FLORIDA BUILDING COMMISSION

CONSTRUCTION PRACTICES/QUALITY ASSESSMENT REPORT

ISSUES, OPTIONS, AND RECOMMENDATIONS REGARDING CONSTRUCTION AND INSPECTION PRACTICES

JANUARY 26, 2005

Report By Jeff A. Blair
Florida State University

jblair@fsu.edu
http://consensus.fsu.edu

This document is available in alternate formats upon request to Dept. of Community Affairs, Codes & Standards, 2555 Shumard Oak Blvd., Tallahassee, FL 32399, (850) 487-1824.
I. INTRODUCTION AND OVERVIEW

On June 3, 2004, Senator Lee Constantine sent a letter to Florida Building Commission Chairman Raul L. Rodriguez, AIA, outlining the outcome of building code related legislation resulting from the 2004 legislative session. One of the issues, and the subject of this assessment report, concerns the Senator’s request that the Commission “study the current practices of builders and inspectors and make recommendations that will maintain the quality of construction and the effectiveness of home inspections while providing protection for builders, inspectors and consumers”. The Senator indicated that although specific legislation relating to construction practices was initiated (SB 1328) and enjoyed support at the committee levels, it was not taken up by the 2004 Legislature due to time constraints. Senator Constantine indicated to the Commission, that now is an opportune time to review certain construction practices, and remarks in his letter that the State of Florida has a rapidly expanding population, and the subsequent demand for the sale and construction of homes has created the “possibility of an increase in problems associated with home construction”.

At the June 15, 2005 Commission meeting, Chairman Rodriguez outlined the Senator’s letter, and indicated that he would respond to the Senator in writing, which was done in a letter dated July 14, 2004. In regards to the quality of construction issue, the Chair charged Jeff Blair, Commission facilitator with the Florida Conflict Resolution Consortium at Florida State University, with conducting an assessment by interviewing stakeholder groups affected by the issue, and reporting back findings and recommendations to the Commission in time for their review at the January 25, 2005 meeting.

Following are the three key issues identified in Senator Constantine’s letter, and they are addressed in the assessment report:

- Study the current practices of builders and inspectors and make recommendations that will maintain the quality of construction and the effectiveness of home inspections.

- Review procedures used by tract builders regarding the post construction checklist, and the length of time for completing the list.

- Review current practices that inspectors use when doing home inspections as well as the number of inspectors that are available to conduct inspections.

In addition, other related issues, considerations, and options identified by interviewees, are also addressed. These include issues related to roles and responsibilities as well as procedural matters. It should be noted that the findings in this assessment report are limited to residential home construction. Finally, an analysis of the findings and recommendations for proceeding are included as a component of the report.

It should be noted that the express purpose of the request for a review of construction practices is, “to increase the safety, accountability, and affordability of the construction industry”.

FBC—CONSTRUCTION PRACTICES / QUALITY ASSESSMENT
This report presents the results of the assessment conducted on behalf of the Florida Building Commission. It is based on interviews with the affected interests and a review of documentation. There are no views attributed to specific individuals and findings represent a compilation of views representing a general level of agreement between interviewees. In some cases, opinions run the gambit from the Commission should be granted additional authorities to deal with an issue to nothing should be done unless the market drives the change through the course of business and economic decisions. Views run from a desire for more regulation to less regulation to leaving the system as it currently is.

A central finding of the assessment is that, there are many interrelated issues and interest groups affected by the quality of construction and construction practices review issue, and no single process or option will adequately address the issue. Rather, a coordinating role will be required where issues of education, training and qualifications, licensing, building codes, inspection functions, public and private roles and responsibilities, construction professionals from design through installation trades, consumer interests, and executive and legislative policy decisions can be considered in a holistic and systematic manner. Finally, the implementation of any recommendations for system enhancements will require a commitment of funding, and stakeholder were unanimous in agreeing that the Florida Building Commission should not be given additional responsibilities and duties without a commensurate increase in funding support.

II. THE ASSESSMENT PROCESS

The purpose of the assessment was to consider the various issues related to the construction practices of builders and inspection practices of inspectors from the perspectives of stakeholder groups with an interest in the system. Interviewees were asked to identify what they consider to be the key issues related to construction and inspection functions, what were some acceptable options from their perspectives, and what role they felt the Commission should play in any process convened to consider these issues.

This assessment was conducted by Jeff Blair of the Florida Conflict Resolution Consortium, a center based at Florida State University. Additional information on the assessment interviewer can be found in Appendix II of this report.

A. Conduct of the Assessment

The assessment interviewer met initially with Chairman Raul L. Rodriguez, AIA and DCA staff to discuss the parameters of the assessment and to identify potential interviewees. Additional interviewees were suggested by those interviewed during the course of the project. Most interviews were conducted by phone. In addition, the assessment interviewer reviewed relevant documents, including Senator Constantine’s letter, construction and inspection relevant statutes, and a draft of SB 1328. A list of persons interviewed is provided in Appendix I of this report.
B. Interview Questions

- Are you aware of the purpose behind this quality of construction assessment?
- How does this issue affect and/or impact your interests?
- From your perspective what are the key issues that should be considered in any process convened to conduct a review of current practices in terms of construction and inspections?
- What do you see as the role of the Commission in a review and recommendation process?
- Is this a Building Code Issue?
- Any suggestions for enhancing the system (construction and inspections)?
- What would be the best format to review the issues and make recommendations?
- Who else should I talk to in order to get a complete picture of the situation?

III. FINDINGS OF THE ASSESSMENT BY ISSUES

Role of the Florida Building Commission
In general, interviewees felt that the Florida Building Commission (the Commission), is the best forum for reviewing issues related to quality of construction, with broad based stakeholder representation, and a proven commitment to consensus-building on substantive policy issues. However, certain concerns were identified especially related to providing additional funding to hire staff and/or consultants to review code related issues and make recommendations back to the Commission. A common theme was that, whatever new authorities may be granted to the Commission should include additional commensurate resources to ensure the Commission can continue to meet all of its responsibilities in an effective manner.

In addition, there are many issues related to quality of construction that belong in the purview of the various licensing and enforcement boards, as well as some issues which belong in the private sector as a part of their business practices. Although most agree that, the Commission could serve as a review forum with coordination functions, some interest groups believe many of the issues are not Commission and building code issues per se. Many interest groups felt the Commission could play a coordinating role in consumer education as well as with building code related education, again with commensurate additional funding.

Finally, it was strongly recommended by many interest groups that the Commission receive legislative authority to issue binding interpretations on the Building Code to ensure consistent and uniform enforcement of the Code around the State.

The Florida Building Code Process
In general, interviewees felt that the Building Code amendment process is already in place and effectively responding to emerging information related to enhancing the performance of homes in areas such as flashing, water infiltration, and product performance. In fact, the Commission is currently participating in a review of the research conducted as a result of this season’s hurricanes, and determining whether to effect code enhancements resulting from lessons learned. Several interviewees who engage in damage investigation and/or repair work, noted that certain products should be reviewed for suitability since they allegedly do not perform well under specific Florida conditions such as high humidity and moisture. They also indicated some of the
exiting weatherproofing practices including caulking should be evaluated for performance and unintended consequences, such as trapping moisture inside of walls.

In addition, numerous interviewees pointed out that the Florida Building Code, as are building codes generally, is a minimum standard and intended to address structural integrity and the life-safety of a building, and not the more subjective issue of “quality”.

Support was expressed for reviewing the minimum inspections required in the code. In fact, as will be discussed later, most believe that issues of quality are often related to installation and improper use of products, and not the result of the Florida Building Code. There is general agreement that, the Code is a living document designed to provide a reasonably cost effective and structurally sound building.

The issues of resources and funding was another central finding, with stakeholders recommending the Commission receive additional funding to hire consultants to assist with the review of key issues under consideration by the Commission.

In many instances, multiple complex issues are concurrently under consideration by the Commission, and the DCA staff as well as the Commission’s Technical Advisory Committees (TAC’s) are unable to research and develop recommendations to the extent desirable on all issues due to resource constraints related to staffing, time, and funding. Interviewees report that if the Commission were able to hire more consultants, then the Commission would have the best research and date available for making their decisions and recommendation on the Building Code System.

**Consumer Related Issues**

According to interviewees, the issues of consumer protections related to construction and inspection practices, should be addressed primarily from the licensing and enforcement perspectives. Many mentioned the Construction Industry Licensing Board and other professional boards as venues for reviewing protections afforded in contracts and warranties, such as requiring minimum contract standards for builders’ contracts. There were also comments regarding a need to coordinate between the Building Code and the various licensing boards in terms of enforcement strategies and education initiatives. Again, the issue of ensuring the use of durable and weather tight products and proper installation techniques was considered a consumer safeguard issue that could be addressed in the Code.

Education and dissemination of sound accurate information to the public, was described as a potential role for the Building Commission as long as funding came with the responsibility. Many interest groups believe that “quality”, beyond the requirements of the Building Code is a market driven issue, based on the performance record of the contractor, and the subsequent satisfaction level of consumers. In short, the market drives the process as related to quality.

**Post Construction Check Lists—Punch list**

Although this is clearly a consumer issue, it is also a builder issue, and affects both consumer and builder in a substantial way. In general, with one exception, interest groups believed strongly that requiring standards for punch lists is not a proper issue for consideration in a review of construction quality as related to building practices, and is in fact, a marketing and reputation decision of the individual contractor. Many felt that a review of punch lists is an unwarranted intrusion, and not appropriate for regulation.
**Enforcement**

There appears to be near universal agreement that local jurisdictions and the various licensing boards should remain responsible for enforcement issues; however, the Florida Building Commission should put forth a vigorous effort to coordinate education and licensing requirements as they relate to construction, inspections, and all of the professions involved in the process. Many feel there is a disconnect between the various professional and licensing boards, and some coordinating effort should be made to ensure consistency and afford the consumer with predictable protections.

**Construction Practices**

Another general theme expressed is that a well trained and educated construction workforce is required to ensure proper installation and compliance with the requirements of the building code. Some of the options favored are training for construction managers, however many felt this is a business decision and should not be mandated but encouraged.

There were numerous recommendations for considering requiring additional licensing, with minimum education and qualification requirements, for the licensure of additional key trades such as drywall, framing, masonry, and concrete contractors/installers. In short, require licensing for all of the major subcontractor specialties in the home building construction process.

There was a strong support for ensuring the proper installation of products, with the realization that not all aspects of installation can be detected during the course of the inspection process.

Options for addressing this, in addition to training, include requiring more detailed installation instructions and construction details, such as are required in commercial construction.

Another suggestion involves developing and requiring a contractors handbook with key aspects of the building code highlighted. Building officials in some jurisdictions have worked with homebuilders to identify the code areas and issues that have proven to be historically problematic.

There were some advocates for requiring additional levels of quality assurance, beyond the local building inspection process. Others feel that this should again, be optional and is a market decision. In fact, some homebuilders employ private inspection and plans review providers, and others hire a “parallel provider” who does additional and redundant inspections on key structural aspects of homebuilding to ensure strict compliance with the code and that certain standards of quality are met, as defined by the builder.

**Inspection Practices**

In general, interviewees expressed respect for the efforts of local building officials while understaffed, underfunded, and overworked. In some cases design professionals and contractors rely on the building official to ensure that homes are designed and built to the code. This requires extra work by plans reviewers and additional re-inspections by building inspectors.

The issue of standardizing certain aspect of building inspections services, beyond compliance with the code, comes up against the issue of home rule, and the varying requirements, expertise, and resources of local building departments.

Building officials are required to provide an education and training function, and are successful to the extent that they have adequate resources to do this in addition to their permitting and inspection functions, which in a rapidly growing State, are extensive.

Again, some builders have hired private providers and third party professionals to provide additional levels of quality assurance for their projects.
Due to a heavy workload, and inability to maintain quality personnel as a result of inadequate resources, some interest groups expressed the believe that the potential exists for some buildings to be permitted and constructed without meeting all of the requirements of the Code. Again, funding is a critical issue expressed by all, and any additional duties for building departments will require additional resources.

**Education**

A central theme from all interest groups, as previously discussed, is that of education. Interviewees expressed a believe that there should be an effort to enhance the education of the public on building code and related issues, on licensing and enforcement issues, and on providing accurate updates on developments related to the work of the Florida Building Commission.

There was widespread agreement that an educated and well trained construction workforce would aid with the correct installation of products and compliance with the building codes. Many stated that an effort should be undertaken to work with the various licensing boards and regulating agencies to coordinate training and education needs, to ensure reasonable and appropriate qualifications are in place, and to foster a knowledge of the building codes and the role they play in construction quality and life-safety.

Another element discussed by many, is that there should be some attempt at restoring a sense of craftsmanship, as exemplified in the past by apprenticeship programs. Again, the workforce should have the appropriate training and skills to undertake their respective trades.

**IV. ANALYSIS OF FINDINGS**

There is a spectrum of views, on a range of issue related to construction quality generally, and construction and inspection practices specifically. Views range from a desire to regulate more protections to all that is required is already in place. It should be noted that, there are many interrelated issues and interest groups affected by the quality of construction and construction practices review issue, and no single process or option will adequately address the issue. Rather, a coordinating role will be required where issues of education, training and qualifications, licensing, building codes, inspection functions, public and private roles and responsibilities, construction professionals from design through installation trades, consumer interests, and executive and legislative policy decisions can be considered in a holistic and systematic manner.

To that end, most would agree that education and coordination should be the primary focus, as opposed to additional regulations. There are some building code issues, that should and indeed for the most part, are already under review by the Florida Building Commission. In addition, some products should be reviewed for suitability for some applications in Florida, especially those related to weatherproofing a home, and those whose structural integrity is easily compromised by moisture. The issue of workforce training was in the original plan for the development of the Florida Building Code system. In order to pursue this issue, consensus would have to be built between the various interest/stakeholder groups and additional funding and staffing would be required. This would require a policy decision between the Governor and legislators and implementation from state agency heads.
To a large extent quality as related to the durability and safety of homes, is an issue of using the correct materials and products, and installing them according to the installation instructions and in conformance with the requirements of the Florida Building Code. To the extent that contractors decide to do more than this, is a question of their personal commitment to their “product” and a business decision related to their desire to respond to market demands and expectations.

To the extent that the public is well educated on issues related to building codes including weatherproofing, mold, proper use of products and other consumer issues, the expectations for quality will be driven by their demands. The homebuilding industry will always respond to the requirements of the consumer, and an educated public may be willing to pay for a certain level of quality above that required. However, a consumer has every right to expect a home will be built to meet the Florida Building Code, and thus ensure a reasonable level of structural integrity, water tightness, correct use and installation of products, and life safety.

The homebuilder desires and requires a trained and qualified workforce, this is prerequisite to building a quality home that meets the Florida Building Code. In some cases, building officials have become the defacto educators to the requirements of the Code for the design professional, builder, and trade subcontractors. There are several provisions currently in place such as the private provider system authorized by Section 553.791, F.S. The Florida Building Commission is proposing changes to the private provider statute in their Report to the Governor and 2005 Legislature, that should provide additional enhancements to the system. Considerations should be given to providing relief in terms of resources to local building departments. Homebuilders should be encouraged to consider the use of third party quality assurance on their projects and to have properly trained and qualified job site supervisors. Additional subcontractor specialties should be reviewed and considered for licensure with minimum training and qualifications appropriate to their areas of specialty.

Finally, the issue of roles and responsibilities will have to be addressed. The Florida Building Commission is an existing forum with broad stakeholder representation and a proven commitment to consensus-building on important policy issues of impact to the entire State of Florida. To this end, the Commission could convene a process to fully air the issues and options, and develop a package of recommendations for consideration by the Governor and Legislature. Some of the recommendations could be implemented immediately by a consensus of the Commission. In certain ways, the finding of this assessment correlate well with those of the original Building Code Study Commission—which found an inconsistency of interpretation and enforcement, as well as a multitude of different building codes used around the State—in that there is a disconnected system and lack of coordination between the various professions, trades, associations, industries, regulating and licensing entities, and educational efforts related to construction and inspection practices.
V. RECOMMENDATIONS

Recommendation 1
Stakeholder Workgroup Process. The Commission convene a stakeholder workgroup process, similar to the product approval and private provider workgroups, to work with stakeholders to identify the issues, evaluate alternatives, and develop recommendations for enhancing coordination between the various entities charged with the education, licensing, enforcement, and code and standards development functions related to the construction and inspection of residential homes.

Recommendation 2
Building Code Enhancements. The Commission proceed with its assessment and evaluation of issues identified from hurricane research and effect any code changes deemed appropriate. In specific, the Commission should review flashing and water infiltration/intrusion issues, roofing products, the suitability for use of certain products based on the research findings, and the required minimum inspections schedules for enhancements. These and additional weatherproofing aspects of home construction products, such as stucco, should have their standards reviewed, and then the Commission should determine whether to require additional installation details in the Code.

Recommendation 3
Coordination and Education. After recommendation 1 is complete, and depending on the outcomes, the Commission should consider forming another Program Oversight Committee (POC) whose function is to serve as a liaison between the various groups charged with the education, licensing, and enforcement of construction and inspection practices. In addition, the POC would make recommendation to the Commission for providing practical, understandable, and accurate consumer information regarding codes and standards related to home construction and the work of the Florida Building Commission, including updates on the latest developments and efforts to enhance the Florida Building Code.

The POC could further function as an “advisory council” with the role of coordinating education, licensing, and education requirements of design and construction professionals and construction subcontractors. If funding and resources are not available for this function within the Department of Community Affairs, then consideration should be made to forming an advisory council to deal with the coordination issues.

Recommendation 4
Licensing. The entities responsible for the licensing of critical subcontractor trades should review the various trades and determine whether to require licensing, qualifications, and training of additional subcontractor specialties associated with home construction. This issue should first be evaluated by the stakeholder workgroup outlined in Recommendation 1.
Recommendation 5
Private Provider Recommendations. The Commission has submitted a package of recommendations to the Governor and 2005 Legislature with proposed enhancements to the private provider system authorized under Section 553.791, F.S. These recommendations should be considered, and additional programs proposed to work in conjunction with local building departments by providing additional levels of review for compliance with the code, such as third party quality assurance, should also be encouraged.

Recommendation 6
Binding Interpretations. Consideration should be given to granting the Commission statutory authority to issue binding interpretation on the Florida Building Code. Proponents expressed a believe that this will provide a level of consistency for the interpretation of matters related to the Building Code and prevent inconsistent interpretations and enforcement at the local level.

Recommendation 7
Funding. At the conclusion of a stakeholder recommendation process the issue of funding will need to be assessed and resources provided for the implementation of those recommendations that enjoy a high level of agreement. At a minimum, additional funding should be considered in order to assist the Commission with identifying research gaps, developing consensus on research needs and priorities, commissioning needed technical research, and providing a reasonable level of consumer education related to the Building Codes and the work of the Florida Building Commission.

Recommendation 8
Priority of Recommendations. These recommendation should be considered as preliminary, and it is highly recommend that a thorough vetting of all the recommendation in this report be provided through the implementation of Recommendation 1. Namely, by convening a stakeholder workgroup overseen by the Florida Building Commission.
APPENDIX I

Interview Participants

In conducting the assessment, the interviewer sought individual and group interviews with those stakeholder/interest groups who are affected by issues related to quality of construction. Below is a list of persons participating in the interview process and their affiliations. Many of the interviewees represent multiple stakeholder/interest groups but are listed under only one of their affiliations.

1. **FLORIDA BUILDING COMMISSION**
   Raul L. Rodriguez, AIA
   Richard Dixon

2. **LEGAL**
   Jim Richmond

3. **PUBLIC/CONSUMER**
   Barry Ansbacher
   Steve Dwinell
   Robert Jones
   Paula Stich

4. **ARCHITECTS**
   Raul L. Rodriguez, AIA

5. **ENGINEERS**
   Gary Elzweig

6. **LOCAL GOVERNMENT**
   George Wiggins

7. **BUILDING OFFICIALS**
   Nick D’Andrea
   Dale Greiner

8. **HOME BUILDERS**
   Dick Browdy
   Jack Glen
   Bing Hacker
   Bob White

9. **INSURANCE**
   Jim Goodloe
   Do Kim
10. FIRE PROTECTION  
   John Calpini

11. BUILDING TRADES  
   Don Brown  
   Sean Morgan  
   Brian Meadows

12. PRODUCT MANUFACTURERS  
   Dave Olmstead

13. PRIVATE PROVIDERS  
   Frank O’Neill
APPENDIX II

Feasibility Assessment Interviewer

"The purpose of the Consortium is to serve as a neutral resource to assist citizens and public and private interests in Florida to seek cost-effective solutions to public disputes and problems through the use of alternative dispute resolution and consensus building.”
--F.S. 240.702

Our mission is to bring Floridians together to learn to transform unproductive conflict into cost-effective, sustainable solutions. The Consortium serves as a catalyst to create supportive policies and to help educate statewide on the appropriate use of mediation, facilitation and other collaborative problem-solving approaches to resolve a wide range of public policy issues.

With the support of Florida State University and the Florida Legislature, the Consortium provides dispute resolution service, education, training and research to build a broader understanding of the value of collaborative approaches and create a cadre of citizens, leaders, professionals and students skilled in using collaborative consensus building and conflict resolution processes.

The Consortium offers neutral technical assistance to a wide range of professionals, agency staff and private citizens and organizations engaged in public problems throughout Florida. We help to design and implement efforts for intergovernmental collaboration, community and public problem-solving, and land-use and environmental dispute resolution. We also provide referral services connecting stakeholders and potential users with trained dispute resolution professionals.

Jeff Blair is faculty at Florida State University, and serves as Associate Director for the Florida Conflict Resolution Consortium. His work for the Consortium has included facilitation, process design, strategic planning, and consensus-building on multiple public policy initiatives. He has worked with state and local government representatives to design and implement collaborative approaches to planning, rule making, and dispute resolution with an emphasis on public participation in the design and implementation of policy. He has facilitated hundreds of rule development workshops and conducted negotiated rulemakings for various state agencies. In addition, he teaches numerous classes and conducts trainings in various dispute resolution topics for FAU, FIU, MDCCC, and various local governments. During the past six years he has served as the Consortium's project director for the Florida Building Commission, a 23 member Governor appointed stakeholder group who successfully created, implemented, and maintains the new statewide Florida Building Code. Other ongoing projects include serving as facilitator and conflict resolution consultant for state agency stakeholder advisory boards such as the Pest Control Enforcement Advisory Council and the Florida Coordinating Council on Mosquito Control. Mr. Blair has provided facilitation, planning, and process design for numerous non-profit organizations since 1977.