



**AIA**<sup>®</sup>

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## *Guide for Sustainable Projects, including Agreement Amendments and Supplementary Conditions*

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# INTRODUCTION

### Purpose of this Guide

Sustainable design and construction is a rapidly evolving area of importance to Owners, Architects, Contractors and others involved in the design and construction industry. New building codes and certification systems attempt to define, and often place different parameters around, what is required for a building project to be considered “sustainable.”

As sustainable design and construction practices continue to evolve, Owners, Architects and Contractors will be faced with an increasingly diverse set of standards to apply to their projects. Green building codes, such as the 2010 California Green Building Standards Code, establish mandatory baselines for energy and environmental performance that all building projects are required to meet. At the same time, Owners may request voluntary measures, such as LEED® certification, in an effort to achieve energy savings or other environmental benefits. Often, these requirements cannot be achieved without each of the Project participants accepting new roles and responsibilities on the Project.

This rapidly changing field of sustainable design and construction presents new roles, responsibilities, risks and opportunities for those involved in the design and construction industry. A clear understanding of these new roles and responsibilities will be increasingly important. This Guide identifies and discusses key issues related to those roles, responsibilities, risks and opportunities. Additionally, model language is provided that can be incorporated into existing AIA Contract Documents to assist parties in defining, documenting and allocating the specific roles and responsibilities of the Owner, Architect and Contractor, and to assist Project participants in allocating new risks to the party in the best position to control those risks.

The model language included in this Guide is drafted to provide general guidance and does not provide legal advice. Laws regarding the use and enforceability of the model language may vary from jurisdiction to jurisdiction. Users of this Guide are encouraged to familiarize themselves with the laws and regulations applicable in the jurisdiction where the Project is located and to consult with an experienced attorney.

## Revisions to this Guide

The Conventional (A201) Family of AIA Contract Documents is published on a ten year revision cycle. However, given the rapid development of sustainable design and construction, a ten year revision cycle might be too long to provide a meaningful tool for industry participants. This Guide allows the AIA to provide proposed model language for use with AIA standard form documents, and also to address new topics as they develop. This Guide will be updated to reflect changing industry standards and practices, and in response to feedback from industry participants. Any subsequent revisions to this Guide will be indicated by a change to the date in the lower right hand corner of the document. Please check periodically to confirm that you have the latest version of this Guide.

## How to Use this Guide

This Guide is coordinated with the provisions of the key agreements in the AIA's Conventional (A201) Family of documents, including AIA Documents A101™–2007, A201™–2007, and B101™–2007. In many instances this Guide provides information for consideration on key topics but does not provide specific model contract language. Where specific model language is provided, this Guide assumes that amendments to the appropriate AIA Document will be assembled as a separate document and cross-referenced to the appropriate AIA Document. Alternatively, modifications may easily be made directly in the text of the appropriate AIA Document, typically through the use of AIA Contract Documents software. In general terms, the concepts discussed in this Guide may be applicable to other delivery models. For additional discussion on other delivery models please refer to Article 4.

This Guide is printed in two typefaces. Times New Roman 10-point typeface (example: Architect), indented from the body text of the Guide, is used only for material that is intended as actual model language which may be used for a specific project, and represents material which may be added to, deleted or revised, and then incorporated into the appropriate AIA Contract Document. Arial 10-point typeface (example: Owner) is used for explanatory notes and identifies items requiring specific attention.

## Modifications to AIA Contract Documents

AIA documents are drafted and coordinated to avoid overlaps and gaps in the rights and duties of the many contracting parties. Many of the provisions suggested in this Guide expand or limit the scope of services or responsibilities of various parties. Therefore, modifications must be made carefully. If a provision in one contract is changed, other contractual relationships on the Project may also require modification. For example, a change in the Owner/Architect agreement may require a corresponding change in the General Conditions document in order to avoid conflicts or inconsistencies. Section deletions and renumbering of sections should be avoided because they can play havoc with carefully coordinated internal references and cross references to other agreements. Some topics may be discussed in multiple articles of this Guide, as they relate to various specific parties. *For a full discussion of the topics, users are encouraged to read the entire Guide.*

# GUIDANCE AND MODEL LANGUAGE

## Suggested Introductory Paragraph to Amendments and Supplementary Conditions

Historically, changes to the standard text of AIA Owner/Architect Agreements have been referred to as “amendments” while changes to Owner/Contractor Agreements and General Conditions documents have been referred to as “Supplementary Conditions.”

If Supplementary Conditions to an AIA Owner/Contractor Agreement or General Conditions will be placed in a separate document, an introductory paragraph to explain their purpose may be helpful, such as:

### Model Language

The following supplements modify AIA Document [*Insert document number and title, e.g. A201–2007, General Conditions of the Contract for Construction*]. Where a portion of the [*Agreement or General Conditions, as applicable*] is modified or deleted by these Supplementary Conditions, the unaltered portions of the [*Agreement or General Conditions, as applicable*] shall remain in effect.

If Amendments to an AIA Owner/Architect Agreement will be placed in a separate document, an introductory paragraph to explain their purpose may be helpful, such as:

#### **Model Language**

The following amendments modify AIA Document [*Insert document number and title, e.g. B101™–2007, Standard Form of Agreement Between Owner and Architect*]. Where a portion of the Agreement is modified or deleted by these Amendments, the unaltered portions of the Agreement shall remain in effect.

## **ARTICLE 1 BACKGROUND**

### **Sustainable Design and Construction**

In 2007, the AIA Code of Ethics and Professional Conduct incorporated provisions addressing sustainable design, sustainable development and sustainable practices. Like the AIA Code of Ethics and Professional Conduct, this Guide employs the use of the term “sustainable.” The word sustainable is used in this Guide to describe projects that incorporate design and construction practices that are intended to offer benefits to the environment, enhance the health and well being of building occupants, or increase energy efficiency. As used in this Guide the term “sustainable” is synonymous with other terms used to describe environmentally responsible design and construction nomenclature such as “green design and construction” or “high performance building.”

In deciding whether to incorporate sustainable elements in the design and construction of a project, the Owner is faced with diverse options. The Owner may consider any of the various certification systems, or may implement sustainable design and construction measures without pursuing any specific certification. Most certification systems for commercial projects provide many options that can be tailored to a specific project, budget and sustainable objective. In addition to environmental benefits associated with design and construction in conformance with these systems, certification also offers brand name recognition when leasing or selling space in a new project. On the other hand, many of the benefits of sustainable design and construction, including the potential for reduced energy costs, reduced environmental impact, and increased building life cycle, may be enjoyed without pursuing a specific certification system.

In considering potential certification systems or other sustainable design elements, it is important to distinguish between certification and building performance. A building that has achieved a specific certification will not necessarily realize enhanced performance, and therefore may not meet an Owner’s performance expectations. Conversely, a building that meets the Owner’s performance expectations or incorporates sustainable design and construction elements may not be eligible for a particular certification because it may not meet all of the certification requirements. Clearly defining both the Owner’s performance and certification goals, as well as any limitations to attaining those goals, is critical in setting expectations and realizing a successful sustainable project.

The AIA does not endorse any particular sustainability certification. If it is determined that pursuing a particular certification is the most appropriate option for the project, there are numerous certification systems that can be considered. Currently, the better known certification systems include Energy Star, Green Globes, and LEED®. Depending on the type of project, the requirements of each of these certification systems varies. For example, LEED® is a certification system that not only has different levels of certification (silver, gold, platinum) but also different requirements based on project type (new construction, renovation, core and shell). LEED® is a certification system that also takes into consideration multiple aspects of design and construction for the whole building, whereas Energy Star focuses exclusively on energy performance. Information about each of these certification systems may be found at the Certifying Authorities’ respective websites. The Green Building Certification Institute (GBCI) is the Certifying Authority for LEED®, the Green Building Initiative is the Certifying Authority for Green Globes, and Energy Star is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy. Architects should consider the variety of options available for third party certification and the amount of documentation required for each. The time and effort required for design and construction will be different on every project and sustainable projects will be particularly affected by the local climate, site conditions and preferred architectural form, massing and project type.

Many jurisdictions are developing their own standards for design and construction or adopting one of the existing certification systems through regulations or codes. In a 2009 study,<sup>1</sup> the AIA found that 138 out of 661 U.S. cities with a population of 50,000 or more had established sustainable building programs. With more and more state and local governments requiring that projects achieve specific sustainability requirements, some level of sustainable design and construction will become increasingly prevalent in the industry. Often, these new laws are unclear as to the exact penalty for failure to achieve or comply with the law's requirements and may also require bonds or other obligations not readily available in the market.

In an effort to establish minimum sustainable building practice criteria for incorporation into building codes, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) in conjunction with the Illuminating Engineering Society (IES) and United States Green Building Council (USGBC) developed ANSI/ASHRAE/USGBC/IES Standard 189.1, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (Standard 189.1). Standard 189.1 is applicable to all buildings except low rise residential buildings and covers site sustainability, water use efficiency, energy efficiency, indoor environmental quality and the building's impact on the atmosphere or natural resources. Standard 189.1 can be voluntarily applied to a project; and is not mandatory unless adopted as code in the jurisdiction where the project is located.

The International Code Council (ICC) is currently developing its International Green Construction Code (IgCC) which it plans to formally release in 2012. The IgCC is intended to apply to traditional commercial and high-performance buildings and be complementary to the ICC family of Codes & Standards. The IgCC will apply to the construction of buildings, structures, and systems, including alterations and additions. Standard 189.1 is proposed as a "jurisdictional compliance option" that allows jurisdictions to require compliance with Standard 189.1 rather than the provisions of the IgCC. The IgCC will not be applicable to projects until adopted as code in the jurisdiction where the project is located.

Since 2000, the U.S. General Services Administration (GSA), an independent agency of the United States government and one of the largest land owners and managers in the nation, has required that all of its new construction and major modernization projects achieve, at a minimum, LEED<sup>®</sup> Certified status. This requirement was revised in 2010 to require a minimum LEED<sup>®</sup> Gold certification on GSA owned properties. One of the GSA's key roles is the construction, operation and maintenance of federal facilities, including courthouses, office buildings, land ports of entry and research facilities.

In addition to jurisdictional or governmental requirements that create additional sustainable criteria for design and construction projects, many jurisdictions are offering incentives for projects that incorporate sustainable design and construction measures. Incentives may include expedited permitting, tax rebates and credits, or other financial and project incentives. Some incentives are available exclusively to the Owner while others are available directly to the Architect or Contractor. These incentives, while beneficial to the Project or the party receiving the incentive, may create the potential for significant damages to other parties on the Project if a requirement for receiving the incentive is not achieved.

### **Special Definitions**

To facilitate the development of coordinated agreements calling for the use of sustainable design features and construction methods on a project, this Guide recommends that certain newly defined terms be included in the standard AIA Contract Documents. Below are Special Definitions that are specific to sustainable projects and used as defined terms throughout the model language in this Guide. The list of Special Definitions<sup>2</sup> may be tailored to your particular use of the model language in various AIA Contract Documents or your use of Supplementary Conditions.

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<sup>1</sup> The American Institute of Architects, *Local Leaders in Sustainability—Green Building Policy in a Changing Economic Environment* (Washington, DC: 2009).

<sup>2</sup> Users of this Guide should note that the Special Definitions used in this Guide are not applicable when AIA Document B214™–2007, Architect's Services: LEED<sup>®</sup> Certification, is utilized as the Architect's sole scope of services, as B214–2007 uses its own set of defined terms that are independent of those defined terms used in this Guide.

Because the defined terms in AIA Document A201™–2007 are included by reference in other AIA documents, this document assumes that the special definitions used in this Guide will be incorporated into A201–2007 and that A201–2007 as modified will be incorporated by reference into B101–2007 and other AIA Agreements.

Add the following Section 12.1 to B101–2007

**Model Language**

§ 12.1 Reference to AIA Document A201™–2007 as used in this Agreement shall mean A201–2007 as modified by the parties, dated \_\_\_\_\_, and attached hereto.

Reference to A201–2007 as modified will also need to be made in the Owner/Contractor Agreement to incorporate, by reference, the modified terms of A201–2007.

Add the following to the end of Section 9.1.2 to A101–2007

**Model Language**

§ 9.1.2 . . . as modified by the parties, dated \_\_\_\_\_, and attached hereto.

Add the following Section 1.1.9 to A201–2007:

**Model Language**

§ 1.1.9 Special Definitions

§ 1.1.9.1 Sustainable Objective

The Sustainable Objective is the Owner’s goal of incorporating Sustainable Measures into the design or construction of the Project to achieve a Sustainability Certification or other benefit to the environment, enhance the health and well being of building occupants or improve energy efficiency. The Sustainable Objective is identified in the Sustainability Plan.

§ 1.1.9.2 Sustainable Measure

A Sustainable Measure is a specific design element; construction means or method; or post occupancy usage, operations, maintenance and monitoring requirement that must be completed in order to achieve the Sustainable Objective. The Owner, Architect and Contractor shall have responsibility for the Sustainable Measure(s) allocated to each of them in the Sustainability Plan.

§ 1.1.9.3 Sustainability Plan

The Sustainability Plan is prepared by the Architect and identifies and describes: the Sustainable Objective; the Sustainable Measures targeted; implementation strategies selected to achieve the Sustainable Measures; the Owner’s, Architect’s and Contractor’s roles and responsibilities associated with achieving the Sustainable Measures; the specific details about design reviews, testing or metrics to verify achievement of each Sustainable Measure; and the Documentation for Certification required for the Project. The Sustainability Plan will be incorporated as part of the Contract Documents.

§ 1.1.9.4 Sustainability Certification

The Sustainability Certification is the initial third-party certification of sustainable design, construction, or environmental or energy performance, such as LEED®, Green Globes, Energy Star or another rating or certification system, that may be designated as the Sustainable Objective or part of the Sustainable Objective for the Project. The term Sustainability Certification shall not apply to any recertification or certification occurring subsequent to the initial certification.

§ 1.1.9.5 Documentation for Certification

The Documentation for Certification includes all documentation related to the Sustainable Objective or to a specific Sustainable Measure that the Owner, Architect or Contractor is required to prepare in accordance with the Contract Documents. Responsibility for preparation of specific portions of the Documentation for Certification will be allocated among the Owner, Architect and Contractor in the Sustainability Plan and may include documentation required by the Certifying Authority.

§ 1.1.9.6 Certifying Authority

The Certifying Authority is the entity that establishes criteria for achievement of a Sustainability Certification and is authorized to grant or deny a Sustainability Certification.

## ARTICLE 2 AGREEMENT BETWEEN OWNER AND ARCHITECT

The following sections are coordinated with the article and section numbers found in AIA Document B101™–2007 for easy reference. However, the information included below, with careful review and coordination, may be applicable to other AIA agreements. *It is important to note that the discussion and model language included below incorporates the [Special Definitions included in Article 1 of this Guide](#).* Careful coordination when modifying your Agreement or creating Supplementary Conditions is required. (See [Modifications to AIA Contract Documents](#) above.)

The model language included in Article 2 of this Guide emphasizes the important role the Architect plays in educating Owners and establishing reasonable expectations regarding sustainable design early in the Project. The language emphasizes that the Architect will design the building with the intention of having the Project meet the specified Sustainable Objective, but recognizes that the construction, operation and maintenance of the building, as well as interpretations by the Certifying Authority, are beyond the Architect's control.

### Initial Information

**§ 1.1** In AIA Document B101™–2007 and other AIA Owner/Architect Agreements, the parties are prompted to provide initial information setting forth, among other things, the Owner's assumptions and expectations regarding key Project parameters. The Architect's services and corresponding compensation are based on the initial information provided by the Owner. On a sustainable project, the parties may want to include specific information about the Owner's assumptions and expectations related to the Sustainable Objective or Sustainable Measures contemplated for the Project. If, when developing the Sustainability Plan, the scope of the Architect's services are increased beyond those reasonably inferable from the initial information, this may serve as a basis for an increase in the Architect's compensation.

**§ 1.2** AIA Document A201™–2007, Section 9.8.1, defines Substantial Completion as "the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use." In a sustainable project, in which the Owner is seeking to achieve a Sustainability Certification, it is important that the Owner understands that the date of Substantial Completion is not the same as the date of award of the Sustainability Certification, which is likely to be some time later than Substantial Completion. Accordingly, the following parenthetical information may be added to B101–2007 Section 1.2.2 to clarify this point:

Delete Section 1.2 in its entirety and add the following to B101–2007:

#### Model Language

§ 1.2 The Owner's anticipated dates for commencement of construction and Substantial Completion of the Work are set forth below:

- .1 Commencement of construction date:
- .2 Substantial Completion date:

*(Substantial Completion is not the anticipated date of the award of a Sustainability Certification)*

### Standard of Care

**§ 2.2** In 2007, the AIA included a new provision in its standard Owner/Architect Agreements that sets forth the standard of care generally applicable to the Architect's services. This language was added by the AIA so that the parties to the Owner/Architect agreement would not insert a standard of care provision that is different than the common law standard of care without discussion or negotiation. This standard of care, as set forth in B101–2007 Section 2.2, follows:

**§ 2.2** The Architect shall perform its services consistent with the professional skill and care ordinarily provided by architects practicing in the same or similar locality under the same or similar circumstances. The Architect shall perform its services as expeditiously as is consistent with such professional skill and care and the orderly progress of the Project.

Unless this provision is subsequently modified by the parties, this is the standard by which the Architect's performance will be evaluated in any legal proceeding. Accordingly, it is important that Owners and Architects

recognize and understand this standard of care. Owners and Architects should also be aware that modifications to this contractual standard of care language could have important consequences from both a legal liability perspective and an insurance coverage perspective. Liability to the Owner or others based on heightened standard of care language (e.g., “the Architect shall perform its services consistent with the highest and best professional care...”, or “the Architect shall perform its services consistent with highly experienced green building or sustainable design professionals...”, etc.) may not be covered by the Architect’s professional liability insurance. Both Owners and Architects should exercise caution before altering or amending this standard of care language, and legal counsel should be consulted in order to discuss the potential effects of any such modifications. It is important to recognize that, in the event of a dispute under the standard of care language set forth in AIA Document B101™–2007, the Architect’s services will be evaluated in comparison to services provided by its peers performing in the same or similar locality under the same or similar circumstances. The Architect must understand the customs and practices of, and standards applied, by other Architects on similar projects in that locality and perform its professional services accordingly.

Furthermore, as more jurisdictions institute green building standards by code, the Architect’s standard of care may include requirements established by newly adopted code or practice. In other words, “standard of care” is an evolving concept; as design professionals begin incorporating sustainable design practices as Basic Services (either voluntarily or through jurisdictional requirements), the Architect’s standard of care may eventually be construed to include those sustainable design practices as the accepted baseline standard of performance for the Architect.

In addition to industry changes or code requirements that may change the Architect’s standard of care, the Architect may inadvertently assume greater obligations or liabilities by including contractual provisions such as warranties, guarantees and assurances that a specific Sustainable Objective will be achieved. Because “guarantees” and “warranties” are often excluded from coverage under professional liability insurance policies, a non-negligent failure to achieve a contractually guaranteed Sustainable Objective may not be covered by the Architect’s professional liability insurance and accordingly should be avoided. (See discussion on [guarantees of performance](#) below.)

### **Scope of Architect’s Basic Services**

**§ 3.1.4 Substitutions.** Sustainable projects require careful selection of building materials and equipment. Often, the Architect will select specific materials or equipment necessary to achieve the Sustainability Certification or otherwise necessary for the Sustainable Objective. Substitutions that fail to conform to the specific requirements of the Architect specified materials and equipment could prevent a project from achieving the Sustainable Objective. It is, therefore, critical that each substitution be carefully considered in light of the impact it may have on achieving the Sustainable Objective. As discussed in Article 3 of this Guide, modifications to A201–2007 may require the Contractor to include additional information in the Contractor’s substitution requests.

**§ 3.2 Schematic Design Phase Services.** At the outset of most projects, the Architect may be the Owner’s first point of reference when considering a Sustainable Objective for a project. The AIA recognized this role of the Architect in the 2007 edition of B101 by including the following two sections regarding environmentally responsible design as part of the Architect’s Schematic Design Phase Services:

**§ 3.2.3** The Architect shall present its preliminary evaluation to the Owner and shall discuss with the Owner alternative approaches to design and construction of the Project, including the feasibility of incorporating environmentally responsible design approaches. The Architect shall reach an understanding with the Owner regarding the requirements of the Project.

**§ 3.2.5.1** The Architect shall consider environmentally responsible design alternatives, such as material choices and building orientation, together with other considerations based on program and aesthetics, in developing a design that is consistent with the Owner’s program, schedule and budget for the Cost of the Work. The Owner may obtain other environmentally responsible design services under Article 4.



This language recognizes that the Architect is required to consider basic environmentally responsible design alternatives as part of its Basic Services. As discussed in the section below on Additional Services, if the Owner wishes to expand these responsibilities, the Owner may authorize the Architect to provide other sustainable design services as an Additional Service under the Agreement.

### **Construction Phase Services**

**§ 3.6.6 Project Completion.** As noted in the discussion of the Initial Information, Substantial Completion and the award of a Sustainability Certification are not likely to occur at the same time. The award of a Sustainability Certification typically will be later than the date of Substantial Completion. It is important that the Owner understands that there are significant issues associated with Substantial Completion, including release of retainage and the beginning of the Contractor's warranties and corrections period. Insertion of the following language in Section 3.6.6.1 may facilitate a discussion with the Owner to be sure the Owner understands that these items are triggered by Substantial Completion and not necessarily by award of the Sustainability Certification, or verification that the Sustainable Objective was met, unless the parties specifically provide otherwise in the Contract Documents.

Add the following to the end of B101–2007, Section 3.6.6.1:

#### **Model Language**

§ 3.6.6.1 . . . Substantial Completion does not include award of the Sustainability Certification or verification or certification that the Sustainable Objective has been met.

### **Additional Services**

This Guide provides model language for a scope of “Additional Services for Sustainable Projects” which can be inserted directly in the text of B101–2007. If the parties do not wish to use the recommended model language for **Additional Services for Sustainable Projects** set forth in this Guide and the Owner has requested services that go beyond the basic environmentally responsible design services discussed above, utilizing the table for Additional Services in B101–2007, they could choose (1) “extensive environmentally responsible design” under Section 4.1.23; or (2) LEED® Certification (B214–2007) under Section 4.1.24. The precise scope of “extensive environmentally responsible design services” would need to be described in Section 4.2 of B101–2007 or in an attached exhibit. Each of these options for Additional Services is discussed below.

Categorizing the Architect's sustainable design services as Basic Services or Additional Services may be complicated by the fact that some jurisdictions have established sustainable or green building codes. Section 3.2.1 of B101–2007, requires that the Architect review laws, codes, and regulations applicable to the Architect's services as part of its Basic Services and Section 3.4.2 requires that the Architect incorporate into the Construction Documents the design requirements of governmental authorities having jurisdiction over the Project. However, it is still important to outline a clear scope of services in the Owner/Architect Agreement regarding the Architect's sustainable design duties and those to be undertaken by the Owner and its consultants. Even where a jurisdiction may require a specific Sustainability Certification or compliance with a sustainability-related code, it is still important to define how the Sustainability Plan will be developed, who will perform the Sustainable Measures, who will register the Project with the Certifying Authority and who will submit documents to the Certifying Authority. The Architect and Owner may consider incorporating one or more of the scopes of service described below to clarify and define the parameters of the Architect's services. In addition, the Architect should review the section of this Guide regarding compensation.

**§ 4.1.24 Architect's Services: LEED® Certification, AIA Document B214™–2007.** The USGBC's LEED® building certification systems have become popular systems for establishing methods to design and construct sustainable projects and have been incorporated into the sustainable building statutes of some jurisdictions.<sup>3</sup> AIA Document B214–2007 establishes the Architect's scope of services for LEED® Certification. Among other things, the Architect's services include conducting a pre-design workshop where

<sup>3</sup> It should be noted that in order to achieve societal or environmental benefits some Owners may elect to have their Projects designed in accordance with LEED® principles without necessarily seeking LEED® certification.

the LEED® Certification system will be reviewed and LEED® credits will be targeted, preparing a LEED® certification plan, monitoring the LEED® certification process, providing LEED® specifications for inclusion in the Contract Documents and preparing a LEED® certification report detailing the level of LEED® Certification the Project achieved.

**LEED® Online v3.** In 2009, the USGBC released LEED® version 3.0. As part of that release, the USGBC mandated the use of LEED® Online™ Version 3 (“LEED® Online”) as the vehicle for project registration, document submission, and project certification. The 2009 LEED® registration process requires that all parties who will submit documentation, in furtherance of project registration or certification, agree to Terms and Conditions for the Use of LEED® Online. In addition, the person or entity seeking to register a project for LEED® Certification and/or ultimately applying for that certification must also agree to the LEED® Project Registration Agreement, the LEED® Project Certification Agreement, and the LEED® Certification Policy Manual. Those agreements also incorporate by reference requirements and terms found in other LEED®-related documents.

As originally drafted, these agreements placed significant obligations and responsibilities on the project registrant and on the persons or entities submitting the project for certification.<sup>4</sup> Concerns over the structure and terms of these agreements were raised with the USGBC and GBCI by several industry groups. The USGBC and GBCI considered the concerns raised and, in January 2011, issued revised agreements and related documents for use in conjunction with LEED® Online and the LEED® certification process. The revised documents addressed many of the concerns raised.

The January 2011 revised documents, and the Confirmation of Agent’s Authority in particular, clarify that the USGBC and GBCI are primarily interested in holding the project owner accountable for compliance with the requirements for seeking and maintaining LEED® certification. Having said that, non-owner participants may still assume potential liability arising from the use of LEED® Online and participation in the registration and certification process. It is therefore important that all project participants thoroughly read and understand the agreements and related documents associated with the use of LEED® Online. It is particularly important for project owners to be aware of the content of these documents and the practical and legal obligations they impose. For a more detailed discussion of these agreements see [\*Special Terms and Conditions Imposed by Third Party Certification or Rating Entities \(“Certification Authorities”\), and in particular GBCI and USGBC\*](#), in the Appendix of this Guide.

### **Use of B214™–2007**

AIA Document B214–2007 may be used in three ways.

- 1) The Architect may perform the services included in B214–2007 as its sole scope of services. In that case, B214–2007 should be used in conjunction with AIA Document B102™–2007, Standard Form of Agreement Between Owner and Architect without a predefined Architect’s Scope of Services.
- 2) The Architect may perform the services in B214–2007 as an Additional Service to the Architect’s Basic Services. If the Architect will perform LEED® Certification as an Additional Service, identify the Architect as performing this service in Section 4.1.24 of B101–2007 and attach B214–2007 as an exhibit.
- 3) The scope of work outlined in B214–2007 may be performed by a consultant to the Owner, with the Architect incorporating the LEED® requirements identified in the LEED® Certification Plan<sup>5</sup> into the Architect’s drawings and specifications for the Project. In this instance, the Owner and Architect may need to craft specific provisions to modify B101 and consider appropriate compensation.

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<sup>4</sup> In some instances, those obligations went well beyond what that person or entity could reasonably control. For example, the Project Certification Agreement required the registrant, regardless of whether the registrant was the owner or some other project participant, to provide site access to documentation, and access to project specific energy and water performance documentation for a significant period of time after project completion. Clearly these matters would be within the purview of the project owner and would normally be beyond the scope of matters a project architect, contractor, or green building consultant could control.

<sup>5</sup> The LEED® Certification Plan is similar in nature to the Sustainability Plan described in this Guide. For a more detailed explanation of the defined terms used in AIA Document B214™–2007, please review the instructions to B214–2007.

**Guarantee of Performance.** LEED® Certification relies on the review and approval of the Project by a third party organization, the GBCI, whose independent evaluation of credit requirements is outside of the control of the Owner, Architect or Contractor. Many of the credits required for certification rely not only on the design of the Project but also on the Owner's use and operation of the Project; the Work provided by the Contractor or the work or services provided by the Owner's other contractors or consultants; or interpretation of credit requirements by the GBCI. Maintaining LEED® certification may also be dependent on the proper operation and maintenance of the Project by the Owner following construction. Because of the necessity of meeting all of these requirements, the Architect is not in a position to guarantee or warrant that certification will be achieved. The Architect may wish to include an affirmative acknowledgement that LEED® Certification is dependent on the performance of other persons outside the Architect's control and cannot be warranted or guaranteed by the Architect.

If the Architect is performing LEED® Certification services pursuant to B214–2007, add the following Section 12.2 to B101–2007:

**Model Language**

§ 12.2 The Owner and Architect acknowledge that LEED® Certification is awarded by the Green Building Certification Institute (GBCI), an independent third party organization, and is dependent on factors beyond the Architect's control, such as the Owner's use and operation of the Project; the Work provided by the Contractor or the work or services provided by the Owner's other contractors or consultants; or interpretation of credit requirements by GBCI. Accordingly, the Architect does not warrant or guarantee that the Project will be granted LEED® Certification by the GBCI.

**§ 4.4 Additional Services for Sustainable Projects.** The Architect on a sustainable project may perform a variety of services. For example, the Architect may be asked to explore design elements that can be incorporated into the Project consistent with achieving the Sustainable Objective, such as reducing energy consumption or improving indoor air quality.

It is important for the Owner and Architect to develop a clear understanding regarding the complete scope of the Architect's services. Outlined below is a sample scope of services for sustainable projects. This scope of services establishes a process to: (1) determine the Owner's Sustainable Objective; (2) develop a Sustainability Plan outlining the Sustainable Measures necessary to achieve the Sustainable Objective; (3) designate responsibility for each Sustainable Measure; and (4) incorporate the Sustainable Measures included in the Sustainability Plan into the drawings and specifications for the Project.

This scope of services is meant to be flexible and may be used on many types of sustainable projects. For example, this scope of services could be used on a project with a single goal of 75% energy savings, compared to a referenced benchmark standard, as its Sustainable Objective or a project where the Sustainable Objective is both 75% energy savings and some third party rating or certification. The level of service can be specifically tailored to the Owner's requirements and budget.

**Predesign Workshop.** Fundamental to the success of sustainable projects is the development of a clear understanding of the Owner's goals and expectations for the Project. A predesign workshop allows the Architect, Owner and other participants to meet prior to beginning the design phase of the Project to confirm the Sustainable Objective and establish the goals and expectations for the Sustainable Measures that will be incorporated into the Project. During the predesign workshop, the Project participants should discuss the Owner's intended use of the Project and potential Sustainable Measures that would allow the Owner to achieve its goals for the Project. In addition, the Architect may advise the Owner on the feasibility of, or budget impacts arising from, the potential incorporation of Sustainable Measures, or necessary implementation procedures. The Owner and Architect may also discuss the potential post-construction impact the Sustainable Measures may have on the completed Project such as building operations or maintenance procedures.

**Sustainability Plan.** The model language included below requires that, following the predesign workshop, the Architect develop a Sustainability Plan based on the Sustainable Objective. The Sustainability Plan identifies the Sustainable Measures; and may take, for example, the form of a spreadsheet outlining each of

the Sustainable Measures targeted and allocating responsibility for that measure to one or more of the Project participants. The Sustainability Plan is not intended to be aspirational in nature, but rather a road map for achieving the Sustainable Objective that clearly outlines the Sustainable Measures and who is responsible for achieving them. When developing the Sustainability Plan, the parties should consider how achievement of each Sustainable Measure is going to be verified. The Sustainability Plan can be used to establish performance parameters that will demonstrate achievement of each Sustainable Measure, the types of testing necessary, and the party responsible for verification that those performance parameters have been met. Including a clear methodology in the Sustainability Plan for verifying that the Sustainable Measures have been achieved will clarify each party's responsibility for a particular Sustainable Measure and may lead to fewer claims on the Project.

Upon completion of the Sustainability Plan, the Architect will submit the Sustainability Plan to the Owner for approval. During the design phase, the Sustainable Measures included in the Sustainability Plan should be incorporated into the drawings and specifications, as appropriate, and will form part of the basis for the bidding or negotiation of the Owner/Contractor Agreement. Additionally, the Sustainability Plan may be bound into the specifications for the Project. Once the Owner and Architect have agreed to the Sustainability Plan, it may be prudent for each party to acknowledge agreement to the Sustainability Plan in writing. This can avoid confusion and minimize disputes later as the parties have a clear record of their agreement.

**Design Phase.** The Architect, as part of the design phase for the Project, will incorporate the Sustainable Measures for the Project, identified in the Sustainability Plan, into the drawings and specifications as appropriate. This may require additional information in the drawings and specifications, such as specific performance criteria or other required characteristics of materials or equipment. Identification of how the performance criteria or other required characteristic contributes to attaining a Sustainable Measure will provide guidance for substitution requests. (See [Substitutions in Article 3](#), below.)

It is also important for the Architect to review the effect of Sustainable Measures on building systems and other aspects of the Project with the Owner; explain how those building systems are intended to be operated in accordance with the design parameters; and explain the impact on building use and occupancy resulting from the utilization of Sustainable Measures. For example, the Owner should understand how operation of the HVAC system, in accordance with the design parameters required to meet a Sustainability Measure or the Sustainable Objective, will impact temperature, humidity and other aspects of the building environment.

**Guarantee of Performance.** It is important to recognize that successful achievement of the Sustainable Objective will depend not only on the design of the Project but also the Owner's use and operation of the Project; the Work provided by the Contractor or the work or services provided by the Owner's other contractors or consultants; or interpretation of credit requirements by a Certifying Authority. Accordingly, the Architect is not in a position to guarantee or warrant that the Project will achieve the Sustainable Objective. The Architect may wish to include a statement similar to Section 4.4.3.2 below.

**Untested Materials and Equipment.** The Owner's Sustainable Objective or other Project requirements may necessitate use of untested materials and equipment on the Project. The Architect or its consultants may be unable to confirm a track record of reliability for the materials or equipment. If the materials or equipment fail to perform in accordance with the manufacturer's representations, the Project may fail to achieve the Sustainable Objective. It is important that the Architect discuss untested products with the Owner and inform the Owner of any potential impact on the Sustainable Objective that may occur if the product fails to meet the manufacturer's representations. If, after discussion with the Architect about the potential impacts on the Sustainable Objective, the Owner chooses to use the product, the model language included as Section 4.4.3.3 below may limit the Architect's liability for a failure of the product to perform in accordance with the manufacturer's representations.

If the Architect will perform the Additional Services for Sustainable Projects as described above, include the following as Section 4.4 in B101–2007:

#### **Model Language**

#### **§ 4.4 Additional Services for Sustainable Projects**

##### **§ 4.4.1 Predesign Workshop**

The Architect shall conduct a predesign workshop with the Owner, the Owner’s consultants, and the Architect’s consultants during which the participants will: review and discuss potential Sustainable Measures to be targeted; establish the Sustainable Objective; examine strategies for implementation; and discuss the potential impact on the Project schedule and the Owner’s program and budget.

##### **§ 4.4.2 Sustainability Plan**

§ 4.4.2.1 Following the predesign workshop, the Architect shall prepare a Sustainability Plan based on the Sustainable Objective and Sustainable Measures targeted and shall submit the Sustainability Plan to the Owner, and request the Owner’s approval.

§ 4.4.2.2 Based on the Owner’s approval of the Sustainability Plan and any approved changes to the Sustainability Plan, the Architect shall perform those Sustainable Measures specifically identified as the responsibility of the Architect in the Sustainability Plan. If the Sustainability Plan requires the Architect to provide services beyond those contemplated at the time of execution of this Agreement, those services shall be provided pursuant to Section 4.3.1.1.

§ 4.4.2.3 Subject to Section 4.4.4, the Architect shall revise the Sustainability Plan as the design and construction of the Project progresses to reflect any changes approved by the Owner.

##### **§ 4.4.3 Design Phase**

§ 4.4.3.1 The Architect shall prepare Drawings and Specifications that incorporate the Sustainable Measures identified in the Sustainability Plan, as appropriate.

§ 4.4.3.2 The Owner and Architect acknowledge that achieving the Sustainable Objective is dependent on many factors beyond the Architect’s control, such as the Owner’s use and operation of the Project; the Work provided by the Contractor or the work or services provided by the Owner’s other contractors or consultants; or interpretation of credit requirements by a Certifying Authority. Accordingly, the Architect does not warrant or guarantee that the Project will achieve the Sustainable Objective.

§ 4.4.3.3 As part of the Sustainable Measures, the Project may require the use of materials and equipment that have had limited testing or verification of performance. The Architect will review the product literature and manufacturer’s performance representations but may be unable to determine that the materials or equipment will perform as represented by the manufacturer. The Architect will discuss with the Owner the proposed use of such materials or equipment and discuss potential effects on the Sustainable Objective that may occur if the materials or equipment fail to perform in accordance with the manufacturer’s representation. The Owner will render a decision regarding the use of such materials or equipment in accordance with Section 5.3. In the event the Owner elects to proceed with the use of such materials or equipment, the Architect shall be permitted to rely on the manufacturers’ or suppliers’ representations and shall not be responsible for any failure of the Project to achieve the Sustainable Objective as a result of the use of such materials or equipment.

#### **Limitations on Additional Services for Sustainable Projects**

It is important to clearly define the scope of the Architect’s sustainable design and construction phase services. Throughout the design and construction of the Project, it may be necessary to perform multiple revisions to the Sustainability Plan or make multiple submittals to the Certifying Authority. These services may not be contemplated as part of the scope of the Architect’s Additional Services and could require a significant expenditure of resources or funds; especially on projects where Additional Services for Sustainable Projects are being performed on a fixed fee basis. The Architect might consider placing limitations on certain services which, if exceeded, would be compensated as an Additional Service under Section 11.3 of B101–2007.

Add the following section 4.4.4 to B101–2007:

**Model Language**

§ 4.4.4 The Architect’s services exceeding the limits set forth below shall be compensated as Additional Services under Section 11.3. When the limits below are reached, the Architect shall notify the Owner:

- .1 \_\_\_\_\_ ( ) revisions to the Sustainability Plan
- .2 \_\_\_\_\_ ( ) meetings during development of the design and Contract Documents required to define, develop and incorporate the Sustainable Measures
- .3 \_\_\_\_\_ ( ) submittals to the Certifying Authority
- .4 \_\_\_\_\_ ( ) responses to the Certifying Authority’s comments and questions

**Other Certifications.** The scope of services set forth above may be used on projects where the Owner seeks to incorporate performance-based Sustainable Measures and also on projects where the Owner seeks a Sustainability Certification, other than LEED® Certification services using B214–2007. The model language included below assumes that the Architect will be responsible for registering the Project with the appropriate Certifying Authority and submitting the Project for certification. The model language also assumes that the Architect will pay all fees required by the Certifying Authority to register the Project and obtain the Sustainability Certification and those fees will be treated as a reimbursable expense to the Architect. If the Architect is unwilling or unable to pay those fees, the model language included in Section 4.4.5.3 below, should be deleted and new language should be added to Article 5 of B101–2007 requiring the Owner to make those payments. As noted in the previous discussion of LEED® Online, the Certifying Authority may require the individual or entity registering or submitting the Project for certification to enter into certain ancillary agreements with the Certifying Authority. The Architect should carefully review these agreements and consult with legal counsel regarding their terms. If the Architect is the party responsible for registering the Project and submitting the Documentation for Certification necessary for the selected Sustainability Certification, consider including the following language:

Add the following Section 4.4.5 to B101–2007:

**Model Language**

§ 4.4.5 Submission of Documentation for Certification

§ 4.4.5.1 The Architect shall collect the Documentation for Certification from the Owner and Contractor and organize and manage the Documentation for Certification as necessary for the Sustainability Certification process.

§ 4.4.5.2 The Architect shall review the Sustainability Certification process and regularly report progress to the Owner.

§ 4.4.5.3 The Architect shall register the Project with the Certifying Authority. Registration fees and any other fees charged by the Certifying Authority shall be a reimbursable expense under Section 11.8.1 of this Agreement.

§ 4.4.5.4 Subject to Section 4.4.4, the Architect shall submit the Documentation for Certification to the Certifying Authority as required by the Sustainability Plan.

§ 4.4.5.5 Subject to Section 4.4.4, the Architect shall prepare and submit the applicable certification application for the Project to the Certifying Authority in accordance with the Sustainability Plan.

§ 4.4.5.6 Subject to Section 4.4.4, the Architect shall prepare responses to, and submit additional documentation required by, comments or questions received from the Certifying Authority after review of the application, required calculations, and documentation.

**§ 4.1.23 Extensive Environmentally Responsible Design**

The scope of services outlined above as Section 4.4 is one example of the type of services that the Architect might perform on a sustainable project. If the scope of services described in Section 4.4 does not meet the Owner’s goals, the Owner and Architect may select Section 4.1.23: Extensive Environmentally Responsible Design from the table of Additional Services included in B101–2007. The AIA has not provided a description of services for extensive environmentally responsible design. In this situation, the parties have the ability to

develop their own specific scope of services that should be attached to B101–2007 as an exhibit or a description inserted in Section 4.2.

#### **§ 4.1.22 Commissioning: AIA Document B211™–2007**

Building commissioning is a prerequisite for LEED® certification, a requirement of the draft IgCC, and a requirement of most other sustainability certifications, ordinances and laws. Building commissioning is a process that verifies that key systems in a new building are performing in accordance with the Owner’s requirements, as well as with applicable certification requirements, and are consistent with the design requirements. Key to the commissioning process is establishing the performance criteria for the systems to be commissioned in order to demonstrate, through measurable and objective testing, that the systems actually perform in accordance with this criteria. In addition, commissioning should include operator systems training that addresses not only proper operation and maintenance of the systems, but also demonstrates the purpose of the system, special design features, operating sequences, and any limitations of the system. Commissioning may also include a follow up meeting with the Owner, typically one year following Substantial Completion of the Project, to review specific systems and to provide additional recommendations on the operation and performance of commissioned systems.

AIA Document B211™–2007 provides a scope of services for commissioning that requires the Architect, based on the Owner’s approval of systems to be commissioned, to develop a commissioning plan, a design intent document, and commissioning specifications. It also requires that the Architect review the Contractor’s submittals and other documentation related to the systems to be commissioned, observe and document performance tests, train operators, and prepare a final commissioning report.

It should be noted that in some instances it may not be appropriate for the Architect to perform commissioning of the Project. LEED®, for example, permits the Architect to perform the prerequisite “Fundamental Commissioning” but requires an independent agent that may be contracted by the Architect to perform “Enhanced Commissioning.” Local law or Owner preference may also prevent the Architect from performing commissioning of the Project.

If the Architect will perform commissioning as an Additional Service, identify the Architect as performing this service in Section 4.1.22 of B101–2007 and attach B211–2007 as an exhibit.

#### **§ 4.3.1 Changes to the Sustainability Plan or Instruments of Service**

The requirements for a specific Sustainability Certification may change during the course of the Project. It is important, when a Sustainability Certification is selected for the Project, to clearly identify the version of the Sustainability Certification applicable to the Project in the Sustainability Plan. Some Sustainability Certifications may allow you to “lock in” a particular version of the certification system when you register the Project. If the requirements to achieve the Sustainability Certification change during the course of the Project, the Architect may need to perform significant additional work to revise the plans and specifications for the Project to meet the new requirements. Consider including a new Section 4.3.1.12 to address changing or editing previously prepared Instruments of Service arising from a change in the Sustainability Certification requirements as an Additional Service compensated under Section 11.3 of B101–2007.

Add the following Section 4.3.1.12 to B101–2007:

##### **Model Language**

- .12 Changing or editing previously prepared Instruments of Service, including the Sustainability Plan, necessitated by changes in the requirements to achieve the Sustainability Certification established for the Project.

In addition, the Owner and Contractor are responsible for preparing Documentation for Certification as allocated in the Sustainability Plan. Assistance provided by the Architect with preparation of such documentation, if requested by the Owner or Contractor, may be included as an Additional Service using the model language below.

Add the following Section 4.3.1.13 to B101–2007:

##### **Model Language**

- .13 Assistance to the Owner or Contractor with preparation of Documentation for Certification for which the Owner or Contractor are responsible pursuant to the Sustainability Plan.

**§ 4.3.4 Completion of the Architect's Services.** B101–2007 Section 4.3.4 establishes a time limit for performance of the Architect's services. If the Project is not completed within the time specified, continued performance by the Architect will be compensated as Additional Services. Additionally, the Architect's Basic Services during the Construction Phase end 60 days after (1) the date of Substantial Completion of the Work or (2) the anticipated date of Substantial Completion identified in the Initial Information, whichever is earlier, unless the Owner has authorized the Architect to continue performing Construction Phase services as Additional Services. On a sustainable project, the Owner may request that the Architect continue to perform services for the Project until the Sustainable Objective is achieved. However, achievement of the Sustainable Objective may be delayed by reasons beyond the Architect's control and may occur later than Substantial Completion. It may, therefore, be necessary to place a limit on the duration of the Architect's services under Section 4.4.

Modify B101–2007 Section 4.3.4 and add Section 4.3.5 as follows:

**Model Language**

§ 4.3.4 Except as otherwise provided in Section 4.3.5, if the services covered by this Agreement have not been completed within \_\_\_\_\_ (\_\_) months of the date of this Agreement, through no fault of the Architect, extension of the Architect's services beyond that time shall be compensated as Additional Services.

§ 4.3.5 If the Additional Services for Sustainable Projects required of the Architect by Section 4.4 have not been completed within \_\_\_\_\_ (\_\_) months after the date of Substantial Completion, through no fault of the Architect, extension of the Architect's services under Section 4.4 beyond that time shall be compensated as Additional Services.

**Owner's Responsibilities**

On a sustainable project, the Owner's responsibilities during construction could include retaining a consultant to advise the parties regarding the Sustainable Objective and Sustainable Measures; registering the Project for a Sustainability Certification; creating a budget to cover increases in cost related to achieving the Sustainable Objective; approval of the allocation of responsibility for achieving Sustainable Measures included in the Sustainability Plan; and engaging an independent third party commissioning agent if one is required by the Sustainability Plan or Certification Authority. The Owner's responsibilities following construction may include responsibility for operation and maintenance in accordance with the requirements of the Certification Authority or Sustainability Plan; responsibility for executing certain post-construction Sustainable Measures as required by the Sustainability Plan; responsibility for ensuring that tenants occupy and use the building in accordance with its design intent; and responsibility for recertification of the Project if required by the Sustainability Certification.

It is important to include in the Agreement an affirmative duty of the Owner to perform those Sustainable Measures identified as a responsibility of the Owner in the Sustainability Plan.

Add the following Section 5.13 to B101–2007:

**Model Language**

§ 5.13 Based on the Owner's approval of the Sustainability Plan and any approved changes to the Sustainability Plan, the Owner shall perform those Sustainable Measures identified as the responsibility of the Owner in the Sustainability Plan, or as otherwise required by the Contract Documents. The Owner shall require that each of its contractors and consultants perform the contractor's or consultant's services in accordance with the Sustainability Plan.

Sustainable projects may require the Owner to provide additional information, such as historical utility usage data, in addition to the information required in B101–2007, in order for the Architect to assist the Owner in making decisions regarding the Sustainable Objective and Sustainable Measures targeted for the Project. This may be particularly true on renovation projects where information on existing construction may play a critical role in developing the Sustainability Plan. A provision should be included in the Agreement that requires the Owner to provide any information pertinent to the Project.



Add the following Section 5.14 to B101–2007:

**Model Language**

§ 5.14 The Owner shall provide to the Architect any information relevant and necessary for achievement of the Sustainable Objective, including design drawings; construction documents; record drawings; shop drawings and other submittals; operation and maintenance manuals; master plans; operation costs; operation budgets; pertinent records relative to historical building data, building equipment and furnishings; and repair records.

**Consultants**

For a sustainable project, it may be necessary for the Architect to hire consultants with expertise in specific areas of the Project related to sustainable design. Like all projects, sustainable projects require the careful development and coordination of the scope of services to be provided by each of the respective consultants.

AIA Document C401™–2007 is a standard form of agreement to be used by the Architect and the Consultant providing services to the Architect to establish their responsibilities to each other and their mutual rights under the Agreement. C401–2007 incorporates by reference a pre-existing Owner/Architect Agreement known as the Prime Agreement. C401–2007 utilizes a flow-down provision, at Section 1.3, to incorporate the rights and responsibilities that the Owner and Architect have with respect to each other in the Prime Agreement and extend those rights and responsibilities, respectively, to the Architect and the Consultant.

Section 1.2 of C401–2007 requires the Architect and the Consultant to describe the Portion of the Project for which the Consultant is required to provide services. Once the Consultant’s Portion of the Project has been defined, the flow-down provision requires the Consultant to assume toward the Architect all obligation and responsibilities that the Architect assumes toward the Owner in the Prime Agreement as applicable to the Consultant’s Portion of the Project. Therefore, any Sustainable Measures required of the Architect in the Sustainability Plan that are contained in the Consultant’s Portion of the Project would become the responsibility of the Consultant.

Given this flow down of responsibilities, it is important that the Architect clearly define the Consultant’s scope of services for the Consultant’s Portion of the Project. It is equally important to clearly define any limitations or other conditions on which the Consultant’s services are based. With this clear understanding of the Architect’s expectations of the Consultant, there may be very few provisions of the Consultant agreement that require modification for a sustainable project.

**Instruments of Service**

In order to be sure that the Owner is able to comply with the requirements of the Certifying Authority, revisions to the nonexclusive license included in B101–2007 may be necessary to grant an additional nonexclusive license to the Owner to submit Instruments of Service to the Certifying Authority and for the Certifying Authority to use the Instruments of Service in accordance with its requirements.

Delete Section 7.3 of B101–2007 in its entirety and add:

**Model Language**

§ 7.3 Upon execution of this Agreement, the Architect grants to the Owner a nonexclusive license to use the Architect’s Instruments of Service solely and exclusively for purposes of constructing, using, maintaining, altering and adding to the Project. Solely for the purpose of obtaining or maintaining the Sustainability Certification, the Architect also grants the Owner a nonexclusive license to submit the Architect’s Instruments of Service, directly or through third parties, to the Certifying Authority to comply with the requirements imposed by the Certifying Authority and further grants the Owner a nonexclusive license to allow the Certifying Authority to publish the Instruments of Service in accordance with the policies and agreements required by the Certifying Authority. The Architect shall obtain similar nonexclusive licenses from the Architect’s consultants consistent with this Agreement. The license granted under this section permits the Owner to authorize the Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers, as well as the Owner’s consultants and separate contractors, to reproduce applicable portions of the Instruments of Service solely and exclusively for use in performing services or construction for the Project. The licenses granted in this Section 7.3 are valid only if the Owner substantially performs its obligations, including prompt payment of all sums when due, under this Agreement. If the Architect rightfully terminates this Agreement for cause as provided in Section 9.4, the license granted in this Section 7.3 shall terminate.

## Claims and Disputes

Potential damages are an important issue on all projects but of particular importance on projects with sustainability requirements. Several contractual methods of addressing damages are discussed below. However, all damages provisions should be reviewed by each party's legal counsel.

**§ 8.1.3 Consequential Damages.** The AIA has included mutual waivers of consequential damages in its agreements since 1997. The importance of this waiver as a tool to mitigate potential damages is especially applicable to a sustainable project. Consequential damages on any particular sustainable project could include unachieved energy savings, unintended operational expenses, lost financial or tax incentives or unachieved gains in worker productivity. By including the model language below, the parties agree that these types of damages are consequential.

Because it is unlikely that any one of the Project participants will be solely responsible for providing a sustainable building or Sustainability Certification, liability for consequential damages may be difficult to allocate. Additionally, the types of consequential damages that may be alleged on a sustainable project, such as unrealized gains in worker productivity, could be extremely difficult to prove.<sup>6</sup>

The mutual waiver of consequential damages included in B101–2007 and other AIA Documents includes all consequential damages regardless of the specific circumstances of the Project. However, upon consultation with legal counsel, it may be desirable to modify the mutual waiver of consequential damages to address specific or unique concerns related to your Project. Included below is model language that addresses the unique types of consequential damages that may arise on a sustainable project.

Add the following Section 8.1.3.1 to B101–2007:

### **Model Language**

§ 8.1.3.1 The mutual waiver in this Section 8.1.3 expressly includes those consequential damages resulting from failure of the Project to achieve the Sustainable Objective or one or more Sustainable Measures including unachieved energy savings, unintended operational expenses, lost financial or tax incentives, or unachieved gains in worker productivity.

**§ 8.1.4 Limitation of Liability.** Due to the nature of the risks to the Architect on a sustainable project, the Architect might consider including a limitation of liability provision to establish a maximum amount of liability for the Architect if there is a claim by the Owner. Note that the Limitation of Liability clause applies only to claims between the Owner and Architect, and that claims from third parties will not normally be affected.

For model language that provides several methods of formulating a limitation of liability provision that may be used in B101–2007, see AIA Document B503™–2007, Guide for Amendments to AIA Owner/Architect Agreements.

**§ 8.1.5 Indemnity.** B101–2007 does not contain a provision requiring that the Architect indemnify the Owner. AIA Document B103™–2007, Standard Form of Agreement Between Owner and Architect for a Large or Complex Project, contains an indemnity provision against third-party claims that limits the Architect's duty to indemnify the Owner to the available proceeds of insurance coverage. Many states have laws limiting or prohibiting the enforceability of indemnity clauses. The parties are cautioned to consult with legal counsel as to the specific application of local laws to this provision. The indemnity provision included in B103–2007<sup>7</sup> is an example of language that has been carefully drafted so that the Architect is only liable for those third party claims to the extent caused by the Architect's negligent acts or omissions and recovery is limited to the

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<sup>6</sup> Users are cautioned against executing any AIA Contract Document that has been modified to eliminate the mutual waiver of consequential damages language.

<sup>7</sup> **AIA Document B103™–2007 Section 8.1.3.** The Architect shall indemnify and hold the Owner and the Owner's officers and employees harmless from and against damages, losses and judgments arising from claims by third parties, including reasonable attorneys' fees and expenses recoverable under applicable law, but only to the extent they are caused by the negligent acts or omissions of the Architect, its employees and its consultants in the performance of professional services under this Agreement. The Architect's duty to indemnify the Owner under this provision shall be limited to the available proceeds of insurance coverage.

available proceeds of insurance coverage. Indemnity language that would require the Architect to indemnify the Owner for liability not caused by the Architect's negligence or that is otherwise outside the policy limits or insurance coverage poses additional risk for an architect and in some states may be unenforceable.

**§ 10.9 Confidentiality of Documentation for Certification.** As noted above, many Certification Authorities require that the party registering or submitting a project for a Sustainability Certification enter into certain ancillary agreements with the Certifying Authority. GBCI requires that the registrant of the Project enter into the Registration Agreement with GBCI. The Registration Agreement provides for a license to GBCI to access and view all information submitted to GBCI by or on behalf of the registrant, in relation to the Project. The Registration Agreement provides that this license also includes the right for GBCI and USGBC to use, reproduce, publish and display this information in the ways identified in the LEED® Policy Manual. Submission of certain Project information and Instruments of Service to GBCI may be in violation of strict confidentiality provisions contained in certain Owner/Architect Agreements. AIA Document B101–2007 states that the Architect may disclose the Owner's confidential information to "those who need to know the content of such information in order to perform services or construction solely and exclusively for the Project." While this language may be sufficient to allow the type of disclosure provided by the LEED® Registration Agreement, it may be prudent to include authorization to disclose information to the Certifying Authority in the Agreement.

Add the following Section 10.9 to B101–2007:

**Model Language**

§ 10.9 The Architect shall have the right to submit the Documentation for Certification obtained from the Owner or its contractors and consultants to the Certifying Authority as necessary to perform the Architect's services for the Project, including information designated as confidential or business proprietary by the Owner or its contractors and consultants.

**Compensation**

**§ 11.2 Additional Services**

AIA Document B101–2007 separates the Architect's compensation for services into two categories, compensation for Basic Services and compensation for Additional Services. In addition, compensation for Additional Services is subdivided into two categories; those Additional Services known at the time of entering into the Agreement and those that arise during the course of the Project. This allows for flexibility in developing the Architect's compensation structure for the Project. For example, Basic Services could be compensated based on a percentage of the Cost of the Work while Additional Services might be billed on an hourly basis.

Other than the Architect's consideration of basic environmentally responsible design alternatives under Sections 3.2.3 and 3.2.5.1, B101–2007 does not include services related to sustainable design as part of the Architect's Basic Services. If the Architect is hired to perform LEED® Certification services or extensive environmentally responsible design services, these services would be designated in the table at Section 4.1 and additional compensation for this service would be included in Section 11.2.

If the Architect is hired to perform Additional Services for Sustainable Projects, these services would be included as a new Section 4.4 and a new Section 11.2 would be added as follows:

Delete Section 11.2 of B101–2007 in its entirety and add the following:

**Model Language**

§ 11.2 For Additional Services designated in Section 4.1 and Additional Services described in Section 4.4, except for those services that exceed the limits set forth in Section 4.4.4, the Owner shall compensate the Architect as follows:

*(Insert amount of, or basis for, compensation. If necessary, list specific services to which particular methods of compensation apply.)*

When the limits under Section 4.4.4, included in the Section on Additional Services for Sustainable Projects, have been exceeded, those services are compensated under Section 11.3. Section 11.3 would need to be modified to include those services.

Delete Section 11.3 of B101–2007 in its entirety and add the following:

**Model Language**

§ 11.3 For Additional Services that may arise during the course of the Project, including those under Section 4.3 and Section 4.4.4, the Owner shall compensate the Architect as follows:

*(Insert amount of, or basis for, compensation.)*

In jurisdictions where building codes have incorporated sustainable design and construction requirements, Owners may expect sustainable design services as part of the Architect's Basic Services. The Architect will need to consider whether the Architect's typical compensation structure for Basic Services requires adjustment in consideration of the significant additional responsibilities, risks and expenditures of time the Architect may be required to assume. This may be problematic for Architects that bill Basic Services as a percentage of the Cost of the Work; and may be particularly troublesome on public projects where compensation for the Architect's Basic Services may be set by laws, ordinances and regulations.

**§ 11.4 Compensation for Architect's Consultants.** The scope of services that the Architect is hired to perform on a sustainable project may include elements outside the services typically performed in the Architect's day-to-day practice. These services could include some of the services outlined above such as commissioning or LEED® Certification Services or may include, for example, consultants for land use planning or lighting. The services of these consultants may be costly and may fall outside the Architect's typical fee structure for Basic Services and Additional Services. The Architect may consider a form of direct reimbursement for the costs of these consultants. The costs of consultants could be billed as the direct cost paid by the Architect for the consultant's services plus a percentage under Section 11.4 of B101–2007 or as direct hourly billings under Section 11.7 of B101–2007.

**§ 11.8 Reimbursable Expenses.** The Architect may accrue additional reimbursable expenses in a sustainable project that are not listed in Section 11.8.1 of B101–2007. Additional reimbursable expenses could include, for example, the cost of registering or applying for certification of the Project with a selected Certifying Authority or Project specific software necessary to achieve the Sustainable Objective. The Architect will want to specify that these costs are reimbursable, or perhaps specify that they are to be paid in advance by the Owner.

Some examples of additional reimbursable expenses are included below and may be added to Section 11.8.1 of B101–2007; other items could be added based on the specific requirements of a particular Project.

**Model Language**

- .12 Additional expenses for Project specific software or other equipment or materials necessary to achieve, or directly related to, the Sustainable Objective;
- .13 Fees paid to the Certifying Authority;
- .14 Presentation materials required for submission to the Certifying Authority or as otherwise necessary to achieve the Sustainable Objective.

## ARTICLE 3 AGREEMENT BETWEEN OWNER AND CONTRACTOR AND GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

The following sections are coordinated with the article and section numbers found in AIA Documents A101™–2007 and A201™–2007, as indicated, for easy reference. However, the information included below, with careful review and coordination, may be applicable to other AIA agreements. *It is important to note that the discussion and model language included below incorporates the Special Definitions included in Article 1 of this Guide.* Careful coordination is required when modifying your agreement or creating Supplementary Conditions.

## General Provisions

**The Contract Documents.** Because the Sustainability Plan prepared by the Architect and approved by the Owner is the critical document in outlining the Owner's, Architect's and Contractor's responsibilities for Sustainable Measures necessary to achieve the Sustainable Objective, it is important to include reference to the Sustainability Plan as a Contract Document.

The term Contract Documents is defined in both AIA Documents A101–2007 and A201–2007. The definition in each of these documents may be modified as follows to include the Sustainability Plan.

Modify Article 1 of A101–2007 as follows:

### Model Language

#### ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, the Sustainability Plan, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

In addition to the modification to Article 1 stated above, it will be necessary to add the Sustainability Plan to the enumeration of Contract Documents included in A101–2007, Article 9.

Add the following to A101-2007 Section 9.17:

### Model Language

.3 The Sustainability Plan

It is also necessary to modify the definition of the Contract Documents in A201–2007.

Modify Section 1.1.1 of A201–2007 as follows:

### Model Language

#### § 1.1.1 The Contract Documents

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, the Sustainability Plan, Addenda issued prior to execution of the Contract, other documents listed in the Agreement and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of Addenda relating to bidding requirements.

**§ 1.1.9 Special Definitions.** The Special Definitions described in Article 1 of this Guide would be included as Section 1.1.9 of A201–2007.

## Owner's Responsibilities

Achieving the Sustainable Objective relies on more than the Contractor's performance. The Owner, Architect and Contractor must each perform those services identified as their responsibility in the Sustainability Plan. An affirmative obligation on the Owner's part to perform those Sustainable Measures identified as the responsibility of the Owner should be included as part of the General Conditions.

Add the following Section 2.2.6 to A201–2007:

**Model Language**

§ 2.2.6 The Owner shall perform those Sustainable Measures specifically identified as the responsibility of the Owner in the Sustainability Plan, including any approved changes, or as otherwise required by the Contract Documents. The Owner shall require that each of its contractors and consultants perform the contractor's or consultant's services in accordance with the Sustainability Plan.

**Contractor's Responsibilities**

As with the Owner, an affirmative requirement that the Contractor perform those Sustainable Measures identified as the responsibility of the Contractor in the Sustainability Plan and Contract Documents should be included as part of the General Conditions.

Add the following Section 3.1.4 to A201–2007:

**Model Language**

§ 3.1.4 The Contractor shall perform those Sustainable Measures specifically identified as the responsibility of the Contractor in the Sustainability Plan or as otherwise required by the Contract Documents.

**§ 3.4.2 Substitutions.** The process for handling substitutions on a sustainable project is complicated by the fact that the suitability, characteristics, performance and reliability of materials and equipment can have far-reaching impacts, not only on the Project schedule and the long-term function of the Project, but also on whether targeted Sustainable Measures will be achieved. The process for evaluating substitutions must be communicated to all parties to the Project, and appropriate changes to A201–2007 should be considered. The following section establishes the criteria for submission of substitution requests that may have an effect on the Sustainable Objective. Such language may be included in the General Requirements (Division 1 of the Specifications) as well as the Supplementary Conditions. A more detailed process for the review of substitutions can be found in AIA Document A503™–2007.

Add the following Section 3.4.2.1 A201–2007:

**Model Language**

§ 3.4.2.1 The Contractor shall include with any substitution requests submitted in accordance with Section 3.4.2 a written representation identifying any potential effect the substitution may have on Project's ability to achieve a Sustainable Measure or the Sustainable Objective. The Architect is entitled to rely on these representations by the Contractor.

**§ 3.5.2 Warranty.** Achieving the Sustainable Objective depends upon a number of decisions and actions during design and construction of the Project. The Owner's actions post-construction and during occupancy of the building also affect the ability to achieve and maintain the Sustainable Objective. Contractors should avoid incorporating contractual language or taking actions that could be construed as establishing a warranty as it pertains to achievement of the Sustainable Objective. Model contract language stating that the Contractor will construct the Project in accordance with the Contract Documents (including the Sustainability Plan) but that the Contractor cannot warrant that the building will achieve the Sustainable Objective is provided below.

In A201–2007, immediately before the existing text of Section 3.5, add a section reference as follows “§3.5.1” and then add the following Section 3.5.2 to A201–2007:

**Model Language**

§ 3.5.2 The Contractor shall perform the Sustainable Measures required to be performed by the Contractor in accordance with the Contract Documents, however, nothing contained in this Section 3.5 shall be construed as a guarantee or warranty by the Contractor that the Project will achieve the Sustainable Objective.

**§ 3.7 Compliance with Laws.** Many state and local jurisdictions have adopted policies and laws establishing requirements for sustainable design and construction. Some jurisdictions require all projects to achieve a specified Sustainability Certification while other jurisdictions have enacted comprehensive laws that outline specific performance requirements. It is important that the Contractor understand what is required in the jurisdiction where the Project is located.

AIA Document A201–2007, Section 3.7, requires the Contractor to (1) comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work and (2) assume appropriate responsibility for such Work and bear the costs attributable to correction of Work the Contractor performs knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities. Codes, laws and regulations relating to sustainable design and construction could impose responsibility on the part of the Contractor in addition to the responsibilities required by A201–2007.

**§ 3.11 Documentation for Certification.** Where an Owner requires achievement of a Sustainability Certification or where a Sustainability Certification is required by law, the Contractor may have responsibility under the Contract Documents for preparing Documentation for Certification.

Add the following to the end of Section 3.11 of A201–2007:

**Model Language**

The Contractor shall be responsible for timely preparing and completing the Documentation for Certification required of the Contractor in the Contract Documents and submitting the Documentation for Certification to the Architect in accordance with any schedules or deadlines set forth in, or as otherwise required by, the Contract Documents. In the absence of schedules or deadlines for submission of Documentation for Certification in the Contract Documents, the Contractor will submit the Documentation for Certification with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors. The Contractor grants to the Architect or the Owner the right to submit the Documentation for Certification to the Certifying Authority as required in order to achieve or maintain the Sustainability Certification.

**§ 3.12 Submittals.** The Contractor’s submittals, such as shop drawings, product data and samples, play an increasingly important role on sustainable projects. Submittals related to sustainable products, materials and methods often require additional time for preparation. The Contractor may consider including additional time in its submittal schedule to allow for preparation of submittals relating to sustainable products, materials and methods. Multiple submittals related to a particular Sustainable Measure must be considered together as they often have a collective effect on achieving the Sustainable Measure. As with all submittals, the Contractor has an obligation, under Section 3.12.6 of AIA Document A201–2007, to review, coordinate and approve all submittals prior to submission to the Architect. In addition, the Contractor may not perform work for which a submittal was required until the submittal is approved by the Architect pursuant to Section 3.12.7 of A201–2007. On projects where performance specifications are provided for sustainable products there may be additional criteria that must be verified by the Contractor.

**§ 3.15 Cleaning Up.** Construction waste management and disposal plays an important part on sustainable projects. Building demolition, selective demolition, renovation, and new construction all contribute to generating waste which is often diverted to landfills. Many materials generated from the construction process are able to be salvaged for re-use in the Project or recycled. For example site demolition could offer opportunities for recycling of asphalt paving for use in new paving, and for recycling masonry, and concrete obtained from demolition for use in clean site fill. Both waste generated by construction workers (e.g. paper and beverage containers) and by the building process can be recycled.

Add the following Section 3.15.1.1 to A201–2007:

**Model Language**

§ 3.15.1.1 In addition to the requirements of Section 3.15.1, the Contractor shall recycle, reuse, remove or dispose of materials as required by the Contract Documents and as necessary to achieve the Sustainable Objective.

On a sustainable project where use or disposal of construction waste is a significant consideration, the Contractor may be required to prepare and submit a construction waste management and disposal plan for submission to the Certifying Authority. The goal of a construction waste management and disposal plan is to reduce the amount of materials entering a landfill. There are several components to the plan. First, a quantitative goal must be set by the Owner for recycling or salvaging a certain percentage by weight of nonhazardous demolition and construction waste on the Project. This percentage can also be set by public

authorities having jurisdiction over the Project or by a Certifying Authority. Other portions of the plan include identification of waste for recycling, a waste reduction work plan, a cost analysis and an implementation plan (including training, monitoring and reporting).

The process can be complex and time-consuming. It can also be costly, as reports must be generated, personnel must be trained and often a waste management coordinator is employed. If a construction waste management and disposal program is intended to be included in a Project, a separate Division 01 specification section may be written for the Project outlining all the applicable requirements and procedures. A separate paragraph 3.15.3 may be inserted in AIA Document A201–2007 to introduce the requirement which will be elaborated on elsewhere in the Contract Documents.

Add the following Section 3.15.3 to A201–2007:

**Model Language**

§ 3.15.3 The Contractor, in accordance with the Contract Documents, shall prepare and submit to the Architect and Owner a construction waste management and disposal plan outlining the procedures and processes for salvaging, recycling or disposing of construction waste generated from the Project.

**Subcontractors**

For a sustainable project, it may be necessary for the Contractor to hire subcontractors with expertise in specific areas of the Project related to sustainable construction. Like all projects, sustainable projects require the careful development and coordination of the scope of Work to be provided by each of the respective subcontractors.

AIA Document A401™–2007 is a standard form of agreement to be used by the Contractor and the Subcontractor to establish their responsibilities to each other and their mutual rights under the Agreement. A401–2007 adopts by reference AIA Document A201™–2007, General Conditions of the Contract for Construction, and a pre-existing Owner/Contractor Agreement known as the Prime Contract. AIA Document A401–2007 utilizes a flow-down provision, at Article 2, to incorporate the obligations and responsibilities that the Owner and Contractor have with respect to each other in the Prime Contract and extend those obligations and responsibilities, respectively, to the Contractor and the Subcontractor.

Article 8 of A401–2007 requires the Contractor and the Subcontractor to describe the portion of the Work for which the Subcontractor is responsible. Once the Subcontractor's portion of the Work has been defined, the flow-down provision requires the Subcontractor to assume toward the Contractor all obligations and responsibilities that the Contractor assumes toward the Owner in the Prime Contract as applicable to the Subcontractor's portion of the Work. Therefore, any Sustainable Measures required of the Contractor in the Sustainability Plan that are contained in the Contractor's portion of the Work would become the responsibility of the Subcontractor.

Given this flow down of responsibilities, it is important that the Contractor clearly define the Subcontractor's portion of the Work. It is equally important to clearly define any limitations or other conditions on which the Subcontractor's services are based. With this clear understanding of the Contractor's expectations of the Subcontractor, there may be very few provisions of the Subcontract agreement that require modification for a sustainable project.

**Delays and Substantial Completion**

**Delays.** Projects that seek to incorporate Sustainable Measures or achieve a Sustainability Certification pose new challenges for a Contractor who desires to achieve Substantial Completion of the Project within the Contract Time. The use of new and potentially untested products, or products that must be obtained from a particular manufacturer or in a particular location, creates a potential source of delays.

Because specific materials or equipment may be necessary to achieve a Sustainable Measure or, ultimately, to achieve the Sustainable Objective, it is important for the Contractor to verify that the specified materials or equipment can be fabricated and delivered to the Project in accordance with the construction schedule. Any delays in delivery, or unavailability of specified materials or equipment, known to the Contractor should be brought to the attention of the Architect as soon as possible so that alternative materials, equipment or sources may be considered.



**Substantial Completion.** Under AIA Contract Documents, Substantial Completion occurs when the Project can be occupied and used for its intended purpose. Because the Contractor cannot control the review and approval process of a Certifying Authority or may not be responsible for collecting all of the data necessary to quantify achievement of a Sustainable Objective, the Contractor is cautioned against entering into a contract that would require achievement of the Sustainable Objective as a condition precedent to Substantial Completion. However, it is often the case that the Contractor has some responsibility for documentation required to be submitted to the Certifying Authority. If this is the case, the Owner may wish to require that submission of all Documentation for Certification that the Contractor is required to provide be included as a condition precedent to achieving Substantial Completion.

Add the following sentence to the end of Section 9.8.1 of A201–2007:

**Model Language**

§9.8.1 . . . Except for Documentation for Certification which by its nature must be provided after Substantial Completion, the Contractor shall submit Documentation for Certification required from the Contractor by the Contract Documents no later than the date of Substantial Completion. Verification that the Project has achieved the Sustainable Objective, or the actual achievement of the Sustainable Objective alone, shall not be a condition precedent to issuance of a Certificate of Substantial Completion in accordance with Section 9.8.4.

At the time of Substantial Completion, the Contractor may still be responsible under the Contract Documents for certain Sustainable Measures necessary to achieve the Sustainable Objective. A performance bond, such as AIA Document A312™–2010, may help protect the Owner’s interests in seeing that the Contractor’s obligations are met. The Performance Bond requires the surety to assume responsibility for the performance of the Contractor’s Work under the Contract in the event of the Contractor default. If the Owner requires a Performance Bond, the bond amount should be inserted in AIA Document A101™–2007 in the fill point in Article 10. Additionally, the Owner might consider extending the Contractor’s one year correction period under A201–2007 Section 12.2.2.1, taking into consideration the estimated date when verification of the Sustainable Objective will occur.

**Final Completion**

Final completion of the Project under A201–2007 occurs when the Contractor’s Work has been completed in accordance with the terms and conditions of the Contract Documents and the entire balance found to be due the Contractor, and noted in the final Certificate for Payment, is due and payable. Final completion of the Project is complicated by the fact that verification that the Project has achieved the Sustainable Objective may not occur until sometime after Substantial Completion. Energy Star certification, for example, is not issued until a full year of energy usage data has been compiled for the building. In many instances, the Contractor may have completed the punch list and performed all of its obligations under the Contract Documents. Here again, the Owner may find protection in the form of a Performance Bond or in an extended warranty.

**Claims and Disputes**

**Consequential Damages.** Owners often elect to include Sustainable Measures in their projects for reasons other than increasing the environmental performance of the building. Many jurisdictions offer tax incentives for sustainably built buildings or offer expedited permitting. Owners may also incorporate Sustainable Measures to increase the marketability of the building, increase the public image of the company, decrease energy use or increase worker productivity. If a Project does not meet its Sustainable Objective, the Owner may claim to have sustained damages arising from the failure to realize these ancillary benefits. These types of damages are often difficult to anticipate, quantify, or prove. For example, it is difficult to determine what damages may arise if the Owner alleges that its employees are not productive and motivated because the building failed to achieve a specific Sustainable Measure or did not achieve the Sustainable Objective.

Because it is unlikely that any one of the Project participants will be solely responsible for providing a sustainable building or achieving a Sustainability Certification, liability for consequential damages may be difficult to allocate. For this reason, users are cautioned against executing any AIA Contract Document that has been modified to eliminate the mutual waiver of consequential damages language.

The mutual waiver of consequential damages included in A201–2007 and other AIA Documents includes all consequential damages regardless of the specific circumstances of the Project. However, upon consultation

with legal counsel, it may be necessary to modify the mutual waiver of consequential damages to address specific or unique concerns related to your specific Project. Included below is model language that addresses the unique types of consequential damages that may arise on a sustainable project.

Add the following Section 15.1.6.3 to A201–2007:

**Model Language**

§ 15.1.6.3 In addition to those damages included in Section 15.1.6.1 and 15.1.6.2 the mutual waiver in this Section 15.1.6 expressly includes consequential damages resulting from failure of the Project to achieve the Sustainable Objective or one or more of the Sustainable Measures including unachieved energy savings, unintended operational expenses, lost financial or tax incentives, or unachieved gains in worker productivity.

**Limitation of Liability.** If the Owner is unwilling to include language in the Contract stating that the Contractor does not warrant that the Project will achieve the Sustainable Objective or where the Owner will not agree to waive consequential damages, the Contractor’s liability for damages in the event the Project fails to meet the Sustainable Objective can be limited by use of a limitation of liability provision. A limitation of liability will place parameters around a loss and protect the contractor from a potential loss that is difficult to quantify.

Such a provision would normally appear in the Owner/Contractor Agreement; for example, space is provided in AIA Document A101–2007 Section 8.6 for insertion of other terms applicable to the Contract. However, it is important for Subcontractors and others to be aware of such a provision; therefore it is not unusual for this requirement to be set out in the Supplementary Conditions.

The language shown here is a suggested guide. It should not be included as Supplementary Conditions without review by the Owner’s attorney and concurrence of the Owner. Repetition should be avoided. If the provision is written in the Supplementary Conditions, a cross-reference should appear in the Agreement between the Owner and Contractor. In multiple-prime contracting, the Owner should include appropriate provisions addressing limitation of liability in the multiple prime contracts.

If the Owner and Contractor agree to a limitation of liability, add the following Section 8.6.1 to A101–2007:

**Model Language**

§ 8.6.1 Neither the Contractor, Contractor’s consultants, nor their agents or employees shall be jointly, severally or individually liable to the Owner in excess of \_\_\_\_\_ (\$\_\_\_), for any failure to perform a Sustainable Measure or failure of the Project to achieve the Sustainable Objective, including breach of contract or negligence not amounting to a willful or intentional wrong.<sup>8</sup>

## ARTICLE 4 OTHER DELIVERY MODELS

In this initial iteration of the Guide, model language is coordinated with the AIA’s Conventional (A201) Family of documents, which are used for design-bid-build projects. These documents are the basis on which other AIA document families are drafted. Many of the concepts discussed in this Guide are, therefore, applicable to AIA Contract Documents for other delivery models such as Design-Build or Integrated Project Delivery.

This Guide does not endorse any specific delivery model as the most appropriate model for sustainable building projects. As more owners begin to demand sustainable buildings and more jurisdictions begin to mandate sustainable practices, owners, architects, and contractors will be required to incorporate sustainable design and construction measures on all projects regardless of delivery model. At the same time, the success of sustainable projects often relies on the close coordination of the design and construction process. For this reason, users are encouraged to consider all available delivery models and choose the model best suited for the particular project considering the owner’s goals and budget. Below is a brief discussion of some of the other delivery models addressed by AIA Contract Documents: Construction Management, Design-Build, and Integrated Project Delivery.

<sup>8</sup> Due to the project specific nature of this provision, it does not appear as one of the revisions shown in Appendix C.

## Construction Management

AIA Contract Documents separate Construction Management documents into two distinct families; Construction Manager as Adviser and Construction Manager as Constructor. Each of these families offers unique opportunities for the sustainable building project.

**Construction Manager as Adviser (CMA).** Under the AIA's Construction Manager as Adviser documents, the Owner enters into three separate contracts; the Owner/Architect Agreement (B132™–2009), Owner/Construction Manager as Adviser Agreement (C132™–2009) and the Owner/Contractor Agreement (A132™–2009). The General Conditions for these agreements is A232™–2009. The Owner/Architect and Owner/Contractor Agreements are similar to the corollary agreements in the Conventional Family of documents with added recognition of the unique role the Construction Manager plays in this delivery model.

Under C132–2009, the Construction Manager is not hired to construct the Project. Instead, the Construction Manager is hired to advise the Owner prior to the start of construction, or preconstruction, and to assist in the management of the Project during construction. During the preconstruction phase, the Construction Manager performs various functions, including cost estimating, scheduling, design review, and advising the Owner regarding constructability, availability of materials and labor, sequencing for phased construction, time requirements for procurement, and installation and construction. The Construction Manager also advises the Owner concerning factors related to construction cost, including costs of alternative designs or materials, preliminary budgets, life-cycle data, and possible cost reductions. During the construction phase of the Project, the Construction Manager's duties include performing contract administration for the contract(s) for construction; administration of multiple prime contractors, if applicable; updating and issuing the Project schedule; scheduling tests and inspections; and assisting in Project close out.

Because of the Construction Manager's close cooperation with the Owner and Architect during the preconstruction phase and the Construction Manager's additional responsibilities during the construction phase, the Construction Manager as Adviser documents offer a unique opportunity for the Construction Manager to assist in the development and implementation of a sustainable design and construction program. During the Preconstruction Phase, the Construction Manager Adviser can review the Sustainability Plan and offer advice on constructability, materials availability, time requirements for procurement, life cycle data, etc. This additional review and coordination will provide an added layer of assurance that the Project is moving in the right direction to achieve the Sustainable Objective. In addition, the Construction Manager Adviser's participation in the Project during Preconstruction allows for a targeted approach to contract administration and scheduling during the construction phase.

**Construction Manager as Constructor (CMc).** Under the AIA's Construction Manager as Constructor documents, the Owner enters into two separate agreements; the Owner/Architect Agreement, typically AIA Document B103™–2007, and the Owner/Construction Manager as Constructor agreement, either A133™–2009 or A134™–2009. The General Conditions document is A201–2007. This delivery model is similar to the Construction Manager Adviser delivery model with the exception that the Construction Manager also serves as the Constructor of the Project.

The Construction Manager as Constructor project delivery method shares many of the benefits that the Construction Manager Adviser project delivery model provides with the added benefit that the Construction Manager will also be responsible for completing construction of the Project. The early involvement of the Construction Manager during the design phase allows the Construction Manager to provide input on the Sustainable Measures contemplated, assist in the development of the Sustainability Plan, procure items with longer lead times, and provide a smooth transition when it is time to start construction.

## Design-Build

Under the AIA's Design-Build Family of documents, the Owner enters into one contract (A141™–2004) with a Design-Builder who is obligated to design and construct the Project. The Design-Builder then enters into agreements with a Contractor (A142™–2004), or an Architect (B143™–2004), or both. Often, the Design-Builder may also be the Architect or Contractor for the Project.

Many of the benefits cited for design-build as a project delivery model such as enhanced communication, single point responsibility, and increased value analysis, may be useful on a sustainable project. The single point responsibility for design and construction of the Project allows the Design-Builder to carefully coordinate the design with the input of the Architect or Contractor. The allocation of responsibility for certification credits or other Sustainable Measures can be confirmed with the responsible party early in the design. This careful coordination of the design with the activities of the Contractor may allow for the early identification of issues and allow for adjustment of the Sustainable Measures for the Project in order to achieve the Sustainable Objective.

### **Integrated Project Delivery**

The AIA's Integrated Project Delivery Family is comprised of three sets of documents. The transitional forms are modeled after existing Construction Manager agreements and offer a comfortable first step into Integrated Project Delivery. The Multi-Party Agreement is a single agreement entered into by the Owner, Architect, Contractor and possibly other parties to design and construct a project utilizing Integrated Project Delivery. The Single Purpose Entity creates a limited liability company for the purpose of furnishing planning, design, and construction for the Project.

One of the common elements of Integrated Project Delivery is a focus on close cooperation among the parties to the Project. Like Construction Management or Design-Build projects, this close cooperation among the parties allows for close coordination of the Sustainability Plan, responsibility for Sustainable Measures, constructability, materials availability, time requirements for procurement, life cycle data, and other items of importance to this type of Project.

Under the Multi-Party and Special Purpose Entity models, close cooperation is further encouraged by providing for Goal Achievement Compensation for the accomplishment of goals. Goal Achievement Compensation under these models works by allowing the parties to establish goals early in the Project, such as achieving a Sustainable Measure, and paying amounts to each party in the form of goal achievement compensation if that goal is achieved. This provides an added incentive for parties on the Project to work together to achieve the Sustainable Objective.

## **APPENDIX**

- Appendix A** [Comparative Tool: Text of AIA Document A101™–2007, Standard Form of Agreement Between Owner and Contractor, modified to include model language from D503™–2011](#)
- Appendix B** [Comparative Tool: Text of AIA Document A201™–2007, General Conditions of the Contract for Construction, modified to include model language from D503™–2011](#)
- Appendix C** [Comparative Tool: Text of AIA Document B101™–2007, Standard Form of Agreement Between Owner and Architect, modified to include model language from D503™–2011](#)
- Appendix D** [Special Terms and Conditions Imposed by Third Party Certification or Rating Entities \(“Certification Authorities”\), and in particular GBCI and USGBC, an article by Kenneth W. Cobleigh, Esq., Managing Director and Counsel, AIA Contract Documents](#)
- Appendix E** [AIA Resources for Sustainable Design and Construction Projects](#)