

March 20, 2018

Mr. Brad Wiseman Director of Planning and Development Services City of Round Rock 301 W. Bagdad, Suite 210 Round Rock, Texas 78664

Re: Kalahari Resort and Convention Center – Round Rock HKS Project #20673

Dear Mr. Wiseman:

Per discussion between the City of Round Rock and Kalahari Resorts and Conventions, our project team has been tasked to communicate to the city how the proposed EIFS material cited in the proposed PUD for finish materials of exterior walls complies with the durability and appearance standards of the C1-a (General commercial – limited) district. The ordinance in question states:

*"Exterior wall finish.* The building materials of a project shall be durable, require low maintenance, and be of the same or higher quality as surrounding developments." and

"At least 75 percent of the total exterior wall finish, except for doors, windows, and trim, shall be natural stone, simulated stone, brick, stone-face or split-face concrete masonry unit (CMU), or *stucco*"

The primary exterior finish material proposed for the hotel and convention center is EIFS (Exterior Insulation and Finish System). The material was chosen based on our experience with EIFS on similar hospitality projects of similar size and design. We believe the use of EIFS is an acceptable exterior material under the current zoning ordinance by relating its use to "stucco" as identified above.

Stucco and EIFS are similar in that both materials are portland cement based. Both materials must be applied over a stable substrate, i.e. exterior sheathing and steel studs. Both materials are applied most often by subcontractors experienced in the application of both EIFS and stucco, lending to the fact that EIFS is often referred to as synthetic stucco. In many cases, at distance, the visual difference between stucco and EIFS is unperceivable.

To exemplify the quality of the proposed exterior system for the hotel and convention center, it is important to define the proposed assembly, code criteria, and overall expectation of the client, architect, contractor, and in turn the city.

Exterior Insulation and Finish Systems (EIFS) are multi-layered exterior wall systems that include a portland cement based air and water barrier over exterior sheathing or other structural stable

substrate, expanded polystyrene insulation board, which is secured to the exterior wall surface with a specially formulated adhesive, a durable portland cement based water-resistant base coat, which is applied on top of the insulation and reinforced with fiberglass mesh for added strength, and an attractive and durable finish coat, typically using acrylic copolymer coating system. The embedded fiberglass mesh is specified in different weights that increase the system's durability at grade and pedestrian areas. In fact, the mesh weight specified by HKS for these areas will provide impact resistance similar to systems accepted in the state of Florida for high velocity hurricane zones.

The trade association for EIFS, EIMA (EIFS Industry Members Association) publishes known and tested facts concerning the system. By insulating outside the structure / sheathing, EIFS reduces air infiltration, stabilizes the interior environment, and reduces energy consumption. By contrast, traditional "between the studs" insulation, no matter how thick, leaves "thermal breaks" or gaps where heat and cold pass more freely between the outdoors and the space within at studs, wall outlets, wall joints, and elsewhere. In fact, EIFS adds to the "R-value" of a building (R-value is a measurement of the resistance to heat flow; the higher the R-value, the better the material's insulating value.) Most EIFS use insulation board with an R-value of R-4 to R-5.6 per inch as the innermost layer in the wall system. When combined with standard wall cavity insulation, the extra layer can boost wall insulation from R-19 to R-26 or more. EIFS are resilient enough to "absorb" building movement and thus avoid the unsightly cracking problems that are so common with stucco, concrete, and brick exteriors.

HKS has been very successful in the use of EIFS in the commercial market. Actually, EIFS are the most widely used wall cladding in commercial construction in this country, accounting for over 20% of the market. To emphasize our confidence in the system, attached are photographs of a few hospitality projects located in Texas that were completed by HKS in the past 10 years.

There are reasons for the success of EIFS in the commercial market. The specification for the system is based on performance criteria through ASTM standards and/or model building codes thus mandating the use of higher quality materials in fully tested assemblies. A few of the standards are listed below.

## AMSI/EIMA

**99A-2001** American National Standard for Exterior Insulation and Finish Systems (EIFS) **ICC ES** 

**AC24** Interim Criterial for Exterior Insulation and Finish Systems (EIFS) (July1, 2003) **AC219** Acceptance Criteria for Exterior Insulation and Finish Systems (March 1, 2004) **ASTM** 

**C1397-09** Standard Practice for Application of Class PB Exterior Insulation and Finish Systems

Concerning building codes, the city of Round Rock adopted the ICC, International Building Code, 2015. IBC acknowledges EIFS as an exterior wall covering in Section 202, Definitions, which notes:

EXTERIOR WALL COVERING. A material or assembly of materials applied on the exterior side of exterior walls for the purpose of providing a weather-resisting barrier, insulation or for

aesthetics, including but not limited to, veneers, siding, *exterior insulation and finish systems*, architectural trim and embellishments such as cornices, soffits, facias, gutters and leaders.

The IBC also identifies criteria for testing and inspection of EIFS. Section 1705.16, Exterior insulation and finish systems (EIFS) further acknowledging EIFS as an acceptable exterior system under the building code.

Additionally, EIFS is successful in the commercial market because of the application and monitoring processes. Our contract specifications will require only qualified applicators. Pre-installation conferences involving the architect, contractor, subcontractor and system manufacturer, as well as exterior mock-ups of the EIFS, are a requirement of the specification. We invite the city and its inspectors to take part in the conferences. The monitoring process includes the review of the submittals by the architect and assurance by the general contractor that the product is installed according to the approved contract documents. Ultimately, the project is being inspected by the city.

Should you have any additional comments or questions regarding the exterior design of the project, please feel free to call me to discuss. I look forward to hearing from you.

Sincerely,

= Ims.#

Steven J. Valenta, AIA Vice President HKS

Michael Orlouski

Michael Orlowski Operations Manager Hensel Phelps

cc:

City of Round Rock City Council Mr. Steve Pine, Director of Development, Kalahari Resorts and Conventions Mr. Richard Johnston, AIA, Principal, HKS

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