

# HISTORIC AND DESIGN REVIEW COMMISSION

May 03, 2023

**HDRC CASE NO:** 2023-153

**COMMON NAME:** River Walk improvements from E Houston to Lexington; stair between E Houston and E Commerce

**LEGAL DESCRIPTION:** NCB 400 BLK 2 LOT SW TRI OF 1 & N IRR PTS OF 2, 3,4, & 5

**ZONING:** UZROW, H, RIO-3, Public Property, D

**CITY COUNCIL DIST.:** 1

**APPLICANT:** Tania Gunn/Beaty Palmer Architects

**OWNER:** CITY OF SAN ANTONIO

**TYPE OF WORK:** River Walk improvements from E Houston to Lexington; stair between E Houston and E Commerce

**APPLICATION RECEIVED:** April 13, 2023

**60-DAY REVIEW:** Not applicable due to City Council Emergency Orders

**CASE MANAGER:** Edward Hall

## REQUEST:

The applicant is requesting a Certificate of Appropriateness for approval to perform rehabilitative scopes of work to the public and historic River Walk path on the west bank between E Houston Street and Lexington Avenue. Within this request, the applicant has proposed individual scopes of work that include:

1. Stair Between Houston Street and Commerce Street (west side of main channel, opposite north flood gate), circa 1960's-1970's
  1. Cleaning and re-parging of existing concrete structure.
  2. Selective demolition of existing treads and risers (approximately 2" into existing concrete) and patching with new cementitious filler.
  3. Patching with new cementitious filler at intersection of stair with street level.
  4. Removal of existing metal rail system and replacing it with code compliant galvanized metal handrail/guardrail system.
2. Houston Street Bridge to Travis Street Bridge
  1. Remove, store, and re-install 10 historic walk panels over new reinforced concrete sub-slabs
  2. Re-grout all grouted walk panels
3. Travis Street Bridge to Pecan Street Bridge
  1. Remove, store, and re-install 5 historic walk panels over new reinforced concrete sub-slab
  2. Remove 3 non-historic walk panels
  3. Remove existing deteriorated historic flagstone walk and steps; install new flagstone over new reinforced concrete sub-slab ramp and landing with galvanized metal handrails (historic low stone wall and decorative boulders at ramp outside edge to remain)
  4. Install new colored pre-cast concrete pavers in size and pattern to match historic architectural drawings over existing contemporary concrete walk
  5. Remove existing deteriorated historic pre-cast concrete pavers and replace with new colored pre-cast concrete pavers in size and pattern to match historic architectural drawings over new reinforced concrete sub-slab
  6. Remove existing deteriorated historic flagstone paving and install new flagstone paving over new reinforced concrete sub-slab; add one new flagstone step and low stone walls at dock to flatten cross slope of walk
  7. Reset 4 existing historic concrete panels to flatten cross-slope
  8. Re-grout all existing grout joints
4. Pecan Street Bridge to Martin Street Bridge
  1. Remove, store, and re-install 1 historic walk panel over new reinforced concrete sub-slab
  2. Add stone curb between walk and retaining wall

3. Re-grout all existing grouted joints
5. Martin Street Bridge to Augusta Street Bridge
  1. Remove, store, and re-install 5 historic walk panels over new reinforced concrete sub-slabs
  2. Saw-cut, remove, store, and re-install 6 contemporary walk panels over new reinforced concrete sub-slabs
  3. Remove portion of contemporary stone river wall cap, raise wall height with stone to match existing, and re-install cap
  4. Remove 6 deteriorated historic walk panels; remove historic colored pre-cast concrete pavers and salvage intact triangular pavers for re-installation; remove existing concrete dock edge and trim; remove historic stone steps; Install new concrete ramp with galvanized metal handrails; connect ramp to historic stair at landing; connect dock to ramp at landing via new concrete steps; reinstall salvaged historic colored pre-cast concrete pavers over new reinforced concrete sub-slab; install new reinforced concrete dock edge
  5. Install new flagstone paving (per historic architectural drawings) over existing concrete walk
  6. Remove existing contemporary concrete walk and stone curb; install new elevated concrete walk and ramps suspended on concrete piers (open on land side to augment tree root space, closed on river side by new stone-faced retaining wall and curb); install metal handrails both sides of ramp and elevated walk
  7. Re-grout all existing grouted joints
6. Augusta Street Bridge to St. Mary's Street Bridge
  1. Remove existing deteriorated concrete paving (under Augusta bridge) and install new reinforced concrete paving to match existing with grouted joints
  2. Remove existing deteriorated historic flagstone paving and install new flagstone paving over new reinforced concrete sub-slabs
  3. Remove existing stone curb and metal edging and install new roughly squared limestone curb over reinforced concrete footing
  4. Remove existing historic flagstone steps, existing deteriorated historic flagstone paving, and contemporary concrete steps and handrails; install new flagstone faced ramp and boat landing over new reinforced concrete sub-slab; install new low stone wall; install new galvanized metal handrails at ramp and steps down to boat landing
  5. Re-grout all existing grouted joints
7. St. Mary's Street Bridge to Navarro Street Bridge
  1. Remove existing 4' wide contemporary concrete walk and install new 5' wide reinforced concrete walk over clean river gravel fill; revise routing of walk to accommodate existing mature trees
8. Navarro Street Bridge to Lexington Street Bridge
  1. Remove 34 panels of existing contemporary concrete walk and install new reinforced concrete walk sloped to eliminate ramp and cross-slope conditions
  2. At boat landing' install new reinforced concrete topping sloped to reduce cross-slope
  3. Install new roughly squared limestone curb over reinforced concrete footing at river side of existing walk to control erosion under existing walk

## **APPLICABLE CITATIONS:**

*Unified Development Code Section 35-676. - Alteration, Restoration and Rehabilitation.*

In considering whether to recommend approval or disapproval of an application for a certificate to alter, restore, rehabilitate, or add to a building, object, site or structure, the historic and design review commission shall be guided by the National Park Service Guidelines in addition to any specific design guidelines included in this subdivision.

- (a) Every reasonable effort shall be made to adapt the property in a manner which requires minimal alteration of the building, structure, object, or site and its environment.
- (b) The distinguishing original qualities or character of a building, structure, object, or site and its environment, shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features shall be avoided when possible.
- (c) All buildings, structures, objects, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance are prohibited.
- (d) Changes that may have taken place in the course of time are evidence of the history and development of a building, structure, object, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.

- (e) Distinctive stylistic features or examples of skilled craftsmanship, which characterize a building, structure, object, or site, shall be kept where possible.
- (f) Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should reflect the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historical, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
- (g) The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building's materials shall not be permitted.
- (h) Every reasonable effort shall be made to protect and preserve archaeological resources affected by, or adjacent to, any project.
- (i) Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material, and character of the property, neighborhood or environment.
- (j) Wherever possible, new additions or alterations to buildings, structures, objects, or sites shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the building, structure, object, or site would be unimpaired.

#### *Unified Development Code Section 35-673 – Site Design Standards*

(g) Paving Materials. An important San Antonio landscape tradition is the use of decorative surfaces for paving and other landscape structures. Paving materials and patterns should be carefully chosen to preserve and enhance the pedestrian experience.

(1) Vary Walkway, Patio and Courtyard Paving to Add Visual Interest on the Riverside of Properties Abutting the River. Pervious paving is encouraged where feasible and appropriate to the site.

A. A maximum of six hundred (600) square feet is allowed for a single paving material before the paving material must be divided or separated with a paving material that is different in texture, pattern, color or material. A separation using a different material must be a minimum of twenty-four (24) inches wide, the full width of the pathway.

B. A maximum of one hundred (100) lineal feet is allowed in a walkway before the pattern must change in districts "RIO-2," "RIO-3," and "RIO-4." A maximum of five hundred twenty-eight (528) lineal feet is allowed before the pattern must change in districts "RIO-1," "RIO-5" and "RIO-6." The change of material at five hundred twenty-eight (528) lineal feet will define and delineate one-tenth-mile markers.

C. In "RIO-3," the Riverwalk pathway shall be delineated by using a separate material that is clearly distinguished from the adjacent patio paving materials. If the historic Hugman drawings indicate a sidewalk width and pattern on the site, that paving pattern and material shall be replicated.

(h) Site Walls and Fences. Site walls and fences are used to help divide spaces, screen unsightly objects and provide privacy. However, the character of the San Antonio River is such that walls shall not be erected in such a way as to block views of the river from public spaces.

(1) Use of Site Walls to Define Outdoor Spaces.

A. Use of low scale walls (twenty-four (24) inches to forty-eight (48) inches) to divide space, create a variety in landscaping and define edges is permitted.

B. Solid walls (up to seventy-two (72) inches) are permitted to: screen mechanical equipment, garbage receptacles and other unsightly areas; and provide privacy at the back of lots up to the front building face.

(2) Site Wall and Fence Materials.

A. On properties abutting the river, site walls and fence materials may be constructed of: stone, block, tile, stucco, wrought iron, tubular steel, welded wire or a combination of masonry and metal, cedar posts and welded wire or garden loop or other materials having similar characteristics. All other properties, not abutting the river may use the above listed materials plus wood fencing.

B. All chain link fences are prohibited for properties abutting the river. For properties that do not abut the river chain link is only allowed in the rear yard if not readily visible from the right-of-way. Barbed wire, razor wire, and concertina are prohibited in all RIO districts.

(i) Street Furnishings. Street furnishings are exterior amenities, including but not limited to, tables, chairs, umbrellas, landscape pots, wait stations, valet stations, bicycle racks, planters, benches, bus shelters, kiosks, waste receptacles and similar items that help to define pedestrian use areas. Handcrafted street furnishings are particularly important in San Antonio, and therefore this tradition of craftsmanship and of providing street furniture is encouraged.

(1) Prohibited Street Furnishings in Riverwalk Area. The following street furnishings are prohibited within the publicly owned portion of the Riverwalk area, whether or not the property is leased, and on the exterior of the

riverside of buildings directly adjacent to the publicly owned portion of the river:

- A. Vending machines.
- B. Automatic teller machines.
- C. Pay phones.
- D. Photo booths.
- E. Automated machines such as, but not limited to, penny crunching machines, blood pressure machines, fortune-telling machines, video games, animated characters and other machines that are internally illuminated, or have moving parts, or make noise, or have flashing lights.
- F. Inanimate figures such as horses, kangaroos, bears, gorillas, mannequins or any such animal, cartoon or human figure. This section does not affect public art as defined in Appendix "A" of this chapter.
- G. Monitors (i.e., television screens, computer screens).
- H. Speakers.

(2) Street Furnishing Materials.

- A. Street furnishings shall be made of wood, metal, stone, terra cotta, cast stone, hand-sculpted concrete, or solid surfacing material, such as Corian or Surell.
- B. Inexpensive plastic resin furnishings are prohibited.

(3) Advertising on Street Furnishings.

- A. No commercial logos, trademarks, decals, product names whether specific or generic, or names of businesses and organizations shall be allowed on street furnishings.
- B. Product or business advertising is prohibited on all street furnishings.
- C. Notwithstanding the restrictions above, applications may be approved for purposes of donor or non-profit recognition.

(4) Street furnishings, such as tables and chairs may not be stored (other than overnight storage) in such a way as to be visible from the river pathway.

(j) Lighting. Site lighting should be considered an integral element of the landscape design of a property. It should help define activity areas and provide interest at night. At the same time, lighting should facilitate safe and convenient circulation for pedestrians, bicyclists and motorists. Overspill of light and light pollution should be avoided.

(1) Site Lighting. Site lighting shall be shielded by permanent attachments to light fixtures so that the light sources are not visible from a public way and any offsite glare is prevented.

- A. Site lighting shall include illumination of parking areas, buildings, pedestrian routes, dining areas, design features and public ways.
- B. Outdoor spaces adjoining and visible from the river right-of-way shall have average ambient light levels of between one (1) and three (3) foot-candles with a minimum of 0.5-foot candles and a maximum of six (6) foot-candles at any point measured on the ground plane. Interior spaces visible from the river right-of-way on the river level and ground floor level shall use light sources with no more than the equivalent lumens of a one hundred-watt incandescent bulb. Exterior balconies, porches and canopies adjoining and visible from the river right-of-way shall use light sources with the equivalent lumens of a sixty-watt incandescent bulb with average ambient light levels no greater than the lumen output of a one hundred-watt incandescent light bulb as long as average foot candle standards are not exceeded. Accent lighting of landscape or building features including specimen plants, gates, entries, water features, art work, stairs, and ramps may exceed these standards by a multiple of 2.5. Recreational fields and activity areas that require higher light levels shall be screened from the river hike and bike pathways with a landscape buffer.
- C. Exterior light fixtures that use the equivalent of more than one hundred-watt incandescent bulbs shall not emit a significant amount of the fixture's total output above a vertical cut-off angle of ninety (90) degrees. Any structural part of the fixture providing this cut-off angle must be permanently affixed.
- D. Lighting spillover to the publicly owned areas of the river or across property lines shall not exceed one-half (½) of one (1) foot-candle measured at any point ten (10) feet beyond the property line.

(2) Provide Lighting for Pedestrian Ways That is Low Scaled for Walking. The position of a lamp in a pedestrian-way light shall not exceed fifteen (15) feet in height above the ground.

(3) Light Temperature and Color.

- A. Light temperature and color shall be between 2500° K and 3500° K with a color rendition index (CRI) of eighty (80) or higher, respectively. This restriction is limited to all outdoor spaces adjoining and visible from the river right-of-way and from the interior spaces adjoining the river right-of-way on the river level and ground floor level. Levels shall be determined by product specifications.

(4) Minimize the Visual Impacts of Exterior Building Lighting.

- A. All security lighting shall be shielded so that the light sources are not visible from a public way.
- B. Lighting (uplighting and downlighting) that is positioned to highlight a building or outdoor artwork shall be aimed at the object to be illuminated, not pointed into the sky.
- C. Fixtures shall not distract from, or obscure important architectural features of the building. Lighting fixtures



shall be a subordinate feature on the building unless they are incorporated into the over-all design scheme of the building.

(5) Prohibited Lighting on the Riverside of Properties Abutting the River.

- A. Flashing lights.
- B. Rotating lights.
- C. Chaser lights.
- D. Exposed neon.
- E. Seasonal decorating lights such as festoon, string or rope lights, except between November 20 and January 10.
- F. Flood lamps.

(6) Minimize the visual impacts of lighting in parking areas in order to enhance the perception of the nighttime sky and to prevent glare onto adjacent properties. Parking lot light poles are limited to thirty (30) feet in height, shall have a 90° cutoff angle so as to not emit light above the horizontal plane.

(k) Curbs and Gutters.

(1) Construct Curb and Gutter Along the Street Edge of a Property.

- A. Install curbs and gutter along the street edge at the time of improving a parcel.
- B. In order to preserve the rural character of RIO-5 and RIO-6, the HPO in coordination with public works and the development services department may waive the requirement of curbs and gutters.

(l) Access to Public Pathway Along the River. These requirements are specifically for those properties adjacent to the river to provide a connection to the publicly owned pathway along the river. The connections are to stimulate and enhance urban activity, provide path connections in an urban context, enliven street activity, and protect the ambiance and character of the river area.

(1) A stair, ramp or elevator connecting the publicly owned pathway at the river to private property along the river is allowed by right at the following locations:

- A. At all street and vehicular bridge crossings over the river.
- B. Where publicly owned streets dead end into the river.
- C. Where the pedestrian pathway in the Riverwalk area is located at the top of bank and there is a two-foot or less grade change between the private property and the pathway.

(2) If there is a grade change greater than two (2) feet between the private property and the publicly owned pathway at the river then the following conditions apply:

- A. Access to the publicly owned pathway is limited to one (1) connection per property, with the exception that connections are always allowed at street and vehicular bridge crossings. For example if one (1) property extends the entire block face from street crossing to street crossing the owner would be allowed three (3) access points if the distance requirements were met.
- B. The minimum distance between access points shall be ninety-five (95) feet. Only street and vehicular bridge connections are exempted. Mid-block access points must meet this requirement.
- C. Reciprocal access agreements between property owners are permitted.

(3) Clearly define a key pedestrian gateway into the site from the publicly owned pathway at the river with distinctive architectural or landscape elements.

- A. The primary gateway from a development to the publicly owned pathway at the river shall be defined by an architectural or landscape element made of stone, brick, tile, metal, rough hewn cedar or hand-formed concrete or through the use of distinctive plantings or planting beds.

UDC Section. 35-675. Archaeology.

When an HDRC application is submitted for commercial development projects within a river improvement overlay district the city archeologist shall review the project application to determine if there is potential of containing intact archaeological deposits utilizing the following documents/methods:

- (1) The Texas Sites Atlas for known/recorded sites, site data in the files of the Texas Archeological Research Laboratory and the Texas Historical Commission;
- (2) USGS maps;
- (3) Soil Survey maps;
- (4) Distance to water;
- (5) Topographical data;
- (6) Predictive settlement patterns;
- (7) Archival research and historic maps;
- (8) Data on file at the office of historic preservation.

If after review the city archeologist determines there is potential of containing intact archaeological deposits, an archaeological survey report shall be prepared and submitted. If, after review by the city archeologist, a determination is made that the site has little to no potential of containing intact archaeological deposits, the requirement for an archaeological survey report may be waived.

Upon completion of a survey, owners of property containing inventoried archaeological sites are encouraged to educate the public regarding archaeological components of the site and shall coordinate any efforts with the office of historic preservation.

## **FINDINGS:**

- a. The applicant is requesting a Certificate of Appropriateness for approval to perform rehabilitative scopes of work to the public and historic River Walk path on the west bank between E Houston Street and Lexington Avenue. Additionally, the applicant has proposed to perform rehabilitative scopes of work to the existing, stair at between E Commerce and E Houston. The proposed improvements will bring the west bank of the River Walk in to compliance with the Americans with Disabilities Act as well other regulatory codes while balancing the preservation of Hugman's original design intent and original materials.
- b. EXISTING CONDITIONS – Many of the existing elements on the west bank between E Houston Street and Lexington Avenue are of the Hugman era. Modifications have been made in various locations, primarily from a 2002 improvement project and along the right of way between Auditorium Circle and Lexington Avenue.
- c. REPAIR & MAINTENANCE – When possible, the applicant has proposed to repair historic elements in-place. The applicant has noted that all existing grouted joints will be re-grouted. Staff finds that all grout should match the original in color as closely as possible. In many instances, surfaces will be removed and reinstalled over reinforced concrete sub-structures. This will allow for adequate foundations for walkways and for adequate drainage.
- d. STAIR REHABILITATION – The applicant has proposed to perform rehabilitative scopes of work to the curved stair to include cleaning, repairs to stairs and risers, and the installation of a code compliant metal handrail/guardrail system. Staff finds the proposed scope of work to be appropriate.
- e. HUGMAN ELEMENTS (Paving Panels) – The applicant has proposed to remove, store and reinstall original Hugman era paving panels. The panels have shifted from their original installation. The applicant has noted that panels will be reinstalled over reinforced concrete sub-slabs. Staff finds this to be appropriate and consistent with the Guidelines.
- f. HUGMAN ELEMENTS (Flagstone Paving) – The applicant has proposed to remove existing, damaged flagstone paving and to install new flagstone paving over a reinforced concrete sub-slab. Staff finds this scope of work to be appropriate as the applicant has proposed to follow historic architectural drawings. Staff finds that all original flagstone that is not damaged beyond repair should be preserved and reused.
- g. STAIRS/RAMPS – Where existing stairs are located, the applicant has proposed to install ramps to achieve ADA compliance. The applicant has proposed unique solutions for each stair location to maintain as many original elements as possible. Ramps will be faced with flagstone to relate to existing Hugman elements. The applicant has noted the installation of guardrails in various locations. Railings will not touch or interfere with historic materials. Staff finds this scope of work to be appropriate.
- h. WALLS/CURBS/EDGING – The applicant has proposed to modify many low walls and curbs/edging. In these instances, the applicant has proposed to construct concrete walls to be clad with stone. In stances where contemporary walls and curbs/edging have been installed, these will be removed and replaced with elements that are complementary of Hugman era elements. Staff finds this scope of work to be appropriate.
- i. TREE PROTECTION – This stretch of the River Walk features various existing trees, many of which are bald cypress trees. The applicant has proposed to accommodate trees and their root zones by shifting and raising the paved pathways, where necessary. Staff finds this to be appropriate.
- j. ARCHAEOLOGY – The project shall comply with all federal, state, and local laws, rules, and regulations regarding archaeology, as applicable.

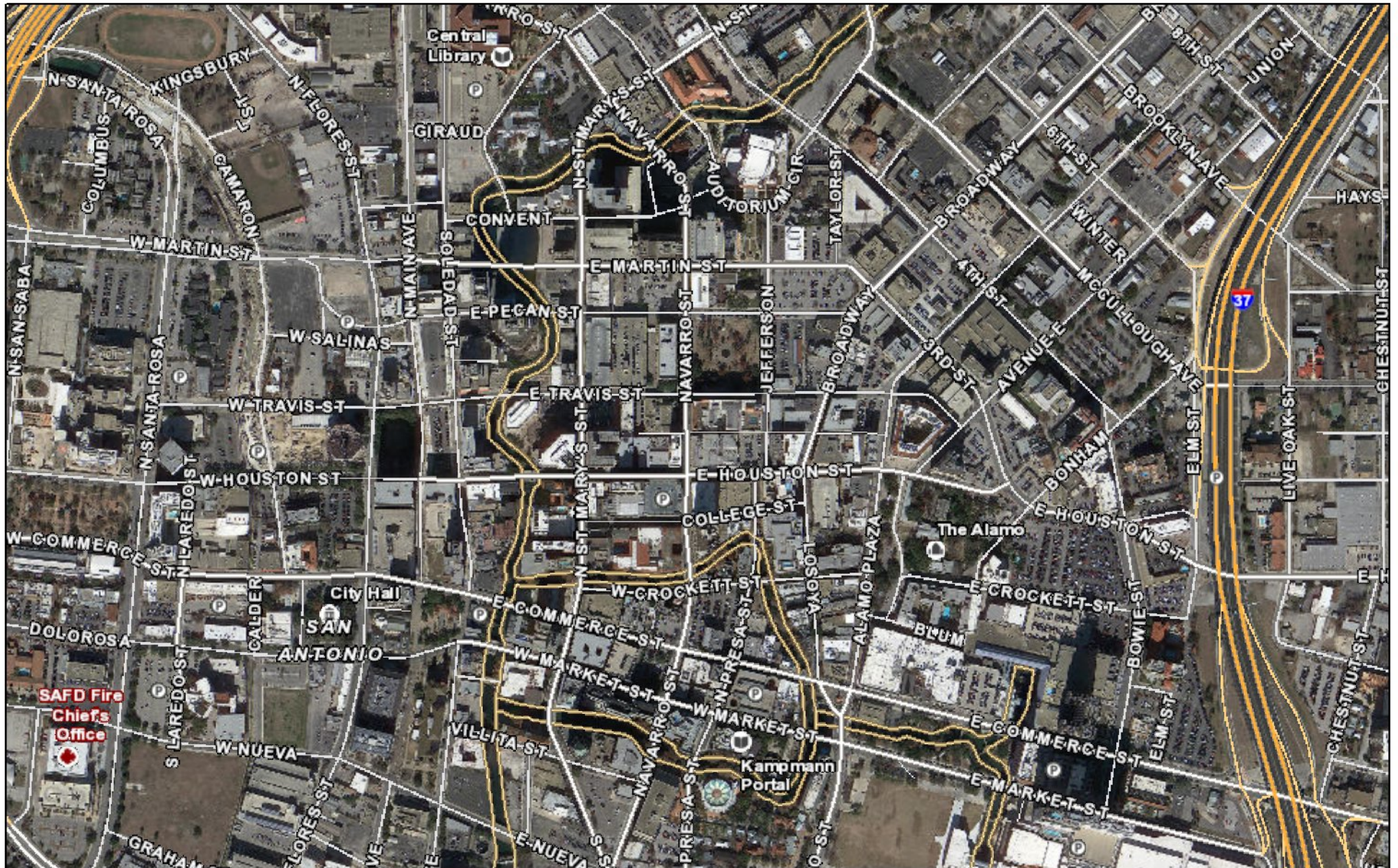
## **RECOMMENDATION:**

Staff recommends approval based on findings a through j with the following stipulations:

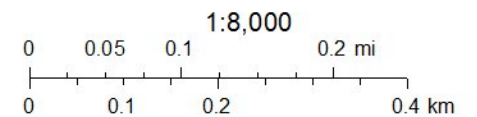
- i. That all original flagstone or cast stones that are not damaged beyond repair should be preserved and reused where possible. Unused materials should be stored for use in future maintenance projects.
- ii. ARCHAEOLOGY – The project shall comply with all federal, state, and local laws, rules, and regulations regarding archaeology, as applicable.



# City of San Antonio One Stop



April 27, 2023







CITY OF SAN ANTONIO  
**OFFICE OF HISTORIC  
PRESERVATION**

**Historic and Design Review Commission**  
***Pre-Submittal Consultation Report***

DATE: April 21, 2023

HDRC Case #: 2023-153

Address: San Antonio River Walk

Meeting Location: River Walk

APPLICANT: Tania Gunn/Beaty Palmer Architects

DRC Members present: Jeff Fetzer, Scott Carpenter, Jimmy Cervantes, Roland Mazuca

Staff Present: Shanon Miller, Cory Edwards, Edward Hall, Cynthia Martinez, Robert Rinn, Lincoln St George

Others present: Mike Beaty, Beaty Palmer Staff

**REQUEST: Repair to the west River Walk path between E Houston and Lexington; repair to stairs at E Commerce and River Walk**

**COMMENTS/CONCERNS:**

MB: Overview of project scope - Houston to Lexington. 4 types of paving - Hugman (30's/40's), substitute paving (Hugman repairs), contemporary paving (two profiles - 2002, Hotel Indigo Paving).

MB: Overview of typical Hugman paving.

MB: Overview of Hugman steps - ramp instead of steps/maintain river profile/elevation. Railing will be installed.

SC: Questions regarding railing location. MB: railing will not touch historic fabric.

JC: Questions regarding new paving.

MB: Overview of how paving will be repaired. Reinforced concrete sub slab. Walk paths will be arced to protect root flares.

MB: Many Hugman paving panels can be repaired in place.

RM: Questions regarding wall ages. MB: Walls will not be impacted.

MB: Walk will be raised in places to accommodate cypress roots, where needed.

MB: Circular walls between Convent and Augusta are not original. Ramp will start at Convent street, ramp up to stair (first 4 or 5 steps will be covered), ramp up to landing. Original paving will be salvaged. Between steps and Augusta is not Hugman flatwork. Slab will be lifted to allow for tree root zone. Build up stone retaining wall.

MB: Hugman stair above Augusta bridge

MB: Paving from Augusta bridge to SWAoA has failed. Will be redone with concrete sub slab, new flagstone top. Facing stone of retaining walls may be reused, will require retaining wall behind.

JF: Questions about new retaining walls/locations? Upper wall? (MB: No.)

MB: Hugman landing and stair at St Mary's bridge. Guardrail and above is work from 2002. Hugman work ends at this point.

RM: Questions about low wall location and profile at St Mary's bridge. Flagstone will also be replaced to match other replacement needs. Likely concrete underneath.

JF: Could increased slope be proposed to St Mary's bridge to reduce a loss in existing steps. Curved riser should be preserved, if possible.

MB: Landing will be maintained at current level, if possible.

MB: 2002 walk is only 4 feet in width. Walk is eroding. Cypress trees were planted in 2002. Walkways will be moved (to wall side) to accommodate trees.

MB: Navarro to Richmond. Will not be replaced with wider walk.

JF: Can landings be incorporated to allow for pullouts for passing.

MB: 2002 improvements stop after Richmond bridge. Hotel walk after bridge. Existing ramp is not to code. Will be replaced. Slab will be topped, landing raised one foot approximately.

MB: walk at Lexington/4th Street will be maintained. Repaired as needed. Stair at Lexington is not original. Built in 2002.

MB: ADA accessible on west side.

MB: Circular stair at old Mexican Manhattan. Likely 1970's. Cast concrete is in good shape structurally. Support to stair is engaged with river wall. Problems: Edges of treads are badly chipped. Railing is too short. Not up to legal code. Concept is to clean up structure, remove 2" from treads and risers. Stairs will be reinforced. Railing will be replaced, reattach at existing placement.

SC: Could added metal edging be used instead of failure (considering potential to fail).

MB: 3 phases of work.

## ***OVERALL COMMENTS:***

## Scope of Work: River Walk Main Channel Enhancements

The scope of this project includes capital improvements to the San Antonio River Walk main channel to enhance life safety, accessibility, code compliance, and aesthetics while respecting historic and natural architectural features.

### **Stair Between Houston Street and Commerce Street (west side of main channel, opposite north flood gate), circa 1960's-1970's**

This concrete stair has severe damage to tread edges and at the juncture of the stair structure with street level. Additionally, the existing metal rail system does not comply with current guardrail and handrail code requirements. Proposed modifications include:

1. Cleaning and re-parging of existing concrete structure
2. Selective demolition of existing treads and risers (approximately 2" into existing concrete) and patching with new cementitious filler
3. Patching with new cementitious filler at intersection of stair with street level
4. Removal of existing metal rail system and replacing it with code compliant galvanized metal handrail/ guardrail system

### **River Walk on west/north side of main channel from Houston Street bridge to Lexington Street Bridge**

#### Houston Street Bridge to Travis Street Bridge

1. Remove, store, and re-install 10 historic walk panels over new reinforced concrete sub-slabs
2. Re-grout all grouted walk panels

#### Travis Street Bridge to Pecan Street Bridge

1. Remove, store, and re-install 5 historic walk panels over new reinforced concrete sub-slab
2. Remove 3 non-historic walk panels
3. Remove existing deteriorated historic flagstone walk and steps; install new flagstone over new reinforced concrete sub-slab ramp and landing with galvanized metal handrails (historic low stone wall and decorative boulders at ramp outside edge to remain)
4. Install new colored pre-cast concrete pavers in size and pattern to match historic architectural drawings over existing contemporary concrete walk
5. Remove existing deteriorated historic pre-cast concrete pavers and replace with new colored pre-cast concrete pavers in size and pattern to match historic architectural drawings over new reinforced concrete sub-slab
6. Remove existing deteriorated historic flagstone paving and install new flagstone paving over new reinforced concrete sub-slab; add one new flagstone step and low stone walls at dock to flatten cross slope of walk
7. Reset 4 existing historic concrete panels to flatten cross-slope
8. Re-grout all existing grout joints

#### Pecan Street Bridge to Martin Street Bridge

1. Remove, store, and re-install 1 historic walk panel over new reinforced concrete sub-slab
2. Add stone curb between walk and retaining wall
3. Re-grout all existing grouted joints

#### Martin Street Bridge to Augusta Street Bridge

1. Remove, store, and re-install 5 historic walk panels over new reinforced concrete sub-slabs
2. Saw-cut, remove, store, and re-install 6 contemporary walk panels over new reinforced concrete sub-slabs
3. Remove portion of contemporary stone river wall cap, raise wall height with stone to match existing, and re-install cap
4. Remove 6 deteriorated historic walk panels; remove historic colored pre-cast concrete pavers and salvage intact triangular pavers for re-installation; remove existing concrete dock edge and trim; remove historic stone steps; Install new concrete ramp with galvanized metal handrails; connect ramp to historic stair at landing; connect dock to ramp at landing via new concrete steps; reinstall salvaged historic colored pre-cast concrete pavers over new reinforced concrete sub-slab; install new reinforced concrete dock edge
5. Install new flagstone paving (per historic architectural drawings) over existing concrete walk
6. Remove existing contemporary concrete walk and stone curb; install new elevated concrete walk and ramps suspended on concrete piers (open on land side to augment tree root space, closed on river side by new stone-faced retaining wall and curb); install metal handrails both sides of ramp and elevated walk
7. Re-grout all existing grouted joints

#### Augusta Street Bridge to St. Mary's Street Bridge

1. Remove existing deteriorated concrete paving (under Augusta bridge) and install new reinforced concrete paving to match existing with grouted joints
2. Remove existing deteriorated historic flagstone paving and install new flagstone paving over new reinforced concrete sub-slabs
3. Remove existing stone curb and metal edging and install new roughly squared limestone curb over reinforced concrete footing
4. Remove existing historic flagstone steps, existing deteriorated historic flagstone paving, and contemporary concrete steps and handrails; install new flagstone faced ramp and boat landing over new reinforced concrete sub-slab; install new low stone wall; install new galvanized metal handrails at ramp and steps down to boat landing
5. Re-grout all existing grouted joints

#### St. Mary's Street Bridge to Navarro Street Bridge

1. Remove existing 4' wide contemporary concrete walk and install new 5' wide reinforced concrete walk over clean river gravel fill; revise routing of walk to accommodate existing mature trees

#### Navarro Street Bridge to Lexington Street Bridge

1. Remove 34 panels of existing contemporary concrete walk and install new reinforced concrete walk sloped to eliminate ramp and cross-slope conditions
2. At boat landing' install new reinforced concrete topping sloped to reduce cross-slope
3. Install new roughly squared limestone curb over reinforced concrete footing at river side of existing walk to control erosion under existing walk



