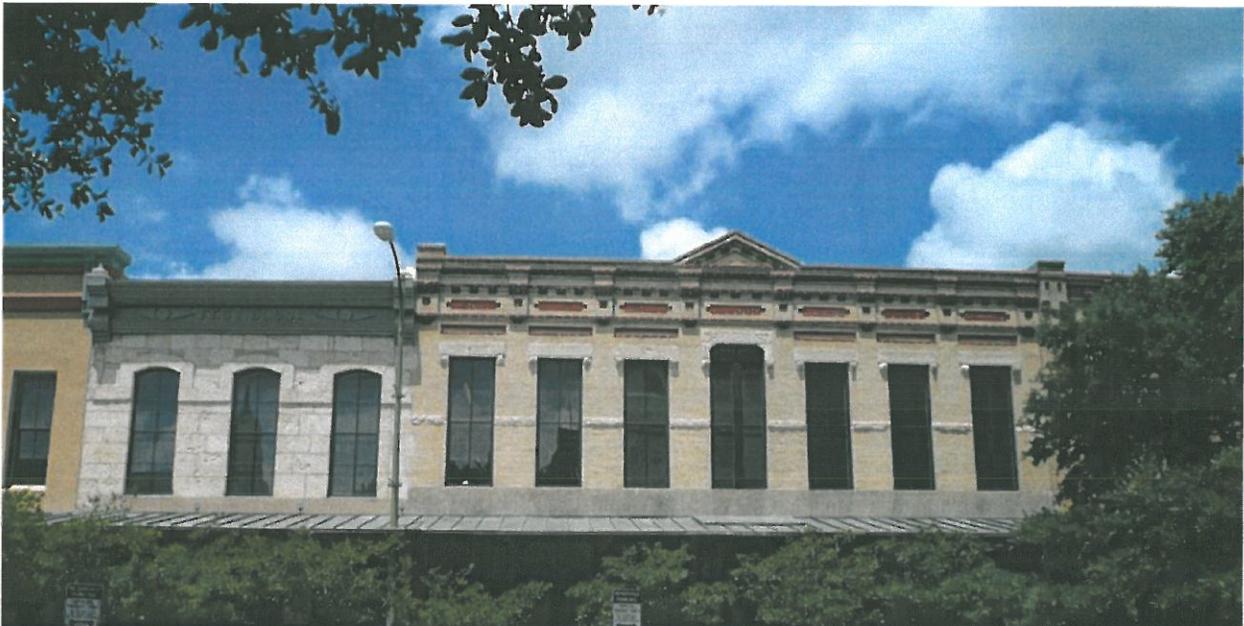


PLAZA DE ARMAS BUILDING ROOFING ASSESSMENT

SUBMITTED TO
CITY ARCHITECT'S OFFICE
ASSET MANAGEMENT DEPARTMENT
CITY OF SAN ANTONIO



SUBMITTED BY
DEBRA J. DOCKERY, ARCHITECT, P.C.

JUNE 1, 2007

INTERIM REVIEW, NOT INTENDED FOR BIDDING, PERMITTING OR
CONSTRUCTION. DEBRA J. DOCKERY, TEXAS ARCHITECT LICENSE NO. 11930

PLAZA DE ARMAS ROOFING ASSESSMENT

CITY OF SAN ANTONIO
ASSET MANAGEMENT DEPARTMENT

SUBMITTED BY
DEBRA J. DOCKERY, ARCHITECT, P.C.

JUNE 1, 2007

Table of Contents

Summary of Findings

Roofing Assessment

Skylight Replacement

Elevator Cab Repair

Summary Opinion of Probable Construction Cost

Reference Roof Plan

Existing Conditions Photos



INTERIM REVIEW, NOT INTENDED FOR BIDDING, PERMITTING OR
CONSTRUCTION. DEBRA J. DOCKERY, TEXAS ARCHITECT LICENSE NO. 11930

**Plaza De Armas
City of San Antonio**

ROOFING ASSESSMENT

Following is an assessment and recommendations for roofing replacement, skylight replacement, and elevator cab renovation at Plaza De Armas Building. This interim review report is not intended for bidding, permitting, or construction. The report was prepared by Debra J. Dockery, Registered Architect, State of Texas, #11930.

The on site reviews were conducted on April 25 and May 15, 2007.

Existing Conditions

The Plaza De Armas building is the City of San Antonio headquarters for the Human Resources Department. It is a two story structure with a basement and encompasses at least 3 different buildings with distinct features.

The main entry leads to a central clerestory with a skylight. A restaurant (Panchitos) occupies the central space while city offices occur off the main circulation route.

The masonry building is a collection of eclectic styles facing City Hall to the East and an alley to the West and is anchored by the interior central court.

Survey:

Roof Area - Approx. 19,000 sq. ft. of built up roof. Approx. 340 sq. ft. of metal roof.

Roof Construction – Mostly granular surface cap sheet on multi ply built up roofing. There are eight distinct roof areas, most with parapets on all sides. Two areas have a sloping gable roof. All flat roofs are sloping in one direction. One roof area has gravel surface built up roofing.

Roof Drainage – 7 metal scuppers at west wall. Downspouts drain onto Calder street.

Roof Top Equipment – Approx. 14 air handlers.

Condition – Deterioration of granular roof surface, roof membrane, electrical panel stands as well as pitch pans. The roof area closest to the roof access has standing water. Metal flashing at skylights to roof are open and show signs of attempted repair. Areas around roof top curbs show signs of roof patch or repair. Electrical conduit at some locations is lacking proper anchoring, and wiring is exposed.

Recommendations:

Remove all existing roofing, wood nailers and related metal flashing.

Replace all existing roofing, roof curbs and metal flashing. Create roof slopes as needed.

Replace all rusted kendorf for electrical panel stands and place all exposed electrical wire into conduit and on proper skids.

Cap all existing parapet roof conditions with sloped metal flashing.

Cover all parapet walls with continuous metal wall panel flashing.

Replace asphalt shingle roof and replace and paint all rotten wood siding at roof penthouse.

Summary:

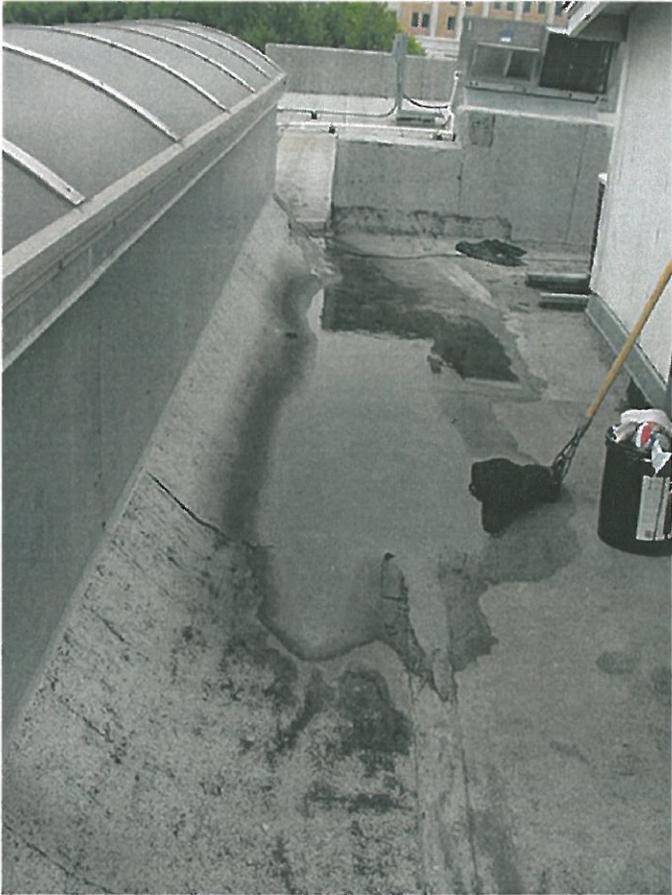
Provide roofing replacement and deck repairs at main roof areas. Provide retrofit metal roof over existing metal roof area. Provide new metal scuppers and downspouts. Provide new electric panel stands and conduit as required. Provide new wood siding and new paint for roof access housing as needed.

Opinion of Probable Construction Cost-Roofing only:

Roofing Replacement with 4 ply built-up roofing, gravel or mineral surface cap, R-19 rigid insulation, new sheet metal work.

Removal of Existing Roofing	19,000	SF	\$1.00	\$19,000
New Roofing and Insulation	19,000	SF	\$12.00	\$228,000
New Metal Roofing	340	SF	\$15.00	\$5,100
Parapet Wall Flashing	3,600	SF	\$10.00	\$36,000
Miscellaneous Repairs and Contingency	1	LS	\$20,000	\$20,000
				\$308,100
Contractor's Overhead and Profit				1.15
				\$354,315

Existing Conditions Photos





**Plaza De Armas
City of San Antonio**

CONTINUOUS VAULTED SKYLIGHT ASSESSMENT

Summary:

Existing large skylights are gaining too much heat and leaking.

Survey:

Skylight Area - Approx. 2,000 sq. ft. of barrel vault shaped skylight.

Construction – five aluminum framed bronze skylights , 5' wide by 52' long. The skylights have 2' wide intermediate roof drains. These metal drains that slope in two directions are not an integral part of the skylight, but they are adjacent to both sides of each skylight.

Condition – Aluminum frames in fair condition, glazing in fair condition, Flashing around skylights is in bad condition with signs of attempted repairs. At least one of the barrel vault skylights is showing signs of being warped. This could be the frame or it could be structural. Currently there is an active water leak in one of the trough sections in between the skylights.

Recommendations:

Replace skylights with like design except reduce heat gain by using a double or triple layer white translucent acrylic material.

Replace existing sloped gutter areas with like design except increase slope and refine joints so as to avoid water leaks.

Perhaps utilize a radiant barrier paint on all framing members.

Summary:

Provide new skylights, gutters, and metal flashing , replacing the existing with like design. Utilize a more energy efficient glazing in order to reduce radiant heat gain.

Opinion of Probable Construction Cost:

Removal of Existing skylights	2,000	SF	\$1.00	\$2,000
New skylights	2,000	SF	\$25.00	\$50,000
New Metal gutter/flashing	2,000	SF	\$20.00	\$40,000
Miscellaneous Repairs and Contingency	1	LS	\$10,000	\$20,000
				\$112,000
Contractor's Overhead and Profit				1.15
				\$128,800

Existing Conditions Photos





**Plaza De Armas
City of San Antonio**

INDIVIDUAL SKYLIGHT ASSESSMENT

Summary:

Existing small skylights are in need of new curbs.

Survey:

Skylight Area – 2 –units approx. 48 sq. ft. total.

Construction – two aluminum framed white skylights , 4' wide by 6' long

Condition – Aluminum frames in fair condition, glazing in fair condition, Flashing around skylights is in bad condition with signs of attempted repairs. The existing curbs that appear to be made of 2x4 wood framing are deficient and are in very bad condition.

Recommendations:

Replace skylights with like design except reduce heat gain by using a double or triple layer white translucent acrylic material.

Perhaps utilize a radiant barrier paint on all framing members.

Summary:

Provide new skylights, new curb, and metal flashing , replacing the existing with like design. Utilize a more energy efficient glazing in order to reduce radiant heat gain.

Opinion of Probable Construction Cost:

Removal of Existing skylights	48	SF	\$1.00	\$48.00
New skylights	48	SF	\$50.00	\$2,400.00
New Metal gutter/flashing	48	SF	\$20.00	\$960.00
Miscellaneous Repairs and Contingency	1	LS	\$5,000	\$5,000.00
				\$8,408.00
Contractor's Overhead and Profit				1.15
				\$9,669.00

Existing Conditions Photos



**Plaza De Armas
City of San Antonio**

ELEVATOR ASSESSMENT

Survey:

Elevator area – 5'-9" W X 4'-4" D (clear). The cab size does meet current Texas Accessibility Standards.

Elevator Construction – Dover brand , 2100 lb. capacity, 13 passenger, 3 stops.

Condition – Interior of cab is an outdated and worn stainless steel with red plastic laminate. The Hall call buttons and Hall lanterns are outdated and not visually obvious and do not meet current ADA requirements. The raised brail characters are worn and are not mounted at standard height. In talking with the company that maintains the elevator now, he relayed that the cab is in fairly good condition , but it could use a new pump unit and controls.

Recommendations:

Purchase a modernization kit for the elevator cab and it's related electronic controls.

After detailed investigation by an elevator technician the existing pump may be refurbished and the purchase of a new pump unit may be optional.

Paint outside of elevator door so as to accentuate its renovation.

Summary:

Provide a renovated interior elevator cab along with new hall signals and a complete survey to comply with current code.

Opinion of Probable Construction Cost:

Painting	1	LS	\$1,000	\$1,000
Modernization kit	1	LS	\$30,000	\$30,000
New pump unit	1	LS	\$10,000	\$10,000
Miscellaneous Repairs and Contingency	1	LS	\$5,000	\$5,000
				\$46,000
Contractor's Overhead and Profit				1.15
				\$52,900

Existing Conditions Photos





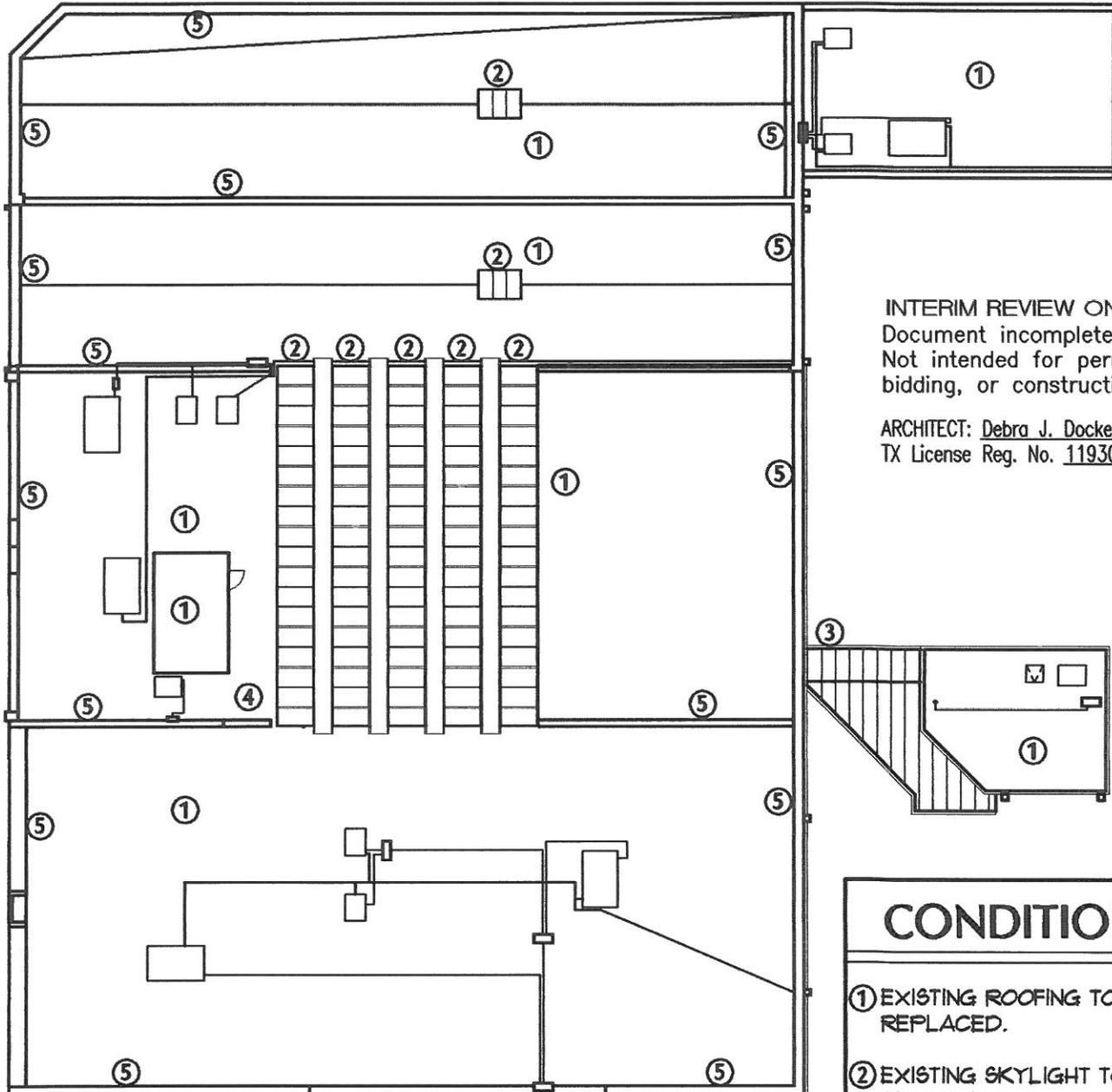
CONCLUSION:

Summary of opinion of probable construction cost:

Roofing	\$354,315
Vaulted Skylights	\$128,800
Single Skylights	\$9,669
Elevator	\$52,900
Total	\$545,684

CITY OF SAN ANTONIO PLAZA DE ARMAS ROOFING

LOSOYA STREET



INTERIM REVIEW ONLY
Document incomplete:
Not intended for permit,
bidding, or construction.

ARCHITECT: Debra J. Dockery
TX License Reg. No. 11930

CALDER ALLEY

CONDITIONS

- ① EXISTING ROOFING TO BE REPLACED.
- ② EXISTING SKYLIGHT TO BE REPLACED.
- ③ NEW METAL RETROFIT ROOF OVER EXISTING.
- ④ RENOVATE ELEVATOR CAB.
- ⑤ NEW METAL WALL PANEL ON ALL EXISTING PARAPET WALLS.

SPANISH GOVERNORS PALACE

PLAZA DE ARMAS ROOF PLAN

01 SCALE NO SCALE

Continuous Vaulted Skylights

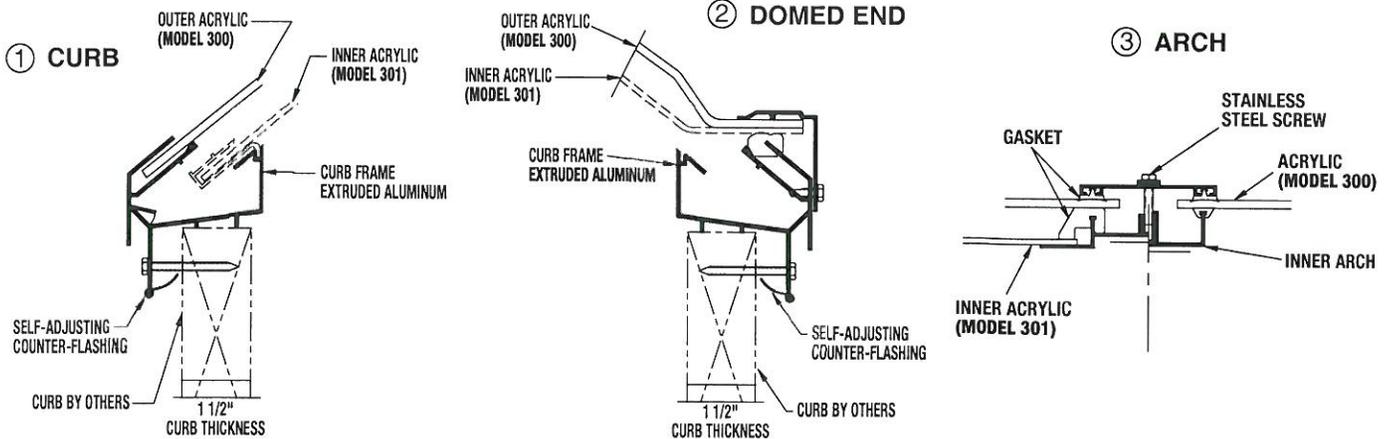
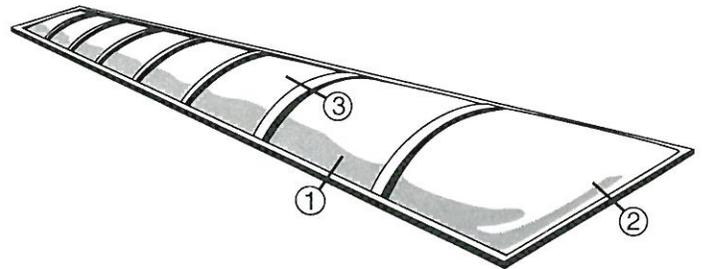
Plasteco's Continuous Vaulted Skylight Model 300 (single glazed) and Model 301 (double glazed) are available in widths ranging from 3 ft. to 7 ft. with unlimited length. They are composed of pre-assembled half dome or vertical ends and intermediate sections which are shipped K-D. The intermediate sections consist of flat acrylic, monolithic polycarbonate, or structured sheet polycarbonate sheets cold formed over pre-formed aluminum arches.

The curb frame comes with a self-adjusting counter-flashing to reduce the amount of air infiltration (or exfiltration) that occurs between the top of the curb and the skylight curb frame.

These skylights are light in weight and provide an economical solution to daylighting of relatively large rectangular areas. Since the skylight opening is rectangular the construction of the structural framing, curbs, roofing, flashing and the interior finish is simplified resulting in a lower completed cost.

Although the skylights are normally furnished K-D (except for the ends), Plasteco has shipped pre-assembled 20 ft. sections. The pre-assembled 20 ft. sections have special designed ends than can be milled together with a special EPDM gasket. Projects consisting of 20,000 ft. have been installed using the 20 ft. pre-assembled sections.

Since skylights are not designed to support body weight, some method of fall protection should be provided. See add-alternate for information on OSHA regulations on fall protection.



Single Glazed Model 300	Double Glazed Model 301	Dome Ht.	Outside Curb Dim. A
300-30	301-30	7"	33 ³ / ₄ "
300-36	301-36	8"	39 ³ / ₄ "
300-42	301-42	9"	45 ³ / ₄ "
300-48	301-48	10"	51 ¹ / ₄ "
300-54	301-54	11"	57 ³ / ₄ "
300-60	301-60	12"	63 ³ / ₄ "
300-72	301-72	14"	75 ³ / ₄ "
300-84	301-84	16"	87 ³ / ₄ "

Custom sizes available.

Specifications: Continuous vaulted skylights shall be single glazed Model 300 (double glazed Model 301) as manufactured by Plasteco, Inc. (800-231-6117; Fax 877-231-6117). Curb (by others) shall have a minimum thickness of 1-1/2". Each skylight shall consist of a pair of pre-assembled half domes (or vertical ends). The intermediate sections are shipped K-D with arch sections over nominal 4 ft spacing. Model 300 acrylic shall be clear, bronze or #2447 white translucent. Model 301 inner acrylic shall be clear or white translucent.

Curb frame, inner and outer arch supports shall be 6063-T5 extruded aluminum. Exterior exposed aluminum can be mill finish, clear anodized, bronze anodized, and powder coating or fluoropolymer (color). Curb frame shall have self-adjusting counter-flashing. All gaskets shall be black EPDM. Skylights are designed to support a 20 psf load.

Add alternate: Fall protection as required by OSHA Regulation 1926.501 "Duty to have fall protection" shall be provided by Model A FALLGUARD® Skylight Screens. FALLGUARD® Skylight Screens shall be shipped separately and installed prior to the installation of the skylight.