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## Construction Accounting and Taxation

May / June 2014

A photograph of two men in construction safety gear (hard hats and high-visibility vests) shaking hands on a construction site. The background shows a large steel structure under construction under a clear blue sky. The image is partially overlaid with a blue diagonal graphic.

### **Building Your R&D Tax Credit Claim on a Solid Foundation: The Architectural, Engineering, and Construction Industry**

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# BUILDING YOUR R&D TAX CREDIT CLAIM ON A SOLID FOUNDATION:

The R&D tax credit is an excellent though underutilized tool that can make a difference among construction, architecture, and engineering companies whose activities meet the IRS's definition of research and experimentation and who can substantiate these activities.

## THE ARCHITECTURAL, ENGINEERING, AND CONSTRUCTION INDUSTRY

YAIR HOLTZMAN

**W**hile large multinational architectural, engineering and construction firms are well aware of the benefits of the research and development (R&D) tax credit and avail themselves of this tax benefit, the situation is very different with smaller to mid-size engineering firms. Many small to mid-size firms in the architectural, engineering, and construction (A/E/C) industry (less than \$250 million in revenue) do not realize that the federal R&D tax credit is avail-

able to them and can be a powerful catalyst for growth and generating much-needed capital. The principals and officers of A/E/C firms may be unaware that expenses associated with the development of unique functional and energy-efficient designs allow them to take advantage of significant R&D tax incentives. Accordingly, firms that fail to take advantage of the opportunity may find themselves falling further and further behind their larger competitors, who far more often make the wise decision to claim their credit. Participating

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### EXHIBIT 1 Four Types of Qualifying Activity: New to Company

New Product Development	Incremental Product Improvement
New Process Development	Incremental Process Development

firms have committed necessary and appropriate resources to building a comprehensive infrastructure, incorporating procedures that readily and contemporaneously identify and substantiate qualified expenses.

#### What is the research and development tax credit?

The federal research and development (R&D) tax credit, also known as the research and experimentation (R&E) tax credit, was first introduced by Congress in 1981. The purpose of the credit is to reward U.S. companies for increasing spending on research and development within the United States. The R&D tax credit, is available to businesses that uncover new, improved, or technologically advanced products, processes, principles, methodologies, or materials. In addition to “revolutionary” activities, in some cases, the credit may be available if the company has performed “evolutionary” activities such as investing time, money, and resources into improving its products and processes. Correctly calculating the R&D tax credit is critical because the credit can be used to lower the effective tax rate a company pays and to generate increased cash flow.

The R&D credit continues to be underutilized by qualified companies and their business management teams, particularly within the A/E/C industry. Reasons include a misunderstanding of qualification and documentation requirements

for federal and state credits, fear of triggering an IRS audit in the current or prior-year tax returns, and the perception of the credits as being limited in scope or fleeting in nature due to their persistent short renewal periods.

#### A/E/C industry: Four groups of potentially qualifying activities

Qualifying R&D activities as they apply to the A/E/C industry generally fall within four general brackets (see Exhibit 1): new product development, incremental product development, new process development, and incremental process development. The credit is comprised primarily of three types of qualified research expenses (QREs).

#### How does the R&D tax credit work?

The R&D tax credit is available to taxpayers who incur incremental expenses for qualified research activities (QRAs) conducted within the United States.

The credit is comprised primarily of three types of QREs:

1. internal wages paid to employees for qualified services;
2. supplies used and consumed in the R&D process; and
3. contract research expenses (when someone other than an employee of the taxpayer performs a QRA on behalf of the taxpayer, regardless of the success of the research).

For an activity to qualify for the research credit, the taxpayer must show that it passes the following four tests:

1. The activity must rely on a hard science, such as engineering, computer science, biological science, or physical science;
2. The activity must relate to the development of new or improved functionality, performance, reliability, or quality features of a structure or component of a structure, including architectural designs that a firm develops for its clients;
3. Technological uncertainty must exist at the outset of the activity. Uncertainty exists if the information available at the outset of the

project does not establish the capability or methodology for developing or improving the business component, or the appropriate design of the business component; and

4. A process of experimentation (e.g., an iterative testing process) must be conducted to eliminate the technological uncertainty. This includes assessing a design through modeling or computational analysis and experimenting with a material's durability or longevity.

Once it is established that the activity qualifies, a thorough analysis must be performed to determine that the taxpayer has assumed the financial risk associated with, and will have substantial rights to, the products and/or processes that are developed through the architectural, engineering, or construction work completed.

### Calculating the R&D tax credit

There are two standard methods of calculating the Section 41 R&D tax credit. The first is the regular or traditional research credit and the second is the alternative simplified credit (ASC) methodology. The first option (1), the "regular credit," consists of two basic components:

1. 20 percent of the excess in QREs for the current year over a base period amount, plus
2. 20 percent of the excess of "basic research payments" or university basic research payments made in the current year over a base amount paid to universities and other qualified organizations. The base amount is the average of the prior three years' payments for the basic research to qualified organizations. The second option (2) is the reduced credit. Taxpayers who select the regular credit method are required to reduce their deductible R&D expenses under the IRC Section 174 expense deduction. The election is made at any time prior to or on a timely filed (including extensions) income tax return. The

### MATHEMATICAL FORMULAS AND DEFINITIONS

#### Alternative simplified credit (ASC):

$ASC = (QRE) - \text{Average of Previous 3 Years' QRE} \times 50\% \times 14\%$

#### Regular research credit (RRC):

$20\% (\text{Current QRE} - \text{Base Period Amount}) + 20\% (\text{Current payments to University} - \text{Base Period Amount}) = \text{R\&D Credit}$

If the special election is made under IRC 280C(c)(3), the amount of the allowable credit is determined as follows.

#### Reduced regular credit:

$\text{Allowed Research Credit} = (\text{QRE} - \text{Base Period Amount}) \times 13\%$

#### Reduced ASC:

$ASC = (\text{QRE}_{\text{current year}} - \text{Average of Previous 3 Years' QRE} \times 50\%) \times 14\% \times 0.65$

#### Base period amount:

$\text{Base Period Amount} = \text{Fixed Base Percentage (FBP)} \times \text{Average of Previous 4 Years' Gross Receipts}$

election is made on the Form 6765. The Form 6765 is the form for the Credit for Increasing Research Activities.

The base period amount is defined in IRC Section 41(c) as the product of: (1) the fixed base percentage (FBP) and (2) the taxpayer's average annual gross receipts for the four tax years preceding the taxable year for which the credit is being calculated. The base period amount can never be less than 50 percent of the current year's QREs. Therefore, the base period amount will always be the greater of: (1) the computed amount under IRC Section 41(c), or (2) 50 percent of the current year qualifying expenses.

Another methodology to calculate the research credit is the ASC. Since 2007, taxpayers have been able to elect the ASC, which equals 14 percent of the QREs for the taxable year that exceed 50 percent of the average QREs for the three taxable years preceding current credit year.

### Recent developments

The federal R&D tax credit has been evolving ever since it was originally

**UNDER THE GUIDANCE PROVIDED IN SECTION 174, TAXPAYERS ARE ALLOWED TO EITHER DEDUCT R&D EXPENDITURES AS THEY ARE PAID OR INCURRED, OR TREAT THEM AS DEFERRED EXPENSES AMORTIZABLE OVER A PERIOD NOT LESS THAN 60 MONTHS.**

enacted in 1981 and has been enjoying broad bipartisan political support. Most recently, the American Taxpayer Relief Act of 2012 (the Act), which was signed into law by President Obama on January 2, 2013, retroactively reinstated it for the two-year period beginning January 1, 2012 through December 31, 2013. In fact, the credit is more likely to be made permanent than it is to fall by the wayside. This most recent extension provides companies of all sizes yet another opportunity to either take advantage of the credit or to face competition that already has or will. Qualified companies doing a cost-benefit analysis should consider that most states also offer their own R&D tax credits that require similar documentation to the federal credit, thereby significantly increasing the benefits side of the equation.

The Act also included two significant modifications. First, the Act modified the treatment of acquisitions and/or dispositions. Under the Act, a taxpayer acquiring a trade or business prorates the target's QREs, gross receipts, and related base-period impact based on the number of days from the time of acquisition through the end of the controlled group's tax year. The Act provides for similar treatment in the event of the disposition of a trade or business. Second, the Act modified the method by which the R&D credit is allocated to the members of a controlled group of corporations (any two or more corporations connected through a stock ownership percentage of at least 80 percent). Prior to the Act, there were two different allocation methods based on the ratio of the stand-alone credit to the group credit, and the ratio of stand-alone QRE to group QRE. The proper method to use depended on the amount of the group credit as compared to the sum of the stand-alone credits. Under the Act, regardless of the amount of the group credit as compared to the sum of the stand-alone credits, the R&D credit allocable to the members of a controlled group is the proportionate basis to its share of the aggregate of the QRE.

Additionally, in September 2013, the Treasury Department and IRS proposed taxpayer-friendly regulations that would amend the Internal Revenue Code Section 174 definition of "research and experimentation" (also known as R&D) expenditures. Under the guidance provided in Section 174, taxpayers are allowed to either deduct R&D expenditures as they are paid or incurred, or treat them as deferred expenses amortizable over a period not less than 60 months. The existing regulations provide that a determination of whether costs qualify as R&D expenditures depends on whether the costs are required R&D expenses critical to activities intended to discover information that would eliminate uncertainty. The IRS is now proposing that if expenditures do qualify as R&D expenditures during the course of the development effort, it will no longer matter if the resulting product is ultimately sold or is used in the taxpayer's trade or business.

An April 15, 2013 federal court decision in Florida very relevant to the A/E/C industry found that the IRS has taken too broad an approach in determining when a contract is "funded," making it ineligible for the R&D tax credit. The decision in *Geosyntec Consultants Inc. v. United States* puts the emphasis back on a taxpayer's risk being the primary and key factor in allowing contractor expenses.<sup>1</sup>

For tax years 2002 through 2005, Geosyntec isolated about 370 of 4,500 total projects for analysis and inclusion in the calculation of its R&D tax credits. To get to those 370 projects, Geosyntec focused only on projects undertaken under contractual fee structures fixed in nature or conducted on a cost-plus basis subject to a maximum. Geosyntec maintained that the court should determine the parties' economic risk for both categories of contracts by looking only to principles of contract law and focusing on the financial risk associated with the successful delivery of a completed product rather than the performance of the research itself.

The fact remains that despite rulings like *Geosyntec*, R&D tax credits remain

severely underutilized by eligible A/E/C industry companies and their management teams for the reasons discussed earlier. Legislation, however, has just been introduced separately by two democratic representatives of Congress to make the R&D tax credit permanent and increase its value. The proposals differ primarily in the amount by which the tax credit would increase, but both would make it a permanent incentive.

In another positive development, the IRS announced in August 2012 that it would no longer use the “tiered issue process” to determine exam priorities and address corporate tax issues, freeing the R&D tax credit from its historical designation as a Tier I audit issue. This designation has long discouraged companies from utilizing the credit for fear of increased audit scrutiny. Now the level of compliance risk should be less of a concern for qualified companies wanting to pursue R&D tax credits.

Government officials, knowing that innovation is critical to any company’s success and to overall U.S. economic growth, have legislated alternative calculation options over the years to encourage U.S. companies to invest in research and development and to make the credit more valuable and obtainable. The ASC is the most recent example, removing complications inherent in prior calculation methods and easing the documentation burden of the R&D tax credit significantly. Legislators have also expanded the definition of what qualifies as R&D to include “process improvements,” making the credit available to many previously excluded industries such as energy exploration, software development, financial services, and, yes, even the construction industry.

### The A/E/C industry

Architecture and engineering (A&E) firms frequently invest substantial time, money, and resources in advancing and improving building designs and processes. Activities conducted by construction contractors through their architectural and engineering employees are often overlooked as R&D activities. When

these employees develop and design new and innovative construction techniques, their activities most likely qualify for the R&D tax credit. As a result of unique project aspects and ever-changing structure and energy codes, many projects that appear similar on the surface are, in fact, at least partially new or improved with respect to function or performance and thus qualify. Recent court cases have supported this premise, entitling A&E firms to their claimed R&D tax credits.

### Contract research and criteria for construction projects

Many activities required in the design and construction of a new building may be QRAs; (e.g., green technology, solar energy, and radical new designs). These new technological advances may be provided by the project’s architects, engineers, or other design services consultants. Architecture firms can attest that designing a building is not all about aesthetic design. However, the firms’ principals and officers may be unaware that the expenses associated with the development of unique functional and energy-efficient designs may allow them to take advantage of significant R&D tax incentives. With the increase in sustainable and “green” designs incorporated into building features, architecture firms are expending more time and effort in the design phase of projects to achieve optimal energy-efficient and functional designs.

Since most, if not all, engineering and construction projects are performed pursuant to contracts, engineering and construction companies must analyze each contract to make certain that they assume financial risk and have substantial rights. If the risk and rights are not held by the taxpayer for a particular contract, then the work performed under that contract must be excluded from the R&D credit calculation. For a contract under which a construction or engineering company retains the rights and risk, an evaluation of the different stages of the contract can determine where qualifying activities may exist.

Under Treas. Reg. § 1.41-2(e)(1), a taxpayer may claim a QRE at 65 percent



**THE CHALLENGE WITH CAPTURING THE RESEARCH AND EXPERIMENTATION TAX CREDIT FOR THE ARCHITECTURAL, ENGINEERING, AND CONSTRUCTION INDUSTRY IS THAT ONE NEEDS TO IDENTIFY, ISOLATE, QUALIFY, AND QUANTIFY ISLANDS OF QUALIFYING RESEARCH EXPENDITURES WITHIN A VAST OCEAN OF NON-QUALIFYING EXPENDITURES.**



**IF AN EXPENSE DOES NOT QUALIFY AS A CONTRACT RESEARCH EXPENSE FROM THE PERSPECTIVE OF THE TAXPAYER ON WHOSE BEHALF THE RESEARCH HAS BEEN PERFORMED, THEN THE ASSOCIATED RESEARCH EXPENSES SHOULD BE CLAIMED BY THE TAXPAYER THAT PERFORMS THE RESEARCH AND DEVELOPMENT (I.E., THE CONTRACTOR), PROVIDED CERTAIN CRITERIA ARE MET.**

of any expense paid or incurred to any person, other than an employee of the taxpayer, for the performance of qualified research services on behalf of the taxpayer. If an expense does not qualify as a contract research expense from the perspective of the taxpayer on whose behalf the research has been performed, then the associated research expenses should be claimed by the taxpayer that performs the research and development (i.e., the contractor), provided certain criteria are met.

Under Treas. Reg. § 1.41-2(e) (2), a taxpayer may claim an expense as a qualified contract research expense if a three-prong test is passed.

1. The contract for research services must be entered into prior to the performance of the research services;
2. The contract must provide that the research is being performed on behalf of the taxpayer, and the taxpayer retains significant rights to the research. Qualified research can be performed on behalf of the taxpayer notwithstanding the fact that the taxpayer does not have exclusive rights to the results; and
3. The contract must provide that the taxpayer requesting the research services will bear the expense of the research even if the research is not successful. A contract for research services providing payment that is contingent upon the success of the research is not a contract research expense for that taxpayer.

If this three-part test is satisfied, then the taxpayer may claim these expenses as qualified contract research expenses. If this test is not satisfied, then the taxpayer on whose behalf the research services were performed may not claim these costs as QREs. Instead, the contractor performing the research must determine whether it is entitled to claim the associated research expenses on its own behalf as part of its research credit.

Once a contractor establishes that its research expenses should not be claimed by the taxpayer on whose behalf the services were performed, the contractor must also establish that the expenses are

not considered to be “externally funded” under the applicable Treasury Regulations.

Under Treas. Reg. § 1.41-4A (d) (1)-(2), a two-part test applies to determine whether a research activity is considered to be externally funded, as follows:

1. Under the applicable contracts, are payments for the research made contingent on the success of the research activities?
2. Does the contract researcher retain “substantial rights” in the results of the research?

If a contractor that performs qualified research can show that both parts of the test have been met in the affirmative, then the contractor is entitled to claim the associated expenses as QREs. According to the IRS’s Audit Techniques Guide, “if a contractor retains substantial rights in the results of the research and if payment to him is contingent on the success of the research, then the contract is not funded and the contractor is eligible to claim the credit.”<sup>2</sup> Additionally, the U.S. District Court for the Southern District of Florida recently ruled that an engineering company’s research expenditures under its fixed-price contracts were not funded and therefore were eligible for the Code Sec. 41 research credit.<sup>3</sup>

Most QRAs, however, are performed in the first three phases of the architectural process. The phases, and the extent to which QRAs may be performed in each phase, can be generally described as follows.

**Ideation and design.** This phase typically involves allocation of space, space planning, and assessment of available and required square footage. There is significant uncertainty at this phase, as the architect is called upon to determine how the proposed site may accommodate the functional and nonfunctional elements required by the client (e.g., placement of personnel and equipment) on an overall basis.

**Schematics.** This phase typically involves exploration of the general concept of the building. In this phase, several schemes will generally be designed, with one selected by the building owner. There is significant uncertainty at this stage, as the architect is called upon to:

1. consider several alternatives for development of the selected space;
2. determine (on an overall basis) how each alternative may be constructed, given architectural and related principles; and
3. model the architectural and engineering design alternatives.

**Development.** This phase typically involves expansion and redesign of the selected design, including assessment of alternative materials and energy sources and the cost of various options. There is significant uncertainty at this stage, as the architect is called upon to resolve major design issues in fitting the selected architectural scheme into a workable overall plan.

Remaining phases that involve developing and delivering the construction documents involve uncertainty only to the extent that the drawing process reveals the need for reassessment of the design.

The construction phase generally does not qualify. There could typically be uncertainty at this stage only to the extent that rework or change orders necessitate reassessment of the design, but this is limited in scope and applicability in its credit qualification.

Lastly, certification phases, providing assurance that structures have been assembled successfully, generally do not qualify for the R&D tax credit, as technical uncertainty is generally not prevalent.

Constructors often can qualify activities for tax credits that are aimed at developing the construction process for specific jobs or those intended to improve the overall process performance to increase efficiencies. Design-build services, LEED projects, and value engineering are often the best candidates, but even some preconstruction planning and development of means and methods for plan-spec and hard-bid jobs qualify for the benefits. Since this incentive is an

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enticing dollar-for-dollar reduction in tax liability, even a small portion of activities that qualify can result in significant tax benefits. Maximum tax savings are often realized with services under design-build delivery. As a labor-based incentive, increased benefits are often attained on construction jobs under design-build because early involvement with designers and subsequent increases in overall project efficiencies tend to increase qualified R&D time for constructors. The increase in resultant credits is often dramatic.

### **Qualifying and non-qualifying activities**

Typical qualifying initiatives and activities generally fall within five categories: architectural, civil engineering, environmental engineering, structural engineering, and construction services.

Examples of qualifying A/E/C industry projects and initiatives identified and documented by Anchin, Block & Anchin LLP include the following.

**Architectural activities.** Design activities in connection with energy efficiency, site orientation, and structural and functional features can potentially qualify for the federal R&D credit. This includes commercial office buildings, educational facilities, hospitals, correctional facilities, industrial facilities, airports, stadiums, etc. Additional examples include:

- first-time implementation and use of VisSim micro-simulation software to analyze potential project impacts on pedestrian and automobile traffic (local roads, freeways, and parking);
- developing a solution to isolate a commercial building from subway-generated vibrations and minimize ground-borne noise within the structure based on acoustical calculations and predictive modeling;
- design of a new laboratory science building that incorporates all extreme vibration criteria of various lab equipment and machinery at areas/positions of differing sensitivity to noise and wind — building

must have vibration-resistant capability;

- evaluation of the effects of ambient temperature on concrete slabs and the requirement for expansion joints in residential flat-plate structures;
- development and installation of a new cable dehumidification system on a major bridge to mitigate and prevent corrosion of its suspension cables;
- first-time implementation and use of Trimble, a global positioning device, to improve design techniques and dramatically improve efficiency in layout and installation phases of projects, development of new plants, and process assays;
- designs that improve space utilization;
- optimization of existing plant operations;
- constructability reviews that identify improvements to asset or process design;
- development of innovative green or sustainable designs;
- development of new building elevations;
- design and development of unique energy-efficient buildings and/or sub-structure features; and
- first-time implementation and use of Building Information Modeling (BIM) to improve decision-making about a facility or project from its earliest conceptual stage through its design, construction, and operational life.

**Civil engineering.** Engineering and design activities related to road design, bridges, water and wastewater treatment facilities, foundations and earthwork, retaining walls and structures, site development, and infrastructure can potentially qualify for the federal R&D credit. Additional examples include:

- development of a unique dense non-aqueous phase liquid (DNAPL) recovery system;
- development of unique remediation techniques including “soil washing”;
- unique bridge or roadway designs, and/or components of the designs;

- design of new suspension bridge cables or new processes/techniques to replace them;
- development of innovative wastewater technologies;
- design of unique water pipeline and ancillary systems;
- design of unique water-treatment plants to optimize plant capacity or efficiency; and
- design of innovative sanitary sewer systems for new residential communities.

**Environmental engineering.** Design activities related to remediation design, solid waste system design, drainage system design, and flare station design can potentially qualify for the federal R&D credit. Additional examples include:

- environmental testing and impact studies;
- new production systems or high-tech processes to produce or treat hydrocarbons, hydrogen, ammonia, ethanol and/or other molecular compounds;
- remediation of soil with radioactive and or carcinogenic materials;
- closed-loop wastewater treatment plant design and implementation;
- development of innovative wastewater technologies;
- development of unique flashing details;
- development of new building elevations;
- design of unique water pipeline and ancillary systems;
- design of unique water-treatment plants to optimize plant capacity or efficiency;
- design of innovative sanitary sewer systems for new residential communities;
- integration of toxic waste and other waste disposal processes into a structure;
- implementation of counter-terrorism capabilities to protect water and natural energy resources; and
- development, implementation, or upgrading of systems and/or software.

**Structural engineering.** Engineering and design activities related to building super-


structure design, foundation design, HVAC system design, electrical systems, and piping systems can potentially qualify for the federal R&D credit.

Examples include:

- building designs to support unique structures such as antennas;
- design a unique process for correcting water infiltration and other associated building deficiencies;
- design of lateral force resistance systems for buildings;
- design of marinas to meet unique structural and load requirements;
- development of alternative electricity conduction systems;
- development or improvement of lighting within a structure;
- development or improvement of noise or vibration levels within a structure;
- development of plans for replacing brick cladding with more energy-efficient synthetic stucco and more weather-resistant rainscreen cladding systems;
- dramatic improvement of surveying techniques and procedures through development and implementation of 3D laser scanning capability;
- experimentation with new material combinations and related performance analysis;
- development of innovative green or sustainable designs;
- development of innovative assembly methods that accelerate or improve the construction process;
- unique bridge or roadway designs;
- unique construction or innovative techniques for untested environments;
- building designs to support unique structures;
- design and development of unique energy-efficient buildings and/or features;
- first-time design and implementation of in-situ soil stabilization;
- development or improvement of lighting within a structure;
- improvement or development of alternative ventilation for a structure;



**ENGINEERING AND DESIGN ACTIVITIES RELATED TO BUILDING SUPERSTRUCTURE DESIGN, FOUNDATION DESIGN, HVAC SYSTEM DESIGN, ELECTRICAL SYSTEMS, AND PIPING SYSTEMS CAN POTENTIALLY QUALIFY FOR THE FEDERAL R&D CREDIT.**



**CONSTRUCTION, ARCHITECTURE, AND ENGINEERING COMPANIES WHOSE ACTIVITIES MEET THE IRS'S DEFINITION OF RESEARCH AND EXPERIMENTATION AND WHO CAN SUBSTANTIATE THESE ACTIVITIES STAND TO BENEFIT GREATLY FROM THE R&D TAX CREDIT.**

- improvement or determination of alternative heating and cooling systems;
- improvement of acoustical qualities of structure;
- selection of appropriate chemistry/chemical compounds to yield optimal required structural characteristics;
- integration of product and material transportation systems into the functional design of a structure;
- new concept of alternate materials for constructing a structure;
- new concept for assembling and/or fastening component parts of a structure;
- implementation of counter-terrorism capabilities;
- development, implementation, or upgrading of systems and/or software;
- HVAC firms switching to integrated part load value (ILPV) for chillers and integrated energy efficiency ratio (IEER) for rooftops, splits, and variable refrigerant flow (VRF);
- development of an HVAC system using ultraviolet light and electronic filter systems;
- installation of smart systems using diagnostics and prognostics for accuracy;
- installation or development of Hybrid Systems technology; and
- development and implementation of new modeling tools, systems for verification of equipment performance, and automated ways to transfer data.

**Construction services.** Activities related to developing new or unique methods to improve construction processes, developing new construction techniques, and experimenting with new materials can potentially qualify for the federal R&D credit. Additional examples include:

- constructability reviews intended to identify improvements to asset or process design;
- unique construction or innovative techniques in untested environments;
- determination of alternate materials with which to construct a structure

or parts of a structure (must be a new concept to taxpayer); and

- determination of alternate means of assembling and/or fastening component parts of a structure (must be a new concept to taxpayer).

### **Non-qualifying initiatives and activities**

Non-qualifying initiatives and activities include the following:

1. architectural activities relating to aesthetic design and non-design-related services like feasibility studies, project budgeting, construction administration, and project management;
2. civil engineering services relating to surveying, soil and materials testing, traffic engineering, subsurface evaluations, and landscape architecture;
3. environmental engineering services relating to site assessments and investigation, permitting, and regulatory compliance;
4. structural engineering, including forensic engineering, permitting, feasibility studies, and construction management activities; and
5. construction services, including construction management and oversight, routine construction labor, and construction inspections.

### **Examples of other non-qualifying activities and initiatives include:**

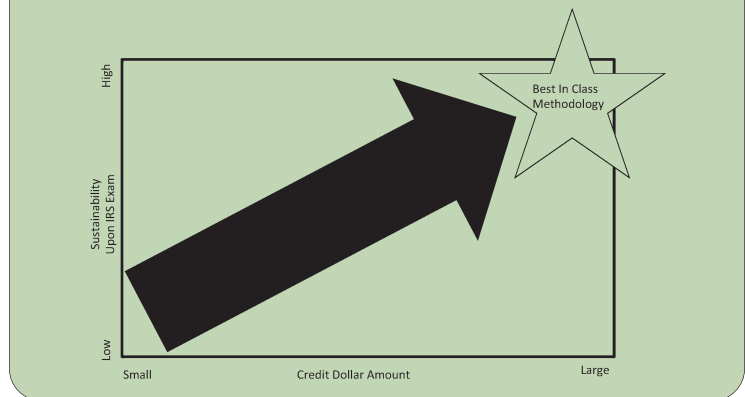
- producing marketing or promotional materials;
- activities related to marketing efforts or market analysis;
- analysis of demographics or population trends;
- research related to style, appearance, or cosmetics;
- activities related to finance, budgeting, or accounting;
- activities related to pricing or bid packages;
- building construction or project scheduling;
- participating in meetings with the city or county to obtain zoning review of plans;

- oversight services to ensure that construction is according to design specifications;
- routine maintenance of existing equipment;
- technical support or maintenance of existing products;
- funded research/grants;
- research conducted outside of the United States;
- efficiency surveys;
- management functions or techniques;
- reverse engineering;
- routine data collections;
- ordinary testing or inspections for quality control;
- participating in meetings with the city or county to obtain zoning review of plans;
- producing drawings or promotional materials;
- assisting in the review or development of bid packages related to building or component construction;
- participating in building construction scheduling or construction oversight services to ensure that the building and its components are constructed according to the design specifications;
- construction and fireproofing inspections;
- efficiency surveys;
- management functions or techniques; and
- routine data collection.

## Conclusion

Construction, architecture, and engineering companies whose activities meet the IRS's definition of research and experimentation and who can substantiate these activities stand to benefit greatly from the R&D tax credit. The key to obtaining the R&D tax credit is distinguishing between qualified and non-qualified research activity and expenses. The distinction is often subjective and may be based on how the company's accounting and project management systems allocate activity and expenses. As a result, many allowable expenses either

### EXHIBIT 2 Optimizing the R&D Tax Credit



are not counted toward the credit or are disallowed by the IRS. Methodologies and tools can be implemented to appropriately capture, calculate, and document QREs.

The R&D credit continues to be underutilized by qualified companies and their business management teams, particularly within the A/E/C industry. The underuse of this credit stems from a misunderstanding of qualification and documentation requirements for federal and state credits, fear of triggering an IRS audit in the current or prior year tax returns, and the perception of the credits as being limited in scope or short-lived in nature as a result of their persistent short renewal periods. Ironically, the architectural and engineering industry is well positioned to take advantage of this lucrative tax credit, as engineers almost always track their time to projects. Detailed time and project tracking helps facilitate nexus considerations. Documentation is usually abundant, as projects are closely tracked and monitored from start to finish. Records are generally kept contemporaneously. These are key ingredients for a successful R&D tax credit claim. After all, the final value of an R&D tax credit rests with its sustainability upon IRS examination (see Exhibit 2).

The R&D credit can be a powerful incentive, often providing a hidden source of cash from prior expenses while also serving to significantly reduce current and future federal and state tax liabilities and thereby becoming a source of

increased cash flow and a tool for refueling a company's R&D efforts. Planning ahead by creating an infrastructure that identifies QRAs and collects contemporaneous documentation is essential to reducing future tax liabilities and building your R&D tax credit on a more solid foundation.

As of the writing of this article, the U.S. House of Representatives plans to vote in May 2014 to make the research tax credit permanent, the first step toward ending a 33-year lapse-and-revival cycle that has frustrated companies such as Intel Corp. and Agilent Technologies, Inc. House Majority Leader Eric Cantor, a Virginia Republican, announced the plan on Thursday, April 24, 2014, in a memo. The research credit, first enacted in 1981, expired most recently on Decem-

ber 31, 2013. The Senate Finance Committee voted earlier this month to expand and extend the research credit and dozens of other expired tax breaks through 2015. A permanent Research and Experimentation tax credit would create stability and certainty and catalyze investment by the private sector. It would place American companies, especially American manufacturers, on par with their international competitors who already have permanent R&D incentives. ■

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#### NOTES

- <sup>1</sup> *Geosyntec Consultants Inc v. United States*, No. 12-80334 (S.D. Fla. Apr. 15, 2013).
- <sup>2</sup> Audit Techniques Guide: Credit for Increasing Research Activities (i.e. Research Tax Credit) IRC § 41 \* - Qualified Research Activities, Paragraph 5.c.8., Internal Revenue Service (2014).
- <sup>3</sup> *Geosyntec Consultants, Inc. v. United States*, No. 9:12-cv-80334 (S.D. Fla. 2013).