LEGISLATIVE ASSEMBLY OF THE
NORTHWEST TERRITORIES

10TH ASSEMBLY, 9TH SESSION

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DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
EXECUTIVE SUMMARY
to Discussion Paper
Maximum Local and Northern Employment
and Business Opportunities on
Construction Projects

BACKGROUND:

In order to stimulate the N.W.T. economy to the extent possible the Executive Council is committed to delivering its capital construction programs in a manner which maximizes employment and business opportunities for Northern and local residents.

The Department of Public Works and Highways and the N.W.T. Housing Corporation have been highly involved in developing and implementing policies and programs related to the achievement of local and Northern involvement. Further increases to these already high levels of involvement are planned.

PROPOSAL SUMMARY:

The G.N.W.T. proposes to improve and expand upon the approaches utilized to maximize local and Northern involvement on appropriate capital projects in the following ways:

Main Thrusts

 Tender and Award Contracts on the Basis of Local and Northern Involvement

Projects will be tendered publicly and award will be based on maximizing the usage of Northern and local labour, subcontractors, equipment, construction materials and local accommodations. This approach would be clearly outlined in the tender call and would be explained to all interested bidders at a pre-tender meeting.

2. Partial Authority to Community Council

Projects are turned over to the community to manage all or certain phases of planning or implementation. This approach would allow the communities a higher level of involvement in projects. The community would be expected to follow existing Government Regulations, Policies and Directives designed to maximize local and Northern involvement.

3. Construction Management by GNWT/Contractor

The G.N.W.T. would act as general project superintendent and all subcontracts for labour, materials and other services would be awarded separately to achieve the maximum Northern and local involvement.

4. Direct Negotiations of Construction Contracts

This approach would be used in communities where only one qualified contractor exists in the community where the project occurs. The Government would only negotiate on the basis that the contractor would utilize only Northern or local subcontractors, labour, materials and other services to the extent these are available in the N.W.T.

Other Thrusts

The following measures may be used separately or in conjunction with the approaches outlined above:

Hiring Local Project Assistant

On projects exceeding \$50,000 a local resident would be hired and trained on the project-site to assume project administration duties such as liaising with the local workforce and monitoring the project work. As ability of the Assistant increases further training and increased responsibilities will result.

2. Establish Joint Project Committees With GNWT/Community Representative

These committees would be formed to coordinate all non-technical aspects of the project. Representation would include both community and Government officials and would be specifically responsible to ensure local involvement initiatives planned for the project are being achieved.

3. Establish Training Program for Contractor Employees and Support for Private Sector Apprentices

The Department of Education's resources through the Arctic College will be made available to assist local contractors in developing and implementing training programs. Also the recently established Department of Education's Private Sector Apprenticeship Program will be available to contractors.

4. Provision of Bonding Assistance

As part of the G.N.W.T's efforts to maximize local and Northern involvement, existing Economic Development and Tourism programs which provide bonding assistance to Northern companies will be reviewed and amended as required to provide appropriate support to contractors.

FACTORS:

- 1. The Government has identified the lack of locally available skilled workers as the major barrier to increasing local employment on construction projects. Integral to increasing the levels of local and Northern involvement will be the provision of training and apprenticeship programs in the construction trades to local residents.
- 2. These training programs will have to be implemented either in an academic environment or in the local community, on the job site. This second approach is best suited to the needs of communities and their residents and is the approach considered necessary in conjunction with approaches suggested.
- Implementation of these local and Northern involvement approaches will have the following impacts.
 - a. Project costs will increase: Unskilled/untrained personnel are not as productive as trained construction trades people. Providing increased guidance and training will cost more.
 - b. Project construction time will be extended: The facility will not be available as soon as if employing skilled workers. Training is a time-consuming process, and delays may be incurred in completion of facilities.
 - c. More time will be required to plan projects: Resources and desires of the community must be identified and evaluated, and specific procedures for each construction project must be identified in response.
 - d. More projects will be of stick-built construction: Buildings of wood are more labour-intensive and offer more opportunity for local involvement and carpentry training.
 - e. Project management workload and Government overhead costs will be increased.

DISCUSSION PAPER Maximum Local and Northern Employment and Business Opportunities on Construction Projects

INTRODUCTION:

With the recent downturn in the Northern economy as a result of low world prices for furs, oil and minerals, the Executive Council has directed that even greater emphasis be given to increasing the level of local and Northern employment and business opportunities to ensure that a higher level of Government dollars are retained in the North.

This Discussion Paper is being tabled in order to advise the Members of the Legislative Assembly and through the Assembly the people of the Northwest Territories of some of the approaches being considered by the Department of Public Works and Highways and the N.W.T. Housing Corporation to stimulate employment and skills training opportunities for N.W.T. residents, through the Government's Capital Construction programs.

BACKGROUND:

A major priority of the G.N.W.T. has been to deliver programs and services in a manner which emphasizes employment and business opportunities for Northerners.

The Department of Public Works and Highways has played a major role in developing and implementing various new policies and procedures aimed at achieving a high level of Northern and local involvement. For example, over the last several years the Department has implemented internal directives which:

- Require construction contractors to use local commercial accommodations in communities; and,
- 2. Give preference to Northern architectural and engineering consultants being hired by the Government.
- Require contractors to report on the level of local and Northern involvement they achieve on capital projects awarded to them.

The Northwest Territories Housing Corporation has also been very actively involved in developing new policies and processes

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which are aimed at achieving higher levels of local and Northern involvement. For example:

- 1. The N.W.T. Housing Corporation tenders for separate supply and erect contracts for most of their housing projects. This approach allows the smaller companies to bid on contracts, particularly to provide labour for housing projects. Northern companies have shown great interest in this approach while Southern firms have shown little interest in bidding on labour only contracts.
- The Corporation includes provisions in its tender documents which promote contractors to use local accommodations wherever available and feasible.
- 3. The Corporation has introduced the inclusion of community/ contractor local labour identification and usage in all its capital projects this year. This new process is implemented at a pre-construction meeting held in the community, and then managed and monitored by Corporation Project Management staff for the duration of the contract.

The Department of Public Works and Highways has been highly involved in developing the Government's Business Incentive and Privatization Policies and both DPW&H and the N.W.T. Housing Corporation are actively involved in implementing the Business Incentive Policy.

Implementing increased levels of local and Northern involvement, beyond those already being achieved by DPW&H and the NWTHC will require significant financial and staff input from a number of other Government Departments including:

- The Department of Education which may provide academic and hands on training through various Departmental programs.
- The Department of Economic Development and Tourism which may provide assistance and support to new local businesses.
- 3. The service Departments of Finance, Government Services and Personnel which may be required to facilitate and assist in implementing special measures related to the payment of contractor invoices, amending the tendering procedures for materials and in the hiring of workers on the job site.

The maximizing of local and Northern involvement opportunities has been an important thrust for the Department of Public Works and Highways in the last several years. In 1986/87, of the 1199 construction, operation and maintenance contracts awarded by the Department, 962 (81%) went to Northern contractors. The total value of contracts awarded to Northern companies was \$62.2 million. Eighty percent of our architectural and engineering contracts were awarded to Northern consultants, representing 88% of the total dollar value spent on consultant services.

On an individual project basis the Department of Public Works and Highways has been able to maximize Northern and local involvement opportunities as is illustrated in Attachment 1. For example on the Nahanni Butte School, approximately 70% of all labour was local or Northern, with a total Northern and local payroll of \$157,000 out of a total payroll for labour of \$224,000. On a total project basis 52% of the project's cost was applied in the North. By excluding materials purchased from a Northern company but supplied from the South, the percentage of this project accruing to Northern and local individuals and businesses was 78.5%.

The Corporation is also achieving impressive levels of local and Northern involvement on its housing construction projects. For 1987 to date, the Corporation has issued 93% of construction contracts to Northern firms. The dollar value of the contracts going to these Northern firms represents 93% of their planned contract expenditures. These figures are not yet finalized as only 75% of the Corporation's contracts have been awarded so far this year.

The construction management approaches discussed in this paper are intended to allow the GNWT to continue and expand the levels of Northern and local involvement beyond the levels achieved already.

The term local and Northern involvement includes any or all of the following measures generally enforced through our construction contracts aimed at creating opportunities for employment and training.

- Use of local accommodations by all workers from outside a community.
- 2. Use of local and Northern labour on the job site.
- Provision of training to local and Northern labour force, usually combined with work on job site.
- 4. Use of local and Northern subcontractors.
- 5. Use of equipment from local and Northern firms.
- 6. Use of local and Northern cartage/transportation.
- 7. Provision of materials by local and Northern suppliers.
- 8. Use of local and Northern general contractors.
- Hiring of general superintendents capable of on-site construction management working with local workers.

10. Use of local project assistants.

The use of these measures will continue to depend on size, scope, location, timing or funding for the project and availability of the goods and personnel services in the local community.

PRINCIPLES

The GNWT is committed to maximizing employment opportunities for all NWT residents. The Government will implement its annual capital construction program, to the extent possible, utilizing various approaches to project management which will emphasize and maximize employment and training opportunities for local and Northern residents.

Furthermore, the implementation of local involvement approaches must be consistent with the following GNWT policies and DPW&H directives.

- 1. Business Incentive Policy.
- Directive on the Use of Commercial Accommodations by Contractors.
- Directive on the Selection of Architectural and Engineering Consultants.
- Timing of Payments Directive (Department of Finance Directive).
- 5. Privatization Policy.

PROPOSAL SUMMARY:

The majority of capital construction projects are now implemented through the public tender and award process set by the Government Contract Regulations. Over the past several years, individual projects have been implemented based upon decisions to maximize Northern and local involvement opportunities. The local and Northern involvement approaches described below have all been utilized, to some extent, to achieve this end.

The Government is proposing to improve and expand the approaches utilized in the past and to increase the number of projects implemented using these approaches. The Government will continue to determine the method of implementing individual capital projects and the appropriate local and Northern involvement approach to be used.

While the Housing Corporation concurs with the Government's steps to maximize Northern involvement in business through innovative contract awards and management, it cannot participate

to the full extent. The Corporation must operate with due consideration to C.M.H.C. and the contracting procedures that apply to jointly funded projects; however, the implementation of the separate supply and labour contracts has resulted in Northern firms being the low hidder in over 90% of capital construction tenders. The Corporation, while having some limitations, will continue to look at initiatives through which it can participate to expand Northern employment and business opportunities.

Local and Northern Involvement Approaches

Main Thrusts

1. Tender and Award on the Basis of Local and Northern Involvement

In this instance the project would be awarded on the basis of public tenders with qualifications. Conditions would include stipulations as to Northern and local labour content; use of local accommodations and provisions as to material sources and/or equipment suppliers, and stipulations as to subcontractors. Recording and reporting actual hours of work by local and Northern labour will also be required.

In conjunction with implementing this approach, a proposed modification to our tender and contract documents is planned. The Public Works and Highways Major Works Tender form presently requires all bidders to list their proposed sub-trades. The Housing Corporation also requests similar information in its housing tenders.

A proposed modification to the form will request bidders to list, in addition to the present information, the lowest priced Northern subcontractors they would be willing to use and the additional premium, if any, the GNWT would be required to pay should the GNWT elect to choose these alternate Northern subcontractors. (Generally these are Northern subcontractors whose prices may not be within 5-10% of the lowest Southern subcontractor). This listing will not include those Northern subcontractors which the bidder has already proposed to use. The proposed new form is attached as Attachment 1.

This approach would allow the GNWT to increase the amount of local and Northern involvement and the premium required will be easily identified. Use of this approach, however, may require extended contract award periods. Executive Council approval will be required in certain cases.

Criteria

 Projects will be tendered with a statement as to the GNWT's intent to award on the basis of local and Northern involvement.

- A pre-tender meeting will be held to explain to all bidders the GNWT's intent.
- 3. Establishment of a joint committee composed of community and Government representatives to monitor the project. Project budget control would be by the Department of Public Works and Highways or the N.W.T. Housing Corporation.
- A "local project assistant" will be hired on selected projects with estimated construction costs over \$500,000.
- Persons interested in working on upcoming projects in their community will be identified in advance with skill levels noted, as a courtesy to contractors.
- Require general contractors to list the premium, if any, to use local and Northern sub-trades which would normally not be used due to higher prices.

Implications

- Southern contractors could view the provisions as precluding competition.
- Significant involvement in the joint committee would be required from the community.
- Training aspects would require monitoring for effectiveness by GNWT.
- 4. Our Government's experience is that projects implemented in this manner cost more but are worthwhile due to the increased benefits to Northern firms and residents.
- Added administration and coordination by the Government would be necessary.

2. Partial Authority to Community Council

In this instance Project Management authority is delegated to Community Councils to varying degrees. Depending upon the complexity of the project and the experience of the Community Council, projects could be turned over at any point from planning to construction. The community could conceivably engage the services of planning consultants for planning and programming; architects or engineers for design and contract documents, and enter into construction contracts with full fiscal responsibility. This approach would be implemented in line with the Municipal Capital Assistance Policy being finalized by the Department of Municipal and Community Affairs.

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Criteria

- Communities undertaking this approach would be selected on the basis of capability and willingness. The communities must have formally indicated a willingness to participate in project planning and/or implementation.
- The community must be assessed by the G.N.W.T. as capable of undertaking partial management of project planning and/or implementation.
- 3. The community must sign a Partial Project Authority Agreement which sets out all terms and conditions under which the GNWT and the community will manage the project.
- 4. The community must follow the Government's Business Incentive Policy, Government Contract Regulations and Directives on the Selection of Architectural and Engineering Consultants and Use of Commercial Accommodation by Contractors.
- 5. The community must agree to participate on a project management committee together with participants of the Department of Public Works and Highways or the N.W.T. Housing Corporation and the client Department. Such a committee is to be established for each project implemented under this approach.

Implications

- 1. Community pride commensurate with degree of involvement.
- 2. Experience in Project Management for local participants.
- 3. Increased training opportunities for local labour.

3. Construction Management by GNWT/Contractor

In this instance an individual employed by the GNWT, or by a firm under contract to the GNWT, would act as general superintendent. All contracts for labour, materials and services would be awarded separately. All payment control, administration accounting and other management aspects would be handled either by the GNWT or the contractor.

Criteria

1. Projects would be smaller and simpler where the potential for local labour involvement is greater.

- Establishment of a joint committee composed of community and Government representatives to monitor the project.
- 3. Project superintendents must have the experience and ability to work with local residents in isolated Northern communities.
- 4. The communities must indicate their willingness to support this approach.
- Government procedures for purchasing materials and hiring of staff on-site must be reviewed and revised as required.

Implications

- Community pride commensurate with the degree of involvement.
- Training opportunities in accordance with the superintendent's capabilities.
- 3. Cost and time premiums consistent with using projects as on-the-job sites may be expected.

4. Direct Negotiations

In this instance the GNWT would award the construction contract without a tender call. The contract may be for an entire project or for a portion thereof.

Criteria

The circumstances of this form of contract would be extraordinary.

- Only companies that are Northern contractors as defined by the Business Incentive Policy would be considered.
- 2. 100% Local/Northern labour would be required.
- 3. 100% Northern subcontractors if available in the NWT. The list of subcontractors to be used must be agreed to during the negotiating process.
- Use of local accommodations if available would be required.
- 5. Construction would be in accordance with designs and standards approved by the Department of Public Works and Highways or the N.W.T. Housing Corporation.

- Construction would be in accordance with all GNWT regulations and applicable codes.
- All material must be purchased through Northern suppliers, if available in the NWT.
- All equipment would be 100% Northern supply if available in the NWT.
- All transportation would be through Northern companies where applicable.
- All Government grants would be deductible from project costs. No duplicate funding would be considered.
- Total disclosure of a company's financial position would be a condition of negotiation.
- 12. Any decision to negotiate must be approved by the Executive Council.
- 13. This approach will only be considered in localities where there is only one qualified contractor who could do the work.
- 14. Only companies located in the community where the project occurs will be considered for award.
- 15. Terms and conditions of negotiated contracts are subject to approval by the Financial Management Board.
- 16. A joint committee composed of community and Government representatives would be established to monitor the project.
- 17. A "local project assistant" position would be created to aid in job coordination.

Implications

- 1. Local companies will gain experience in contracting.
- Negotiated contracts lack the benefit of competition and traditionally cost more than those tendered publically.
- Not possible to identify contract premium being paid as a result of negotiating rather than public tendering.

OTHER THRUSTS:

The following measures may be utilized in conjunction with the approaches listed above or on any appropriate capital projects.

1. The Hiring of Local Project Assistants

It is proposed to employ a suitable local resident in a project assistant capacity for selected projects in excess of \$500,000. Initial duties would include time keeping; clerk-of-the-works functions such as recording deliveries and shipments, project monitoring, liaison with local work force and assignments from the project officer. Depending on aptitude and progress, duties could expand into more formal clerk-of-the-works status, and more sophisticated job monitoring. Individuals displaying aptitude and willingness would be encouraged to develop through training courses and further education with a view to employment in project management within the GNWT or with contractors.

Candidates for this position would be selected on the basis of qualifications, capability and ability to speak the local language as well as English. Some contruction training, and/or secondary schooling or adult education could be requirement. Community standing and people skills should be considered.

2. The Establishment of a Joint Committee of Local Involvement

This committee would involve all of the major participants community and Government project including would provide both improved Ιt representatives. communications and an opportunity for local input into the project. The committee would review the non-technical aspects of the project, such as, the use of local resources, local training programs, and any concerns impacting the community or the contractor. The committee through regular meetings (to coincide with the schedule of project site meetings) would verify/monitor the contractor's performance in comparison to tender proposal; i.e. Business Incentive Northern Contractors, Local/Northern Proposed Involvement, Training Programs, etc.

This approach to project management can be used in all major capital projects. To be successful, all of the parties must be dedicated to the principle on which it is based - a local community having a legitimate right to be involved in projects that have a significant impact on its way to life - and must be willing to commit a great deal of time and energy to making it work.

3. Provision of Specific Training for Contractor Employees and Provision of Support for Private Sector Apprentices

On any given project, requirements may exist for specialized training of a contractor's locally hired workers. The Government, through the Department of Education and the Arctic College, must be available to assist contractors in developing and implementing the necessary courses.

In addition, the Department of Education has already established a new program for the support of apprentices in the private sector. One of the major review exercises facing the Government is to analyze the best means to coordinate apprentice training between public and private sectors. Such options as rotating private and public sector apprentices are to be examined. The goal is to provide a greater range of skills training to the apprentice and to assist private sector contractors in continuing the training of apprentices when construction work slows down during the winter.

4. Provision of Bonding Assistance

One of the challenges facing the Government is to assist small local contractors who have difficulty in getting bonding or whose bonding capacity has reached its limit.

The Department of Conomic Development and Tourism has already established programs to assist the private sector contractors on this and other fronts. As part of this Government's efforts to increase local and Northern involvement, existing programs will be reviewed and amended as required to provide appropriate and necessary support to local and Northern contractors.

5. Senior Management Review Committee

In order to ensure that the Government's desires to increase local and Northern involvement are met, the Executive Council has formed a committee of Deputy Ministers from the various Departments who must play leading roles in this review. The committee will be chaired by the Deputy Minister of Public Works and Highways, and will include as a core group the Department Heads for Economic Development and Tourism, Education and the NWT Housing Corporation.

FACTORS:

1. Lack of Applicable Skills

In developing its initiatives, the Government has identified as the major barrier to local employment on construction projects, the lack of locally available skilled personnel. Compounding this problem is the immobility of skilled labour. People are generally unwilling to move in order to work. This is a problem faced by contractors and businesses, whether out-of-community construction companies or local contractors. If local unemployed persons were

trained in construction trades, such as carpentry, electrical work, plumbing, painting and drywalling, etc., then the initiation of construction projects would in itself be a reasonable solution to the problem of unemployment. However, in spite of the increase in the scope of this Government's capital plan and the initiatives mentioned earlier, unemployment in our small Northern communities remains a concern. We are told repeatedly by contractors that they are not able to hire locally the skilled tradespeople needed to do the work - in spite of high numbers of unemployed people. Further attempts to enforce local hiring by contractors (as has been the main thrust of existing measures) without establishing further initiatives that address this fundamental problem, will not achieve the local employment goals desired by the Executive Council.

The Department of Education is taking steps to address this problem by establishing an apprenticeship program to support the private sector.

2. Provision of Training

The provision of more and greater opportunities for Northerners to train and learn the necessary trades skills is seen by the Government as a key component of any plan to addressing the unemployment problem.

Training can be provided either in an academic environment or in a work environment, i.e.: on-the-job. For many obvious reasons, this first option is neither a practical nor a possible solution to the problem in the short to medium term. If locally available but unskilled persons are to be employed on these construction works, it will mean that the projects will have to be implemented in ways, such as the approaches outlined in this paper, that will accommodate their existing skill levels and provide them with on-the-job training.

3. Impacts

- Project costs will increase: Unskilled/untrained personnel are not as productive as trained construction trades people. Providing increased guidance and training will cost more.
- 2. Project construction time will be extended: The facility will not be available as soon as if employing skilled workers. Training is a time-consuming process, and delays may be incurred in completion of facilities.
- 3. More time will be required to plan projects. Resources and desires of the community must be identified and evaluated, and specific procedures for each construction project must be identified in response.

- More projects will be of stick-built construction. Buildings of wood are more labour-intensive and offer more opportunity for local involvement and carpentry training.
- Project management workload and Government overhead costs will be increased.

As previously noted, it will be important that the Government recognize these impacts and be prepared to commit sufficient resources of staff and funding in support of project planning and implementation, if the new initiatives are to succeed.

4. Financial

The specific financial impacts of implementing these approaches cannot be estimated accurately as the impact will vary with the approach selected. Issues such as funding availability, time frames for completion and other factors must be reviewed for each project.

CONCLUSION

The Government is committed to increasing the levels of local and Northern involvement achieved on capital construction projects. This should translate into increased long term employment opportunities for N.W.T. residents and contractors and developing a workforce which has the necessary training and experience to provide most if not all of the trades and management skills required on construction jobs.

The Government intends to examine all viable options to achieve even a higher level of local and Northern involvement than has been attained to date, and to commit the necessary resources to ensure successful implementation in the future.

MAHAMKI BUTTE SCHOOL Analysis of Local and Northern Involvement

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Local	\$ \$1	105,000	47							3,840	100					108,840	24
Northern	\$ \$	51,785	23	114,815	75	27,525	100	5,795	100			25,300	100	21,765	100	246,985	53
Sub Total	\$	156,785	70	114,815	75	27,525	100	5,795	100	3,840	100	25,300	100	21,765	100	355,825	77
Southern	\$ *	67,000	30	38,800	25											105,800	23
Grand Total	\$ *	223,785	100	153,615	100	27,525	100	5,795	100	3,840	100	25,300	100	21,765	100	461,625	100

^{1) %} of Project Grand Total

²⁾ Materials purchased from a Northern Supplier but shipped directly from south for this job. If this material is considered as southern, Total Southern expenditures would increase to \$220,615 or 48% of total cost, leaving only 52% for northern and local.

BUILDING CONSTRUCTION LIST OF SUB-CONTRACTORS (ALTERNATE)

The following are the Sub-Contractors we propose to use for the Division or Sections of Work listed hereunder and I/We agree that if any changes are made without written authorization, the contract may be terminated at the option of the Minister. Failure to complete this appendix may result in the Tender being disqualified.

The price listed on page 1 of this Tender Form is based on the sub-contractors listed in part "A" hereunder. This price will increase by the premiums specified in part "B" of this Appendix should the G.N.W.T. elect to use more northern subtrades.

Α.	Division Or Section Of Work	Name Of Sub-Contractor
١.	Sitework	
2.	Pilings	
3.	Structural/Framing	
4.	Roofing	
5.	Dr ywall	
6.	Flooring	
7.	Painting	
8.	Mechanical	
9.	Electrical	
10.	Controls	
11.		
12.		

In cases where the above specified sub-contractors are non-northern firms, bidders are requested to list below the lowest northern firm and premium the G.N.W.T. would be required to pay if the G.N.W.T. wishes the Contractor to use them.

•B•	Division Of Work	Northern Subcontractor	Premium		
1.	Sitework				
2.	Pilings				
3.	Structural/Framing		1		
4.	Roofing		l .		
5.	Dr ywall		1		
6.	Flooring		1		
7.	Painting		1		
8.	Mechanical				
9.	Electrical		1		
10.	Controls				
11.	1				
12.					