WYNWOOD STREETSCAPE

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Special Thanks To: Elfis Hiraldo





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Today, streetscapes play an important role in many cities and neighbourhoods. They are what define the character of a city. Wynwood which is a neighborhood located in Miami has become a very tourist zone due to its artistic character. However, the streets lack of providing a space where visitors and locals can feel comfortable and safe while contemplating the art on the street walls. For this reason, my research will focus on providing solutions that will improve the streetscape of three important streets in Wynwood by making them more pedestrian friendly.







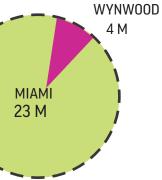
Architecture

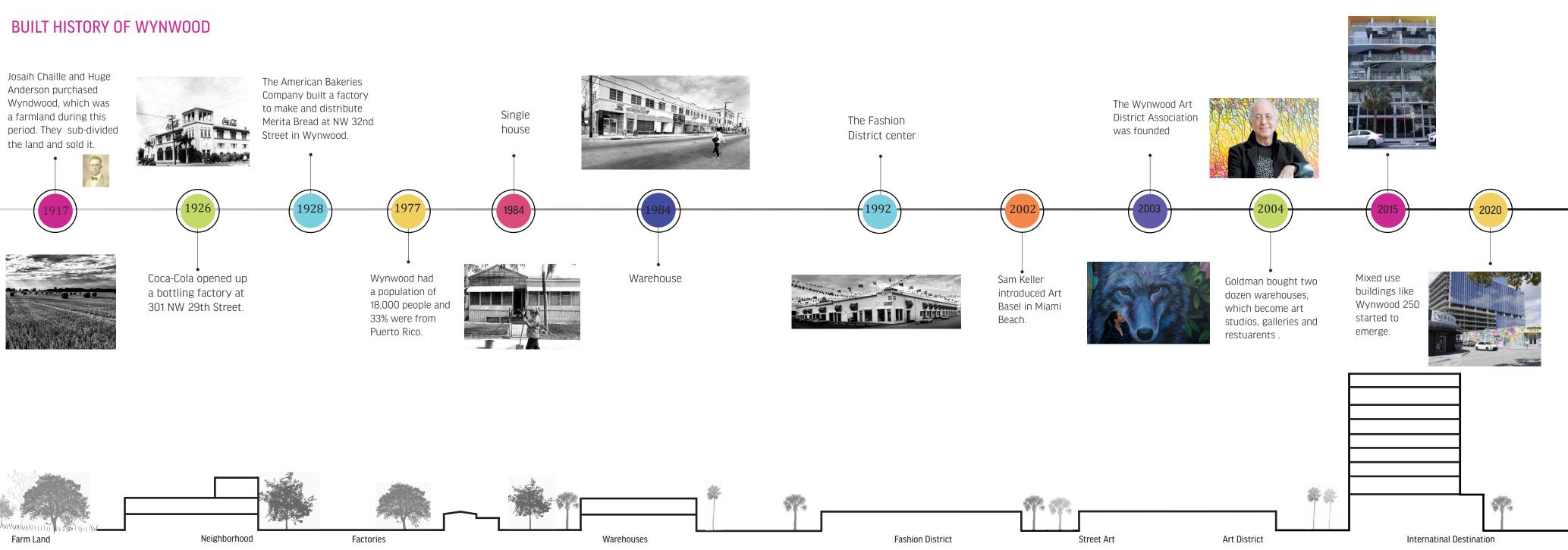
Art and Culture

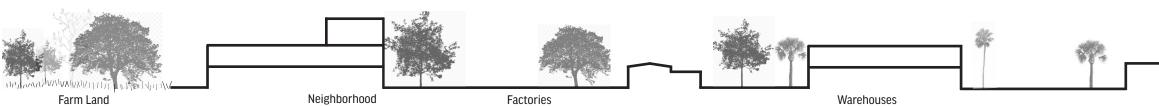




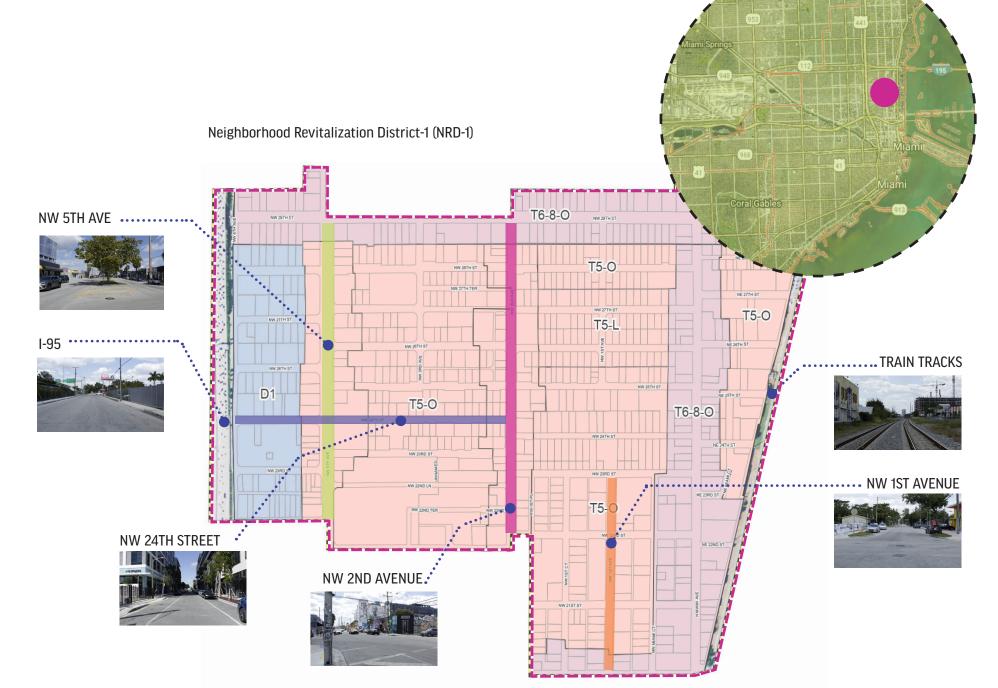
2019 - MIAMI & WYNWOOD ANNUAL VISITORS REPORT

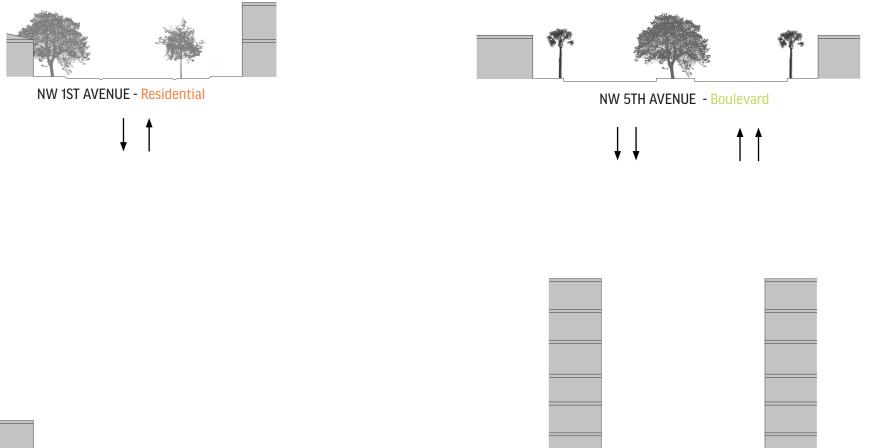






WYNWOOD STREETSCAPE





TYPES OF STREET



NW 2ND AVENUE - Main Street





NEIGHBORHOOD IDENTITY

ARCHITECTURE

New and existing structures

STREET ART

Walls

RESIDENTIAL LIFE

Apartments

COMMERCIAL/RETAIL

Restaurants and shops















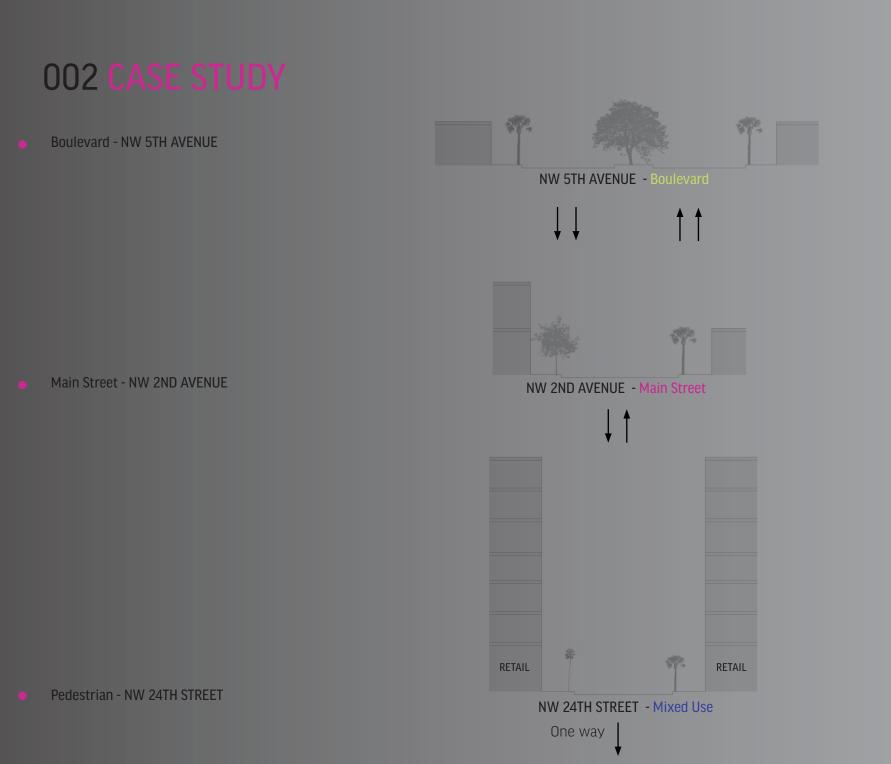


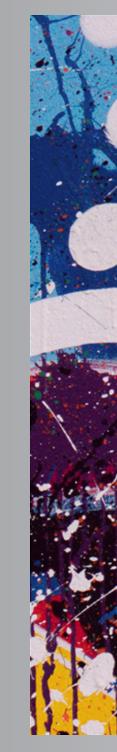














C Streets are means of transport and connections to many places whether we walk, cycle, use public transit or drive but they are also places in their own right, not just passages from one location to another, and they are vital in giving a distinctive character to an area and providing structure for a village, town or city. ${f Y}$

Petra Funk





Barcelona, Spain



Teruel. Spain



Algeciras, Spain







Enschede, The Netherlands



Melbourne, Austrailia



San Francisco, USA



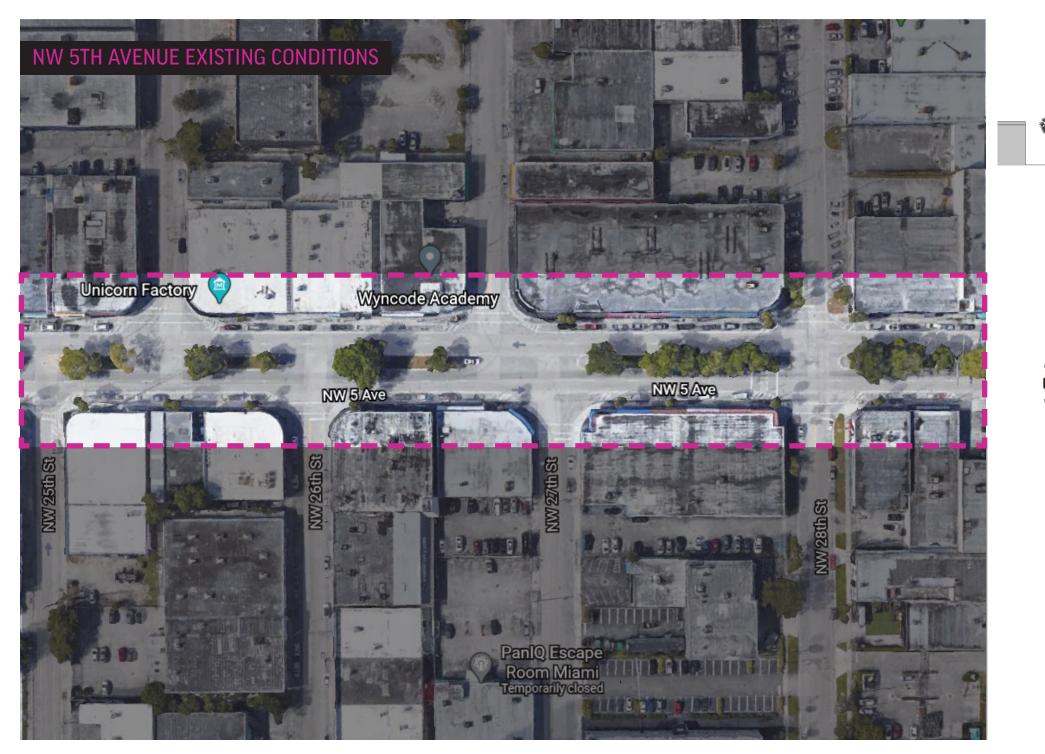
London, UK

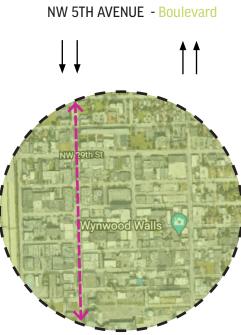


Tyrol, Austria



Armentieres, France





STREET DIMENSIONS

Sidewalk: 10'- 10" Travel lanes: 21' Parking: 10'-6' Median: 12'-6"









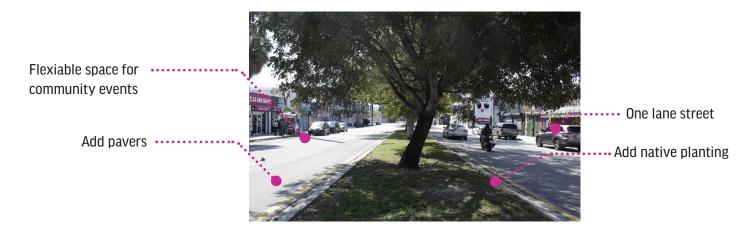






OPPORTUNITIES

NW 5TH AVENUE - Boulevard





Fleixable space for furniture-----and frontage zone

Add trees

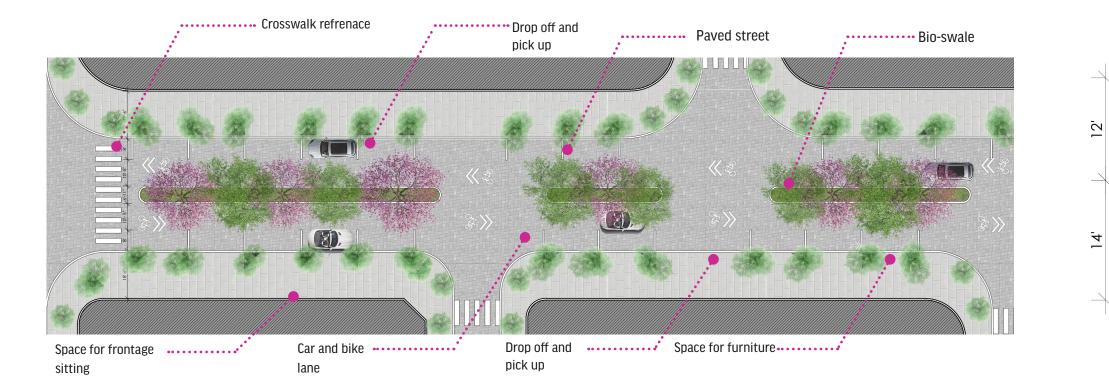
-- Paved sidewalk

••••••Wider sidewalk

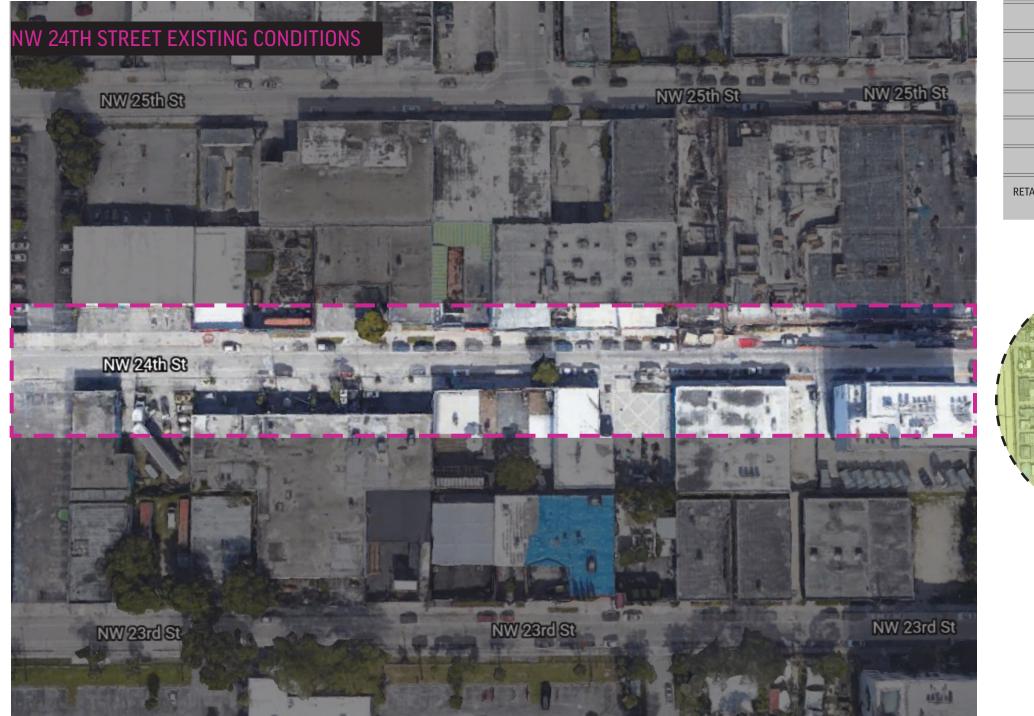




NW 5TH AVENUE - Boulevard

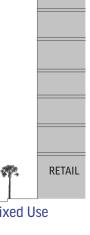




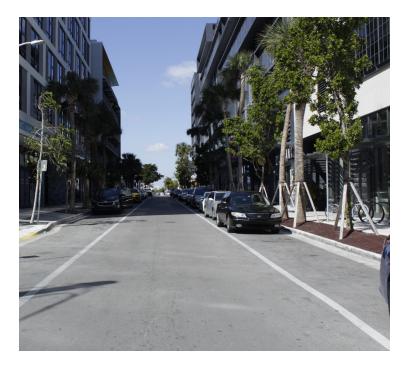


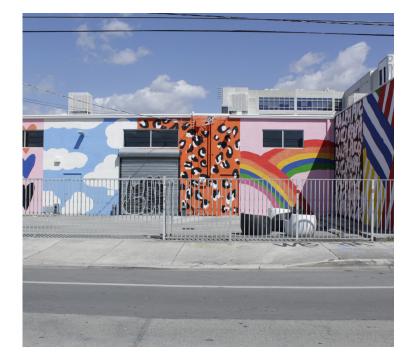


STREET DIMENSIONS Sidewalk: 10'- 6" Travel Iane: 14' Parking: 9'











LOCAL PRECEDENT

OPPORTUNITIES



Lincoln Road



Giralda Plaza





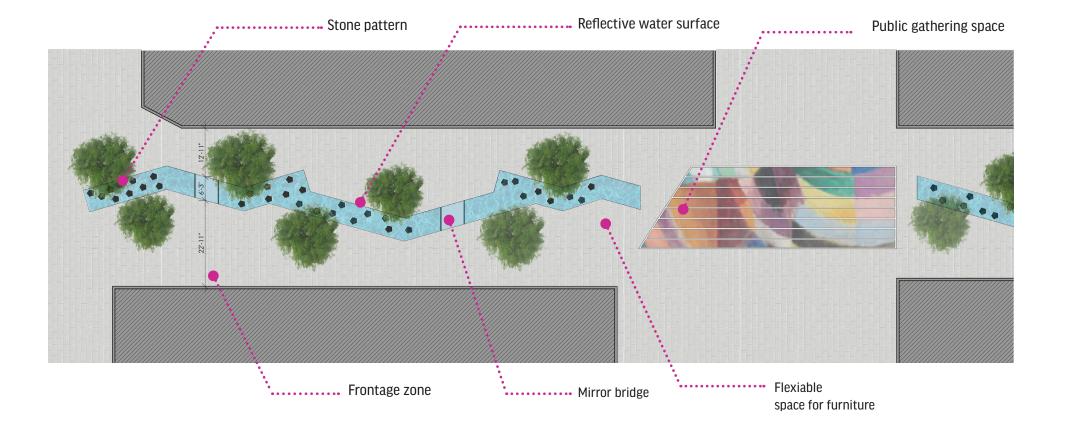


Española way

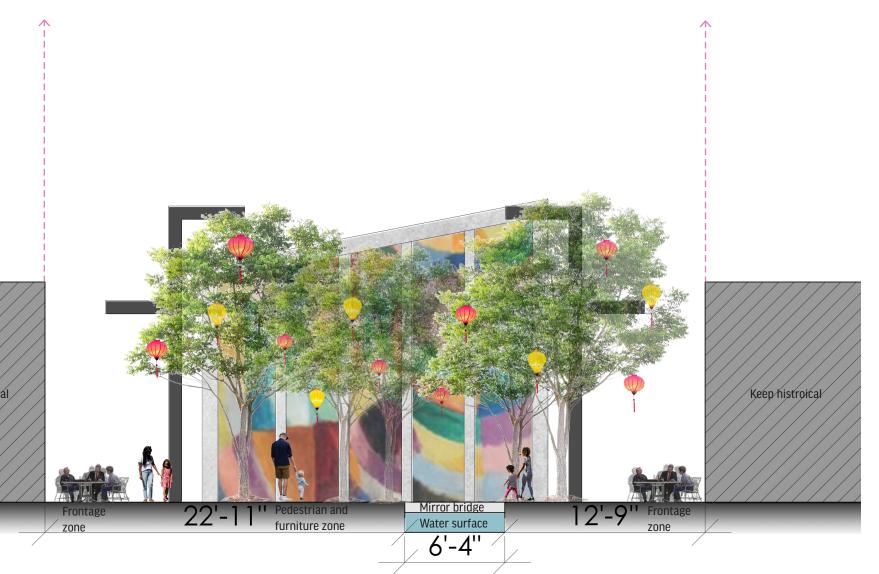
NW 24TH STREET - Pedestrian

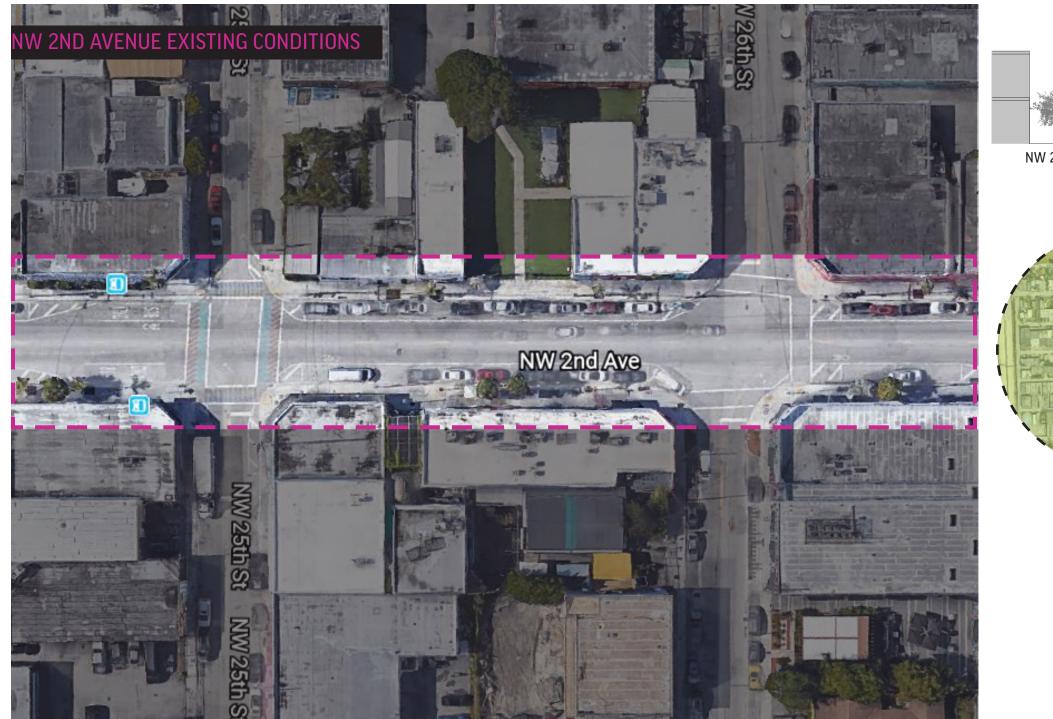


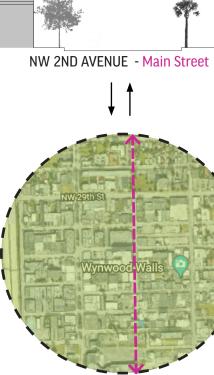
NW 24TH STREET - Pedestrian



Keep historical







STREET DIMENSIONS

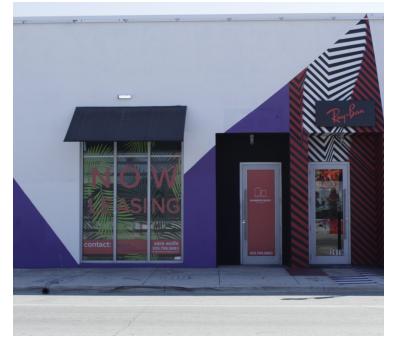
Sidewalk: 10'- 10" Travel lane: 17' Parking: 10' -6'

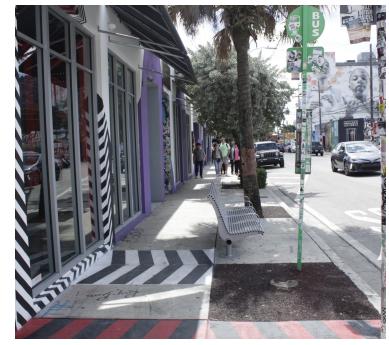










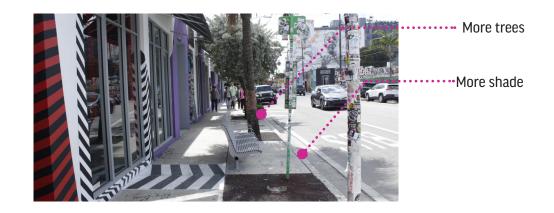


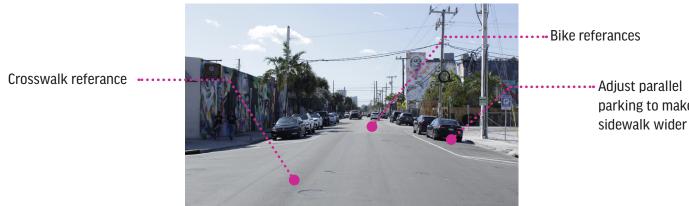
OPPORTUNITIES

NW 2ND AVENUE - Main Street



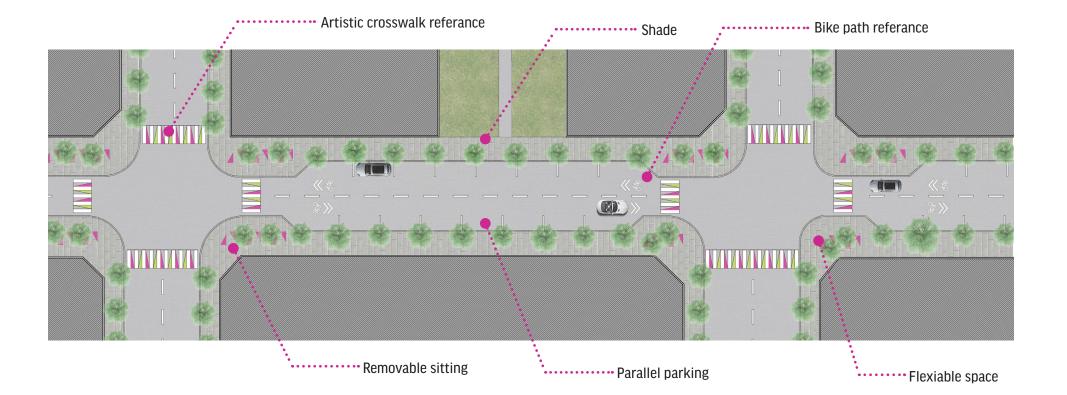


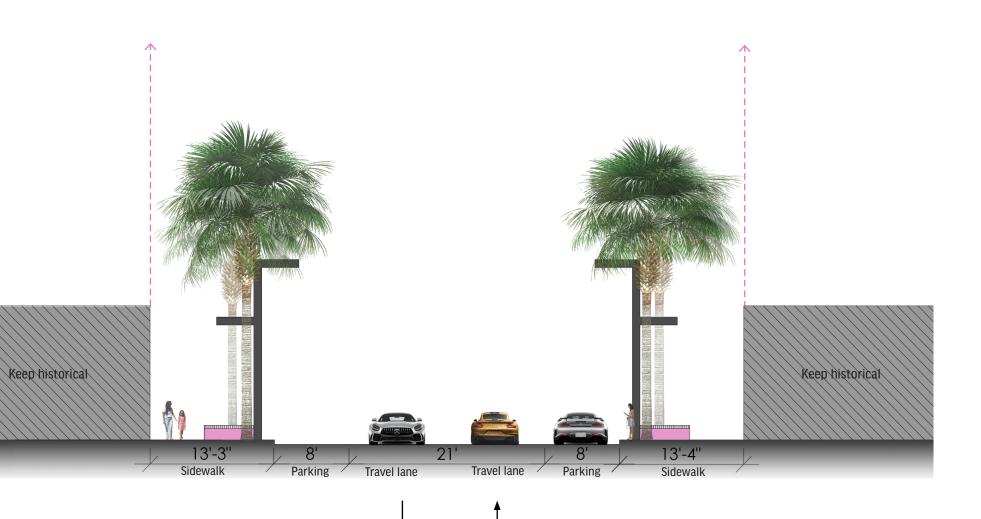




parking to make sidewalk wider

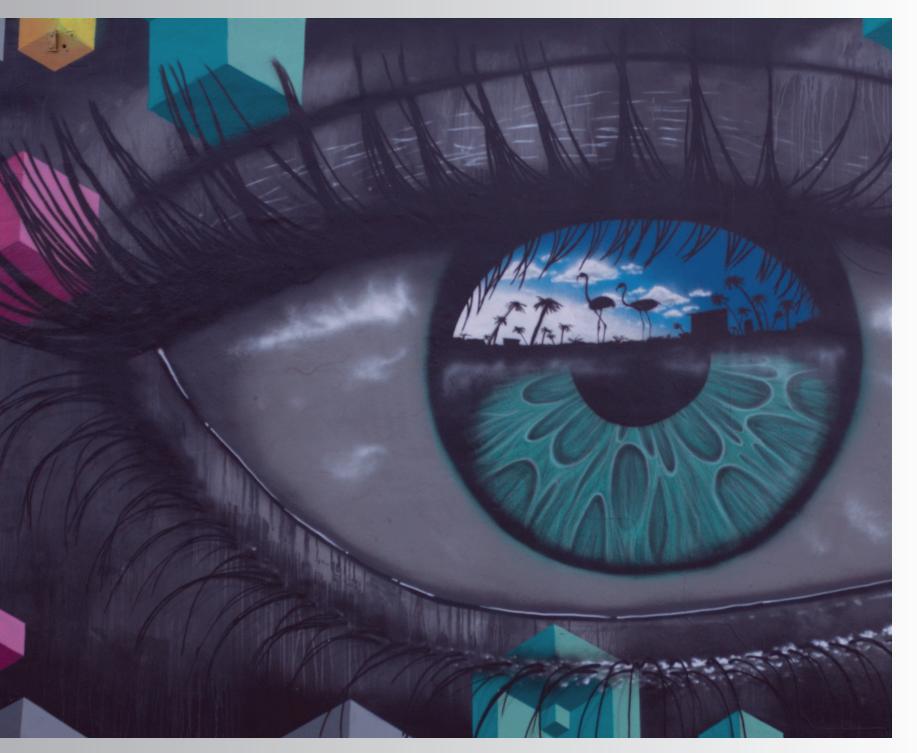
NW 2ND AVENUE - Main Street





003 SOLUTIONS

- Sustainable Streetscape
- Street Landscape
- Paving
- Water Conservation
- Security and Safety



SUSTAINABLE STREETSCAPE

Sustainable streetscape ensures that streets are durable and function as a better ecosystem while generating systems that manage storm water runoff and at the same time reduce carbon footprint. Sustainable streetscape also adds aesthetic value, economy growth, environmental health and safety to a neighborhood. For this reason, sustainable streetscape creates an eco-friendly environment to live, visit and work. Locals and tourist would enjoy having an outdoor lunch, a pleasant walkable sidewalk, a bicycle path and a safe place to connect other places.

There are three elements that play an important role in a sustainable streetscape design which are lighting, permeable pavement and bio- swales. For instance, solar power lighting can reduce light pollution and could benefit a city's economy by reducing the total power consumption. Permeable pavement decreases the flow of surface runoff water into a sewer system, which makes water penetrate the subgrade and keep plants in healthy conditions. As permeable pavement, bio-swales are practical in retaining water. They help filter water into the ground which keeps soils in good conditions and improves the growth development of plants.







STREET LANDSCAPE

Street landscape planting can improve the character of a neighborhood. They provide a friendly environment for drivers and pedestrians. Pedestrians benefit from the shade and shelter that street trees provide. Street trees also adds visual interest and makes sidewalk hard surfaces more pleasant for pedestrians. Unlike rural sites, planting trees in an urban sites could be more challenging because of hardscape surfaces, poor soils, excessive heat, poor water quality and air pollution.

To conserve street landscaping in places as Wynwood, the urban site conditions should include:

•Protecting the roots of the vegetation from being compacted or not retaing water.

•Providing sufficient and adequate space for above and below ground landscape. This helps trees to grow in healthy conditions.

Street landscape that are planted and placed properly in an urban site as Wynwood can:

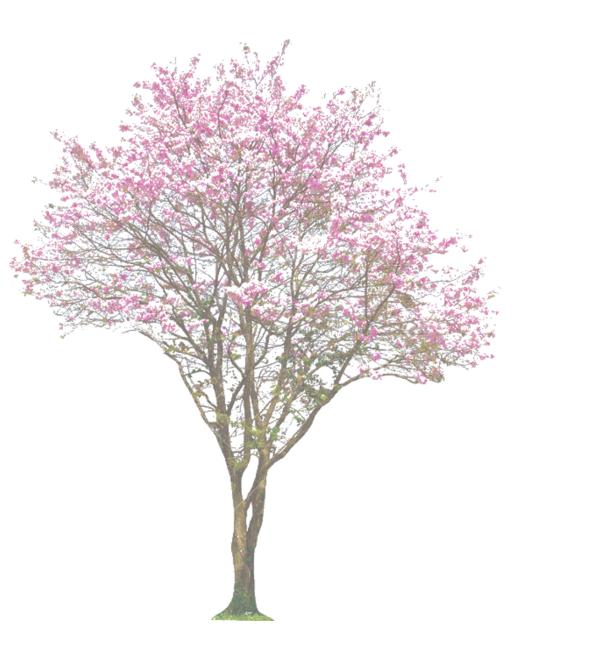
•Softens the hardscape surface of a sidewalk

•Reduces the local island heat effect

•Improves air quality

Provides shade

•Improves the visual aspect of streets







SHRUBS



BIODIVERITY Miami-Dade Landscape Manuel



Southern Shield Fern



Caesalpinia granadillo



Acer rubrum



Pimenta dioica



Cassia Grandis



Coccoloba diversifolia



Cassia Javianca

Wood Fern



Hymenocallis Latifolia



Society Garlic

PAVING

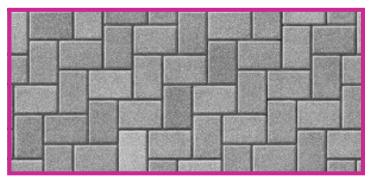
Permeable pavements can be easily installed and maintained. They are also known for being a long-lasting method of paving. They have a positive effect on vegetation because they function as filters. Through the process of infiltrating surface water to the subgrade, the water can be cleaned.

ADVANTAGES OF PAVEMENT:

- Can cool paving surfaces through evaporation
- Reduces tire noise and traffic speed
- Increases traction during rain as standing surface water is obsorbed
- Reduces storm water runoff
- Provides aesthetic appeal

TYPES OF PERMEABLE PAVEMENT

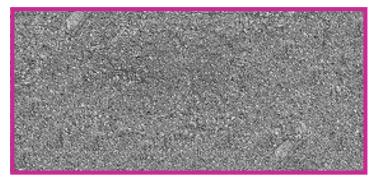
- Pervious concrete 3 to \$4/square foot
- PICP pavement 3 to \$4/square foot
- Porous asphalt \$2/square foot



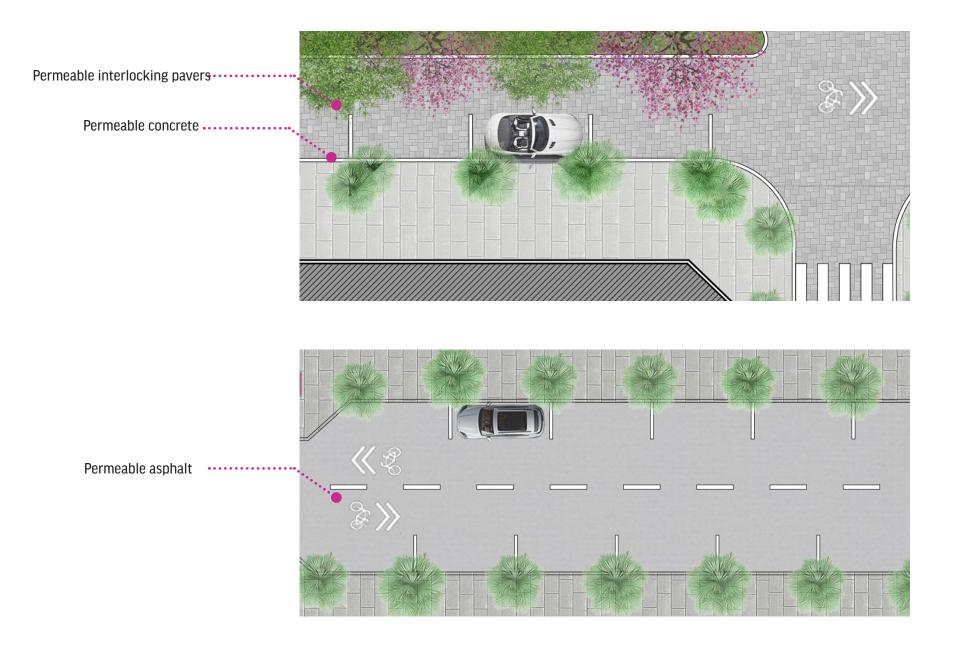
Permeable interlocking pavers



Permeable concrete



Permeable asphalt



WATER CONSERVATION

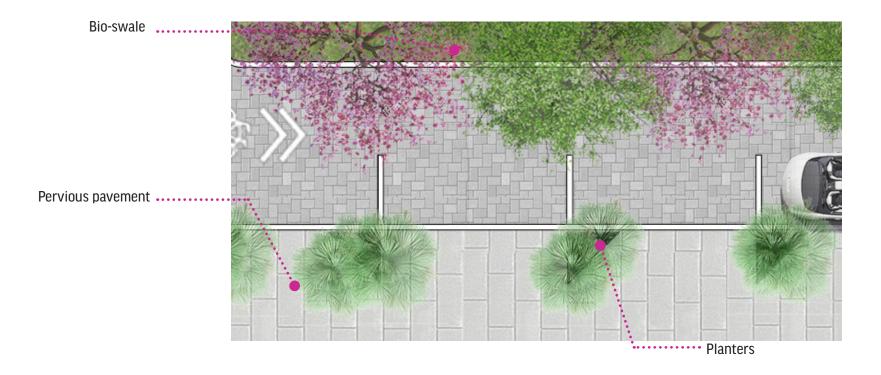
Storm water management practice can be done through a bio-swale system. As pervious paving, bio-swales obsorb water. Storm water runoff occurs when water flows rapidly over a surface that does not absorb water. This affects the environment because these storm water runoffs are contaminated. Therefore, they can also contaminate rivers, streams and vegetation. Bio-swales reduce water velocity and contribute in the process of filtering storm water runoffs.

According to a research done by the Michigan State University these are some of the benefits of a bio-swale system:

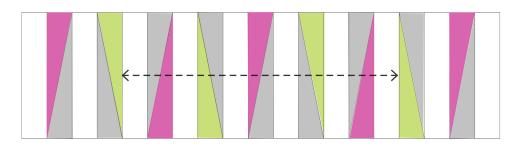
- •Protects local waterways from stormwater pollutants
- •Creates habitat for wildlife, including birds and butterflies
- •Reduces non-point pollution by filtering stormwater
- •Reduces standing water (puddles) that can attract mosquitoes
- •Creates colorful gardens with a variety of flowers and plants year round
- •Requires little maintenance after establishment







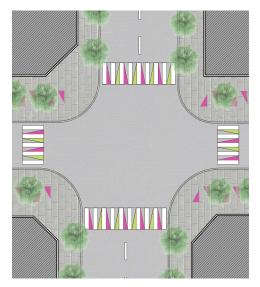
SECURITY AND SAFETY



Better **cosswalk definition** makes pedestrian feel secure when crossing.

Lighting provides a comfortable and secure space and encourages outdoor activities. Outdoor lighting also highlights important architectural structures and building facades which adds value to the character of a neighborhood.





NW 2ND AVENUE

NW 5TH AVENUE



NW 5TH AVENUE

004 NEXT STEPS

Implementing artistic street elements such as:

Wayfinding and Signage

Benches

Bicycle Racks

Bollards

Litter Bins



WORKS CITED

Bain, Lesley, Barbara Gray, and Dave Rodgers. Living Streets: Strategies for Crafting Public Space. Hoboken, N.J: John Wiley & Sons, 2012.

Calkins, Meg, and Michael Van Valkenburgh. The Sustainable Sites Handbook a Complete Guide to the Principles, Strategies, and Practices for Sustainable Landscapes. Hoboken (N.J.): Wiley, 2012.

Firley, Eric, and Katharina Groen. The Urban Masterplanning Handbook. Somerset: Wiley, 2014.

Funk, Petra, Chen Zhang, and Wenwen Yin. Cheng Shi Jie Dao Jing Guan She Ji = Urban Streetscape Design. Shenyang: Liaoning ke xue ji shu chu ban she, 2014.

Gibb, Terry. "Bioswales Can Improve Water Quality Resources." MSU Extension, September 20, 2018. https://www.canr.msu.edu/news/bioswales_can_improve_ water_quality_resources.

Street Art World. London: Reaktion Books, 2016

THANK YOU