HISTORIC AND DESIGN REVIEW COMMISSION

April 18, 2018

HDRC CASE NO:	**2018-172**
COMMON NAME:	IKE Smart City Kiosks – Multiple Locations
ADDRESS:	909 W HOUSTON ST
LEGAL DESCRIPTION:	NCB 263 BLK 76 LOT 15 (VIA WESTSIDE TRANSIT CENTER)
ZONING:	D, HS
CITY COUNCIL DIST.:	Various
DISTRICT:	Cattleman Square Historic District
LANDMARK:	El Fenix Grill
APPLICANT:	Steve Jaffe/IKE Smart City, LLC
OWNER:	City of San Antonio Office of Innovation
TYPE OF WORK:	IKE Smart City Kiosks - Various Locations
APPLICATION RECEIVED:	April 04, 2018
60-DAY REVIEW:	June 03, 2018

REQUEST:

The applicant is requesting conceptual approval to install interactive kiosks in multiple locations throughout the City of San Antonio. The applicant has proposed 11 additional locations in addition to 24 previously approved locations. The proposed additional locations will be located at VIA locations throughout the city as well as four downtown locations.

APPLICABLE CITATIONS:

Sec. 35-640. - Public Property and Rights-of-Way.

(a) Public Property. Generally, the historic and design review commission will consider applications for actions affecting the exterior of public properties except in the case of building interiors that are the sites of major public assemblies or public lobbies. The historic and design review commission will also consider applications for actions affecting public properties such as city parks, open spaces, plazas, parking lots, signs and appurtenances.
(b) Public Rights-of-Way. Generally, the historic and design review commission will consider applications for actions affecting public rights-of-way whose construction or reconstruction exceeds in quality of design or materials standards of the design manual of the public works department.

Sec. 35-641. - Design Considerations for Historic and Design Review Commission Recommendations.

In reviewing an application, the historic and design review commission shall be aware of the importance of attempting to find a way to meet the current needs of the City of San Antonio, lessee or licensee of public property. The historic and design review commission shall also recognize the importance of recommending approval of plans that will be reasonable to implement. The best urban design standards possible can and should be employed with public property including buildings and facilities, parks and open spaces, and the public right-of-way. Design and construction on public property should employ such standards because the use of public monies for design and construction is a public trust. Public commitment to quality design should encourage better design by the private sector. Finally, using such design standards for public property improves the identity and the quality of life of the surrounding neighborhoods.

Sec. 35-642. - New Construction of Buildings and Facilities.

In considering whether to recommend approval or disapproval of a certificate, the historic and design review commission shall be guided by the following design considerations. These are not intended to restrict imagination, innovation or variety, but rather to assist in focusing on design principles, which can result in creative solutions that will enhance the city and its neighborhoods. Good and original design solutions that meet the individual requirements of a specific site or neighborhood are encouraged and welcomed.

(a) Site and Setting.
(1) Building sites should be planned to take into consideration existing natural climatic and topographical features. The

intrusive leveling of the site should be avoided. Climatic factors such as sun, wind, and temperature should become an integral part of the design to encourage design of site-specific facilities which reinforces the individual identity of a neighborhood and promotes energy efficient facilities.
(2) Special consideration should be given to maintain existing urban design characteristics, such as setbacks, building heights, streetscapes, pedestrian movement, and traffic flow. Building placement should enhance or create focal points and views. Continuity of scale and orientation shall be emphasized.
(3) Accessibility from streets should be designed to accommodate safe pedestrian movement as well as vehicular traffic. Where possible, parking areas should be screened from view from the public right-of-way by attractive fences, berms, plantings or other means.
(4) Historically significant aspects of the site shall be identified and if possible incorporated into the site design. Historic relationships between buildings, such as plazas or open spaces, boulevards or axial relationships should be maintained.

(b) Building Design.
(1) Buildings for the public should maintain the highest quality standards of design integrity. They should elicit a pride of ownership for all citizens. Public buildings should reflect the unique and diverse character of San Antonio and should be responsive to the time and place in which they were constructed.
(2) Buildings shall be in scale with their adjoining surroundings and shall be in harmonious conformance to the identifying quality and characteristics of the neighborhood. They shall be compatible in design, style and materials. Reproductions of styles and designs from a different time period are not encouraged, consistent with the secretary of the interior's standards. Major horizontal and vertical elements in adjoining sites should be respected.
(3) Materials shall be suitable to the type of building and design in which they are used. They shall be durable and easily maintained. Materials and designs at pedestrian level shall be at human scale, that is they shall be designed to be understood and appreciated by someone on foot. Materials should be selected that respect the historic character of the surrounding area in texture, size and color.
(4) Building components such as doors, windows, overhangs, awnings, roof shapes and decorative elements shall all be designed to contribute to the proportions and scale of their surrounding context. Established mass/void relationships shall be maintained. Patterns and rhythms in the streetscape shall be continued.
(5) Colors shall be harmonious with the surrounding environment, but should not be dull. Choice of color should reflect the local and regional character. Nearby historic colors shall be respected.
(6) Mechanical equipment or other utility hardware should be screened from public view with materials compatible with the building design. Where possible, rooftop mechanical equipment should be screened, even from above. Where feasible, overhead utilities should also be underground or attractively screened. Exterior lighting shall be an integral part of the design. Interior lighting shall be controlled so that the spillover lighting onto public walkways is not annoying to pedestrians.
(7) Signs which are out of keeping with the character of the environment in question should not be used. Excessive size and inappropriate placement on buildings results in visual clutter. Signs should be designed to relate harmoniously to exterior building materials and colors. Signs should express a simple clear message with wording kept to a minimum.
(8) Auxiliary design. The site should take into account the compatibility of landscaping, parking facilities, utility and service areas, walkways and appurtenances. These should be designed with the overall environment in mind and should be in visual keeping with related buildings, structures and places.

(c) Multiple Facades. In making recommendations affecting new buildings or structures which will have more than one (1) important facade, such as those which will face two (2) streets or a street and the San Antonio River, the historic and design review commission shall consider the above visual compatibility standards with respect to each important facade.

FINDINGS:

a. The applicant is requesting conceptual approval to install interactive kiosks in multiple locations throughout the City of San Antonio. The applicant has proposed 11 additional locations in addition to 24 previously approved locations. The proposed additional locations will be located at VIA locations throughout the city as well as four downtown locations.
b. DESIGN REVIEW COMMITTEE – This request was reviewed by the Design Review Committee on March 13, 2018. At that meeting, committee members noted that the proposed scale was not a concern, that face branding was preferred over spine branding and asked questions regarding final design.
c. PREVIOUS APPROVALS – At the March 21, 2018, Historic and Design Review Commission hearing, the applicant received approval for the location and design of 24 kiosks with the following stipulations. The applicant

has noted that these previous stipulations will be adhered to with the additionally proposed locations and that all stone has been eliminated from the proposals.

i. That every effort be made to minimize visual impacts from the River Walk or river right-of-way.
ii. That no individual installation damage or obscure historic fabric such as bridges, unique sidewalk features, or architectural elements.
iii. That no individual installation detract from the primary entrance of view to a significant historic building or resource.
iv. That a clear pedestrian path of 72" be maintained around each installation. Instances where this cannot be met should be coordinated with the Disability Access Office.
v. ARCHAEOLOGY- The development project shall comply with all federal, state, and local laws, rules, and regulations regarding archaeology.
vi. That all locations make every attempt to group closely with existing street amenities and furnishings such as B Cycle stations.

d. VIA LOCATIONS – The applicant has proposed to locate 7 kiosks at VIA transit locations. These locations include Centro Plaza, Five Points, the Medical Center Transit Station, the Kel-Lac Transit Center, the Randolph Park and Ride, the Ingram Transit Center and in the Deco District at Mary Louise.
e. DOWNTOWN LOCATIONS – The applicant has proposed four additional downtown locations in the event that any of the previously approved locations are unfeasible. These locations include E Houston at Losoya, Alamodome Plaza North, Buena Vista at IH-35 and Cesar E Chavez at IH-35.
f. ARCHAEOLOGY- The development project shall comply with all federal, state, and local laws, rules, and regulations regarding archaeology.

RECOMMENDATION:

Staff recommends that the locations of the proposed kiosks balance the goals of this innovative program with maintaining the historic character and ambiance of Downtown Streets. With approval of the kiosk design and preliminary locations by HDRC, staff will review each individual installation for impacts to historic resources.

The four alternate kiosk locations may only be used if they are replacing a removed kiosk. These locations are not to be added to existing locations to result in more than 24 locations from the original approval.

Staff recommends approval of the proposed locations with the previously approved stipulations:

i. That every effort be made to minimize visual impacts from the River Walk or river right-of-way.
ii. That no individual installation damage or obscure historic fabric such as bridges, unique sidewalk features, or architectural elements.
iii. That no individual installation detract from the primary entrance of view to a significant historic building or resource.
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vi. That all locations make every attempt to group closely with existing street amenities and furnishings such as B Cycle stations.

No stone is to be incorporated into the proposed kiosks. Staff will also incorporate any additional stipulations or recommendation by the HDRC in these reviews.

CASE MANAGER:

Edward Hall

IKEsmartcity.com | 614.294.4898
250 N. Hartford Avenue | Columbus, Ohio 43222

City of San Antonio
Historic & Design Review Commission
Office of Historic Preservation
1901 S. Alamo
San Antonio, TX 78204

Greetings,

The IKE Smart City LLC partnership with City of San Antonio Office of Innovation has recently expanded to include the placement of IKE at various VIA locations throughout the city. We will endeavor to place one kiosk at seven different VIA locations. The seven locations where we would like to place IKE are as follows:

1. Centro Plaza
2. Five Points
3. Medical Center Transit Station
4. Kel-Lac Transit Center
5. Randolph Park & Ride
6. Ingram Transit Center
7. Deco District - Mary Louise

We have also identified the following four locations that would serve as a pool from which we would draw in the event any of the previously submitted and approved 24 locations become unfeasible.

8. Houston/Losoya
9. Alamodome Plaza North
10. Buena Vista / IH 35 - 1
11. Cesar Chavez / IH 35 – 1

We are asking the Historic & Design Review Commission to approve these additional 11 location nodes for further exploration and development.

Best regards

Steve Jaffe
City Manager

San Antonio Map - 11 locations f...

All changes saved in Drive

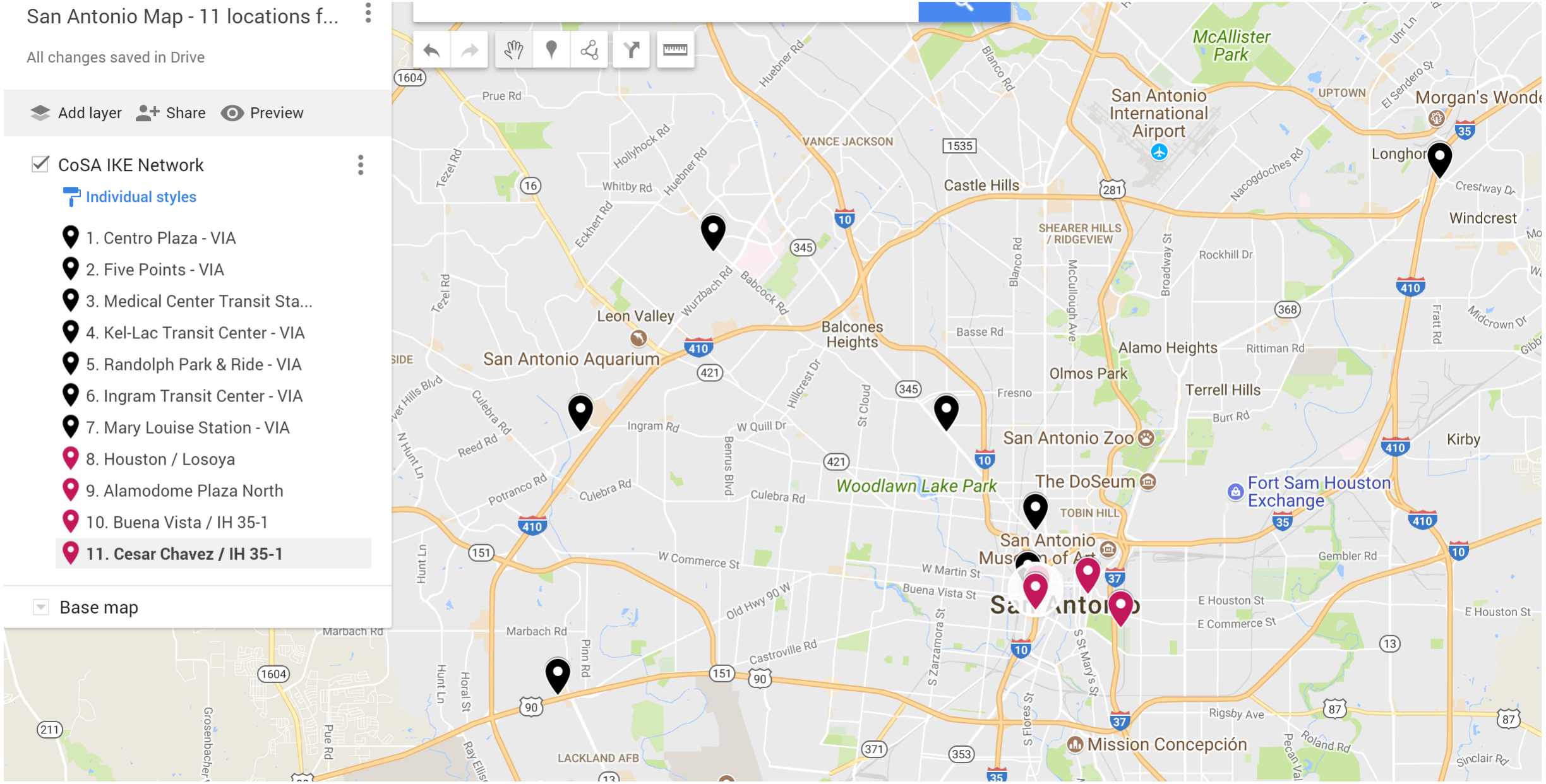
Add layer | Share | Preview

CoSA IKE Network

Individual styles

1. Centro Plaza - VIA
2. Five Points - VIA
3. Medical Center Transit Sta...
4. Kel-Lac Transit Center - VIA
5. Randolph Park & Ride - VIA
6. Ingram Transit Center - VIA
7. Mary Louise Station - VIA
8. Houston / Losoya
9. Alamodome Plaza North
10. Buena Vista / IH 35-1
11. Cesar Chavez / IH 35-1

Base map



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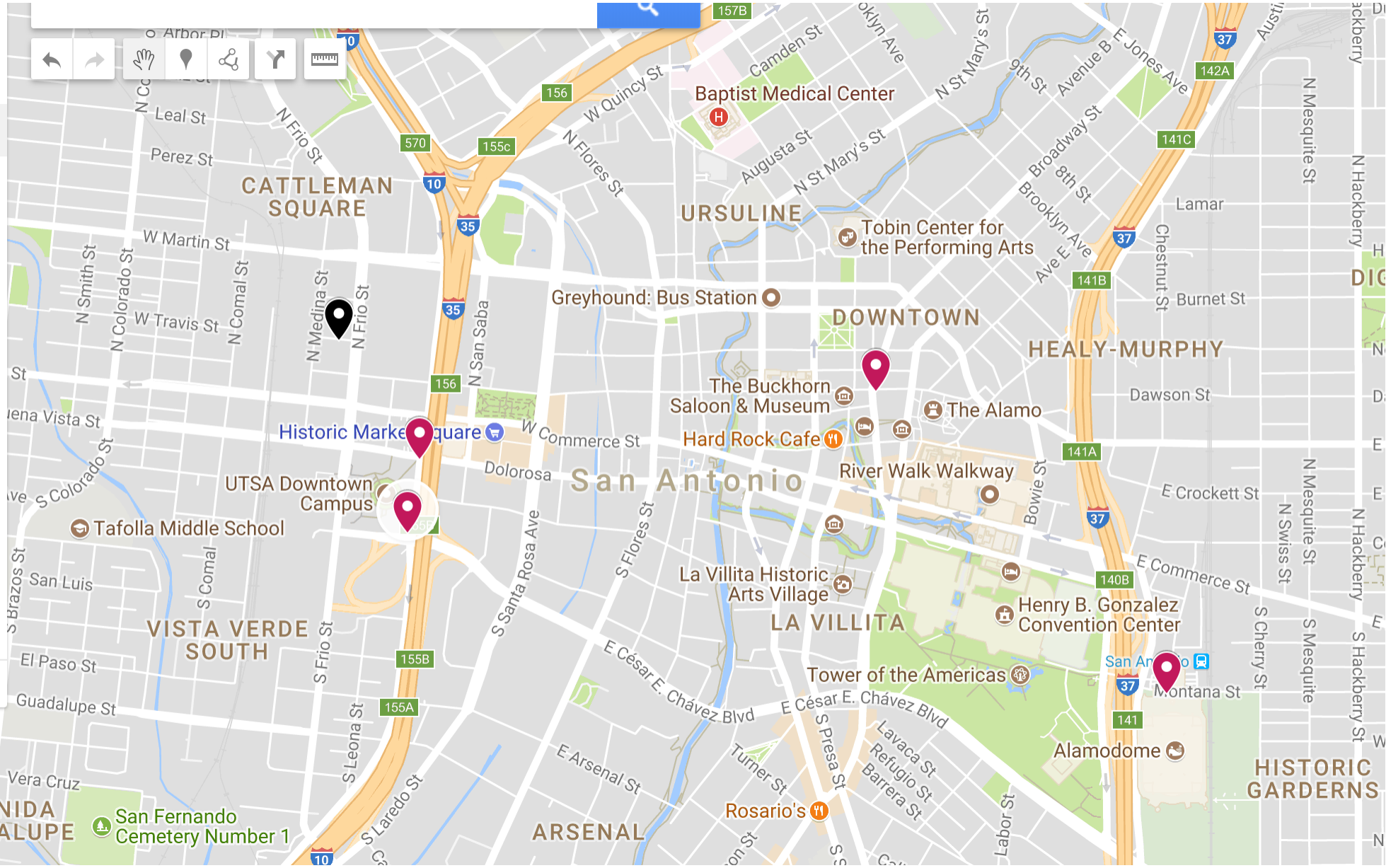
7. Mary Louise Station - VIA
8. Houston / Losoya
9. Alamodome Plaza North
10. Buena Vista / IH 35-1
11. Cesar Chavez / IH 35-1

Base map



ike SMART CITY

CITY OF SAN ANTONIO - Office of Innovation

HDRC APPLICATION – Support Materials

February 16, 2018

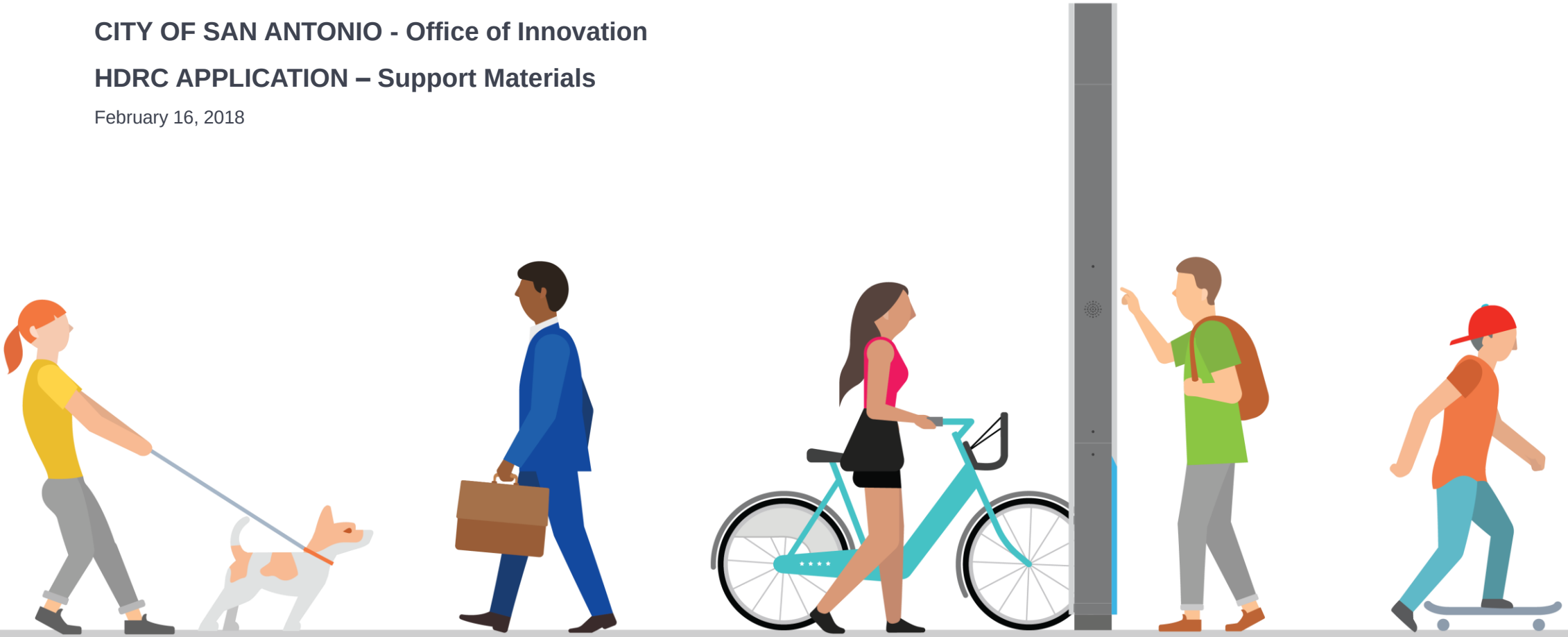


Table of Contents

IKE Smart City - Overview

IKE (Interactive Kiosk Experience), is a seamless, best-in-class hardware and software communication system that connects cities with people through interactive, vivid touchscreens, an ever-expanding suite of applications, and a dynamically engaging interface.

IKE's open platform, customizable software, and multi-tenant content management system will provide maximum flexibility to the City of San Antonio, serving as one integrated informational hub for city services and communications now and in the future.

IKE will support the City of San Antonio's economic development and placemaking goals by encouraging exploration and discovery of local businesses, while improving mobility with multi-modal wayfinding and real-time public transit schedules.

Additionally, IKE serves the needs of all communities equally by improving connectivity and accessibility in under-served areas through free Wi-Fi, increased cellular coverage, as well as access to valuable social services such as homeless shelter availabilities, food support, and job opportunities.

ike SMART CITY

The Interactive Smart City Kiosk

Applications

EAT & DRINK
Drives traffic to area businesses with detailed listings of restaurants and other dining establishments

SHOP
Encourages a thriving economy with detailed listings of area retail shops and centers

PLAY
Creates a vibrant and energetic city with detailed listings of activities and attractions

STAY
Makes it easy to visit by providing detailed listings of hotels, motels, and other lodging

GET AROUND
Provides wayfinding and real time schedules for multi-modal transportation options

SOCIAL SERVICES
Supports the underserved with detailed listings of tools and resources

CIVIC RESOURCES
Makes it easy to get important things done with detailed listings of city, state and federal resources

EVENTS
Highlights things to do and opportunities to be a part of the community

POSTERS
Communicates, promotes and displays customized City content

PHOTO BOOTH
Allows pedestrians to pose for customized photo postcards

ARCADE
Engages pedestrians with an easy to use gaming experience

Features & Functionality

ESSENTIAL & EMERGENCY COMMUNICATIONS
Deploys emergency messages and critical updates from governmental authorities

INCREASED WI-FI & CELLULAR FUNCTIONALITY
Encourages a thriving economy with detailed listings of area retail shops and centers

CUSTOMIZABLE HARDWARE DESIGN
Compliments the unique aesthetic and surrounding landscape of the City

CONTENT INTEGRATION & LIVE UPDATES
Uses existing CMS and APIs to integrate with IoT feeds

CUSTOMIZABLE CONTENT
Accepts new and customized content and applications

MOBILE & WEB EXTENSIONS
Extends the IKE experience to Web and social platforms

DATA & ANALYTICS
Provides valuable IKE usage data through a readily available Analytics Dashboard

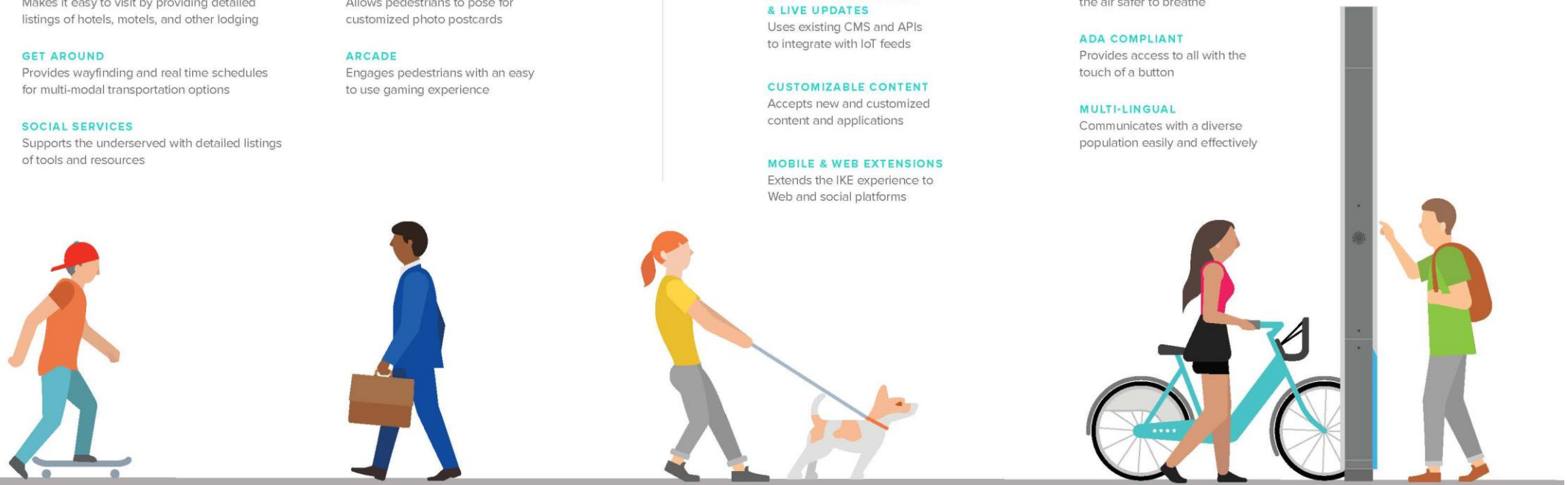
SURVEY SAYS
Allows the public to share opinions with city leadership

PEDESTRIAN COUNTER
Captures traffic counts and patterns

AIR QUALITY MONITOR
Monitors pollution and make the air safer to breathe

ADA COMPLIANT
Provides access to all with the touch of a button

MULTI-LINGUAL
Communicates with a diverse population easily and effectively



Design Goals

All IKE's will be designed and produced in accordance with the unique requirements of City of San Antonio Historic Design and Review Commission standards.

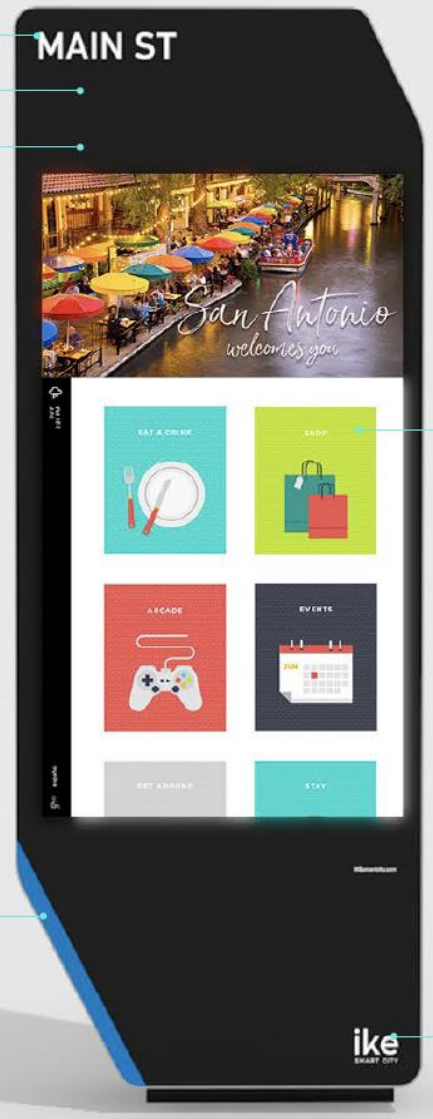
Ultimately, the IKE platform is a kit of parts containing the best in class hardware and software, but the design and architecture of the kiosks can be customized to meet the design goals of HRDC.

Materials, colors and lighting can all be modified to maintain a cohesive appearance.

Following will demonstrate the various elements of customization along with three design paths currently under exploration with City of San Antonio Office of Innovation. Our goal is to deliver an aesthetic that enhances the beautiful streetscapes of the City of San Antonio and works in accord with HRDC standards.

Design Customization Variables

CITY OF SAN ANTONIO OFFICE OF INNOVATION ike SMART CITY



Street name and font

Exterior color

Material and finish

Two options for interface design

Kinetic lighting color

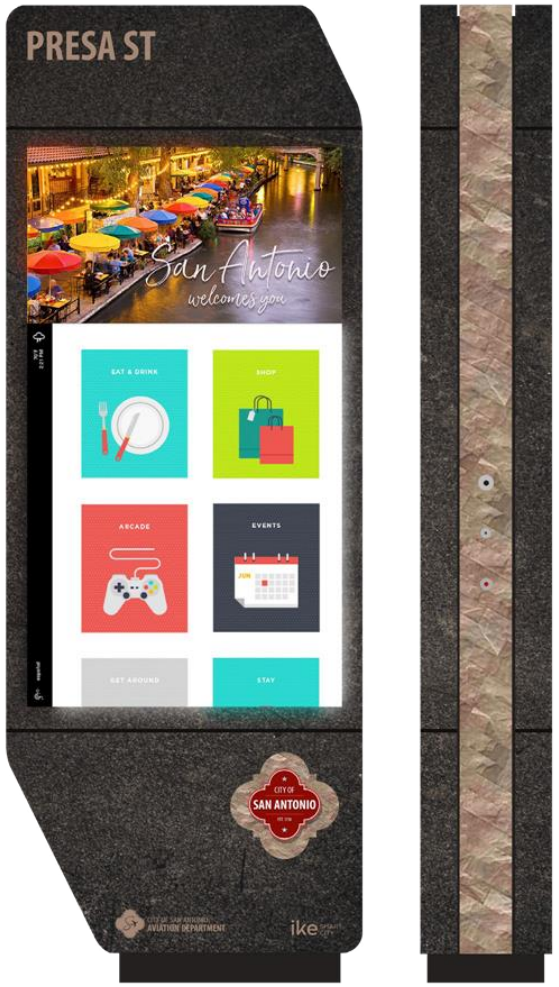
Size, color, and location of IKE and City branding elements

Exterior spine color

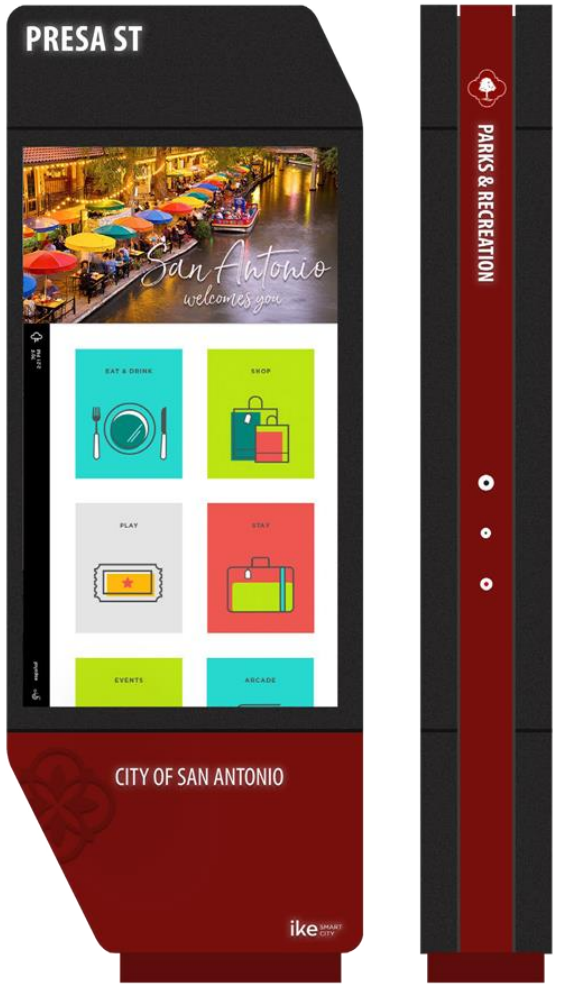
Exterior spine material and finish

Optional Emergency Call button

Design Options – Group A



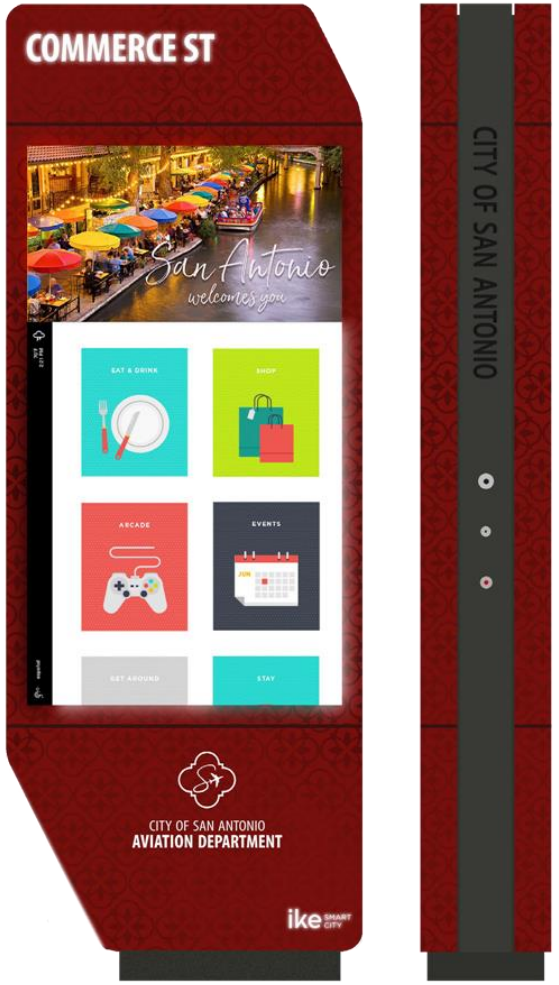
A1



A2

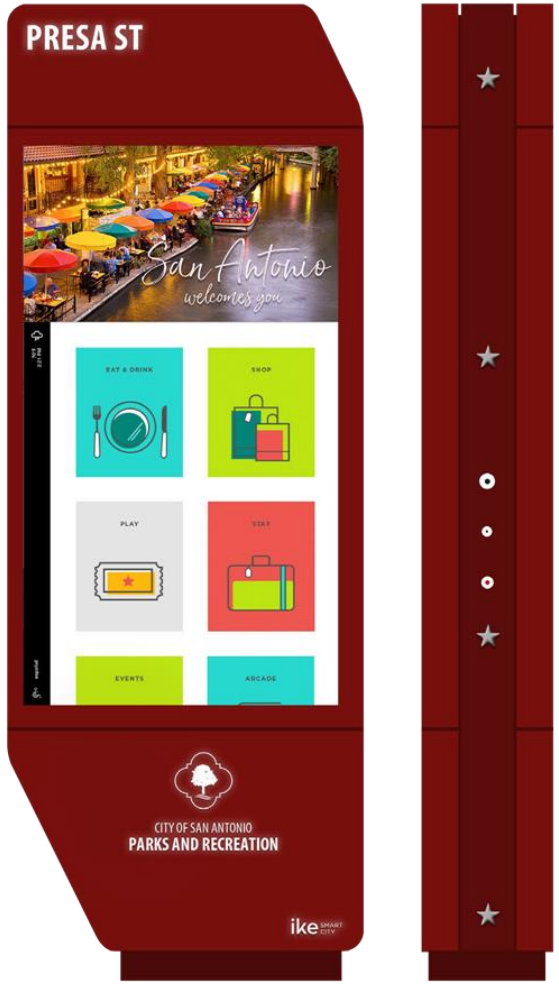
A3

Design Options – Group B



B1

B2



B3

IKE Smart City – Specifications of Materials Used

All IKE hardware is resilient for the duration of the contract and under warranty. Should any equipment or parts require service, maintenance or repair there will be no expense to the City of San Antonio.

Recycled Content & Materials
Approximately 25% aluminum pre-consumer, 1-5% post-consumer grade dependent. Approximately 34% copper tubing and wire post-consumer. Materials include aluminum, copper, glass and plastic.

Energy Consumption During Production
Approximately 20% of all energy used in the manufacturing process and 10% of all energy during use of the product come from renewable sources.

Energy Efficiency
25% of efficiency for all similar products as designated by the U.S. Department of Energy's Federal Energy Management Program (note, no standard exists for this specific product). All efforts have been made to reduce energy consumption in all manufacturing and use applications.

Low VOCs
All coatings used in the production process are a low to zero VOC paint.

Reduced Packaging
98% of all packaging will be reused during and after delivery of product.

End of Life Management
IKE Smart City LLC will accept the product back at the end-of-life including removal and transportation.

IKE Smart City – Signage

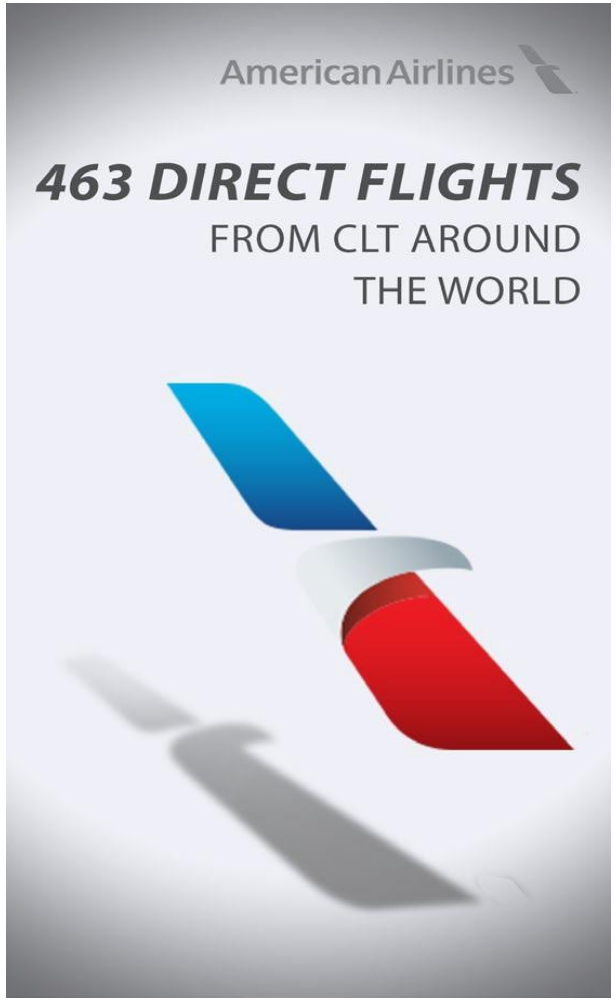
Modes of Operation

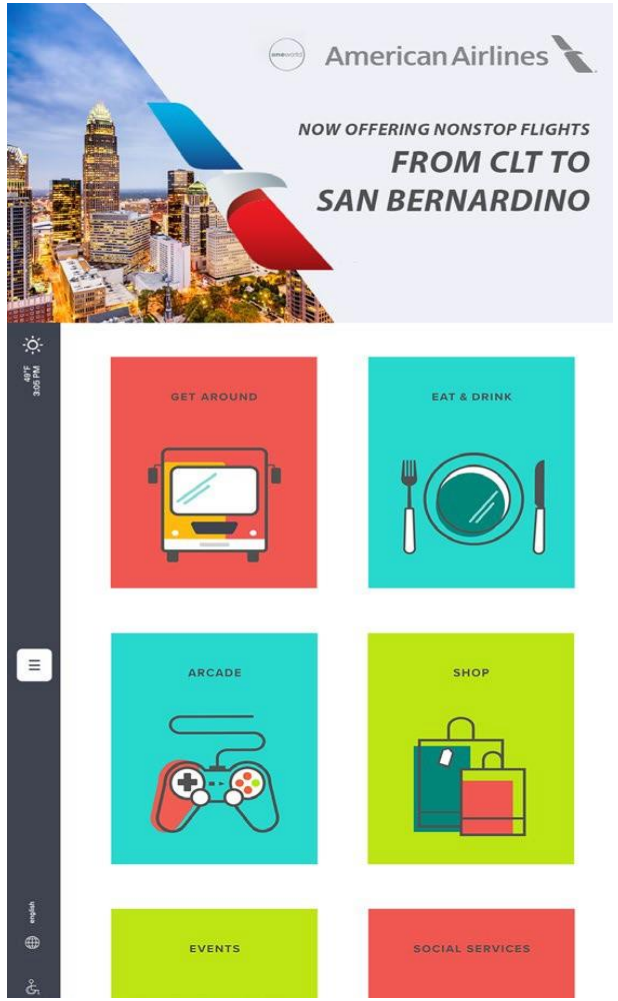
IKE has two modes of operation, allowing for an engaging mix of both interactive and commercial content.

PASSIVE MODE
(ATTRACT LOOP)

This is the default mode when a pedestrian has not engaged IKE's interactive features. During the Attract Loop, the entire screen is occupied by a 9:16 (portrait) layout showing an "ad loop" that features a combination of city, community, arts, and commercial messaging.

Once a pedestrian engages IKE by touching the screen, it shifts to Engaged Mode and the ad loop is resized to a 16:9 landscape layout at the top of the screen.





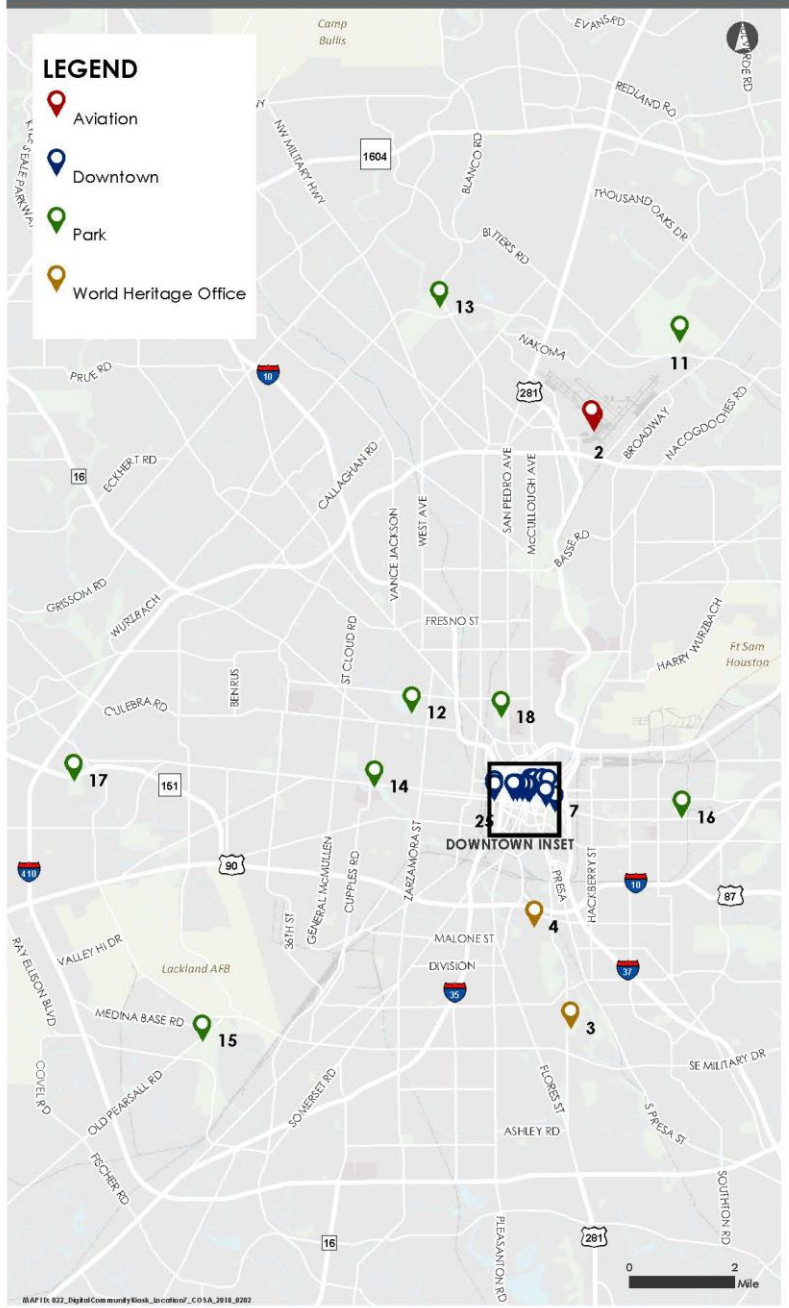
ENGAGED MODE
(DASHBOARD)

When the interactive user experience is launched, IKE shifts to Engaged Mode and the application dashboard home screen that begins every interactive IKE experience is displayed on the bottom two-thirds of the screen.

When IKE is engaged, a user can scroll through the applications with swiping gestures immediately familiar to any user of a smartphone. A simple touch to any of the dashboard tiles launches relevant content and provides additional interactivity within the selected application.

DIGITAL COMMUNITY KIOSKS - CITY OF SAN ANTONIO ONLY

Potential Kiosk Nodes
Version 7



COSA Locations

1. San Antonio International Airport
2. San Antonio International Airport
3. Mission San Jose
4. Mission Concepción
5. Houston St. & N. St. Mary's St.
6. Houston St. & N. Presa St.
7. Henry B. Gonzalez Convention Ctr.
8. Houston Street & Riverwalk
9. Houston Street & Alamo Street
10. Losoya St. & Commerce St.
11. McAllister Park
12. Woodlawn Lake Park
13. Phil Hardberger Park
14. Elmendorf Park
15. Pearsall Park
16. Lincoln Park
17. Tom Slick Park
18. San Pedro Springs Park

COSA Street Projects

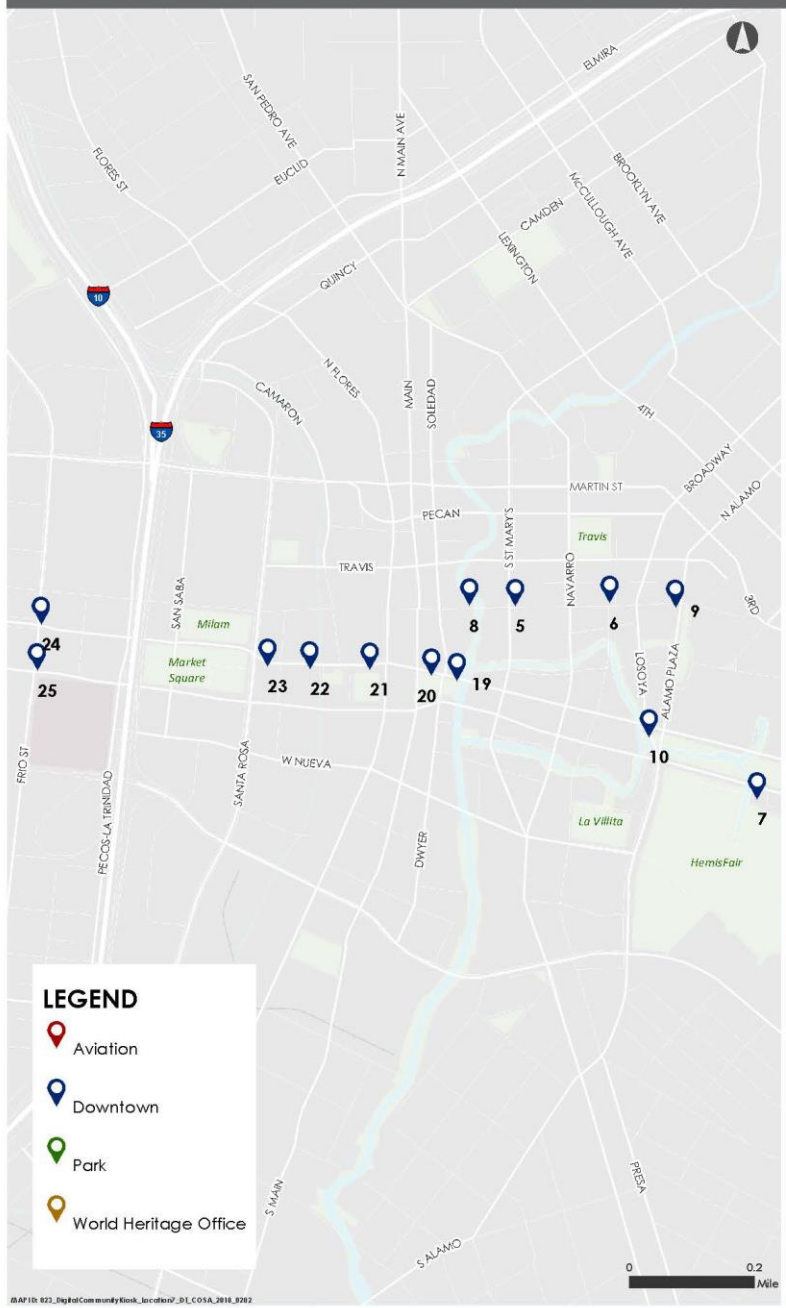
19. Commerce St. & San Antonio River
20. Commerce St. & Main Plaza
21. Commerce St. & Spanish Governor's Palace
22. Commerce St. & San Pedro Creek
23. Commerce St. & Santa Rosa
24. Frio St. & W. Commerce St.
25. Frio St. & Buena Vista St.

DOWNTOWN DETAIL

SMARTSA

DIGITAL COMMUNITY KIOSKS - CITY OF SAN ANTONIO ONLY

Downtown Detail
Potential Kiosk Nodes
Version 7



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25. Frio St. & Buena Vista St.

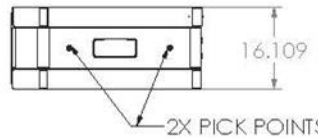
OVERVIEW MAP

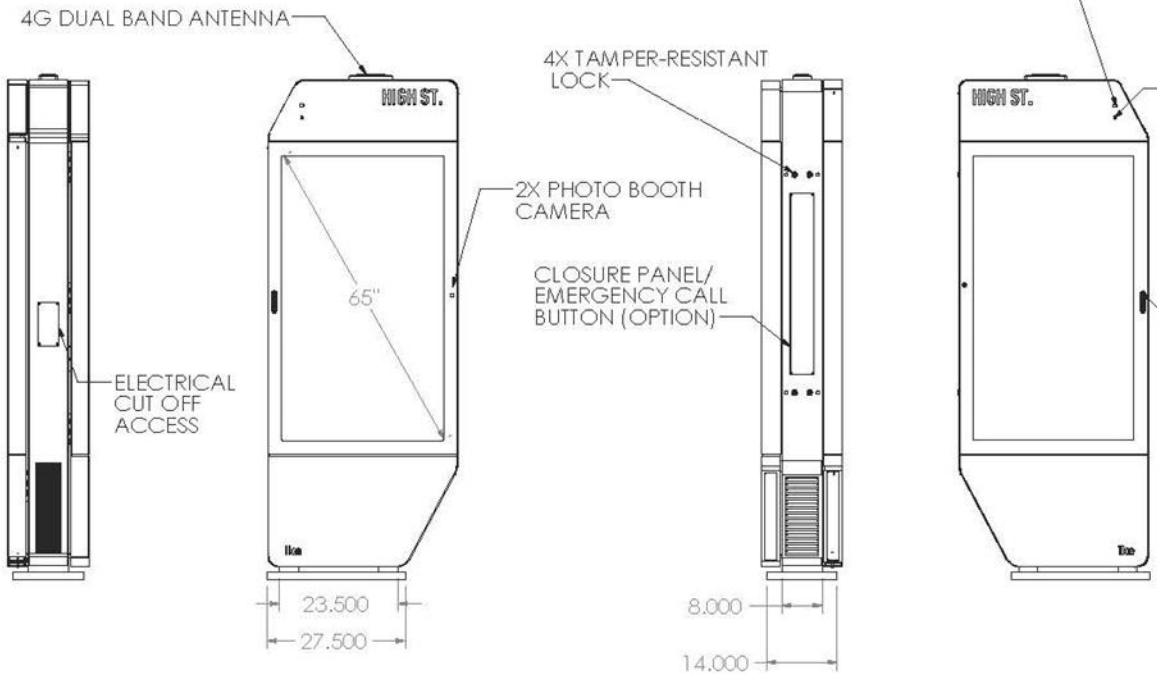
SMARTSA

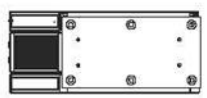
NOTES:

1. DEBUR ALL SHARP EDGES.
2. ALL THREADS TO BE FREE OF POWDER COAT AND, OR PAINT.
3. △ INDICATES CHANGE AT LAST REVISION

REVISIONS			
REV.	DESCRIPTION	DRAWN BY	DATE
A	INITIAL RELEASE	CCW	12/26/2017







ITEM #	QTY	PART #	PURCHASED PART #	DESCRIPTION
1	1	8275-02311		PENTAGRAM/IKE KIOSK, CABINET ASSEMBLY
2	1	8275-02360		DOOR ASSY
3	1	8275-02400		DOOR "B" ASSY

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
.XX = ± .020
.XXX = ± .010
.XXXX = ± .0050
ANGLE: ± .5°

INTERPRET DRAWING PER Y14.100.

DIMENSIONS AND TOLERANCES ARE IN ACCORDANCE WITH ASME Y14.5 - 2009.

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

DRAWN BY: CCW

MATERIAL:

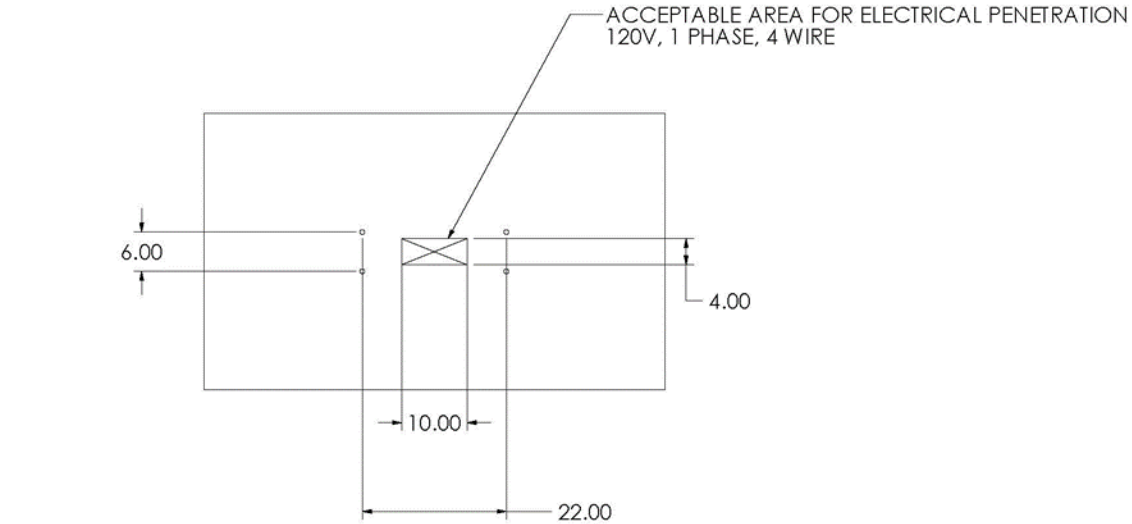
FINISH:

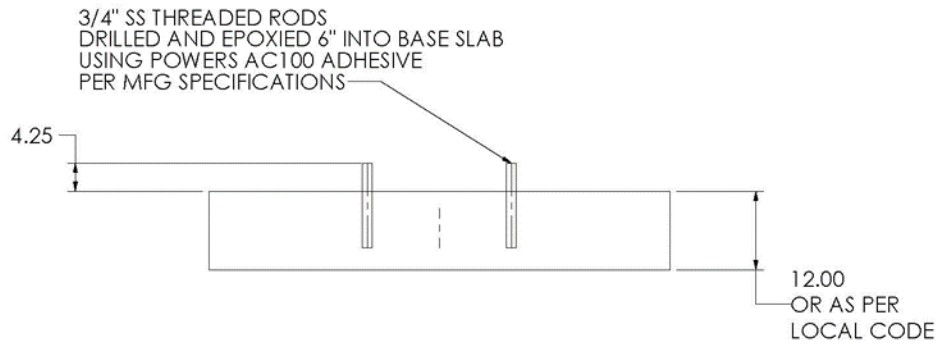
DISPLAY DEVICES, INC
GOLDEN, CO

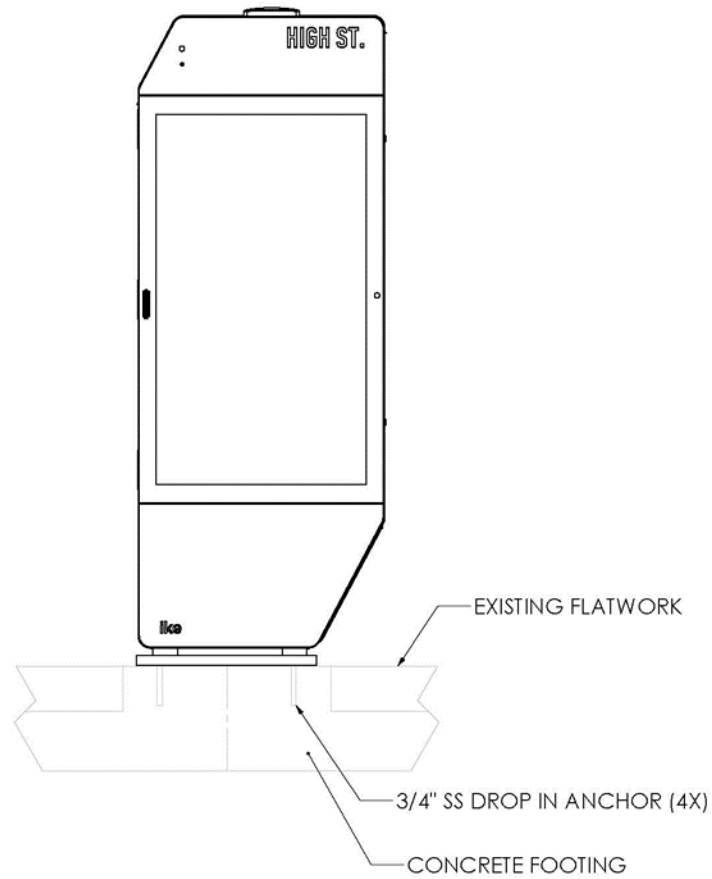
TITLE:
PENTAGRAM/IKE KIOSK

SIZE	DWG. NO.	REV
B	8275-02309	A

SCALE: 1:26 SHEET 1 OF 3







FOUNDATION DETAIL

NOTE:
THIS DRAWING WAS PREPARED FOR PRELIMINARY ESTIMATING AND CONCEPTUAL PURPOSES ONLY. ALL INFORMATION IS BELIEVED TO BE TRUE AND ACCURATE; HOWEVER, DDI ASSUMES NO RESPONSIBILITY FOR THE USE OF THIS DESIGN FOR ACTUAL CONSTRUCTION. DETERMINATION OF THE SUITABILITY OF THE DESIGN IS THE SOLE RESPONSIBILITY OF THE INSTALLER. FINAL DESIGNS FOR CONSTRUCTION PURPOSES MUST BE PERFORMED BY A LICENSED PROFESSIONAL ENGINEER, USING THE ACTUAL CONDITIONS OF THE SITE.

SIZE	DWG. NO.	REV
B	8275-02309	A
SCALE: 1:20		SHEET 2 OF 3

POLANE® 8890 Polyurethane Enamel

High Gloss White Base.....F63W100	High Gloss Clear Base.....F63C101	High Gloss Custom Blend.....F63ZX Series
Low Gloss White Base.....F63W102	Low Gloss Clear Base.....F63T103	Low Gloss Custom Blend.....F63LG Series
High Gloss Jet Black.....F63B104	Low Gloss Black.....F63B105	Catalyst.....V66V55

DESCRIPTION

POLANE® 8890 Polyurethane Enamel is a two component, aliphatic acrylic topcoat with fast dry and flexible application characteristics.

Advantages:

- Available in a full gloss range
- Available in a broad range of colors
- Quick tack free time
- High abrasion resistance
- Chemically resistant
- Less than 3.5 VOC* as applied
- Good performance over multiple substrates including steel, aluminum, ABS, PC-ABS, PVC and Polycarbonate
- Compatible with a wide range of primers including E61AC133 E61A280 and E61A510

Air Quality Data (Theoretical):

- Non-photochemically reactive
- Volatile Organic Compounds (VOC) as packaged, maximum, less exempt solvents 3.5 lb/gal, 420 g/L
- Catalyzed and reduced as listed: 3.5 lb/gal, 420 g/L

An Environmental Data Sheet is available from your local Sherwin-Williams facility or at www.paintdocs.com.

*VOC compliance limits vary from state to state; please consult local Air Quality rules and regulations.

CHARACTERISTICS

Gloss: 15-90 units (60°)

Volume Solids: 52 ± 2%

Viscosity:
Catalyzed and reduced, varies by color

High Gloss	12 - 16 sec #3 Zahn
Low Gloss	25 - 40 sec #3 Zahn

Recommended film thickness:

Mils Wet	2.9 - 3.8
Mils Dry	1.5 - 2.0

Mixing Ratio (High Gloss) F63ZX:
5 parts Polane® 8890
1 part Catalyst V66V55
0.25 Parts (max) V6V768 Accelerator
(7 oz max per gal)
0.6 parts recommended reducer

Mixing Ratio (Low Gloss) F63LG:
6 parts Polane® 8890
1 part Catalyst V66V55
0.15 Parts (max) V6V768 Accelerator
(3.5 oz max per gal)
0.7 parts recommended reducer

Pot Life: 2 hours (mixed as listed)

Spreading Rate (no application loss)
830-850 sq ft/gal @ 1.0 mils DFT

Drying (1.5 mils DFT 77°F, 50% RH):

To Touch:	20 minutes
Tack Free:	2 hours
Dry to Handle:	4-8 hours
To recoat:	No critical recoat
Force Dry:	30 minutes at 180°F

Dry times shown are with the listed mix ratios

Flash Point: 85 - 92°F Pensky-Martens Closed Cup

Package Life: Polane® 8890 2 years, unopened
V66V55 1 year unopened

APPLICATION

Typical Setups

Reduction: Reduce as listed below. Maximum total reduction is 10% by volume to maintain 3.5 lb/gal VOC.**

Airless Spray:
Pressure..... 1200-2600 psi
Tip ..... .011 - .013"
Reduction Rate.....5-10% R2K5 or R6K30

Air Assisted Airless Spray:
Atomizing Air ..... 25 psi
Fluid Pressure.....1800 psi
Tip ..... .011 - .013"
Reduction Rate.....5-10% R2K5 or R6K30

Conventional Spray:
Air Pressure ..... 50-60 psi
Fluid Pressure ..... 5-10 psi
Reduction Rate...5-10% R6K18 or R6K30

HVLP:
Air Pressure at the cap ..... 7-10 psi
Fluid Pressure ..... 7-10 psi
Reduction Rate...5-10% R6K18 or R6K30

**Polane® reducers may also be used.

Cleanup:
Clean tools/equipment immediately after use with R6K18 (Butyl Acetate), R6K30 (MAK) or Polane® Reducers

Follow manufacturer's safety recommendations when using any solvent.

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SPECIFICATIONS

General: Substrate should be free of grease, oil, dirt, fingerprints, drawing compounds, any contamination, and surface passivation treatments to ensure optimum adhesion and coating performance properties. Consult Metal Preparation Brochure CC-T1 for additional details.

Steel: Remove rust, mill scale, and oxidation products. For best results, treat the surface with a proprietary surface chemical treatment of zinc or iron phosphate.

Aluminum (untreated)**:** Prime with Industrial Wash Primer, P60G2, RoHS Compliant Wash Primer, P60G10, or Kem Aqua® Wash Primer, E61G522.

Galvanized Steel (untreated)**:** Prime with Industrial Wash Primer, P60G2, RoHS Compliant Wash Primer, P60G10, or Kem Aqua® Wash Primer, E61G522.

Plastic: Due to the diverse nature of plastic substrates, a coating or coating system must be tested for acceptable adhesion to the substrate prior to use in production. Reground and recycled plastics along with various fire retardants, flowing agents, mold release agents, and foaming/blowing agents will affect coating adhesion. A filler or primer/barrier coat may be required. Please consult your Sherwin-Williams Product Finishes Sales Representative for system recommendations.

Testing: The information, data, and recommendations set forth in this Product Data Sheet are based upon test results believed to be reliable. However, due to the wide variety of substrates, substrate properties, surface preparation methods, equipment and tools, application methods, and environments, the customer should test the complete system for adhesion, compatibility and performance prior to full scale application.

SPECIFICATIONS

Product Limitations:

• Polane® 8890 coatings must be catalyzed. **Do not vary catalyst ratio.** The catalyst ratio has been established for optimum hardness, flexibility, gloss, chemical and solvent resistance. Slight over or under catalyzation will not seriously affect performance.

• V66VC232 catalyst may be used in place of V66V55. The mixing ratios must be strictly maintained as 3.7:1 for high gloss and 4.5:1 for low gloss. Both have a 5% solvent reduction.

• Do not blend with any other polyurethane. No other catalysts or reducers are recommended because foreign materials such as alcohols and glycols destroy performance properties. Lacquer thinners and alcohol containing solvent blends should not be used with Polane® enamels.

• Polane® coatings are not recommended for exterior use on wood.

•Do not spray hot, heat shortens pot life. Do not pump catalyzed material from drums into circulating systems. Friction heat developed by pumps and circulation will shorten potlife.

• Protect Polane® enamels, catalyst and reducer from moisture as water affects pot life and properties. Store indoors.

• Do not package Polane® coated products in airtight plastic bags unless completely cured. Since Polane® Enamels continue to cure for several weeks, the buildup of organic solvents and reaction by-product could cause improper cure and adhesion failure in use.

•Blend with Phoenix® Colorants only. Do not exceed the maximum tint load of 24 ounces per gallon for Clear or 14 ounces per gallon for White

• Do not exceed the recommended amount of V6V768 per sprayable gallon of paint

• Clean application equipment thoroughly before and after use

Performance Tests

Bonderite® 1000 steel panels, F63W100 catalyzed 5:1 with V66V55, Reduced 10% with R6K18. 1.5 mils DFT, 14 days air cured

Impact Resistance, Direct	60 in lb
Impact Resistance, Indirect	40 in lb
Pencil Hardness	F-2H*
*Pencil Hardness may vary depending on dry film thickness, substrate and tester	
Taber abrasion	less than 100mg (1000g, 1000 cy, CS-17)
Conical Mandrel	Pass
Water Immersion	24 hours
Adhesion	5B
QUV-A	1000 hours
Salt spray (on Bonderite®)	300 hours
Salt spray (on Bonderite® and primed)	1200 hours
Heat resistance, Dry	300°

CAUTIONS

FOR INDUSTRIAL SHOP APPLICATION ONLY

Thoroughly review product label and Safety Data Sheet (SDS) for safety information and cautions prior to using this product.

To obtain the most current version of the Environmental Data Sheet (EDS), Product Data Sheet (PDS), or Safety Data Sheet (SDS) please visit your local Sherwin-Williams facility or www.paintdocs.com.

Please direct any questions or comments to your local Sherwin-Williams facility.

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Sherwin-Williams warrants the product to be free of manufacturing defect in accordance with Sherwin-Williams' quality control procedures. Except for the preceding sentence, due to factors that are outside of Sherwin-Williams' control, including substrate selection, and customer handling, preparation, and application, Sherwin-Williams cannot make any other warranties related to the product or the performance of the product.

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Thank You

ike SMART CITY

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