The new bus shelter design is intended to be of an iconic nature and incorporate features enhancing the transit experience of passengers, including innovative designs and technology, as well as to enable for installation of bus shelters at more bus stops with high transit ridership. The following sizes are proposed:

- Standard / Enhanced (20'x6.5')
- Minimal 6.5' (10'x6.5')
- Minimal 3' (10'x3')
- Temporary (10'x3')

CITY OF MIAMI BEACH

FINAL SUBMITTAL
Bus Shelters
May 04, 2018

MIAMIBEACH ACAI pininfarina

Company Information

ACAI

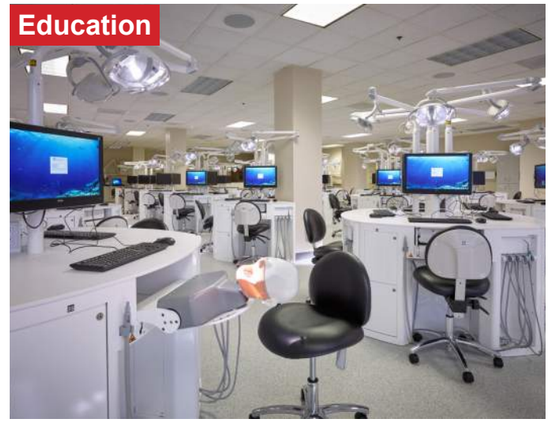
architecture • engineering

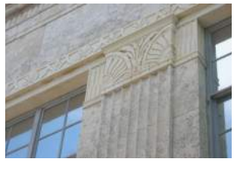
www.acaiarchitects.com

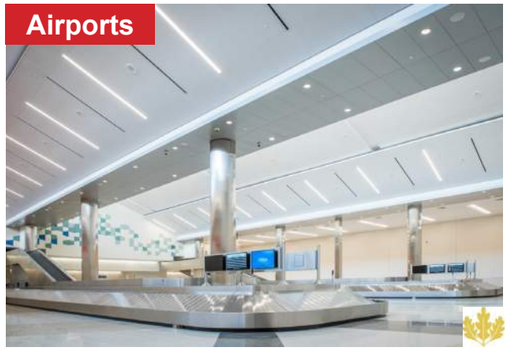
ACAI believes that good architecture is the physical manifestation of good design. We strive to create facilities that reflect a unique synthesis of their mission, functional purpose and express the spirit and personality of their Owner. We are industry leaders in BIM (Building Information Modeling). We utilize our experience to deliver our design work in BIM. As skilled advisors to our Clients, we are committed to answering needs with creative ideas, innovative solutions and well-executed, professional services.

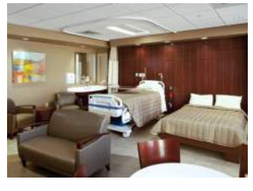
Founded in 1985, ACAI offers a wide range of services including Planning, Architecture, Engineering, Landscape Architecture, Roof Consulting and Construction Management, on virtually all types of projects. Our design work runs the gamut from Master Planning through Construction Administration services for medical, educational, recreational, residential, industrial and commercial facilities. Our Engineering work has focused on Roofing Consulting, including Investigation, Reports, Recommendations and Design. As ACAI is both an Architectural firm and licensed a General Contractor, ACAI brings a unique skill set of design and construction experience. Our Construction Management is truly: Managing of construction.

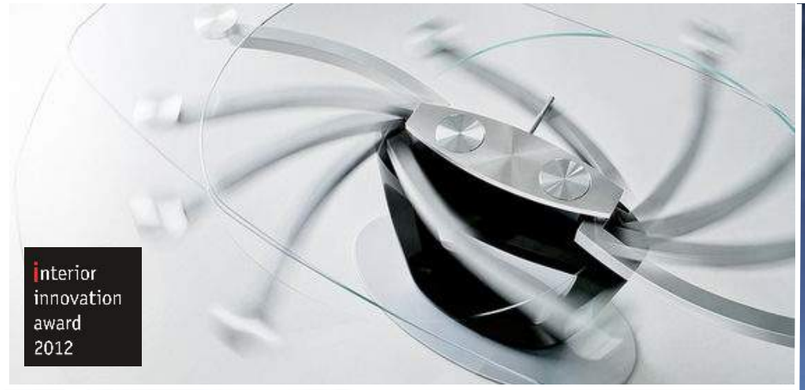
= LEED Gold Certified











pininfarina

360
lifestyle design house

Pininfarina is the emblem of the truly Italian style. The expression of **innovation, purity** and **elegance** is applied to all the products, from luxury cars, to haute horlogerie, to architecture.

The power of a visionary able to imagine future scenarios, to design and build innovative solutions improving the quality of life.

Executive Summary

EXECUTIVE SUMMARY

DRB / HPB Submittal
April 16, 2018

As part of their long-range development plans the City of Miami Beach has proposed to adopt a new, iconic bus shelter design that will enhance the transit experience, improve the quality of transit services in the City and provide a readily identifiable structure representative of and unique to Miami Beach.

To assist in that goal the City retained the services of a team of professionals including ACAI Associates Architects, Pininfarina Design and Engineering, and TLC Engineering to develop a prototype shelter design adaptable to different shelter types required throughout the City based on current and projected ridership. As part of the process in selecting the design for the shelter the team was challenged to provide a series of conceptual designs which are illustrated in this presentation. The selected concepts were further developed as necessary, for the City to select a single design to be further developed and presented. That concept, "Smart – translucency" is the basis of design for this submittal.

- One of the goals for the design is its adaptability for use for each of the following shelter types which are further illustrated in this document.

Minimal Shelter that can be used in locations with limited space, low ridership (less than 50 riders per day) and single family residential locations.

- Standard Shelter – to be used in locations where there is sufficient space and average ridership (50 – 250 riders per day).

- Enhanced Shelter – to be used in locations where there is sufficient space and a large ridership (over 250 riders per day).

Temporary Shelter – currently will take a similar form as the minimal shelter and can be easily installed and removed where existing bus stops are temporarily relocated during construction projects. Further exploration and discussions with the City of Miami Beach Building Department are necessary to see how this shelter can be implemented on the existing sidewalks without substantial foundation work.

Additional elements to be incorporated into the selected concepts particularly for the Standard and Enhanced Shelters include advertising, telecommunication, security, ITS and wireless connectivity systems along with accessibility components including audible and tactile element. A more detailed explanation of the scope of work is as follows:

The new bus shelter design is intended to be of an iconic nature and incorporate features enhancing the transit experience of passengers, including innovative designs and technology, as well as to enable for installation of bus shelters at more bus stops with high transit ridership. The following sizes are proposed:

- Standard / Enhanced (20'x6.5')
- Minimal 6.5' (10'x6.5')
- Minimal 3' (10'x3')
- Temporary (10'x3')

All minimal and standard shelters will potentially have the following amenities:

- Solar powered
- LED lighting
- Passenger panic button
- Real-time bus arrival information and two-way communication (may be dependent on dedicated electrical connection)

Enhanced shelters will have all the base amenities and potentially the following:

- Dedicated electrical connection
- Security cameras
- An interactive touch screen / digital ad
- Audible annunciation (speakers)
- Wi-FI hotspot
- Cell phone charging station
- A wayfinding totem

MIAMIBEACH

Designing an **iconic** bus shelter for the City of Miami Beach with architectural and smart technology components.

On Site
Documentation

Harding & 85th SB (minimal)

Normandy & Rue Granville WB (enhanced)

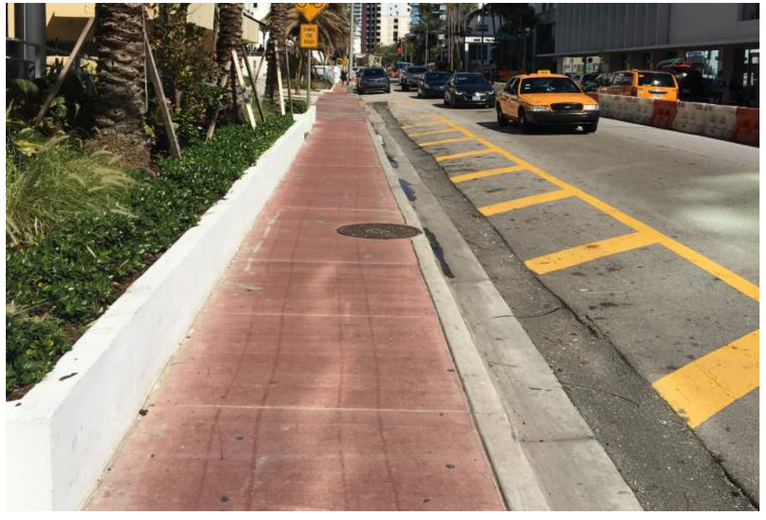
Collins & 67th NB (minimal)

Collins and 43rd NB (minimal)

OVERVIEW Map of proposed Bus Shelter

Photo documentation of 16 existing stops. (In brackets shelter type)
Photos Taken: 2017.02.11

Indian Creek & 29th SB (standard)



Collins & 29th SB (temporary)

Collins & 17th SB (enhanced)

Collins & 17th NB (minimal)

Lincoln Rd & Washington EB (enhanced)

Lincoln & Washington WB (enhanced)

Photo documentation of 16 existing stops
Photos Taken: 2017.08.11

Washington & 9th SB (standard)

Washington & 9th NB (standard)

Washington & 2nd SB (standard)

Washington & 2nd NB (standard)

Alton & 15th SB (standard)

Alton & 15th NB (standard)

Photos Taken: 2017.02.11

On Site

Analysis & Observations


Waiting outside of Shelter

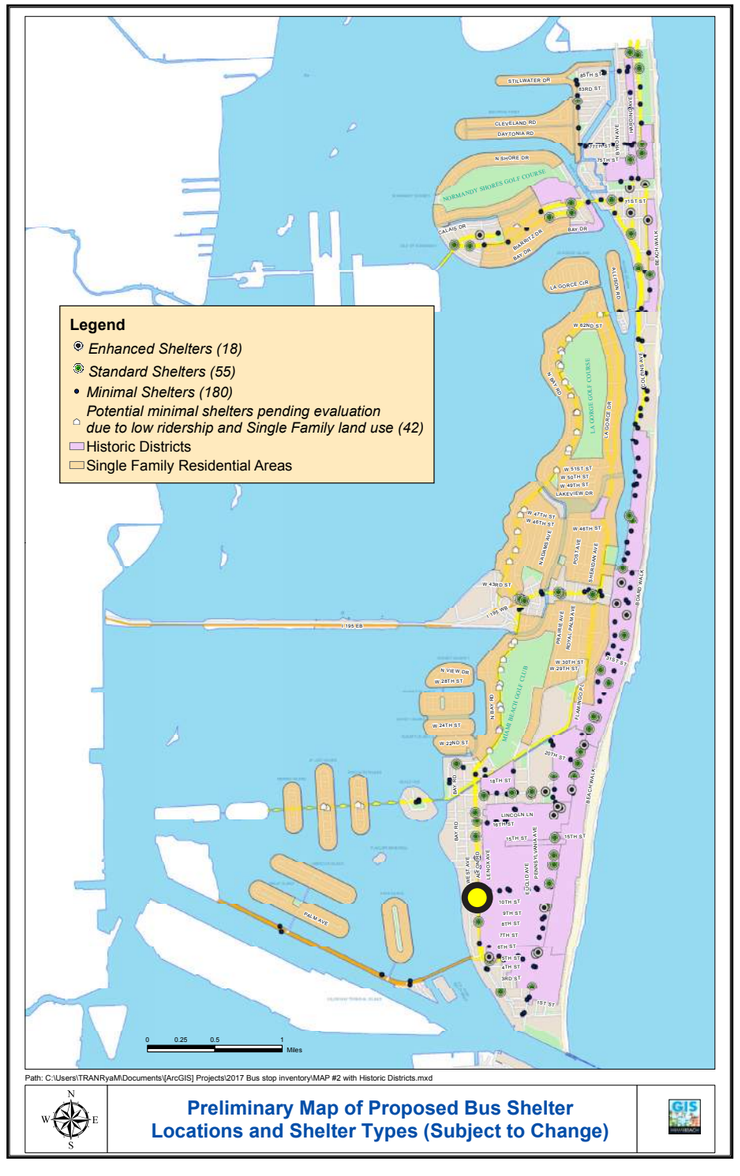

Sitting out of shelter

Backside Standing

Confusing Environmental Graphics

RESEARCH Collins Avenue / 22 Street

Discovering and analyzing the current stations in order to understand the request
Photos Taken: 2017.02.11



Backside Shade


Backside Shade


Sitting outside shelter


Bike placement

RESEARCH 1020 Alton Rd (Whole Foods)

Discovering and analyzing the current stations in order to understand the request
Photos Taken: 2017.02.11


Solar panels not integrated


Heavy ceiling and structure


Different design language

BUS SHELTER CURRENT INVENTORY

Discovering and analyzing the current stations in order to understand the request.
Photos Taken: 2017.02.11


Simplicity

Special lightning


New tech requirements

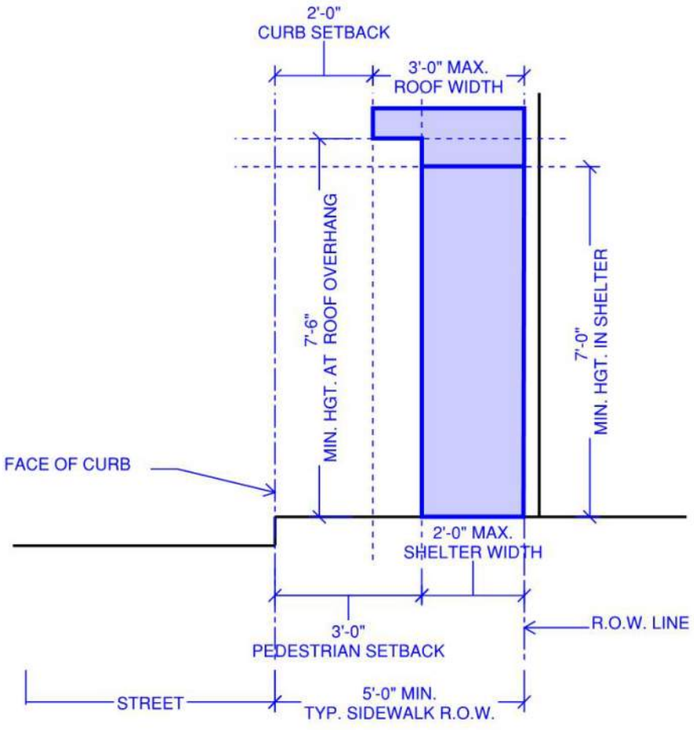

Clean Design


Deconstructive urban elements

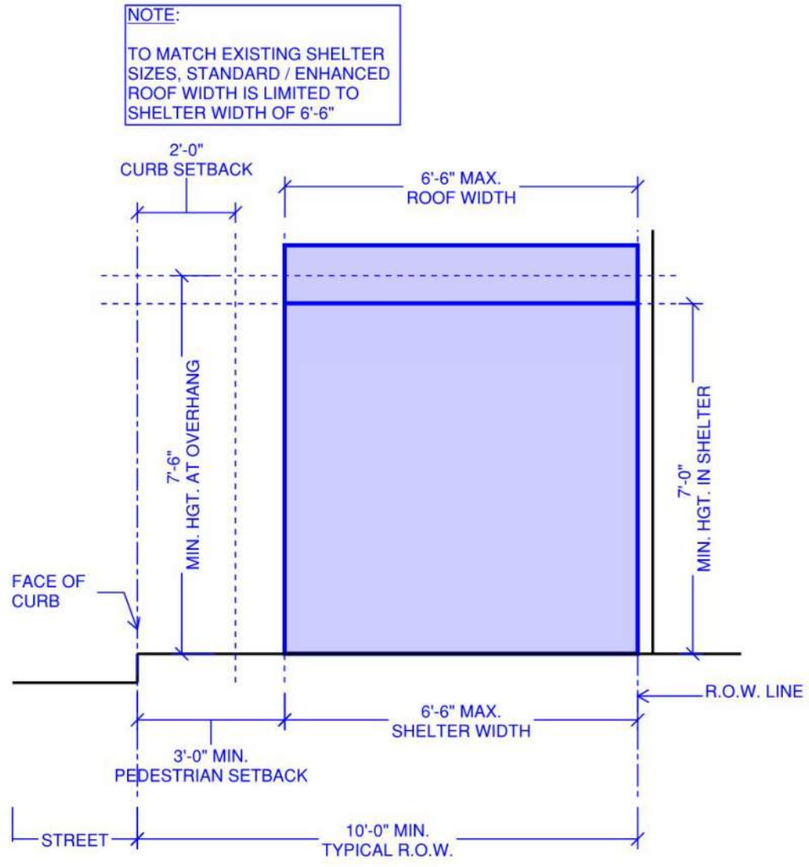
FUTURE SHELTER OPPORTUNITIES

Analyzing current trends of bus shelters

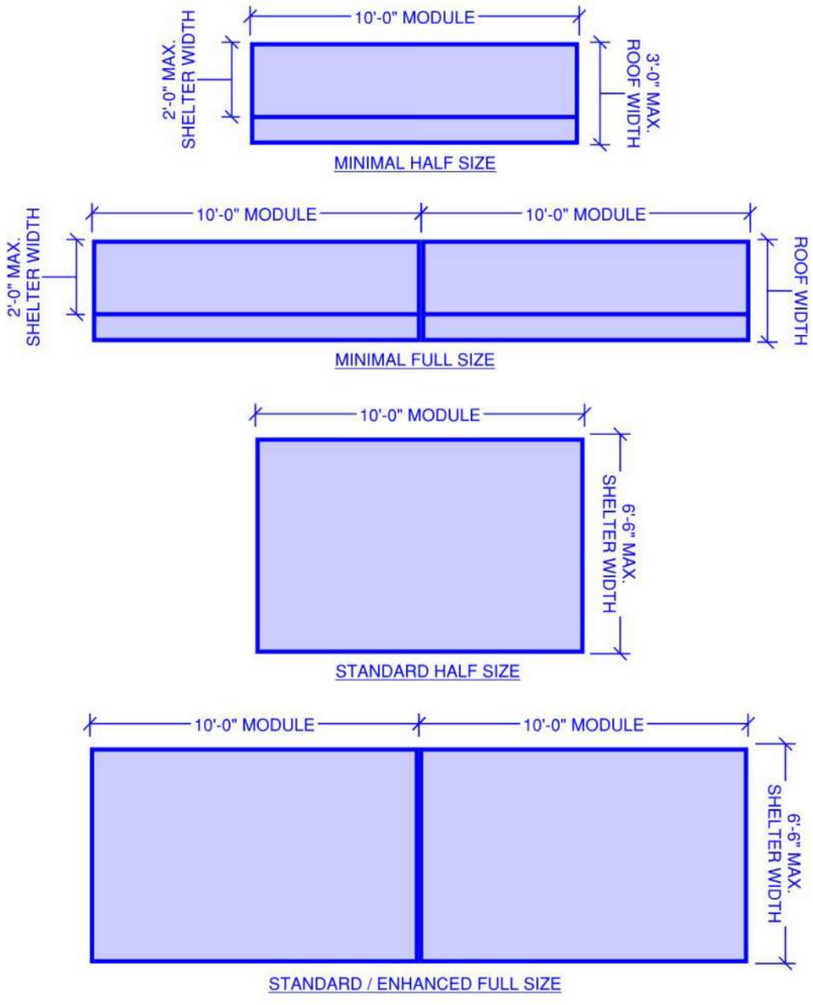
Static Envelope



3'MINIMAL BUS STOP - WIDTH & HEIGHT



6.5' MINIMAL /STANDARD / ENHANCED BUS STOP - WIDTH & HEIGHT



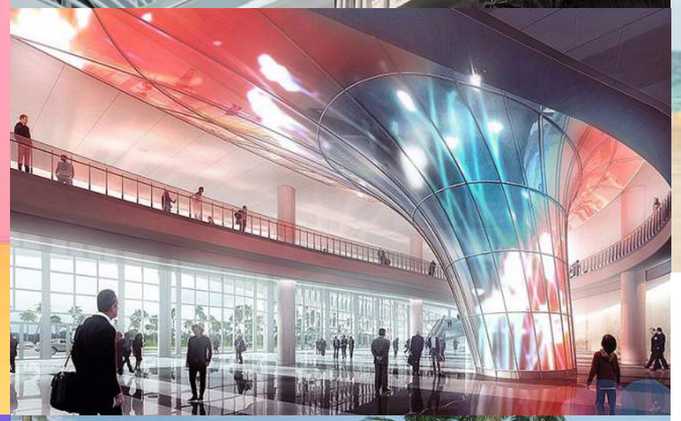
BUS STOP WIDTH & LENGTH

SPATIAL CONSTRAINS

Requirements

Understanding Miami Beach

Understanding Miami Beach



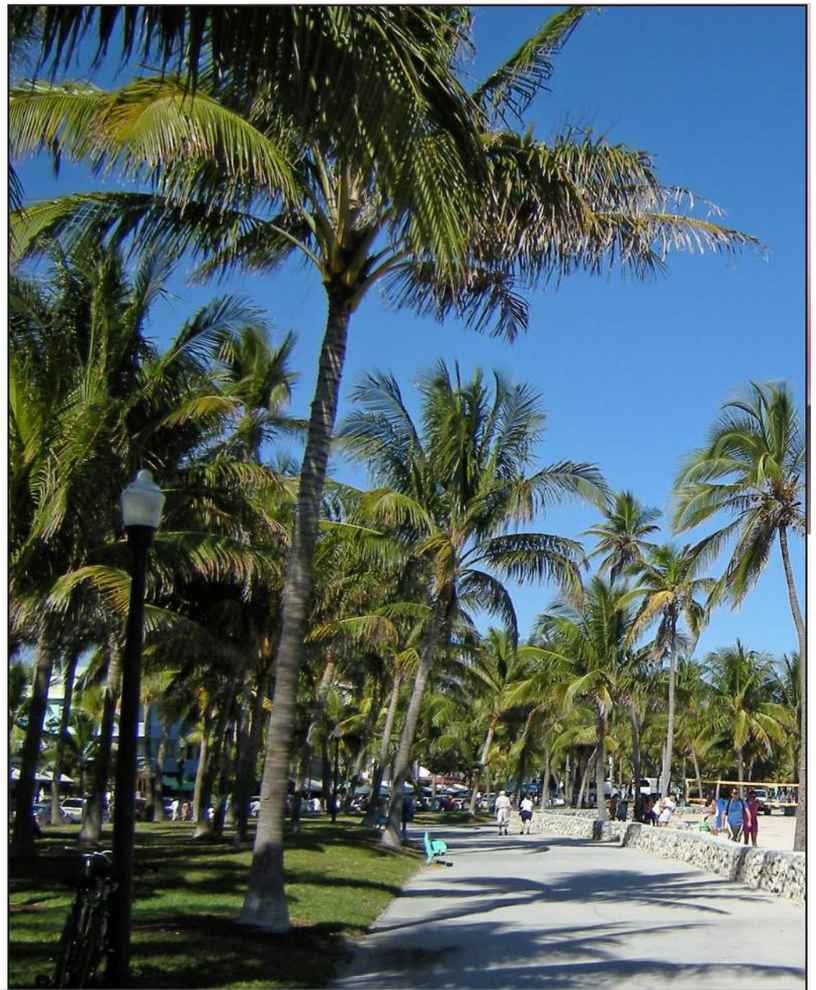
Main color palette

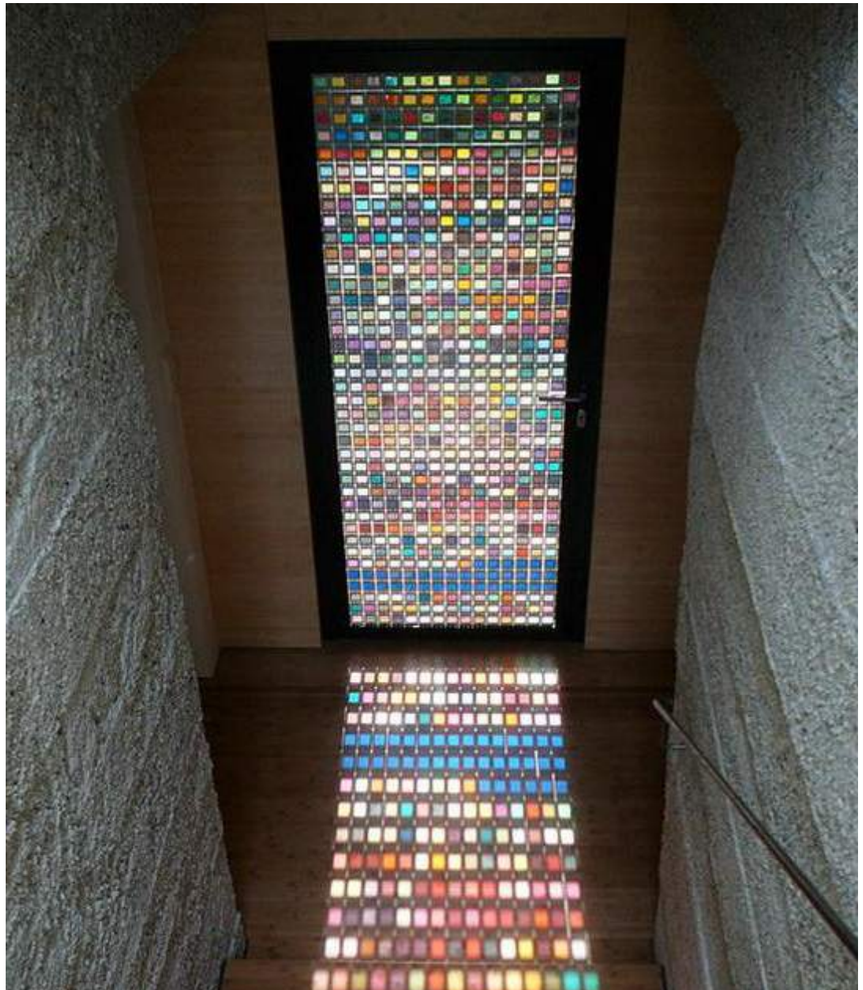
Secondary color palette (color accents)

MIAMI MOODBOARD

Visual elements that represent SOBE soul
We identified some keywords: Fun, Happy, Playful, Lively, Dynamic, Energetic, Vital

Design Concept





4 Smart - translucency

CONCEPT SELECTED

Understanding the light that offers a smart and unique experience for commuters. Statement looking into the future.

Step 1:

Initial Conceptual Renderings Presented
2018.02.22

CONCEPT SELECTED

Initial Design Conceptual Renderings shown to Financial Committee
Presented: **2018.02.22**

In Context

Conceptual Development Renderings

2018.04.11

CONCEPT- Standard / Enhanced - 20x6.5x7FT

SHELTER ON SITE DAY TIME WITH 55" AD PANEL
2018.04.11 - COLLINS AV & 22ST

CONCEPT- Standard / Enhanced - 20x6.5x7FT

SHELTER ON SITE DAY TIME WITH 55" AD PANEL
2018.04.11 - COLLINS AV & 22ST

EXISTING

SHELTER CONCEPT IN CONTEXT

CONCEPT COMPARISON - Standard / Enhanced - 20x6.5x7FT

Shelter on site day time with 55" AD Panel
2018.04.11 - COLLINS AV & 22ST

CONCEPT – Standard / Enhanced - 20x6.5x7FT

Shelter on site with 90° 4’ x 6’ AD Panel
2018.04.11 - COLLINS AV & 22ST

EXISTING

SHELTER CONCEPT IN CONTEXT

CONCEPT COMPARISON - Standard / Enhanced - 20x6.5x7FT

Shelter on site with 90° 4' x 6' AD Panel
2018.04.11 - COLLINS AV & 22ST

CONCEPT – Standard / Enhanced - 10x6.5x7FT

Shelter on site residential area with 55" AD Panel
2018.04.11 - ALTON RD. & NORTH BAY RD.

EXISTING

SHELTER CONCEPT IN CONTEXT

CONCEPT COMPARISON - Standard / Enhanced - 20x6.5x7FT

Shelter on site residential area with 55" AD Panel
2018.04.11 - ALTON RD. & NORTH BAY RD.

Pending size evaluation
due to low ridership and Single Family

CONCEPT – Standard / Enhanced - 20x6.5x7FT
Environment
2018.04.11 - COLLINS AV & 22ST

EXISTING

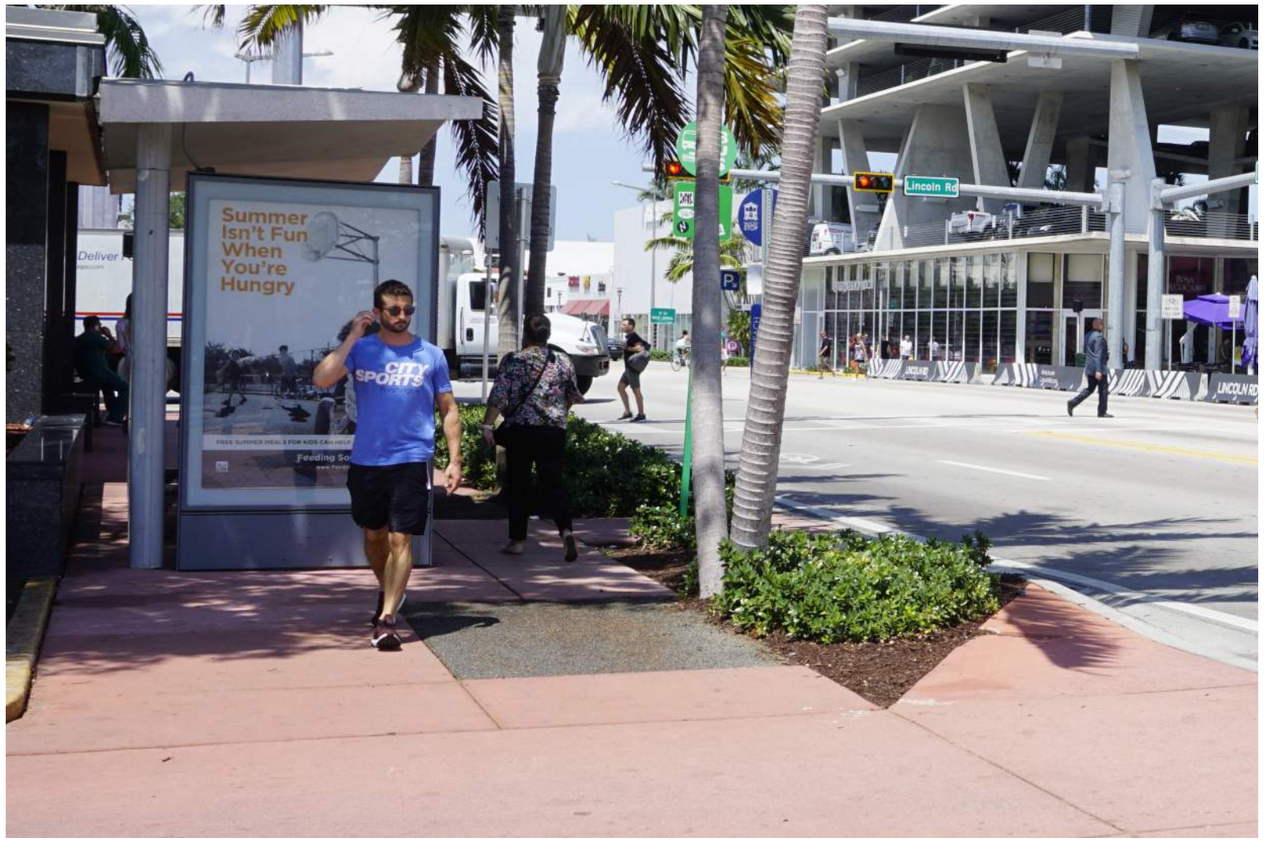
SHELTER CONCEPT IN CONTEXT

CONCEPT COMPARISON - Standard / Enhanced - 20x6.5x7FT

Environment
2018.04.11 - ALTON & LINCOLN RD

CONCEPT - Standard / Enhanced - 10x6.5x7FT

Shelter on site day time
2018.04.11 - ALTON & LINCOLN RD



EXISTING

SHELTER CONCEPT IN CONTEXT

CONCEPT COMPARISON - Standard / Enhanced - 10x6.5x7FT

Shelter on site day time
2018.04.11 - ALTON & LINCOLN RD

CONCEPT - Minimal - 10x3x7FT

Shelter on site day time
2018.04.11

Example Bus Shelter in a reduce sidewalk area

EXISTING

SHELTER CONCEPT IN CONTEXT

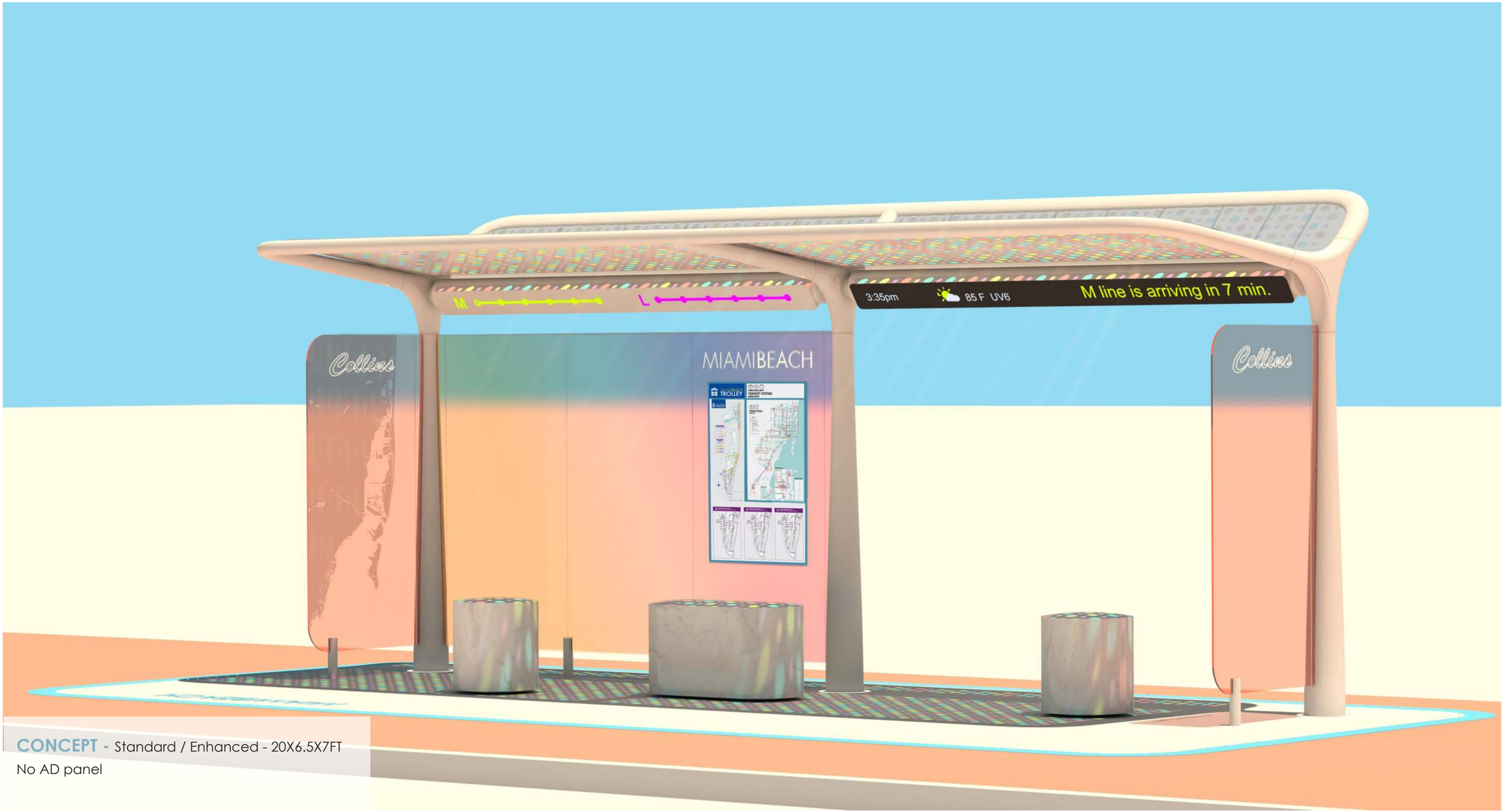
CONCEPT COMPARISON - Minimal - 10x3x7FT

Shelter on site day time
2018.04.11

Example Bus Shelter in a reduce sidewalk area

Diagrammatic

Conceptual Development Rendering

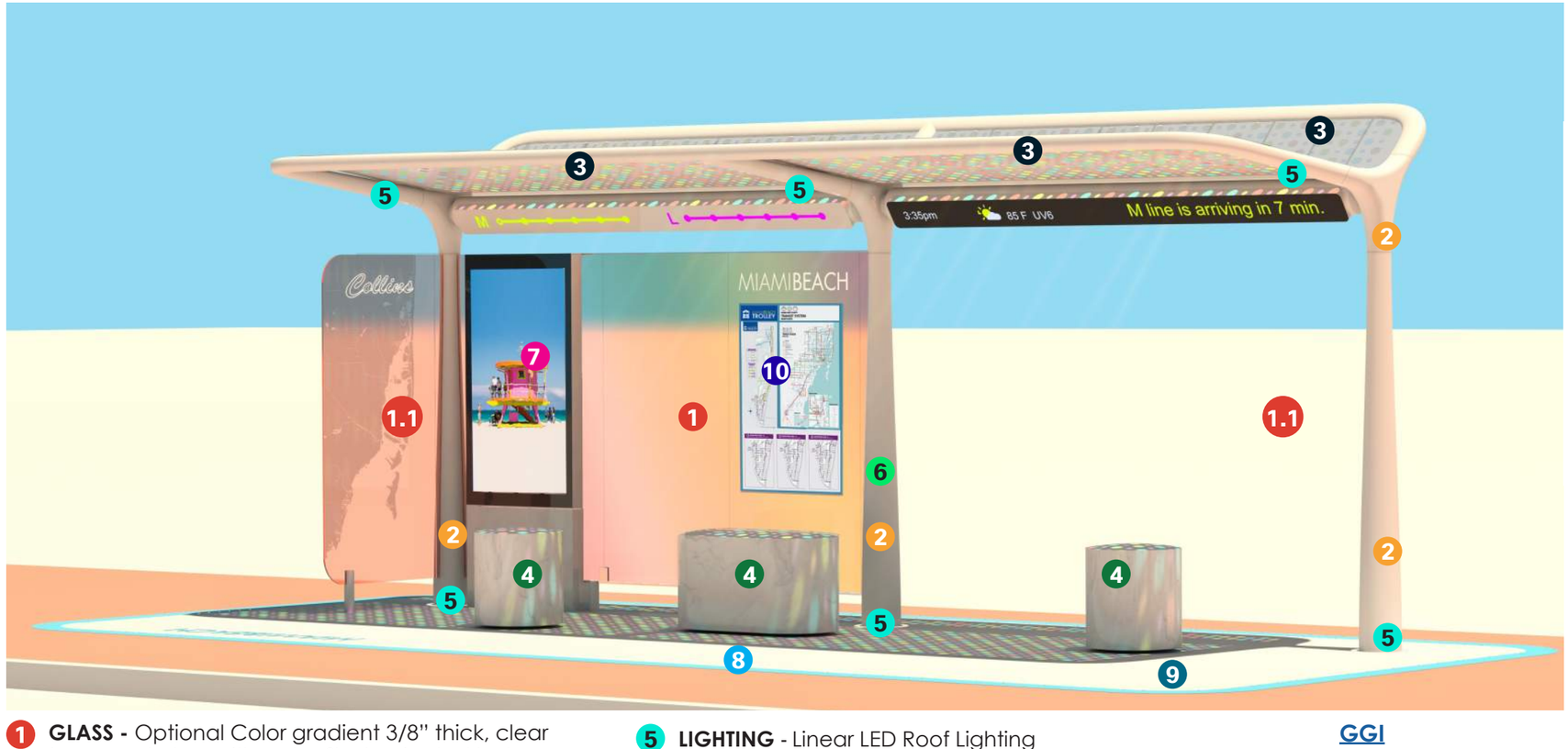


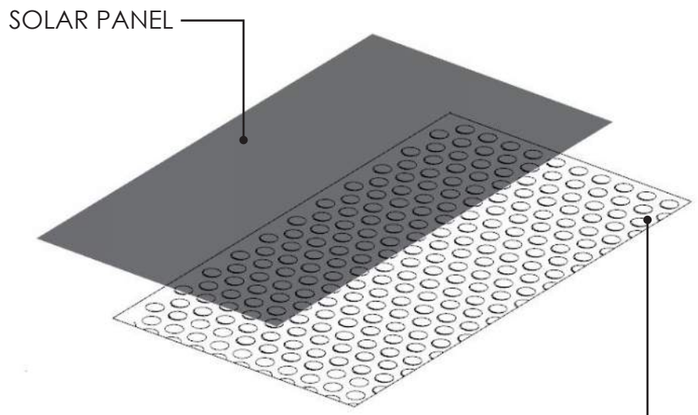
CONCEPT - Standard / Enhanced - 20X6.5X7FT

No AD panel

CONCEPT - Standard / Enhanced - 20X6.5X7FT
WITH 90° 4' X 6' AD PANEL (DIGITAL OR STATIC)

CONCEPT - Standard / Enhanced - 20X6.5X7FT
With 90° 4' x 6' AD Panel (Digital or Static)





1 **GLASS -** Optional Color gradient 3/8" thick, clear tempered glass with mylar film laminated between sheets to block UV rays.

1.1 **OPTIONAL SIDE GLASS -** Optional Color gradient 3/8" thick, clear tempered glass with mylar film laminated between sheets to block UV rays.

2 **POSTS + VERTICAL SUPPORTS -** Aluminum cast / White Powder-coated strip aluminum frame

3 **ROOF -** ONYX SOLAR + GGI - Alice Digital Printing (Ceramic frit is fused into the glass) - See Sample Image

4 **SEATING**
See sample image (OSSO - ESCOFET)

5 **LIGHTING** - Linear LED Roof Lighting
LIGHTING - Column Base lighting

6 **USB / WIRELESS CHARGER** - Marine-rated

7 **OPTIONAL 55" DIGITAL DISPLAY / AD PANEL**

8 **REFLECTIVE PAVEMENT MARKER OR PAINT -** Reflecting Marking Paint

9 **MARKER FLOOR** - Natural Colored Concrete with City Logo to Define Bus Stop Space

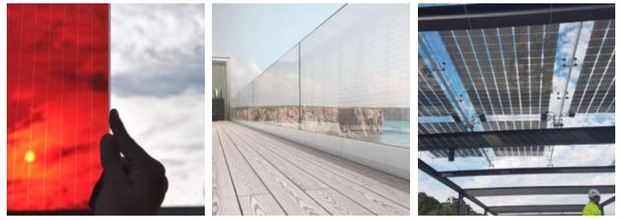
10 **SERVICE MAP**
Transit/trolley placement

CONCEPT - Standard / Enhanced - 20X6.5X7FT

Materials

GGI

ONYX SOLAR



OSSO Concrete Design

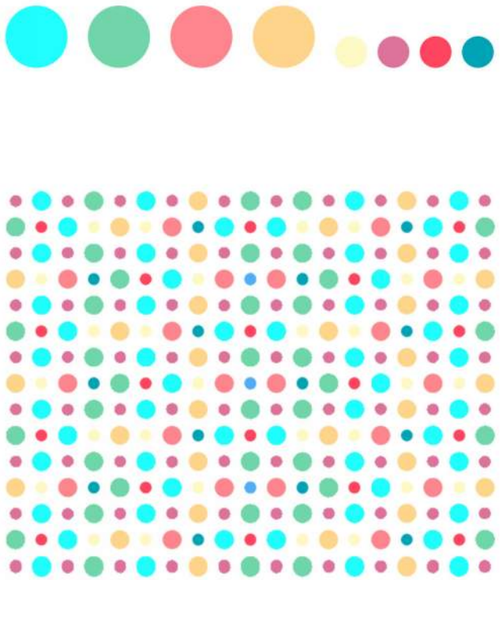
Alula Stool

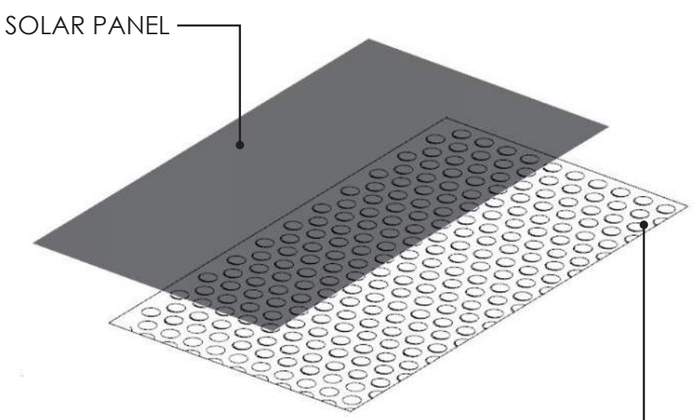
Radius

ESCOFET

Push

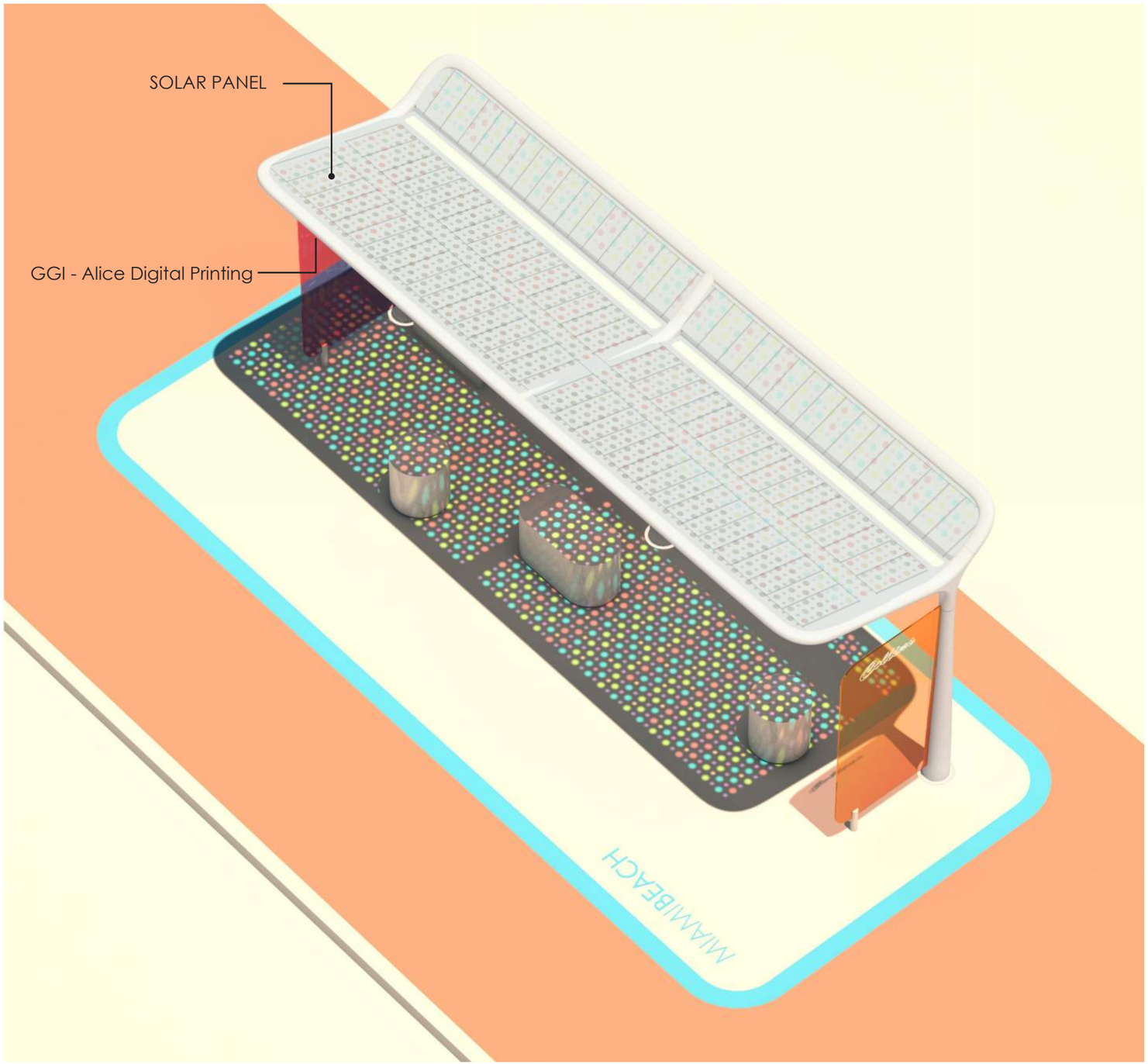
Soc

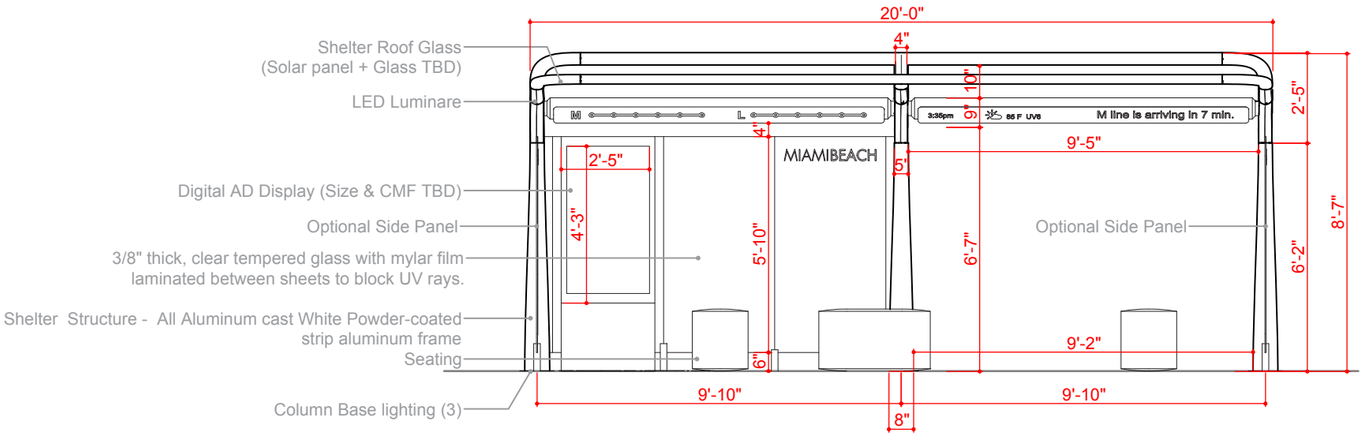




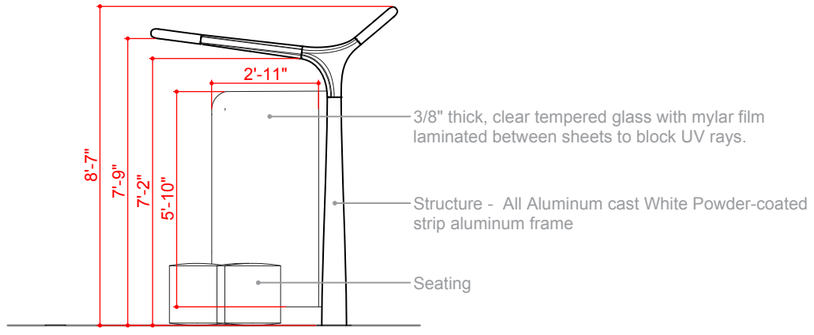
CONCEPT - Standard / Enhanced - 20X6.5X7FT

Roof Concept Color and Form

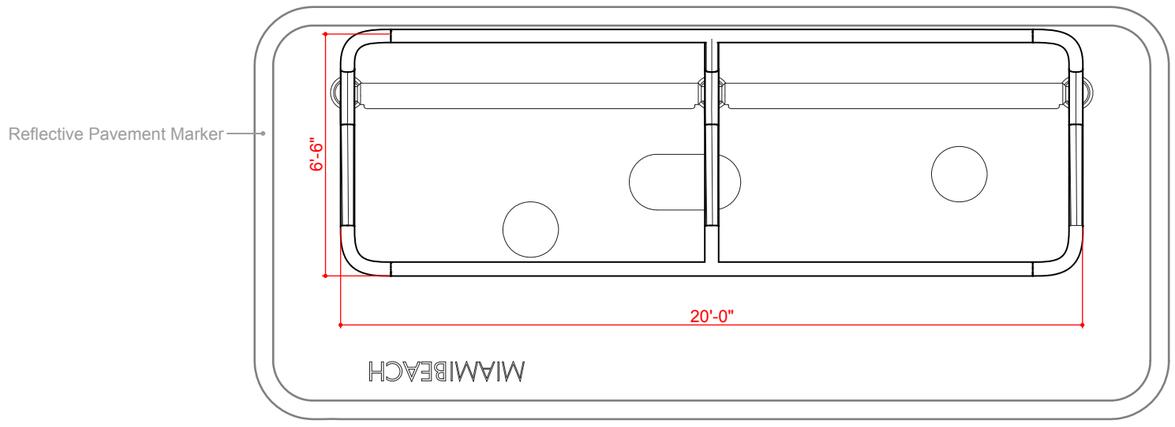




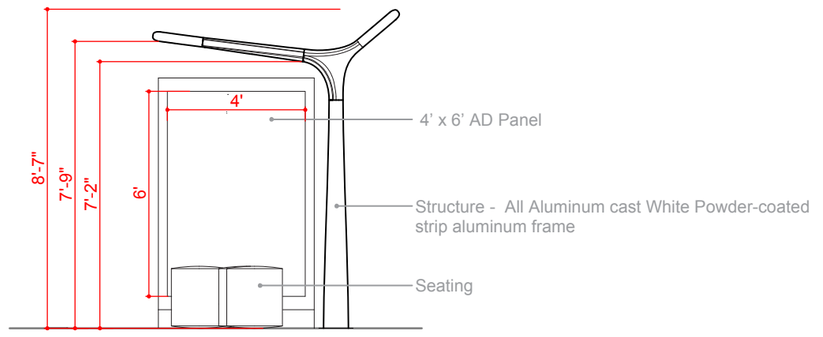
FRONT VIEW



SIDE ELEVATION



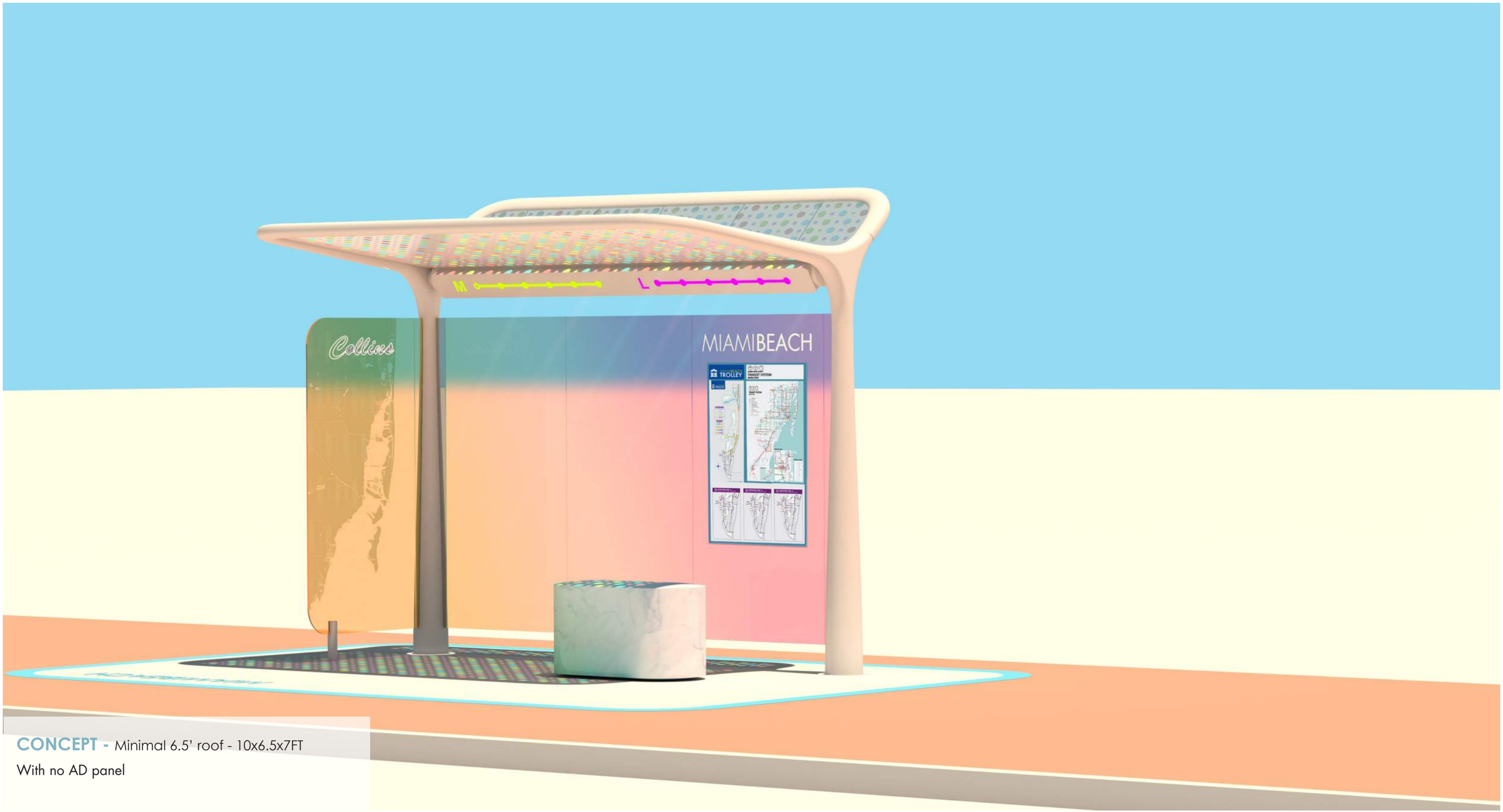
TOP VIEW



SIDE ELEVATION
90° 4' x 6' AD Panel

CONCEPT - Standard / Enhanced - 20X6.5X7FT
Dimensions and Materials

CONCEPT DESIGN NOT FOR CONSTRUCTION



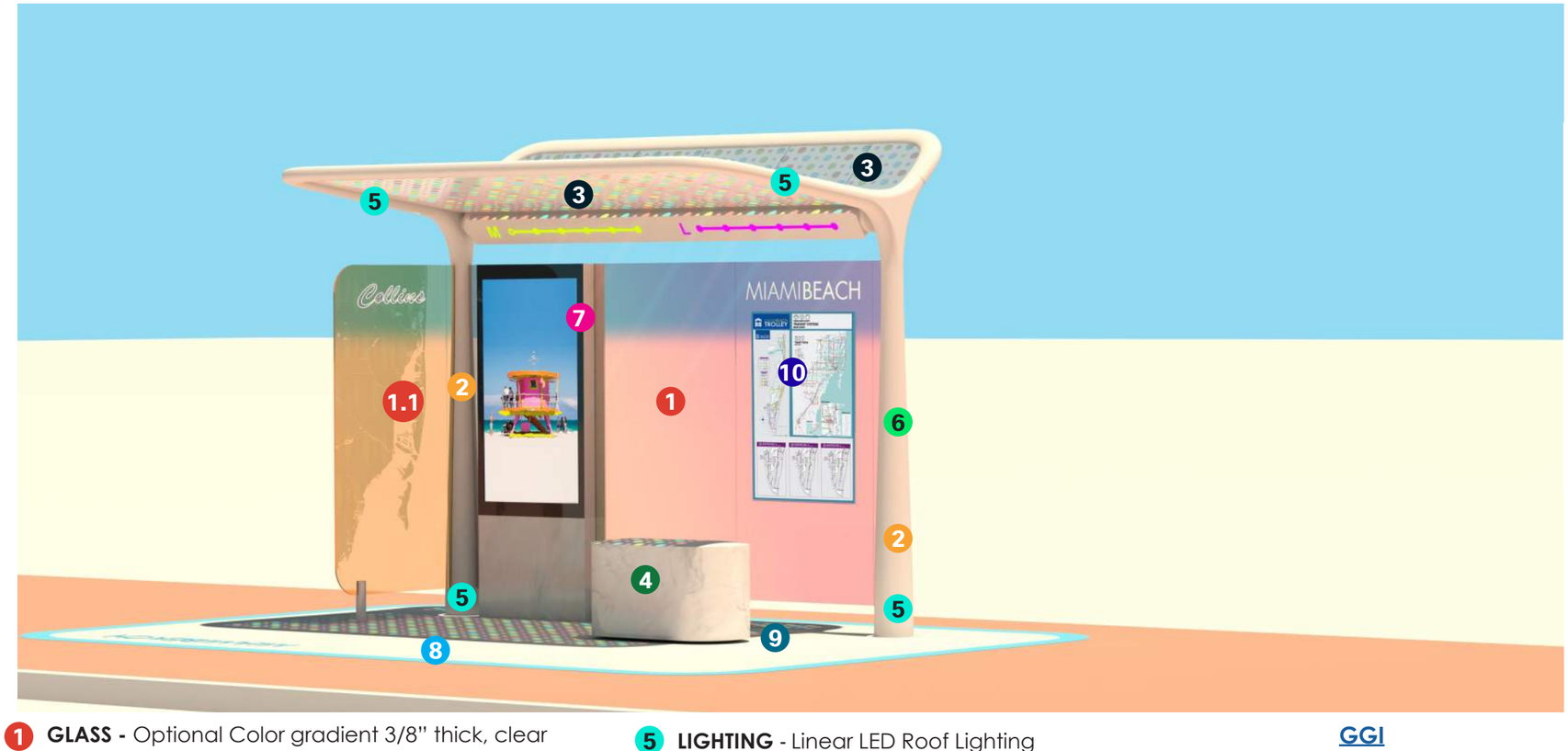
CONCEPT - Minimal 6.5' roof - 10x6.5x7FT

With no AD panel

CONCEPT - Minimal 6.5' roof with AD panel - 10x6.5x7FT

With 55" AD Panel

CONCEPT - Minimal 6.5’ roof with AD panel - 10x6.5x7FT
With 90° 4’ x 6’ AD Panel



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4 **SEATING**
See sample image (OSSO - ESCOFET)

5 **LIGHTING** - Linear LED Roof Lighting
LIGHTING - Column Base lighting

6 **USB / WIRELESS CHARGER** - Marine-rated

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8 **REFLECTIVE PAVEMENT MARKER OR PAINT -** Reflecting Marking Paint

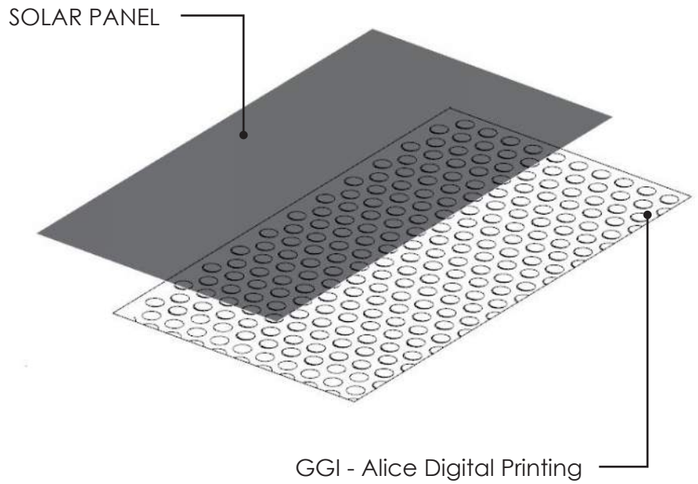
9 **MARKER FLOOR** - Natural Colored Concrete with City Logo to Define Bus Stop Space

10 **SERVICE MAP**
Transit/trolley placement

CONCEPT - Minimal 6.5' roof - 10x6.5x7FT

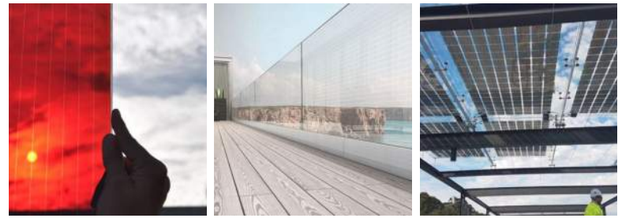
Materials

ROOF DIAGRAM



GGI

ONYX SOLAR



OSSO Concrete Design

Alula Stool

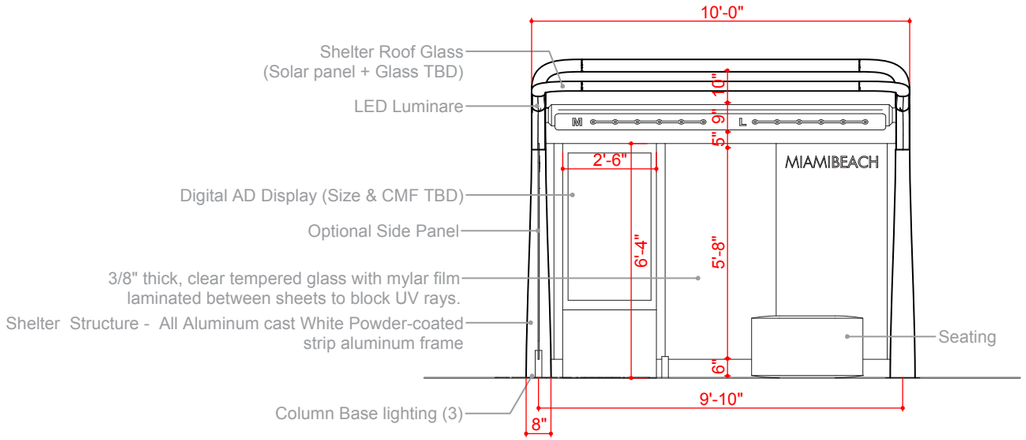
Radius

ESCOFET

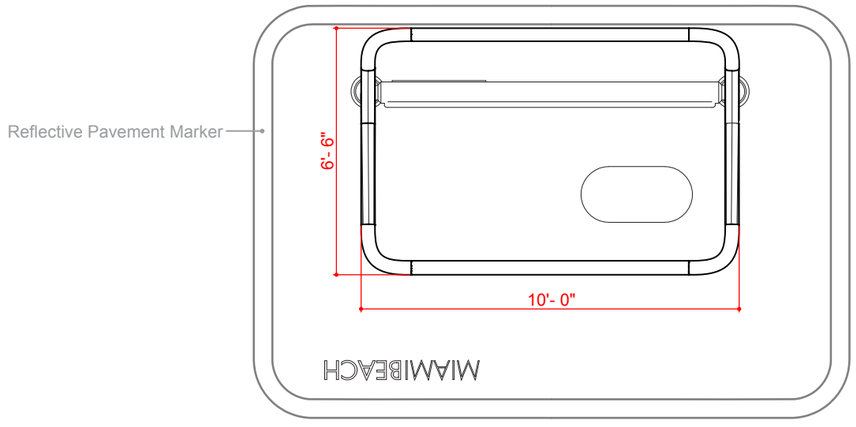
Push

Soc

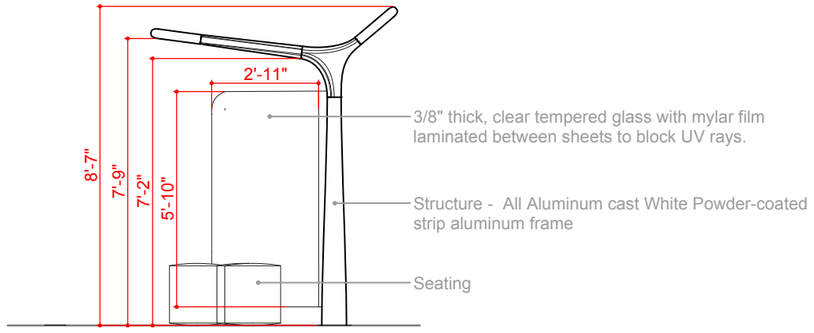
CONCEPT DESIGN NOT FOR CONSTRUCTION



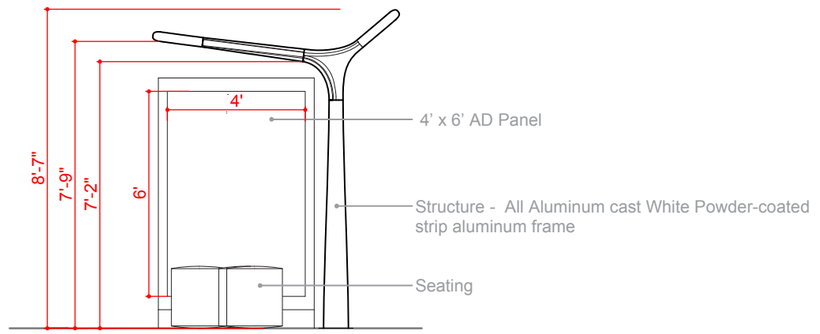
FRONT VIEW



TOP VIEW



SIDE ELEVATION

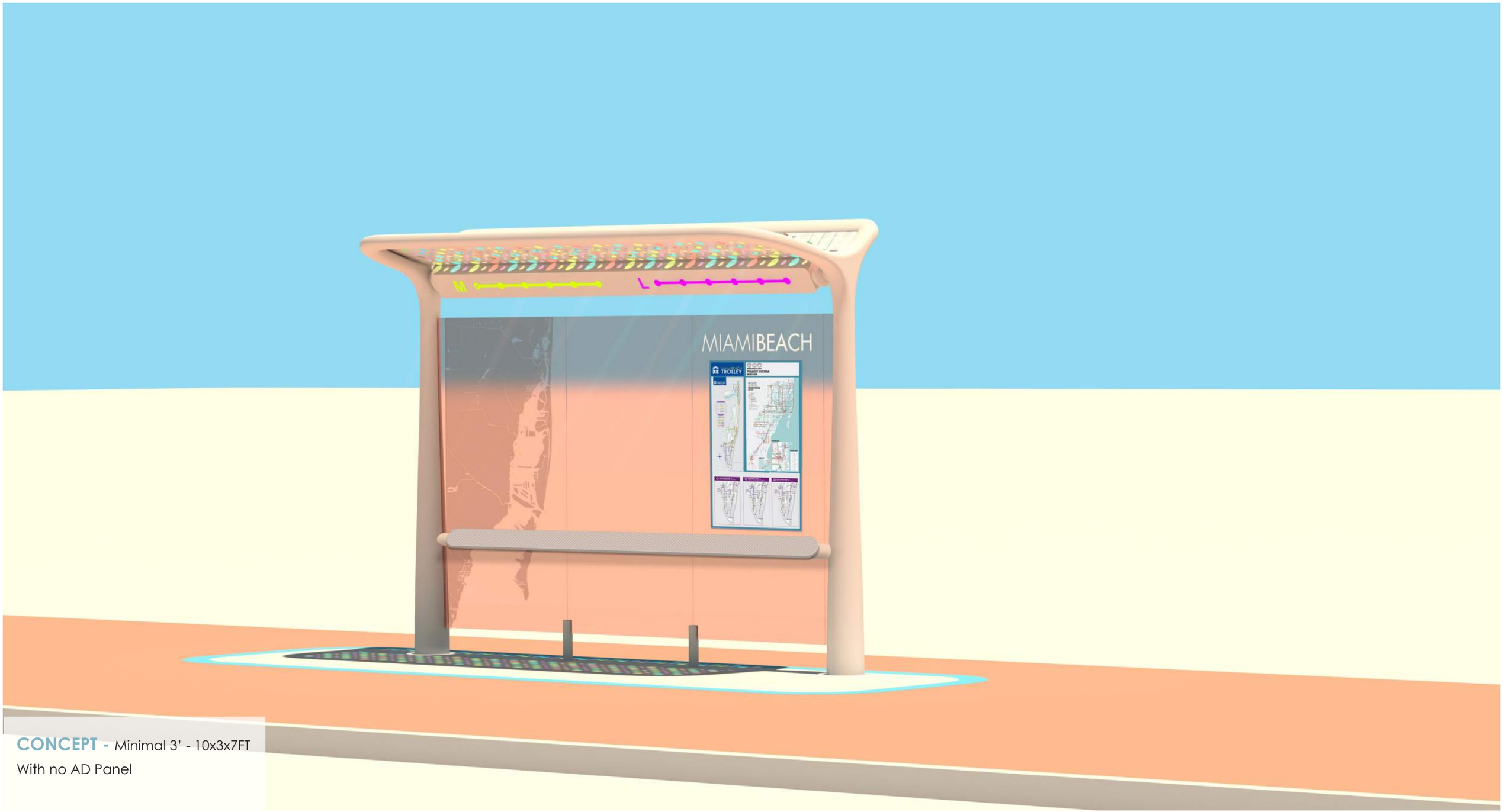


SIDE ELEVATION
90° 4' x 6' AD Panel

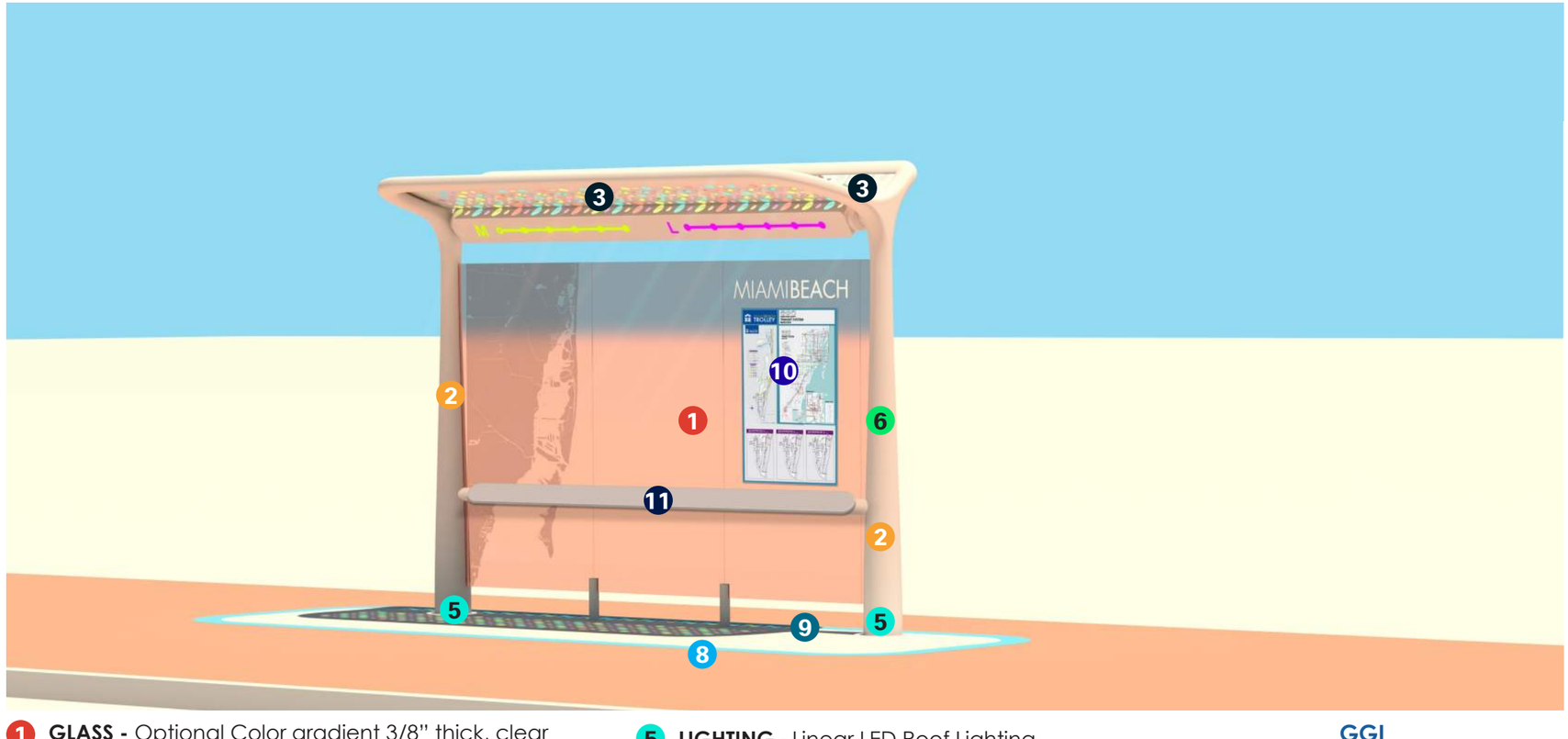
CONCEPT - Standard / Enhanced - 10x6.5x7FT

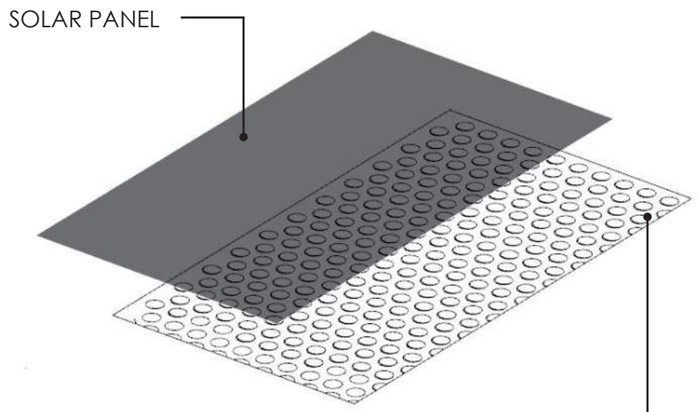
Dimensions and materials

CONCEPT DESIGN NOT FOR CONSTRUCTION



CONCEPT - Minimal 3' - 10x3x7FT
With no AD Panel





1 **GLASS -** Optional Color gradient 3/8" thick, clear tempered glass with mylar film laminated between sheets to block UV rays.

1.1 **OPTIONAL SIDE GLASS -** Optional Color gradient 3/8" thick, clear tempered glass with mylar film laminated between sheets to block UV rays.

2 **POSTS + VERTICAL SUPPORTS -** Aluminum cast / White Powder-coated strip aluminum frame

3 **ROOF -** ONYX SOLAR + GGI - Alice Digital Printing (Ceramic frit is fused into the glass) - See Sample Image

4 **SEATING**
See sample image (OSSO - ESCOFET)

5 **LIGHTING** - Linear LED Roof Lighting
LIGHTING - Column Base lighting

6 **USB / WIRELESS CHARGER** - Marine-rated

7 **OPTIONAL 55" DIGITAL DISPLAY / AD PANEL**

8 **REFLECTIVE PAVEMENT MARKER OR PAINT -** Reflecting Marking Paint

9 **MARKER FLOOR** - Natural Colored Concrete with City Logo to Define Bus Stop Space

10 **SERVICE MAP**
Transit/trolley placement

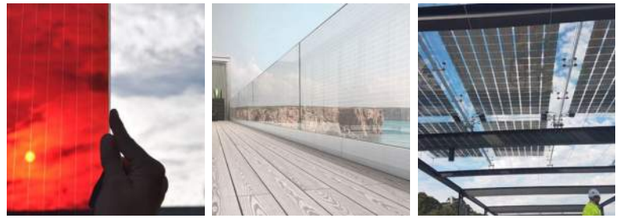
11 **LEANING RAIL** - Aluminum cast

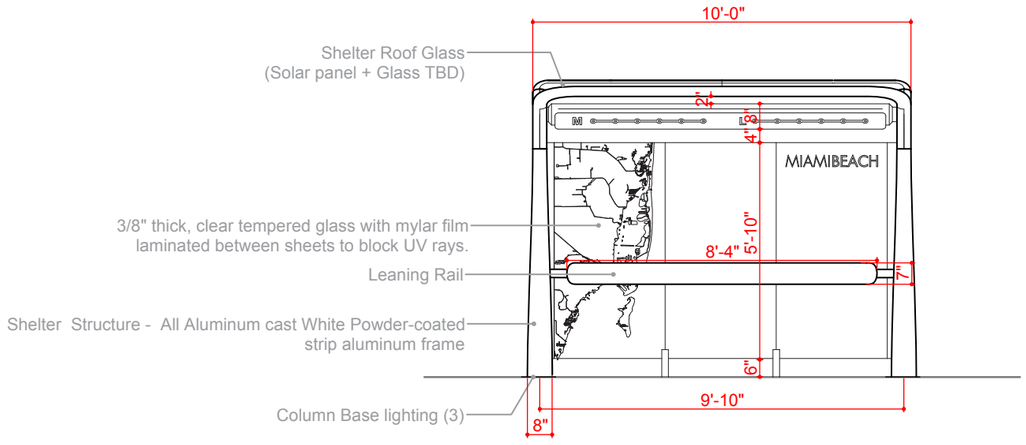
CONCEPT - Minimal 3' - 10x3x7FT

Materials

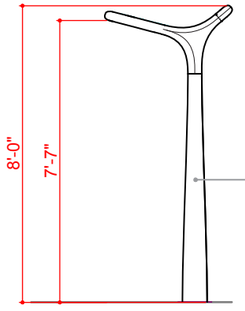
GGI

ONYX SOLAR

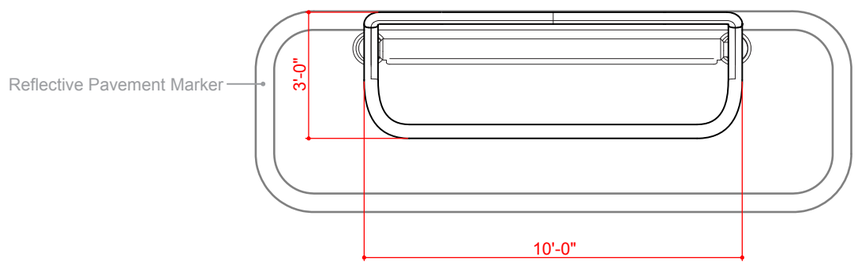




FRONT VIEW



SIDE ELEVATION

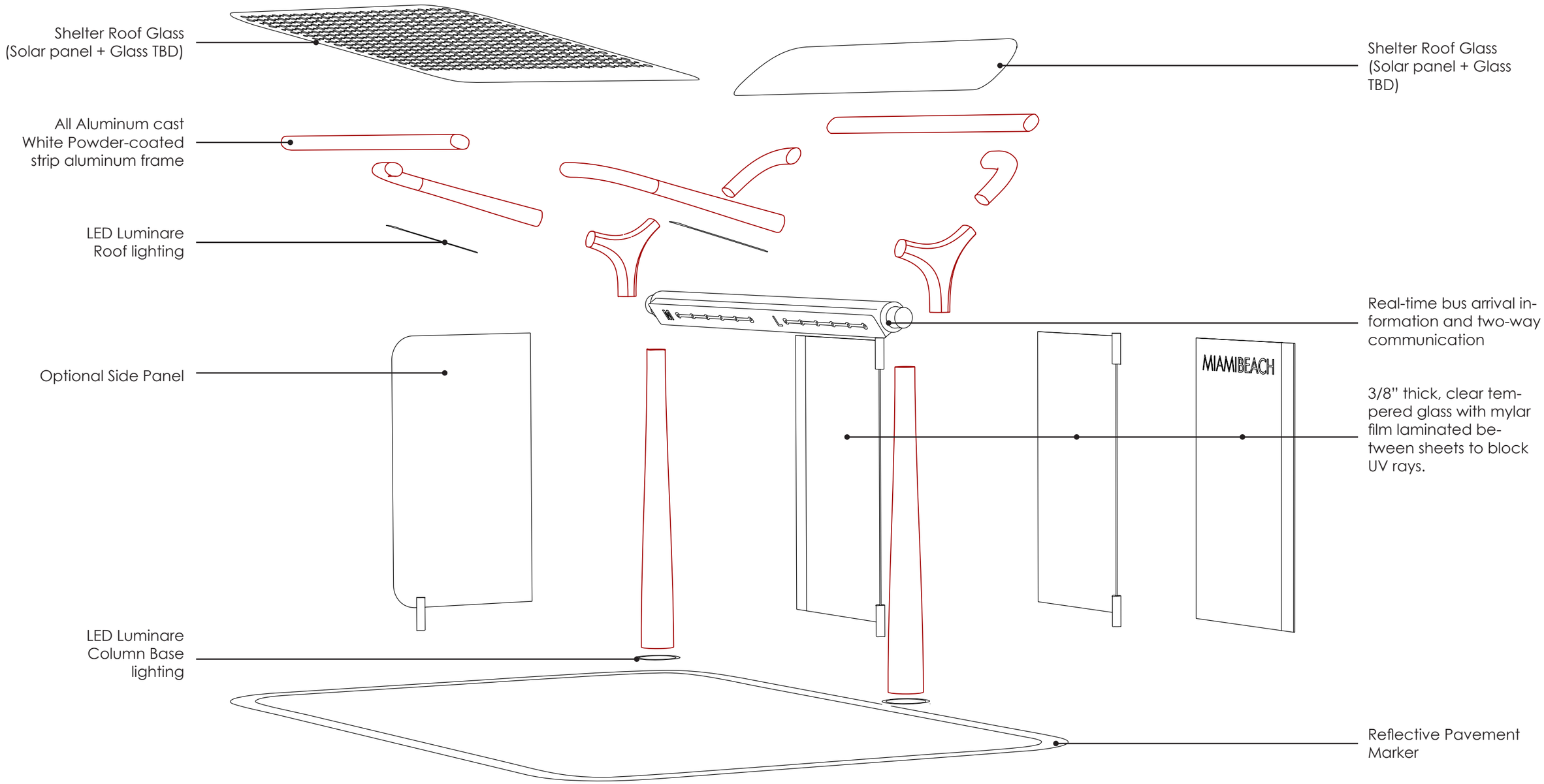


TOP VIEW

CONCEPT FOUR - Minimal 3' - 10x3x7FT

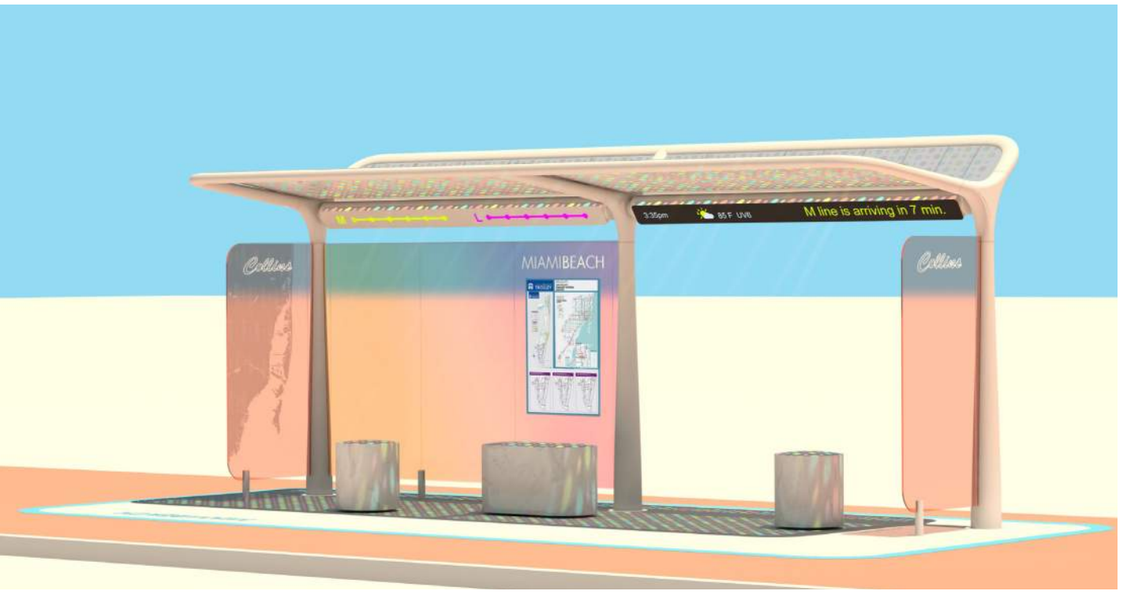
Dimensions and materials

CONCEPT DESIGN NOT FOR CONSTRUCTION



CONCEPT GENERAL STRUCTURE AND ELEMENTS COMPOSITION

Exploded View



STANDARD / ENHANCED
20X6.5X7FT

MINIMAL 6.5'
10X6.5X7FT

MINIMAL 3'
10X3X7FT

CONCEPT FOUR SIZE COMPARISON

Standard / Minimal 6.5'/ Minimal 3.5'

SHADE STUDY

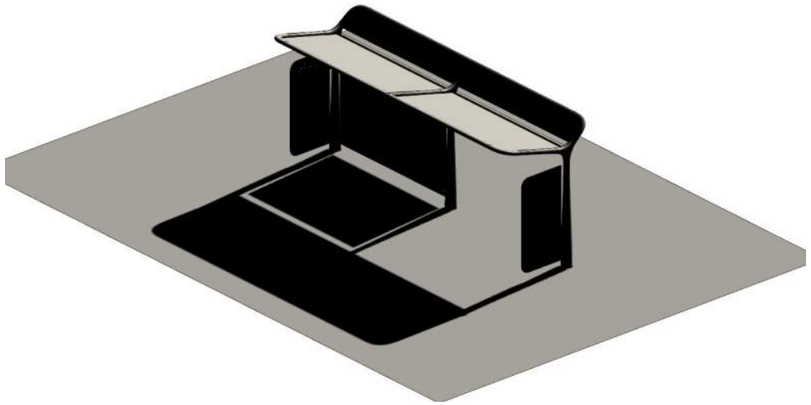
July

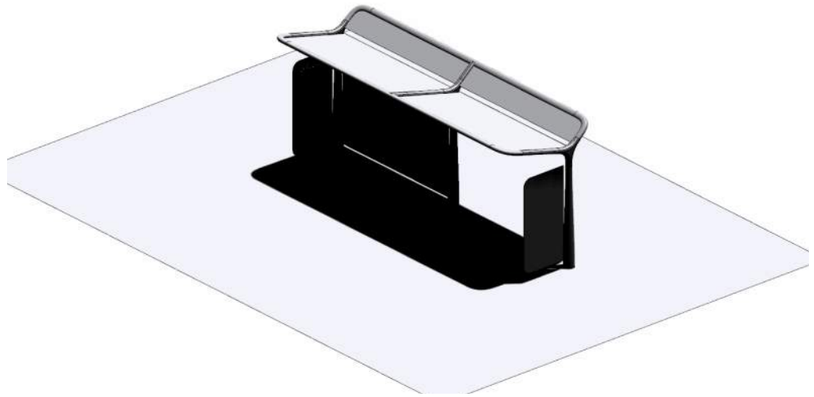
9 .am / 12 .pm / 4 .pm

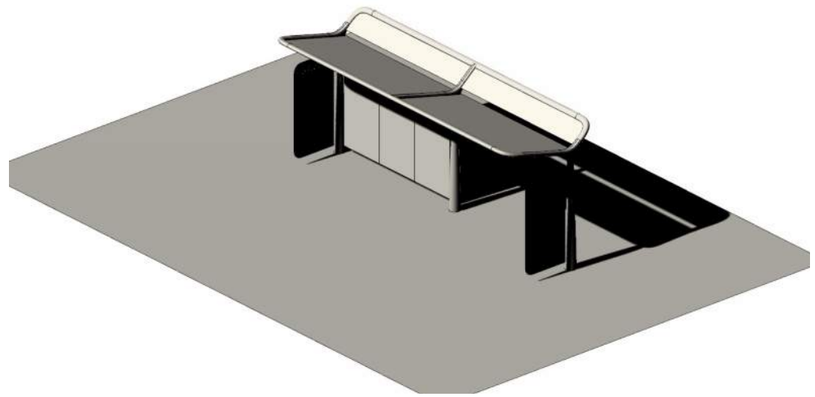
9 AM

12 PM

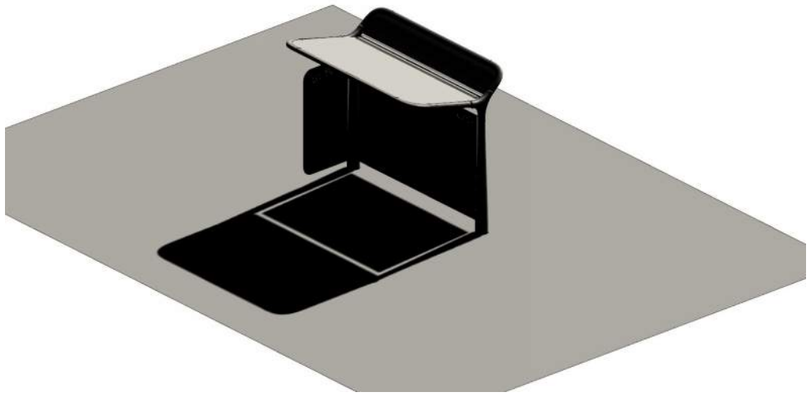
4 PM

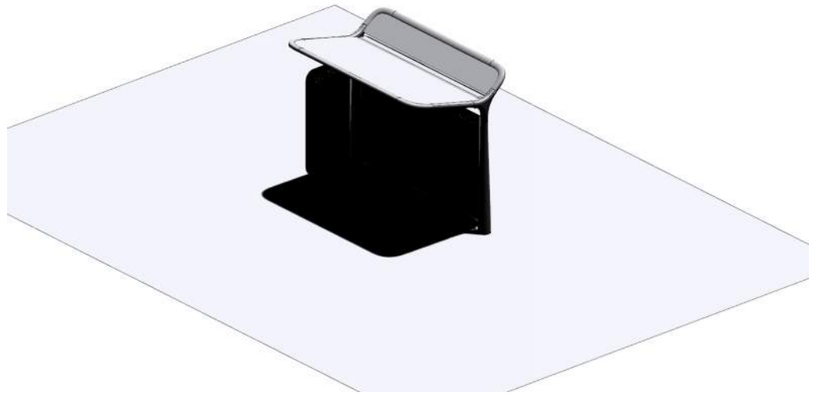


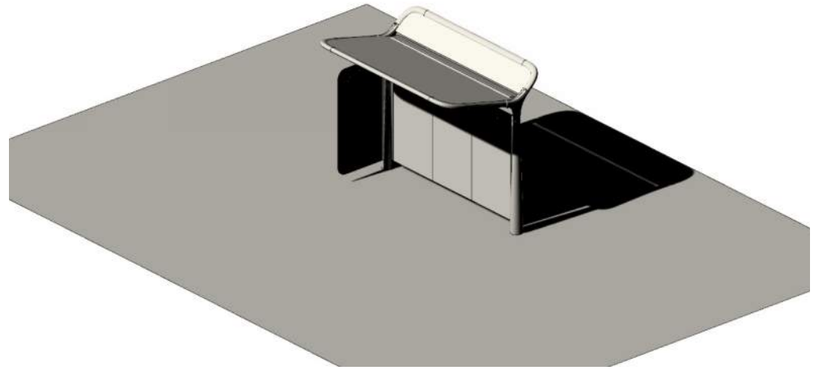




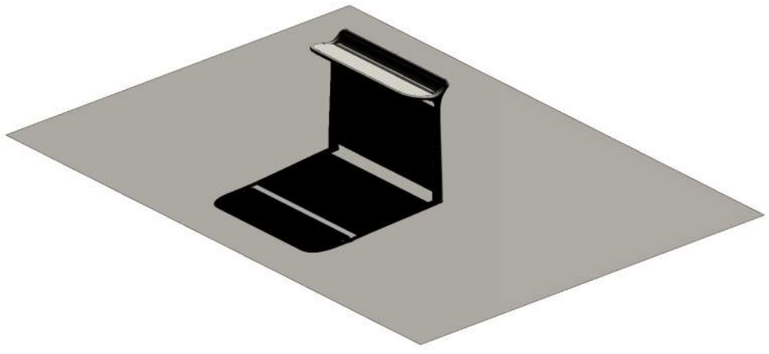
Standard / Enhanced - 20X6.5X7FT

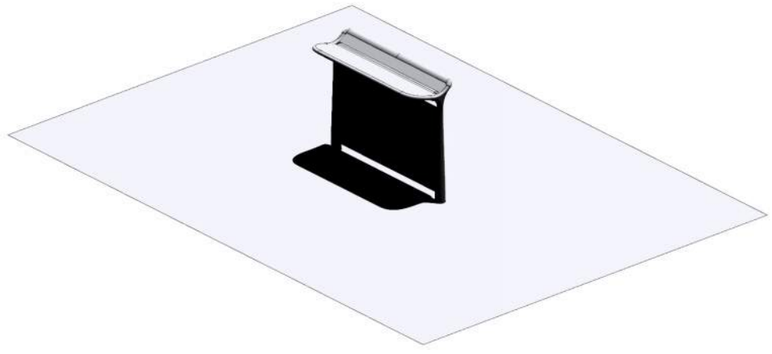


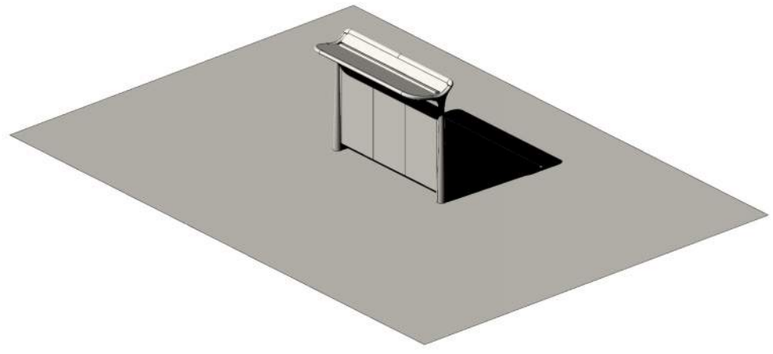




Minimal 6.5'- 10x6.5x7ft







Minimal 3' - 10X3X7FT

CITY OF MIAMI BEACH

Thank you