CHILDREN'S TERRITORIAL TREATMENT CENTRE

FSC ARCHITECTS & ENGINEERS

Program Fit to Dene K'onia Facility, Hay River, NT

1 Introduction

FSC was retained by the Department of Public Works and Services and the Department of Health and Social Services in December 2004 to assist in determining the feasibility of transforming the former Dene K'onia Young Offender Facility into a Children's Territorial Treatment Centre. The specific intent of this report is to determine program fit to the existing building's configuration.

FSC recently completed the functional program for the Treatment Facility. This study compares that work to the spaces in the existing building and proposes a conceptual for effecting those changes, for cost planning purposes only.

2 Dene K'onia

The existing facility in Hay River was originally constructed in 1922 as a children's receiving home. The layout is institutional in nature and includes double bunked dormitories.

A classroom addition was constructed to the design of Department of Public Works in 1922. Ramp slopes exceed 1:12 and other code issues remain within this addition including clearances by doorways and landing space at the top of the ramp.

In 1922 Four concrete block cells were added and renovations completed to transform Dene K'onia into a secure Young Offender's facility.

In 1997 the Young Offender Facility was renovation to complete life safety and health improvements including the addition of an emergency generator, a new sprinkler system, new kitchen equipment and numerous miscellaneous code upgrades.

The existing facility is capable of housing 16 children in double bunked accommodation and 4 children in single cell accommodation.

The facility is organized around a service core and includes exposed glulam construction.

A significant advantage of the construction assembly is a full heated crawlspace which allows ease of installation of new building systems including electrical and mechanical distribution systems. This is especially significant in light of the absence of dedicated air handling sytem.

3 Area Comparison

Then following table compares areas identified in the Functional Program with complementary spaces in the Dene K'onia Facility. With some significant exceptions, the spaces in the existing facility tend to match the requirements of the Functional Program

Space	Program Area (Factored)	Dene K'onia Area	Variance	Comments
Entrance/Foyer	10.8	17	6.2	Combined for comparison purposes only
Living/Dining	58	84.5	26.5	Combined for comparison purposes only
Kitchen	33.5	21.75	(11.75)	
Pantry	7.08	6.08	(1)	
Bedrooms	100.32	94	(6.32)	
Washrooms	21.4	20	(1.4)	
Linen	4.8	0	(4.8)	
Laundry	6.68	7	0.32	
Janitors Rm.	2.784	1	(1.78)	
Safe Rm.	7.8	0	(7.8)	
Classroom	51.7	55	3.3	Note associates storage space and office at DK
Recreation	48	0	(48)	
Storage	84	40	(44)	Existing Area includes 15 m² outdoor shed
Staff Mtg.	48	0	(48)	
Staff Off.	44.6	45	0.4	
Staff WC	9.6	5.25	(4.35)	Existing not Barrier Free
Counseling	31.51	0	(31.51)	
Viewing	8.94	0	(8.94)	
Administrator	11.14	9	(2.14)	This is equivalent space adjacent to existing classroom.
Receptionist	9.3	9.5	0.2	Existing Control Rm.
Support	7.92	7	(.92)	
Waiting	11.86	0	(11.86)	
Mechanical	81.24	29	(52.24)	No AHU space in existing building.
Subtotal	**700.974**	**451.08**		
8% Structure	*56.07*	*36*		
12.5% Circulation	*Included above*	*70.92*		
Total	**757.044**	**558m2**		

The existing floor plan of the Dene K'onia facility bears many similarities to the functional program. There are however ten significant area shortfalls however:

1. No indoor recreation
2. No Group Counseling/Viewing Rm.
3. No safe Room
4. Living/Dining Area too large
5. No Air Handling Space
6. No Staff Meeting Area
7. Kitchen Area too small
8. Bedrooms are double bunked and should be split in half for single occupancy
9. Cells Areas are redundant
10. Poor storage (the existing cell area could compensate for this)

4 Planning Considerations

FSC was requested to complete a conceptual design which applied the functional program to the existing Dene K'onia plan so as to asses program fit. *Figure 1* presents the existing layout of the main floor at Dene K'onia, totaling approximately 558 m² GFA (Gross Floor Area).

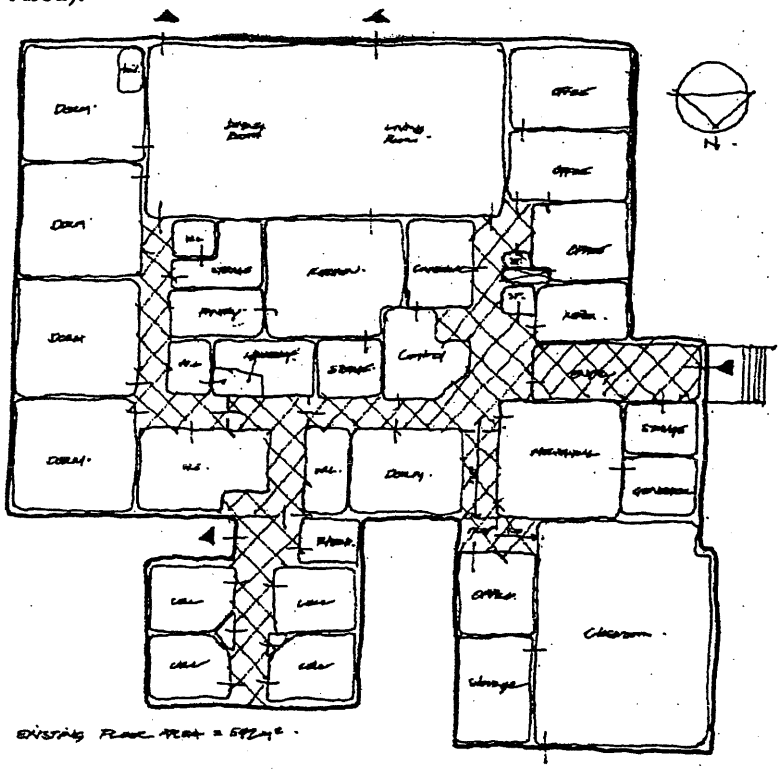

Figure 1:Main Floor, Dene K'onia

The general configuration of the existing facility matches the requirements of the Childrens Territorial Treatment Centre with the exceptions noted in Part 4. The planning exercise following is intended to assess the degree of fit required to transform the existing Dene K'onia Facility to accommodate the Functional Program of the Children's Treatment Centre. This will assist in determining the costs associated with the project in order to determine it's viability. The exercise should not be seen as a design proposal.

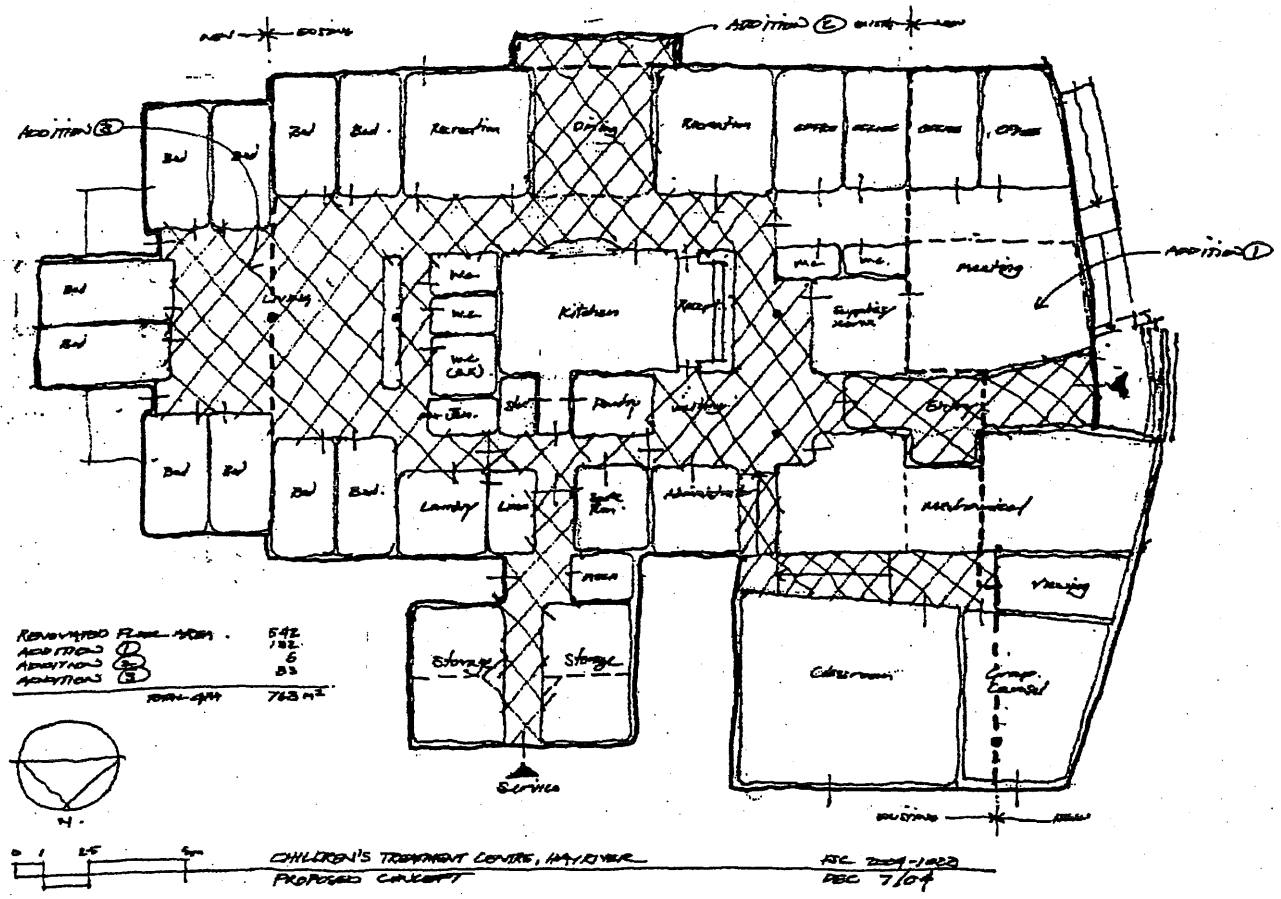

Figure 2: Concept for Children's Territorial Treatment Centre, Hay River

The plan above takes the following thoughts into consideration:

- Maintaining and expanding the basic relationships in place in the existing facility: service core, administration by the entry, separate teaching area, closely associated house functions, bedrooms to the west.
- An addition to the street-front to significantly alter the image and presence of the former building in the community
- Co-locating the classroom and group counseling spaces together and apart from the active, noisy spaces of the house, in turn separating 'home' and 'school'
- Adding to the west so as not to infringe on outdoor playing areas

5 Cost Support

To meet the functional program, costs should account for approximately

1. **216 m²** of new construction in separate additions
2. **542 m²** of full program renovation (interior wall and finish demolition)

In order to save money, the core area could be retained (kitchen, laundry, storage and existing washrooms, reducing the scope of full renovations to **442 m²**. These would be supplemented with **100 m²** of renovations to finishes only.

A scheme to expand to the south only was considered and is feasible, but the end result may compromise the functionality of the proposed facility. The configuration presented in Figure 2 was felt to be prudent from a planning perspective.

6 Additional Considerations

The following issues should be considered in the evaluation of the existing Dene K'onia facility as a suitable location for a new Children's Treatment Centre.

- Public Perception as a children's correctional facility
- Extent of renovations for barrier free accessibility.
- Presence of cells as a reminder of former function.
- Implications of core infringing on passive observation (surveillance)
- Limitations of transforming an institution into a home.

7 Summary

From a planning perspective it is possible to transform the existing Dene K'onia facility into a Children's Treatment Centre, the building's original function. Careful consideration must be given to ensuring that this same transformation can be effected in the collective conscience of the community, who relate to the building as a place of punishment. The co-existence of the Treatment Centre and the community is crucial to successful program delivery. In addition, considerable effort will have to be made to change the environment in the building from an institutional to a home-like one.

NORTH SLAVE REGIONAL OFFICE
DEPARTMENT OF PUBLIC WORKS & SERVICES
GOVERNMENT OF THE NORTHWEST TERRITORIES

Meeting Record

PWS File: 610.03159.01.02

PROJECT: Childrens Territorial Treatment Centre
Project No. 3159

LOCATION: SMH-3, Meeting Room

DATE: Friday 10 December 2004 **TIME:** 9:00 – 11:00 a.m.

ATTENDEES:

Ian Cook	Capital Planning Consultant	HSS
Barry Ward	Facility Planner	PWS
Richard Cracknell	Senior Technical Officer – Mech	PWS
John Dick	Senior Technical Officer – Elec	PWS
Bill Wyness	Senior Technical Officer – Arch	PWS
Doug McKie	Senior Maintenance Advisor	PWS
Norm Dei	Quantity Surveyor	PWS
Stephen Cumming	Architect	FSC Architects
Doug Morrison	Project Officer	PWS – NSRO

DISTRIBUTION: 10 Dec 04
All Present
Philip Kienholz — Project Officer — PWS – Hay River

This meeting was convened to discuss, and determine, the feasibility of converting the existing Dene K'onia building in Hay River into a Children's Territorial Treatment Centre suitable for long term use (i.e. 25 years)

1 Barry highlighted the functional requirements of the project as follow:
- Program requirements will consist of the following: Kitchen – residential style, Quiet room, Recreation room, Classroom, Administration and Staff Support areas, Storage, Bedrooms.
- Program area is 750 – 760 sq. m.
- 10 single beds to house both boys and girls, ages 8-12 years
- current facility in Yk operated by Bosco Homes under contract
- facility will be maintained by PWS
- current staffing of Yk facility is 16 PY's

2 The Dene K'onia building was constructed in 3 phases:
- 1967 – core of the building constructed – 438 sq m
- 1977 – Classroom addition added – 78 sq m
- 1985 – secure custody cellblock added – 53 sq m
- TOTAL Building area – 569 sq m

3 FSC advised that their preliminary investigation of this building showed that it would be possible to accommodate the program around the existing facility. HSS stated that the program should not be compromised to make it fit into the existing building. It was concluded that an additional 191 sq m (aprox) of new construction would still be required.

4 All agreed that important design criteria in the development of this project are as follow:
- Provide natural light into all spaces
- Allow direct visual supervision of Living / Dining / Recreation areas by staff
- Image of the facility. This was considered the most important of the criteria. It was noted that it is important that the facility no longer be a reminder of a secure facility as it will be a residential type facility and should reflect that fact.

5 A report was presented by each of the disciplines and a summary of the discussion surrounding each is listed below:

a) Arch / Struc
- The existing site is attractive due to its proximity to community activities (i.e. school / pool) as well as its size and maturity.
- Structure of the Original 1967 building noted as being in reasonably good condition. This portion of the building (i.e. foundation, floor structure, roof structure) could be saved.
- The current structure may facilitate expansion to the south, which was agreed to be desirable.
- It is expected that most wall/ceiling surfaces, including doors and frames, contain lead paint and as such will require abatement, along with any existing asbestos insulation. A complete hazmat investigation would need to be conducted to confirm
- As the building would require a new ventilation system, it is recommended that the facility receive an exterior wall retrofit to upgrade the envelope to current performance requirements. Same can be said about the roof.
- PWS TSS stated that the Classroom addition floor structure required upgrading to current design standards.
- Crawlspace headroom minimal and limits access
- The 1977 Classroom addition has little value functionally as it is remote from the core of the building.

b) Maintenance
- Generally the existing building has been maintained well
- The existing washrooms require extensive renovation
- The existing bedrooms require cleanup.
- Existing siding requires re-attachment in some locations.
- PWS maintenance requested that DDC controls not be including in the project, new or renovated.

c) Electrical
- Investigation of electrical systems indicated that it would be advisable to replace the following systems:
  - Wiring – does not meet current code
  - Lighting – currently T12 and incandescent pots
  - Emergency lighting
  - Exit devices – original devices

- Exterior lights – HPS
- Electrical panels – mostly full, old TW wiring
- Main electrical service – suggest providing 3 phase which is available at back of site – currently 200 amp single phase service not acceptable for new facility
- Fire Alarm devices - original

- Investigation indicated that the following systems were adequate:
  - Telephone system –new
  - Fire Alarm system – new Edwards panel, 30 zone capability
- There is an existing emergency generator on site. HSS stated that there will be no requirement in the new CTTC for emergency power.

d) Mechanical

- Current sprinkler system is acceptable. System will require a backflow preventer. HSS advised that CTTC facility is to be sprinklered throughout.
- Plumbing:
  - Current HWT should be sufficient to serve new program space
  - None of existing fixtures meet current code
  - Current distribution system appears acceptable
  - Asbestos exists on piping
  - Incoming water service should be acceptable
  - Incoming Sewer should be acceptable
- Ventilation:
  - No mechanical ventilation system currently in facility – new ventilation system will be required for the new program spaces.
  - Ventilation will be required for crawlspace.
- Heating
  - 5 propane fired furnaces currently – should be replaced
  - Ductwork is run in crawlspace – difficult to access
- Kitchen:
  - Commercial style kitchen with exhaust hood and make up air unit on roof
  - Hand wash station will be required
  - No class 'K' fire extinguisher currently exists
  - No grease interceptor currently exists

e) Costing

- PWS stated that based on the discussion, it would appear that renovation of the existing building would involve extensive upgrade of M/E systems, as well as envelope systems.
- PWS suggested that it perhaps best to demo all but the 1967 building foundation, floor and roof structure, since it has been identified as being in good condition.
- Reuse of the existing site is desirable since it may not be possible to find a serviced lot in Hay River, and therefore it would be a costly exercise to obtain a new site. It was noted that it would be more cost effective to save the existing structure on the existing site.

6 Summary

- All were in agreement that the best approach would be to save the existing 1967 building foundation, floor and roof structure, and to demolish the 1977 classroom and 1985 cell block. PWS will provide a recommendation in this regard to HSS, complete with estimated costs for renovation and construction of addition.
- It was agreed that the existing M/E and building envelop systems were in poor condition and therefore would be costly to replace.
- All agreed that the project continued to be on hold until receipt of the FMB decision in mid to late January 2005.
- PWS will review the project schedule taking into consideration items discussed and issue to HSS.

Meeting Adjourned 11:00 a.m.

This report is to be considered a true and accurate summary of items discussed.
Please advise the undersigned of discrepancies or omissions immediately.

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Project Officer
North Slave Regional Office
Yellowknife, NT

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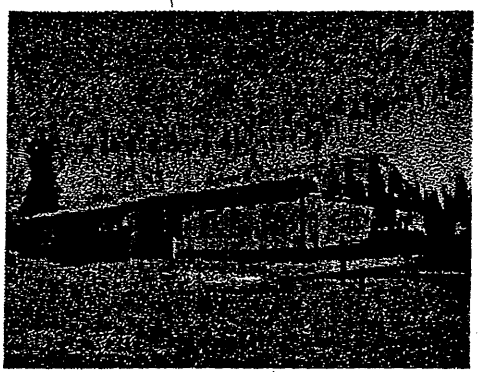
Dene K'onia Young Offender Facility - Hay River NWT



Technical Status Evaluation UPDATE December 8 2005:
Summary Overview (Revised from 1997 report findings)

General Findings.

Findings re Architectural/Structural Systems:

The **substructure** of the original core building is virtually as installed, having provided good service since initially occupied in 1967. Steel piles and concrete pile caps show no sign of deterioration under the first phase portion of the building. Wide flange steel beams at major structure lines are level and true to original lines. The 1978 addition substructure is similarly stable, but less durable than the original building. The 1985 addition shows no structural deterioration. All three portions are founded on deep foundation units (steel piles driven to rejection).

The **superstructure** displays very limited signs of deformation (surface material cracks) at two locations, due likely to transient loads, and located in the northeast corner near the 1977/8 addition. The structural system of the 1967 section meets performance expectations, and has an indefinite remaining service life of at least 25 years. The structural system of the 1977/8 addition has demonstrated some deterioration in the floor support, the cause of which is not yet fully diagnosed.

The weather enclosing **envelope** is in generally satisfactory condition, but does not meet current air/vapour, thermal and cladding performance requirements. If built today, a better performing air/vapour barrier, increased thermal insulation, and upgraded doors and windows would be required to reduce air leakage, increase occupant comfort levels, and reduce energy costs. Appropriate remediation will conserve the building envelope, and add up to 30 years to the building's economic service life.

The weather enclosing envelope would need to be upgraded to accommodate any proposed

mechanical ventilation system which would positively pressurize the building.

Exterior **cladding** is loose in some areas and penetrations through it typically unsealed, allowing snow and rain to blow into the exterior portions of the wall system. Exterior **doors** are minimally insulated but generally have reasonably well maintained hardware and weatherstripping. Exterior **windows** are twin sealed fixed glazed units in the low security portions of the building, and specialized impact resistant high security windows in the dormitory rooms and cells. All windows appear poorly connected to the air/vapour barrier system, and are well below meeting current CAN/CSA standards for frame conductance and air leakage.

The entire **low-slope roof system** was retrofitted in the late 1980's with a conventional high slope asphalt shingle roof on plywood deck and wood framed trusses. A new vapour retarder and new loose fill cellulose fibre insulation was installed in the attic created above the original roof. The new roof is generally performing well, but additional investigation of the original roof membrane and supporting structure to determine the extent of any deterioration is recommended. The new roof membrane (asphalt shingles) is nearing the end of its normal service life, and water ingress through some deteriorated flashings, and some condensate formation from moist air migration through the assembly, have periodically resulted in moisture being detected in a portion of the roof.

Interiors spaces display durable and easy to repair finishes, and the remaining service life of surface materials varies widely throughout the facility, with the dormitory rooms and washrooms having the shortest remaining service life.

Site work generally meets performance requirements. The unpaved parking area was the only substantial technical shortcoming identified in the original TSE. Other shortcomings are due to facility history and higher standards now in effect than were in effect at the time of construction. **Building entrances** do not meet the provision for barrier free access recommended by the 1995 National Building Code, in that the primary entrance of the building is recommended to be barrier free (NBC A3.8.1.2) in the 1995 NBC, rather than a secondary entrance. Secondary entrances have no code complying barrier-free access ramps.

Findings re Mechanical Systems:

Plumbing Systems

Incoming 100mm diameter main shared for Domestic Water Supply and Sprinkler system is adequate for existing facility plus potential future addition.

Existing DCW/DHW piping system is code complaint and could be reused where possible, but multiple changes will be required to meet any new layout, which may negate any potential project cost savings.

All existing plumbing fixtures are non-code complaint, and will require to be replaced.

Drainage system is at the end of its service life, and, due to multiple changes likely to meet new program, should be replaced up to building exit.

Drain line to Town mains may be reused.

75 gallon capacity, 173.7GPH recovery rated hot water heater recently retrofitted may not be sufficient to serve 10 occupants shower needs. Consultant will require to determine capacity and recovery rate required.

Venting system will require multiple changes. Partial salvage will not be feasible due to interior wall demolition.

Fire Protection System

Existing system brought up to code in 1998. One exception is lack of a backflow prevention device. Due to demolition scope and revised layout, system will, in all probability, require to be removed back to the main tree in Mechanical Room.

Main tree will accommodate addition coverage.

Heating and Ventilation Systems

Existing propane fired furnaces do not provide code required ventilation, and would not accommodate addition without another unit be provided.

Replacement with hydronic heating system and mechanical ventilation system(s) is recommended. Boilers should be complete with dual fuel burners.

Crawlspace requires ventilation as per NBC 6.2.2.7.

Kitchen

Kitchen lacks code required hand-wash sink, grease interceptor on dishwashing sink drain, and Class K Fire Extinguisher.

Existing rangehood exhaust and interlocked MUA unit on the roof of Secure Block meets code, but maintenance access to rooftop unit is hazardous and problematic.

If program changes so that Kitchen becomes a residential type, none of the above is required.

Crawlspace

There are asbestos piping elbows in Crawlspace that will be required to be removed.

Findings re Electrical Systems:

Electrical Service

Present electrical service to the building is limited to 200 amp, single phase which according to the supply utilities one year history is loaded to 60-70% during peak demand. Future load requirements may necessitate increasing the service size. Three-phase power, if required, is in the area according to Northland Utilities in Hay River. Distribution panels generally are near capacity for branch circuits. Motor control thermal protection switches are an older style of Square D for which parts will become increasingly difficult to find.

Branch Wiring

Branch wiring in a considerable percentage of the area is installed with armored cable that utilized an aluminum strap for ground. During any major future renovation it is recommended that this cabling be replaced to ensure proper bonding. The branch wiring within the crawlspace is a mixture of conduit, armored cable and non-metallic sheathed cabling with residential and specification grade devices installed.

Lighting

Lighting is provided by surface mounted F40/34 T12 fluorescent with wrap around lenses that presently require the installation of metal pieces to keep the lenses from falling out of the fixture. Incandescent recessed lighting is also in use. During any major future renovation it would be more cost effective to replace the fluorescent fixtures with T8 technology for energy savings and improved appearances. Recessed lighting could be enhanced with compact fluorescent technology. Emergency battery packs are 12-volt units that are interconnected with incandescent lamps within the exit fixtures. The exit fixtures have visibly yellowed providing a poor visual appearance, yet are illuminated with LED chandelier base lamps. Exterior HPS fixtures have plastic lenses that are exhibiting a yellowing appearance as well.

Low Voltage Cabling Systems

Networking category 5 and category 3 telephone cabling has been installed free air in the wood structure and loosely in the crawl space; no conduit system has been installed. A Norstar KSU and multi feature handsets are in use. The existing closed circuit television monitoring and recording system is an older technology with a highly visible presence. Security control cabling for the cell blocks has been abandoned within the crawlspace under the former control room. The original fire alarm system has been replaced with a new 30 zone Edwards EST panel with 10 zones in use. Fire alarm devices and wiring is original. During any major future renovation, the devices should be upgraded.

Standby Power

The generator is a relatively small 7.5 kW single phase unit that supplies the fire alarm system, security cameras, intercom system, mechanical room lighting, the sprinkler pre-action panel, furnaces 1-5, the emergency battery packs, battery charger, block heater and #1 supply fan according to the panel directory. Unit has only 140 hours of operation.

General Conclusions & Recommendations.

Conclusions & Recommendations
re Architectural/Structural Systems:

The 1967 major portion of the building has a durable and well constructed substructure and superstructure, but the weather-enclosing envelope requires upgrading to contemporary technical performance and energy conservation design standards in order to justify extending this portion=s service life economically. The 1978 addition structure and weather enclosing envelope appear to have deteriorated to the degree that structural and envelope remediation costs will not justify the available service life extension to be obtained. The 1985 addition, a non-combustible cell block, is in good structural condition, with ample remaining service life, but like the other portions of the building requires stabilization and upgrading of the weather-enclosing envelope.

Conclusions & Recommendations
re Mechanical Systems:

While all the existing systems are in good condition, there is no code required ventilation provided except in the Classroom, and all plumbing fixtures do not meet code. Provision of mechanical ventilation does not readily conform with existing warm air furnaces, so provision of a hydronic heating system and mechanical ventilation is required.
Although the existing plumbing and sprinkler piping systems are code compliant and in relatively good condition, the anticipated scope of demolition to meet the proposed program requirements means that most, if not all, of the piping will require modification.
The anticipated reclassification of the Kitchen to a residential use will result in the existing exhaust fan, rangehood, and Make Up Air Unit becoming redundant, so they should be removed.
In summary, if the proposed Addition / Renovation proceeds, we would recommend that all mechanical systems be removed back to the sprinkler tree and service entry / exit of plumbing systems.

Conclusions & Recommendations
re Electrical Systems:

The electrical systems are presently in fair operational condition. A few minor maintenance items should be addressed such as a few cover plates are missing in the crawlspace and the generator block heater was not operational. The poor visual appearance of the existing fluorescent lighting fixtures and exit lighting could be enhanced by replacement with T8 and LED technology.

Additions to the floor area and mechanical load requirements may necessitate an increase in the service size. If interior walls are to be relocated during any major future renovations, it is recommended that the branch wiring and branch circuit panels be upgraded.

Appendix 1

Northwest Territories Public Works and Services

Dene K'onia
Hay River, NT

Estimated Project Costs

December 10, 2004

1.0 Introduction

The Department of Health and Social Services in conjunction with Public Works and Services investigated the probability of altering the existing Dene K'onia Young Offenders Facility spatial program requirements to meet those of the Department of Health and Social Services for a "Children's Treatment Centre".

This estimate is intended to provide a realistic cost for the Alterations / Addition based on those findings.

1.1. Background:

Originally constructed in the mid 1960's as a Treatment Centre, the Dene K'onia Facility has undergone alterations and additions in 1977 and 1985 for conversion to a Young Offenders Facility.

Present spatial layout does not meet the needs of the program as developed by the Department of Health and Social Services and additional floor plate would be required.

A site visit was undertaken December 08 2004, with the Department of Health and Social Services, Public Works and Services and the Department of Justice to assess the present condition of the Dene K'onia Facility and the feasibility of providing the necessary additional program space.

From the documentation and information provided by HSS & PWS team members, it was determined that very little of the existing facility could be salvaged. Although the sub-structure and structure were determined to be acceptable, the extent of changes to the existing floor plan layout as required by the new program, major changes would be necessary. Operational equipment was deemed to have reached the end of service life and others do not have the capacity for expansion.

Municipal services and site development are deemed to be minimal.

1.2. Methodology:

Based on the information provided, it was determined that although some of the existing facility could be salvaged the costs associated with protection and remediation of those areas, minimal saving would be realized.

It is recommended that costing be prepared based on retention of the existing substructure and limited portion of the floor plate. Should the revised floor plate provide for additional savings, these should be considered premium.

Pricing reflects probable construction costs obtainable, on the effective date of this report. The estimate is a determination of fair market value for the construction of this project; it is not a prediction of low bid. Pricing assumes competitive bidding for every portion of the work.

The estimate was prepared in accordance with generally accepted principles and practices.

1.3. Specifications:

Specifications were not available at this stage and therefore, components and systems; quality standards were established which represent a level of quality and workmanship consistent with the nature of the project.

1.4. Exclusions:

The Construction Cost Summary does not provide for:

- Legal fees and expenses.
- Cost of work to remove contaminated soils, if applicable.
- Cost of Land.
- Cost of any infrastructure elements unless specifically included within this report.

1.5. Documentation:

The information utilized in the preparation of the estimate was provided by HSS and PWS team members.

1.6. Cost Base:

All hard costs are in the 3rd quarter, 2005 dollars on the basis of competitive prices being obtained from general Contractors and all sub-trades and/or suppliers.

1.7. Contingencies:

A construction contingency of 20% has been allowed for changes occurring during the course of construction.

1.8. Building Gross Floor Areas:

Gross Floor area with retained floor plate was calculated to be 467 m^2+/-.
The additional space was measured to be 290 m^2.
Revised Gross Floor area was calculated to be 760 m^2.

2.0 Executive Summary of Costs:

Estimated Hazmat Investigation Costs	$25,000.00
Estimated Hazmat	$100,000.00
Estimated Demolition Costs	$100,000.00
Estimated Geotechnical Costs	$5,000.00
Estimated Construction Costs	$2,100,000.00
Estimated Site Development Costs	$50,000.00
Estimated Civil Inspection Costs	$6,000.00
Estimated A & E Fees	$215,000.00
Estimated A & E Expenses	$25,000.00
Estimated Survey Costs	$20,000.00
Estimated PWS Service Fees	$15,000.00
Estimated Contingency {20% of Construction}	$420,000.00
Total Estimated Budget	$3,081,000.00
Round off	$3,100,000.00

Norm Dei, Quantity Surveyor
Asset Management
Public Works & Services

Department of Health & Social Services
Capital Project Substantiation

Appendix 2

Project Title: Children's Territorial Treatment Centre - Yellowknife

Community: Yellowknife

Region: 11

FISCAL YEAR:	Prior	Current	2003/04	2004/05	2005/06	2006/07	2007/08	Future
CAPITAL COSTS:	$	$	$	$ 3,307	$ -	$ -	$ -	$ -

BACKGROUND/SUBSTANTIATION:

This is a replacement project. The present 814 sq metre building was originally erected in 1967 with additions in 1995. $3.307 million is required to replace it with a facility that is up to current codes and standards and provide an additional 40 years life expectancy. A Technical Status Evaluation (TSE) was not done as the building was determined by PW&S to have no redeemable life expectancy. This is the sole facility in the NWT for this program (pre-teen children).

SCOPE OF WORK:

Construction costs:

Structure	$	351,120
Mechanical	$	660,060
Electrical	$	358,900
Envelope	$	486,360
Partitions, etc.	$	590,580
OHGC	$	245,496
	$	2,692,516

CAPITAL REQUIREMENTS:

As above.

O&M IMPLICATIONS:

Increase in building operating costs is expected.

Appendix - 3 **Cost for Territorial Treatment Centre -- Year 2003/04**

Description	Amount
TTC-Recoveries	
TTC-Purchased Serv	1,085,983.49
TTC-Fuel Oil	10,177.71
TTC-Propane	671.16
TTC-Electricity	14,275.71
TTC-Water & Sewage	2,245.29
TTC-Building/Grounds Mtce	36,340.29
Total:	**1,149,693.65**

DEPARTMENT OF JUSTICE

PROGRAM 82: Justice

DIVISION	5	Community Justice and Corrections
SECTION	1	Corrections
UNIT	4	Young Offender Facilities
BUDGET CODE:	882282	Dene Konia Utilities and Maintenance
COSTING:	0000-000-000	Unspecified

CONTROL/STD OBJECT		2002/03 Actuals	2003/04 Main Estimates	2003/04 Revised Main Estimates	2004/05 Main Estimates
1-10	Permanent Salaries	0	0	0	0
1-20	Casual Wages	(10)	0	0	0
1-30	Employee Benefits	0	0	0	
1-40	Employee Related Benefits	0	0	0	
TOTAL Compensation & Benefits		(10)	0	0	0
2-100	Grants	0	0	0	0
2-200	Grants-in-Kind	0	0	0	0
2-300	Block Funding	0	0	0	
2-400	One-Time Contribution	0	0	0	
2-500	Ongoing Contributions	0	0	0	
2-600	Contributions-in-Kind	0	0	0	
TOTAL GRANTS & CONTRIBUTIONS		0	0	0	0
3-100	Travel and Transportation	0	0	0	0
3-200	Materials and Supplies	55	32	32	32
3-300	Purchased Services	0	0	0	0
3-400	Utilities	29	40	40	40
3-500	Contract Services	0	0	0	0
3-600	Fees & payments	0	0	0	0
3-700	Other Expenses	10	4	4	4
3-800	Tangible Assets	0	0	0	0
3-900	Computer Hardware & Software	0	0	0	0
TOTAL OTHER O&M		94	76	76	76
3-100	Amortization Expense	0	0	0	0
TOTAL AMORTIZATION		0	0	0	0
TOTAL O&M		84	76	76	76

Appendix 4

g-6-136-0546hrs

Appendix 5.

Cost if Hay River Health Authoriy Runs Territorial Treatment Centre

Position	EFT	Salary	Benefits @ 18.61%	Northern Allowance	Total Compensation
CSSW IV	1.0	$ 76,240	$ 14,188	$ 3,366	$ 93,794
CSSW III	1.0	$ 70,479	$ 13,116	$ 3,366	$ 86,961
Team Leader (CSSW II)	1.0	$ 65,116	$ 12,118	$ 3,366	$ 80,600
LPN	12.0	$ 648,396	$ 120,666	$ 40,392	$ 809,454
LPN Casual	0.4	$ 21,613	$ 4,022	$ 1,346	$ 26,982
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LPN Casual	0.4	$ 21,613	$ 4,022	$ 1,346	$ 26,982
	18.2	$ 1,033,137	$ 192,267	$ 61,261	$ 1,286,665

Cost of contract (compensation only) with Current Contractor $ 1,160,040

Assumptions
1. CSSW IV pay step based on 17-3. This is an extra position needed if GNWT is running the program
2. CSSW III pay step based on 15-3
3. CSSW II pay step based on 13-3
4. LPN pay step based on 10-3
5 Used GNWT rates for 2004/05 based on a 40 hr work week
6. Positions are estimated positions that will be needed (position name not EFT) but is assumed to be an average