

**From Blueprints through Red Tape to
Green Buildings and All the Colors in
Between
(and Hopefully Beyond):
Practical and Contractual
Considerations on Your Road to
LEED Certification**

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Introduction

- **Speakers:**
- **Edward B. Gentilcore, Reed Smith LLP**
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Introduction (cont.)

Through efforts of U.S. Green Building Council (“USGBC”) and through development of LEED Green Building Rating System and Green Building Initiative, design, construction and/or renovation of buildings that are environmentally responsible, profitable and healthy places to live and work have been growing

The Trend Toward Green Continues

The penetration of organizations/ markets has been varied

- Federal government
- State government
- Local government
- Profit corporations
 - John Buck Company (Chicago, Illinois)
 - Tower Companies (Rockville, Maryland)
 - PNC Corporation (Pittsburgh, Pennsylvania) – *Most green buildings in 2006 (28)*
- Non-profit corporations
- Individuals (residential)

The Trend Toward Green Continues (cont.)

The project building types have also been varied

- Multi-use
- Commercial office
- Health care
- Colleges and Universities
- K-12 education
- Library
- Multi-unit residential

The LEED Rating Process

Five LEED credit categories

- Sustainable sites – 22%
- Water efficiency – 8%
- Energy and atmosphere – 27%
- Material and resources – 20%
- Indoor environmental quality – 23%

The LEED Rating Process (cont.)

The LEED certification process – three general steps

- **Step 1** – Project registration - LEED letter templates, Credit Inquiries and Rulings access and online project listing
- **Step 2** – Technical support – reference packages – Credit Inquiries and Rulings
- **Step 3** – Building certification – upon document submittal and USGBC review

Benefits of Achieving Green/LEED Rated Building Status

- **Maryland provides tax credit for construction or renovation of buildings that satisfy certain “Green” standards**
 - **Incorporates LEED rating system**
- **New York grants a tax credit if an owner decides to build or renovate “Green”**
- **On the Federal Government level, the General Services Administration (“GSA”) has recently adopted a Green Building/LEED certification requirement for tenant leasing**

Benefits of Achieving Green/LEED Rated Building Status (cont.)

- **Some jurisdictions (Arlington, VA; Boulder, CO; Austin, TX) provide for additional Floor Area Ratio (“FAR”) for LEED buildings**
- **Chicago is now allowing for an expedited permit process for LEED buildings**
 - **Calatrava-designed tower in Chicago**
- **As such, more is on the line now than just the achievement of Green Building standards or the LEED rating itself**

Hypothetical (or real) case studies

- Owner desires LEED silver adaptive reuse office building
- Portion of existing building will be razed and materials from demolition reused on new project
- Architecture firm is hired and designs building and issues plans and specifications with intent of receiving a LEED silver rating, if properly constructed and documented
- GSA given a letter of intent with the owner to occupy 70 percent of the building, if delivered with a LEED silver rating
- Owner retains a LEED consulting company to assist in the monitoring, documentation, and certification of the project

Hypothetical (or real) case studies (cont.)

- University (in a jurisdiction with fast-track permit processing for LEED buildings) desires to design/construct academic building on raw land with lecture halls and offices for its School of Business
- President of the University has designated alternative sites on campus (suburban setting), Dean of the school and faculty have mandated an advanced technology facility, and Board of Trustees have established additional fundraising if building is delivered with a LEED silver rating

Most Discussions Focus On...

- **Economics and merits of sustainable design, the impact of LEED, and the role of the USGBC; or**
- **Credits and materials to earn the desired level of LEED certification**

Often lost in these discussions is daunting task of constructing a building...

- Few materials address provisions to included in legal documents to identify responsible parties for the LEED certification, compliance requirements, and consequences for failure to obtain intended certification
- In addition, after all designs have been issued and contractors hired, it is overwhelming task of construction management team, including superintendent, to coordinate, manage, and build the project

Often lost in these discussions is daunting task of constructing a building... (cont.)

- Construction of any building presents stiff challenges to build according to plans, within budget, and on time
- With LEED projects, new overlay is added
 - Places responsibilities on construction management staff and superintendent, as well as on workers in the field

Three areas implicated by LEED projects to be addressed

- Need to create new provisions in legal agreements between owner and architect and owner and general contractor, as well as, possibly, owner and LEED consultant
- Additional tasks of the superintendent and construction management staff, including document requirements and field worker performance, on LEED projects
- Necessity to properly manage the documents for LEED approval and certification - also investigate possibility of LEED innovation points for advances in legal drafting and framework

Three areas implicated by LEED projects to be addressed (cont.)

- To ignore these area or fail to appreciate these concerns jeopardizes intended certification and creates liabilities and consequences among and for the participants
- Like most areas of design and construction, failure to address these issues at early stage can lead to consequences that may not be remedied later on

Three areas implicated by LEED projects to be addressed (cont.)

- Focus will be on those procedures which can be implemented during the planning, design and construction phases of the project
- Key is to facilitate submission of the necessary information at substantial completion and in the certification process

Legal Considerations and Drafting Agreements

- Properly drafted legal agreements are:
 - Detailed roadmaps of relationship among parties
 - Allocation of obligations of the parties
 - Allocation of risk
- S.C.O.P.E.

Legal Considerations and Drafting Agreements (cont.)

- Based on experience, the law, details of project, and tolerances for risk, the documents should anticipate important legal and practical issues and set forth mechanism to address project issues.
- Despite the evolving maturity of sustainable construction, many LEED-based requirements are still relegated to a paragraph or two paragraph mention in the design and construction contracts

Legal Considerations and Drafting Agreements (cont.)

- To achieve LEED certification, RFP, scope documents, and contract drafts should clearly identify
 - Objectives to be sought
 - Goals to be achieved
 - Responsibilities of the respective parties to assure that those objectives and goals are satisfied
 - Consequences to those parties in event desired objectives and certification are not obtained

Legal Considerations and Drafting Agreements (cont.)

- **Principal legal agreements for commercial project seeking LEED certification include**
 - **Agreement between the owner and architect**
 - **Agreement between the owner and general contractor**
 - **Agreement between the owner and LEED consultant**
- **Many of these agreements begin with form documents (AIA, AGC, and others), and are then modified for each owner/ project**

Legal Considerations and Drafting Agreements (cont.)

- **Principal issues in any design or construction agreement:**
 - **Price**
 - **Scope of work**
 - **Schedule**
 - **Mechanics of transmission of information (such as submittals and RFI's)**
 - **Mechanics of change orders**
 - **Allocation of risk for delay and cost increases**
 - **Authorized persons to act on behalf of the parties**
 - **Dispute resolution**
 - **Expectations of quality**
- **Agreement between owner and general contractor also includes drawings and specifications, which need to specifically include LEED requirements**

Green Contracts: The Early Years

- In earliest contracts incorporating Green Building/LEED rating objectives, contractual requirements not as detailed
 - Subject treated most heavily in requests for proposals and the specifications
 - Some reference to the requirements set forth in general conditions
 - Some cost elements specifically identified, but not always
 - Little discussion of document management and procedures to be followed in order to obtain (or facilitate obtaining) LEED rating
 - Little identified in terms of penalties for non-compliance

Green Contracts: The Early Years (cont.)

- Project participants also were still inclined to pursue all reasonably available efforts to achieve the rating of the facility
 - Symbol for recognition for future project sales pitches
- Consequences of not obtaining the rating were not as clearly identified or known
 - Hard to articulate or calculate ramifications of non-compliance

Green Contracting Today

- As projects continue to seek Green Building/LEED rated status, more contractual (but not enough) attention is being paid to requirements
 - Specific dollar values being allocated towards Green-based efforts
 - Specific certification levels/targets are being identified within contractual requirements
 - Efforts needed to obtain certification points are being incorporated into the specifications and, in some instances, contract documents

Green Contracting Today (cont.)

- However, much remains to be done:
 - For example, nothing specifically tied to a failure to achieve project certification
 - Nothing tied to implications of not having a certified facility at desired level
 - Implications of and remedies for failure to achieve underlying point standards in particular areas
 - *As project is ongoing*
 - *At substantial completion/during project close-out*

Future of Green Bldg. Contracts

In 2004, the AIA Released Document B214-2004

- Document identifies those services to be provided by architect which would be consistent with obtaining LEED certification
- Does provide for preparation of specifications for construction documents, but does not elaborate on requirements to be incorporated in construction documentation
- Nothing identified in terms of consequences for failure to achieve certification
- Does not address what happens to registration costs if certification not obtained
- Nevertheless, very good starting point for defining design professional relationship

Future of Green Bldg. Contracts (cont.)

- Government contracts have begun to incorporate specific language geared towards of Green Building/ LEED Rated recognition
 - **King County, Washington**
 - *Incorporates definitions for recycling environmentally preferable products*
 - *Includes environmental purchasing policies which are to be used on public contracts*
 - **County of Alameda, California**
 - **Identifies specific retention provision tied towards its Sustainable Building Contract Program**
 - **Provides a monetary withholding in order to secure energy performance requirements**

Future of Green Bldg. Contracts (cont.)

- More can be done:
 - Review LEED project checklist for points tied to design and construction activities
 - Evaluate and consider which requirements are more appropriately “design based” versus “construction based”

Future of Green Bldg. Contracts (cont.)

- Incorporate most critical elements into contracts as performance based criteria beyond general standards of achieving LEED certification
 - *Heat recovery systems vs. bike racks*
- Tailor liquidated damage and force majeure provisions to accommodate LEED-related criteria and standards

Future of Green Bldg. Contracts (cont.)

- Identify specific LEED cert./Green Building requirements and implications of not achieving desired status, if known
 - **Failure to obtain available tax credits**
 - **Failure to obtain government tenancy**
 - **Potential impact on additional FAR allowances**
 - **Provide specific monetary allocation for LEED performance and failure to achieve LEED certification**
 - **Incorporate LEED-related activities/objectives as basis for performance grounded default**
 - *While project is ongoing*
 - *As standard for substantial completion/final completion*
 - **Require continuation of involvement with project while certification process is on-going so design/construction teams are invested in achieving result**

Future of Green Bldg. Contracts (cont.)

- **Credit point for Innovation in Design.**
- **Specific reporting requirement for records that will be necessary in the LEED-certification/review process should be included in the design/construction process/contracts**
 - **Clearly delegate responsibilities for recordkeeping, and**
 - **Methods set forth of recordkeeping among the design and construction teams**
 - *Documentation of reviews consistent with LEED-based criteria*
 - *Certifications of waste recycling and appropriate waste disposal*
 - *Records certifying energy efficient equipment and procedures*
 - *Information related to materials of construction including reused, recycled content, regional materials and rapidly renewable materials*

Future of Green Bldg. Contracts (cont.)

- **Design/Construction Caveat:
LEED-Based Disputes**
 - In addition to disputes that may arise where required or a desired certification not obtained
 - Possibility exists for suits tied to LEED requirements in the design and construction of buildings

Future of Green Bldg. Contracts (cont.)

- For example, consider situation where a LEED-related design criteria results in a traditional construction failure
 - *Contractor may rely upon requirement as a basis for avoiding liability for unforeseen consequences arising from specification*
 - *E.g., use of heat absorbing roof treatments may cause increased weight and moisture resulting in burden and/or vapor penetration into the building*
- LEED-related plans and specifications must be reviewed for design integrity and constructability by a designer and contractor familiar with LEED-based innovation

Future of Green Bldg. Contracts (cont.)

- **Design/Construction Caveat: LEED-Based Disputes (cont.)**
 - **Other similar LEED-related issues to be considered:**
 - **Measure of damages for failure to obtain the intended LEED certification (for instance, a GSA tenant voids its lease because of failure of the landlord to obtain LEED certification or loss of LEED-based economic incentives such as increased FAR or tax credits)**
 - **Impossibility of performance (for instance, specified bamboo flooring is unavailable or available at an inflated costs)**

Future of Green Bldg. Contracts (cont.)

- **Design/Construction Caveat: LEED-Based Disputes (cont.)**
 - **Should consider including LEED consultant in dispute resolution provisions**
 - **Allocation of responsibility for document management and submission**
 - **Remediation in the event that the USGBC questions materials submitted in review**

Future of Green Bldg. Contracts

Concluding Thoughts:

- **Need to review and reconsider all those “standard contracts” when pursuing a Green Building/LEED project**
- **By proceeding in this fashion, coupled with crafting contracts specifically tailored to LEED-based criteria and approaches for achieving Green Building status, project objectives can be achieved while also maintaining commercial certainty between the participants**

Construction Management

- **Tempting to think a building is easily built in strict accordance to plans and specifications**
 - **In fact, construction of any building involves many thousands of dependently related tasks and skilled workers from unrelated subcontractors coordinating their movement, all in a dangerous environment**
- **Following issuance of drawings and specifications, and following execution of the legal agreements, owner issues a notice to proceed and construction team mobilizes**

Construction Management (cont.)

- Construction team and superintendent are charged with oversight responsibilities on a LEED project
 - Knowledge of contractual obligations, familiarity with LEED standards for certification, and knowledge of elements which will be incorporated into the project to achieve desired LEED status are essential for the management team and superintendent to correctly, efficiently, and appropriately discharge obligations and to assure project is poised to receive certification
 - *Education and training on the key components and elements of a LEED rating is essential*

Construction Management (cont.)

- Project management team has many documents to coordinate, circulate, and maintain during any construction project - submittals, change orders, requests for information, and addenda –
- Sometimes, management team must submit documents for approval and may have to re-submit documents if rejected
 - *Added emphasis on a LEED project where document submittals are a key certification feature*

Construction Management (cont.)

- **Superintendent is responsible for successful and safe completion of the work**
 - Requires that materials are timely ordered and delivered, subcontractors have an adequate workforce that is performing to the expected quality, site is safely maintained, and schedule is maintained
 - On a given day, superintendent may be addressing concerns of owner, complaints of the neighbors, issues from management team, and still maintain jobsite routine
- **In addition to RFI's, change orders, and other record documents, construction managers must also manage LEED required documents and superintendent must ensure that LEED procedures are being carefully followed**

Construction Management (cont.)

- **Sample of the LEED credits that require affirmative action by management team, superintendent, and subcontractors**
 - **EA Prereq 1: Commissioning of Building**
 - **MR Prereq 1: Storage and Collection of Recyclables**
 - **MR 1.1, 1.2, 1.3: Building Reuse**
 - **MR 2.1, 2.2: Construction Waste Management**
 - **MR 3.1, 3.2: Materials Reuse**
 - **MR 4.1, 4.2: Recycled Content**
 - **EQ Prereq 1: IAQ Performance**
 - **EQ 3.1, 3.2: Construction IAQ Management**
 - **ID 1: Innovation in Design**

Construction Management (cont.)

- Remember that subcontractors and field workers are often highly skilled and experienced, but also may have modest education
 - Not all subcontractors have e-mail or even routinely use internet
- Workers must be trained and adapt to the LEED requirements.
 - Specifications may call for separate dumpsters to recycle demolished materials for MR Prereq 1, project management staff may have had separate dumpsters delivered to the site, but subcontractors must diligently use dumpsters properly or jeopardize credit

Project Submission

- **Following substantial completion, owner (or its agent) is then responsible to submit materials for LEED certification.**
 - **Submittal materials include documentation requirements, records of building materials used in construction, operation and maintenance programs, and other similar information to support final steps in LEED certification process.**
 - **Contractual obligations of the various parties to submit necessary materials for approval and to remedy questions that may be asked by the USGBC are key.**
 - **Should be spelled out in the various contract documents**
 - **File procedures need to be established in advance to assure accurate record keeping**

Conclusion

- **LEED has introduced a new layer to design and construction, requiring legal consideration, technical expertise, and a clear allocation of responsibility**
 - **Mistakes of design or construction can jeopardize the certification of a project**
 - **Failure to properly submit the materials can jeopardize certification**
- **With proper advance legal planning, technical training of the workforce and management, and attention to detail, the LEED-based design and performance intent of owner can be satisfied**