HB

264

HOUSE COMMITTEE REPORT

(7)

Date Referred to Committee: April 14, 2003

FURTHER REFERRALS: Labor and Commerce
Finance

Date of Committee Action: 4-24-03

The COMMUNITY AND REGIONAL AFFAIRS Committee considered: **HB 264**

HOUSE BILL NO. 264 **STATE CONSTR. PROJECTS; REVIEW/INSPECTION**

"An Act relating to the review of certain state public construction projects for compliance with building and other safety codes, relating to the inspection of certain state public construction projects, and exempting certain state public construction projects from obtaining building permits from municipalities, from municipal inspection during construction, and from complying with a review requirement; and providing for an effective date."

Recommends it be replaced with [ ] HCS *or* [ ] CS *for* _____ (_____)
For Senate Bills with new title: [ ] Technical Title [ ] New Title: HCR_____ **[ ] Same Title [ ] New Title**

[ ] attach amendments
[ ] add new referral to _____Committee
[ ] Letter of Intent_____Committee

List of Abbrev for Depts.:
ADM
CED
COR
CRT
EED
DEC
DFG
GOV
HSS
LEG
LAW
LWF
MVA
DNR
DPS
REV
DOT
UA

NEW FISCAL NOTES *Assigned by Chief Clerk's Office				
List by Dept(s):	*FN#	Fiscal	Indet.	Zero
DOT/PF				✓

PREVIOUS FISCAL NOTES				
List by Dept(s):	FN#	Fiscal	Indet.	Zero

Signing with recommendations	Printed Last Name	DP	DNP	NR	AM
	KOTT				✓
	ANDERSON	X			
	SAMUELS	X			
	WOLF	✓			
	CISSNA				✓
Chair:	MORGAN				✓
Chair:					

COMMITTEE: House Community and Regional Affairs Standing Committee	SUBJECT: HB 264 STATE CONSTR. PROJECTS; REVIEW/INSPECTION

DATE: April 24, 2003

PLEASE SIGN IN

PLEASE PRINT: NAME & TITLE	ADDRESS	PHONE	REPRESENTING (No acronyms unless for a state agency, please)	DO YOU WANT TO TESTIFY ?
Sam Kito III	155 S. Seward St.	586 0753	City + Borough of Juneau	N
E-mail address:	sam-k.kito@ci.juneau.ak.us			
Tim Rogers	PO Box 196650	343-4467	Municipality of Anchorage	YES
E-mail address:	ROGERSTA@CI.ANCHORAGE.AK.US			
Nancy Peterson	Box 307	835-2531	City of Valdez	No
E-mail address:				
Nancy Slagle	3132 Channel Dr	465-3911	DOT+PF	If needed
E-mail address:				
E-mail address:				

ALASKA STATE LEGISLATURE
House of Representatives

COMMITTEE ASSIGNMENTS:

RULES COMMITTEE, CHAIRMAN
LABOR & COMMERCE COMMITTEE, MEMBER
LEGISLATIVE COUNCIL, MEMBER
SPECIAL COMMITTEE ON OIL & GAS, MEMBER
LEGISLATIVE ETHICS COMMITTEE, MEMBER

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Representative Norman Rokeberg

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SECTIONAL ANALYSIS FOR HB 264
BY: Representative Norman Rokeberg

Title: An Act relating to the review of certain state public construction projects for compliance with building and other safety codes, relating to the inspection of certain state public construction projects, and exempting certain state public construction projects from obtaining building permits from municipalities, from municipal inspection during construction, and from complying with a review requirement; and providing for an effective date.

Section 1: Adds exemption from permit, review and inspection to the list of provisions that supersede existing and prohibit future home rule enactments.

Section 2: Creates a new statute within Title 29, Municipal Government, that exempts certain public projects from municipal review, permits and inspections.

Section 3: Conforming amendment referencing new exemption.

Section 4: Conforming amendment referencing new exemption.

Section 5: Conforming amendment referencing new exemption.

Section 6: Review and permitting of state agency construction projects.

(a) For projects over $1,000,000, the commissioner may contract a private nongovernmental organization or a person certified by a private nongovernmental organization to review a public project for compliance with local building standards.

(b) The review made under (a) of this section shall determine if the project complies with the building and other safety codes that apply to the project. All findings from the review shall be submitted to the commissioner.

(c) If the project is projected at $1,000,000 or more, and has been reviewed under (a) of this section, a building permit from the municipality is not required, the department is not required to submit plans to a planning commission, and the project is not subject to inspection by the municipality during construction.

(d) Definitions.

Section 7: Applicability. This Act only applies to a public project whose design begins on or after the effective date of this Act.

Section 8: This Act takes effect immediately.

ED 1: 4/22/03

ALASKA STATE LEGISLATURE
House of Representatives

COMMITTEE ASSIGNMENTS:

RULES COMMITTEE, CHAIRMAN
LABOR & COMMERCE COMMITTEE, MEMBER
LEGISLATIVE COUNCIL, MEMBER
SPECIAL COMMITTEE ON OIL & GAS, MEMBER
LEGISLATIVE ETHICS COMMITTEE, MEMBER

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SPONSOR STATEMENT FOR HB 264
BY: Representative Norman Rokeberg

Title: An Act relating to the review of certain state public construction projects for compliance with building and other safety codes, relating to the inspection of certain state public construction projects, and exempting certain state public construction projects from obtaining building permits from municipalities, from municipal inspection during construction, and from complying with a review requirement; and providing for an effective date.

Ted Stevens International Airport (ANC) is the largest airport in the state. For those who use the airport frequently, it seems that the construction season never ends and the new Concourse C, which is part of the controversial Terminal Redevelopment project, has been fraught with delays in securing building permits. In fact, construction was delayed for such an extended time period that it has cost the state approximately $33 million and construction is not yet complete. The events that caused the permitting delays in the construction of Concourse C at ANC are not acceptable and must be avoided in future construction.

Because of concerns over the permitting issue and cost implications, Legislative Budget and Audit was requested to review the matter. The audit results clearly show many problems. One problem was that Municipality of Anchorage's plan review engineers lacked the expertise and time for a project with the scope and the size of the airport terminal project. As a result, the process of permitting became onerous and adversarial at times.

In an effort to prevent this type of protracted permitting process from happening again, I have sponsored this legislation. HB 264 exempts state building projects that cost over $1 million from local (municipal and borough) permitting processes. These projects will instead be reviewed by national organizations equipped to handle large projects or local engineers who are certified by these national organizations. It is expected that this legislation will help prevent the time delays and cost overruns that have plagued the state in many building projects.

I encourage your support of this legislation.

FISCAL NOTE

STATE OF ALASKA
2003 LEGISLATIVE SESSION

Fiscal Note Number:
Bill Version: HB264
() Publish Date:

Revision Date/Time (Note if correction):
Dept. Affected: DOT&PF
Title: State Construction Projects; Review/Inspection
BRU
Component
Sponsor: Rokeberg
Requester: HCRA
Component No.

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL EXPENDITURES	0.0	0.0	0.0	0.0	0.0	0.0
CHANGE IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2003) cost: 0.0
Mark this box (X) if funding for this bill is included in the Governor's FY 2004 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*

HB264 will have no fiscal effect on the department. Any cost savings associated with permits will likely be spent contracting with experts to complete reviews and inspections. The option of hiring third party experts to do plan reviews will allow the department to avoid extensive, costly delays associated with the review process.

Prepared by: Dennis R. Poshard
Phone 465-3900
Division: Special Assistant to Commissioner
Date/Time 4/23/03 4:27 PM
Approved by: Commissioner Mike Barton
Date 4/23/2003
Agency: Alaska Department of Transportation and Public Facilities

(Revised 9/2002 OMB)

Municipality of Anchorage

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George P. Wuerch, Mayor

OFFICE OF PLANNING, DEVELOPMENT, AND PUBLIC WORKS
4700 S. Bragaw

June 6, 2002

Mr. Mike Marsh
Legislative Budget and Audit Committee
Division of Legislative Audit
3305 Arctic Blvd., Suite 101
Anchorage, AK 99503

Dear Mr. Marsh:

Thank you for allowing the Municipality of Anchorage the opportunity to review the preliminary audit of the passenger terminal construction project at Anchorage International Airport. I have reviewed the revised document and have no further comments to offer beyond those included in our letter of April 26, 2002 addressing the draft audit. In my review of the preliminary audit, I noticed some of our comments have been addressed, while others have not. We remain concerned the underlying inference is the Municipality of Anchorage permit process/staff caused the delay in construction of the terminal building. While the report states it will not be addressing the technical questions regarding design quality, we contend it is that specific question that must be answered to ascertain any allocation of responsibility over the issuance of the building permit. Therefore, again, we will refer our comments back to our April 26, 2002 letter to you. If you would like another copy of that letter, please let me know.

Thank you again for allowing the Municipality of Anchorage the opportunity to review the preliminary audit.

Sincerely,

Craig E. Campbell

Craig E. Campbell
Executive Director

CEC/sg

MOA
Audit Response

Municipality of Anchorage

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George P. Wuerch, Mayor

OFFICE OF PLANNING, DEVELOPMENT, AND PUBLIC WORKS
4700 S. Bragaw

April 26, 2002

Via Fax: (907) 561-1452

Mr. Mike Marsh
Legislative Budget and Audit Committee
Division of Legislative Audit
3305 Arctic Blvd., Ste. 101
Anchorage, Alaska 99503

Dear Mr. Marsh:

RE: Management Letter No. 1 - Stevens International Airport Redevelopment Project Concourse C Permitting Dispute

The Municipality of Anchorage (MOA) appreciates the opportunity to respond to your letter, dated March 15, 2002. Pursuant to your request, I asked our Development Services Department to review your letter and provide any information that may be beneficial in articulating the Municipality of Anchorage's position regarding the permitting process for the "C" Concourse expansion at Stevens International Airport, Anchorage.

The Municipality of Anchorage wants to clarify a few issues after reviewing of your letter. It appears the audit report leads a reader to conclude the Municipality of Anchorage has caused the delays in permitting due to the "MOA being unreasonable in the amount of documentation the city is demanding to support the permit application" and that the "airport terminal project overwhelmed MOA's in-house permitting resources." We take exception to that conclusion.

The audit report alleges the scope, size, and timeliness of the project, taken together, exceeded the in-house capability of Building Safety. According to the audit, that conclusion is based on the fact the review process exceeded the 70 day review period originally agreed to between ADOT and the MOA, as well as the fact there were disputes involving calculations that ultimately resulted in the MOA hiring two third-party engineering firms to represent the MOA's position. It is true a full permit was not issued within 70 days. It is our contention the 70 day agreement was only for the initial review. There is no way to regulate total time for issuing a permit since it depends on the quality of the engineering and how quickly a designer resolves the concerns raised by reviewers. This was clearly pointed out to the State at the beginning of the review. There should have been no expectation a permit would be issued within 70 days.

The audit attempts to characterize the delay in approving a permit as evidence the MOA staff was overwhelmed. The audit report states, "The city takes the position the permit process was protracted because the project's design engineers presented an inadequate application." The report then states the design engineer, as well as the architectural firm that hired them, respond that the city behaved inefficiently and lacked adequate resources to review the design in a reasonable manner. If that were the case, than the third-party reviewers hired by the MOA and agreed to by ADOT (it should be noted these firms are nationally recognized experts in seismic structural design standards) would not have confirmed the MOA's identification of significant design calculation mistakes in the submitted documents by the ADOT consultant engineer. Therefore, while the ADOT consultant engineer alleges it was MOA's inefficiency and inadequate resources, the facts show the delay was clearly related to insufficient and incorrect design calculations submitted to the MOA by the ADOT consultant engineer.

The delay in permit issuance was based on the fact the documents submitted to the MOA by the ADOT consulting engineer during the initial review period were technically insufficient, with numerous compounding errors as already stated. This is an important point. A building permit could have been issued if the ADOT consultant engineer had made the appropriate corrections to the initial review comments issued by the MOA.

The audit report indicates the delay in permit issuance was unexpected by ADOT. We disagree. The MOA and ADOT agreed to a longer than normal review process due to the complexity of the project and the technical aspects of the design. MOA reviewers identified serious design calculation deficiencies that precluded an ability to issue a permit as the review process was being completed. The MOA communicated with ADOT routinely during this period.

MOA policy is strictly in accordance with written law. Design documents are reviewed for compliance with the requirements of the building code. The building official or a plan reviewer, acting as his agent, must approve subsequent changes that affect code requirements. In short, the plan must be correct before it is approved. Ultimately, the MOA's legal responsibility is to assure buildings constructed within its jurisdiction comply with the minimum requirements of the building code. To do less would be negligent. At no time has the MOA's review been capricious or unprofessional. The MOA reviewers and their various agents have simply held to the standard of building code compliance. When the MOA plan reviewers' findings were challenged by the ADOT and their consultant engineer, the MOA hired competent and nationally recognized experts to determine the validity of the MOA's concerns. In each case, the MOA reviewers' concerns were validated by the these outside firms. This is also an important point.

A system of partial permitting was agreed to by the MOA, at the request of the ADOT, in order to allow work to proceed where the appropriate design documents did meet the requirements of the building code because of the inordinate number of concerns found in the initial review and the anticipated time it would take to resolve them. It is inappropriate for the audit report to insinuate that the MOA simply implemented the partial approval process. This approach was at the request of the state to facilitate and expedite construction. Alternatively, no work would have been allowed until a

full building permit was issued after resolution of all concerns. This way construction was allowed to proceed, as the concerns surrounding each portion of the work were resolved.

Significant modifications to the design were made by the design team in response to initial review comments. The ADOT consultant engineer, however, did not adequately address the fundamental questions surrounding the computer models, in a timely manner. It was obvious to the MOA by June 2000, the process would go on and on unless the quality of the structural engineering improved. At that time, it was suggested by the MOA to ADOT that a significant improvement in the quality of the engineering would be required in order to expedite the review and permitting process. The design team met with the MOA plan reviewers to discuss the types and quantity of mistakes that were being found in the computer models and to view examples on a computer screen using ETABS graphical interface. The design team agreed to reanalyze and correct the computer models before any further review as a result. This process took until September 2000.

Throughout the summer, the MOA continued to work with ADOT to allow work to be continued on the concrete basement portion of the project, which included a concrete lid designed as a two-way slab. The MOA hired S. K. Ghosh, a nationally recognized, Chicago based engineer, to assist in identifying and clarifying the outstanding issues surrounding the basement and its two-way slab after several submissions of incomplete and inaccurate design submittals for this work by the ADOT consultant engineer. S. K. Ghosh's involvement was strictly confined to concrete issues surrounding the basement. He was not involved in the review of either the computer modeling or steel design of the structure.

In September 2000, revisions to the computer models were complete and resubmitted to the MOA. At this time, and with the concurrence of ADOT, the MOA hired Degenkolb Engineers to act as the MOA agent for the MOA's structural review of the project. Review of the September 2000 computer model submissions by Degenkolb showed the models, although much improved, to still be in error. It took until early January 2001 for the outstanding issues with the computer models to be resolved. With corrections to the computer models complete, the actual design forces in the steel members and their connections were finally set. Since the finalized loads and resultant forces had changed significantly, all structural members and connections had to be reanalyzed by ADOT's consultant engineer to show compliance with the building code. This review was done by Degenkolb.

It is important to stress the MOA hiring of Degenkolb was done to satisfy ADOT concerns the MOA reviewers were being too critical. However, as documented by the permitting process since September 2000, Degenkolb has identified extensive deficiencies in the design that had to be corrected before a permit could be issued. If, as the audit report alleges, the MOA had caused any delays due to an unreasonable requirement for documentation, or a lack of professional expertise to handle the project, Degenkolb would not have needed nearly a year and a half working with the ADOT consultant engineer to resolve significant design issues with the project. From this, it is reasonable to state that the MOA did not hire Degenkolb because it needed further assistance in the project; but rather, Degenkolb was hired to satisfy a ADOT concern about the level of review provided by the MOA and that Degenkolb validated that MOA concerns about the design submission quality were correct.

Finally, the audit report suggests that the design of buildings to withstand earthquakes involves considerable subjective judgment. The MOA disagrees. While there is certainly some subjectivity in any decision involving the engineering of complex facilities, the science of engineering buildings to withstand significant earthquakes is much more objective than subjective. For instance, the Osaka Kansai International Airport terminal building opened in 1994 on reclamation land in Osaka Bay was specifically designed to withstand significant seismic activity. And as a result, during the 1995 Kobe earthquake, which measured 7.3 on the Richter scale, the Kansai Airport terminal building experienced very little structural damage. This is because of the high level of focus on seismic factors that were identified and included in the initial design of the structure. Basically, the terminal was correctly designed for the potential type of earthquake incident that the airport experienced shortly after opening. Proper seismic design can be accomplished for airport terminal buildings and the MOA simply was expecting the submitted plans to be code compliant.

The review process for the Stevens International Airport terminal expansion project has been no different than on any other project within the Municipality, although the complexity of the project and the inability to quickly obtain accurate data and information from the ADOT consultant engineer has resulted in an extensive permit timeframe. Review is for compliance with building code requirements. The code requirements essentially define the practice of engineering in the structural field. Conformance with code requirements is the minimum standard throughout the industry, and was a reasonable expectation for this project.

In regards to the four options suggested by the audit report that ADOT could have pursued, the MOA would concur ADOT has always had the ability to appeal an administrative decision to the Building Board. We will reserve comment on whether an appeal would have been successful. The Building Board normally only reviews single item-issues. These volunteer board members may not have had either the time or the expertise to research many of the complex structural engineering matters at issue.

The other three options are all essentially the same. Each suggests an independent, knowledgeable expert be retained to complete the review, either ICBO, an independent third party reviewer, or an arbitrator. The MOA has a long-standing policy any owner can opt for code review to be done by an independent, third party reviewer instead of in-house by MOA reviewers. Accordingly, Degenkolb Engineers, an independent, nationally recognized firm, with an impeccable reputation for seismic design and evaluation of complex steel structures, was hired in September 2000 to do the remaining structural code review for the airport project. Despite wording in their contract stating their findings were not binding on the MOA, all parties understood Degenkolb would be acting for and on behalf of the MOA as its agent in completing the review. Degenkolb engineers have been in continual direct contact with the design engineers and have had full power from the MOA to make decisions on its behalf. Degenkolb raised issues as a result of their own review and worked directly and independently with the design team in clarifying and resolving the issues without any interference by MOA reviewers. At no time has the MOA not fully accepted, supported, and considered the review by Degenkolb as binding.

Ultimately, the whole issue rests on the quality of the structural design. The design, as confirmed by the extensive revisions required to meet Degenkolb's comments, was deficient from the start. It appears to the MOA rather than improving the quality of the design documents, the ADOT consultant engineer continued over the past two years to submit documents which did not adequately address the comments issued by Degenkolb, subsequently causing a delay in issuance of the full building permit.

We would recommend the auditor reevaluate the focus of the audit to ascertain why it took over two years for the consultant engineer to meet the seismic design requirements for the terminal expansion project at Stevens International Airport, rather than the issue as to why it took so long for a permit to be issued. The auditor will probably find the answer to the second by addressing the first issue.

Again, let me stress, we take exception to the implied conclusion the MOA permit process/staff caused the delay in construction of the terminal building. The facts clearly show otherwise. I want to thank you for the opportunity to review the draft audit letter and we are available to answer any questions you may have pertaining to this most difficult assignment.

Sincerely,

Craig E. Campbell

Craig E. Campbell
Executive Director

CEC/sg

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OFFICE OF THE COMMISSIONER

June 10, 2002

Pat Davidson, CPA
Legislative Auditor
Legislative Budget and Audit Committee
Division of Legislative Audit
P.O. Box 113300
Juneau, AK 99811-3300

Dear Ms. Davidson:

Thank you for allowing me to respond to the overall audit conclusions and findings and recommendations contained in the preliminary report of A Special Report on the Department of Transportation and Public Facilities, Ted Stevens International Airport Seismic Design Dispute dated May 7, 2002. The following are our comments:

The Concourse C Replacement Project, as noted in the audit report, is the centerpiece of the Gateway Alaska plan, which provides for development, improvement, and expansion of the Ted Stevens Anchorage International Airport.

As a result of competitive procurement, the Department of Transportation and Public Facilities (Department) selected a team of designers comprised of firms with excellent records in public works projects. Part of the scope of work for this design team was to develop complete engineering and design documents suitable for permitting and construction in accordance with an agreed schedule, and to obtain all required reviews and approvals.

Based on coordination with the Municipality of Anchorage (MOA), the Department schedule anticipated that building permits for Concourse C Phase 1, the structural phase, would be in hand by April 2000. Completion of Phase 1 was scheduled for March 5, 2001. As noted in the audit report, the question whether a project meets building code criteria for seismic resistance is a question of judgment based, in part, upon mathematical modeling of the structure's integrity and response to seismic forces.

The Department submitted the first iteration of plans, specifications, and modeling to MOA on December 3, 2000. The Department relied on the designers' representation that the documents were sufficiently complete and adequate for permitting. Unfortunately, they were not. For example, the mathematical modeling proved deficient in many respects such as the failure to include an entire row of structural columns, and the inconsistent and deficient treatment of snow loading. The Department believes that the deficiencies in the plans, specifications, and modeling were one of the primary causes of the permitting delays that followed.

This audit is primarily focused on the permitting process and potential remedies available to DOT&PF to resolve an extended review process. It was obviously not intended to address in any detail the technical adequacy or deficiency of the design. As a result, the audit report fails to recognize and appreciate the consequences of the problems described above. Because of the inadequate set of initial documents and the designers' inability to demonstrate that the design met seismic criteria, the "options" outlined in the audit report were not necessarily available nor would they have been effective to solve the problems encountered.

Options 1 and 4 involve an appeal process intended to resolve situations wherein the parties have a dispute over who's interpretation of the code is correct. These appeal options were of little value because the designers would not say with confidence that their design was correct and the MOA's interpretation and/or comments were incorrect. The Department hired experienced design professionals and relied upon them to provide, among other things, the necessary expertise to meet seismic requirements. The designers were responsible for obtaining the necessary permitting from MOA. At no time did the designers suggest that an appeal be initiated to resolve interpretation disputes with MOA's inspection department.

Options 2 and 3, which involve binding review by third parties, would have required the agreement of MOA to delegate its review function and permitting function to others. MOA eventually agreed to third party review of the design if funded by the Department. However, the independent nature of the third party review was limited by MOA. The third party could not issue the permits, nor did it have unilateral decision making authority from MOA. Even with the resources of a major engineering firm to provide a limited third party review, the review continued for another 18 months due to the problems with the design. Further, it is not clear that agreement to a binding third party review would have resulted in any saving of time, because the third party reviewer would have had to familiarize itself with the design of this complex project and the details of the structural issues.

As the permit review process continued, the Department and the designers became increasingly frustrated with that process, and began to characterize it as unduly detailed. By then, however, the permit review process had already suffered lengthy delays.

In the spring and summer of 2000, the Department considered moving forward with the project on an "at risk" basis. That procedure would have allowed the Department to proceed with construction without permits, assuming the risk that modifications would be required as a result of the permit review. Other developers have used the "at risk" procedure in Anchorage. To that end, the Department requested the designers to certify that the plans were complete, i.e., that further significant changes would not be required. After repeated oral requests, the Department formally requested such certification on November 8, 2000. On October 24, 2001, 18 months after the permits were to have been issued, the designers finally assured the Department that the design was complete. Nevertheless, the MOA continued to require the designers to make changes in the design to address structural concerns. Although some of the design changes may have been made merely in order to mollify MOA, it is clear that many of the changes had structural significance.

The full extent of the economic impact of these structural design problems is still not known. It is anticipated that the final figures will be substantially higher than shown in the audit report. For instance, negotiations with the general contractor for impact damages to the Phase I structural work have not been concluded. Further, some of the work originally intended to be completed in the structural phase has been moved into the completion phase contract in an effort to reduce delay impacts. There have also been additional changes to the design of the steel structure by the designer, the impacts of which have not yet been determined. The impacts caused by the design problems and permitting delays will continue to accrue. Additional impacts, such as the loss of revenue due to the delays, and inefficiencies resulting from crowding of the existing terminal facilities remain to be calculated. DOT&PF intends to pursue its legal remedies and seek fair compensation for these problems.

With respect to the Finding and Recommendation section of the audit report, the Department fully concurs with Recommendation No. 1. The ability to opt for independent plan reviews for compliance with local building codes will put the schedule control of the project back into the hands of the State. It is important that such independent plan reviewers have the full and final authority to decide issues of code compliance without being subject to additional review, oversight or control by local permitting authority. Without such independence, the value and effectiveness of this alternative would be greatly diminished.

Please let us know if you have any questions.

Sincerely,

Joseph L. Perkins, P.E.
Commissioner

cc: Nancy Slagle, Director, Administrative Services
Kurt Parkan, Deputy Commissioner, Aviation and Administration
Bob Janes, CPA, Internal Review
Dave Eberle, Regional Director, Central Region
Mort Plumb, Airport Director, Ted Stevens Anchorage International Airport

June 12, 2002

Members of the Legislative Budget
and Audit Committee

We have reviewed the responses from the Department of Transportation and Public Facilities and the Municipality of Anchorage to our preliminary audit on Ted Stevens Anchorage International Airport, Seismic Design Dispute. Nothing contained in these responses gives us cause to reconsider our conclusions.

We reaffirm our findings.

Pat Davidson, CPA
Legislative Auditor

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

TED STEVENS ANCHORAGE INTERNATIONAL AIRPORT SEISMIC DESIGN DISPUTE

May 7, 2002

25-30013-02

LBA Audit

May 8, 2002

Members of the Legislative Budget
and Audit Committee:

In accordance with the provisions of Title 24 of the Alaska Statutes, the attached report is submitted for your review.

DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
TED STEVENS ANCHORAGE INTERNATIONAL AIRPORT
SEISMIC DESIGN DISPUTE

May 7, 2002

Audit Control Number

25-30013-02

The Department of Transportation and Public Facilities is currently renovating Ted Stevens Anchorage International Airport. The project has as its "centerpiece" a new Concourse C. As required by statute, the department applied to the Municipality of Anchorage for a building permit to construct the foundation and structural steel frame for Concourse C. A dispute developed with municipal officials as to whether the proposed construction would meet local building code standards for resistance to earthquakes. The audit examines this dispute over issuance of a building permit.

The audit was conducted in accordance with generally accepted government auditing standards. Fieldwork procedures utilized in the course of developing the findings and discussion presented in this report are discussed in the Objectives, Scope, and Methodology section. Audit results are found in the Report Conclusions and in the Finding and Recommendation sections.

Pat Davidson, CPA
Legislative Auditor

TABLE OF CONTENTS

OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Title 24 of the Alaska Statutes and a special request by the Legislative Budget and Audit Committee, we conducted a special audit of the Department of Transportation and Public Facilities (DOTPF), Ted Stevens Anchorage International Airport.

Objectives

- To describe the history of the building permit dispute concerning the seismic design of Concourse C's foundation and structural steel frame (superstructure).
- To review DOTPF's monitoring of the design process, including the professional, administrative, and legal remedies available to expedite approval of the building permit in question.
- To determine how delay costs have been paid for and the potential for reimbursement.
- To examine the relationship between state construction projects and city building permits in Alaska and other states.

Scope

DOTFF is currently renovating the Ted Stevens Anchorage International Airport. The project has as its "centerpiece" a new Concourse C. The original design for Concourse C was completed in late 1999 and physical construction began in early 2000. Concourse C is now scheduled for completion in early 2004.

As required by statute, DOTPF applied to the Municipality of Anchorage (MOA) for a building permit to construct the foundation and superstructure for Concourse C. A dispute developed with municipal officials as to whether the proposed construction would meet building code standards for resistance to earthquakes. The audit examines this dispute over issuance of a building permit.

The dispute consists of hundreds of individual disputes involving differences of professional opinion among five groups of engineers. We did not address the technical questions regarding the design quality or any allocation of responsibility. These issues will be addressed by such construction dispute resolution systems or litigation as the parties elect to pursue. The focus of this audit is on the process employed by DOTPF to resolve these professional differences and to obtain a timely building permit.

Methodology

Fieldwork for this audit included the following:

- Review of statutes, regulations, ordinances, building codes, court cases, and attorney general opinions.
- Interviews with DOTPF and MOA personnel, and contractors providing construction management for the project.
- Review of DOTPF construction records.
- Inspection of the construction site.
- Review of minutes from MOA's Board of Building Regulation Examiners and Appeals meetings.
- Interviews of public works officials located in other states.
- Review of materials from the International Conference of Building Officials and the American Arbitration Association.

ORGANIZATION AND FUNCTION

The Department of Transportation and Public Facilities (DOTPF) is responsible for construction and operation of state airports. DOTPF is currently constructing improvements at the largest of these facilities, the Ted Stevens Anchorage International Airport.

DOTPF administers the project's contracts through an in-house project director (an architect) who reports to the department's director for the central region. DOTPF construction employees are assigned to assist him as needed in administering the contracts. Airport employees, as ultimate operators of the completed facility, are consulted for design input, but are not involved in day-to-day construction activities.

As part of the airport improvements, DOTPF retained a private architectural firm to design the new Concourse C. That firm subcontracted design of the foundation and structural steel frame (superstructure) to an engineering firm. Other engineering firms were ultimately retained to assist with seismic-related aspects of the project.

DOTPF contracted with various construction companies to implement the design. A construction management firm assists DOTPF's project director in monitoring these contracts.

As required by state law, DOTPF applied to the Municipality of Anchorage (MOA) for a local building permit to construct the foundation and superstructure for Concourse C. Issuance of the permit was governed by building codes, which MOA had adopted by ordinance. The codes include complex provisions concerning the ability of a proposed building to weather earthquakes. These seismic requirements are the subject of the dispute under audit.

In the process leading to a building permit, engineers in MOA's permitting unit study the submitted design plans for code compliance. MOA's building official then makes a decision as to whether the permitting unit should issue a building permit, which authorizes the start of actual construction.

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BACKGROUND INFORMATION

The Department of Transportation and Public Facilities (DOTPF) is currently renovating the primary state-owned airport in Anchorage. The Ted Stevens Anchorage International Airport project has as its "centerpiece" a new Concourse C, which is designed to accommodate nine jet aircraft. This project will double the size of the existing domestic terminal. Concourse C is a complex undertaking divided into four seismically-isolated structures.

As required by state law, DOTPF applied to the Municipality of Anchorage (MOA) for a local building permit to construct Concourse C. DOTPF anticipated that a building permit would be obtained prior to each of three phases in the new terminal's construction: (1) demolition of old Concourse C; (2) concrete foundation with structural steel frame (superstructure); and (3) completion of the new building's interior and exterior.

DOTPF hired an architectural firm that subcontracted design of the foundation and superstructure to a Seattle-based engineering firm. Due to limited resources, it was not MOA's practice to review designs in progress. In January 2000, the completed plans were submitted to MOA with the permit application for the foundation and superstructure. MOA agreed to review the application in 70 days and dedicated three out of its seven plan review engineers.[1] The State awarded bids for the construction work in anticipation of that time line.

MOA withheld full permit approval, project continued with inefficient piecemeal approvals

A dispute arose between the State's design team and MOA engineers assigned to review the permit application. A full building permit for the foundation and superstructure was finally issued in April 2002, over two years after the application was submitted.

While the application for a full permit was pending, MOA granted conditional piecemeal approvals to proceed for small, discrete construction tasks involved with the project, such as individual concrete columns, a baggage tunnel, or a large concrete air duct.

Frequently, the piecemeal approvals were conditioned on design changes "recommended" by one of MOA's plan review engineers during his field visits. These small incremental changes have sometimes caused side effects that "rippled" into changes throughout the design of the project. Steel and foundation work had to be redone to reflect the new assumptions. Sometimes MOA staff directed DOTPF to stop construction until issues were resolved. Contrary to the usual construction practice, MOA required that even routine minor adjustments be formally approved by its plan reviewer rather than the private construction engineer.[2]

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[1] Anchorage Municipal Code of Regulations § 23.11.001D states that "*[m]ajor commercial projects exceeding $10,000,000.00 or high rise exceeding 75 feet in height will be reviewed within 41 working days (eight weeks) or within a reasonable amount of time to be negotiated based upon the complexity of the project.*"

[2] This private construction engineer has the technical status in the trade of being the "structural engineer of record."

Permitting dispute involves calculations related to seismic stability of planned construction

At the core of the dispute has been a running debate over software "models" used in the engineering design of the building's superstructure. Such models mathematically demonstrate a building's ability to withstand an earthquake. Use of these models is required, with considerable latitude as to form,[3] by a national building code. MOA has adopted this code by ordinance. Engineers can choose from at least 150 different software packages to demonstrate that a given design complies with the various principles and formulas detailed in the code.

The dispute surfaced in the summer of 2000 when MOA's plan reviewers, assisted by a Chicago seismic engineering firm, challenged DOTPF's engineering subcontractor's models and supporting data. In MOA's view, these submissions for the permit did not adequately document the proposed design's compliance with code requirements.[4] MOA recommended that DOTPF hire a seismic engineering firm to assist the original engineering firm in strengthening this documentation.

To expedite the process, DOTPF retained a California consulting firm with specialized seismic experience to assist the original designer in meeting MOA concerns. By September 2000, the consultants felt they had remedied all questions concerning the design and its documentation. MOA disagreed and declined to issue a full building permit for the foundation and steel superstructure.

To resolve permitting concerns, DOTPF funded a consultant to assist MOA

The process of piecemeal approvals and rippling design changes continued to frustrate the project's construction schedule. In a further attempt to resolve the outstanding professional differences, DOTPF agreed to pay $540,000 for a California seismic engineering firm of MOA's choosing to assist the city in satisfying itself that the design was adequately documented for earthquake safety.[5]

Counting MOA's own engineering staff, this latest consultant (the seismic firm from California) represented the fifth group of engineers to examine the design calculations offered in support of the foundation and steel superstructure. This firm reviewed the design and responded with a list of 574 questions or "review comments." As part of MOA's process, DOTPF was expected to address these comments as well as those resulting from iterations of subsequent followup comments.

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[3] Section 1630.1.2 of the 1997 Uniform Building Code ("Modeling requirements") prescribes a *"mathematical model of the physical structure"* that includes *"all elements of the lateral force-resisting system," "the stiffness and strength of elements, which are significant to the distribution of forces,"* and *"the spatial distribution of the mass and stiffness of the structure."*

[4] DOTPF acknowledges that the in-house reviewers assigned by MOA included an experienced structural engineer. However, DOTPF asserts that he had limited experience with the seismic software that documented the permit application. DOTPF also indicates that one of the submitted models *"was too complex to run on the Muni computers and so was not reviewed."*

[5] DOTPF and MOA originally agreed upon a $200,000 contract for the consultant. However, as the review protracted, the amount was incrementally advanced to $540,000 by June 2001.

DOTPF frustration with MOA's process continued to escalate

After the review and response of the second MOA consultant, DOTPF staff grew increasingly frustrated in its efforts to satisfy the city's perceptions of the code requirements. DOTPF's discouragement is evident in this November 2001 memo from the project director to his supervisor:

> *[The latest consultant] has four engineers working on permit issues and they intend to be responsive to our priorities, but there is no significant change in the review process or the level of detail examined to resolve comments. Without a change in this process, I am concerned that* ***permit resolution may not be imminent.*** *[Emphasis added.]*

Also in November 2001, another internal document[6] within the project management group[7] noted:

> *We have never attempted to bypass the Building Permit process or Uniform Building Code requirements. However, enough is enough. The unprecedented detailed and reiterative nature of the MOA's permit review process has resulted in a seemingly never-ending quest for academic perfection far in excess of any reasonable expectation and has contributed to over $10,000,000 in cost overruns and more than a year of delay to this project.*

Approximately 500 of the consultant's 574 questions had been resolved by DOTPF by the end of 2001. A full building permit was finally issued on April 5, 2002, two years after the originally anticipated date.

[6] This was a draft of a letter not sent.
[7] This group consisted of personnel from DOTPF and various contractors.

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REPORT CONCLUSIONS

As discussed in our Background Information section, there has been extensive delay in the Department of Transportation and Public Facilities (DOTPF) obtaining a full building permit for Concourse C from the Municipality of Anchorage.

As of January 2002, DOTPF estimated that permitting delays had so far cost the project an additional $7 million and estimated that the total costs from the delays would ultimately climb to over $12 million.

The scope, size, and time lines of the project, taken together, exceeded the in-house capacity of the Municipality of Anchorage's (MOA) permitting office. Recovery of the estimated $12 million in cost overruns related to the delay from either MOA or DOTPF consulting engineers will be difficult. The former is immune by statute from any such claims, while recovery from DOTPF contractors is made problematic since any such insurance claim requires proof of malpractice and will likely involve protracted litigation.

Despite these limitations on DOTPF's potential for cost recovery, we find that there were at least four options, none of which DOTPF elected to pursue, that could have possibly resolved the dispute in a more timely manner.

Following is further discussion of each of these conclusions.

MOA withheld its permit due to a myriad of underlying disputes

DOTPF originally anticipated the issuance of a full building permit after a 70-day review process. However, a full permit was not issued until two years later.

As detailed in the following sections, we identified definite solutions for resolving and preventing such delay problems. However, determination of the specific cause of this delay is far less straightforward.

This protracted permit dispute actually consists of hundreds of individual disputes involving differences of professional opinion among five groups of engineers. Sometimes MOA sought further information to clarify code compliance. Other times, correction was made for a data entry error in a computer model. Sometimes the equivalent of four "second opinions" resulted in design modifications that the parties agree were genuinely helpful. Other design changes were simply made to accommodate MOA, but not really perceived by DOTPF as necessary for a safe building. The line between the preferences of an individual firm and actual code requirements was frequently blurred and in dispute. Litigation may be necessary to assign responsibility to the various parties.

The State's airport terminal project overwhelmed MOA's in-house permitting resources

In our view, the Concourse C project overwhelmed MOA's in-house resources to review plans submitted with a permit application. MOA was in the midst of an overall construction boom at the time it first received DOTPF's application for a building permit to start work on Concourse C. A MOA report indicates that it issued 3,000 building permits during FY 01, representing the city's "*largest construction program since 1984.*" Building designs for these permits were reviewed by MOA's staff of only seven plan review engineers.

Both MOA and DOTPF originally anticipated a 70-day review process. DOTPF asserts that the unexpected delay resulted from an initial review that was unusual and unnecessary in the degree of rigor needed to protect the public. MOA asserts that it was just carrying out its responsibility, and the original plans and calculations failed to adequately document the project's compliance with code requirements.

After failure to reach agreement within the 70 days, MOA supplemented its in-house resources by utilizing two consultants. The first, a Chicago firm, worked with MOA through the summer of 2000, and assisted city reviewers in assessing the calculations and methodology set out in DOTPF's original application. At the end of the summer MOA needed further assistance, and DOTPF agreed to reimburse the city for a second outside reviewer. MOA's contract with this latter consultant summarized the city's objective for the services involved as follows:

> MOA *has determined that additional resources with structural expertise are needed to assist in and facilitate the review of structural engineering design and construction documents on the large, multi-building Anchorage International Airport project.*

Such language further indicates MOA's lack of capacity to respond to DOTPF's permit application under the time lines needed to accomplish the State's complex project.

Regardless of fault, recovery of delay damages from MOA is unlikely

DOTPF's construction schedule has been seriously disrupted by MOA's unexpected response to the permit application. Rather than a full permit after 70 days, piecemeal approvals occurred over a two-year period. DOTPF planned for an application process that was customary, finite, and routine. Instead, the period from design to approval spanned major changes in construction seasons, bidding climates, building codes, airline needs, federal mandates, and world events, all of which were significant to the project's design and costs.

As of January 2002, DOTPF asserted that these permitting delays had so far cost the project an additional $7 million and estimated that the total costs from the delay would ultimately climb to over $12 million. DOTPF anticipates these estimates will be adjusted as construction continues. The components of these delay damages are detailed in Appendix A. Like the project's regular expenditures, the delay costs incurred so far have been paid out of the proceeds collected from the project's bond sales.

MOA takes the position that the permit process was protracted because the project's design engineers presented an inadequate application. The design engineers, as well as the architectural firm that hired them, respond that MOA behaved inefficiently and lacked adequate resources to review the design in a reasonable manner. They (and the engineers' insurance company) assert that the State is the victim of MOA's unprecedented barrage of hyper-technical information requests over items insignificant to public safety.[8]

Regardless of the ultimate adjudication of fault, recovery of any delay damages from MOA is unlikely. Under AS 09.65.070(d), municipalities have absolute immunity from awards of money damages in lawsuits *"based upon the grant, issuance, refusal, suspension, delay, or denial of a . . . permit . . ."*[9] The Alaska Supreme Court has ruled that this broad immunity applies regardless of the underlying intentions of municipal employees.[10] The statute is designed to prevent litigation that would discourage local governments from undertaking building code programs.[11]

Any recovery for a defective design will likely involve protracted litigation

The project required a unique structure with an original design. The new building was designed around existing airport features, including physical integration with the present domestic terminal.

Engineering carries a public image of certainty and precision. However, the design of a building to withstand earthquakes involves considerable subjective judgment. Building codes incorporate various trade standards, such as those for structural steel, and provide designers with a system of formula-based principles for predicting the reaction to seismic forces.

Though a multitude of software models are available to support an engineer's judgment, a design's resistance to earthquakes is still a matter of professional interpretations and opinions. For two years, the quality of the terminal's design has been debated by a variety of experts in the context of such interpretations and opinions.

The design engineers are covered by a $10 million malpractice insurance policy. The State is entitled to collect from that coverage if the construction delays resulted from a defective design. However, the engineering firm defends its work, and its insurance company has declined to pay the State for any delay damages. Thus, any insurance recovery will probably require protracted litigation as to the engineering adequacy of what was submitted to MOA.

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[8] In November of 2001, the design engineers wrote DOTPF's project director that MOA's *"process dictates a high level of document perfection that cannot be achieved in an economical or timely manner,"* an expectation that *"exceeds any other project we have been involved with."*

[9] However, this immunity statute does not mean that victims of a malfunctioning permit process are left without judicial recourse. They may still seek an injunction that orders MOA to correct unfair procedures that are being used to apply a code in a particular case, such as unreasonable delays or documentation. *See J&L Diversified Ent. v. Anchorage*, 736 P.2d 349 (Alaska 1987). The judge can appoint an expert ("master") to evaluate complex situations or to address recurring compliance issues. *See* Civil Rule 53(a); *cf. Peter v. Progressive Corp.*, 986 P.2d 865 (Alaska 1999) (extensive discussion of various issues in judicial use of masters).

[10] *See J&L Diversified Ent. v. Anchorage*, 736 P.2d 349 (Alaska 1987).

[11] *Wilson v. Municipality of Anchorage*, 669 P.2d 569 (Alaska 1983).

DOTPF had several options that could have been used to resolve the two-year permit dispute

Although options to recover costs from either MOA or the project's designers are affected by immunity and the protraction of litigation, DOTPF had other options to pursue in order to resolve the permit dispute with the city. From our perspective, there are at least four options that DOTPF should have considered.

1. Appeal to local building code appeals board. As is the norm for cities that adopt uniform building codes, Anchorage has by ordinance established an appeals board, commonly referred to as the "Building Board," to resolve interpretation disputes between builders and MOA officials concerning a project's requirements.

   As shown in Exhibit 1, the Building Board has broad authority to resolve disputes concerning the application of the city's building codes. DOTPF could have appealed to the board as individual technical issues or groups of issues arose. DOTPF could have appealed any direction to stop work on the project. Any denial of a building permit would also have been eligible for an appeal to the board.

   The 11-member board is composed of local architects, engineers, and contractors, all independent from the officials who review plans and issue permits. The board's decision binds the city and, given the board's expertise,[12] may be conclusive on technical issues in any later lawsuits over the same project. Our review of the minutes of the Anchorage board (past five years) shows that it was available to promptly hear an interpretation dispute throughout DOTPF's two-year struggle to obtain a building permit. Appeals are routinely heard within a month, but the board will call an expedited "special meeting" if necessary to accommodate a tight construction schedule.

EXHIBIT 1

AUTHORITY OF BUILDING BOARD
UNDER ANCHORAGE ORDINANCES

Anchorage Municipal Code 23.05.204.1:

In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretations of the technical code, there shall be and is hereby created a board of appeals . . .

Anchorage Municipal Code 23.05.204.3C:

The Building Board shall hear and decide appeals from actions of administrative officials relating to code regulations under Title 23 [building codes].

Anchorage Municipal Regulation 23.10.005:

The board may determine the suitability of alternate materials and methods of construction [and] provide for reasonable interpretation of the provisions of the building code . . .

Anchorage Municipal Regulation 23.10.013:

The board shall conduct a public hearing on any provisions of the adopted building codes. In cases involving a request for an interpretation of any provision of the building codes or an appeal from the decision of the administrative official alleging error in enforcement or interpretation of the building codes, the board shall hold a formal hearing at which time the appellant and/or his representatives, and any supporting witnesses, may present testimony relevant to the appeal.

[12] By city ordinance, the board is composed of members "*qualified by experience or training to pass on matters pertaining to building construction.*" Members must include two architects, two civil engineers, a mechanical engineer, an electrical engineer, two general contractors, a mechanical contractor, a plumbing contractor, and an electrical contractor.

Meetings are usually concluded within three hours, and a decision issued before adjournment. Engineers and contractors usually present their cases directly to this technical board, rather than through arguments by an attorney.

The scope of the appeals ranged from the installation of a dishwasher to the potential for a high-rise (McKay Building) to be rehabilitated (versus demolished). Though airport issues were never brought to the board, the board did consider an appeal from city requirements on another state project. In 1998, the builder of a university dorm challenged the *"building inspection requirement of elongated, open-front toilet seats."*

We believe DOTPF would likely have received a productive hearing on the seismic issues involved in its airport terminal. Seismic issues for other projects were considered in two of the board's appeals, both resolved in favor of the petitioning builder.

The board acts in a very independent manner. Appellants fare well before the board. During the past five years, three-fourths of appeals taken to the board were granted to appellants seeking permits from, or relief from permit conditions set by, the city. It seems entirely possible that the panel would have arrived at a resolution acceptable to DOTPF at much less expense to the State.

2. Binding plan review by national standards organization. Like state and local governments throughout the nation, Anchorage has adopted a variety of building codes that are national standards written by the International Conference of Building Officials (ICBO).[13] Anchorage has adopted ten of ICBO's codes as local standards by ordinance, such as the Uniform Building Code, Uniform Fire Code, and Uniform Plumbing Code. DOTPF's dispute with MOA involved the application of ICBO's Uniform Building Code.

   ICBO is a well-known resource for governments that require assistance in applying its codes. A city can contract with ICBO to review building permit applications when in-house capabilities are challenged by volume or the need for specialized expertise.[14] A binding ICBO plan review is also a recognized mechanism for resolving disputes between builders and cities over code requirements.
   Anchorage has in the past offered a builder this option if an interpretation debate persisted. Nevertheless, DOTPF did not explore it during the course of the two-year dispute.

3. Binding independent "third-party (peer) review" by a private engineering firm. The applicant bears all costs incurred by the city in processing a building permit, whether directly assessed by an explicit agreement or implicitly incorporated into the permit fee.

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[13] Per www.icbo.org, *"[t]he International Conference of Building Officials is a not-for-profit service organization owned and controlled by its member cities, counties and states."*

[14] ICBO publicly advertises this service on the Internet (www.icbo.org):
To enable members to obtain support during peak workloads, as well as to get expert advice when the construction of a major building project occurs, the Conference maintains a staff with expertise in structural, civil, fire protection, mechanical and electrical engineering that provides a comprehensive plan review service. This service is used primarily for large structures of commercial or industrial complexes or high-rise buildings . . . .

As a result, DOTPF bears the cost of any engineering firms retained to help MOA as well as the firm retained to help the project's own design engineer.

To resolve the permit dispute, DOTPF agreed to pay $540,000 for a particular seismic consulting firm chosen by MOA. Unfortunately, ambiguity in this expert's role diluted the firm's effectiveness in bringing the permit to resolution.

DOTPF's management assumed that MOA was delegating its plan review to the expert and that the city would abide by the expert's decisions without further review. However, the only written agreement regarding the expert's role is the contract with MOA. Exhibit 2 shows that under the contract's terms, the expert hired at state expense functioned as only an advisor to MOA and had no binding dispute resolution role.

Such an arrangement for outside assistance, known in the industry as a "third-party review" or "peer review," is not unique in the permitting process for a large project.[15]

However, DOTPF might have negotiated more than an advisory role for the expert selected by MOA. DOTPF and MOA could have explicitly agreed that the consultant's assessment would be binding on both.[16]

EXHIBIT 2

EXCERPTS FROM
DOTPF-FUNDED CONTRACT FOR
MOA'S SEISMIC CONSULTING FIRM

The Municipality of Anchorage (MOA) has determined that additional resources with structural expertise are needed to assist in and facilitate the review of structural engineering design and construction documents on the large, multi-building Anchorage International Airport project. . .

A. Contractor shall employ expertise in structural steel engineering to:

1. Promptly and impartially review design and construction documents of the proposed Anchorage International Airport building project;

2. Make well-analyzed, reasoned, and technically supported written comments and recommendations to the MOA concerning the design and construction documents of the Anchorage International Airport building project to meet local and national codes and standards. . .

F. Contractor agrees that all recommendations are advisory, and the MOA shall have no obligation to follow such recommendations. . .

I. Contractor shall provide the MOA with written findings and recommendations. . .

[Emphasis added.]

[15] Minutes for MOA's Building Board discuss a major private construction project involving renovation of the McKay Building. The minutes note the building official's report to the board that a *"[t]hird-party peer review firm will be contracted with for this project because of its complexity."*

[16] Such an arrangement should not pose issues concerning improper "delegation" of the city's permitting authority. While a building permit is actually "issued" by the city, it certainly has the authority to contract out plan reviews as necessary to ICBO, or any other qualified private entity. Submission of a code application dispute to third-party resolution is neither new nor novel for MOA or the industry (see footnotes 16-17). So long as the third party is guided by a clearly-defined scope of work and sufficient criteria, no "delegation" problem should arise under a contractually agreed-upon alternative dispute resolution process. *See Municipality of Anchorage v. Anchorage Police Dept. Employees Assn.*, 839 P.2d 1080 (Alaska 1992). Nevertheless, if DOTPF or MOA were still concerned about improper delegation, they could have included a provision in their agreement giving each party the right to an appeal to the building board.

This latest firm was the third group of seismic experts retained at state expense to offer opinions without binding effect on MOA's decision to issue a building permit. Including the original design team and MOA's plan review engineers, this firm became the fifth group of engineers to address the project's seismic issues.

4. Commercial construction arbitration. A city and a builder will ideally negotiate some settlement of any dispute over the code requirements for a project. However, if the parties are unable to negotiate such resolution on their own, they can agree that an independent arbitrator will arrive at a nonjudicial settlement for them.

   Disputes are common in major construction projects. The respected American Arbitration Association has a well-established process for "large, complex construction disputes" that involve a claim of at least $1 million. This process is endorsed by the National Construction Dispute Resolution Committee, which includes representatives from over 20 national organizations in the industry.[17]

   MOA and DOTPF did not pursue the possibility of an arbitrated solution.

In hindsight, the above solutions seem feasible for expediting MOA's issuance of a building permit. However, DOTPF offers a variety of explanations as to why none of these solutions were pursued. The most dominant reason seems to be that DOTPF continually felt that its negotiations with MOA were productive and that issuance of a final building permit was imminent, rather than years away. As a result, they were reluctant to begin any processes that MOA might consider adversarial.

Other DOTPF explanations include:

1. State's desire to avoid legal remedies
   The parties were seeking practical engineering solutions to expedite construction rather than legal remedies that would prolong it.

[17] Among the organizations represented are the American Institute of Architects, the American Public Works Association, the American Road and Transportation Builders Association, the American Society of Civil Engineers, and the Associated General Contractors of America.

2. Maintenance of a cooperative "partnering" relationship with MOA
   The parties envisioned themselves as partners in accomplishing a public purpose rather than as adversaries. DOTPF believed such a partnering relationship was necessary for both this project and future projects.

3. Benefit of hindsight
   Various solutions that might now appear feasible were simply never discussed at the time.

FINDING AND RECOMMENDATION

Recommendation No. 1

The commissioner of the Department of Transportation and Public Facilities (DOTPF) should pursue an amendment to AS 35.10.025 to allow state projects to elect independent plan reviews for local building permits

Local regulation of state construction is not a universal practice in other states. Our survey of the practices of 24 other states determined that state construction is not subject to local building permits in 18 of those 24 states.[18] This determination is consistent with the observation by one recognized expert that, unless the legislature elects otherwise, *"state owned buildings or structures located within municipal limits are not generally subject to municipal building codes."*[19]

In Alaska, the legislature has made state projects subject to local building permits through AS 35.10.025:

> ***Compliance with local building codes.*** *A public building shall be built in accordance with applicable local building codes including the obtaining of required permits. This section applies to all buildings of the state and corporate authorities of the state.*

Unfortunately, such intergovernmental relations may result in conflicts and inefficiencies in accomplishing large construction projects, as has been the case with the Concourse C building permit.

Rather than entirely eliminate a city's role in state projects, we recommend that AS 35.10.025 be amended to allow the State some responsible choices in its process to obtain a local building permit. More specifically, the State should have the option to contract for the plan review to be conducted by an independent entity acceptable to the city, at state expense.[20]

Such an outside review of plans ("third-party review" or "peer review") offers a valuable second opinion for both the State and its design team. That outside review may be conducted by a city's own permitting staff, by the International Conference of Building Officials, or by

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[18] State construction projects are not subject to local building permits in the following states: Arizona, Arkansas, California, Connecticut, Georgia, Idaho, Illinois, Kansas, Louisiana, Maryland, Nevada, New Mexico, North Carolina, South Carolina, Tennessee, Utah, Virginia, and Wisconsin. State construction projects are subject to local building permits in the following states: Florida, Montana, Oregon, Vermont, Washington, and Wyoming.

[19] *McQuillin Municipal Corporations* (3rd ed.) § 24.513.05 (footnotes omitted).

[20] The statute should provide a mechanism for resolving any dispute concerning the selection of the independent reviewer, such as an appeal to the local building board or the governor's exemption of a particular project from local regulation. The statute should also provide that the firm or organization conducting this independent review is protected by the immunity of AS 09.65.070(d) to the same extent as that immunity would apply to an internal plan review.

a respected private consulting firm. The resource chosen for this second opinion should match the State's construction schedule and the complexity of the project.

A city such as Anchorage may not have the in-house resources to provide periodic "preliminary plan reviews" or ongoing feedback during the design phase. However, if the city has confidence in an outside reviewer, DOTPF should be able to proactively consult the reviewer as the design evolves and avoid the delays experienced on Concourse C.

If the State elects the option for such an independent review, it should substitute for any internal plan review by the city. If the independent review finds compliance with local building codes, the required permits should be issued without further plan review by the city.

Such a statutory change would allow the State to expedite construction of state projects while also providing for an independent, third-party review of large scale state projects.

APPENDIX A

TED STEVENS ANCHORAGE INTERNATIONAL AIRPORT
ADDITIONAL PROJECT COSTS RESULTING FROM BUILDING PERMIT DELAYS

(Unaudited)

	Expended Through Jan. 3, 2002	Estimated Ultimate Total For Project
Additional project management costs	$423,120	$2,851,755
Additional design costs	1,175,000	1,287,598
Additional construction costs:		
Changes in permit scope	2,063,210	4,188,210
Inefficiencies from permit delays	956,855	1,221,855
Winter construction due to permit delays	356,593	606,593
Extended overhead from permit delays	1,990,916	2,590,916
Totals	$6,965,694	$12,746,927

Source: Data provided on Jan. 3, 2002 by DOTPF project director

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Alaska State Legislature

House Committee on Community and Regional Affairs

Representative Carl Morgan, Chair
State Capitol Building, Room 408
Juneau, AK 99801
907-465-3882

AGENDA

State Capitol 124
9:00 am – 10:00 am

- **Call to Order**
  Today's date is April 24th, 2003
  The time is 9:00 am
  Roll Call

- **On today's agenda**

  - **HB 264 State Construction Projects; Review/Inspection**
    Sponsor: Representative Rokeberg

- **Public Testimony**
  (Not teleconferenced ~ no expressed interest)

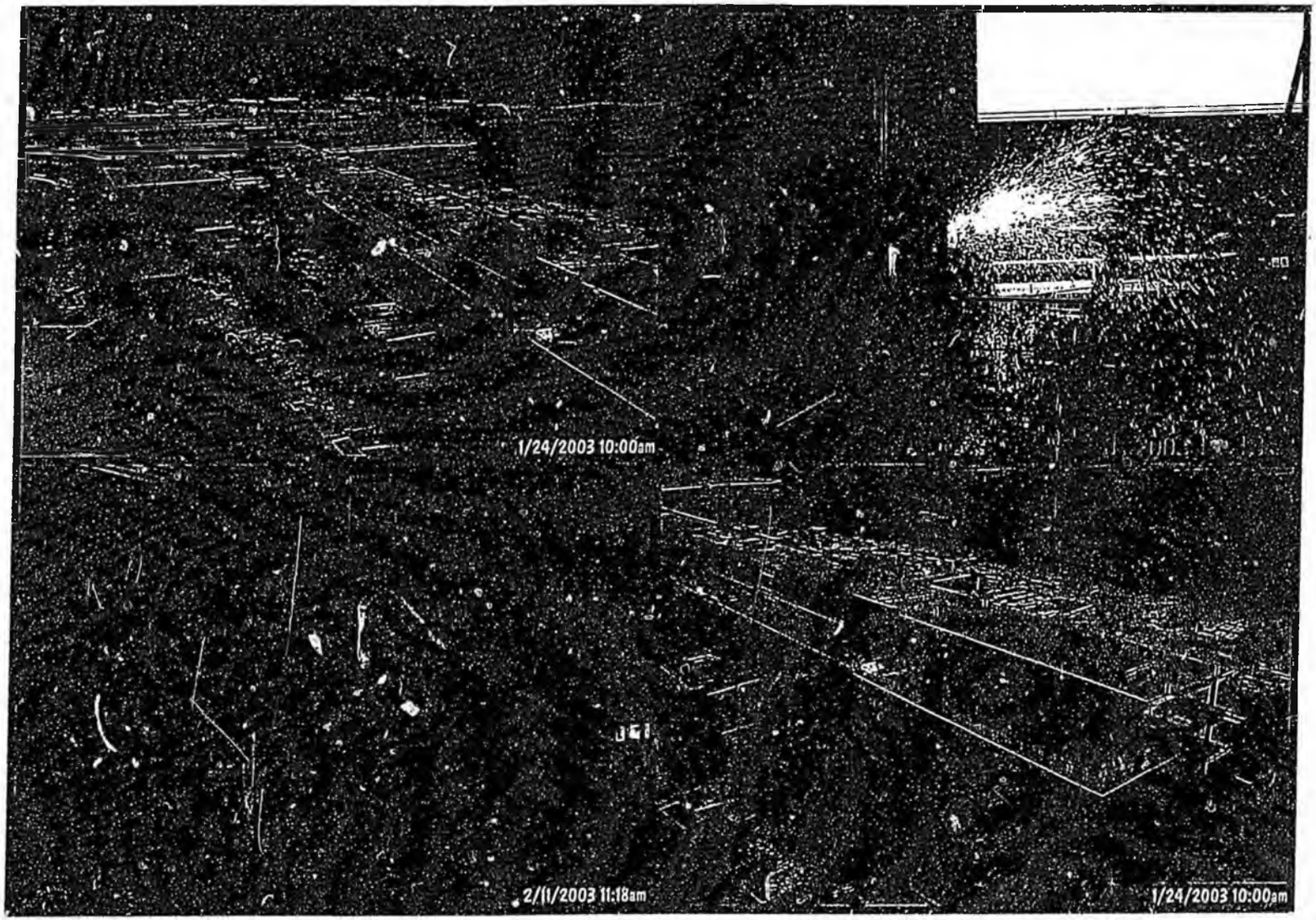
- **Questions and Comments from committee members**

- **Other Business**
  If there is no other business, announce next meeting announce next meeting.

- **Next Meeting – Tuesday, April 29th**

- **Adjourn**

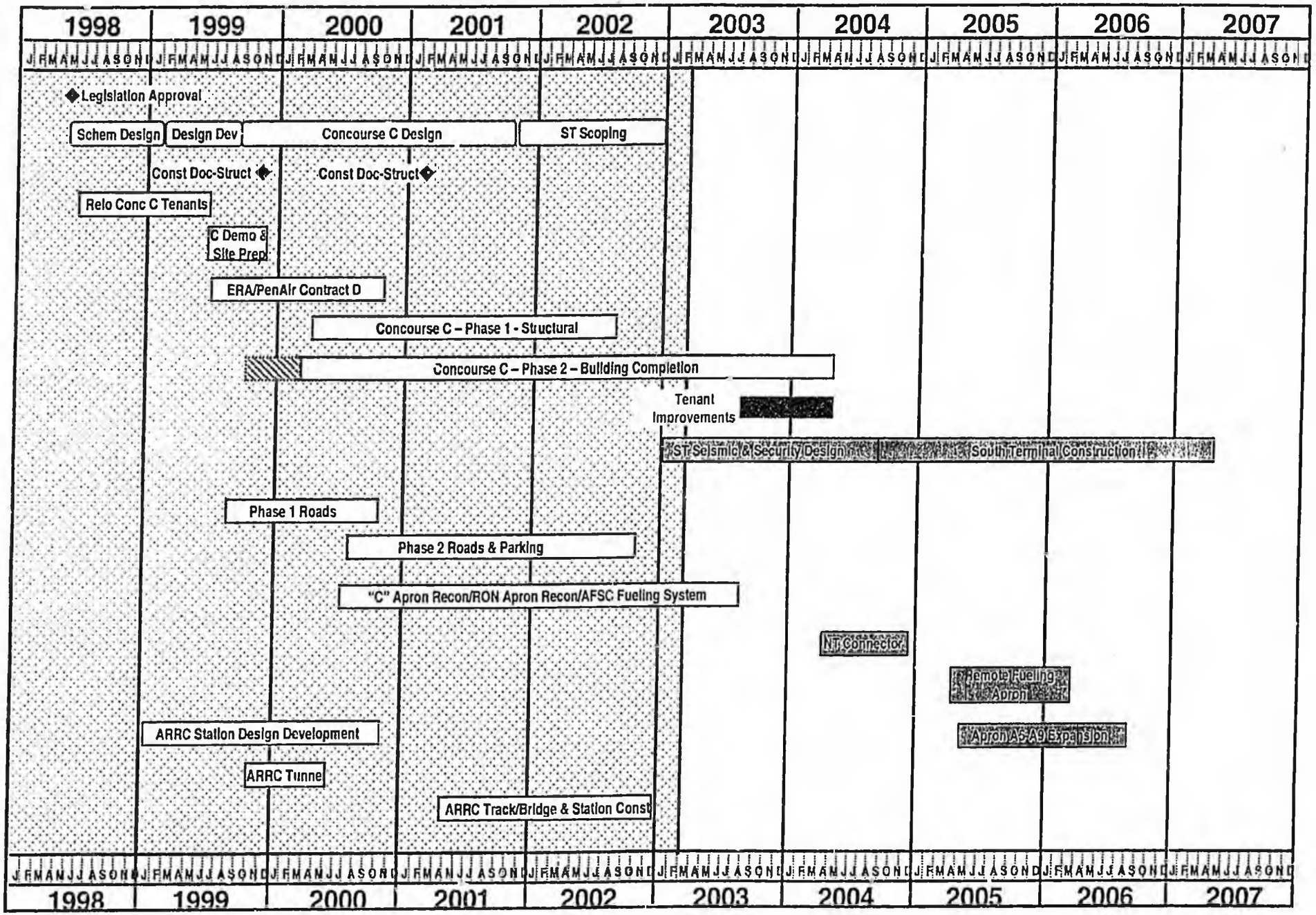
Terminal Redevelopment Project
Legislative Briefing
March 2003



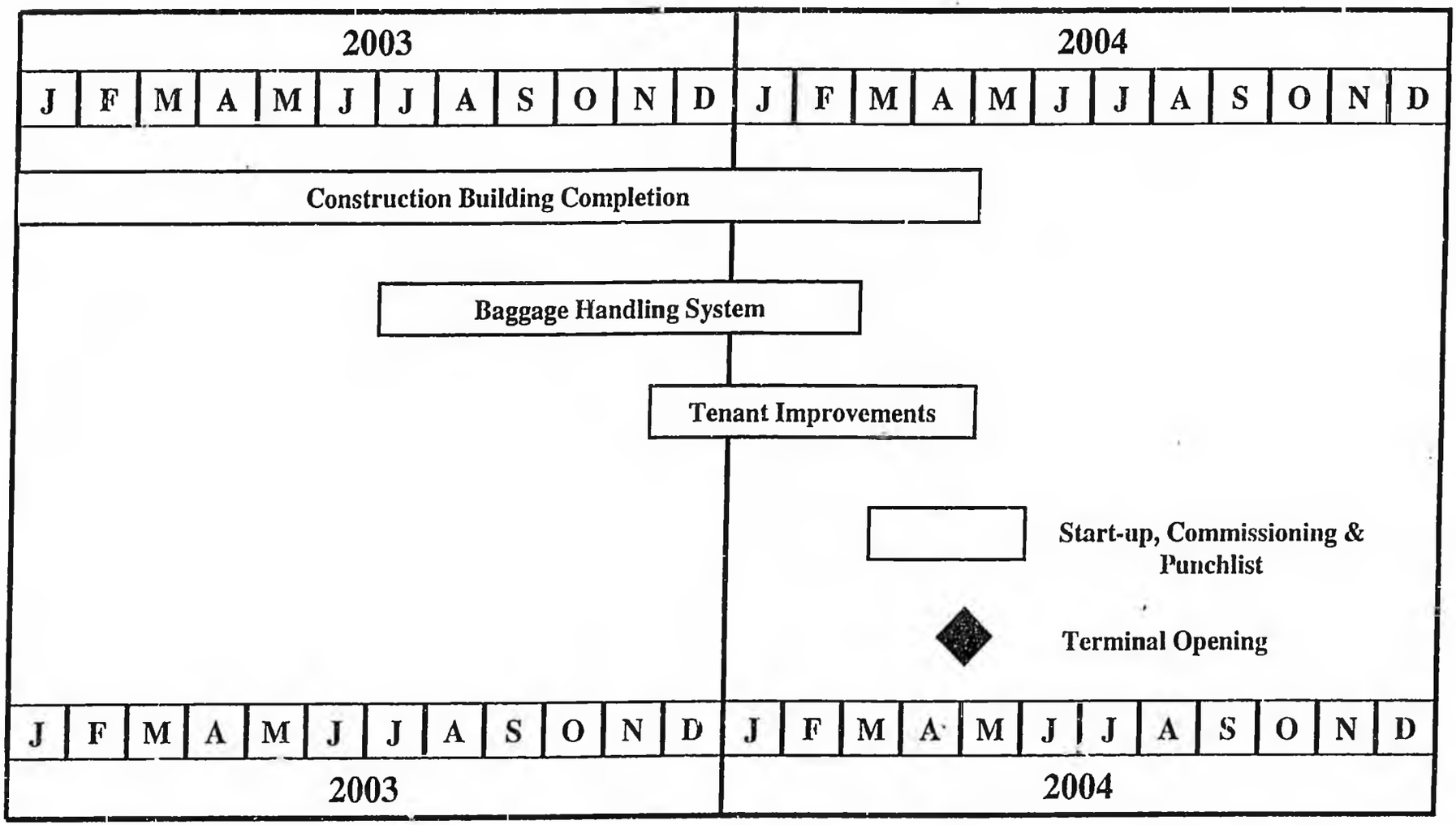
Ted Stevens
Anchorage International Airport

Anchorage Int'l Airport

Summary Schedule



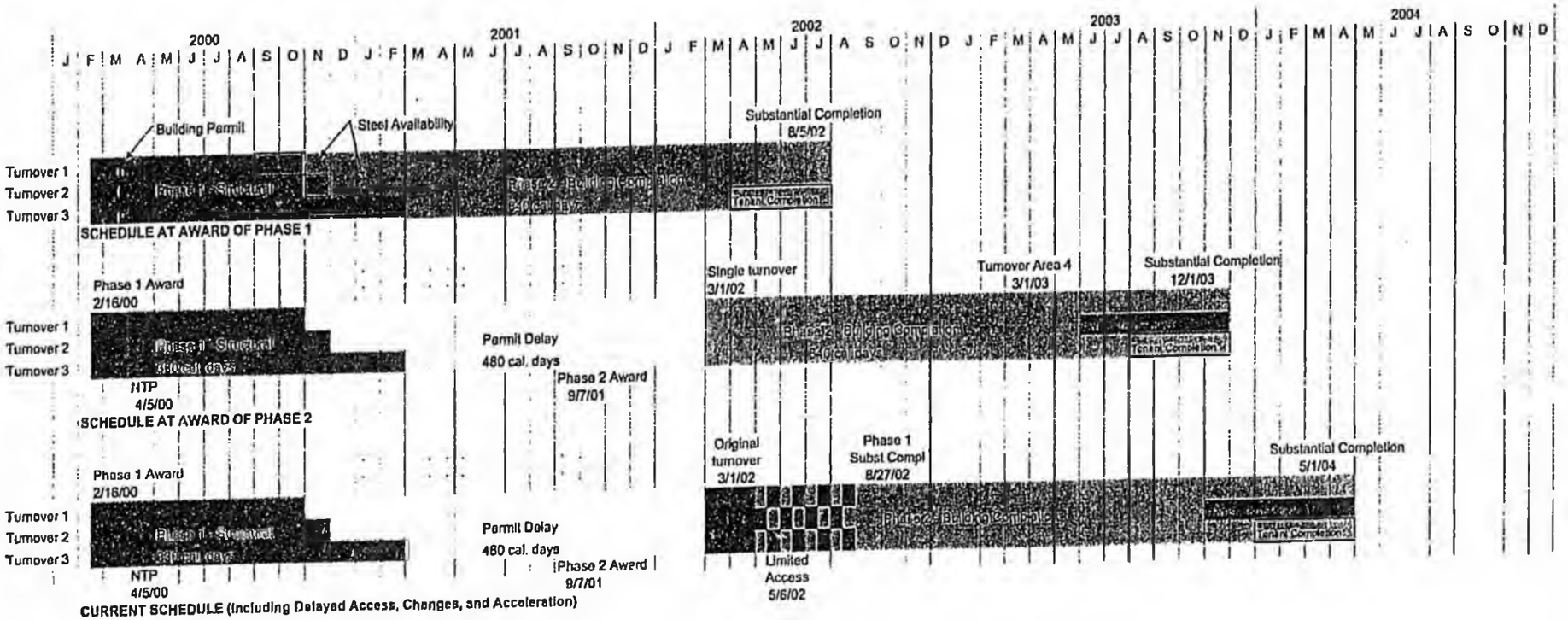
Concourse C Completion Schedule



Concourse C –Permit Delays

- **Building Permit application – 12/3/99.**
- **Anticipated Building Permit approval – 4/5/00.**
- **Actual Building Permit approval – 4/5/02.**

ANC TERMINAL REDEVELOPMENT
CONCOURSE C
SCHEDULE
PREPARED 10-30-02



Permit Related Costs

(in million's)

	Feb 03
Construction	$ 22.1m
Permit Review / Design	$ 3.8m
Construction Management	$ 3.6m
Project Administration / Legal	$ 3.7m
Total	$ 33.2m

ALASKA JOURNAL OF COMMERCE

Section B Alaska Oil & Gas Reporter

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Airport project $150 million short

By Tim Bradner
Alaska Journal of Commerce

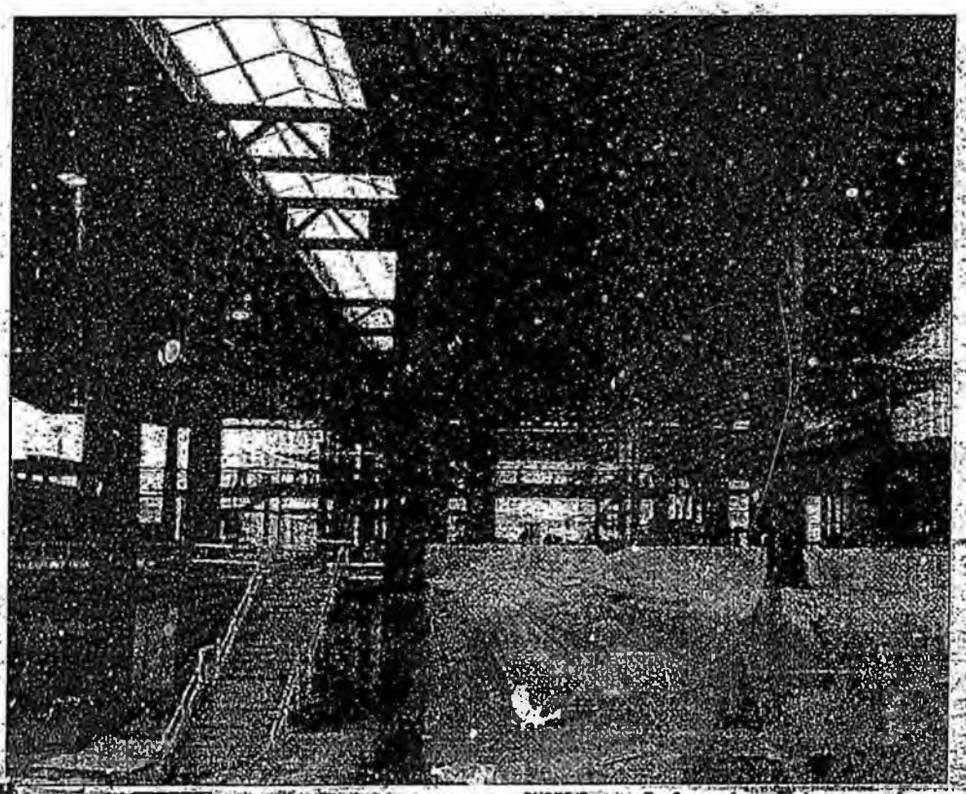
Construction managers of the Ted Stevens Anchorage International Airport terminal renovation project told state legislators they need another $150 million and will run out of cash for the project by October unless the Legislature gives the state airport system authority to sell more bonds.

The airlines that use the airport will pay for the additional bonds, although they are recommending that some other airport capital projects be delayed, air carrier representatives told a joint meeting of the House and Senate Transportation committees March 13.

Three factors, two of them unexpected, have combined to push total costs of the airport's Concourse C demolition and reconstruction, and remodeling of the main south terminal to about $400 million, according to Dave Eberle, manager of the project for the state Department of Transportation and Public Facilities.

One cost increase resulted early on during the Concourse C redesign when airlines told the airport they needed more room than they thought earlier. That resulted in a reconfiguration of the planned new structure, an addition of 86,000 square feet and $22 million in extra cost.

The air carriers and the airport agreed to pay for that increase with interest earnings on revenue bonds sold for the project.



PHOTO/Courtesy Ted Stevens Anchorage International Airport

Permit delays and design changes have added $150 million to the completion cost of the massive expansion at Ted Stevens Anchorage International Airport.

The next event was an unpleasant surprise, however. It came in January, 2000 when the Municipality of Anchorage rejected the airport's application for a building permit for the new Concourse C structure due to errors in the design, Eberle said. Unfortunately, the contractor had already been hired and steel ordered.

After a year of intensive discussions and studies by engineers, agreements were reached that satisified the city's requirements. Final approval took another year, after more engineering work and review of

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New security requirements added to airport project delays

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the resubmitted applications.

The building permit was issued in May, 2002, two years later than it was originally expected.

The municipality had done piecemeal approvals for parts of the structure, which allowed some work to get under way, but the delay has added $33 million to the project cost, Eberle said.

Then there were the events of Sept. 11, 2001. Following the terrorist attacks in New York and at the Pentagon, the federal government ordered new screening of passenger baggage. More space was needed for the baggage screening equipment.

The order came just as new contracts had been let for structural work. The designers had to, once again, revamp the plans. That added another $18 million to $23 million to the Concourse C project.

New security systems will also add approximately $11 million to the main terminal remodeling, although the amount is still uncertain because the building configuration may have to change. The airport's total additional security costs due to the Sept. 11, 2001 attacks will probably reach $50 million, and it's uncertain how much, if any, will be repaid by the federal government, said Kip Knudsen, deputy commissioner for aviation for DOTPF.

The net result of all this is that $175 million of $260 million in available funds have been spent, with the project 54 percent complete. The project has been funded to date with proceeds from $230 million in airport revenue bond sales, $26 million in Federal Aviation Agency funds and $20 million in interest earnings, according to the presentation made to legislators.

The airport needs another $50 million this year to complete the Concourse C work and do engineering on the remodeling of the main South Terminal. Another $100 million is needed next year to do the construction on the main south terminal remodeling, Eberle said.

As bad as all this sounds, the airlines using the airport will pay for the improvements, Knudson said. "The airport system will be able to sustain these increases," he said.

The airport system will ask the Legislature to increase the cap on airport debt by $80 million to $100 million this year, but the state's General Fund won't be tapped to pay for the bonds, Knudson said.

Cliff Argue, Alaska Airlines vice president for facilities and chairman of the airline operating committee for the airport, agreed with Knudsen. "The airlines are on the hook to make up the shortfall," he said.

"The bonds that have been issued are revenue, not general obligation, bonds. Under the new airline operating agreement, the carriers agreed to support the capital improvement plan," Argue said.

He urged that the state's priorities should be to get the project done, to cancel or delay some other airport capital projects and to issue more revenue bonds to cover the remaining costs. The airlines propose that $67 million in other capital projects be delayed or cancelled, Argue said. The airport system has not yet agreed to the list, and Argue did not identify what the projects are.

Knudson said the long-range outlook for the airport system, which includes the Fairbanks as well as Anchorage international airports, is still positive. Air cargo is growing 4 percent annually and although passenger enplanements are down they are still up 1.8 percent in recent years. "In a few years, even the enlarged terminal will be operating at full capacity," he told the transportation committees.

Argue said the airlines' outlook isn't all that rosy. On a national basis the industry is in tough shape, with heavy losses, he said. Costs are now a major concern for carriers, among them airport costs.

While the terminal project must go forward, the carriers are talking with the airport system on whether cost reductions can be made in other areas.

Sen. Tom Wagoner, R-Kenai, asked Eberle if it was typical for the state to hire a contractor and order materials before a construction permit was obtained. "I've been in the commercial construction business, and we would never start work until we got the permit," he said.

Eberle said in some cases it is done, and in this case there had been consultations with the municipality before the permit applications were submitted and there were no indications of problems.

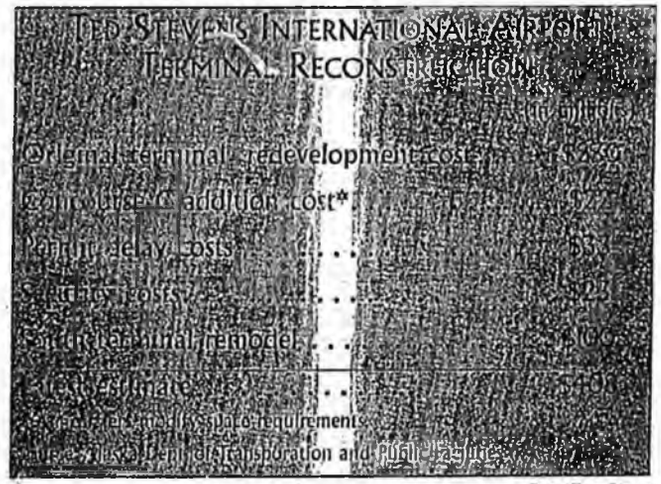
Senate Transportation Committee Chairman John Cowdery, R-Anchorage, a former contractor, acknowledged that the municipality commonly allows parts of projects to proceed, such as foundation work, because of seasonal constraints on the construction industry.

Eberle said it had been expected that the municipality would issue the Concourse C permit in about 70 days, but the municipal engineers discovered some errors in assumptions on earthquake structural stress made by the consulting engineers on the project.

Once those mistakes were found, the municipality started digging into the application and asking questions about modeling work that had been done, he said. "A lot of our time was spent debating interpretations of the building code," Eberle said.

Rep. Norm Rokeberg, R-Anchorage, asked about errors and omissions regarding insurance coverage for the project. Eberle replied that the state has $10 million in coverage and that the insurance company has been notified that a claim will be filed.

The engineering consultant may have additional coverage but what the state might recover from that is up to the Department of Law, Eberle said.



Graphic/Debbie Bahlen

Coal trains may return to Seward

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not putting a lot of hope in a revived coal export operation.

"We are cautiously optimistic that there is a possibility of a return to coal export service," Flynn said. "But we're not banking on it."

In the meantime, Alaska Rail-

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

OFFICE OF THE COMMISSIONER

FRANK H. MURKOWSKI, GOVERNOR

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JUNEAU, ALASKA 99801-7898

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VIA FACSIMILE 465-2040

March 28, 2003

The Honorable Norman Rokeberg
Alaska State Legislature
State Capitol
Juneau, AK 99801-1182

Dear Representative Rokeberg:

Here are some examples where various permitting and code requirements have had an impact on our various projects. We have included the total project costs.

1. On the Anchorage International Airport (ANC) Concourse B Hex Heating Ventilation and Air Conditioning Upgrade Project, a difference in code interpretation by MOA building inspector added an additional cost to the project of approximately $25,000. The total project amount is $360,000.

2. On the ANC Lighting Vault project, additional reviews by Anchorage Waste Water and Utilities in issuing waterline permit added costs to the project of about $40,000. The total project amount is $2,250.000.

3. On the Public Health Lab Project, a delay in issuing building permit caused a delay of 51 days of contract time costing about $32,000. The total project amount is $12,000,000.

4. On the ANC Warehouse Project MOA Planning and Zoning permit required landscaping at the warehouse despite being advised that the vegetation would not survive due to the close proximity of a snow dump. The landscaping vegetation died shortly after planting, which cost about $20,000. The total project amount is $3,000,000.

5. On the ANC Airport North Terminal Baggage Addition project, delays in design and advertising for construction due to the Urban Design Commission's lack of a quorum resulted in a five month delay and loss of construction season with the estimated cost about $100,000. The total project amount is $3,100,000.

6. On the ANC Terminal Redevelopment project, the New Concourse C project had a 2 year delay in securing building permits due to design problems. Construction was delayed by approximately 20 months at a cost impact of approximately $33 million. (Note: Although the permit delays primarily resulted from design errors and omissions, the state had virtually no control over the MOA permitting process to bring additional manpower resources or expedite the review or the decision making. Legislative Audit No. 25-30013-02 dated May 7, 2002 provides a recommended statute change that would enable the state to take control of the code review process through use of a third party. This would enable the state to bring sufficient resources to expedite the design review, determine code compliance and resolve non-compliance issues.). The cost impact is unknown. The total project amount is $100,000,000.

7. On the Dowling Road (total project amount is $12,300,000.) and Old Seward Highway Projects (total project amount is $8,800,000.), the utility and construction work on the city side streets was held up because of the lack of a permit. On the Old Seward Highway the MOA Right of Way permit delayed installing storm drain to the Sedimentation Basin on Campbell Creek via 64th Ave, which is a MOA right of way. Costs impacts are unknown.

8. The Talkeetna Spur Rehabilitation project advertising was held up while waiting for a flood hazard permit from the Mat-Su Borough. The total project amount is $5,500,000. Cost impacts are unknown.

9. Lack of an MOA noise permit can shut down work during our short summer construction season. Costs impacts are unknown.

10. On the Haines Ferry Terminal Improvement Project, we worked closely with the city to develop the project and had agreement with them over the scope of work. The scope of the project impacted an adjacent property owner. The Corp of Engineers (COE) issued a permit based on their evaluation of the impacts and the Attorney General (AG) issued an opinion that riparian rights were not violated. The adjacent landowner wrote several letters to political officals but the item that made us cancel the advertised project was the city's declaration that we did not receive a local planning permit. The AG advised the city that their ordinances did not require us to secure a permit but they refused to budge. Additional cost is $303,894. The total project amount is $2,139,000.

Please call me if I can be of further assistance.

Sincerely,

Mike Barton

Mike Barton
Commissioner

Attn: Representative Carl Morgan

CITY OF FAIRBANKS
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FAX: 907-459-6787
smthompson@ci.fairbanks.ak.us

FAXED 04/24/03

April 24, 2003

VIA FACSIMILE: (907) 465-3871

Senator Con Bunde
Chairman Senate Labor and Commerce Committee
State Capital Room 506
Juneau, Alaska 99801-1182

Re: SB 180 Safety Code Task Force

Dear Senator Bunde:

The City of Fairbanks has reviewed Senate Bill 180 wherein the purpose of said bill is to establish a task force for the purpose of reviewing and revaluating available published safety codes. While we concur with the spirit and purpose of the Senate Bill, we respectfully disagree with its composition. More accurately we believe that municipal participation should be included on the task force. A representative from a full service building or fire department should be a standing member of the task force. If the task force is to reach an equitable solution and provide a meaningful recommendation to the legislature it is essential that personnel who provide daily plan review and inspections for municipal code compliance be provided an opportunity to engage in this important decision. To do otherwise, would exclude valuable expertise and insight.

We also request that any appointment to the task force not result in duplicate representation. Please feel free to contact me if you have any questions. We look forward to hearing from you and the committee.

Sincerely,

CITY OF FAIRBANKS

Steve M. Thompson, Mayor

CC: City Council
Interior Delegation
Steve Shuttleworth
Code Review commission
File