

THE ROLE OF WATER IN PROJECT DESIGN

**1. PASS THE LOW FREQUENCY FLOOD EVENT
(100 YEAR)**

MAY, 2013, AT THE TUNNEL OUTLET



MAY, 2013, AT CAMP STREET

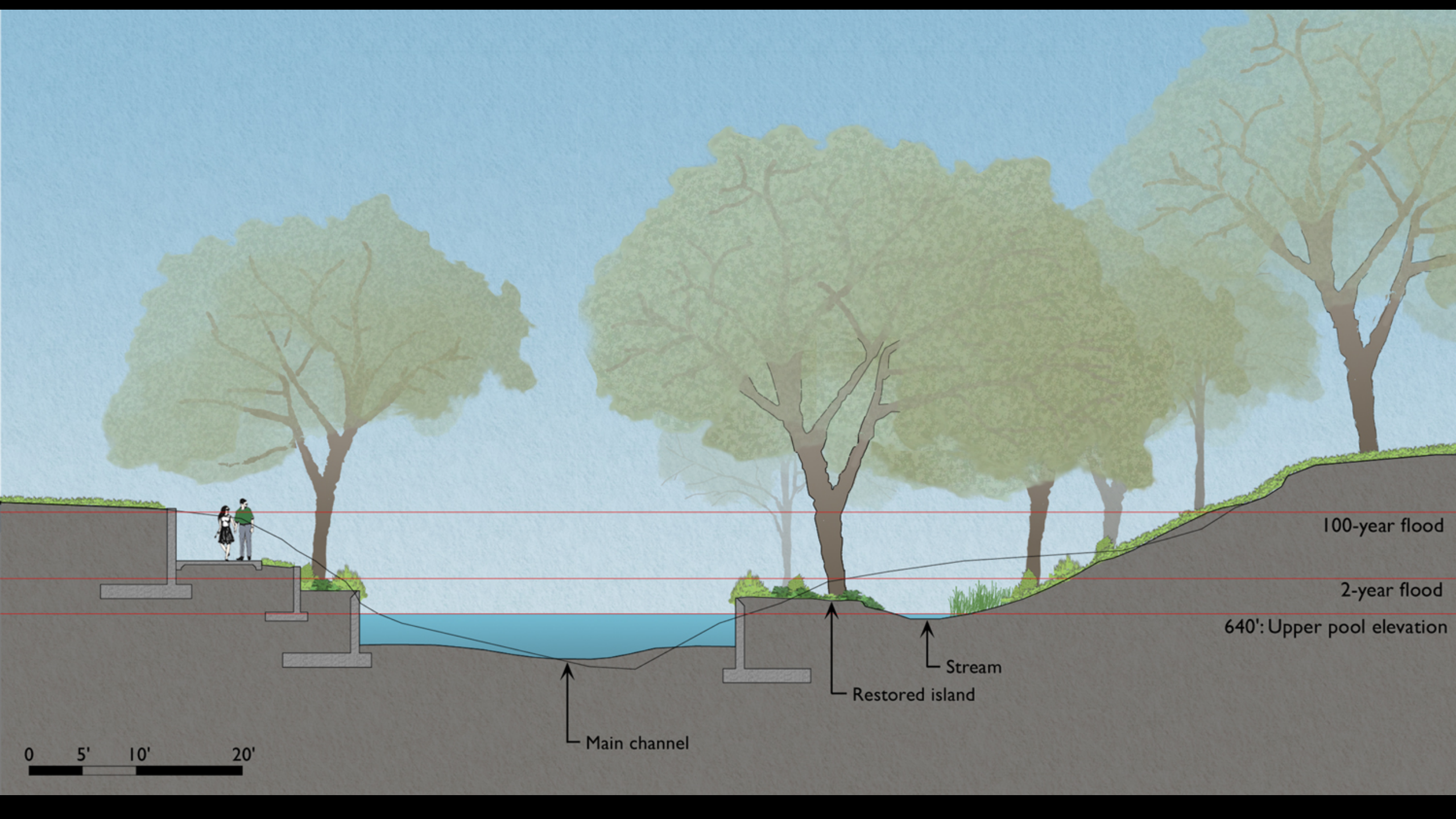


MAY, 2013, AT CAMP STREET



2. ACCOMMODATE HIGH FREQUENCY FLOOD EVENTS

- 1 YEAR, 2 YEAR
- PUBLIC SAFETY
- MAINTENANCE



100-year flood

2-year flood

640': Upper pool elevation

Stream

Restored island

Main channel

0 5' 10' 20'

SAN ANTONIO RIVER, SOUTH ALAMO



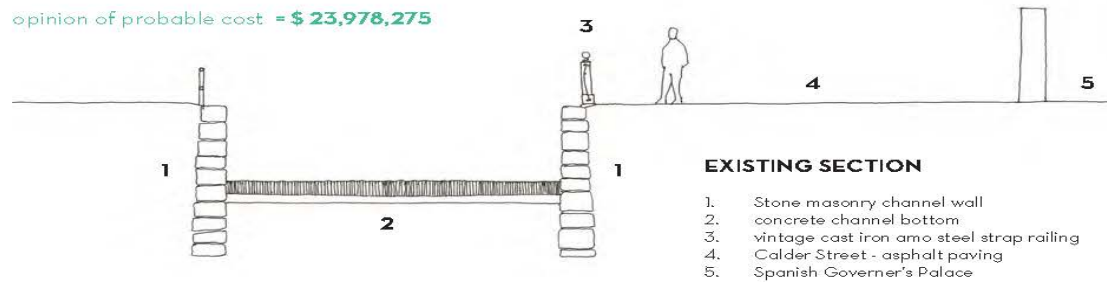
SAN ANTONIO RIVER, SOUTH ALAMO



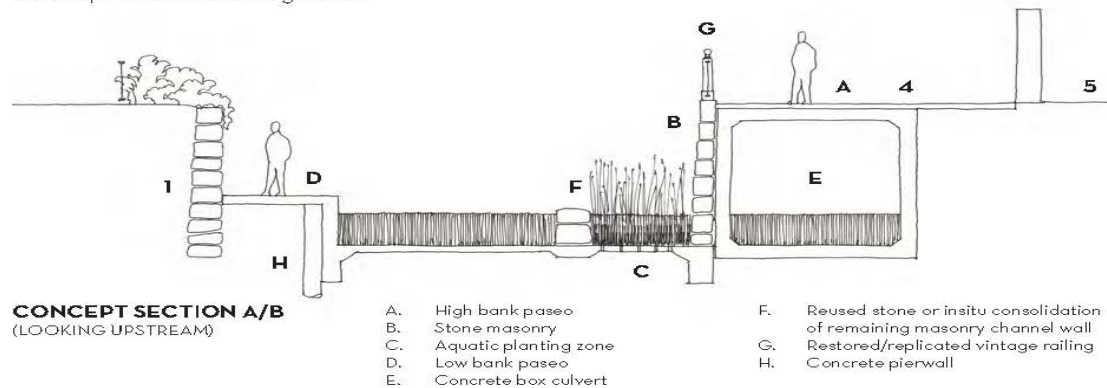
AGUA ANTIGUA ANCIENT WATER

CONCEPT PLAN A/B - In this area San Pedro Creek is the taproot of San Antonio's history as a city and the conceptual treatment of the channel will not be complete without a renewed preservation and urban design plan for the adjacent buildings and spaces. The single high-bank paseo in the Salon de Alameda area will need to transition to include a low-bank paseo as the creek courses through Agua Antigua, and the capacity of the channel will need to be increased. With the immediate adjacency of existing buildings, restricted width of the channel, and the low grade low clearances of the Commerce and Dolorosa Bridges, finding adequate pathways for water and people remains a daunting design and acquisition challenge. Calder Street offers opportunity to consolidate the need for increased capacity of the channel and both high-bank and low-bank paseos by placing a box culvert underneath. The box culvert would need to extend upstream and transition back to the open channel at Salon de Alameda.

opinion of probable cost = \$ 23,978,275



The creek section between Commerce and Dolorosa Streets is 20' wide with a concrete bottom. The stone masonry channel walls are 10' in height and intermixed with stone and concrete building foundations. Calder Street is paved with asphalt and the vintage railing of cast iron posts and basket weave strap steel railing is the only significant historic site design element directly associated with the creek. Random mulberry and hackberry trees line the west bank, but the limbs of the oak tree inside the patio of the Spanish Governors Palace provide overarching shade.

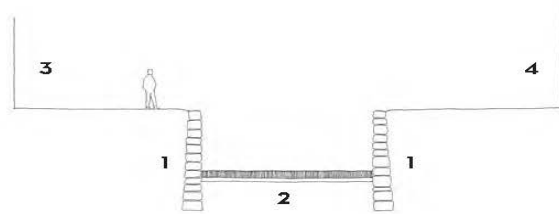


The capacity of the channel is increased by the addition of a concrete box culvert under Calder Street, removing the east channel wall and rebuilding it further east, and lowering the invert of the channel by several feet. To maintain the structural stability of the west channel wall a pierwall is shown 5' inboard the channel and provides opportunity for the low-bank paseo. The original location of the east channel wall is interpreted by reusing salvaged stone as a bulkhead for an aquatic planting zone. The width of Calder Street is reduced and repaved to allow service and emergency access but is envisioned as a car free pedestrian walk.

EL MERODEO THE MEANDER

CONCEPT PLAN A/B - The absence of buildings and receptiveness of the City has allowed the idea of the creek to reconstitute a meandering and natural character through this area. There is also opportunity to achieve a slightly higher difference of invert elevation between Dolorosa and Cesar Chavez so there can be small waterfalls or rapids. Considering the constrained and ruler straight runs both up and downstream of this area, this character will make an important difference in the urban form and sensory experience of people. High and low-bank paseos are shown along the west bank between Dolorosa and Nueva and allow a sloped earthen bank to be modified with future development. Pedestrian linkage to the Navarro Historic Site is important and the high-bank paseo continues south across Nueva to avoid the County parking garage exit ramp. It would bridge the creek as soon as there is enough east bank area to receive the walk. The treatment of the banks will likely vary between terraced and sloped depending on the position of the channel. It may be feasible to leave a substantial portion of the existing stone walls in situ and possibly incorporate them in the design.

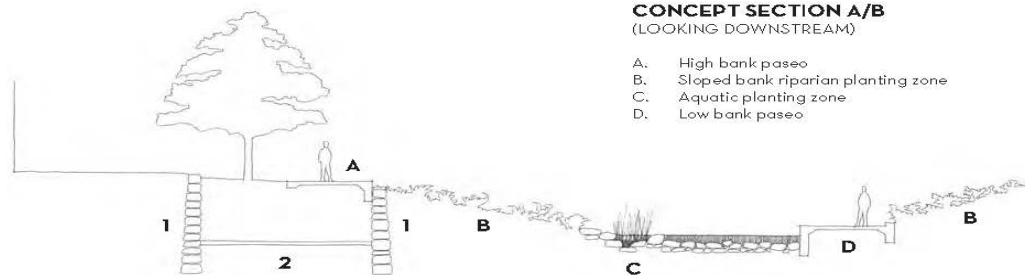
opinion of probable cost = \$ 23,560,537



EXISTING SECTION (LOOKING DOWNSTREAM)

1. Stone masonry channel wall
2. concrete channel bottom
3. Bexar County Parking Garage
4. Old city police station (under demolition)

From Dolorosa south the creek is 20' wide with a concrete bottom and 10' high stone masonry channel walls. The nearly equal areas on both sides of the channel are due to the railroad spurs that once lined the creek.



CONCEPT SECTION A/B (LOOKING DOWNSTREAM)

- A. High bank paseo
- B. Sloped bank riparian planting zone
- C. Aquatic planting zone
- D. Low bank paseo

The openness of the creek is substantially increased by the wide swings of the meanders. Sloped earthen banks offer broad swaths of riparian plantings and a more relaxed topography. The natural rock bottom and aquatic planting margins add to the ecological integrity of the creek. Portions of the existing stone channel walls can remain in situ and possibly part of the ultimate design.

3. AMENITIES

- WATER RIGHTS
- WATER SUPPLY

VILLA LAGUNILLA
TOWNLAKE
OPTION A/B VIEW



CAMPO ABAJO
LOWER FIELD
OPTION A VIEW

