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Grayson County

Jail Assessment

Submitted: January 25, 2010

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Honorable Drue Bynum
Grayson County Judge
Grayson County Courthouse
100 W. Houston
Sherman, Texas 75090

RE: GRAYSON COUNTY JAIL- EXISTING FACILITY PHYSICAL ASSESSMENT

Dear Judge Bynum,

Hale-Mills Construction is honored to present this assessment to Grayson County. The goal of this assessment is to:

- Identify and assess the most cost effective method of correcting any items in any of the operational systems that are (were) out of compliance with any applicable local, state, or federal regulations including but not limited to Texas Commission on Jail Standards
- Identify and assess the items that are causing any major operational issues within the existing jail facility

The enclosed "Summary Overview" describes the current condition of the major jail "systems", including security systems, mechanical/electrical/plumbing systems, structural soundness, and kitchen/laundry equipment. Hale-Mills Construction then formulated three (3) "Options" for correcting these systems – ranging from:

- Option 1 - Existing Facility Systems upgrade/renovation
- Option 2 - Renovation of Existing Facility & the addition of new Intake/Processing & Sallyport
- Option 3 - Renovation of Existing Facility & the addition of new Intake/Processing & Sallyport and 337-bed Expansion

Hale-Mills Construction has assigned costs to each Option.

We anticipate this assessment presents Grayson County with cost-effective, viable options for the resolution of its County Jail issues. We look forward to further discussions with Grayson County and welcome the opportunity answer any questions that arise.

Respectfully submitted,



Sean Butler
Vice President

Enclosures

SUMMARY OVERVIEW

GRAYSON COUNTY JAIL – EXISTING FACILITY PHYSICAL ASSESSMENT

Goal of this Assessment

The goal of this assessment is to analyze the current downtown jail facility and determine the most cost effective method of correcting any major the operational systems that are not in compliance with any applicable local, state, or federal regulations, including the Texas Commission on Jail Standards (TCJS). The following assessment and recommendations are made with the understanding that the County will continue to incur maintenance costs due to the age of this facility. Our analysis includes 1) items that are not currently in compliance with TCJS, 2) items that are not financially feasible for the County to address and correct at this time and 3) reporting to the County of any systems that are not in need of replacement at this time. It is imperative that the County understands that without completely remodeling the facility and replacing all systems (which is not economically feasible or recommended), the County will need to continue to include ongoing maintenance costs in its annual operations budget.

Premise of this Assessment

Grayson County has already invested both time and money on two independent assessments of its county jail system. This report does not attempt to confirm nor refute the findings and conclusions of either report. The public's reaction to Grayson County's jail increasing population and need for expansion of its detention capacity seems to indicate that the citizenry of Grayson County is in favor of keeping the existing jail located in downtown Sherman, Texas. Based upon that premise, Hale-Mills Construction, Ltd. (HMC) offered to evaluate the existing downtown jail facility's security systems, mechanical/electrical/plumbing systems, structural soundness and kitchen/laundry equipment.

On December 2, 2009, HMC and its consultants met with representatives of the Grayson County Sheriff's Department and the Grayson County Jail Administration. HMC then surveyed the downtown jail facility, evaluating the aforementioned systems, assessing their current condition and the longevity of the systems and any needed replacement of existing systems. While surveying the downtown jail facility, HMC kept in mind that cost is a primary concern for Grayson County.

The following assumptions were developed by HMC and serve as the basis for this assessment:

- Cited TCJS "Areas of Non-Compliance" must be addressed immediately, such as numerous cell doors that will not open and close remotely and water leaks from the ceiling, therefore, making the floor slick in inmate occupied areas
- 49 variance beds will be eliminated by May, 2009 per TCJS
- The 1998 48-bed Trustee dorm will eventually be demolished
- The downtown Jail facility will remain intact, with a bed count of:

15 Separation cells	15
(32) Single cells	32
(24) 2-person multi-occupancy cells	48
<u>(6) 24-person dormitories</u>	<u>144</u>
Total Beds	239 beds

Plumbing Pipe and Detention Grade Plumbing Fixtures

Plumbing Pipe:

- Observations and discussions that the cast iron waste piping in the crawl space under the jail was corroding and leaking frequently in numerous locations.
- It appeared at the time of the walk through that 85-90% of the cast iron pipe had been replaced with schedule 40 PVC pipe.
- No budget figure is included for replacing the remainder of the cast iron pipe in the crawl space with schedule 40 PVC pipe.
- The cast iron waste and vent piping above the floor that is not subject to the moisture of the crawl space did not appear to be degrading but will continue to be a maintenance issue.

Detention Grade Stainless Steel Plumbing Fixtures:

- Detention grade plumbing fixtures (toilets, lavatories and showers throughout the existing facility) are operable for the most part, but the controls are corroded, leaking and need to be upgraded.
- We suggest leaving the existing detention grade stainless steel fixtures (toilets, lavatories and showers throughout the existing facility) in place and upgrade them with new control valves, flush valves and push buttons. A budget price is provided for this in Option 1.
- At the time of the walk through, there were no issues with the hot water system observed or reported to us by the facility staff.
- Some of the water heaters have been replaced as recently as March, 2009. We can only speculate that the remaining water heaters will last another 1-5 years.
- Jail maintenance staff stated that there has been a request to install sewer grinders on the 2 effluent lines leaving the facility. We have given a budget amount for this in Option 1.

Security Electronic Controls and Detention Hardware

Security Electronic Controls:

- There are two Control Rooms in the existing jail:
 - one in the original 1982 building
 - one in the 1995 addition
- Each Control Room functions independently of the other and controls only the portion of the building where it is located.
- Much of the original 1982 security electronics are still in place and only partially operable.

- A portion of the 1982 security electronics equipment has been abandoned (and remains idle and in-place)
- When the jail was expanded in 1995, the remainder of the 1982 security electronics equipment had been modified and upgraded to the newer 1995 electronics.
- The existing security electronic controls throughout the facility are out of date and only partially operational.
- Both the 1982 and 1995 security electronics systems need to be replaced completely with new, "state of the art electronics".
 - 1982 security electronics were proprietary. The parts are no longer factory made and can only be acquired from specialized repair shops.
 - While the PLC electronics provided in 1995 are still manufactured, the interface is out-of-date, the intercom system (TOA IC-100) is discontinued and Tri-Coastal (the company who installed the system) is no longer in business.
 - Both vintage systems need to be completely removed back to the original wire terminals so new controls can be put in place and all temporary interface modules removed.
 - Troubleshooting this mix of systems is and will continue to be a massive task for even the most electronically astute.
- This option will require a complete itemized checklist of existing functioning field devices.
 - Each door, intercom, panic, camera and utility control will be tested from the main control room only.
 - The status of the device will be logged and signed off by the County, confirming the existing condition of the device.
 - Once the inventory is complete and signed off, the shutdown of door control and intercom systems will take place. The video system will potentially still operate as presently used but automatic call-ups would be disabled until the new system is installed.
 - After all the door control and intercom components are removed and the original cables tested and labeled, the video head end components would be removed.
 - The existing video cables would be tagged, tested and prepared for re-termination to the new systems.
 - This option would shut the electronic system capability for the facility down for approximately 2 months and would cause the facility to rely on manual operation of all the doors during this period.
 - The operational staffing of such an option would intensify greatly. This option is priced separately in Option 1, however it is our opinion that this can be done in conjunction with either Option 2 or 3, where we are relocating a new control room and security electronic room in a new addition.
 - This would shorten the operational down-time to days, not months.

Detention Hardware:

- The operational capacity of the cell slider doors in the 1982 (original) building has deteriorated to a point of non-compliance with the Texas Commission on Jail Standards.

- Acquisition of new parts for this antiquated slider door system is extremely costly.
- Cell slider doors in the 1982 (original) building should be removed and replaced with swinging detention bar grate doors, frames and swinging door hardware.
- Detention door locks will be Southern Folger 10120 electromechanical locks, and the new units will be surface mounted to the existing bar grate fronts.
- Detention doors, hardware and locks in the 1995 addition seem to be in good working order and are not recommended to be replaced at this time.
- Also discussed was the County's need to convert the 24-bed dorms built in 1995 to maximum security dorms by adding steel plates to the walls and ceilings. Upon further discussion with the Sheriff's department, this work is scheduled to begin soon through another vendor. No pricing for the maximum security upgrade has been included.

Electrical Systems

Electrical Systems:

- The fuel tank for the 300kw Caterpillar generator is leaking and in need of repair.
- We recommend that the fuel tank be replaced along with testing the operation and servicing of the generator.
- The touch plate relay control cabinet throughout the building should be upgraded in conjunction with any work involving the security electronics system, as this will be interfaced with the security electronics.
- All of the starters and contactors for the smoke and fume evacuation system need to be tested and repaired and/or replaced if not functioning properly.
- We recommend checking all electrical devices including, but not limited to, receptacles, switches, disconnects and breakers to meet all applicable standards for each area of the building.
- Inspect all lighting and fixtures and retro-fit all fluorescent lighting from T-12 lamps and ballasts to T-8 lamps and ballast. All type T-12 lamps will be banned from production by 06/2012.

Food Service Area

Kitchen:

- Remove and store all salvageable existing kitchen equipment.
- Repair and level existing floor and install a non-slip epoxy flooring system in compliance with the state health code for commercial kitchens.

- Replace existing ceiling with two layers of hi-impact sheetrock with security mesh.
- Clean walls where needed and repair any damaged areas.
- Re-install all useable kitchen equipment and add additional equipment as the existing space allows.

Heating/Ventilation/Air Conditioning Systems

HVAC Systems:

- Upgrade the AC controls for efficiency purposes. This would give the facility modern controls on the AC portion of the HVAC system, not on the smoke and fume evacuation system.
 - Convert controls for 15 VAV boxes
 - Install five split system air handlers and one central station air handler unit.
- During the walk through, there were no major issues with the smoke and fume evacuation system.
- In our assessment, there is no need to spend a great deal of money updating the smoke and fume evacuation system at this time.

Architectural

Architectural:

- The enclosed second floor walkway from the jail to the Courts Building is in need of repair, including repairing the roof, re-sealing existing windows, repair damaged sheet rock, re-paint walls and ceiling, replace VCT and wall base.
- It is apparent that existing Intake/Processing, kitchen, medical, inmate property storage and existing jail administration do not contain sufficient square footage to accommodate the necessary kitchen equipment. The existing vehicular sallyport is too small and awkwardly designed. These areas will remain as-is in the interest of saving the County money, unless there were to be a major addition to the existing building to enhance these areas.

Conclusion

Our goal was to address only the current problems that are financially feasible to repair or replace at this time, keeping in mind that the facility must stay in compliance with all local, state and federal regulations. This work has been priced based on the assumption that working areas will be clear of any inmates due to the security risks that would be encountered. This means that the County would have to add any additional cost for housing inmates in another location. This would apply in Options 1 or 2. If Option 3 was selected (addition of approximately 337 beds), that portion of the project could be built first and the existing inmates could be moved to that area upon completion, allowing the renovation to take place without shipping any inmates out of county.

All of the assumptions and recommendations provided in this report are based on best practices in the criminal justice construction industry and should not be construed as a complete resolution to any one system. The ongoing maintenance will be extremely vital to the longevity of the existing facility. The recommendations presented in this report were made with an eye on saving the County as much money as practicable, while at the same time, bringing the existing downtown jail facility in compliance with applicable governing regulations.

OPTION 1: Existing Jail Facility Systems Upgrade/Renovation Only

Plumbing Pipe and Detention Grade Plumbing Fixtures

- Leave the existing detention grade stainless steel fixtures (toilets, lavatories and showers throughout the existing facility) in place. Repair and re-trim all stainless steel detention plumbing fixtures to include new pneumatic push button actuators, new pneumatic adjustable metering control valves and new flush valves

Security Electronic Controls and Detention Hardware

- The existing security electronic controls are out of date and only partially operational. Abandon security electronics control capability in the 1982 (original) building Control Room. Replace all of the security electronic functions in the facility and relocate these functions in total to the 1995 addition Control Room. Update with new state of the art non-proprietary equipment for security, reliability and ease of future maintenance.
- Remove the existing sliding cell doors in the 1982 (original) building and replace with swinging detention bar grate doors, frames and swinging door hardware. Lock to be specified is the Southern Folger 10120 electromechanical lock. Units will be surfaced applied to the existing bar grate cell fronts.

Electrical Systems

- Replace fuel tank at the 300kw Caterpillar generator. Test operation and service the generator. The new fuel tank will be placed under the generator housing and have the capacity for 12 hours operating time.
- Upgrade the touch plate relay control cabinets throughout the building. These cabinets control lighting and other electrical systems. These cabinets will be interfaced with the upgraded security electronics system to assure proper operation.
- Test operation of the smoke and fume evacuation system. Repair and replace outdated starters and contactors.
- Check all electrical devices: receptacles, switches, disconnects, and breakers. Replace devices and trim to meet correct standards for each area. Check breakers and disconnects. Replace equipment found to be weak or broken.
- Inspect all lighting and fixtures. Replace all fixtures that are irreparable. Retrofit all fluorescent lighting from T-12 lamps and ballasts to T-8 lamps and ballasts (all type T-12 lamps will be banned from production by 06/2012).
- Upgrade existing kitchen electrical requirements, based upon electrical demand of existing and new kitchen equipment.
- Overall electrical systems inspection. Correct all non-code compliant issues and address all other electrical deficiencies.

HVAC

- Convert controls for 15 VAV boxes
- Install 5 split system air handlers and 1 central station air handler unit from pneumatic controls to DDC controls

ARCHITECTURAL

- Repair the enclosed second floor walkway from the jail to the Courts Building, including repairing the roof, re-sealing existing windows, repairing damaged sheet rock, re-painting walls and ceilings and replacing VCT and wall base.

Design/Build Price for Option 1: \$4,500,000 to \$5,000,000

OPTION 2: Renovate Existing Facility and Addition of New Intake/Processing and Sallyport

- This option will include all pricing from the renovation efforts in OPTION 1
- Demolish existing 48-bed Trustee housing unit and (relocate) county building at the south end of the existing jail.
- Construct a new addition in this location to include new:
 - Intake/Processing –processing desk, holding cells, intoxilizer room, dress in/out, classification, count/records, detox, interview, staff toilet
 - Vehicular sallyport – straight pull-through orientation for ease of operation - sized to accommodate an inter-city bus, limited squad car parking, property storage, electrical, mechanical
 - New master Control Room to allow all upgraded security electronics in the existing building to be run back to this new central location. By doing so, day-to-day operations of the existing facility will not be hampered until it is time to transfer all security electronics control to the new Control Room.

Design/Build Price for Option 2: \$9,250,000 to \$9,750,000

Option 3: Renovation of Existing Facility and Addition of New Intake/Process, Sallyport and 337-bed Expansion

- This Option will include all pricing from the renovation efforts in Options 1 and 2
- This Option includes the most cost-effective and least disruptive effort to add inmate housing to the existing building, new vehicular sallyport, intake/processing and inmate visitation, keeping the existing jail facility in its original location- downtown Sherman, Texas. New facility to be located on available land on the city block bounded by W. Lamar to the north, S. Elm St. to the west, W. Cherry St. to the south and S. Crockett St. to the east.

- Proposed addition includes:

- (13) Separation Cells 13
- (1) 4-bed Multi-Occupancy Cells 4
- (31) 8-bed Multi-Occupancy Cells 248
- (3) 24-bed dorms 72

Total Additional Beds 337

Existing beds 239

(not including 48-bed Trustee beds

which were demolished in Option 2)

TOTAL BEDS 576

- Included in the addition are areas that require additional/updated space:
 - Pull-through vehicular sallyport to accommodate an inter-city bus and squad car parking
 - Property storage
 - Intake/Processing
 - Intake/processing counter
 - Multiple holding cells
 - Detox cells (2)
 - Intoxilizer room
 - Classification
 - Count/records
 - Interview room
 - Inmate clothing issue
 - Staff Toilet
 - Infirmary
 - Nurse's station
 - Exam rooms
 - Medical isolation cells (2)

- Medical cells (5)
- Medical records storage
- Pharmacy
- Utility
- Sick call vestibule
- Commissary
- Public lobby
- Inmate visitation
- Attorney visitation
- New central control
- Administrative offices
- Outdoor recreation yard
- Supply rooms
- Kitchen – remove all existing kitchen equipment, 2,000 square foot addition to existing
- Kitchen – installation of new kitchen equipment
- 337 bed inmate housing addition
- Re-assign existing Intake/Processing as new Inmate Release
- Re-assign existing vehicular sallyport as new maintenance area

Design/Build Price for Option 3: \$18,500,000 to \$19,250,000

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