



Country / City Germany/ Bernburg
University / School Hochschule Anhalt - Anhalt University of Applied Sciences
Academic year 2019
Title of the project A research of design in arid zones to prevent flood problems.
Authors Jorge Rubén Ibarra Sepúlveda

TECHNICAL DOSSIER

Title of the project	A Research of Design in arid zones to prevent flood problems. (...) CHAÑARAL, CHILE
Authors	Jorge Rubén Ibarra Sepúlveda
Title of the course	Master Thesis
Academic year	2019
Teaching Staff	Prof. Dr. Nicole Uhrig, Prof. Dr. Hinnerk Wehberg
Department/Section/Program of belonging	
Department 1: Agriculture, Ecotrophology, and Landscape Development; Master of Landscape Architecture (MLA)	
University/School	Hochschule Anhalt - Anhalt University of Applied Sciences



Chañaral, a small mining city located in northern Chile with its river El Salado struggles with drought in summer and regular flooding of its river during the rainy season. One of the major flooding disasters happened on 25th of March 2015, where 23 people died and more than 22.000 people lost their houses. The government does not have an answer and people demand a project to prevent another disaster. The river nowadays is an element that divides the city, becoming a residual and abandoned space that offers nothing to residents. The thesis proposal presents a floodable park concept suitable for future flooding as well as for the dry season. The thesis points to a design that takes advantage of rainy seasons through various strategies, the most important are: a) retention pools to retain water, generate more biodiversity through phytoremediation. b) Store rainwater in specific areas and reuse it for irrigation of the future parks. The park will have vegetation that will require little maintenance, but will help generate an oasis that is suitable for the difficult future conditions that lie ahead. In urban terms, the aim is to change the perception of the river and its edge, from a residual element to the city to a recreational space and articulator of the city that allows generating different activities and local festivities of great magnitude with an appropriate and sustainable infrastructure, improving the quality of life of the inhabitants rescuing elements of the local culture in its design.

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CLIMATE CHANGE AGAIN

11th International Biennial Landscape Barcelona

Barcelona September 2020
SCHOOL PRIZE



DESIGN STRATEGIES



Groundwater collector



Terraces to Collect + reuse



Obstacles to reducing speed

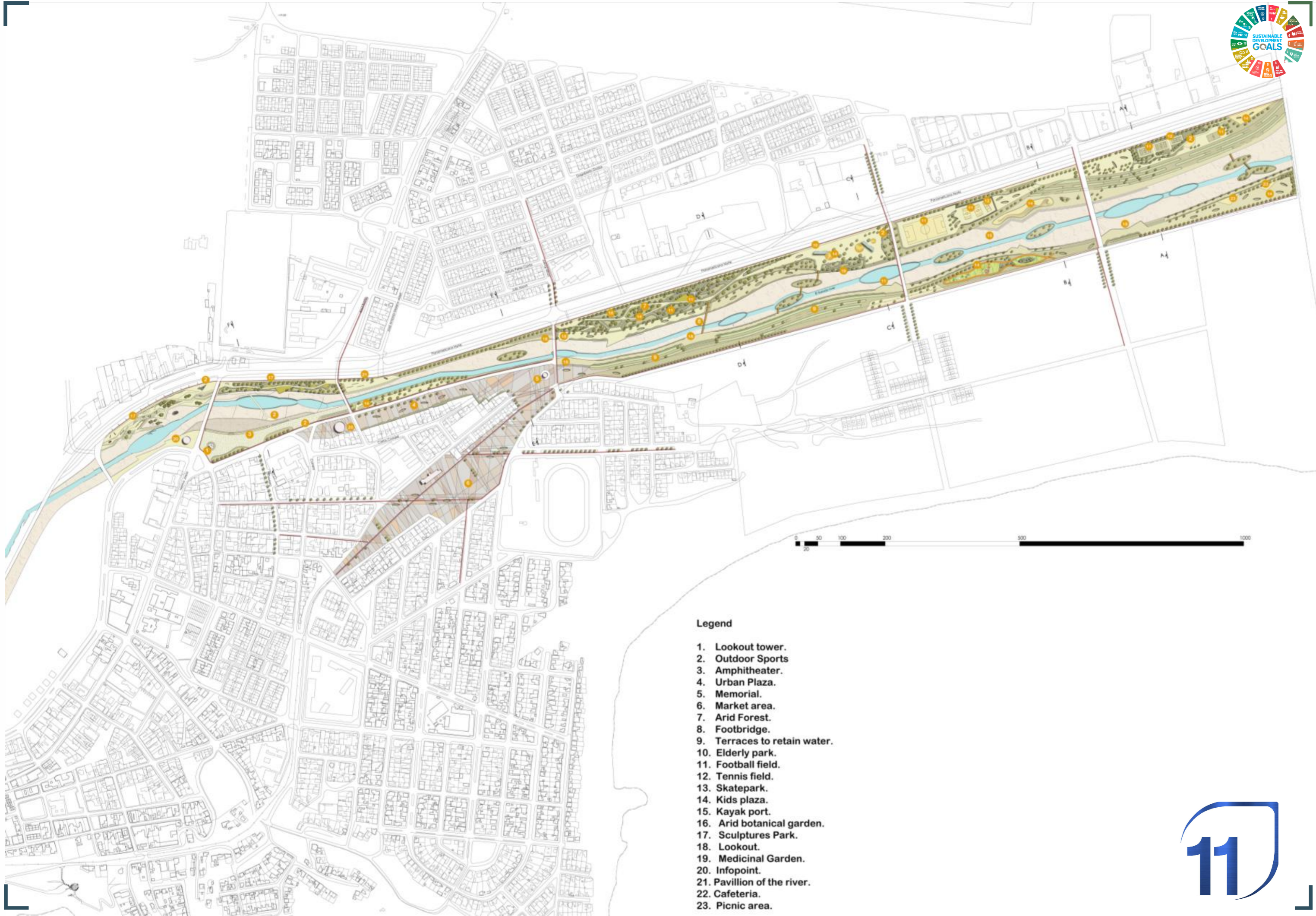


Edges to reduce speed



Retention areas





Legend

- 1. Lookout tower.
- 2. Outdoor Sports
- 3. Amphitheater.
- 4. Urban Plaza.
- 5. Memorial.
- 6. Market area.
- 7. Arid Forest.
- 8. Footbridge.
- 9. Terraces to retain water.
- 10. Elderly park.
- 11. Football field.
- 12. Tennis field.
- 13. Skatepark.
- 14. Kids plaza.
- 15. Kayak port.
- 16. Arid botanical garden.
- 17. Sculptures Park.
- 18. Lookout.
- 19. Medicinal Garden.
- 20. Infopoint.
- 21. Pavillion of the river.
- 22. Cafeteria.
- 23. Picnic area.

