HISTORICAL EFFECTS ANALYSIS STUDY
OF 3820 CHILES ROAD, DAVIS,
YOLO COUNTY, CALIFORNIA 95616

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I. INTRODUCTION AND PURPOSE

This summary is provided in accordance with the California Environmental Quality Act (CEQA) Guidelines §15123. As stated in CEQA Guidelines §15123(a) “an Environmental Impact Report (EIR) shall contain a brief summary of the proposed actions and its consequences.” As required by the Guidelines, this section includes: (1) a summary description of the affected cultural resources, (2) recommended alternatives, and (3) possible mitigation measures. This revised final report also incorporates the changes requested by the City of Davis Historical Resources Management Commission (HRMC) per their September 17, 2018 meeting.

II. PROJECT LOCATION

The subject property is located at 3820 Chiles Road, Davis, Yolo County, California, being enumerated as Assessor’s Parcel Number (APN) 069-070-022-000. The subject property was originally located outside the city limit of Davis before being annexed into the city.

III. PROJECT HISTORY AND DESCRIPTION

The proposed project involves the demolition of the building at 3820 Chiles Road, a designated historic property within the City of Davis. In 2014, the University of California, Davis (UC Davis) leased the property for 20 years with an option to purchase the building and the 311,000-square foot site at a very favorable price. After considering the purchase of the building in some depth UC Davis decided not to exercise its option to purchase the building. In declining to buy the property, the UC Davis Executive Director of Real Estate Services cited its poor location and seismic issues discovered by consulting engineers.

Remedying the seismic issues would have added considerable, but unknown, costs to an anticipated rehabilitation of the building. The locational issue was not distance from the campus (UC Davis occupies a great deal of space across I-80 equidistant from campus), but isolation, as 3820 Chiles Road is not adjacent to other offices and providers of support services.

It is noteworthy that after extensive due diligence, the largest office and R&D tenant in the region - one possessed of a burgeoning appetite for space, one for which the specified purchase price was not a significant sum, and one which had occupied and operated the building for 20 years - concluded that, in light of the building’s structural and locational limitations, it was not worth rehabilitating.
Property owners, Lawrence Shepard and Chuck Cunningham shared the following information regarding past efforts towards adaptive reuse of the property:

**Origins of the Building**

Built in 1965 for Intercoastal Life Insurance Company, predecessor to Pacific Standard Life Insurance Company, the 53,000 square foot building occupies the western half of a 7.4-acre (400’x 800’) parcel. The second story housed corporate offices while the first floor stored the voluminous insurance contracts, records, and securities of the company in the pre-digital era. The first floor was built as a vault with one entrance, no windows, and was partially subterranean. In 1989 the building’s ownership passed to the California Commissioner of Insurance as receiver in the July 1989 bankruptcy of Pacific Standard’s successor, Southmark Corporation, a high-flying Texas-based financial services company that used junk bonds to buy up smaller companies.

**Development Team**

The building was purchased by an investor group that included Lawrence Shepard in 1996 and was leased to the University of California under a 20-year lease. In August 2014 the University announced to the ownership group that it would not extend its occupancy of 3820 Chiles Road or exercise its option to purchase the property. Lawrence Shepard was attracted to the challenge of adaptively reusing it as he had preserved other properties including:

- the 1874 Hunt Boyer Mansion, Davis, a National Register property that was under threat of demolition when he bought and restored it in 1978
- his primary residence at 66 College Park, built in 1926 that, when acquired in 1980, served as a boarding house for 11 students
- three flats in the Francesca Apartments, 850 Powell Street, San Francisco, dating from 1924
- two 75-year-old cabins in Bucks Lake, Plumas County
- 15 early and Mid-Century homes in Davis and Sacramento, California
- approximately 30 less remarkable postwar tract homes and condominiums, abandoned and boarded up during the Great Recession.

Identifying as a now retired professor rather than a developer, Shepard finds fulfillment in breathing new life into old structures. The process most often involves interdependent issues of physically and financially stabilizing properties while rehabilitating and repurposing them. These are tasks corporate developers find time-consuming, risky, and complex. Chuck Cunningham, well known civil engineer in Davis, joined Shepard as co-owner and co-manager of the current project.
Adaptive Reuse of the Existing Building

The text that follows describes several initiatives to evaluate, implement, or otherwise further adaptive reuse of the Pacific Standard Life Building. The first of these was mounted by UC Davis when it weighed exercising its option to purchase the building and site. The other initiatives were supported over a three-year period by Lawrence Shepard as he searched for more than two years for a means to achieve his goal in buying the property, preservation of the existing structure. After studying purchase of the building in some depth UC Davis decided not to exercise its option to purchase the building. In declining to buy the property the UC Davis Executive Director of Real Estate Services cited seismic issues discovered by consulting engineers and its poor location. Remedying the seismic issues would have added considerable but unknown costs to a much-needed rehab of the building. The locational issue was not distance from campus (UC occupies a great deal of space across I-80 equidistant from campus), but isolation: 3820 Chiles Road is not adjacent to other offices and providers of support services.

It is noteworthy that after extensive due diligence, the largest office and R&D tenant in the region - one possessed of a burgeoning appetite for space, one for which the specified purchase price was not a significant sum, and one which had occupied and operated the building for 20 years - concluded that in light of the building’s structural and locational limitations, it was not worth rehabilitating.

After taking possession of the property in 2015 with the intention of restoring the building, the owner assembled a study team to assess the practicality of developing the site with the existing structure as the centerpiece of an office/R&D park. The team was composed of a contractor, an architect, an engineer, two commercial real estate brokers, and the owner. Notwithstanding the owner’s predilection, the team concluded saving the building was impractical, due to a combination of structural and design issues. Paramount among these were seismic deficiencies identified by engineers retained by UC Davis. Other major impediments identified by the study team included its isolated location, gross deficiencies with respect to Title 24 and ADA requirements, obsolete design and layout, and the vault-like basement.

The study team concluded that at best rehabbing the building would cost what a new building would cost without meeting modern design standards for commercial buildings and could cost considerably more because of unknowns. Far from representing an asset for economic development, this conspicuous site and obsolete building could stand dark for many years, so it should be demolished in favor of uses for which there is current demand.

After confronting the impracticality of restoring the obsolete building, the study team analyzed the feasibility of demolishing the building and developing a new office/R&D park on the site, without the burden of the existing building. Multiple plot plans and pro formas were considered. The challenge here was three-fold:
1. Commercial real estate brokers on the team argued that R&D and office tenants prefer to co-locate with similar uses and with service providers in a “campus” environment. This resonated with UCD’s second reason for leaving the site, its isolation. To overcome this, the team proposed using some of the already small site to open space amenities for employees and visitors. On this site in this market, they also argued that there should be 5 parking spaces per 1000 square foot of building rather than the required 4 spaces. These provisions materially reduce the buildable square footage. Finally, the brokers estimated a minimum five to seven-year build-out of any office/R&D park built on this site. In addition to tying up millions of dollars in infrastructure, this exacerbates risk by making the project vulnerable to any new, larger research park approved in the interim like Mace Ranch Innovation Center.

2. While design and development of corporate facilities in urban centers are influenced by corporate image and marketing, office/R&D space in suburban markets like Davis is built for local enterprises and start-ups making it cost-driven. Such space represents a commodity and its development is subject to huge economies of scale. As a result, projects like the Interland Research Park (originally about 50 acres), the original Mace Ranch Research Park across I-80 (more than 100 acres) and the proposed Mace Ranch Innovation Center (102 acres) enjoy much lower development costs than sites as small as 3820 Chiles Road (7.4 acres).

3. There is an abundant inventory of land already zoned for and better located for business park. Just in the immediate vicinity of the site, south of I-80 adjacent to the freeway between the Mace Blvd. and Richards Blvd. exits there are more than 20 acres of vacant office/R&D land. This land alone, when considered next to the vacant standing inventory of office space, represents more than a decade’s absorption in the Davis market.

The factors caused the study team to conclude it was impractical to establish a commercial business park on the 7.4-acre site.

Aware of the University’s decision to vacate the existing building and acting under the impetus of the city’s critical need for new revenue, the city’s deputy chief innovation officer contacted the owner in August 2015 expressing interest in using the building to stimulate economic development in Davis. She and senior city staff toured the building in December and were provided the 2014 seismic study as well as summary statements of the contractor and real estate brokers who participated in the 2015 Study. The city remained interested in the possibility that the building could be used to attract a major technology firm from the Bay Area.

An informal arrangement was agreed upon under which the City of Davis economic development team and Greater Sacramento CEO Barry Broome would draw the property to the attention of a specific internationally known tech giant and other firms expressing interest in the region. The owner could pursue alternative uses but was asked to support the economic development effort by having a rendering of the building drawn for use by economic development officers of the City of Davis and Greater Sacramento.
Wanting to unreservedly support the city’s aspiration to bring a tech giant to Davis, the owner went the extra step of developing a printed brochure and a two-minute animated rendering at a cost of $8,000. After the passage of a full year, local officials indicate that they had not been able to identify a single prospective tenant to show the materials requested. The applicants believe that city staff responsible for economic development now concur with the 2015 Study Team that the 52-year-old building does not have the potential to attract a user.

A concern remained that by rezoning the site from commercial to residential uses the City Council might be tying the hands of future councils by reducing the supply of commercially zoned land, albeit highway commercial land. In the summer of 2016 the owner asked Cushman and Wakefield, an international commercial real estate brokerage firm, to assess the viability of creating a new office building on the site. At their request, James Fitzgerald of MarketOne Builders did a cost study of constructing a new office building that met modern design, seismic and energy efficiency standards. His site-specific numbers were very close to numbers produced a year before by Steve Harrison and his group of subcontractors. Cushman and Wakefield Managing Director Ron Thomas and his Davis colleague Jim Gray analyzed Fitzgerald’s cost figures against market rents in Davis. Their conclusion is that if a developer were to build such a structure today putting in the land at zero cost, the developer “. . . would lose $111,000 per year, at 90% occupancy, and would take construction risk. This deal would never get underwritten for a loan . . . Average rents in Davis (are) $1.86 MG (per month gross). Until rents rise – to $2.75 or $3.00 per foot it is unlikely that any spec office building will get built” (Shepard 2018).

In the long run, office and commercial rents in the region rise by little more than the rate of inflation, two to three percent annually, so a fifty percent increase in rents would require more than a decade and, of course, the land has more than zero cost. This analysis provides confirmation of the findings of the 2015 Study Team: it would be many years, likely decades, before this parcel becomes viable for such office/R&D uses.

Starting soon after he contracted to buy out his partners in Fall 2014, the owner alerted prominent members of the commercial brokerage community that he intended to rehabilitate the building so it and the unbuilt half of the site would be available for lease and/or build-to-suit. As was noted above, this marketing effort was supplemented by the work of economic development officers from the city and Sacramento region in their efforts to bring companies to the area. This 28-month effort has produced nothing: these sources have identified only three prospects with any possible interest, but none of them were interested enough to tour the property. Two of these were fitness/recreational center users and one was office and light manufacturing, a far cry from the high-tech R&D user sought for broader civic benefit.

The applicants’ inability to attract even one potential buyer or tenant to tour the building or site confirm the conclusions of the 2015 Study Team and the City of Davis/Greater Sacramento marketing effort on behalf of the region: firms that want to locate in Davis - especially firms capable of being game changers in the local economy - require land and build-to-suit opportunities
in research parks large enough to provide three things: economies of scale in development; co-location with service providers; and expansion opportunities.

This study, conducted by an independent consulting firm often used by the City of Davis and other jurisdictions, analyzed the viability of developing the site under four land use scenarios with options 2 through 4 requiring demolition of the existing structure:

1. Adaptive reuse of the existing building for office/R&D use
2. Construction of a new office/R&D building
3. Construction of mid-sized retail
4. Construction of for-sale and rental housing as contemplated in the original application (later modified to all rental)

EPS determined that it is not economically feasible to develop the site for office/R&D purposes either by adaptively reusing the old building or by starting with new construction. Adaptive reuse would require one time and on-going losses having an estimated total present value of $6.6 million even when zero cost is attached to the land. Under this scenario, the 52-year-old building would retain locational and functional limitations enumerated in the report.

New construction of an office/R&D building would yield a more functional building without remedying locational limitations but it was still estimated to lose $4.1 million without allowance for land costs. In its detailed analysis, EPS identified as the source of this conclusion low commercial rents prevailing in the Davis and regional markets. For an office/R&D project to make sense to an investor and lender, monthly lease rates would have to rise by about 50 percent $2.90 per gross leasable square foot, a phenomenon that would likely require decades.

The conclusion of EPS that office/R&D is infeasible on this site corroborates:

1. the decision of UC Davis not to purchase and renovate the building following its 2014 due diligence;
2. the findings of the 2015 Study Team and the 2016 MarketOne Builders and Cushman & Wakefield analysis; and
3. the fruitless marketing efforts of the owner, his brokers, and city and regional economic development authorities since early 2015.
IV. REGULATORY FRAMEWORK

CEQA Section 15064.5(a) defines a “historical resource” as a resource that meets one or more of the following criteria:

- Listed in, or eligible for listing in, the California Register;
- Listed in a local register of historical resources (as defined at Public Resources Code Section 5020.1(k));
- Identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code; or
- Determined to be a historical resource by a project’s lead agency (CCR Title 14(3) Section 15064.5(a)).

A historical resource consists of “Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California… Generally, a resource shall be considered by the lead agency to be ‘historically significant’ if the resource meets the criteria for listing in the California Register of Historical Resources.”

If an impact to a historical or archaeological resource is significant, CEQA requires feasible measures to minimize the impact. Mitigation must avoid or substantially lessen the physical impact that the project will have on the resource. Generally, the use of drawings, photographs, and/or displays does not mitigate the physical impact on the environment caused by demolition or destruction of a historical resource. However, CEQA requires that all feasible mitigation be undertaken even if it does not mitigate impacts to a less than significant level.

The California Register of Historical Resources (California Register) is an authoritative guide to cultural resources that must be considered when a government agency undertakes a discretionary action subject to CEQA. The California Register helps government agencies identify and evaluate California’s historical resources, and indicates which properties are to be protected, to the extent prudent and feasible, from substantial adverse change. Any resource listed in, or eligible for listing in, the California Register is to be taken into consideration during the CEQA process. A significant environmental impact would result to cultural resources if a proposed project were to: cause a substantial adverse change in the significance of a historic resource as defined in CEQA Guidelines §15064.5.
V. PROPERTY DESCRIPTION

As originally described by Brunzell in 2013, the subject property is a two-story reinforced concrete Postmodernist building:

designed in “New Formalism” style of architecture and located in south Davis along a highway frontage road. After the 1970 remodel, the building is approximately 188’ x 148’, with a 40’ x 60’ two-story interior courtyard with seven arches on the shorter sides, with a gross size of 53,000 square feet. The rectangular building has a symmetrical design, with the main, public entrance on the longest axis of the building that facing north. An employee and deliveries entrance is located adjacent to a parking lot on the east. The central interior courtyard, towards the northwest corner of the building, opens through both building levels. The flat-roofed building is completely surrounded on the upper level by concrete arches that are supported by a footing or base cantilevered four feet out from the lower level walls. The arches which are flush with the roof, are less structural then ornamental, and unlike the pilasters, they appear to carry only the membrane of the roof. The arch openings, nine each on the building’s longer sides and five each on the shorter, are rectangular with rounded corners and are silhouetted against a background of dark gray tile and tinted windows. The lower level is hidden from street view by a ten-foot high berm that completely surrounds the building with the exception of a narrow opening off the east parking lot. Windows on the lower level are smaller and irregularly placed. Separate from the main building is a single-story promontory structure, approximately 50’ x 10’ feet, that juts out from the front entrance, with flights of stairs on both sides. A 40-foot bridge connects the promontory to the main building’s public entrance on the top floor. On top of the promontory, linearly arranged along the long axis, are the bases for three flag poles. The three original 60-foot flag poles are no longer present, having been removed at an unknown date. The promontory is a closed structure with no interior space and no doors or windows, but with a decorative bronze seal on front. The building sits on a parcel of approximately 7.4 acres. The building and employee parking lot are set back from the frontage road by about 200 feet, with a large lawn area in front. The berm that surrounds the building extends from the front, north side an additional 600 feet to the east, creating a long, low revetment that conceals the employee parking lot and originally provided a base for the company sign. The sign was made from 30 separate letters, each approximately 3 x 5 feet, that were spaced along the berm and individually lit at night. The sign is no longer present and was likely removed following the failure of the insurance company in 1989 (Brunzell 2013).
An updated DPR 523 record was prepared by Brunzell in March 2015 (Brunzell 2015), with the following description of the subject property:

The two-story New Formalist office building is located in south Davis along a highway frontage road. The rectangular-plan building is approximately 180 x 140 feet and symmetrical in design, with its main entrance on the longer north elevation. The flat-roofed building is completely surrounded on the upper level by a concrete colonnade that rests on a base cantilevered four feet out from the lower level walls. The arches are flush with the heavy flat roof, presenting a flat and smooth exterior. The arch openings of the colonnade, nine each on the building’s longer sides and seven on the shorter, are rectangular with rounded corners and are silhouetted against a background of dark tile and tinted windows. The lower level is hidden from street view by a ten-foot high berm that completely surrounds the building with the exception of a narrow opening off the east parking lot. Windows on the lower level are smaller and irregularly placed. A single-story structure, approximately 50 x 10 feet, projects from the front entrance with flights of stairs on both sides. A 40-foot bridge connects the promontory to the main building’s public entrance on the top floor. On top of the promontory, linearly arranged along the long axis, are the bases for three flag poles. The three original 60-foot flag poles are no longer present, having been removed at an unknown date. The promontory is a closed structure with no interior space and no doors or windows, but with a decorative bronze seal on front. The building sits on a parcel of approximately 15 acres. The building and employee parking lot are set back from the frontage road by about 200 feet, with a large lawn area in front. The berm that surrounds the building extends from the front (north) elevation an additional 600 feet to the east, creating a long, low revetment that conceals the employee parking lot and originally provided a base for the company sign (Brunzell March 2015).

VI. FINDING OF SIGNIFICANCE

The subject property, located on the south side of Chiles Road, consists of a two-story, Postmodernist designed corporate office building constructed in 1966 of reinforced concrete with its main entrance facing north towards Chiles Road. The building was recorded on November 11, 2013 by Kara Brunzell and updated on March 1, 2015, and found to be significant as a Davis Landmark resource under National Register of Historic Places (NRHP), California Register of Historic Resources (CRHR), and Davis Register of Historic Resources (DRHR) Criteria A/1 for its association with the broad patterns of history of Davis, commercial development of Yolo County and the City of Davis, and the Saving & Loan financial crisis of the late-1980s in California. It should be noted that the DRHR is based upon different criteria and different levels of historic listing, including Merit, Landmark, and District. If a resource is deemed to be NRHP or CRHR eligible, it is automatically listed on the DRHR.
The property was also determined to be eligible under DRHR Criteria 2 for its association with the life of Silvio Barovetto, a prominent architect, who, according to Brunzell, helped define the character of Davis during the 1960s. The property was also found to be significant under DRHR Criteria 3 for its architecture, being a “standard example of mid-century Modern architecture in the New-Formalism style.” The property was found to be ineligible for the NRHP, CRHR, or DRHR under Criterion D/4, for its informational or scientific values. In summary, Brunzell found the subject property to retain integrity and to be eligible for the NRHP, CRHR, DRHR, and as an Davis landmark property.

While Brunzell’s description of 3820 Chiles Road is generally correct, simply because a building was designed in the “New Formalism” approach to Postmodernist architecture does not necessarily make it historically significant. Postmodernist is also represented in Davis in a variety of commercial/office buildings, particularly those buildings built on the U.C. Davis campus during the 1960s. However, the campus does not have good examples of the “New Formalism” style of Postmodernist architecture. Another consideration that has already been stated is the association with the subject property and architects Barovetto & Thomas, whose work embodies many of the elements of Postmodernist design. New Formalism is an architectural design that developed in the United States during the mid-1950s and flourished in the 1960s, evidenced by hundreds of commercial, civic, and institutional style building constructed in this style. Buildings designed in the New Formalism style exhibited many Classical elements, particularly uniform symmetry, proportion, scale, stylized colonnades, and entablatures. Modern reinforced concrete and precast concrete materials allowed for a wide variety of applications of the style. Edward Durrell Stone's New Delhi American Embassy (1954), which blended the architecture of the east with modern western concepts, is considered to be the beginning of New Formalism architecture in America (Fullerton Heritage Website 2017).

In summary, the subject building was designed in a Postmodernist style of architecture by the prominent local architectural firm of Barovetto & Thomas, whose work is also featured on a number of buildings in Davis, as well as Yolo and Sacramento County. Assuming New Formalism is a significant form of Postmodernist architecture, then the subject property at 3820 Chiles Road, constructed in 1966 for the Intercoast Life Insurance Company (1966-1970) and later occupied by Pacific Standard Life Insurance Company (1972-1989), is an important example of that form of architecture in Davis. Equally important is the association of the building with the architectural firm of Barovetto & Thomas, whose work reflects an important chapter of architectural design in Davis after World War II.

VII. CEQA FINDING AND PROJECT ALTERNATIVES

Because the building is a significant resource or historic property, demolition of the building is a significant impact under CEQA. Although the loss of a historic building is generally unmitigable, project alternatives should be taken into consideration along with mitigation measures.
VIII. SIGNIFICANT EFFECTS AND MITIGATION MEASURES

The following information summarizes the proposed impacts and mitigation measures:

**Alternative 1:** No Project. Retain building in its present location.

**Mitigation Measure:** None.

**Significance after Mitigation:** N/A

**Alternative 2:** Document and demolish 3820 Chiles Road.

**Mitigation Measure:** Prior to demolition of the building the Applicant shall:

a) Retain a qualified architectural historian, as approved by the City of Davis Planning, Department, to prepare a “Historic Documentation Report.” The report shall include current photographs of each building displaying each elevation, architectural details or features, and overview of the buildings, together with a textual description of the building along with additional history of the building, its principal architect or architects, and its original occupants. The photo-documentation shall be done in accordance with Historic American Building Survey/Historic Engineering Record (HABS/HAER) guidelines, which should include archival quality negatives and prints. The final Report shall be available in hard copy and electronic copy format and deposited with the City of Davis Community Development and Sustainability Department, the Hattie Weber Museum, and the State Office of Historic Preservation, U.C. Davis Special Collections, and other appropriate organizations and agencies as identified by the Planning Department.

b) Install and maintain a publicly accessible space for a memorial or interpretive plaque/display accessible to the public on or near the former location of the subject property, identifying the former location of the building, its original owner, and its historic significance as it relates to Postmodern architectural design. The HRMC subcommittee shall provide input or help in the design, wording, and final location of the plaque.

c) Develop a plan to locate and find the time capsule that was hidden within the building and how best to curate it and display it if it is recovered.

**Significance after Mitigation:** Even with adherence to the above mitigation measure, the alternative would not fully mitigate the loss of the property or historic resource, which is significant for the purposes of CEQA. Therefore, this Alternative would be considered a significant and unavoidable impact.
**Cumulative Analysis:** CEQA Guidelines Section 15130 (a) states that “an EIR shall discuss cumulative impacts of a project when the project’s incremental effects is cumulatively considerable, as defined in CEQA Guidelines Section 15065 (c).” While 3820 Chiles Road is a relatively rare example of Postmodernist architecture in Davis, there are other representative properties in Davis that fall under this broad classification. Thus, the loss of 3820 Chiles Road will not result in the demise of the last building of this type or design in Davis.

IX. REFERENCES

Brunzell, Kara. 3820 Chiles Road, Davis, California. DPR 523 Primary Record and BSO Record. November 11, 2013.

Brunzell, Kara. 3820 Chiles Road, Davis, California. Updated DPR 523 Primary Record and BSO Record. March 1, 2015.


Shepard, Lawrence. Personal communication. September and October 2017, October 2018.
