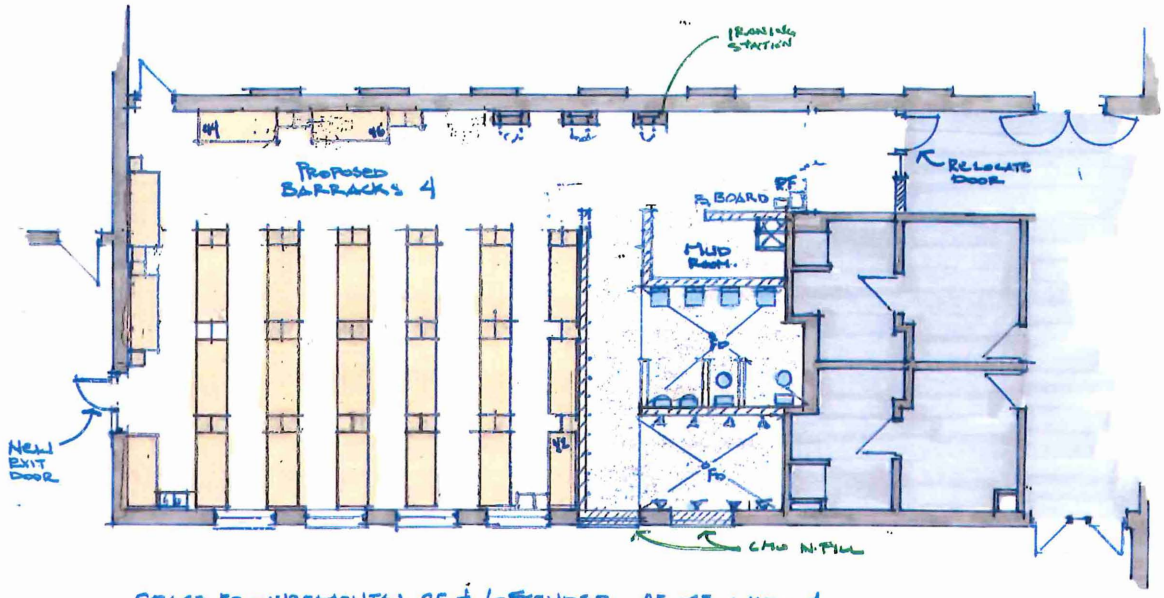
SC: 1/8" = 1'-0"

JAN. 20, 2015

0 1 4 8

INSPEC

5801 Duluth Street
Minneapolis, MN 55422



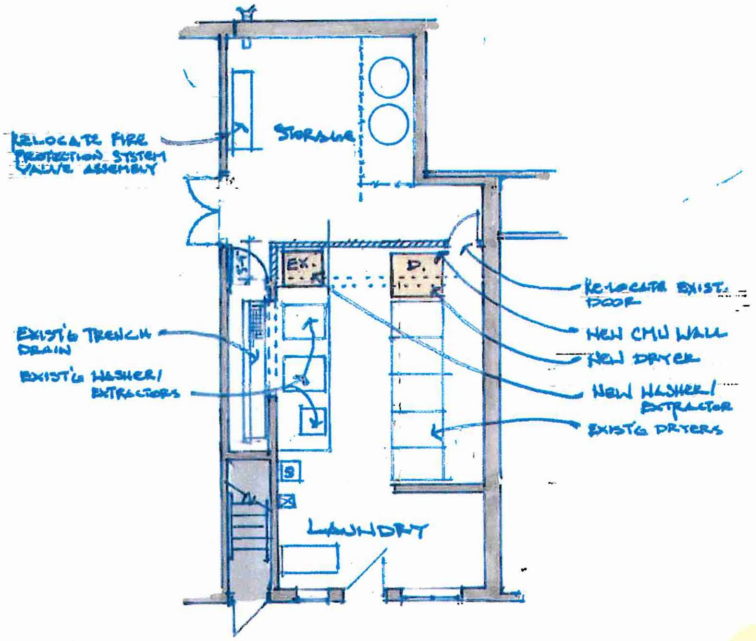
SPACE REQUIREMENTS: 25 ☐/OFFENDER 46×25 = 1150 ☐
AVAILABLE : 2110' ☐
FURNITURE : 478 ☐
UNENCUMBERED SPACE = 1191', ☐
MUDROOM/RESTROOM = 460 ☐

STUDY FOR DORMITORY - BARRACKS 4 - OPTION #2

SC: 1/8" = 1'-0"

JAN. 20, 2015

INSPEC
5801 Duluth Street
Minneapolis, MN 55422



STUDY FOR DORMITORY - LAUNDRY

SC: 1/2" = 1'-0"

0' 4' 8'

INSPEC
5801 Duluth Street
Minneapolis, MN 55422

Appendix B

Space Program

Study Classroom for Dormitory

MCF- Willow River/Moose Lake

Barracks Program								
Room	**Existing**	**SF**	**Quantity**	**at Base**	**BASE SF.**	**at Net**	**NET SF**	**Comments**
Existing								
Workout room			1	2030	2030			
Barracks								
Unencumbered space			46	25	1150			
Furniture - Bunk			22	18	396			
Furniture - Wardrobe			45	2	90			
Barracks Total					1636			
Restroom					0			
Shower (1 per 8)			5	9	45			
Accessible Shower			1	15	15			
Toilet (1 per 12)			3	15	45			1 toilet/2 urinal
Accessible Toilet			1	40	40			
Lavatory (1 per 12)			4	15	60			
Mud Room			1	120	120			
Total Base S.F.					**325**	**1.3**	**423**	
Maintenance Building								
Exercise Room	2030							
Maintenance North Bay	1000							
Exercise			1	2000	2,000			
Existing Maintenance North Bay			1	1000				
Addition			1	1000				
Staff Office			1	100	100		Locate in center	
Offender Restroom			1	120	120		maintenance bay	

CIP Exercise Equipment Inventory

Jan. 2015

CIP Cardio Equipment @ CIP	Rank	Qty	Year	Area (inches)	Power
Nautilus Treadmill		1	2006	86 X 36	*
Nautilus Upright Bikes		3	2006	42 X 24	Self-generated
Nautilus Recumbant Bikes		1	2006	55 X 26	Self-generated
Nautilus Elliptical		1	2006	100 X 30	Self-generated
Stairmaster Climbers		1	2006	44 X 22	*
Cybex UBE (Arm Bike)		1	1998	58 X 28	Self-generated
Scifit Elliptical		1	2003	62 X 31	Self-generated
Scifit UBE		1	2013	60 X 32	Self-generated
Schwinn Air UBE (Arm Bike)		1	2006	60 X 34	Self-generated
Cybex Upright Bike		1	2013	50 X 24	Self-generated
Precor Maxima S23T Treadmills		3	2013	84 X 38	*

***110V dedicated circuits are recommended.**

Weight Machines		Qty	Year	Area (inches)
Hammer Strength Isolateral Lat Machine*		1	2007	62 X 45
Pec Deck (cable)		1	old	46 X 42
Cable Crossover		1	old	166 X 36
Hammer Strength Iso-Lateral Chest Press*		1	2007	63 X 44
Hammer Strength Iso-Lateral Inc. Chest*		1	2007	54 X 44
Smith Machine (cable)		1	old	90 X 70
Cybex Shoulder Press Mach.		1	1997	54 X 50
Hammer Strength Leg Press Machine		1	2007	72 X 66
Cybex Leg Extension/Curl*		1	2007	90 X 30
AbCoaster		1	2011	68 X 30
LifeFitness Ab Machine		1	2007	68 X 34
Hammer Strength Iso-Lateral Rower		1	2007	60 X 49
Hammer Strength Pullover Machine		1	2007	58 X 66
Hammer Strength Seated Dip Machine		1	2007	68 X 49
Hammer Strength Seated Hamstring Curl		1	2007	56 X 58
Flat Bench Press		1	old	50 X 49
Incline Bench Press		1	old	51 X 50
Preacher Curl		1	old	36 X 38
Decline Sit-up board		1	old	84 X 32
Decline Bench		1	old	58 X 28
Flat Bench		1	old	50 X 18
Dumbell Racks		2	old	70 X 30
Bar Racks		2	old	16 X 16
Squat Rack		1	old	60 X 56
Dip/Roman Chair		1	old	40 X 26
Incline Bench Press		1	old	52 X 24
Military Press Chair		1	old	40 X 31
Plate Tree		2	old	27 X 22
Scale		1		22 X 20
Storage cartons		2		14 X 14

Appendix C

Probable Cost of Construction Spreadsheet

PPM
Professional Project Management

Construction Cost Budget Estimate:

Project Name:

MCF Moose Lake / Willow River - Fitness Bldg Expansion: High Cost

Location:

Moose Lake / Willow River, MN

Project Phase:

Preliminary Concept Phase

Date Prepared:

Wednesday, 25 February 2015

Summary of Contents:

PPM Client: Inspec
PPM Client Contact: Larry Koch
Client Commission No.: tbd

Arch / Engineer: INSPEC
A / E Contact: Larry Koch
A / E Commission No.: tbd

Prepared By:

Douglas L. Holmberg, PE/CPE
President, PPM, Inc.

Number of Pages:
Pages 1 - 10

PPM Project No.:
1509.104.ch.2.25.15

Professional Project Management, Inc.
1858 East Shore Drive
St. Paul, MN 55109
(612) 919-4000 fax: (651) 774-0935
dougppm@gmail.com

Construction Cost Budget Estimate: *Preliminary Concept Phase*

Project Name: MCF Moose Lake / Willow River - Fitness Bldg Expansion: High Cost
Project Location: Moose Lake / Willow River, MN
Date: Wed, 25 Feb 2015
Arch / Engineer: INSPEC
A / E Commission No.: tbd

Prepared by:
Professional Project Management, Inc.
Doug Holmberg, PE / CPE (612) 919-4000

PPM Project No.: 1509.104.ch.2.25.15

CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total

Assumptions & Qualifications:

1. This Budget Estimate is based on the following:

Documents Received:	Date Received:
tbd:	tbd
prepared by:	tbd
dated:	xx/xx/xxxx

Info:

Arch / Engineer: INSPEC
A / E Contact: Larry Koch
A / E Commission No.: tbd

NTP issued by : Larry Koch
Date NTP issued: tbd

2. Proposed Construction Schedule:

Date of this Budget Estimate:	Wed, 25 Feb 2015
Bid Opening:	Tue, 28 Jul 2015
Award Contart:	Sat, 1 Aug 2015
Start Construction:	Fri, 28 Aug 2015
Construction Duration (months):	12
Complete Construction:	Mon, 22 Aug 2016
Construction Midpoint:	Wed, 24 Feb 2016
Duration from Budget Estimate date to Construction Midpoint (mn):	12.1
Construction Cost Escalation Rate per month =	0.58%
Construction Cost Escalation Rate per 12 month period =	7.0%
Construction Cost Escalation:	
from Budget Estimate date to Construction Midpoint =	**7.08%**

3. Estimate Up-dates:

Estimate Up-date no.:	Date of Up-date:
1509.101.ch.2.13.15	Fri, 13 Feb 2015
1509.102.ch.2.18.15	Wed, 18 Feb 2015
1509.103.ch.2.19.15	Thu, 19 Feb 2015
1509.104.ch.2.25.15	Wed, 25 Feb 2015

4. Assumptions:

1. General Conditions include the following costs:
   - x Bond costs (if applicable)
   - x Insurance costs
   - x Building Permit costs
2. Contracting Method:
   - Public Bid / Firm Fixed Price
   - x Invitation To Bid selection process
   - Cost Plus a Persentage Basis Contract Agreement
   - Negotiated GMP
3. Labor Requirements:
   - x Prevailing Wage / Davis Bacon
   - AGC Union Wage Agreement
   - Right To Work / Non-Union
4. *NOTE: The Following Costs are NOT Included:*
   1. *Contaminated Soil Abatement / Remediation*
   2. *Hazardous Material Abatement / Remediation*
   3. *Soils Correction*

Prepared By and Property of: *PPM, Inc.*
1858 East Shore Drive, St. Paul, MN 55109
(612) 919-4000 f: (651) 774-0935

CSI Division		Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
5. "Bid Risk Factor" accessed by responding Bidders:			Subjective Impact Factor:					
	Bid Documents		0= none, 1=possible, 2=moderate, 3=high	Subjective +% Bid Factor				
	Bidability		0	0.00%				
		Add / Deduct Alternates						
		Well coordinated documents						
		Multiple & consistent redundant key notes throughout plans						
		Limited use of Construction Detail Books						
		Non-applicable details all deleted or stricken to limit confusion						
		Construction Phases clearly identified						
		Use of "color coded lines" to differentiate materials						
		Use of 3-D images to convey design intent						
		Use of photos w/ superimposed notes and graphics to convey design intent						
		Reasonable / Unreasonable Bid Period						
		Slow / Busy Bid Day / Week						
	Constructability		0	0.00%				
		New Construction						
		Green Field						
		Brown Field						
		Renovation / Expansion						
		Unforeseen Conditions						
		Construction Defects Repairs						
		Unforeseen Conditions						
		Multiple Construction Phases						
		Multiple Governing Agencies						
		Occupied Facility						
		Special / Security check-point entry						
		Safety, noise, dust, vibration, etc. management						
		Protection / security of occupant FF&E						
	Type of Project							
	Design-Build		0	0.00%				
	Plan & Spec							
	Type of Contract Delivery							
	Public / Hard Bid General Contract		0	0.00%				
	Negotiated GMP							
	CM / CMAR							
	Cost Plus							
	Time & Material							
	Owner							
	Private		0	0.00%				
		Public Bid						
		Invited Bid						
		Acceptable Bid Requirements						
		Acceptable Paperwork						
		Acceptable Change Order Process						
		Acceptable Payment Duration						
	Govt / Public Works		0	0.00%				
		Multiple Governing Agencies						
		Federal / State / Local						
		Voluminous Bid Requirements						
		Voluminous Paperwork						
		Questionable CO Process						
		Questionable Payment Duration						
	Project Management							
	Owner / A-E Project Management Team		0	0.00%				
		Known entity w/ perceived positive abilities and style						
		Known entity w/ negative hear-say abilities and style						
		Unknown entity w/ no record						
	Potential Cost Impact to overall project success:		0	0.00%				

Prepared By and Property of: *PPM, Inc.*
1858 East Shore Drive, St. Paul, MN 55109
(612) 919-4000 f: (651) 774-0935

CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
Construction Cost Budget Estimate: *Preliminary Concept Phase*							**Total**
02000	SITEWORK & DEMOLITION	*% of Total Direct Cost =*	*8.84%*		*Cost Per SF =*	$14.10	$29,249.30
03000	CONCRETE				*Cost Per SF =*	$4.23	$8,770.00
04000	MASONRY				*Cost Per SF =*	$5.33	$11,056.00
05000	METALS				*Cost Per SF =*	$19.58	$40,600.00
06000	WOOD & PLASTICS				*Cost Per SF =*	$0.00	$0.00
07000	THERMAL				*Cost Per SF =*	$0.44	$910.00
08000	DOORS, WINDOWS & GLASS				*Cost Per SF =*	$2.41	$5,000.00
09000	FINISHES				*Cost Per SF =*	$15.90	$32,969.50
10000	SPECIALTIES				*Cost Per SF =*	$0.25	$510.00
11000	EQUIPMENT				*Cost Per SF =*	$0.00	$0.00
12000	FURNISHINGS				*Cost Per SF =*	$0.00	$0.00
13000	SPECIAL CONSTRUCTION				*Cost Per SF =*	$32.68	$67,780.00
14000	CONVEYING SYSTEMS				*Cost Per SF =*	$0.00	$0.00
15000	MECHANICAL	*% of Total Direct Cost =*	*23.75%*		*Cost Per SF =*	$37.91	$78,615.00
16000	ELECTRICAL	*% of Total Direct Cost =*	*16.78%*		*Cost Per SF =*	$26.79	$55,561.80
		TOTAL DIRECT COST			*Cost Per SF =*	$159.61	**$331,021.60**
		Total Direct Cost w/ out Sitework =	$301,772.30				
						Gross Square Foot Area	2,074
		Deduct Sales Tax (Reduction = Total Direct Cost x 40% (Materials) x 0???%)					*$0.00*
						Subtotal =	*$331,021.60*
					w/ out Sitework:		
		General Conditions = 12%			*36,213*		$39,722.59
					367,234	Subtotal =	**$370,744.19**
		OH & Profit *(GC / CM / CMAR Fee)* **=** 4.0%			*14,689*		$14,829.77
					381,924	W/ Out Contingencies) =	**$385,573.96**
		Cost Per Square Foot = $185.91					
					NOTE: Includes Sitework =	*$185.91*	
					Cost Per Square Foot "w/ out Sitework" =	*$184.15*	
		Design Contingency = 10%					$38,557.40
		Total Construction Budget as of: INSPEC					$424,131.35
					Cost Per Square Foot (w/ Design Contingency) =	*$204.50*	
		Construction Cost Escalation = 7.08%					*$30,019.07*
		To the Mid-point date of Construction of: Wed, 24 Feb 2016				*Subtotal =*	*$454,150.43*
		Occupied Facility Factor / Contingency = 5.00%					*$22,707.52*
		Assumes impeeded labor productivity due to occupied living units during construction / Secure Facility				*Subtotal =*	*$476,857.95*
		"Bid Risk Factor" accessed by responding Bidders = 0.00%					*$0.00*
						Subtotal =	*$476,857.95*
		TOTAL CONSTRUCTION BUDGET					$476,857.95
		as of Bid Day on: Tue, 28 Jul 2015					
		Theoretical Cost Per Square Foot of gross bldg area as of Bid Day =					***229.9218644***
		Construction Contingency: 0%					$0.00
		(NOT Included, By Owner ! : PPM recommends 3% to 5%)					
		TOTAL CONSTRUCTION BUDGET:					***$476,857.95***
		Projected to Completion Date of Mon, 22 Aug 2016					
		Total Construction Cost per SF = *$229.92*					

TOTAL DIRECT COST SUMMARY:

Prepared By and Property of: *PPM, Inc.*
1858 East Shore Drive, St. Paul, MN 55109
(612) 919-4000 f: (651) 774-0935

CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total

Quantity Take-Off General Information

Summary of Building Type, Structural System(s), Materials, general Mechanical & Electrical Systems:

Construction Type:	Renovation / Expansion
Existing Site:	Yes
Existing Building:	Existing Maint Facility
Project Phased	No
Multiple Buildings:	No
Prudent protection of existing finishes:	TBD
Construction Working Hours:	Normal
Noise Restrictions:	TBD

Gross Area Summary:

	PPM INSPEC (Square Feet)
First Floor	
Renovation / Expanded Area	2,074
Subtotal Main Level =	**2,074**
Building Total Gross Area =	**2,074**

02000 SITEWORK & DEMOLITION

Demolition & Clearing						
Interior Demolition:						
Demo 8" CMU exterior wall		208	sf	$6.00	$1,248.00	
Demo Exter Metal Panel Wall		801	sf	$6.00	$4,806.00	
Demo Exterior Door		1	ea	$125.00	$125.00	
Demo OH Door		1	ea	$200.00	$200.00	
New Door Opening		1	ea	$800.00	$800.00	
Demo Rail Road Tracks into building	allowance	80	lf	$50.00	$4,000.00	
Demo SOG at rail road tracks	40 lf x 5'	200	sf	$5.00	$1,000.00	
Misc M&E Demo		1,135	sf	$1.50	$1,702.50	
Subtotal Site Demolition & Clearing =	***$13,881.50***					
NOTE: The Following Costs are NOT Included:						
1. Contaminated Soil Abatement / Remediation			***ea***	***$0.00***	***$0.00***	
2. Hazardous Material Abatement / Remediation			***ea***	***$0.00***	***$0.00***	
3. Soils Correction			***ea***	***$0.00***	***$0.00***	
Earthwork						
Grading						
Strip Top Soil & Dispose On-Site (Top 12")	**968 sf x 12" / 27**	36	cy	$15.00	$537.78	
Subtotal Cut & Fill =	***$537.78***					
Excavation — Includes backfill + compaction						
Perimeter / Exterior Footings		91	lf	$20.00	$1,820.00	
Sand Under Slab on Grade						
6" base	968 sf x 6" / 27	18	cy	$20.00	$358.52	
Add for 10 mil Poly		968	sf	$0.50	$484.00	
Silt Fence	allowance	150	lf	$2.25	$337.50	

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Temporary Construction Entrance	Allowance	1	ea	$1,000.00	$1,000.00	
	Site Drainage & Utilities						
	Sanitary Sewer						
	New Wast Line		91	lf	$30.00	$2,730.00	
	Connect to existing waste line		1	loc	$500.00	$500.00	
	Gas Service	allowance	1	loc	$5,000.00	$5,000.00	
	Subtotal Site Utilities =	***$8,230.00***					
	Stoops (Includes Excavation, Footing, Footing Wall & Slab)						
	Main Level		2	ea	$800.00	$1,600.00	
	Landscaping	**misc patching allowance at expansion**	**1**	**ea**	**$1,000.00**	**$1,000.00**	
	Subtotal Landscaping =	***$1,000.00***					
	Misc. Sitework & Demolition Allowance			ea	$0.00	$0.00	
	Subtotal Div-2: Sitework & Demolition						**$29,249.30**
03000	**CONCRETE**						
	CIP Concrete						
	Footings						
	Perimeter Exterior: TFE = ???		91	lf	$22.00	$2,002.00	
	Slabs On Grade						
	4"		968	sf	$5.00	$4,840.00	
	Topping Slab at Restroom / Office		182	sf	$4.00	$728.00	
	Patch SOG at Rail Road Tracks	40 lf x 5'	200	sf	$6.00	$1,200.00	
	Subtotal Div-3: Concrete						**$8,770.00**
04000	**MASONRY**						
	Face Brick						
	Concrete Block						
	Footing Wall (Extend to Frost Depth, Assume 4')						
	8" CMU, Standard	91 lf x 4'	364	sf	$14.00	$5,096.00	
	Exterior Structural CMU Walls						
	8" CMU, Standard	91 lf x 4'	364	sf	$14.00	$5,096.00	
	8" CMU, Standard	OH Door Infill: 12 lf x 4'	48	sf	$18.00	$864.00	
	Subtotal Div-4: Masonry						**$11,056.00**
05000	**METALS**						
	Gross Building Area = 2,074.00						
	Gross Roof Area = 0.00						
	Structural Metal						
	Miscellaneous Metals						
	Guard Rails		35	lf	$100.00	$3,500.00	
	Mezzanine Stair		1	ea	$2,500.00	$2,500.00	
	Mezzanine		326	sf	$100.00	$32,600.00	
	Misc. Metals Allowance		1	allow	$2,000.00	$2,000.00	
	Subtotal Div-5: Metals						**$40,600.00**
06000	**WOOD & PLASTICS**						

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CSI Division	Description		Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Subtotal Div-6: Woods & Plastics							**$0.00**
07000	**THERMAL**							
	Building Insulation							
	Perimeter Stem / Footing Walls(2" Rigid)	91 lf x 4'		364	sf	$2.50	$910.00	
	Subtotal Div-7: Thermal							**$910.00**
08000	**Doors, Windows & Glass**							
	Interior Vestibule Windows	5 lf x 4'		20	sf	$30.00	$600.00	
	HM/Wood Doors, HM/Wood Frames & Hardware							
	Lock Set, Closer	Restrooms		2	ea	$1,000.00	$2,000.00	
	Exit Door, w/Panic HDWR			2	ea	$1,200.00	$2,400.00	
	Subtotal Div-8: Doors, Windows & Glass							**$5,000.00**
09000	**Finishes**							
	Gypsum Drywall							
	Interior Partition Walls (Metal stud w/sound insulation)							
	Gyp Furring at gym perimeter walls			1,521	sf	$3.00	$4,563.00	
	2-Hr Wall			801	sf	$10.00	$8,010.00	
	Metal Stud Walls	36 lf x 10'		360	sf	$8.00	$2,880.00	
	Gyp. Board Ceilings							
	Toilets			61	sf	$9.00	$549.00	
	Acoustical Ceilings							
	2 x 2 lay-in			1,966	sf	$2.50	$4,915.00	
	Special Coatings							
	Seal Concrete Floors			1,150	sf	$0.50	$575.00	
	Painting							
	Paint Exterior of Building	Paint Metal Panels and OH Doors - not pnt on cm		5,015	sf	$1.50	$7,522.50	
	Paint Walls			3,833	sf	$1.00	$3,833.00	
	Gyp Ceiling			61	sf	$2.00	$122.00	
	Subtotal Div-9: Finishes							**$32,969.50**
10000	**SPECIALTIES**							
	Fire Extinguisher w/ Recessed Cabinet			0	ea	$250.00	$0.00	
	Toilet & Bath Accessories							
	Mirrors			1	ea	$50.00	$50.00	
	Paper Dispenser			1	ea	$55.00	$55.00	
	H/C Grab Bars			1	sets	$350.00	$350.00	
	Soap Dispenser			1	ea	$55.00	$55.00	
	Subtotal Div-10: Specialties							**$510.00**
11000	**EQUIPMENT**							

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Subtotal Div-11: Equipment						**$0.00**
12000	**FURNISHINGS**						
	Subtotal Div-12: Furnishings						**$0.00**
13000	**SPECIAL CONSTRUCTION**						
	Roof	54 lf x 20'	1,080	sf	$25.00	$27,000.00	
	New Trusses		102	lf	$100.00	$10,200.00	
	Walls						
	Expanded	801 sf + 40 lf x 14'	1,361	sf	$20.00	$27,220.00	
	OH Door Infill	12 lf x 14' H	168	sf	$20.00	$3,360.00	
	Subtotal Div-13: Special Construction						**$67,780.00**
14000	**CONVEYING SYSTEMS**						
	Subtotal Div-14: Conveying Systems						**$0.00**
15000	**MECHANICAL**						
		Gross Building Area = 2,074.00					
	HVAC						
	Air Side						
	First Floor						
	Renovation / Expanded Area		2,074	sf	$12.00	$24,888.00	
	Roof Top AHU		2,000	cfm	$6.00	$12,000.00	
	Exhaust Fan		75	cfm	$4.00	$300.00	
	Subtotal Air Side =	***$37,188.00***					
	Cost / SF =	***$17.93***					
	Wet Side						
	First Floor						
	Renovation / Expanded Area		2,074	sf	$0.00	$0.00	
	Subtotal Wet Side =	***$0.00***					
	Cost / SF =	***0***					
	Plumbing						
	Lavatories	Vitreous China, Wall-hung	1	ea	$450.00	$450.00	
	Water Closets		1	ea	$700.00	$700.00	
	Urinals	Wall-hung, Waterless	1	ea	$560.00	$560.00	
	Mop Sinks		0	ea	$250.00	$0.00	
	Hot Water Heater		1	ea	$1,000.00	$1,000.00	
	Floor Drains		1	ea	$200.00	$200.00	
	Showers		0	ea	$150.00	$0.00	
	Rough-In & Connection for Items Above		5	ea	$4,500.00	$22,500.00	
	Kitchen Equipment, Hook-Up	Allowance		ea	$200.00	$0.00	
	Subtotal Plumbing =	*$25,410.00*					
	Plumbing Cost / SF =	*12.25168756*					

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Hydronics (Included in HVAC "Wet Side")	Included Above!		ea	$0.00	$0.00	
	Fire Protection / Sprinkler System						
	Renovation of Existing Bldg	Rework existing system for new layout		sf	$1.00	$0.00	
	New Bldg or New Addition	Complete new system	0	sf	$3.00	$0.00	
	Subtotal Sprinkler =	*$0.00*					
	Temperature Control	DDC Control System					
	Renovation of Existing Bldg	Rework existing system for new layout		sf	$2.00	$0.00	
	New Bldg or New Addition	Complete new system		sf	$3.00	$0.00	
	specifics:			ea	$0.00	$0.00	
	First Floor						
	Renovation / Expanded Area		5,339	sf	$3.00	$16,017.00	
	Subtotal Temperature Control =	*$16,017.00*					
	Subtotal Div-15: Mechanical						**$78,615.00**
		Total Mechanical Cost/sf =	***$37.91***				
		% of Total Construction Budget =	***16.49%***				
16000	**ELECTRICAL**						
	Gross Building Area =	2,074.00					
	Complete Electrical (Main Service: 2,000 Amp, 120/208V, Three Phase, Four Wire Distribution)						
	First Floor						
	Renovation / Expanded Area		2,074	sf	$8.00	$16,592.00	
	Lighting						
	First Floor						
	Renovation / Expanded Area		2,074	sf	$5.00	$10,370.00	
	Subtotal Lighting =	*$10,370.00*					
	Cost / SF =	*$5.00*					
	Closed Circuit TV						
	Security System / Closed Circuit TV w/Video Surveillance						
	First Floor						
	Renovation / Expanded Area	allowance by EEA	1	ls	$23,000.00	$23,000.00	
	Subtotal Security System / CCTV =	*$23,000.00*					
	Cost / SF =	*$11.09*					
	Public Address/Intercom System	***Conduit Rough-in only!!!***					
	First Floor						
	Renovation / Expanded Area		2,074	sf	$0.00	$0.00	
	Subtotal Public Address / Intercom System =	*$0.00*					
	Cost / SF =	*$0.00*					
	Telephone / Data / TV System	***Conduit Rough-in only!!!***					
	First Floor						
	Renovation / Expanded Area		2,074	sf	$1.00	$2,074.00	
	Subtotal Telephone & Data System =	*$2,074.00*					
	Cost / SF =	*$1.00*					
	Cable Television Service (Conduit & Cabling)						
	First Floor						
	Renovation / Expanded Area		2,074	sf	$0.00	$0.00	
	Subtotal Cable Television System =	*$0.00*					
	Cost / SF =	*0*					
	Life Safety: Fire Alarm & Smoke Detection	Addressable Analog System					
	First Floor						
	Renovation / Expanded Area		2,074	sf	$1.20	$2,488.80	
	Subtotal Fire Alarm & Smoke Detection System =	*$2,488.80*					
	Cost / SF =	*$1.20*					

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Information Technology / Business Systems	Allowance					
	TOTAL IT System =	*$0.00*					
	Cost / SF =	*#DIV/0!*					
	Electrical Service						
	Misc. Mechanical						
	First Floor						
	Renovation / Expanded Area		2,074	sf	$0.50	$1,037.00	
	Subtotal Div-16: Electrical						**$55,561.80**
		Total Electrical Cost/sf =	***$26.79***				
		% of Total Construction Budget =	***11.65%***				

Add Alternates: NOT Included in Budget Estimate!!!

ITEMS NOT INCLUDED IN BUDGET ESTIMATE:

1. Items specifically not listed above but not limited to the following:
2. Design Contingency to be determined by Architect & Owner
3. Construction Contingency to be determined by Architect & Owner
4. Design Fees
5. Consultant Reimbursables
6. Owner Provided Items
7. Owner Soft Costs
8. Furniture

NOTE:
Professional Project Management, Inc. cannot and does not warrant or represent the accuracy of this budget estimate.

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PPM
Professional Project Management

Construction Cost Budget Estimate:

Project Name:
MCF Moose Lake / Willow River - Barracks Building Renovation: High Cost

Location:
Moose Lake / Willow River, MN

Project Phase:
Preliminary Concept Phase

Date Prepared:
Wednesday, 25 February 2015

Summary of Contents:

PPM Client: Inspec
PPM Client Contact: Larry Koch
Client Commission No.: tbd

Arch / Engineer: INSPEC
A / E Contact: Larry Koch
A / E Commission No.: tbd

Prepared By:
Douglas L. Holmberg, PE/CPE
President, PPM, Inc.

Number of Pages:
Pages 1 - 10

PPM Project No.:
1509.104.ch.2.25.15

Professional Project Management, Inc.
1858 East Shore Drive
St. Paul, MN 55109
(612) 919-4000 fax: (651) 774-0935
dougppm@gmail.com

Construction Cost Budget Estimate: *Preliminary Concept Phase*

Project Name: MCF Moose Lake / Willow River - Barracks Building Renovation: High Cost
Project Location: Moose Lake / Willow River, MN
Date: Wed, 25 Feb 2015
Arch / Engineer: INSPEC
A / E Commission No.: tbd

Prepared by:
Professional Project Management, Inc.
Doug Holmberg, PE / CPE (612) 919-4000

PPM Project No.: 1509.104.ch.2.25.15

CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total

Assumptions & Qualifications:

1. This Budget Estimate is based on the following:

Documents Received:	Date Received:
tbd:	tbd
prepared by:	tbd
dated:	xx/xx/xxxx

Info:

Arch / Engineer: INSPEC
A / E Contact: Larry Koch
A / E Commission No.: tbd

NTP issued by : Larry Koch
Date NTP issued: tbd

2. Proposed Construction Schedule:

Date of this Budget Estimate:	Wed, 25 Feb 2015
Bid Opening:	Tue, 28 Jul 2015
Award Contart:	Sat, 1 Aug 2015
Start Construction:	Fri, 28 Aug 2015
Construction Duration (months):	12
Complete Construction:	Mon, 22 Aug 2016
Construction Midpoint:	Wed, 24 Feb 2016
Duration from Budget Estimate date to Construction Midpoint (mn):	12.1
Construction Cost Escalation Rate per month =	0.58%
Construction Cost Escalation Rate per 12 month period =	7.0%
Construction Cost Escalation:	
from Budget Estimate date to Construction Midpoint =	7.00%

3. Estimate Up-dates:

Estimate Up-date no.:	Date of Up-date:
1509.101.ch.2.13.15	Fri, 13 Feb 2015
1509.102.ch.2.18.15	Wed, 18 Feb 2015
1509.103.ch.2.19.15	Thu, 19 Feb 2015
1509.104.ch.2.25.15	Wed, 25 Feb 2015

4. Assumptions:

1. General Conditions include the following costs:
   - x Bond costs (if applicable)
   - x Insurance costs
   - x Building Permit costs
2. Contracting Method:
   - Public Bid / Firm Fixed Price
   - x Invitation To Bid selection process
   - Cost Plus a Persentage Basis Contract Agreement
   - Negotiated GMP
3. Labor Requirements:
   - x Prevailing Wage / Davis Bacon
   - AGC Union Wage Agreement
   - Right To Work / Non-Union
4. *NOTE: The Following Costs are NOT Included:*
   1. *Contaminated Soil Abatement / Remediation*
   2. *Hazardous Material Abatement / Remediation*
   3. *Soils Correction*

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	5. "Bid Risk Factor" accessed by responding Bidders:	Subjective Impact Factor:					
	Bid Documents	0= none, 1=possible, 2=moderate, 3=high	Subjective +% Bid Factor				
	Bidability	0	0.00%				
	Add / Deduct Alternates						
	Well coordinated documents						
	Multiple & consistent redundant key notes throughout plans						
	Limited use of Construction Detail Books						
	Non-applicable details all deleted or stricken to limit confusion						
	Construction Phases clearly identified						
	Use of "color coded lines" to differentiate materials						
	Use of 3-D images to convey design intent						
	Use of photos w/ superimposed notes and graphics to convey design intent						
	Reasonable / Unreasonable Bid Period						
	Slow / Busy Bid Day / Week						
	Constructability	0	0.00%				
	New Construction						
	Green Field						
	Brown Field						
	Renovation / Expansion						
	Unforeseen Conditions						
	Construction Defects Repairs						
	Unforeseen Conditions						
	Multiple Construction Phases						
	Multiple Governing Agencies						
	Occupied Facility						
	Special / Security check-point entry						
	Safety, noise, dust, vibration, etc. management						
	Protection / security of occupant FF&E						
	Type of Project						
	Design-Build	0	0.00%				
	Plan & Spec						
	Type of Contract Delivery						
	Public / Hard Bid General Contract	0	0.00%				
	Negotiated GMP						
	CM / CMAR						
	Cost Plus						
	Time & Material						
	Owner						
	Private	0	0.00%				
	Public Bid						
	Invited Bid						
	Acceptable Bid Requirements						
	Acceptable Paperwork						
	Acceptable Change Order Process						
	Acceptable Payment Duration						
	Govt / Public Works	0	0.00%				
	Multiple Governing Agencies						
	Federal / State / Local						
	Voluminous Bid Requirements						
	Voluminous Paperwork						
	Questionable CO Process						
	Questionable Payment Duration						
	Project Management						
	Owner / A-E Project Management Team	0	0.00%				
	Known entity w/ perceived positive abilities and style						
	Known entity w/ negative hear-say abilities and style						
	Unknown entity w/ no record						
	Potential Cost Impact to overall project success:	0	0.00%				

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Construction Cost Budget Estimate: *Preliminary Concept Phase*						**Total**
02000	SITEWORK & DEMOLITION	*% of Total Direct Cost =*	*4.75%*		*Cost Per SF =*	$9.53	$30,874.00
03000	CONCRETE				*Cost Per SF =*	$0.90	$2,916.00
04000	MASONRY				*Cost Per SF =*	$5.75	$18,616.00
05000	METALS				*Cost Per SF =*	$0.00	$0.00
06000	WOOD & PLASTICS				*Cost Per SF =*	$0.00	$0.00
07000	THERMAL				*Cost Per SF =*	$0.00	$0.00
08000	DOORS, WINDOWS & GLASS				*Cost Per SF =*	$2.10	$6,800.00
09000	FINISHES				*Cost Per SF =*	$5.70	$18,465.00
10000	SPECIALTIES				*Cost Per SF =*	$0.25	$800.00
11000	EQUIPMENT				*Cost Per SF =*	$65.47	$212,000.00
12000	FURNISHINGS				*Cost Per SF =*	$0.00	$0.00
13000	SPECIAL CONSTRUCTION				*Cost Per SF =*	$0.00	$0.00
14000	CONVEYING SYSTEMS				*Cost Per SF =*	$0.00	$0.00
15000	MECHANICAL	*% of Total Direct Cost =*	*43.48%*		*Cost Per SF =*	$87.23	$282,446.00
16000	ELECTRICAL	*% of Total Direct Cost =*	*11.80%*		*Cost Per SF =*	$23.67	$76,654.60
		TOTAL DIRECT COST			*Cost Per SF =*	$200.61	**$649,571.60**
		Total Direct Cost w/ out Sitework =	$618,697.60				
					Gross Square Foot Area		3,238
		Deduct Sales Tax (Reduction = Total Direct Cost x 40% (Materials) x 0???%)					*$0.00*
						Subtotal =	*$649,571.60*
					w/ out Sitework:		
		General Conditions = 12%			*74,244*		$77,948.59
					723,815	Subtotal =	**$727,520.19**
		OH & Profit *(GC / CM / CMAR Fee)* **=** 4.0%			*28,953*		$29,100.81
					752,768	W/ Out Contingencies) =	**$756,621.00**
		Cost Per Square Foot = $233.67					
					NOTE: Includes Sitework =	*$233.67*	
					Cost Per Square Foot "w/ out Sitework" =	*$232.48*	
		Design Contingency = 10%					*$75,662.10*
		Total Construction Budget as of: INSPEC					**$832,283.10**
					Cost Per Square Foot (w/ Design Contingency) =	*$257.04*	
		Construction Cost Escalation = 7.00%					*$58,259.82*
		To the Mid-point date of Construction of: Wed, 24 Feb 2016				*Subtotal =*	*$890,542.92*
		Occupied Facility Factor / Contingency = 5.00%					*$44,527.15*
		Assumes impeeded labor productivity due to occupied living units during construction / Secure Facility				*Subtotal =*	*$935,070.06*
		"Bid Risk Factor" accessed by responding Bidders = 0.00%					*$0.00*
						Subtotal =	*$935,070.06*
		TOTAL CONSTRUCTION BUDGET					**$935,070.06**
		as of Bid Day on: Tue, 28 Jul 2015					
		Theoretical Cost Per Square Foot of gross bldg area as of Bid Day =					***288.7801305***
		Construction Contingency: 0%					$0.00
		(NOT Included, By Owner ! : PPM recommends 3% to 5%)					
		TOTAL CONSTRUCTION BUDGET:					***$935,070.06***
		Projected to Completion Date of Mon, 22 Aug 2016					
		Total Construction Cost per SF = *$288.78*					

TOTAL DIRECT COST SUMMARY:

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total

Quantity Take-Off General Information

Summary of Building Type, Structural System(s), Materials, general Mechanical & Electrical Systems:

Construction Type:	Renovation
Existing Site:	No Site Work
Existing Building:	Existing Barracks Building
Project Phased	No
Multiple Buildings:	No
Prudent protection of existing finishes:	Yes
Construction Working Hours:	Normal
Noise Restrictions:	TBD

Gross Area Summary:

First Floor	PPM INSPEC (Square Feet)
Renoavated Kitchen / Showers	3,238
Subtotal Main Level =	3,238
Building Total Gross Area =	3,238

02000 SITEWORK & DEMOLITION

Demolition & Clearing						
Interior Demolition:						
Demo CMU Walls shown at laundry and shower	34 lf x 12'	408	sf	$6.00	$2,448.00	
Demo Exterior Windows - assume 4' High	11 lf x 4'	44	sf	$10.00	$440.00	
Demo Doors		4	ea	$125.00	$500.00	
Demo Lunch Tables		8	ea	$250.00	$2,000.00	
Saw Cut SOG at showers		92	lf	$10.00	$920.00	
Demo SOG at showers		486	sf	$5.00	$2,430.00	
Demo H/L Drinking Fountain		1	ea	$300.00	$300.00	
Interior Demo at Kitchen						
Demo Plumbing Fixtures		4	ea	$300.00	$1,200.00	
Demo Grease Interceptor		1	ea	$500.00	$500.00	
Misc M&E Demo at ktichen area		2,517	sf	$3.00	$7,551.00	
Misc Wall Demo / Room Configuration at Kitchen area	allowance	2,517	sf	$5.00	$12,585.00	
Subtotal Site Demolition & Clearing =	*$30,874.00*					
NOTE: The Following Costs are NOT Included:						
1. Contaminated Soil Abatement / Remediation			*ea*	*$0.00*	*$0.00*	
2. Hazardous Material Abatement / Remediation			*ea*	*$0.00*	*$0.00*	
3. Soils Correction			*ea*	*$0.00*	*$0.00*	
Subtotal Div-2: Sitework & Demolition						**$30,874.00**

Prepared By and Property of: *PPM, Inc.*
1858 East Shore Drive, St. Paul, MN 55109
(612) 919-4000 f: (651) 774-0935

CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
03000	**CONCRETE**						
	CIP Concrete						
	Slabs On Grade						
	New 4" SOG At Showers		486	sf	$6.00	$2,916.00	
	Subtotal Div-3: Concrete						**$2,916.00**
04000	**MASONRY**						
	Face Brick						
	Concrete Block						
	Interior 8" CMU						
	8" CMU, Standard	87 lf x 12'	1,044	sf	$14.00	$14,616.00	
	Infill Exterior Windows	allowance	2	loc	$2,000.00	$4,000.00	
	Subtotal Div-4: Masonry						**$18,616.00**
05000	**METALS**						
		Gross Building Area = 3,238.00					
		Gross Roof Area = 0.00					
	Subtotal Div-5: Metals						**$0.00**
06000	**WOOD & PLASTICS**						
	Subtotal Div-6: Woods & Plastics						**$0.00**
07000	**THERMAL**						
	Subtotal Div-7: Thermal						**$0.00**
08000	**Doors, Windows & Glass**						
	HM/Wood Doors, HM/Wood Frames & Hardware						
	Lock Set, Closer		2	ea	$3,000.00	$6,000.00	
	Side Light		1	ea	$800.00	$800.00	
	Subtotal Div-8: Doors, Windows & Glass						**$6,800.00**
09000	**Finishes**						
	Gypsum Drywall						
	Ceilings						
	New Kitchen Layin ceiling	Kitchen Area Only	799	sf	$5.00	$3,995.00	
	Special Coatings						
	Epoxy Flooring at Kitchen	Kitchen Area Only	799	sf	$8.00	$6,392.00	
	Epoxy Floor Finish at showers		486	sf	$8.00	$3,888.00	
	Painting						
	Wall paitning at kitchen	allowance	799	sf	$2.00	$1,598.00	
	Paint Walls	216 lf x 12'	2,592	sf	$1.00	$2,592.00	

Prepared By and Property of: PPM, Inc.
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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Subtotal Div-9: Finishes						**$18,465.00**
10000	**SPECIALTIES**						
	Fire Extinguisher w/ Recessed Cabinet		0	ea	$250.00	$0.00	
	Toilet & Bath Accessories						
	Towel Hooks		8	ea	$100.00	$800.00	
	Subtotal Div-10: Specialties						**$800.00**
11000	**EQUIPMENT**						
	Kitchen Equipment	Allowance by Rippe	1	allow	$155,000.00	$155,000.00	
	Laundry Equipment						
	45 lb extractor	allowance	1	ea	$15,000.00	$15,000.00	
	80 lb dryer	allowance	1	ea	$8,000.00	$8,000.00	
	Folding Lunch Tables						
	Attached to wall	allowance	8	ea	$4,000.00	$32,000.00	
	Ironing Stations	allowance	4	ea	$500.00	$2,000.00	
	Subtotal Div-11: Equipment						**$212,000.00**
12000	**FURNISHINGS**						
	Subtotal Div-12: Furnishings						**$0.00**
13000	**SPECIAL CONSTRUCTION**						
	Subtotal Div-13: Special Construction						**$0.00**
14000	**CONVEYING SYSTEMS**						
	Subtotal Div-14: Conveying Systems						**$0.00**
15000	**MECHANICAL**						
	Gross Building Area =	3,238.00					
	HVAC						
	Air Side						
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$8.00	$25,904.00	
	Indoor AHU Unit		2,000	cfm	$5.00	$10,000.00	
	Indoor MAU Unit		7,000	cfm	$5.00	$35,000.00	
	Exhaust Fan		7,000	cfm	$2.00	$14,000.00	
	Exhaust Fan		750	cfm	$2.00	$1,500.00	
	Kitchen Hood	Included with Kitchen Equipment Budget	0	ea	$5,000.00	$0.00	
	Subtotal Air Side =	***$86,404.00***					
	Cost / SF =	***$26.68***					

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Wet Side						
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$4.00	$12,952.00	
	Subtotal Wet Side =	*$12,952.00*					
	Cost / SF =	*4*					
	Plumbing						
	Lavatories		4	ea	$600.00	$2,400.00	
	Water Closets		2	ea	$1,000.00	$2,000.00	
	Urinals		2	ea	$700.00	$1,400.00	
	Mop Sinks		1	ea	$500.00	$500.00	
	Showers		8	ea	$250.00	$2,000.00	
	H/C Drinking Fountains		1	ea	$2,000.00	$2,000.00	
	Hot Water Heaters	located in penthouse - gas fired	1	ea	$1,000.00	$1,000.00	
	Floor Drains - At Shower Renovation		5	ea	$200.00	$1,000.00	
	Floor Drains - At Kitchen Renovation	allowance	3	ea	$200.00	$600.00	
	Grease Interceptor at kitchen		1	ea	$5,000.00	$5,000.00	
	Laundry Washer Rough-In		1	ea	$0.00	$0.00	
	Rough-In & Connection for Items Above		28	ea	$4,500.00	$126,000.00	
	Kitchen Equipment, Hook-Up	Kitchen Fixture Hook Ups - allowance	6	ea	$3,000.00	$18,000.00	
	Gas service - kitchen	allowance	1	ea	$5,000.00	$5,000.00	
	Subtotal Plumbing =	*$166,900.00*					
	Plumbing Cost / SF =	*51.54416306*					
	Hydronics (Included in HVAC "Wet Side")	Included Above!		ea	$0.00	$0.00	
	Fire Protection / Sprinkler System						
	Renovation of Existing Bldg	Rework existing system for new layout	3,238	sf	$2.00	$6,476.00	
	Subtotal Sprinkler =	*$6,476.00*					
	Temperature Control	DDC Control System					
	Renovation of Existing Bldg	Rework existing system for new layout		sf	$2.00	$0.00	
	New Bldg or New Addition	Complete new system		sf	$3.00	$0.00	
	specifics:			ea	$0.00	$0.00	
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$3.00	$9,714.00	
	Subtotal Temperature Control =	*$9,714.00*					
	Subtotal Div-15: Mechanical						**$282,446.00**
		Total Mechanical Cost/sf =	***$87.23***				
		% of Total Construction Budget =	***30.21%***				
16000	**ELECTRICAL**						
	Gross Building Area =	3,238.00					
	Complete Electrical (Main Service: 2,000 Amp, 120/208V, Three Phase, Four Wire Distribution)						
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$8.00	$25,904.00	
	New Panel Board at ktichen	allowance	1	allow	$2,000.00	$2,000.00	
	Lighting						
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$5.00	$16,190.00	
	Subtotal Lighting =	*$16,190.00*					
	Cost / SF =	*$5.00*					
	Closed Circuit TV						
	Security System / Closed Circuit TV w/Video Surveillance						
	First Floor						
	Renoavated Kitchen / Showers	allowance for added cameras - barracks / kitchen	23,818	sf	$1.00	$23,818.00	
	Subtotal Security System / CCTV =	*$23,818.00*					

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Cost / SF =	*$7.36*					
	Public Address/Intercom System	*Conduit Rough-In only!!!*					
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$0.00	$0.00	
	Subtotal Public Address / Intercom System =	*$0.00*					
	Cost / SF =	*$0.00*					
	Telephone / Data / TV System	*Conduit Rough-In only!!!*					
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$1.00	$3,238.00	
	Subtotal Telephone & Data System =	*$3,238.00*					
	Cost / SF =	*$1.00*					
	Cable Television Service (Conduit & Cabling)						
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$0.00	$0.00	
	Subtotal Cable Television System =	*$0.00*					
	Cost / SF =	*0*					
	Life Safety: Fire Alarm & Smoke Detection	Addressable Analog System					
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$1.20	$3,885.60	
	Subtotal Fire Alarm & Smoke Detection System =	*$3,885.60*					
	Cost / SF =	*$1.20*					
	Information Technology / Business Systems	Allowance					
	TOTAL IT System =	*$0.00*					
	Cost / SF =	*#DIV/0!*					
	Electrical Service						
	Misc. Mechanical						
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$0.50	$1,619.00	
	Subtotal Div-16: Electrical						**$76,654.60**
		Total Electrical Cost/sf =	***$23.67***				
		% of Total Construction Budget =	***8.20%***				

Add Alternates: NOT Included in Budget Estimate!!!

ITEMS NOT INCLUDED IN BUDGET ESTIMATE:

1. Items specifically not listed above but not limited to the following:
2. Design Contingency to be determined by Architect & Owner
3. Construction Contingency to be determined by Architect & Owner
4. Design Fees
5. Consultant Reimbursables
6. Owner Provided Items
7. Owner Soft Costs
8. Furniture

NOTE:
Professional Project Management, Inc. cannot and does not warrant or represent the accuracy of this budget estimate.

Prepared By and Property of: *PPM, Inc.*
1858 East Shore Drive, St. Paul, MN 55109
(612) 919-4000 f: (651) 774-0935

PPM
Professional Project Management

Construction Cost Budget Estimate:

Project Name:

MCF Moose Lake / Willow River - Barracks Building Renovation: Lower Cost

Location:

Moose Lake / Willow River, MN

Project Phase:

Preliminary Concept Phase

Date Prepared:

Wednesday, 25 February 2015

Summary of Contents:

PPM Client: Inspec
PPM Client Contact: Larry Koch
Client Commission No.: tbd

Arch / Engineer: INSPEC
A / E Contact: Larry Koch
A / E Commission No.: tbd

Prepared By:

Douglas L. Holmberg, PE/CPE
President, PPM, Inc.

Number of Pages:

Pages 1 - 10

PPM Project No.:

1509.104.ch.2.25.15

Professional Project Management, Inc.
1858 East Shore Drive
St. Paul, MN 55109
(612) 919-4000 fax: (651) 774-0935
dougppm@gmail.com

Construction Cost Budget Estimate: *Preliminary Concept Phase*

Project Name: *MCF Moose Lake / Willow River - Barracks Building Renovation: Lower Cost*

Project Location: *Moose Lake / Willow River, MN*

Date: *Wed, 25 Feb 2015*

Arch / Engineer: *INSPEC*

A / E Commission No.: *tbd*

Prepared by:

Professional Project Management, Inc.

Doug Holmberg, PE / CPE (612) 919-4000

PPM Project No.: *1509.104.ch.2.25.15*

CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total

Assumptions & Qualifications:

1. This Budget Estimate is based on the following:

Documents Received:	Date Received:
tbd:	tbd
prepared by:	tbd
dated:	xx/xx/xxxx

Info:

Arch / Engineer: INSPEC
A / E Contact: Larry Koch
A / E Commission No.: tbd

NTP issued by : Larry Koch
Date NTP issued: tbd

2. Proposed Construction Schedule:

Date of this Budget Estimate:	Wed, 25 Feb 2015
Bid Opening:	Tue, 28 Jul 2015
Award Contart:	Sat, 1 Aug 2015
Start Construction:	Fri, 28 Aug 2015
Construction Duration (months):	12
Complete Construction:	Mon, 22 Aug 2016
Construction Midpoint:	Wed, 24 Feb 2016
Duration from Budget Estimate date to Construction Midpoint (mn):	12.1
Construction Cost Escalation Rate per month =	0.58%
Construction Cost Escalation Rate per 12 month period =	7.0%
Construction Cost Escalation:	
from Budget Estimate date to Construction Midpoint =	7.00%

3. Estimate Up-dates:

Estimate Up-date no.:	Date of Up-date:
1509.101.ch.2.13.15	Fri, 13 Feb 2015
1509.102.ch.2.18.15	Wed, 18 Feb 2015
1509.103.ch.2.19.15	Thu, 19 Feb 2015
1509.104.ch.2.25.15	Wed, 25 Feb 2015

4. Assumptions:

1. General Conditions include the following costs:
   - x Bond costs (if applicable)
   - x Insurance costs
   - x Building Permit costs
2. Contracting Method:
   - Public Bid / Firm Fixed Price
   - x Invitation To Bid selection process
   - Cost Plus a Persentage Basis Contract Agreement
   - Negotiated GMP
3. Labor Requirements:
   - x Prevailing Wage / Davis Bacon
   - AGC Union Wage Agreement
   - Right To Work / Non-Union
4. *NOTE: The Following Costs are NOT Included:*
   1. *Contaminated Soil Abatement / Remediation*
   2. *Hazardous Material Abatement / Remediation*
   3. *Soils Correction*

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CSI Division		Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
		5. "Bid Risk Factor" accessed by responding Bidders:	Subjective Impact Factor:					
		Bid Documents	0= none, 1=possible, 2=moderate, 3=high	Subjective +% Bid Factor				
		Bidability	0	0.00%				
		Add / Deduct Alternates						
		Well coordinated documents						
		Multiple & consistent redundant key notes throughout plans						
		Limited use of Construction Detail Books						
		Non-applicable details all deleted or stricken to limit confusion						
		Construction Phases clearly identified						
		Use of "color coded lines" to differentiate materials						
		Use of 3-D images to convey design intent						
		Use of photos w/ superimposed notes and graphics to convey design intent						
		Reasonable / Unreasonable Bid Period						
		Slow / Busy Bid Day / Week						
		Constructability	0	0.00%				
		New Construction						
		Green Field						
		Brown Field						
		Renovation / Expansion						
		Unforeseen Conditions						
		Construction Defects Repairs						
		Unforeseen Conditions						
		Multiple Construction Phases						
		Multiple Governing Agencies						
		Occupied Facility						
		Special / Security check-point entry						
		Safety, noise, dust, vibration, etc. management						
		Protection / security of occupant FF&E						
		Type of Project						
		Design-Build	0	0.00%				
		Plan & Spec						
		Type of Contract Delivery						
		Public / Hard Bid General Contract	0	0.00%				
		Negotiated GMP						
		CM / CMAR						
		Cost Plus						
		Time & Material						
		Owner						
		Private	0	0.00%				
		Public Bid						
		Invited Bid						
		Acceptable Bid Requirements						
		Acceptable Paperwork						
		Acceptable Change Order Process						
		Acceptable Payment Duration						
		Govt / Public Works	0	0.00%				
		Multiple Governing Agencies						
		Federal / State / Local						
		Voluminous Bid Requirements						
		Voluminous Paperwork						
		Questionable CO Process						
		Questionable Payment Duration						
		Project Management						
		Owner / A-E Project Management Team	0	0.00%				
		Known entity w/ perceived positive abilities and style						
		Known entity w/ negative hear-say abilities and style						
		Unknown entity w/ no record						
		Potential Cost Impact to overall project success:	0	0.00%				

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CSI Division	Description	Remarks		Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
Construction Cost Budget Estimate: *Preliminary Concept Phase*								**Total**
02000	SITEWORK & DEMOLITION	% of Total Direct Cost =	5.36%			Cost Per SF =	$8.92	$28,874.00
03000	CONCRETE					Cost Per SF =	$0.90	$2,916.00
04000	MASONRY					Cost Per SF =	$5.75	$18,616.00
05000	METALS					Cost Per SF =	$0.00	$0.00
06000	WOOD & PLASTICS					Cost Per SF =	$0.00	$0.00
07000	THERMAL					Cost Per SF =	$0.00	$0.00
08000	DOORS, WINDOWS & GLASS					Cost Per SF =	$2.10	$6,800.00
09000	FINISHES					Cost Per SF =	$5.70	$18,465.00
10000	SPECIALTIES					Cost Per SF =	$0.25	$800.00
11000	EQUIPMENT					Cost Per SF =	$31.72	$102,700.00
12000	FURNISHINGS					Cost Per SF =	$0.00	$0.00
13000	SPECIAL CONSTRUCTION					Cost Per SF =	$0.00	$0.00
14000	CONVEYING SYSTEMS					Cost Per SF =	$0.00	$0.00
15000	MECHANICAL	% of Total Direct Cost =	52.47%			Cost Per SF =	$87.23	$282,446.00
16000	ELECTRICAL	% of Total Direct Cost =	14.24%			Cost Per SF =	$23.67	$76,654.60
		TOTAL DIRECT COST				Cost Per SF =	$166.24	**$538,271.60**
		Total Direct Cost w/ out Sitework =	$509,397.60					
						Gross Square Foot Area		3,238
		Deduct Sales Tax (Reduction = Total Direct Cost x 40% (Materials) x 0???%)						*$0.00*
							Subtotal =	*$538,271.60*
						w/ out Sitework:		
		General Conditions = 12%				*61,128*		$64,592.59
						599,399	Subtotal =	**$602,864.19**
		OH & Profit *(GC / CM / CMAR Fee)* **=** 4.0%				*23,976*		$24,114.57
						623,375	W/ Out Contingencies) =	**$626,978.76**
		Cost Per Square Foot = $193.63						
						NOTE: Includes Sitework =	*$193.63*	
						Cost Per Square Foot "w/ out Sitework" =	*$192.52*	
		Design Contingency = 10%						$62,697.88
		Total Construction Budget as of: INSPEC						$689,676.64
						Cost Per Square Foot (w/ Design Contingency) =	*$212.99*	
		Construction Cost Escalation = 7.00%						*$48,277.36*
		To the Mid-point date of Construction of: Wed, 24 Feb 2016					*Subtotal =*	*$737,954.00*
		Occupied Facility Factor / Contingency = 5.00%						*$36,897.70*
		Assumes impeeded labor productivity due to occupied living units during construction / Secure Facility					*Subtotal =*	*$774,851.70*
		"Bid Risk Factor" accessed by responding Bidders = 0.00%						*$0.00*
							Subtotal =	*$774,851.70*
		TOTAL CONSTRUCTION BUDGET						$774,851.70
		as of Bid Day on: Tue, 28 Jul 2015						
		Theoretical Cost Per Square Foot of gross bldg area as of Bid Day =						***239.299475***
		Construction Contingency: 0%						$0.00
		(NOT Included, By Owner ! : PPM recommends 3% to 5%)						
		TOTAL CONSTRUCTION BUDGET:						***$774,851.70***
		Projected to Completion Date of Mon, 22 Aug 2016						
		Total Construction Cost per SF =	*$239.30*					

TOTAL DIRECT COST SUMMARY:

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total

Quantity Take-Off General Information

Summary of Building Type, Structural System(s), Materials, general Mechanical & Electrical Systems:

Construction Type:	Renovation
Existing Site:	No Site Work
Existing Building:	Existing Barracks Building
Project Phased	No
Multiple Buildings:	No
Prudent protection of existing finishes:	Yes
Construction Working Hours:	Normal
Noise Restrictions:	TBD

Gross Area Summary:

First Floor	PPM INSPEC (Square Feet)
Renoavated Kitchen / Showers	3,238
Subtotal Main Level =	3,238
Building Total Gross Area =	3,238

02000 SITEWORK & DEMOLITION

Demolition & Clearing						
Interior Demolition:						
Demo CMU Walls shown at laundry and shower	34 lf x 12'	408	sf	$6.00	$2,448.00	
Demo Exterior Windows - assume 4' High	11 lf x 4'	44	sf	$10.00	$440.00	
Demo Doors		4	ea	$125.00	$500.00	
Demo Lunch Tables		0	ea	$250.00	$0.00	
Saw Cut SOG at showers		92	lf	$10.00	$920.00	
Demo SOG at showers		486	sf	$5.00	$2,430.00	
Demo H/L Drinking Fountain		1	ea	$300.00	$300.00	
Interior Demo at Kitchen						
Demo Plumbing Fixtures		4	ea	$300.00	$1,200.00	
Demo Grease Interceptor		1	ea	$500.00	$500.00	
Misc M&E Demo at ktichen area		2,517	sf	$3.00	$7,551.00	
Misc Wall Demo / Room Configuration at Kitchen area	allowance	2,517	sf	$5.00	$12,585.00	
Subtotal Site Demolition & Clearing =	*$28,874.00*					
NOTE: The Following Costs are NOT Included:						
1. Contaminated Soil Abatement / Remediation			*ea*	*$0.00*	*$0.00*	
2. Hazardous Material Abatement / Remediation			*ea*	*$0.00*	*$0.00*	
3. Soils Correction			*ea*	*$0.00*	*$0.00*	
Subtotal Div-2: Sitework & Demolition						**$28,874.00**

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
03000	**CONCRETE**						
	CIP Concrete						
	Slabs On Grade						
	New 4" SOG At Showers		486	sf	$6.00	$2,916.00	
	Subtotal Div-3: Concrete						**$2,916.00**
04000	**MASONRY**						
	Face Brick						
	Concrete Block						
	Interior 8" CMU						
	8" CMU, Standard	87 lf x 12'	1,044	sf	$14.00	$14,616.00	
	Infill Exterior Windows	allowance	2	loc	$2,000.00	$4,000.00	
	Subtotal Div-4: Masonry						**$18,616.00**
05000	**METALS**						
	Gross Building Area = 3,238.00						
	Gross Roof Area = 0.00						
	Subtotal Div-5: Metals						**$0.00**
06000	**WOOD & PLASTICS**						
	Subtotal Div-6: Woods & Plastics						**$0.00**
07000	**THERMAL**						
	Subtotal Div-7: Thermal						**$0.00**
08000	**Doors, Windows & Glass**						
	HM/Wood Doors, HM/Wood Frames & Hardware						
	Lock Set, Closer		2	ea	$3,000.00	$6,000.00	
	Side Light		1	ea	$800.00	$800.00	
	Subtotal Div-8: Doors, Windows & Glass						**$6,800.00**
09000	**Finishes**						
	Gypsum Drywall						
	Ceilings						
	New Kitchen Layin ceiling	Kitchen Area Only	799	sf	$5.00	$3,995.00	
	Special Coatings						
	Epoxy Flooring at Kitchen	Kitchen Area Only	799	sf	$8.00	$6,392.00	
	Epoxy Floor Finish at showers		486	sf	$8.00	$3,888.00	
	Painting						
	Wall paitning at kitchen	allowance	799	sf	$2.00	$1,598.00	
	Paint Walls	216 lf x 12'	2,592	sf	$1.00	$2,592.00	

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Subtotal Div-9: Finishes						$18,465.00
10000	**SPECIALTIES**						
	Fire Extinguisher w/ Recessed Cabinet		0	ea	$250.00	$0.00	
	Toilet & Bath Accessories						
	Towel Hooks		8	ea	$100.00	$800.00	
	Subtotal Div-10: Specialties						$800.00
11000	**EQUIPMENT**						
	Kitchen Equipment	Allowance by Rippe	1	allow	$77,700.00	$77,700.00	
	Laundry Equipment						
	45 lb extractor	allowance	1	ea	$15,000.00	$15,000.00	
	80 lb dryer	allowance	1	ea	$8,000.00	$8,000.00	
	Folding Lunch Tables						
	Attached to wall	allowance	0	ea	$4,000.00	$0.00	
	Ironing Stations	allowance	4	ea	$500.00	$2,000.00	
	Subtotal Div-11: Equipment						$102,700.00
12000	**FURNISHINGS**						
	Subtotal Div-12: Furnishings						$0.00
13000	**SPECIAL CONSTRUCTION**						
	Subtotal Div-13: Special Construction						$0.00
14000	**CONVEYING SYSTEMS**						
	Subtotal Div-14: Conveying Systems						$0.00
15000	**MECHANICAL**						
	Gross Building Area = 3,238.00						
	HVAC						
	Air Side						
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$8.00	$25,904.00	
	Indoor AHU Unit		2,000	cfm	$5.00	$10,000.00	
	Indoor MAU Unit		7,000	cfm	$5.00	$35,000.00	
	Exhaust Fan		7,000	cfm	$2.00	$14,000.00	
	Exhaust Fan		750	cfm	$2.00	$1,500.00	
	Kitchen Hood	Included with Kitchen Equipment Budget	0	ea	$5,000.00	$0.00	
	Subtotal Air Side =	*$86,404.00*					
	Cost / SF =	*$26.68*					

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Wet Side						
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$4.00	$12,952.00	
	Subtotal Wet Side =	*$12,952.00*					
	Cost / SF =	*4*					
	Plumbing						
	Lavatories		4	ea	$600.00	$2,400.00	
	Water Closets		2	ea	$1,000.00	$2,000.00	
	Urinals		2	ea	$700.00	$1,400.00	
	Mop Sinks		1	ea	$500.00	$500.00	
	Showers		8	ea	$250.00	$2,000.00	
	H/C Drinking Fountains		1	ea	$2,000.00	$2,000.00	
	Hot Water Heaters	located in penthouse - gas fired	1	ea	$1,000.00	$1,000.00	
	Floor Drains - At Shower Renovation		5	ea	$200.00	$1,000.00	
	Floor Drains - At Kitchen Renovation	allowance	3	ea	$200.00	$600.00	
	Grease Interceptor at kitchen		1	ea	$5,000.00	$5,000.00	
	Laundry Washer Rough-In		1	ea	$0.00	$0.00	
	Rough-In & Connection for Items Above		28	ea	$4,500.00	$126,000.00	
	Kitchen Equipment, Hook-Up	Kitchen Fixture Hook Ups - allowance	6	ea	$3,000.00	$18,000.00	
	Gas service - kitchen	allowance	1	ea	$5,000.00	$5,000.00	
	Subtotal Plumbing =	*$166,900.00*					
	Plumbing Cost / SF =	*51.54416306*					
	Hydronics (Included in HVAC "Wet Side")	Included Above!		ea	$0.00	$0.00	
	Fire Protection / Sprinkler System						
	Renovation of Existing Bldg	Rework existing system for new layout	3,238	sf	$2.00	$6,476.00	
	Subtotal Sprinkler =	*$6,476.00*					
	Temperature Control	**DDC Control System**					
	Renovation of Existing Bldg	Rework existing system for new layout		sf	$2.00	$0.00	
	New Bldg or New Addition	Complete new system		sf	$3.00	$0.00	
	specifics:			ea	$0.00	$0.00	
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$3.00	$9,714.00	
	Subtotal Temperature Control =	*$9,714.00*					
	Subtotal Div-15: Mechanical						**$282,446.00**
		Total Mechanical Cost/sf =	***$87.23***				
		% of Total Construction Budget =	***36.45%***				

16000 ELECTRICAL

	Gross Building Area =	3,238.00					
	Complete Electrical (Main Service: 2,000 Amp, 120/208V, Three Phase, Four Wire Distribution)						
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$8.00	$25,904.00	
	New Panel Board at ktichen	allowance	1	allow	$2,000.00	$2,000.00	
	Lighting						
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$5.00	$16,190.00	
	Subtotal Lighting =	*$16,190.00*					
	Cost / SF =	*$5.00*					
	Closed Circuit TV						
	Security System / Closed Circuit TV w/Video Surveillance						
	First Floor						
	Renoavated Kitchen / Showers	allowance for added cameras - barracks / kitchen	23,818	sf	$1.00	$23,818.00	
	Subtotal Security System / CCTV =	*$23,818.00*					

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Cost / SF =	*$7.36*					
	Public Address/Intercom System	***Conduit Rough-in only!!!***					
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$0.00	$0.00	
	Subtotal Public Address / Intercom System =	*$0.00*					
	Cost / SF =	*$0.00*					
	Telephone / Data / TV System	***Conduit Rough-in only!!!***					
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$1.00	$3,238.00	
	Subtotal Telephone & Data System =	*$3,238.00*					
	Cost / SF =	*$1.00*					
	Cable Television Service (Conduit & Cabling)						
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$0.00	$0.00	
	Subtotal Cable Television System =	*$0.00*					
	Cost / SF =	*0*					
	Life Safety: Fire Alarm & Smoke Detection	**Addressable Analog System**					
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$1.20	$3,885.60	
	Subtotal Fire Alarm & Smoke Detection System =	*$3,885.60*					
	Cost / SF =	*$1.20*					
	Information Technology / Business Systems	**Allowance**					
	TOTAL IT System =	*$0.00*					
	Cost / SF =	*#DIV/0!*					
	Electrical Service						
	Misc. Mechanical						
	First Floor						
	Renoavated Kitchen / Showers		3,238	sf	$0.50	$1,619.00	
	Subtotal Div-16: Electrical						**$76,654.60**
		Total Electrical Cost/sf =	***$23.67***				
		% of Total Construction Budget =	***9.89%***				

Add Alternates: NOT Included in Budget Estimate!!!

ITEMS NOT INCLUDED IN BUDGET ESTIMATE:

1. Items specifically not listed above but not limited to the following:
2. Design Contingency to be determined by Architect & Owner
3. Construction Contingency to be determined by Architect & Owner
4. Design Fees
5. Consultant Reimbursables
6. Owner Provided Items
7. Owner Soft Costs
8. Furniture

NOTE:
Professional Project Management, Inc. cannot and does not warrant or represent the accuracy of this budget estimate.

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PPM
Professional Project Management

Construction Cost Budget Estimate:

Project Name:

MCF Moose Lake / Willow River - Fitness Bldg Expansion: Lower Cost

Location:

Moose Lake / Willow River, MN

Project Phase:

Preliminary Concept Phase

Date Prepared:

Wednesday, 25 February 2015

Summary of Contents:

PPM Client: Inspec
PPM Client Contact: Larry Koch
Client Commission No.: tbd

Arch / Engineer: INSPEC
A / E Contact: Larry Koch
A / E Commission No.: tbd

Prepared By:
Douglas L. Holmberg, PE/CPE
President, PPM, Inc.

Number of Pages:
Pages 1 - 10

PPM Project No.:
1509.104.ch.2.25.15

Professional Project Management, Inc.
1858 East Shore Drive
St. Paul, MN 55109
(612) 919-4000 fax: (651) 774-0935
dougppm@gmail.com

Construction Cost Budget Estimate: *Preliminary Concept Phase*

Project Name: *MCF Moose Lake / Willow River - Fitness Bldg Expansion: Lower Cost*
Project Location: *Moose Lake / Willow River, MN*
Date: *Wed, 25 Feb 2015*
Arch / Engineer: *INSPEC*
A / E Commission No.: *tbd*

Prepared by:
Professional Project Management, Inc.
Doug Holmberg, PE / CPE (612) 919-4000

PPM Project No.: *1509.104.ch.2.25.15*

CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total

Assumptions & Qualifications:

1. This Budget Estimate is based on the following:

Documents Received:	Date Received:
tbd:	tbd
prepared by:	tbd
dated:	xx/xx/xxxx

Info:
Arch / Engineer: INSPEC
A / E Contact: Larry Koch
A / E Commission No.: tbd

NTP issued by : Larry Koch
Date NTP issued: tbd

2. Proposed Construction Schedule:

Date of this Budget Estimate:	Wed, 25 Feb 2015
Bid Opening:	Tue, 28 Jul 2015
Award Contart:	Sat, 1 Aug 2015
Start Construction:	Fri, 28 Aug 2015
Construction Duration (months):	12
Complete Construction:	Mon, 22 Aug 2016
Construction Midpoint:	Wed, 24 Feb 2016
Duration from Budget Estimate date to Construction Midpoint (mn):	12.1
Construction Cost Escalation Rate per month =	0.58%
Construction Cost Escalation Rate per 12 month period =	7.0%
Construction Cost Escalation:	
from Budget Estimate date to Construction Midpoint =	7.08%

3. Estimate Up-dates:

Estimate Up-date no.:	Date of Up-date:
1509.101.ch.2.13.15	Fri, 13 Feb 2015
1509.102.ch.2.18.15	Wed, 18 Feb 2015
1509.103.ch.2.19.15	Thu, 19 Feb 2015
1509.104.ch.2.25.15	Wed, 25 Feb 2015

4. Assumptions:

1. General Conditions include the following costs:
   - x Bond costs (if applicable)
   - x Insurance costs
   - x Building Permit costs

2. Contracting Method:
   - Public Bid / Firm Fixed Price
   - x Invitation To Bid selection process
   - Cost Plus a Persentage Basis Contract Agreement
   - Negotiated GMP

3. Labor Requirements:
   - x Prevailing Wage / Davis Bacon
   - AGC Union Wage Agreement
   - Right To Work / Non-Union

4. *NOTE: The Following Costs are NOT Included:*
   1. *Contaminated Soil Abatement / Remediation*
   2. *Hazardous Material Abatement / Remediation*
   3. *Soils Correction*

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	5. "Bid Risk Factor" accessed by responding Bidders:	Subjective Impact Factor:					
	Bid Documents	0= none, 1=possible, 2=moderate, 3=high	Subjective +% Bid Factor				
	Bidability	0	0.00%				
	Add / Deduct Alternates						
	Well coordinated documents						
	Multiple & consistent redundant key notes throughout plans						
	Limited use of Construction Detail Books						
	Non-applicable details all deleted or stricken to limit confusion						
	Construction Phases clearly identified						
	Use of "color coded lines" to differentiate materials						
	Use of 3-D images to convey design intent						
	Use of photos w/ superimposed notes and graphics to convey design intent						
	Reasonable / Unreasonable Bid Period						
	Slow / Busy Bid Day / Week						
	Constructability	0	0.00%				
	New Construction						
	Green Field						
	Brown Field						
	Renovation / Expansion						
	Unforeseen Conditions						
	Construction Defects Repairs						
	Unforeseen Conditions						
	Multiple Construction Phases						
	Multiple Governing Agencies						
	Occupied Facility						
	Special / Security check-point entry						
	Safety, noise, dust, vibration, etc. management						
	Protection / security of occupant FF&E						
	Type of Project						
	Design-Build	0	0.00%				
	Plan & Spec						
	Type of Contract Delivery						
	Public / Hard Bid General Contract	0	0.00%				
	Negotiated GMP						
	CM / CMAR						
	Cost Plus						
	Time & Material						
	Owner						
	Private	0	0.00%				
	Public Bid						
	Invited Bid						
	Acceptable Bid Requirements						
	Acceptable Paperwork						
	Acceptable Change Order Process						
	Acceptable Payment Duration						
	Govt / Public Works	0	0.00%				
	Multiple Governing Agencies						
	Federal / State / Local						
	Voluminous Bid Requirements						
	Voluminous Paperwork						
	Questionable CO Process						
	Questionable Payment Duration						
	Project Management						
	Owner / A-E Project Management Team	0	0.00%				
	Known entity w/ perceived positive abilities and style						
	Known entity w/ negative hear-say abilities and style						
	Unknown entity w/ no record						
	Potential Cost Impact to overall project success:	0	0.00%				

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CSI Division	Description		Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
Construction Cost Budget Estimate: *Preliminary Concept Phase*								**Total**
02000	SITEWORK & DEMOLITION		*% of Total Direct Cost =*	*9.89%*		*Cost Per SF =*	$14.10	$29,249.30
03000	CONCRETE					*Cost Per SF =*	$4.23	$8,770.00
04000	MASONRY					*Cost Per SF =*	$5.33	$11,056.00
05000	METALS					*Cost Per SF =*	$2.54	$5,260.00
06000	WOOD & PLASTICS					*Cost Per SF =*	$0.00	$0.00
07000	THERMAL					*Cost Per SF =*	$0.44	$910.00
08000	DOORS, WINDOWS & GLASS					*Cost Per SF =*	$2.41	$5,000.00
09000	FINISHES					*Cost Per SF =*	$15.90	$32,969.50
10000	SPECIALTIES					*Cost Per SF =*	$0.25	$510.00
11000	EQUIPMENT					*Cost Per SF =*	$0.00	$0.00
12000	FURNISHINGS					*Cost Per SF =*	$0.00	$0.00
13000	SPECIAL CONSTRUCTION					*Cost Per SF =*	$32.68	$67,780.00
14000	CONVEYING SYSTEMS					*Cost Per SF =*	$0.00	$0.00
15000	MECHANICAL		*% of Total Direct Cost =*	*26.59%*		*Cost Per SF =*	$37.91	$78,615.00
16000	ELECTRICAL		*% of Total Direct Cost =*	*18.79%*		*Cost Per SF =*	$26.79	$55,561.80
			TOTAL DIRECT COST			*Cost Per SF =*	$142.57	**$295,681.60**
			Total Direct Cost w/ out Sitework =	$266,432.30				
							Gross Square Foot Area	2,074
			Deduct Sales Tax (Reduction = Total Direct Cost x 40% (Materials) x 0???%)					*$0.00*
							Subtotal =	*$295,681.60*
						w/ out Sitework:		
			General Conditions =	**12%**		*31,972*		$35,481.79
						327,653	Subtotal =	**$331,163.39**
			OH & Profit *(GC / CM / CMAR Fee)* **=**	**4.0%**		*13,106*		$13,246.54
						340,760	W/ Out Contingencies) =	**$344,409.92**
			Cost Per Square Foot =	$166.06				
						NOTE: Includes Sitework =	*$166.06*	
						Cost Per Square Foot "w/ out Sitework" =	*$164.30*	
			Design Contingency =	**10%**				$34,440.99
			Total Construction Budget as of:	INSPEC				$378,850.92
						Cost Per Square Foot (w/ Design Contingency) =	*$182.67*	
			Construction Cost Escalation =	*7.08%*				*$26,814.23*
			To the Mid-point date of Construction of:	Wed, 24 Feb 2016			*Subtotal =*	*$405,665.14*
			Occupied Facility Factor / Contingency =	*5.00%*				*$20,283.26*
			Assumes impeeded labor productivity due to occupied living units during construction / Secure Facility				*Subtotal =*	*$425,948.40*
			"Bid Risk Factor" accessed by responding Bidders =	*0.00%*				*$0.00*
							Subtotal =	*$425,948.40*
			TOTAL CONSTRUCTION BUDGET					***$425,948.40***
			as of Bid Day on:	Tue, 28 Jul 2015				
			Theoretical Cost Per Square Foot of gross bldg area as of Bid Day =					***205.3753128***
			Construction Contingency:	**0%**				$0.00
			(NOT Included, By Owner ! : PPM recommends 3% to 5%)					
			TOTAL CONSTRUCTION BUDGET:					***$425,948.40***
			Projected to Completion Date of	Mon, 22 Aug 2016				
						Total Construction Cost per SF =	*$205.38*	

TOTAL DIRECT COST SUMMARY:

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total

Quantity Take-Off General Information

Summary of Building Type, Structural System(s), Materials, general Mechanical & Electrical Systems:

Construction Type:	Renovation / Expansion
Existing Site:	Yes
Existing Building:	Existing Maint Facility
Project Phased	No
Multiple Buildings:	No
Prudent protection of existing finishes:	TBD
Construction Working Hours:	Normal
Noise Restrictions:	TBD

Gross Area Summary:

First Floor	PPM INSPEC (Square Feet)
Renovation / Expanded Area	2,074
Subtotal Main Level =	2,074
Building Total Gross Area =	2,074

02000 SITEWORK & DEMOLITION

Demolition & Clearing						
Interior Demolition:						
Demo 8" CMU exterior wall		208	sf	$6.00	$1,248.00	
Demo Exter Metal Panel Wall		801	sf	$6.00	$4,806.00	
Demo Exterior Door		1	ea	$125.00	$125.00	
Demo OH Door		1	ea	$200.00	$200.00	
New Door Opening		1	ea	$800.00	$800.00	
Demo Rail Road Tracks into building	allowance	80	lf	$50.00	$4,000.00	
Demo SOG at rail road tracks	40 lf x 5'	200	sf	$5.00	$1,000.00	
Misc M&E Demo		1,135	sf	$1.50	$1,702.50	
Subtotal Site Demolition & Clearing =	*$13,881.50*					
NOTE: The Following Costs are NOT Included:						
1. Contaminated Soil Abatement / Remediation			*ea*	*$0.00*	*$0.00*	
2. Hazardous Material Abatement / Remediation			*ea*	*$0.00*	*$0.00*	
3. Soils Correction			*ea*	*$0.00*	*$0.00*	
Earthwork						
Grading						
Strip Top Soil & Dispose On-Site (Top 12")	968 sf x 12" / 27	36	cy	$15.00	$537.78	
Subtotal Cut & Fill =	*$537.78*					
Excavation — Includes backfill + compaction						
Perimeter / Exterior Footings		91	lf	$20.00	$1,820.00	
Sand Under Slab on Grade						
6" base	968 sf x 6" / 27	18	cy	$20.00	$358.52	
Add for 10 mil Poly		968	sf	$0.50	$484.00	
Silt Fence	allowance	150	lf	$2.25	$337.50	

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Temporary Construction Entrance	Allowance	1	ea	$1,000.00	$1,000.00	
	Site Drainage & Utilities						
	Sanitary Sewer						
	New Wast Line		91	lf	$30.00	$2,730.00	
	Connect to existing waste line		1	loc	$500.00	$500.00	
	Gas Service	allowance	1	loc	$5,000.00	$5,000.00	
	Subtotal Site Utilities =	***$8,230.00***					
	Stoops (Includes Excavation, Footing, Footing Wall & Slab)						
	Main Level		2	ea	$800.00	$1,600.00	
	Landscaping	misc patching allowance at expansion	1	ea	**$1,000.00**	**$1,000.00**	
	Subtotal Landscaping =	***$1,000.00***					
	Misc. Sitework & Demolition Allowance			ea	$0.00	$0.00	
	Subtotal Div-2: Sitework & Demolition						**$29,249.30**
03000	**CONCRETE**						
	CIP Concrete						
	Footings						
	Perimeter Exterior: TFE = ???		91	lf	$22.00	$2,002.00	
	Slabs On Grade						
	4"		968	sf	$5.00	$4,840.00	
	Topping Slab at Restroom / Office		182	sf	$4.00	$728.00	
	Patch SOG at Rail Road Tracks	40 lf x 5'	200	sf	$6.00	$1,200.00	
	Subtotal Div-3: Concrete						**$8,770.00**
04000	**MASONRY**						
	Face Brick						
	Concrete Block						
	Footing Wall (Extend to Frost Depth, Assume 4')						
	8" CMU, Standard	91 lf x 4'	364	sf	$14.00	$5,096.00	
	Exterior Structural CMU Walls						
	8" CMU, Standard	91 lf x 4'	364	sf	$14.00	$5,096.00	
	8" CMU, Standard	OH Door Infill: 12 lf x 4'	48	sf	$18.00	$864.00	
	Subtotal Div-4: Masonry						**$11,056.00**
05000	**METALS**						
	Gross Building Area = 2,074.00						
	Gross Roof Area = 0.00						
	Structural Metal						
	Miscellaneous Metals						
	Guard Rails		0	lf	$100.00	$0.00	
	Mezzanine Stair		0	ea	$2,500.00	$0.00	
	Metal Decking over rooms		326	sf	$10.00	$3,260.00	
	Misc. Metals Allowance		1	allow	$2,000.00	$2,000.00	
	Subtotal Div-5: Metals						**$5,260.00**
06000	**WOOD & PLASTICS**						

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Subtotal Div-6: Woods & Plastics						**$0.00**
07000	**THERMAL**						
	Building Insulation						
	Perimeter Stem / Footing Walls(2" Rigid)	91 lf x 4'	364	sf	$2.50	$910.00	
	Subtotal Div-7: Thermal						**$910.00**
08000	**Doors, Windows & Glass**						
	Interior Vestibule Windows	5 lf x 4'	20	sf	$30.00	$600.00	
	HM/Wood Doors, HM/Wood Frames & Hardware						
	Lock Set, Closer	Restrooms	2	ea	$1,000.00	$2,000.00	
	Exit Door, w/Panic HDWR		2	ea	$1,200.00	$2,400.00	
	Subtotal Div-8: Doors, Windows & Glass						**$5,000.00**
09000	**Finishes**						
	Gypsum Drywall						
	Interior Partition Walls (Metal stud w/sound insulation)						
	Gyp Furring at gym perimeter walls		1,521	sf	$3.00	$4,563.00	
	2-Hr Wall		801	sf	$10.00	$8,010.00	
	Metal Stud Walls	36 lf x 10'	360	sf	$8.00	$2,880.00	
	Gyp. Board Ceilings						
	Toilets		61	sf	$9.00	$549.00	
	Acoustical Ceilings						
	2 x 2 lay-in		1,966	sf	$2.50	$4,915.00	
	Special Coatings						
	Seal Concrete Floors		1,150	sf	$0.50	$575.00	
	Painting						
	Paint Exterior of Building	Paint Metal Panels and OH Doors - not pnt on cm	5,015	sf	$1.50	$7,522.50	
	Paint Walls		3,833	sf	$1.00	$3,833.00	
	Gyp Ceiling		61	sf	$2.00	$122.00	
	Subtotal Div-9: Finishes						**$32,969.50**
10000	**SPECIALTIES**						
	Fire Extinguisher w/ Recessed Cabinet		0	ea	$250.00	$0.00	
	Toilet & Bath Accessories						
	Mirrors		1	ea	$50.00	$50.00	
	Paper Dispenser		1	ea	$55.00	$55.00	
	H/C Grab Bars		1	sets	$350.00	$350.00	
	Soap Dispenser		1	ea	$55.00	$55.00	
	Subtotal Div-10: Specialties						**$510.00**
11000	**EQUIPMENT**						

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Subtotal Div-11: Equipment						$0.00
12000	**FURNISHINGS**						
	Subtotal Div-12: Furnishings						$0.00
13000	**SPECIAL CONSTRUCTION**						
	Roof	54 lf x 20'	1,080	sf	$25.00	$27,000.00	
	New Trusses		102	lf	$100.00	$10,200.00	
	Walls						
	Expanded	801 sf + 40 lf x 14'	1,361	sf	$20.00	$27,220.00	
	OH Door Infill	12 lf x 14' H	168	sf	$20.00	$3,360.00	
	Subtotal Div-13: Special Construction						$67,780.00
14000	**CONVEYING SYSTEMS**						
	Subtotal Div-14: Conveying Systems						$0.00
15000	**MECHANICAL**						
	Gross Building Area =	2,074.00					
	HVAC						
	Air Side						
	First Floor						
	Renovation / Expanded Area		2,074	sf	$12.00	$24,888.00	
	Roof Top AHU		2,000	cfm	$6.00	$12,000.00	
	Exhaust Fan		75	cfm	$4.00	$300.00	
	Subtotal Air Side =	*$37,188.00*					
	Cost / SF =	*$17.93*					
	Wet Side						
	First Floor						
	Renovation / Expanded Area		2,074	sf	$0.00	$0.00	
	Subtotal Wet Side =	*$0.00*					
	Cost / SF =	*0*					
	Plumbing						
	Lavatories	Vitreous China, Wall-hung	1	ea	$450.00	$450.00	
	Water Closets		1	ea	$700.00	$700.00	
	Urinals	Wall-hung, Waterless	1	ea	$560.00	$560.00	
	Mop Sinks		0	ea	$250.00	$0.00	
	Hot Water Heater		1	ea	$1,000.00	$1,000.00	
	Floor Drains		1	ea	$200.00	$200.00	
	Showers		0	ea	$150.00	$0.00	
	Rough-In & Connection for Items Above		5	ea	$4,500.00	$22,500.00	
	Kitchen Equipment, Hook-Up	Allowance		ea	$200.00	$0.00	
	Subtotal Plumbing =	*$25,410.00*					
	Plumbing Cost / SF =	*12.25168756*					

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Hydronics (included in HVAC "Wet Side")	Included Above!		ea	$0.00	$0.00	
	Fire Protection / Sprinkler System						
	Renovation of Existing Bldg	Rework existing system for new layout		sf	$1.00	$0.00	
	New Bldg or New Addition	Complete new system	0	sf	$3.00	$0.00	
	Subtotal Sprinkler =	*$0.00*					
	Temperature Control	DDC Control System					
	Renovation of Existing Bldg	Rework existing system for new layout		sf	$2.00	$0.00	
	New Bldg or New Addition	Complete new system		sf	$3.00	$0.00	
	specifics:			ea	$0.00	$0.00	
	First Floor						
	Renovation / Expanded Area		5,339	sf	$3.00	$16,017.00	
	Subtotal Temperature Control =	*$16,017.00*					
	Subtotal Div-15: Mechanical						**$78,615.00**
		Total Mechanical Cost/sf =	***$37.91***				
		% of Total Construction Budget =	***18.46%***				
16000	**ELECTRICAL**						
	Gross Building Area =	2,074.00					
	Complete Electrical (Main Service: 2,000 Amp, 120/208V, Three Phase, Four Wire Distribution)						
	First Floor						
	Renovation / Expanded Area		2,074	sf	$8.00	$16,592.00	
	Lighting						
	First Floor						
	Renovation / Expanded Area		2,074	sf	$5.00	$10,370.00	
	Subtotal Lighting =	*$10,370.00*					
	Cost / SF =	*$5.00*					
	Closed Circuit TV						
	Security System / Closed Circuit TV w/Video Surveillance						
	First Floor						
	Renovation / Expanded Area	allowance by EEA	1	ls	$23,000.00	$23,000.00	
	Subtotal Security System / CCTV =	*$23,000.00*					
	Cost / SF =	*$11.09*					
	Public Address/Intercom System	***Conduit Rough-In only!!!***					
	First Floor						
	Renovation / Expanded Area		2,074	sf	$0.00	$0.00	
	Subtotal Public Address / Intercom System =	*$0.00*					
	Cost / SF =	*$0.00*					
	Telephone / Data / TV System	***Conduit Rough-In only!!!***					
	First Floor						
	Renovation / Expanded Area		2,074	sf	$1.00	$2,074.00	
	Subtotal Telephone & Data System =	*$2,074.00*					
	Cost / SF =	*$1.00*					
	Cable Television Service (Conduit & Cabling)						
	First Floor						
	Renovation / Expanded Area		2,074	sf	$0.00	$0.00	
	Subtotal Cable Television System =	*$0.00*					
	Cost / SF =	*0*					
	Life Safety: Fire Alarm & Smoke Detection	Addressable Analog System					
	First Floor						
	Renovation / Expanded Area		2,074	sf	$1.20	$2,488.80	
	Subtotal Fire Alarm & Smoke Detection System =	*$2,488.80*					
	Cost / SF =	*$1.20*					

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CSI Division	Description	Remarks	Quantity	Unit	Unit Cost	Subtotal	CSI Division Sub-Total
	Information Technology / Business Systems	**Allowance**					
	TOTAL IT System =	*$0.00*					
	Cost / SF =	*#DIV/0!*					
	Electrical Service						
	Misc. Mechanical						
	First Floor						
	Renovation / Expanded Area		2,074	sf	$0.50	$1,037.00	
	Subtotal Div-16: Electrical						**$55,561.80**
		Total Electrical Cost/sf =	***$26.79***				
		% of Total Construction Budget =	***13.04%***				

Add Alternates: NOT Included in Budget Estimate!!!

ITEMS NOT INCLUDED IN BUDGET ESTIMATE:

1. Items specifically not listed above but not limited to the following:
2. Design Contingency to be determined by Architect & Owner
3. Construction Contingency to be determined by Architect & Owner
4. Design Fees
5. Consultant Reimbursables
6. Owner Provided Items
7. Owner Soft Costs
8. Furniture

NOTE:
Professional Project Management, Inc. cannot and does not warrant or represent the accuracy of this budget estimate.

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Appendix D

Food Service Study

ROBERT RIPPE & ASSOCIATES, INC.

FEASIBILITY STUDY

MINNESOTA CORRECTIONAL FACILITY – WILLOW RIVER

WILLOW RIVER, MN

February 25, 2015

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY

An assessment of the foodservice operations for MCF Moose Lake Willow River was prompted by plans to expand the facility by 46 beds. The evaluation revealed that the foodservice department has adequate square footage for the expansion but existing conditions in hot food production and storage will require renovation. Much of the existing equipment is at the end of its expected life and should be replaced. At a minimum, the facility will need to bring the operation into compliance with health department requirements for room finishes and with NFPA 96 for the exhaust hood installation. Replacing the exhaust hood creates an opportunity to reconfigure the hot food and baking functions in order to address food safety and staff safety concerns, and improve the overall function of the department.

II. INTRODUCTION

Minnesota Correctional Facility (MCF) Willow River has requested a feasibility study to evaluate the Food Service Department at their minimum security facility located in Willow River, Minnesota. A one day site visit and study was conducted by Robert Rippe & Associates, Inc., a design firm based in Minneapolis, Minnesota. The following report is based on this site visit (which took place January 7, 2015) and information provided by Larry Koch (Inspec), Becky Dooley (Warden), Nate Knutson (MCF), Candy Adamczak (MCF), Doug Kelley (RECS), Bill Montgomery (DOC) and other key staff. Department space configurations are based on existing building plans received from Inspec. The following sections outline the study's objectives, assessment and recommendations provided by Robert Rippe & Associates, Inc.

A. OBJECTIVES

MCF Willow River is planning to add 46 beds to its facility. The objectives of this study are to:

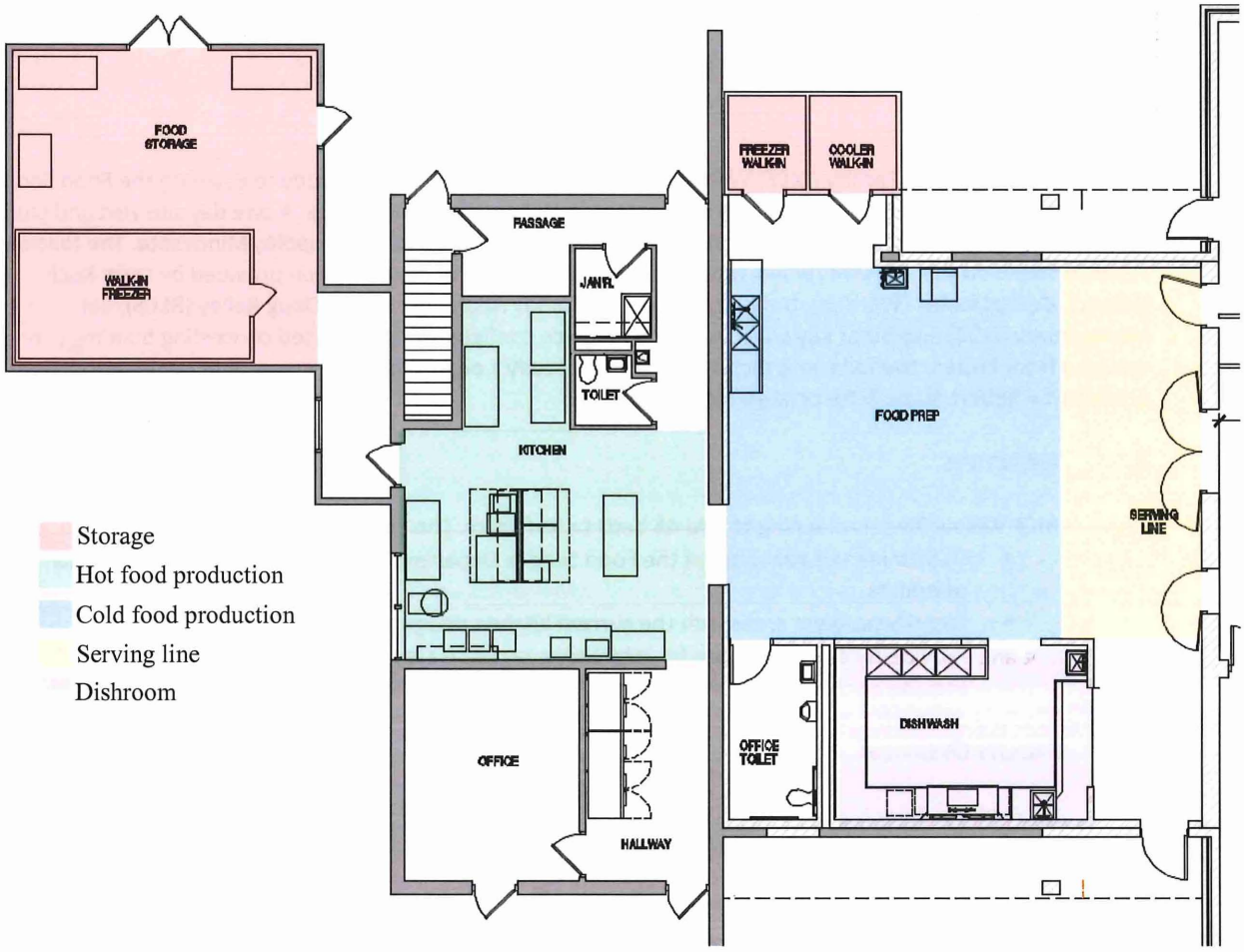
- Determine the adequacy of the Food Service Department for accommodating additional offenders
- Identify problem areas with the current kitchen design, layout, and/or equipment
- Provide recommendations for addressing problem areas
- Provide a schematic design, equipment list and cost estimate for proposed solutions

B. FACILITY OVERVIEW

MCF Willow River is a minimum security facility that runs the Challenge Incarceration Program (CIP). CIP is a boot camp program for non-violent offenders which includes education, critical thinking skills development, chemical dependency programming, and rigorous physical exercise.

The Food Service Department at MCF Willow River currently serves 180 offenders three meals a day. The facility expects to add 46 beds for a total of 226 offenders. This equates to about 675 offender meals plus 15-20 staff meals per day. The menu is a non-select, five week rotation and meals are typically served cafeteria style in two, 30 minute shifts. The department currently operates with 3 cooks, a supervisor and a director. The rest of the labor is supplied by offenders within the facility. The offenders at MCF Willow River also participate in gardening in order to supply the facility with fresh produce. In discussions with staff on site, one of the future goals is to further expand the gardening program. In addition to gardening, the facility composts leftover food waste for use in the garden.

The current kitchen layout consists of receiving and storage, hot and cold food production, serving line and warewashing (see diagram of existing kitchen on page 2) for a total of approximately 3560 square feet. The department configuration results in a significant amount of space devoted to circulation corridors. The dishroom, cold production area and serving line were relocated to former dining space as part of a 2006 renovation. Hot food production and storage areas were not included in the 2006 project. The dining room is located next to the kitchen and doubles as the activity room. It includes pocket tables that fold out during meal service with seating for approximately 64-80 offenders at a time.



C. DESIGN CRITERIA

Foodservice facilities are sized for the peak meal volumes. The peak offender meal volume at MCF Moose Lake Willow River will increase 25% from 180 to 226 meals per meal period. Locations and adjacencies of the kitchen workcenter, serving area, dining room and warewashing are important for efficiency and safety.

Foodservice design criteria consider the flow of food, beginning with raw product deliveries, through production and service, to clean up and trash removal. For operational efficiency and staff safety, workspaces should be self-contained with clearly defined traffic aisles and work aisles. Work spaces should be equipped with ready access to ingredients, sinks, refrigeration and function-specific equipment.

Additional key design criteria consider food safety. Preventing food contamination and providing for strict temperature control of potentially hazardous foods is essential to minimize the risk of foodborne illness. Hot and cold food holding equipment, warewashing equipment, sink locations, lighting and room finishes are considerations for food safety.

III. SPACE PROGRAM

Space program for a 226-bed correctional facility with 15-20 staff meals per day.

Area		Programmed Space	Current Space	Comments
A.	**Receiving**			
	Receiving & Returnables	25	25	
	Trash Staging	30	15	
	Dry Storage	275	270	
	Walk-in/Reach-in Freezer	100	236	
	Walk-in Refrigerator	180	225	
	Sub-total, Receiving & Storage	610	771	
B.	**Food Production**			
	Cold Food Prep & Plating	250	285	
	Hot Food Production	300	240	
	Baking	50	72	
	Pan Storage	20	20	
	Sub-total, Food Production	620	617	
C.	**Sanitation**			
	Tray Drop	100	80	
	Dishwashing/Soiled Carts	160	285	
	Pot and Pan Wash	100	In dishwashing	
	Mop Closet/Detergent Storage	40	42	
	Trash/Recycle	20	In dishwashing	
	Sub-total, Sanitation	420	407	
D.	**Support**			
	Office	120	200	
	Staff Restroom	60	90	
	Offender Restroom	30	35	
	Sub-total, Support	210	325	
	Kitchen, Sub-total	1,860	2120	
	Circulation (33%)	614	1102*	
	Kitchen Department Gross Square Feet	2,473	3222	
			*52% circulation	
E.	**Cafeteria**			
	Serving Area	500	350	
	Sub-total, Cafeteria	500	305	
	Circulation (10%)	50	31	
	Cafeteria Department Gross Square Feet	600	336	

Area	Programmed Space	Current Space	Comments
Total, Kitchen & Cafeteria Department Gross Square Feet	3,074	3,558	

IV. ASSESSMENT

Robert Rippe & Associates, Inc. reviewed the current food service operation at MCF Willow River. The following sections summarize the results of this assessment with regard to overall space and each major workcenter within the department.

A. SPACE

Foodservice departments are sized according to peak meal volume and adjusted for multiple variables. Space requirements will vary according to facility-specific operations. Examples of these variables include:

- Production methods: cook chill versus cook serve, convenience versus scratch, in-house baking
- Staff requirements: lockers, rest rooms, offices
- Configuration and shape of space

Robert Rippe has developed and uses a space programming data base that tracks requirements for efficient foodservice operations relative to peak meal volumes. These metrics are regularly updated to reflect project experience and outcomes. The space program in this report compares the current space to estimated program requirements.

Current State:
The overall size of the Food Service Department includes adequate square footage to accommodate the additional 46 offenders with modifications.

Findings:
The flow of the kitchen is inefficient and potentially unsafe. Traffic aisles (versus work aisles) should be clearly defined throughout the space. Hot food production is somewhat undersized and is located at the rear of the department, between storage and cold prep. The adjacencies of food production and refrigerated storage are important for maintaining safe food temperatures in both hot and cold production areas. Traffic circulation in the hot food area uses work aisles increasing the risk for slips, falls and burns.

Recommendations:

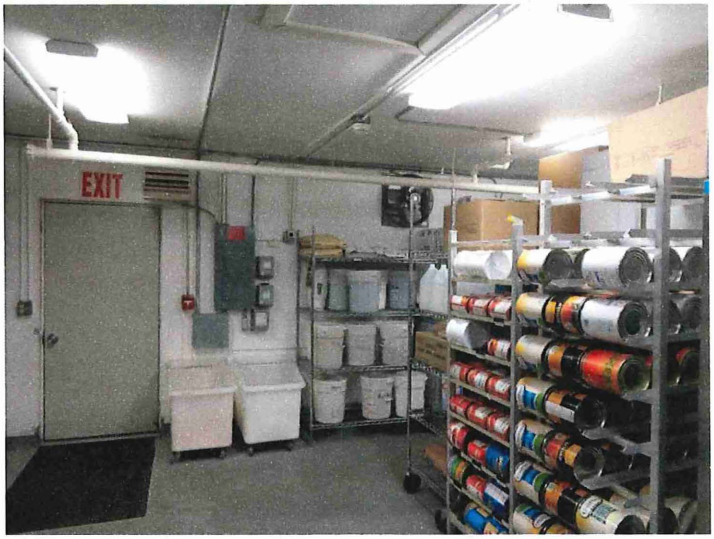
- Reconfigure kitchen layout to improve adjacencies between the key workcenters outlined above
- Provide clearly defined traffic aisles and work aisles
- Improve efficiency of workcenters and storage by reducing unnecessary circulation

B. RECEIVING & STORAGE

Current State:
Storage space in the MCF Willow River kitchen is located in two main areas. The first is located in the receiving area of the kitchen and is connected to hot food production by a short corridor. This area consists of double doors to the outside for receiving, a dry storage area and a walk-in refrigerator. The remaining storage is located in the cold food production area and consists of a small walk-in refrigerator and a small walk-in freezer.

Findings:

Because walk-in freezer space is very limited, there are multiple reach-in freezers located throughout the facility – most of which are located in the dry storage. These reach-in freezers are difficult to load and unload with cases of product. The dry storage area also has the exposed plumbing and conduit. The Minnesota Food Code Part 4626.0305 3-05.12 states that food shall not be stored under a leaking water line or under a line on which water has condensed. Part 4626.0300 3-305.11 of the Minnesota Food Code states that food shall be protected from contamination by storing food where it is not exposed to splash, dust or other contamination. Part 4626.1340 6-201.12.11 of the Minnesota Food Code states that utility service lines and pipes shall not be unnecessarily exposed, and exposed lines shall be installed so that they do not obstruct cleaning of ceilings.



Recommendations:

- Replace capacity or reach-in freezers with walk-in freezer space to reduce space needed, improve product storage and food quality by providing more consistent temperatures.
- Conceal exposed utilities in dry storage area with a ceiling made up of lay-in, scrubbable ceiling tiles.

C. HOT FOOD PRODUCTION & BAKING

Current State:

The hot food production area at MCF Willow River includes the following cooking equipment: range, grill, 2-section combi oven, and two steamers. This area also includes a three compartment sink with covers used for workspace. Support equipment includes two conveyor toasters, bread slicer, slicer and mixer. Underneath the sinks, there are several large buckets used to collect food scraps for composting. MCF Willow River proofs, bakes and slices bread on site and toast is served daily for breakfast. Coffee equipment for the serving line, including the brewer, grinder and shuttles are located in this area; shuttles are moved to the serving counter for meal periods.

Findings:

Overall, much of the cooking equipment in the hot food production area is near or beyond its expected life and may need to be replaced. The MCF Willow River staff is concerned about the cost associated with replacing this equipment, including the costs associated with altering utility connections or hoods, and bringing the kitchen space up to code.

Another concern, from a design and safety standpoint, is the flow in the hot food production area. Work aisles are not well defined and the space is very cramped. The cooking equipment is set up under a double-sided hood with the range and grill on one side and the ovens and steamers on the other. This layout is not optimal from an efficiency standpoint as staff has to circle around from side to side to access all of the equipment.

The final major need for this area is to ensure the facility meets Health Department and building codes. The following list outlines some of the issues noted with this space.

- NFPA 96 requires exhaust hoods to overhang cooking equipment by at least six inches
- Minnesota Food Code Part 4626.1335 6-201.11 states that floors, walls and ceilings must be in good repair and finishes must be smooth, non-perforated and easily cleanable. The exposed wood beams do not meet this code and should be replaced

Recommendations:

- Replace existing equipment that is near or beyond its expected life
- Relocate toasters and coffee equipment outside hot production and closer to the serving line
- Reconfigure cooking equipment layout for easy access and sight lines to each piece.
- Replace exhaust hoods with equipment that meets code.
- Ensure Health Department and building codes are met by replacing wood beams, and repairing floors, walls and ceilings as required.

D. COLD FOOD PRODUCTION

Current State:

The cold food production area is fairly large and was largely renovated in 2006. This area consists of a prep counter with disposer and spray rinse, a small walk-in refrigerator and freezer, a 3-section refrigerator, an ice maker, a mobile warming cabinet and three mobile worktables.

Findings:

The prep sink and counter space in this area is adequate for washing and slicing the fresh produce coming in from the garden.

There are no significant Health Department concerns within the cold food area, however, some of the equipment is near or beyond its expected life and may need to be replaced. This equipment includes the 3-section refrigerator and the ice maker.

Recommendations:

- Replace existing equipment that is near or beyond its expected life
- Add a wash station outside in order to remove field dirt before produce from the garden enters the building

E. SANITATION

Current State:

The dishroom at MCF Willow River includes a dishmachine and three compartment pot and pan sink. This area was also part of the 2006 renovation. The dishroom is located in an acceptable location next to the cold prep area and adjacent to the dining room and sized appropriately for the meal volume.

Findings:

One of the issues in this area is the dishmachine itself. The Food Service Director stated that he has had issues with the machine since its purchase in 2006. However, in reviewing the service records with a representative from Hobart, the repairs seemed to be typical of a machine this age. This dishmachine is currently nine years old, operates seven days a week and may need to be replaced.

The staff have reported issues with excessive heat and humidity in this area which leads to condensation on walls and ceilings; we observed frost on the interior of the building door adjacent this space. This would be a health code concern since it creates conditions for mold growth. The dishmachine has exhaust ducts at the load and unload ends of the machine. Fans should be sized to exhaust 200 cfm and 400 cfm respectively. In addition, there are latent and sensible heat gains from the equipment that need to be accounted for in the room's ventilation.

Recommendations:

- Replace existing dishmachine
- Engineers to evaluate exhaust and return air design for dishroom

F. SERVING

Current State:

The serving line is located within the cold food production area, adjacent to the dining room. This area was also renovated in 2006. The serving line consists of a 5-well hot counter, a long serving counter and a table for cup/mug storage. Although a cold well was planned for the 2006 renovation, it was not installed. Prior to service, cold foods are held in refrigeration located nearby. However, during serving the facility currently holds milk and other cold foods on the line using pans of ice.

Findings:

The concern in this area, again, is the age of the equipment, specifically the hot food counter. This piece of equipment may need to be replaced in the near future. The size of the serving line is sufficient in accommodating the extra 46 offenders that will be added to the facility. However, meal periods may need to be extended and broken into a greater number of shifts. A milk cooler could be added to the end of the line for holding crates of milk. These would better handle the volume, eliminate wet conditions from the use of ice and hold milk at consistent temperatures.

Recommendations:

- Replace existing equipment that is near or beyond its expected life
- Add a milk/cold food cooler to the serving line to ensure proper temperature control during meal service

IV. DISCUSSION

The Food Service Department at MCF Willow River is of adequate size to accommodate 46 additional offenders. However, the department layout requires renovations. The 2006 kitchen expansion did not address the hot food production and storage areas. This portion of the department has poor traffic patterns, no hand sinks, limited workspace and multiple code violations. The majority of the equipment is approaching the end of its useful life and is essential for daily meal production.

The overall recommendation for this project is to address flow issues and code violations in the hot food production area, and replace older equipment. Robert Rippe & Associates, Inc. has developed three design options that improve the Food Service Department at MCF Willow River. The first option is ideal, but comes at a higher cost. The remaining options address the major issues at lower costs. With any of these options, the department renovations will need to correct code deficiencies.

The sections below describe each of the proposed options.

A. Option 1: Drawing FS-1

In all three options, the hot food production area is combined with the bakery so that workspace, pan storage and cooking equipment can be shared. The hot food production area has improved work flows and sight lines to the rest of the department. The workstation is equipped with a hand sink, utility sinks and a double sided workcounter.

The offender's restroom is eliminated; the janitor's closet and trash are relocated to the receiving/storage area. This space is repurposed for dry storage near the cooks using high density shelving; supplies and can racks remain in the receiving area. For cleaning produce from the facilities garden, a mobile soak sink and hose bibb are included outside. The reach-in freezers are replaced with a walk-in freezer of the same capacity near the hot food/bakery workcenter. Additional space for the expanded hot food area is created by rotating the office; the window and natural light are preserved in the space.

In the cold food work space, the two conveyor toasters are relocated to one workcounter with a bread cabinet adjacent. Two mobile warmers are located adjacent the remaining two workcounters. The toasters and warmers are powered using drop cords from the ceiling. This configuration frees up space along the wall for a workcounter to hold the coffee brewing equipment.

In the cost estimate, replacements have been included for all equipment nearing ending of life and for equipment needed to support the increased meal production.

B. Option 2: Drawing FS-2

This option does not relocate the restroom and janitor's closet resulting in a slightly smaller walk-in freezer. All dry storage remains in its current location with improved space for shelving due to eliminating the reach-in freezers. For cleaning produce from the facilities garden, a mobile soak sink and hose bibb are included outside.

In the cold food work space, the two conveyor toasters are relocated to one workcounter with a bread cabinet adjacent. Two mobile warmers are located adjacent the remaining two workcounters. The toasters and warmers are powered using drop cords from the ceiling. This configuration frees up space along the wall for a workcounter to hold the coffee brewing equipment.

In the cost estimate, replacements have been included for only limited equipment nearing ending of life and for equipment needed to support the increased meal production.

C. Option 3: Drawing FS-3

This option eliminates the walk-in freezer and relocates two freezers to the space adjacent the mop closet. The receiving and storage area is unchanged and does not include a hose bibb and mobile soak sink.

In the cold food work space, the two conveyor toasters are relocated to one workcounter with a bread cabinet adjacent. Two mobile warmers are located adjacent the remaining two workcounters. The toasters and warmers are powered using drop cords from the ceiling. This configuration frees up space along the wall for a workcounter to hold the coffee brewing equipment.

In the cost estimate, no replacements have been included for equipment nearing ending of life. Only equipment needed to support the increased meal production has been included.

V. SCHEMATIC DESIGN – SEE ATTACHED FOODSERVICE DRAWINGS

VII. EQUIPMENT LIST & COST ESTIMATE

QTY	EQUIPMENT	COMMENTS	OPTION 1	OPTION 2	OPTION 3
Receiving & Storage					
1	Hose Bibb	By Mechanical	-	-	-
1	Mobile Sink		$1,250	$1,250	$0
Lot	Trash Bin		Existing	Existing	Existing
Lot	Compost Bin		$150	$150	$0
Lot	Dry Storage Shelving		Existing	Existing	Existing
2	Can Rack		Existing	Existing	Existing
1	Walk-in Refrigerator		Existing	Existing	Existing
1	Refrigerator System		Existing	Existing	Existing
Lot	Refrigerator Shelving		Existing	Existing	Existing
1	Walk-in Freezer		$11,800	$9,800	$0
1	Freezer System		$9,000	$8,000	$0
Lot	Freezer Shelving		$3,400	$3,000	$0
1	High Density Shelving		$2,900	$0	$0
Hot Production					
1	Hand Sink		$700	$700	$700
1	Pan Shelving		Existing	Existing	Existing
3	Baking Workcounter	One new	$3,000	$3,000	Future
3	Ingredient Bin		Existing	Existing	Existing
1	Cooks' Workcounter w/Sinks		$10,700	$10,700	$10,700
1	Meat Slicer		$7,300	Future	Future
1	Mixer, 40 Quart		$13,000	$13,000	Future
1	Exhaust Hood		$13,300	$13,300	$13,300
1	Fire Protection System		$4,600	$4,600	$4,600
1	Steamer, 2-Sec.		$18,500	$18,500	$18,500
2	Convection Oven, 2-Sec.	One new	$13,700	$13,700	$13,700
1	Range, 48"		$8,100	$8,100	$8,100
1	Grill, 48"		$8,100	$8,100	$8,100
Cold Food					
1	Walk-in Refrigerator/Freezer		Existing	Existing	Existing
1	Refrigeration System		Existing	Existing	Existing
1	Freezer System		Existing	Existing	Existing
Lot	Refrigerator/Freezer Shelving		Existing	Existing	Existing
1	Workcounter w/Prep Sinks		Existing	Existing	Existing
2	Mobile Bakery Cabinet	One new	$2,700	$2,700	Future
1	Reach-in Refrigerator, 3-Sec.		Existing	Existing	Existing
3	Worktable w/Undershelf		Existing	Existing	Existing
2	Mobile Heated Cabinet	One new	$4,000	$4,000	Future
1	Bread Slicer		Relocate	Relocate	Relocate
1	Hand Sink		Existing	Existing	Existing
1	Ice Maker w/Bin		$4,400	$4,400	Future
1	Coffee Workcounter		Relocate	Relocate	Relocate

QTY	EQUIPMENT	COMMENTS	OPTION 1	OPTION 2	OPTION 3
1	Coffee Grinder		Relocate	Relocate	Relocate
1	Coffee Brewer		Relocate	Relocate	Relocate
2	Conveyor Toaster		$3,400	$3,400	Future
1	Tray Shelf		Relocate	Relocate	Relocate
1	Hot Food Counter, 5-Well		$7,000	$7,000	Future
1	Utility Counter		Existing	Existing	Existing
1	Milk Cooler		$4,000	$4,000	Future
	Total		$155,000	$141,400	$77,700

VIII. CONCLUSIONS

While Option one is recommended, we have developed two additional options that have lower foodservice equipment costs and construction costs. Option two eliminates removal of the rest room and mop closet to create storage for food supplies near the production areas. Option three eliminates the walk-in freezer that is needed to replace multiple reach-in freezers and improve frozen storage and defers some equipment replacements.

Option one results in the most functional foodservice department possible, without undoing work from the 2006 renovation and is the recommended approach for this project.

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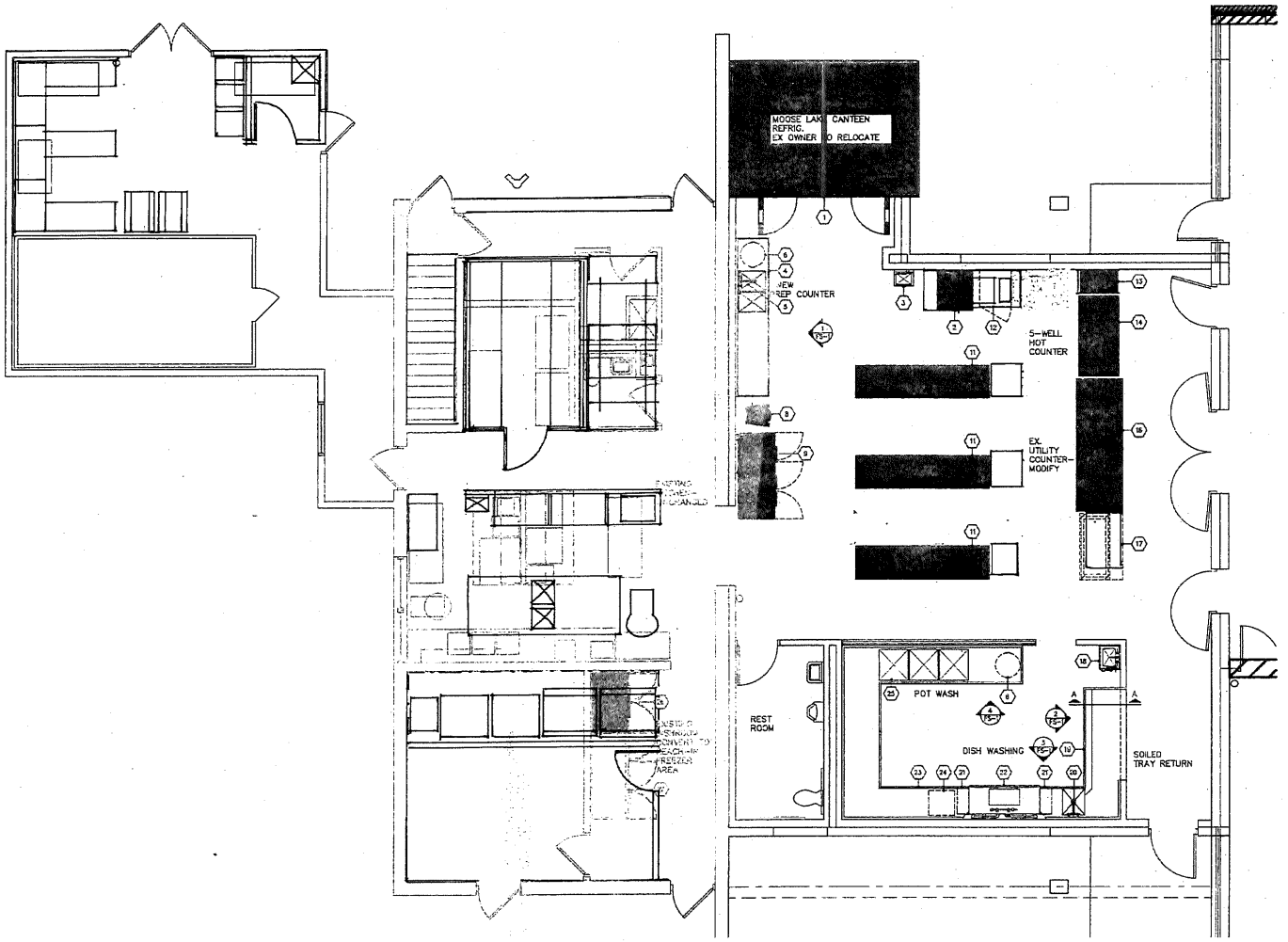

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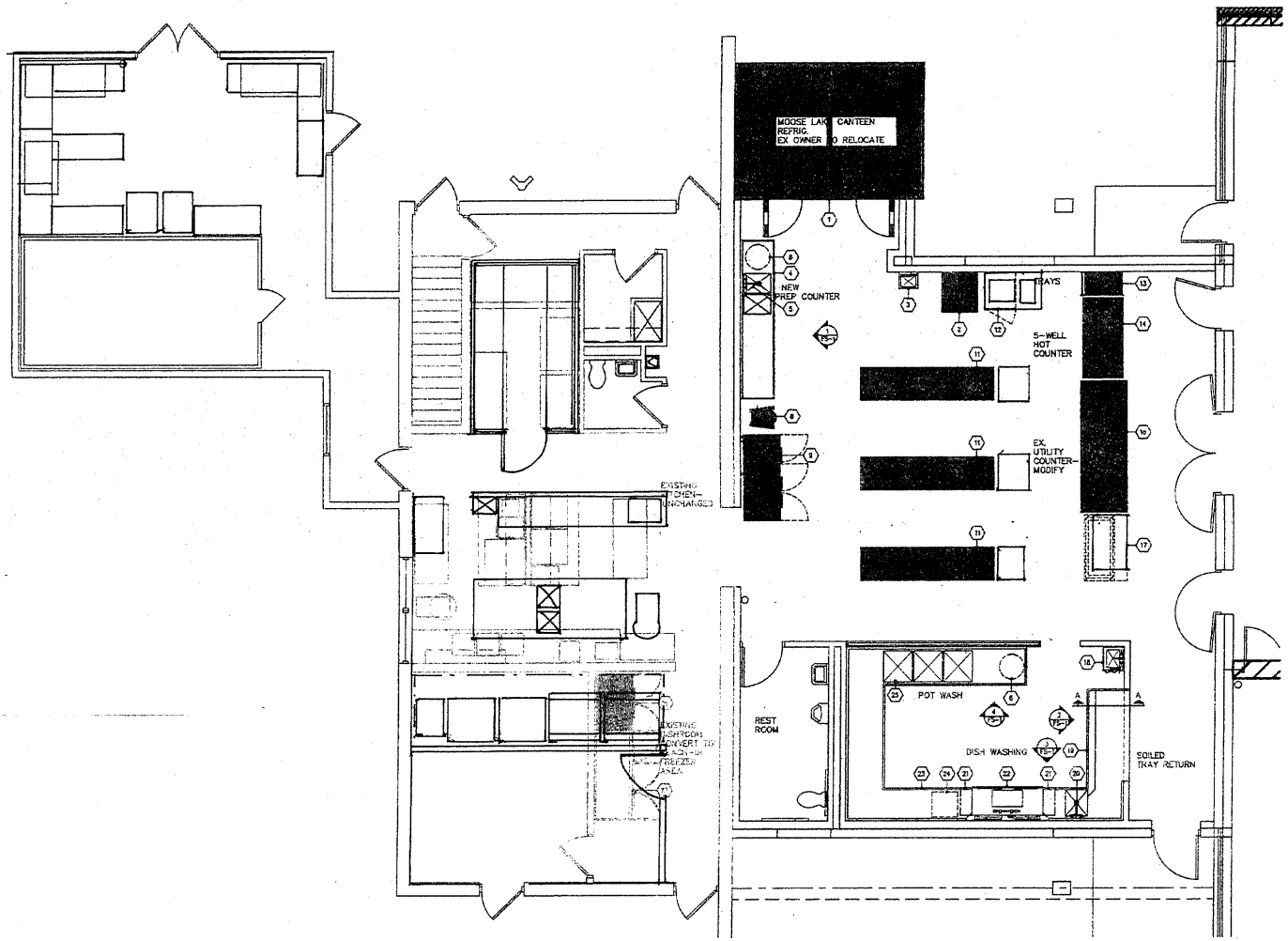

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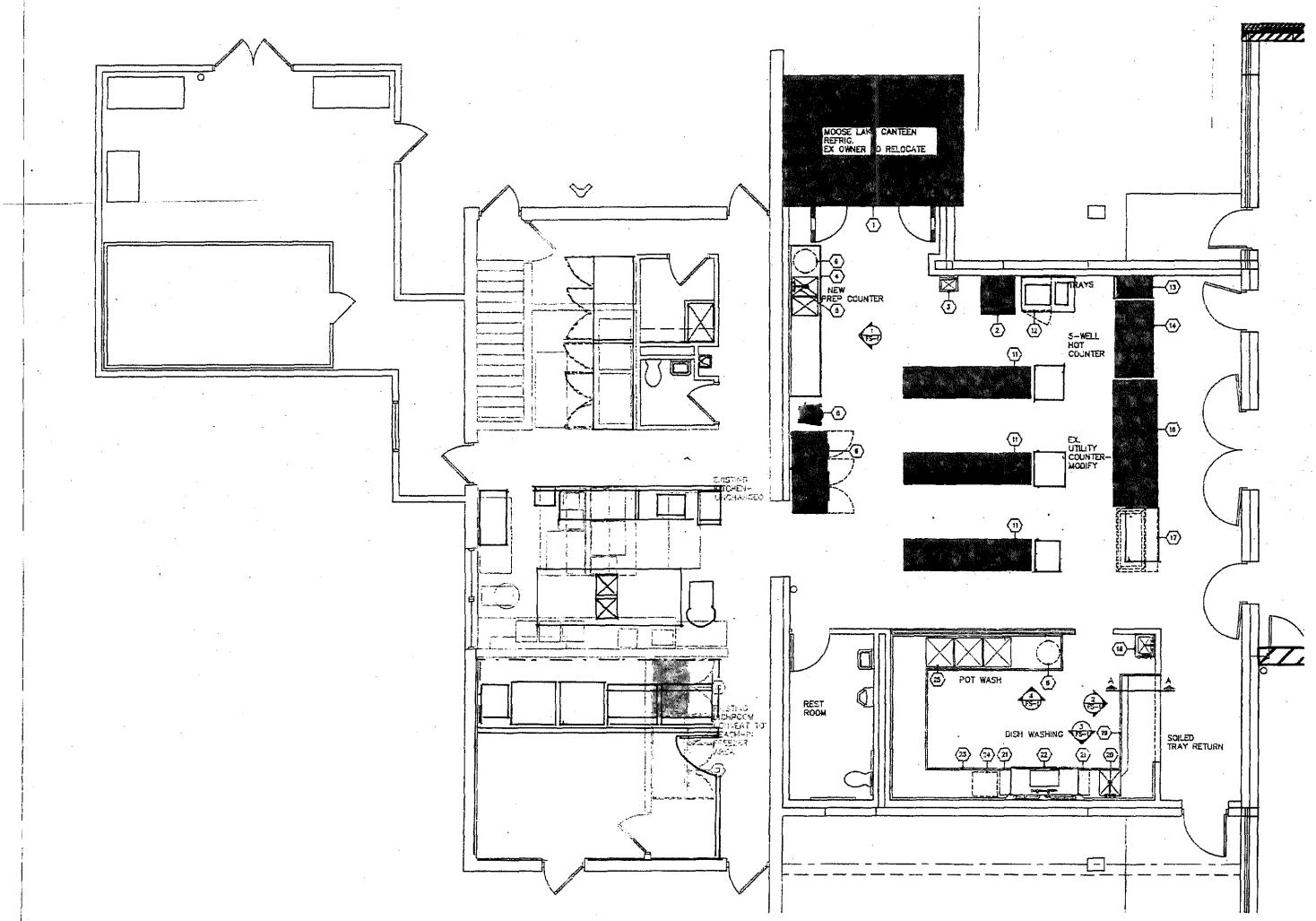

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