MINUTES COUNTY BOARD STAFF MEETING JUVENILE DETENTION FACILITY TUESDAY, JUNE 22, 1999 - 9:30 A.M. COUNTY-CITY BUILDING - ROOM 113

County Commissioners Present: Kathy Campbell, Chair; Larry Hudkins, Vice Chair; Bernie Heier, Linda Steinman and Bob Workman

Others Present: Kerry Eagan, Chief Administrative Officer; Jim Hille, Liz Kuhlman and Chris Beardslee, Sinclair Hille; Dennis Banks, Michelle Schindler and Greg Pettibone, Attention Center; Jerry Pullman, Nebraska Department of Corrections; Gary Lange and Steve Alvine, Alvine & Associates; Dave Kroeker, Budget & Fiscal Officer; Don Killeen, County Property Management; Mike Thurber, County Corrections; Bruce Medcalf, County Clerk; David Johnson, Deputy County Attorney; and Cori Beattie, County Board Secretary

Hille commented that this meeting is a progress meeting as we are in the design development phase. The last meeting, the County authorized Sinclair Hille to move forward based upon the schematic drawings which were presented. Additional information is being brought forward today on the assessment and staff secure areas. He added that things are moving forward according to schedule. Specific direction will need to be given today in regard to the mechanical system. In reference to the next meeting, Hille said the meeting the first part of August could be used to discuss a comprehensive review of all costs associated with the project and a final presentation with colored drawings which could be used for public release at that time.

A. ASSESSMENT CENTER LAYOUT & ASSUMPTIONS

In regard to the staff secure area, Hille commented that the original model was very similar to detention housing pods because it may need to be converted to detention in the future. This became problematic because staff secure should have its own feel/characteristics since those housed there are not in detention. The staff station has complete visibility of the entire area (day room and multi-use area) - a goal which was very important. It was noted that if this area was converted to detention, it would work for the third shift oversight, which was another goal. Hille said the staff secure area is not fully secured by locks. Regulations require a way for residents which is through a teacher's work area into a staff break room outside. It will be secure enough so that any juvenile resident who is to leave would be seen. The rest of the doors are controlled with lock systems.

Immediately outside (north) of staff secure is an outdoor recreation area. This will be bordered by a fence which is anticipated to be a 12' chain link fence. It is not the same type used around high secure areas but, in fact, would be the same as used around the outer perimeter of the overall site. Fences for the higher secure areas will be a non-climbable, chain link type which vaults inward. Heier inquired whether or not it would be possible to mount poles so that barbed wire or razor fencing could be added in the future. Hille said there are poles with standards going out in diagonal angles on both sides which would allow for barbed wire, etc., but care must still be given in choosing the original fence framing. Banks noted that mesh fences have worked splendidly in other facilities because they prevent any grip. The distance from the fence to the internal perimeter is a long distance so nothing could be thrown into that area. He added that the cost of the razor wire is very expensive, but if the Board requested it, they could go that route. Schindler also stated that cameras will be positioned at the outer perimeter. This would help spot anyone trying to get into the perimeter. She added that barbed wire fences do give the public the perception of security.

Heier inquired about windows. Hille said those around the perimeter are more of a bedroom window - not a secure detention window. If the area was ever converted to detention, the windows would need to be replaced to a much smaller unit. Banks reminded the County Board that those juveniles in staff secure will have gone through the assessment process and should not pose a threat to public safety. Hudkins questioned whether or not the windows were made of lexan. Schindler said they were made of polycarbonite with a thirty minute attack rating. Hudkins stated that he would like to know the difference in cost between the lexan and what is currently being considered since it would make the best sense to install lexan windows during construction versus after the fact. Banks said he definitely prefers a window which doesn't break. Hille said a couple of choices, including cost difference, will be offered at the next meeting since there are many options between glass and lexan.

Hille mentioned another cost consideration which the Bard has chosen to do but which is the right direction and that is rough-ins so that all rooms can be converted to wet rooms. Steinman commented that things are moving forward based on assumptions that the building will have to be more secure in the future, whereas, the opposite may be true. The Board should also consider this approach.

Steinman questioned the privacy of the juveniles in the staff secure units. The windows look to be facing the parking lot and curtains are not permitted. Hille said this isn't a problem since the windows can accommodate a shade or blind. The location of this unit was chosen for such reason. Steinman said she is concerned that even a blind could be used to cut. Hille said juveniles housed in this unit, by definition, are not at risk to themselves or others. Shades could also be used and may be less of a hazardous material. Banks said no one really considered placing blinds in bedrooms up to this point. The idea will have to be further considered. Hudkins said some privacy would be gained by raising windows up higher. Schindler said the pros and cons of big and small windows has been debated. She mentioned the idea of smaller windows positioned higher up would allow for an easier transition if the area was ever converted to higher security.

Campbell reminded the Board and those at the meeting that the County looked at places such as Trabert Hall and the Trade Center to originally house staff secure. She is concerned that if this area begins to look like the others, she will regret including it with the new facility. The whole intention of staff secure was to be completely different. Hille said all concerns relative to assessment will be addressed at the next meeting.

Hille said the assessment area is divided into two parts. A common wall will be located down the middle with a door. The assessment center is considered part of a secure process. The vast majority of youths will be brought to assessment. The others will go directly to intake. In the assessment atmosphere, juveniles must not gain easy access to the non-secure areas of

the building, therefore, there is a double door separation from the corridor which connects to the lobby. There will be space for a conference room, an office and a restroom. There is also a waiting area which is connected to a commonly shared area for fingerprinting and photos which could be used for the intake process as well. If someone posts a bond, they would be permitted into the lobby and the secure transition area where they can pay via a window. Parental access from the public side to the secure side will be possible. The crisis area, located on the other half, will have a conference room, staff space for a clinician and open space for cubicles for the crisis intervention team.

Heier said he has a concern with the waiting area and wondered if small rooms wouldn't be better than one room. Banks said all the detention centers he toured throughout the country have open day rooms since the youth is still in transition and a determination has not been made regarding whether they pose a risk. Hille added that anyone posing a risk would immediately go to intake or holding.

B. <u>KEY BUILDING MATERIALS</u>

Kuhlman commented that certain areas would be made up of two layers of 1/4" glass clad with an 1/8" of lexan or polycarbonite in between for a total of 9/16". The outer sides are glass clad so that juveniles cannot scratch it; the polycarbonite inside adds strength. This material will be used in two medium-secure housing units. In the maximum security wing, a 3/4" glass clad polycarbonite will be installed. Areas abutting the outside will consist of the 9/16" glass clad polycarbonite with $\frac{1}{2}$ " tempered glass used in recreation areas. A sixty-minute physical attack glass (1 5/16") will be used in the control room. The ballistic rating equals a .44 magnum.

Hille noted that thee was a recommended materials change to a portion of the exterior. Precast concrete sandwich panels are being suggested on the interior/exterior with insulation in between. A reason for this change is that panels will provides an excellent low-maintenance, durable finish at a lower cost than masonry. On the public side, or front side of the building, brick will still be used. The back-up to brick on the staff secure area, will be pre-cast panels on the inside so all the pods have the same finished material. The administrative spaces and lobby areas will use steel studs as back-up. The interior of the building around the corridor is 8" reinforced concrete block. On the interior of the detention pods is 6" reinforced concrete block. The areas of education, support areas, administration and lobby will all have steel studs with fiber rock. This material has a coating of gypsum and cellulose fibers - versus drywall's paper coating. Fiber rock is very durable and good for sound, impact and fire resistance.

Hille questioned whether or not the Board was comfortable with limited use of pre-cast materials as part of the perimeter areas. The County Board concurred. Hille said he'd like to now skip to agenda item "d" - Mechanical System.

D. <u>MECHANICAL SYSTEM</u>

Hille introduced Jerry Pullman from the State Department of Corrections (DOC), Gary Lange and Steve Alvine, both from Alvine & Associates. He distributed a mechanical systems comparison worksheet (copy on file).

At the last meeting, the County asked architects to pursue the cost of an interlocal agreement with the State Department of Corrections to receive steam and chilled water from the Penitentiary's central plant. Hille noted that the comparison sheet detailed buying energy from the prison versus a ground coupled heat pump (GCHP) system, both of which were measured against a conventional system.

In terms of cost, Hills said both alternatives to the conventional system will cost additional money. Connecting to the prison would cost an extra \$490,000 which would include the cost of the transmission lines and providing for a new, larger chiller for the DOC. A GCHP system would cost an additional \$400,000 for the well field and electrical service and panels. This system is known to be an energy saver, though, the future price of energy is not available. But, on average, a savings of 20% or more could be realized with a GCHP system.

Hille said in talking with engineers, there is also money to be saved in terms of what is spent in energy if we link up with the DOC. This would not be the same amount because if you buy chilled water from the DOC during the summer time, you won't save much money versus having your own chiller. But buying steam, we are assuming that the cost of steam will be less than if running your own boiler. The amount has not been negotiated, therefore, another major consideration is just how much money will be saved. The total would probably not be as much as using a GCHP system.

Another issue is maintenance. Transmission lines to the DOC would be much easier to maintain than seventy heat pumps. Maintenance the first ten years would be low; over time, it would build.

Hille said the means of assessing a value have been debated. He estimated that over twenty years, \$.20 square foot could be used as an average over the life of a system. On the GCHP there is a factor of maintaining and depreciating the system out versus getting energy from an outside source which maintains its own plant. After twenty years, Hille said there would not be a huge differentiation between the conventional system, GCHP system or buying energy from the State. If the cost of energy increases considerably, he felt the GCHP would be the best buy.

Lange said he spoke with Don Killeen recently about a hybrid system which would use well field as a cooling tower with a chiller inside and stay with the conventional system. This means boilers would still be required. The well field cannot be used for heating. The initial cost would rise due to buying the wells.

Heier questioned whether or not it was possible to consider a closed-loop system. Hille said the GCHP is this type of system. Lange said the well fields are used to take in heat. A traditional closed-loop heat pump commonly has a boiler to add heat in the winter time and a cooling tower to reject heat in the summer. He said if the County decides to connect to the State, it would be a good idea to do both steam and chilled water.

Hille said he wants the County to know there are options. Architects have not proceeded with designing a particular system because they feel there is not a clear rationale for any one system. The County must first decide its ultimate objective. For example, if the objective is simplicity of staffing in terms of maintenance, then either a conventional system or connecting to the State would be the best option. If the objective is to lay the groundwork for the conservation of energy, then the GCHP system or hybrid system or connecting to the Penitentiary are the best options. Another aspect is the interlocal concept of working with another government entity.

Hudkins stated that it's hard to make a decision when energy costs are unknown. He questioned the difference between the conventional system and connecting to the Penitentiary. Alvine said it was \$850,000 to do the conventional system with another \$490,000 to connect with the State. Taking energy and maintenance into consideration, a GCHP system is the best route for conserving energy but terrible when it comes to maintenance.

When asked his opinion, Killeen noted that the County has always been a proponent of energy savings. On one hand, keeping the air cooled by a conventional system would use a lot of energy. The next step down would be the cooling tower which would use a little less energy. In his experience, he doesn't feel the heat pump systems are more maintenance intensive. The disadvantage to the GCHP system is the back-up generation costs. He suggested the hybrid system.

Campbell questioned whether the hybrid system allows for fewer parts and equipment in the facility. Lange stated that this system is the conventional one with the minimal amount of maintenance pieces with only the ground being used to dissipate the heat. Hille requested a cost comparison between a central plant and buying all heat pumps. Lange said the hybrid system would be less in comparison to all options because the generator would not need to be upgraded. The cost would essentially be \$850,000 plus the cost of the wells. Hille said the hybrid system looks good on paper because it gets away from all the moving parts distributed throughout the facility. Lange said the trade-off of using the ground compared to heat pumps is running the fan motor on the cooling tower.

Campbell said she likes the hybrid system since it's energy efficient and wouldn't require a number of heat pumps located throughout the building. Pullman commented that the State is committed to remain in cooperation in whatever effort the County desires. Having a back-up for cooling is a concern for them. He felt a rate study would be required since the State is not in the business of selling energy to the County. Alvine said someone would ultimately need to commission a rate study. Cost and time could be \$5,000-\$10,000 for approximately a month. Hille added that negotiation would be involved because of the issue of how to allocate administration and staffing costs for operating the plant and also maintenance charges. He said it will not be as much as the GCHP.

Workman asked if the County decided to go with the hybrid system to include its own loop for cooling, its own heating system and a central chiller, would it be a step back if the County decided in the future to hoop up with the State. Alvine said only a pipe connection would be necessary, as well as any of the administrative or staffing issues previously mentioned.

Campbell said the hybrid system meets the best of what can be determined today while still giving us options for the future. Workman agreed and added that this would leave the door open for joint heating with the State in the future. Plus, with the ground loop system, energy is being saved on cooling.

Campbell wanted to clarify that if the County was to ever hook up to the State's system, a change in legislation would be required. Eagan mentioned that Ken Fougeron discussed a District Energy for the entire area at some point. Going with the hybrid system would still allow easy access.

Campbell thanked everyone for their efforts in coming forth with all the information pertaining to this issue. Letters to Governor Johanns and Harold Clarke will be sent expressing the same. She added that in the long-term, the County would be interested in continuing negotiations with the State in the sense that both look at a future energy district for the area.

MOTION: Workman moved to proceed with the hybrid system including a ground loop chiller and heating system and to continue long-term negotiations with the State in regard to a future energy district in the area of the Penitentiary and new Juvenile Detention Facility; seconded by Steinman. Roll call vote. Motion passed unanimously.

C. <u>ELECTRONIC SECURITY SYSTEM</u>

Hille distributed a handout on the electronic security systems description (copy on file). He added that the consultant will be attending the August meeting to answer detailed questions.

It has been recommended that the facility have a PC generated graphic system which will utilize computers or programmable logic controllers. Hille said the cost of this system is now relatively the same as the hard wired system. He noted that Attention Center staff also prefers a system that is flexible today, as well as in the future.

The PC graphics system will be located in the control center and in each of the housing pod control stations. This system will control all perimeter doors. Resident rooms in each detention area will have an intercom system which will be tied back to a control station. Doors throughout the secure corridors will have a combination of camera and control.

Housing control stations shall have controls for: resident room doors, pod entry doors, multipurpose toilet room door, resident room lights on/off, dayroom lights on/off, TV power on/off and inmate telephone on/off. This system will have a complete logging system and a duress system in classrooms and the housing pods. Also, a guard tour system using six hand-held sets will be involved with bad checks. Hille said the biggest issue has been whether or not to go with the PC graphic system but he, Banks and Schindler all believe this is the right way to go. Hudkins asked Thurber what he thought of the system. Thurber said even though some redundancy may exist, he strongly recommends that the control center be able to monitor all housing units and be able to talk to each room via intercom - both of which this system is capable of doing. He also said the cost between black/white and color monitors is quite minimal.

Banks stated that he likes the system because local engineers can fix and maintain it. It was noted that the consultant has been very conscious of costs, long-term implications, etc.

In reference to the next meeting regarding the juvenile detention facility, Hille said that unless things go array, there will be a relatively small agenda to include a budget summary and a final showing of what the building will look like for public consumption. Also, there will be a response regarding issues, such as the glass, which were brought up today. Campbell added that Kit Boesch may also be ready for her presentation by that date.

The next meeting will be on Tuesday, August 17th at 3:30 p.m., at the County-City Building, room to be announced. If Hille is the only agenda item and can be worked into the August 19th staff meeting, then the meeting on August 17th will be canceled.

There being no further business, the meeting adjourned.