THIRD AVENUE // University to Stewart 10% Design

CITY OF SEATTLE DEPARTMENT OF TRANSPORTATION
IN PARTNERSHIP WITH KING COUNTY METRO

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Third Avenue Seattle

INTRO

Third Avenue plays a critical role in the function and perception of downtown Seattle. Over 65,000 people walk along the street daily-- visitors, workers, shoppers and residents. Additionally, Third Avenue accommodates over 42,000 transit boardings per day. Third Avenue deserves a high level of quality and a dignified public environment for all.

SCOPE

This effort is a 10%, concept level design, for the four blocks between Stewart Street and University Street. It is part of a larger, comprehensive effort to support a safe and attractive Third Avenue corridor.

OUTREACH

Third Avenue has a wide range of constituencies, and outreach efforts were made to a variety of community organizations, agencies, departments, interest groups, business owners and property owners. The project was also the subject of media coverage. The project presentations at the April 9 and July 9, 2013 City Council Transportation Committee were televised on the Seattle Channel and are available online at: http://www.seattlechannel.org/videos/watchVideos.asp?program=transpo

NEXT STEPS

The east side of the block between Stewart and Pine streets (the “Macy’s block”) will be built out per the design recommendations in early 2014 as the first implementation of the corridor vision. Completion of a 30% design level will follow in mid-late 2014, expanding the four block area of this study to the entire transit mall between Stewart and Main Streets.

project site

executive summary

DESIGN APPROACH

The project began with analysis of site context, assets and current usage. A full range of ideas were explored to meet the project goal of Third Avenue as a dignified, high-quality public realm, with a positive and memorable character.

The approach to the design was considered in three categories: Humanizing the Street, Organizing the Street, and Energizing the Street.

Humanizing the Street includes improvements to the quality of materials, street furnishings, art, lighting and landscape to give a sense of scale and care to Third Avenue. Recommendations include:

- Offering places for people to sit comfortably while waiting for transit or spending time along the street. The plan recommends a "kit of parts" of street furnishings that can be adapted to the various conditions along the street. These include canopies, seating and green walls. These elements would be clustered in carefully located "street life zones".
- Adding trees and landscaping where possible.
- Improving the quality of the sidewalk and other materials. Recommendations include materials that encourage maintenance and pride of ownership. Lighter-colored materials are suggested to reduce the feeling of darkness that now exists on the street. The use of photocatalytic concrete is recommended for its light color, its ability to contribute to air quality and self-cleaning properties. A simple design of poured concrete is recommended, with pavers in "street life zones" for scale and flexibility.
- Moving away from an aesthetic based on traffic engineering to a more thoughtful, human-scale design language. For example, integral color concrete with sandblast aggregate is recommended for curbs along bus zones rather than painted red and yellow curb.
- Organizing and standardizing street furnishings such as trash receptacles, news boxes and bicycle racks.
- Improving the lighting. Changing street lights to city-approved LED modules in cobra heads and pedestrian lights will improve energy efficiency, and the whiter light of LEDs offers better visual acuity and safety. For property owners, the recommendations include lighting direction for both opaque and glazed canopies. Lighting to highlight the unique architectural features along the corridor is encouraged.

Organizing the Street addressed the fundamental use of the street in order to improve its functions. The transit function underlies people's use of the street. The location of the "head" of bus stops and the arrangement of transit canopies, seating and lean rails sets the patterns of people waiting for buses. The street has limited seating areas and amenities that are not transit related. Recommendations for organizing the street include:

- Moving the head of the bus stops toward the center of the block where possible in order to relieve vehicular and bus congestion close to the intersections.
- Considering more balanced transit operations by moving some functions from the Pike-Pine block to the Pike-Union block.
- Adding kiosks that incorporate real-time transit information and off-board fare payment ORCA card readers. Locate kiosks to help manage pedestrian congestion.
- Offering weather protection near the curb, where transit riders may choose to wait near the loading area. At very heavily used transit stops, this reduces the friction between transit patrons crossing the flow of pedestrians along the sidewalk as they move from the canopy at the building edge to the curb.
- Infilling the pull-out parking spaces. The level of transit and pedestrian use is intense in this area, and functionally compromised by the pull-outs.

Removal of these zones will require rethinking access for residences and businesses, as well as, service and police vehicles.

Energizing the Street: Creative placemaking is intended to give Third Avenue a memorable, positive and distinctive image. Already energized with thousands of transit patrons and pedestrians, Third Avenue needs a powerful dose of creative spirit and culture to create a positive image. Recommendations include:

- Adding multimedia and digital arts to enliven blank facades and highlight the corridor's activities. For example, projections on the blank walls across from Benaroya Hall could bring the excitement of the symphony hall out into the public realm of the street.
- Encouraging art installations, especially interactive and temporary pieces, bringing interest and character to the street.
- Using digital technology to provide information, wayfinding and interest.

"Make Third Avenue a great street for transit, businesses, residents and visitors - an inviting accommodating, safe and attractive place where people want to be."

Memorandum of Agreement between the City of Seattle, King County and the Downtown Seattle Association for the Downtown Seattle Third Avenue Corridor, 2013

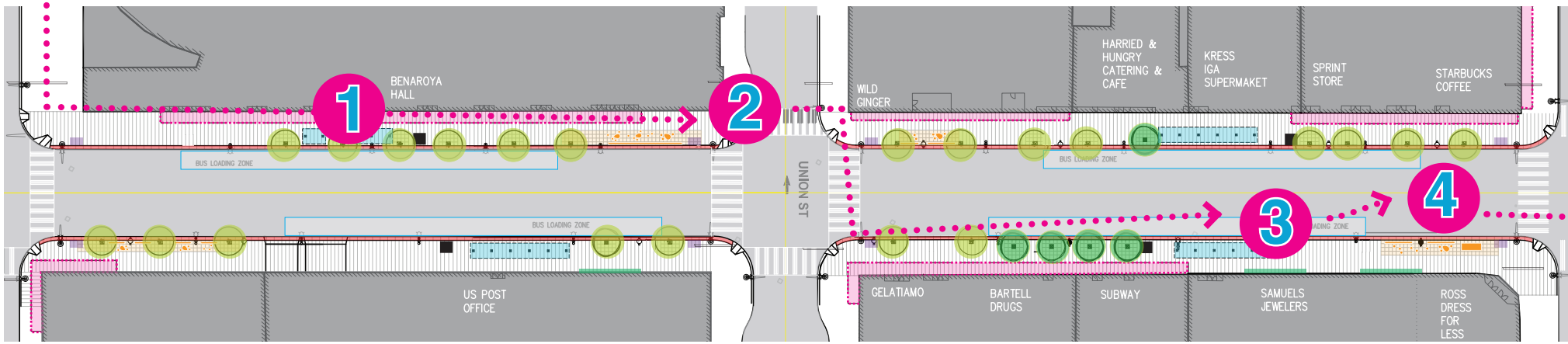
“Day in the Life” Third Avenue

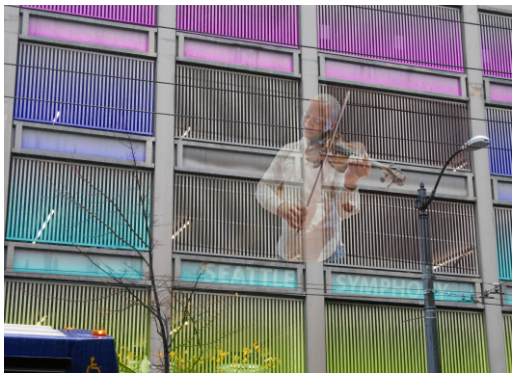
The primary transit street in downtown Seattle with more than 42,000 people a day passing through, Third Avenue should provide a unique experience for everyone.

This is an example of one journey

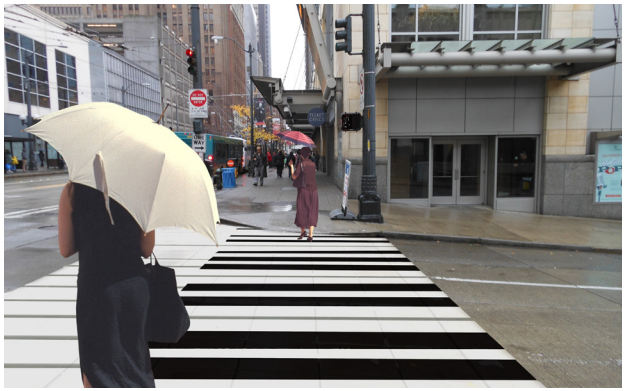
start

4 Check Third Avenue App to play a game with friends on Third





1 Stop to check out the lighting projections from Benaroya Hall on the garage across the street

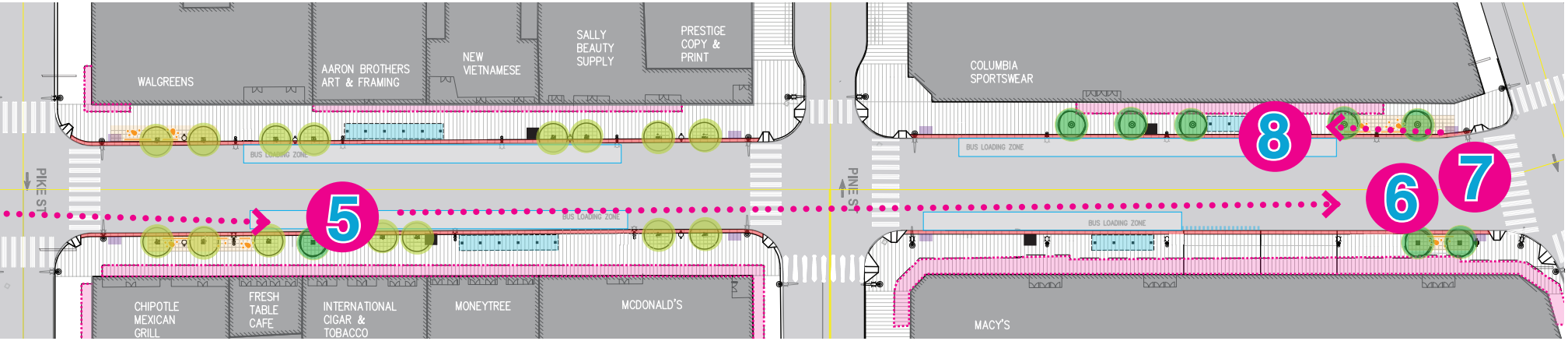


2 Take a walk down Third Avenue past Benaroya Hall and the piano crosswalk

3 Cross the street to sit at the green wall

5 Stop to get a coffee and smell the flower blooms

6 Do a little shopping, enjoy your coffee and hang out at the street lounge



7 While in the lounge, scroll through the digital curated artist poster show

8 Your bus is about to arrive, wait at the transit canopy to get your bus home

Table of Contents

Introduction

a. guiding principles
b. guidelines for a good public realm
c. site context and strategies

Guiding Principles

The project team and stakeholders developed an early set of guiding principles as a foundation for the design concepts and to inspire future implementation.

These principles provide a vision which will improve the quality of life, providing both physical improvements and creating a new identity for Third Avenue in the City of Seattle.

1 ALL CORRIDOR USERS SHOULD FEEL COMFORTABLE WALKING ALONG AND STAYING

2 TRANSIT RIDERS SHOULD FEEL COMFORTABLE AND HAVE A PLEASANT WAITING EXPERIENCE

3 BUSINESS OWNERS, TRANSIT RIDERS AND DOWNTOWN PATRONS FEEL A SENSE OF PRIDE AND STEWARDSHIP

4 THIRD AVE HAS A RECOGNIZABLE POSITIVE CHARACTER AND IMAGE

Guidelines for a Good Public Realm

THIRD AVENUE'S ROLE IN THE CITY

The public realm is a place that everyone can access in the city and therefore should be a place that is well cared for and provides a high level of public amenity.

Positive public life relies on good physical characteristics of the street, well organized, maintained systems, and abundant opportunities for positive social interaction. In the development of the 10% design for Third Avenue, numerous qualities that create great public spaces and streets are referenced.

Adjacent are guidelines of a good public realm that should be applied as a base level when developing Third Avenue.

STREETS SHOULD ....

- PROVIDE DELIGHTFUL ATTRACTIONS AND SURPRISES, REASONS TO WALK AND EXPLORE
- BE ENGAGING PLACES THAT EXHIBIT CARE AND HIGH QUALITY
- BE COMFORTABLE, WITH ROOM TO WALK, SIT AND WAIT
- INVITE A RANGE OF USES, BOTH FOR FUNCTIONALITY AND ENJOYMENT
- ADD VALUE TO THE CITY, LEAVING NO NEGLECTED PLACES
- ENCOURAGE TRANSIT RIDERSHIP AND SUPPORT SMOOTH TRANSIT OPERATIONS
- CONNECT PLACES, NOT DIVIDE THEM
- PROVIDE AND FOSTER A DIGNIFIED EXPERIENCE

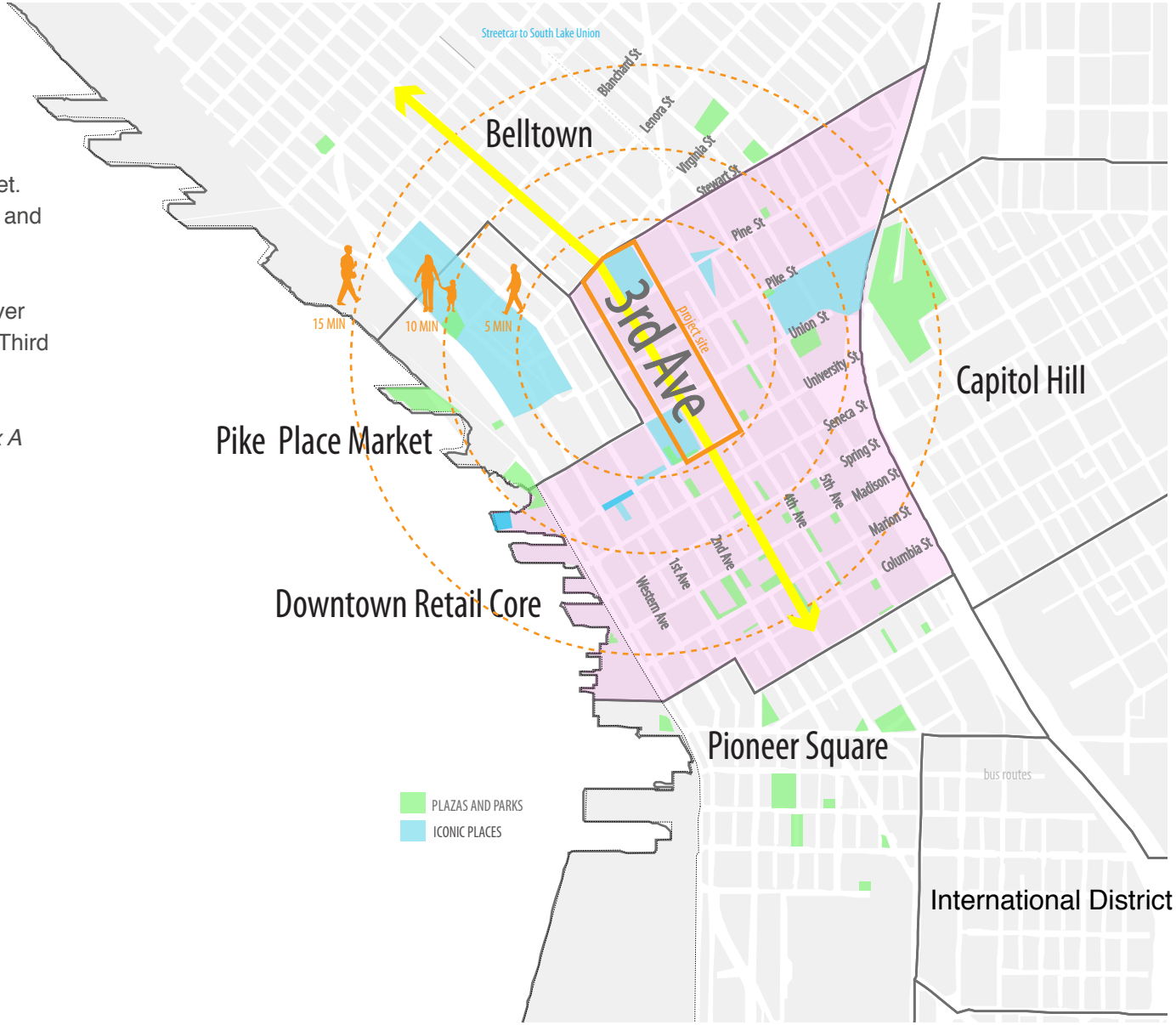
Site + Context

FOUR BLOCKS OF THIRD AVENUE

The 10% design includes four blocks of Third Avenue, from Stewart Street to University Street. The site is situated in the downtown retail core and is blocks away from Pike Place Market.

This effort focuses on these four blocks, however the elements can help to set the tone for all of Third Avenue in the future.

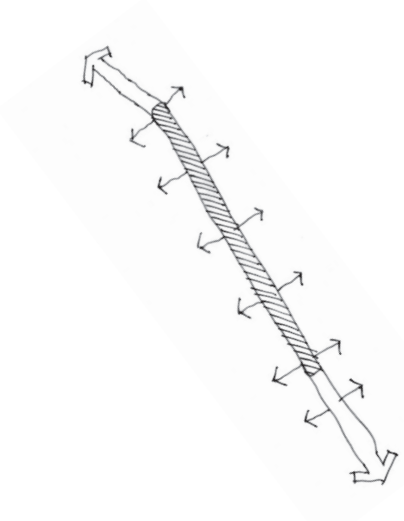
Analysis of site conditions is found in Appendix A

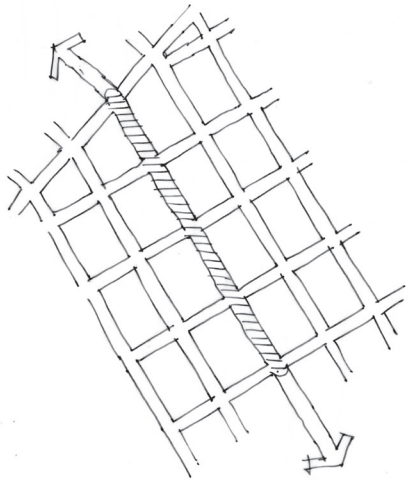


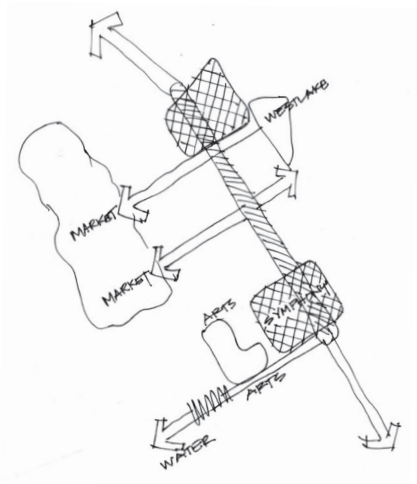
Third Avenue as linear element

Third Avenue as part of a web of downtown streets

Third Avenue as connection in a hierarchy of iconic places







> *"It turns out that the best way to make it look like you care, is to actually care."* Gordon Comstock

Site Strategies

KEY STRATEGIES TO ENHANCE THIRD AVENUE

After analysis of the site conditions and characteristics, several key strategies were developed in order to improve Third Avenue.

These strategies are reflected throughout the 10% design recommendations and provide a framework on how to approach development.

STRATEGIES

- Encourage a variety of human scale activities throughout the street, both temporary and permanent
- Create comfortable transit waiting and loading strategies for more effective use of the street
- Create new social areas on the sidewalk and leverage the critical mass of waiting transit riders to make the sidewalks active and inviting
- Promote a new, impressive identity for Third Avenue with iconic transit areas and consistent high quality paving and materials
- Support pedestrian activity by providing space and infrastructure for temporary programs such as vendors, kiosks, and events
- Enhance the appearance of Third Avenue with art, facade treatments and new trees
- Foster stewardship and participation by building and business owners - management is key to making change

Four block Concept design

a. humanize the street
b. organize the street
c. energize the street

Humanize the Street

A HOLISTIC STREET WITH A KIT OF PARTS

To humanize the street, the team approached the furnishings for Third Avenue as a “kit of parts” that can help to produce a holistic experience. These parts can be combined in a variety of ways, but most important, the placement of them needs to be appropriate to each block, building and adjacent use.

All furnishings should bring humanscale quality to the streetscape and create a pleasant pedestrian realm while also helping navigate people to and from transit. The kit of parts is a set of consistently designed elements that would replace varied and inconsistent street elements.

THIRD AVE “KIT OF PARTS” TOOLBOX

PUBLIC LIFE AMENITIES

street lounge / seating / kiosks / canopy
green facade treatments
“street care” vase program

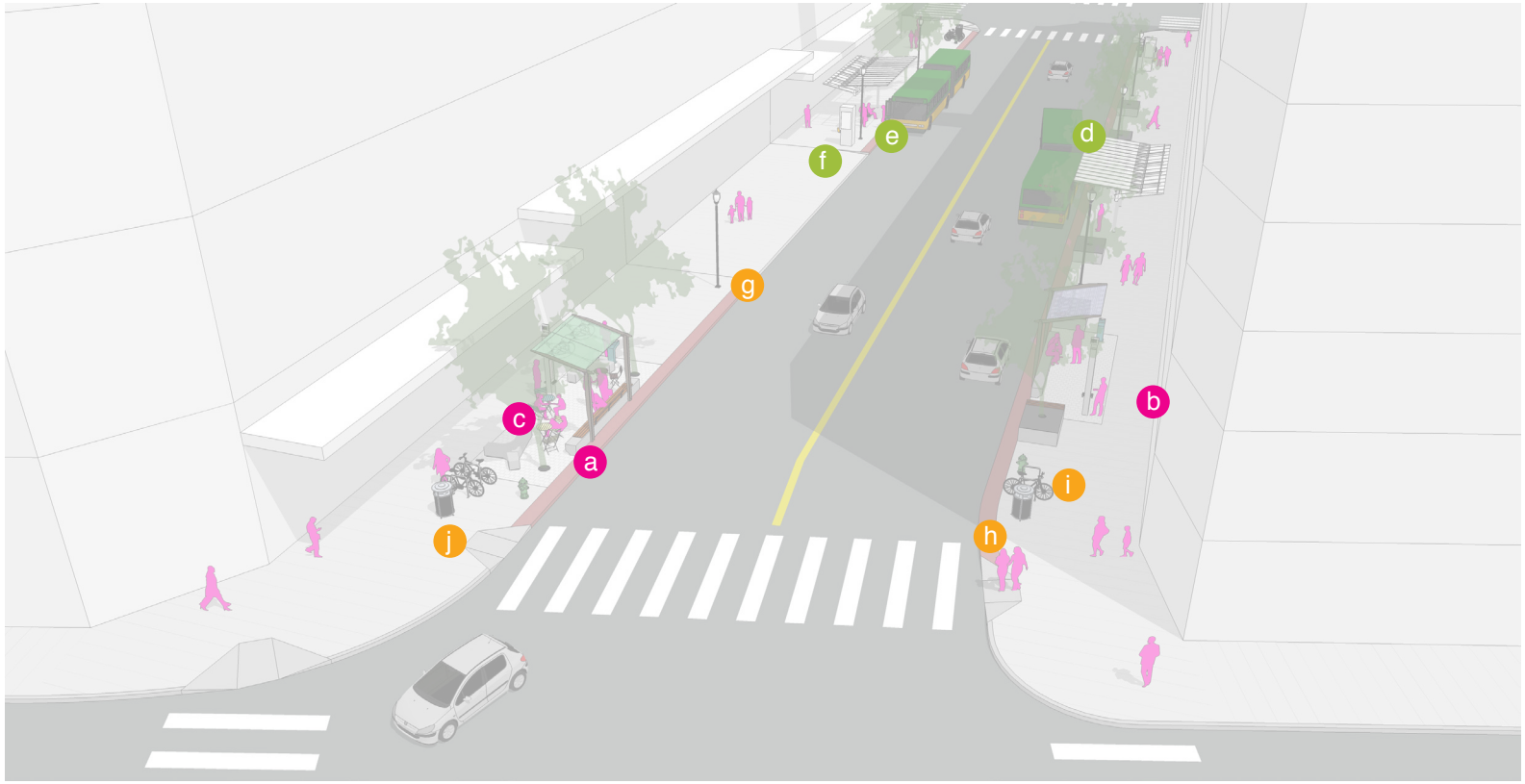
TRANSIT AMENITIES

signature transit canopy
seating / lean rail options
electronic real-time bus arrival sign + ORCA smart card reader

STREET ELEMENTS

lighting elements
paving, patterning, curb and trees
bike racks / news boxes
trash / recycling receptacles

BLOCK CONCEPT : LOCATING THE KIT OF PARTS



PUBLIC LIFE AMENITIES

a. street lounge (seating / kiosks / canopy)

b. green facade treatments

c. “street care” vase program

TRANSIT AMENITIES

d. signature transit canopy

e. seating / lean rail options

f. electronic real-time bus arrival sign + ORCA smart card reader

STREET ELEMENTS

g. lighting elements

h. paving, patterning, curb and trees

i. bike racks / news boxes

j. trash / recycling receptacles

Signature Transit Canopy

CREATING A TRANSIT IDENTITY

Third Avenue transit canopies are distinctive pavilions that bolster a new image for Third Avenue and facilitate fast, orderly boarding and aligning of buses. Serving numerous bus lines and many users a day, they are the focal point for each block's streetscape. They create the heart of Third Avenue's transit identity. To that end they should be impressive, contemporary, and refined in design. All transit canopies are consistent in appearance and amenities. Final product selection should include strong consideration of relative levels of weather protection, CEPTED, and pedestrian circulation.

Design Intent

- Bold transit identity and impact for Third Avenue with small footprint
- Glassy, flexible, light,open, handsome, modern, character-giving
- Scalable structure to accommodate existing trees
- Seating and lean rail modules
- Lighting integration within the canopy
- Recognition of existing building canopies in each block design

TRANSIT CANOPY PRECEDENTS

Transit canopy precedent. Portland, OR

Transit canopy precedent - product from MMCITE

South Lake Union Streetcar

TRANSIT AMENITIES

signature transit canopy
seating / lean rail options
real time signage / ORCA

a Glass Canopy

b Steel Frame shelter with integrated lighting

c 2 foot red curb assisting in boarding safety

d seating

e electronic real-time sign + ORCA smart card reader

Transit Seating / Lean Rail Options

CREATING A TRANSIT IDENTITY

Transit seating and lean rails should create a contemporary palette that is consistent across all transit blocks. They should be simple in form, comfortable for waiting and designed with high-quality materials.

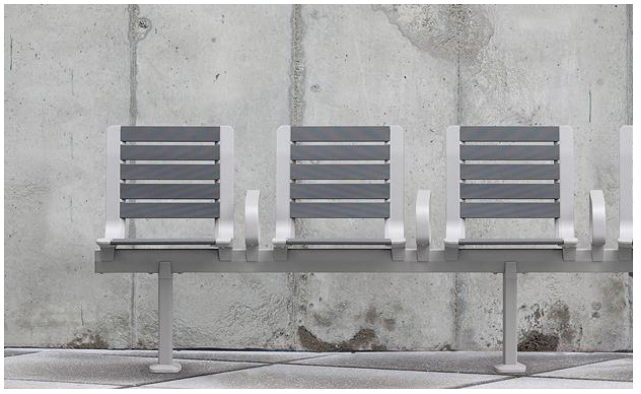
Design Intent

- Comfortable, but for short-term use
- High-quality material with a sense of craft
- Identifies with the same design vocabulary as the transit canopy

Transit bench with arms example

Transit bench with back and arms example

lean rail example

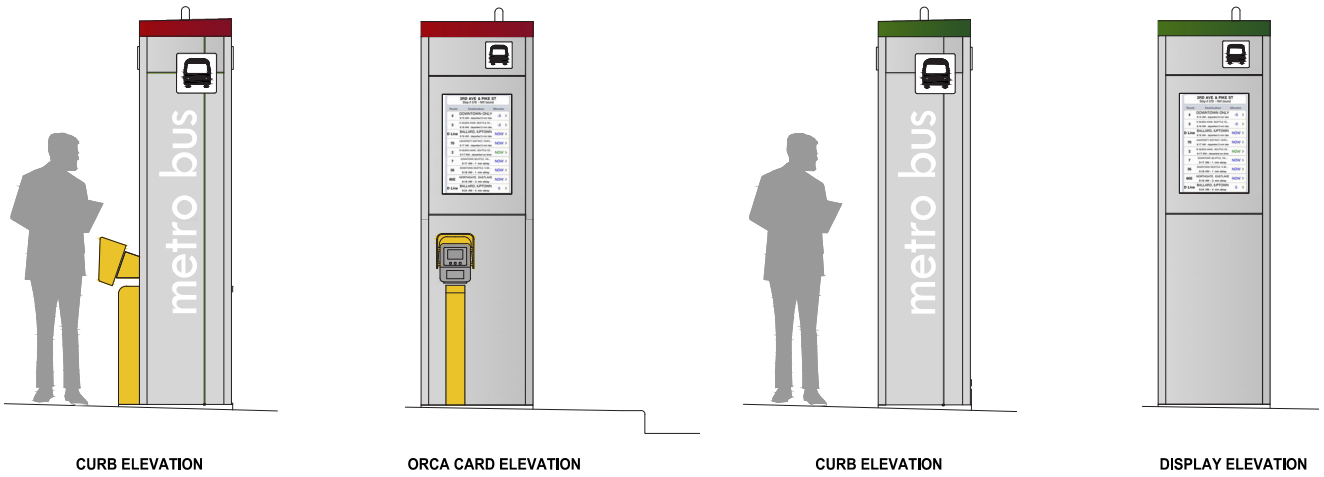


One person chair example

Electronic real-time bus arrival sign + ORCA smart card reader

Located within the bus zone, the electronic real-time bus arrival sign and ORCA card smart reader will allow for quicker boarding and provide up-to-date information on bus arrivals. The features include an LCD screen panel displaying real time OneBusAway information and Orca card reader.

Third Avenue Team and SDOT testing a mockup



Street Lounge

VISION

Third Avenue street lounges would offer transit riders and others a pleasant place to be on the sidewalk. They would become a unique part of the streetscape: located outside of the flow of pedestrian traffic and clearly defined. They are envisioned to be public “rooms” dedicated to comfortable, social sitting and waiting. Implemented over time through a partnership program, street lounges would have both consistent basic elements that make them functional and easily identifiable, as well as opportunities for idiosyncrasy in design and programming, contributing variety and character to Third Avenue as they accrue. Each is designed for its specific location and conditions.

Street lounges express the value of “street life,” leveraging the critical mass of transit riders to encourage more people to spend time on the sidewalk, making Third Avenue a more comfortable, vibrant, and popular street.

IMPLEMENTATION

To work well, street lounges must serve their function as both transit waiting areas and gathering spaces; their success relies on their individual appeal. To that end, every street lounge must be well located and designed, and dutifully maintained. This requires investment and ongoing commitment, shared by multiple parties motivated to ensure the long term success of Third Avenue.

Each street lounge is implemented through a unique partnership with building owners, storefront tenants, business associations or neighborhood groups with a vested interest, or a new “friends of” organization. These are all stakeholders who see value in the public realm as a potential benefit to their own goals and initiatives. A high-quality streetscape with gathering spaces might serve as an inviting entry experience for patrons, a place for customers to enjoy purchased food, or a stage for activating a desolate or misused section of the block.

During reconstruction of a block, the City is primarily responsible for the initial, baseline construction, including some of the basic street lounge elements, such as the pavers. City led committees will be responsible for design review and direction for additional street lounge elements developed with sponsorship. The sponsor is primarily responsible for additional design elements, program or vending activities, as well as maintenance of those elements and routine cleaning of the street lounge, to keep it inviting, comfortable, and safe at all times. The exact terms of these commitments can be further defined in subsequent phases of the Third Avenue design process.

We recommend that the Third Avenue street lounge program is initiated and managed by the City. Referencing the site priority recommendations, goals, and performance criteria included in the implementation section of this document, the City should solicit proposals from interested sponsors. Evaluation criteria should include the applicant’s demonstrated commitment and capacity to maintain the street lounge over a defined period of time, the value and likely success of the proposed street lounge location, and its conceptual / schematic design. The City then awards streamlined “street lounge permits” and potentially subsidies for construction, in addition to building the basic elements—such as a barrier wall, canopy, and information post—that comprise the base street lounge. The City reviews, coordinates, and approves design and construction of additional elements proposed by street lounge sponsors; these elements (such as seating and planting) are the responsibility of the sponsor.

Precedent programming and implementation: San Francisco Parklets: a San Francisco Planning Department, Pavement to Parks program.

All street lounges provide seating options, weather protection, and information posts.

A street lounge may host a vending kiosk or food carts. Here a pretzel vendor is set up permanently (background of image), and puts out folding chairs for customers during the day.

DESIGN & PERFORMANCE

While all street lounges have in common a few essential elements that are part of the baseline program, each also offers unique features or characteristics that are specific to its location and use. The primary (baseline) design should contribute maximum flexibility and potential for additional design. Similarly, the secondary (unique) design should respond to the specific conditions of its site and provide a distinct experience, to the greatest extent possible.

Street lounges are public and always available for use by any person, and should be designed as such: encouraging positive use by a wide range of people and discouraging bad behavior. Their design and materials should be urban and robust in character and quality, commensurate with the surrounding environment, and sustainable in terms of human, material, and economic resources.

Street lounges should be implemented only where they are certain to thrive. At a minimum they must be useful, comfortable, and inviting, supporting constant activity. In some cases, ample seating may best serve that goal; in others, the street lounge design may accommodate specific programs, such as vending kiosks or recurring events, to activate that location and ensure its success. Location, design, and ongoing care and maintenance are critical factors and should be considered together while planning the street lounge program.

Additional considerations and criteria for the street lounge components are described on page 28-39.

Street Lounge Elements

SEPARATION FROM STREET* a

Each street lounge provides a barrier at the curb—a low wall and bench—to improve a sense of separation from adjacent traffic as well as provide seating. The canopy design reinforces this goal.

SHELTER & COMFORT* b

Each street lounge provides significant weather protection of seating areas. High, transparent canopies provide cover from rain. Canopies are removable, allowing for seasonal variation. While the canopy frame is consistent among all lounges, the panels are unique, offering opportunities for art and particular intricacy at each location.

We recommend that each street lounge provides heat during cold months, elevating the level of comfort and appeal above the rest of the streetscape. The heating element may be integrated into the canopy, paving, or walls and shall be efficient and responsible from an energy use perspective.

Each street lounge provides lockable power outlets for public use. Potentially, this may be off-the-grid power, drawing from renewable energy sources such as solar or wind.

As needed, street lounge designs include lighting to ensure safety and comfort at night.

THIRD AVENUE POST* c

Each street lounge features an interactive multimedia Third Avenue Post: a distinctive streetscape element that provides a number of amenities to support transit use, pedestrian experience, and utilization of the lounges, including:

- Real-time updates of bus arrival times, to let riders know when their bus is coming and help them to move to the transit canopy at the right time
- Interactive touch-screen digital transit maps and schedules, including a trip-planning application and city-wide way finding
- Wireless internet access free to the public

SEATING d

Each street lounge provides seating and standing options, such as long social benches, individual seats, lounge chairs, perches and lean rails, stand-up bars, and so on. Designs should include universally accessible options and support comfortable, positive uses by different types of users and discourage illegal behavior.

Movable tables and chairs may be provided and managed by the street lounge sponsor.

OTHER FURNISHINGS e

Each street lounge provides a universally accessible drinking fountain, and receptacles for trash and recycling.

TREES

Where space and soil conditions permit, street lounge designs include new trees, well protected by barriers that may provide another use, such as a seat or bar. New trees match existing street trees nearby.

Existing trees in good health should remain and be protected by barriers as described above.

PROGRAM SPACE

Where desirable and viable, street lounges provide open paved areas and utility connections for temporary programs such as:

- Food vendors with permits for temporary sales, such as carts

- Semi-permanent kiosks such as flower stands, news stands, and coffee stands

- Occasional or recurring events such as mobile libraries, street performances, and bike repair stations.

Such programs should support the goals of the street lounge program and the value of “street life” generally.

** These elements are included in the primary, baseline street lounge design.*

Green Facade Treatment

CREATING SPACES OF INTEREST ALONG THE STREET

A new program of freestanding facades improves the appearance of several barren, vacant, or neglected building walls and elevates the quality of the streetscape’s edge. A robust frame designed for the human scale provides a consistent structure for hosting a wide range of two-dimensional projects that enrich the sidewalk. The façade program is coordinated with adjacent building owners and tenants.

Design Intent

- Provide interest along blank facades
- Create green soft edges along the street
- Develop areas for seating and comfort

Third Avenue Blooms

DEMONSTRATING CARE FOR THIRD AVENUE

The Third Avenue Neighborhood Flowers Program would invite neighbors—building owners, storefront tenants, or anyone else—to show their support for the ongoing beautification and care of their street. The proposed program furnishes a new Third Avenue flower vase—a small, durable, brightly colored design—and encourages neighbors to put their vases where they will charm the public realm: in their window, at their front door or light post in front of their store. On a regular basis, vases are refilled with cut flowers from the flower stalls at the nearby Public Market; of course neighbors may choose to add their own.

The flowers, the vases, and the act of placing the flowers all become identifying symbols of the neighborhood, expressing the attention, affection, and commitment of the people of Third. This program starts with a small gesture—placing a flower—and broadcasts it at an urban scale. It puts flowers everywhere and invites people to participate by placing more vases, adding more flowers, and encouraging others to do the same.

Flowers at Pike Place Market

Lighting Elements

LIGHTING APPROACH FOR THIRD AVENUE

Lighting has a huge impact on the urban environment. It enhances pedestrian and vehicular visual acuity, reinforces a perception of security, acts as a tool to demonstrate leading edge environmental technologies, encourages tourism and attracts businesses which may look to establish and invest in the corridor.

UNIFIED STREET AND PEDESTRIAN LIGHTING ELEMENTS

+ Will organize the streetscape along the four block section. Rhythmic installation of cobra heads will evenly illuminate the street for vehicular traffic and crosswalks.

+ Globe historic in nature, pedestrian poles will provide way finding, increase visual acuity, provide a sense of security and create a lighting layer at the human level. This approach will be augmented by providing canopy downlighting and uplighting to the extent possible while minimizing light pollution.

+ New standard street light for arterial streets developed by Seattle City Light (SCL) and Seattle Department of Transportation (SDOT) will be used.

  The new wayfinding LED cobra heads will improve energy efficiency by reducing energy consumption and providing a high degree of controllability.
  Also, the higher color rendering index (CRI) of the LED fixtures will improve visual acuity, while better light distribution will increase safety for drivers and pedestrians.

+ The pedestrian scale fixtures will create visual unity for the pedestrian experience. The new style pedestrian fixtures will avoid light pollution by distributing the light downwards while providing better facial recognition and increasing the sense of security. LED technology will produce energy savings and reduce maintenance cost.

LED cobrahead light examples

LED pedestrian light examples

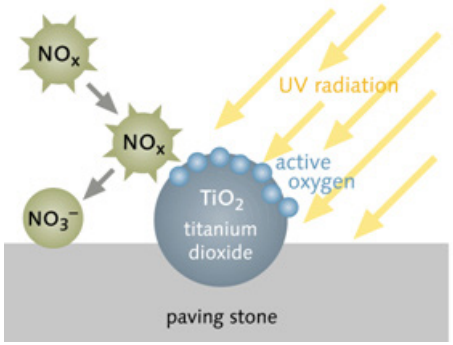
Paving, Patterning, Curb + Trees

PHOTOCATALYTIC PAVING TO HELP CLEAN THE STREET

Sidewalk material and patterning will be a consistent treatment made from photocatalytic concrete which will brighten the corridor and potentialy aid in controlling pollution. The surface paving will contain:

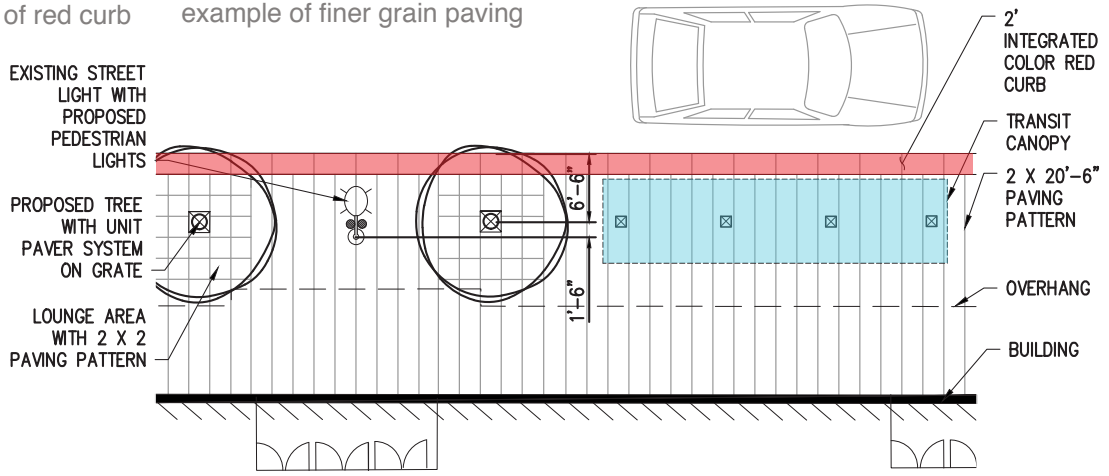
- Street lounge paver treatment providing a distinctive finer grain
- Horizontal paving patterning to elongate the depth of the sidewalk
- Use of light colored paving material to reflect light and brighten sidewalk surface
- Intersection treatments that prioritize the walking area for pedestrians
- 2 foot red curb material along the blocks with different curb design at driveways
- Tree grate paver detail (see page 34)
- Pull-out infills (see concept plans)

photocatalytic paving



example of red curb

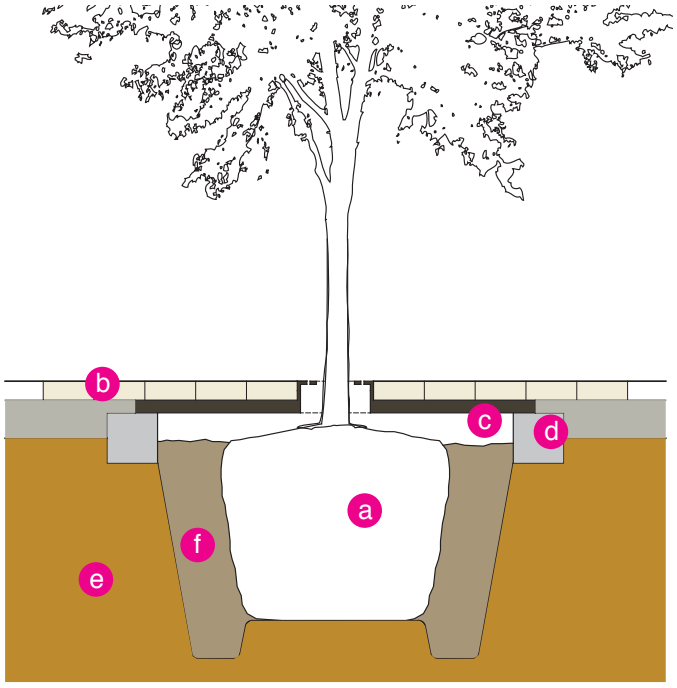
example of finer grain paving



TREE - PAVER GRATE SYSTEM

An off the shelf “paver grate” paving system is an alternative to standard tree grates or planting areas for street trees, fostering street tree growth and health while maximizing the usable space of the sidewalk and reducting grit on the sidewalk surface. A large, 8ft x 5ft steel tray holds unit pavers above the tree root zone, fostering oxygen and water intake and eliminating destructive compaction of the planting soil medium. The tray is designed so the tree trunk opening can expand as the tree grows; pavers extend nearly to the tree with no threat of girdling it over time. Paving is continuous with the surrounding paving; the tray below is not visible.

All existing healthy trees should remain and new trees should be given the largest trench feasible, to maximize the compaction-free zone.



a tree root ball
b unit pavers
c paver grate / tray
d cast in place concrete curb
e compacted subgrade
f planting medium

Bike Racks + News Kiosks

BIKE RACKS

Bike racks should be simple and consistent across Third Avenue. The product should be functional and minimal in appearance and easy to access. We recommend four racks per block face based on block bike usage.

NEWS KIOSKS

In order to reduce clutter, redundancy, and misuse of news racks, we suggest that they be consolidated into a news kiosk that can be located at the street lounges. The kiosk could be an attractive element of the street that engages people in the streetspace instead of just another element in the sidewalk.

We recommend that a kiosk should:

- focus on sale of newspapers, magazines, and potentially other items at street lounges
- Are attractive, and of high quality construction
- Potentially help to activate the street lounges and maintain them
- Could be temporary (movable as needed) or permanent structures

A unique custom bike rack design provides another way to develop a distinct identity for Third Ave. Examples are from Yerba Buena, CA.

street lounge news kiosk example

Trash / Recycling Receptacles + Water Fountains

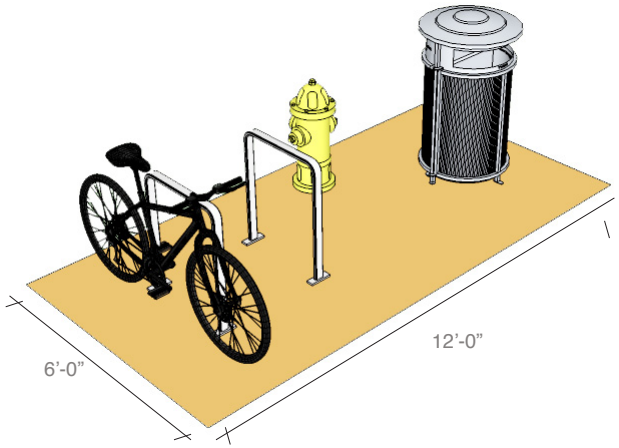
TRASH / RECYCLING RECEPTACLES

Consolidating trash and recycling receptacles into one palette will provide a clean environment that is also attractive along the streetscape. Recommendations for furnishings include:

- easy to use
- light feeling on the streetscape
- consolidated single can recycle and trash to reduce clutter, however with clearly marked recycling

WATER FOUNTAINS

Additionally, adding water fountains in each street lounge adds a utilitarian amenity and also utilizes



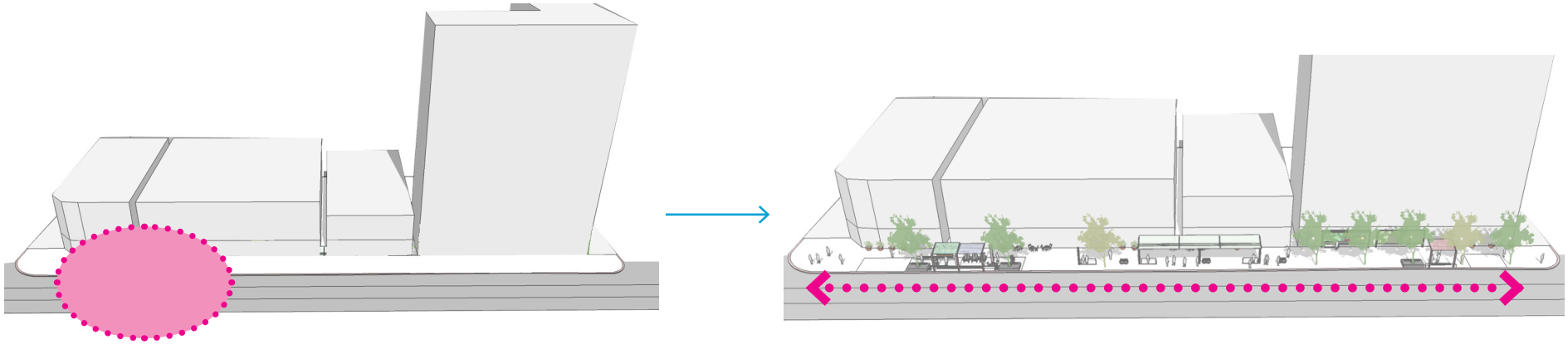
potential style of any new water fountains proposed

Suggested zone and dimensions for essential street elements. Located at each corner block face, this zone helps to organize furnishings without interrupting pedestrian flow throughout the whole block.

Organize the Street

As a first step, the design team reviewed fundamental changes that could improve the function of the street. These include bus operations, location of transit stops, allocation of walk zones, and pedestrian amenities. The intent of organizing transit service, infrastructure and street furnishings is to better use the limited space between buildings and the curb.

Some of the key recommendations, as stated in the executive summary, include: moving the head of the bus stops to the center of the block, considering a new bus stop along the Pike-Union block, adding real-time information and ORCA card kiosks, creating transit canopy waiting areas along the curb to spread people out along the block, creating a unique identity for the corridor and infilling the pull-out parking spaces to give more room to pedestrians on the sidewalks.



EXISTING CLUMPS OF PEDESTRIANS ALONG THE BLOCK

PROPOSED CONCEPT TO SPREAD PEOPLE ALONG THE BLOCK WHILE WAITING AND ENJOYING THE STREET

"...when you invite artists to participate in creating works for all kinds of urban public places, it adds tremendous vitality to those cities"

Nicholas Baume, director of the Public Art Fund
NY Times article on "The Bay of Lights" project

Energize to Create Place

A FUNCTIONAL AND ENGAGING URBAN BLOCK

We propose creating interest and excitement around a new vision for Third Avenue by developing programs around art, both temporary and permanent, creating opportunities to develop a digital identity and formulating new programs around the street lounge concept.

In this approach, we provide precedents and examples of urban interventions, art and digital elements that could help contribute to a new identity.

a Phone booth book exchange
Unknown Artist

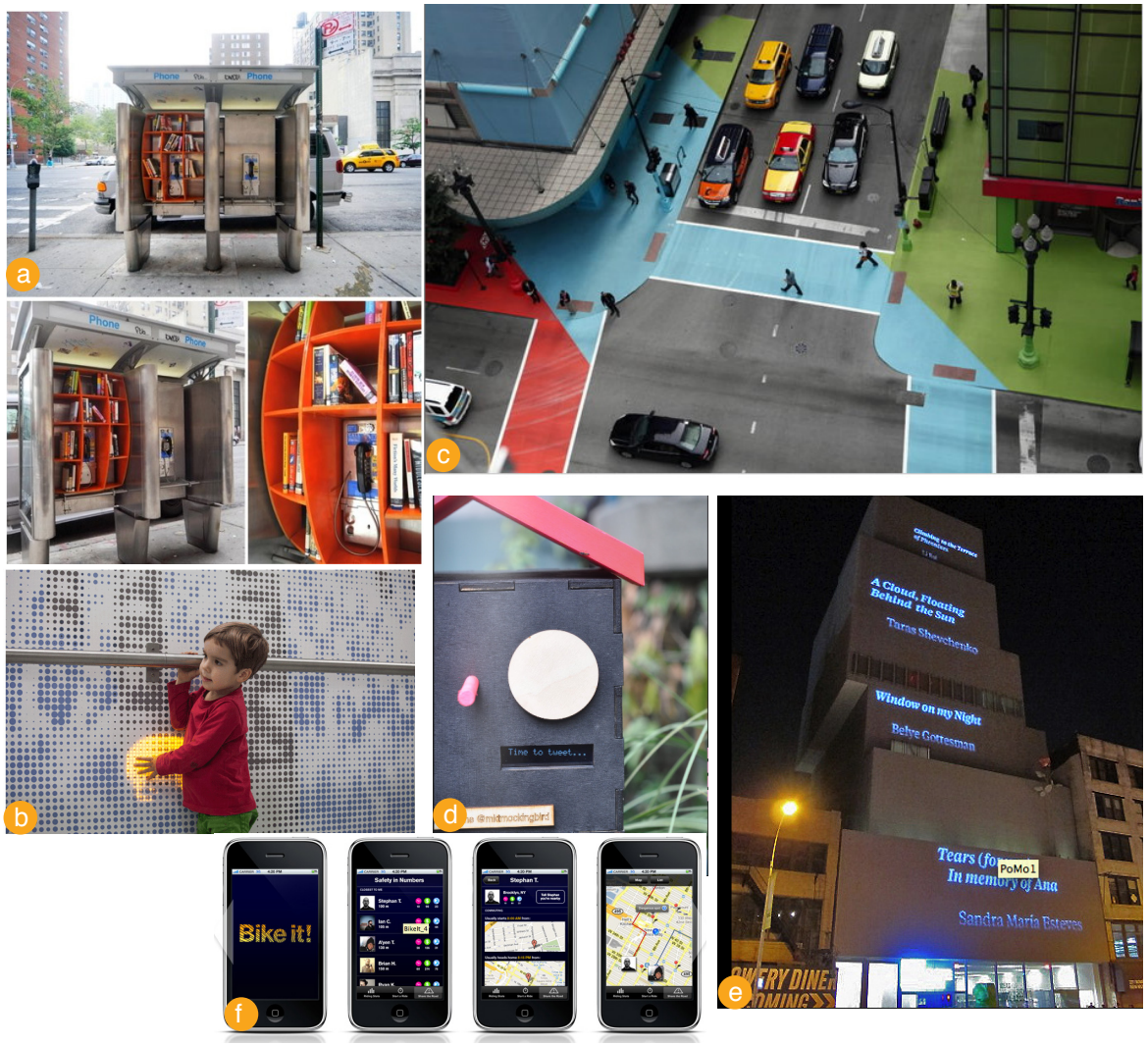
b Interactive LED wall in London
Jason Bruges
http://www.jasonbruges.com/

c Color Jam - temporary art installation
Jessica Stockholder
http://artloop.chicagoloopalliance.com/about/color_jam/

d tweethouse installation
Jenny and Allan Kempson
funded by OACA/SDOT art interruptions

e Poetry projection mobile
Local Projects
http://localprojects.net/project/poemobile/#1

f Bike it phone app and signage
Local Projects
http://localprojects.net/types/page/6/?type=mobile#2



Small-Scale Temporary Installations

ACTIVATING THE RIGHT OF WAY WITH ART

Engaging with artists and adding small installations can help to improve and make Third Avenue a unique place in the city.

We recommend connecting with programs, such as City of Seattle Art Interruptions, which gives small grants to artists to create temporary artworks in the right of way. These are low-cost solutions that can provide huge benefits in terms of creating engaging elements along Third Avenue.

Digital curated artist poster show
Example of rotating art integration shown on street lounge “info pole”

Interactive Hop Scotch
Urban Prototyping

ROW untitled
Chris Papa

Crosswalk Pong
Sandro Engel and Holger Michel

Multimedia Art

CREATING HUMAN ENGAGEMENT WITH PLACE

Interactive, kinetic light experiences along the corridor enchant and delight pedestrians. Many cities around the world have energized their urban environments with light art. Seattle is no exception with its new exhibit mounted on the west façade of the Seattle Art Museum, Mirror by Doug Aitken, a panorama of LED panels that stream images of the Northwest.

Each December in Lyon, France the city becomes a multi-media experience of 2D and 3D projected images on their buildings. During the 2010 Winter Olympic in Vancouver, the exterior of the pavilion displayed interactive light art in which the participants could catch light snowflakes. La Vitrine, an LED interactive panel system at ground level, invites pedestrians to draw on the window with light. On March 5, 2013, the Oakland Bay Bridge debuted its nightly show of 25,000 programmed white LEDs.

The team has identified three positions along the Third Avenue corridor, between Stewart and University, for light art.

Stewart and Third Avenue

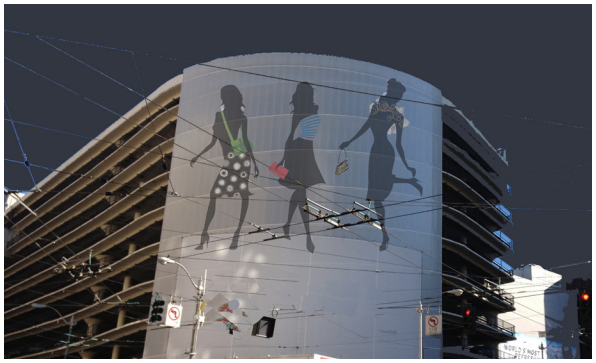
Content for the light art at this façade could celebrate the vibrancy of Seattle's retail community. The acrylic clad, curved ramp of the garage is the perfect surface for projections. Live or recorded video images will be streamed from projectors mounted across the street.

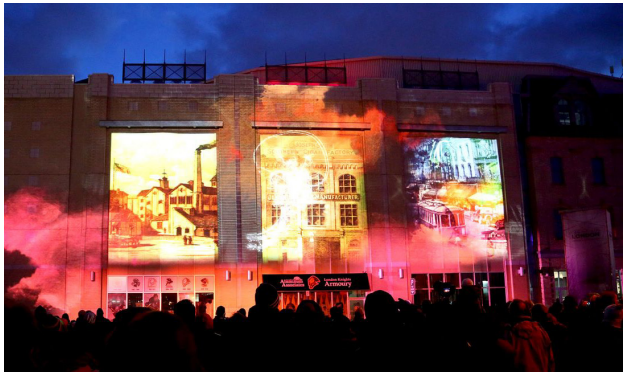
Pike and Third Avenue

This is one of the two blocks along Third Avenue that caters to providing people's day-to-day functions: a supermarket, drugstores, restaurants, and Ross Dress for Less clothing store. The blank terra cotta would be activated with LED panel interactive light art to be activated by people on the street. Cameras and sensors will activate the LED panels so that the participant can create images with a swipe of the hand.

Third Avenue and University

This is the cultural segment of the street, the gateway to the Benaroya Hall and the Seattle Art Museum. A light projection will reflect Seattle's strong commitment to the arts. The concept for this area is to mount linear colored LEDs shown on the parking garage to back light the slatted screens. This installation would be augmented by video projected from Benaroya Hall's roof. The content for these projectors could be live streaming video from the concert hall or local artists.





REVEALING ARCHITECTURE

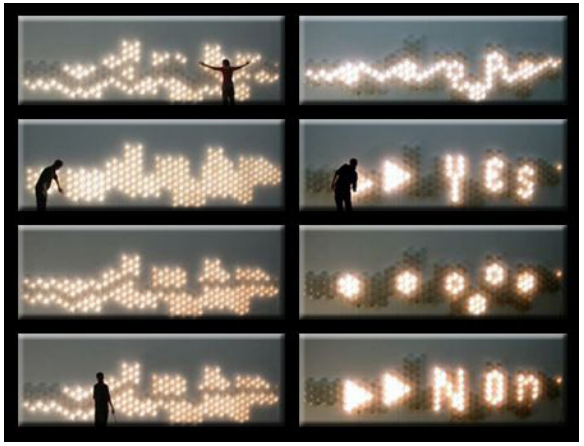
There are several buildings with beautiful architectural elements along the corridor. Keystones, medallions and decorative friezes are integral to several of the buildings including Macy's, Kress, and Ross Dress for Less. Highlighting these elements will not only encourage pedestrians to look up at the vertical elements of the city but can also evoke a sense of community pride and enchant tourists.

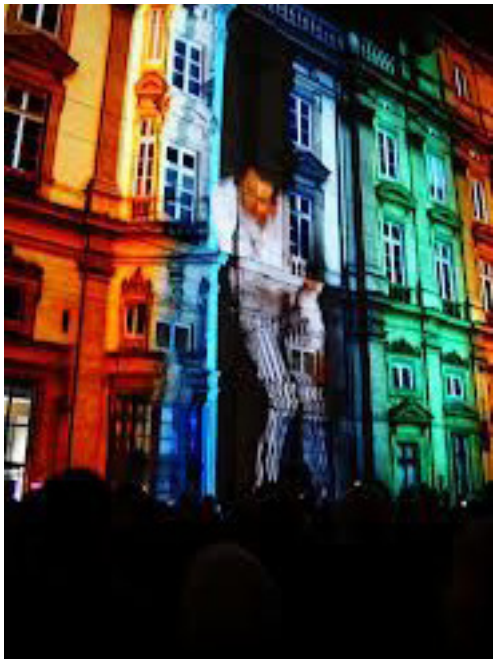
ENGAGING PEOPLE

Cities are increasingly interested in developing multi-media installations that set their urban environment apart. These installations can produce shows that can be wonderful to view, but may also be interactive in nature, encouraging the community to engage with the artwork.

See Appendix B for proposed lighting locations
See Appendix D for equipment description

Macy's Canopy Detail





Third Avenue Digital Identity

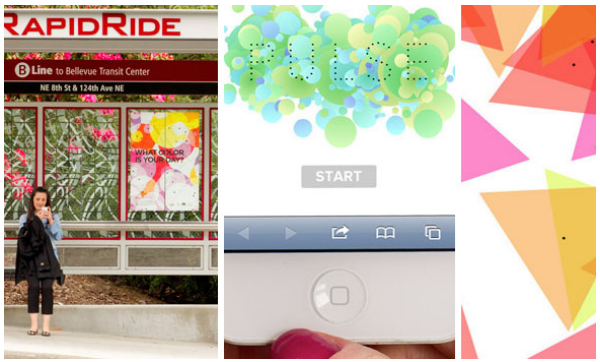
CONNECTING DIGITAL TO PLACE

Seattle should be at the forefront of incorporating digital technology into placemaking. By providing Third Avenue with a digital identity, the project can start to change perception of what Third Avenue provides for the city currently and showcase the vision of what it wants to become in the future.

Additionally, doing smaller human-scale installations on the street with digital elements could help to connect people in different ways - one example could be the development of a phone app that would engage people on the bus in games as they go along Third Avenue.

We recommend:

- Projects that promote communication between Third Avenue transit users and provide fun, not just transit information
- Creating projects with many avenues for multiple types of interaction within the digital and physical realm



B line Metro Rapid Ride phone game, Bellevue
Hornall Anderson, funded by 4culture

Bike It
Local Projects

Intersection Art

CREATING SURPRISING ELEMENTS

Intersections are a part of the city that people experience everyday and have a very important purpose for pedestrians.

We recommend adding an element of delight and surprise to this everyday experience by creating a special design that helps to mark a place that is unique to the city. In this example, we show a piano key design adjacent to Benaroya Hall.

PacMan Crosswalk
Artist Unknown

Color Jam Installation Crosswalk
Jessica Stockholder

concept plans

a. University to Union
b. Union to Pike
c. Pike to Pine
d. Pine to Stewart

Third Avenue Concept Plans

CRITERIA FOR AN ENGAGING URBAN BLOCK

The design team recognized existing criteria to organize the elements along the block; such as existing canopies, bus loading spatial needs, adjacent building uses, sun patterns, and strategies of organizing people up and down the length of the block. The following pages contain concept plans of the four blocks along Third Avenue, University Street to Stewart Street.

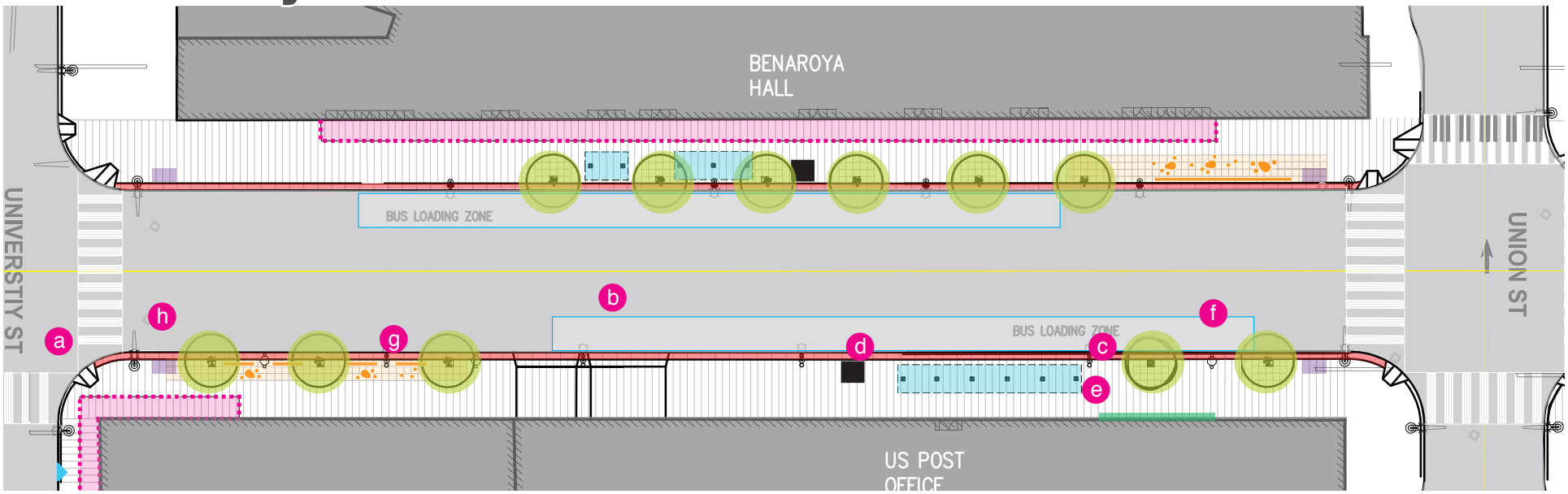
KEY

TRANSIT CANOPY · STREET LOUNGE · EXISTING TREE · PROPOSED TREE · ITS KIOSK + TICKET VENDING

EXISTING SIGNAL LIGHIT · EXISTING STREET LIGHIT · EXISTING PEDESTRIAN LIGHIT · EXISTING STREET + PEDESTRIAN LIGHIT

STREET ELEMENTS ZONE · BUILDING CANOPY · EXISTING STREET LIGHIT WITH PROPOSED PEDESTRIAN LIGHT · PROPOSED PEDESTRIAN LIGHT

University to Union - East



BLOCK DESIGN CONCEPTS

a New paving with photocatalytic material and new patterning

b New red curb treatment

c Remove existing transit shelters and replace with new transit canopy design

d Remove small building on sidewalk

e At Post Office wall add green blank facade treatment

f Add information kiosk to mark transit tunnel entry

g Add energy efficient pedestrian lights, either new or on a shared pole

h Add “street elements zone” to organize trash cans and bike racks

PRIVATE ACTIONS / PARTNERSHIPS

- Work with Benaroya Hall on projections to Parking Garage south of the Post Office
- Strengthen the presence of symphony hall on both sides of block through programming
- Consider lighting to highlight transit tunnel entry
- Stewardship of street furnishings and street lounge

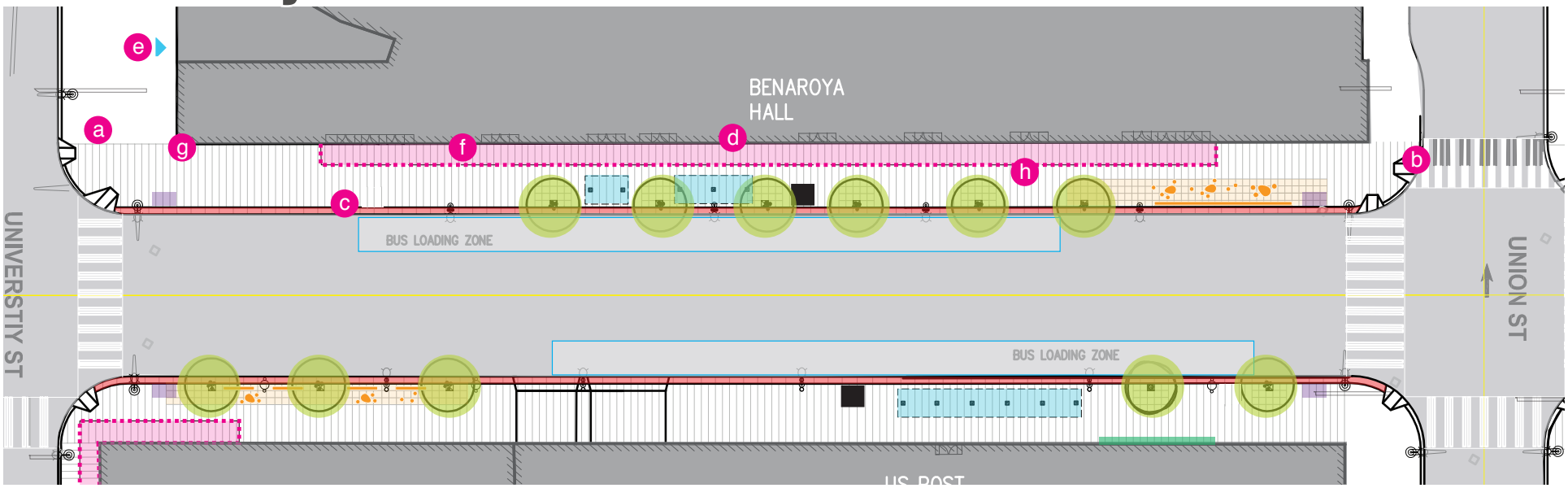
KEY

TRANSIT CANOPY | STREET LOUNGE | EXISTING TREE | PROPOSED TREE | ITS KIOSK + TICKET VENDING

EXISTING SIGNAL LIGHIT | EXISTING STREET LIGHIT | EXISTING PEDESTRIAN LIGHIT | EXISTING STREET + PEDESTRIAN LIGHIT

STREET ELEMENTS ZONE | BUILDING CANOPY | EXISTING STREET LIGHIT WITH PROPOSED PEDESTRIAN LIGHT | PROPOSED PEDESTRIAN LIGHT

University to Union - West



BLOCK DESIGN CONCEPTS

a New paving with photocatalytic material and new patterning

b New artistic intersection treatment, such as a piano key design

c Move bus zone to north to allow space for treatments at building entries

d Consider smaller transit shelter between trees at curb

e Add information kiosk to mark transit tunnel entry

f Add energy efficient pedestrian lights, either new or on a shared pole

g Add “street elements zone” to organize trash cans and bike racks

h New red curb treatment

PRIVATE ACTIONS / PARTNERSHIPS

- Add lighting projection to building across street
- Strengthen the presence of Benaroya Hall on both sides of block
- Consider opening doors to street or adding kiosks at doorways
- Improve canopy lighting
- Stewardship of street furnishings and street lounge

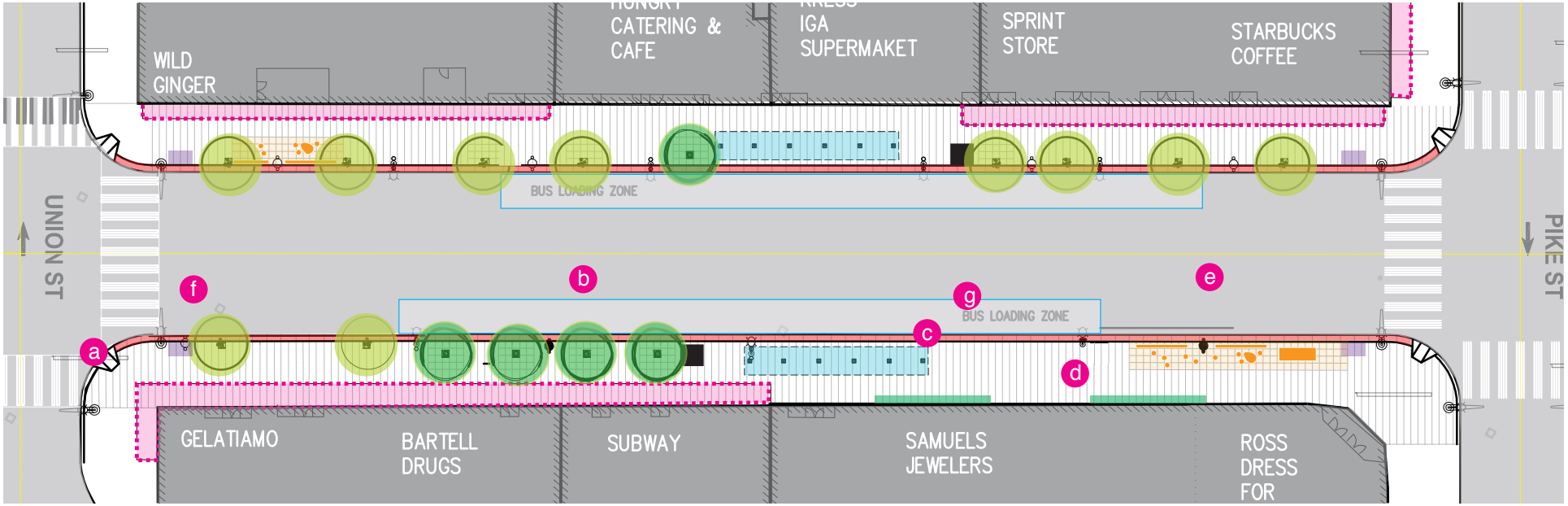
KEY

TRANSIT CANOPY | STREET LOUNGE | EXISTING TREE | PROPOSED TREE | ITS KIOSK + TICKET VENDING

EXISTING SIGNAL LIGHIT | EXISTING STREET LIGHIT | EXISTING PEDESTRIAN LIGHIT | EXISTING STREET + PEDESTRIAN LIGHIT

STREET ELEMENTS ZONE | BUILDING CANOPY | EXISTING STREET LIGHIT WITH PROPOSED PEDESTRIAN LIGHT | PROPOSED PEDESTRIAN LIGHT

Union to Pike - East



BLOCK DESIGN CONCEPTS

a. New paving with photocatalytic material and new patterning

b. Add trees along the block face

c. Recommend that this block serves bus route therefore infill pull-out and add transit shelter

d. Add street furnishings, including a green facade treatment at Ross Dress for Less

e. Add energy efficient pedestrian lights, either new or on a shared pole

f. Add “street elements zone” to organize trash cans and bike racks

g. New red curb treatment

PRIVATE ACTIONS / PARTNERSHIPS

- Add lighting to highlight architectural details
- Consider canopy lighting along the block face
- Stewardship of street furnishings and street lounge and green blank facade treatment

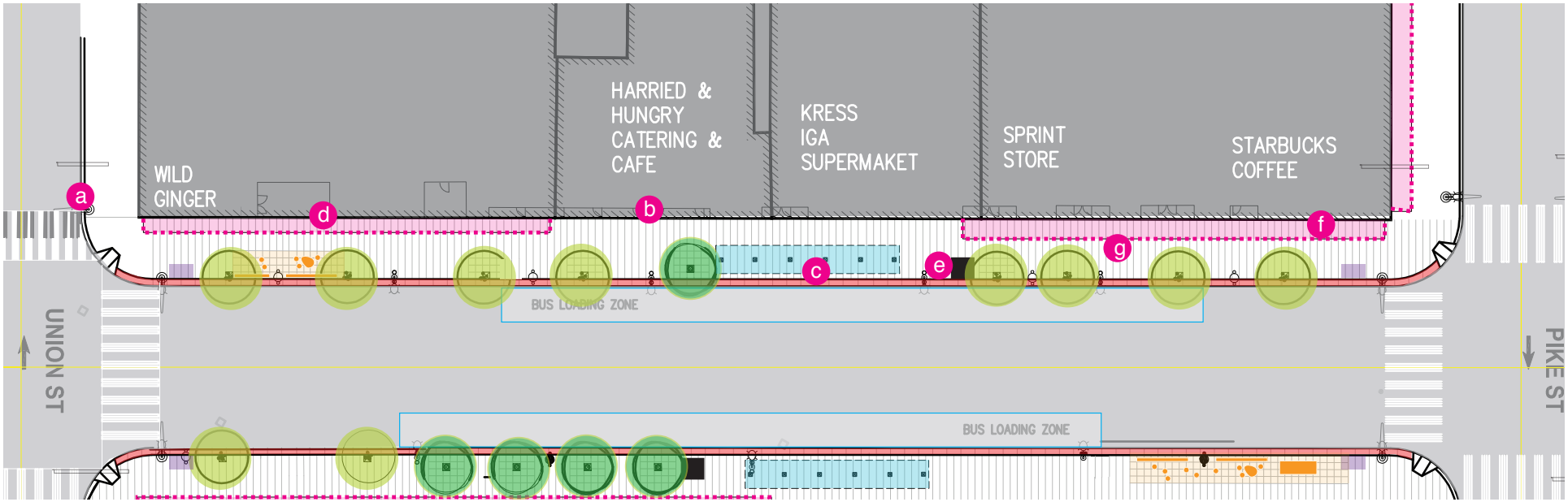
KEY

TRANSIT CANOPY | STREET LOUNGE | EXISTING TREE | PROPOSED TREE | ITS KIOSK + TICKET VENDING

EXISTING SIGNAL LIGHIT | EXISTING STREET LIGHIT | EXISTING PEDESTRIAN LIGHIT | EXISTING STREET + PEDESTRIAN LIGHIT

STREET ELEMENTS ZONE | BUILDING CANOPY | EXISTING STREET LIGHIT WITH PROPOSED PEDESTRIAN LIGHT | PROPOSED PEDESTRIAN LIGHT

Union to Pike - West



BLOCK DESIGN CONCEPTS

a New paving with photocatalytic material and new patterning

b Add trees along block face

c Recommend that this block serves bus stops therefore infill pull-out and add transit shelter

d Add street furnishings including street lounge and new transit canopy

e Add energy efficient pedestrian lights, either new or on a shared pole

f Add “street elements zone” to organize trash cans and bike racks

g New red curb treatment

PRIVATE ACTIONS / PARTNERSHIPS

- Add lighting to highlight architectural details
- Consider canopy lighting
- Stewardship of street furnishings and street lounge

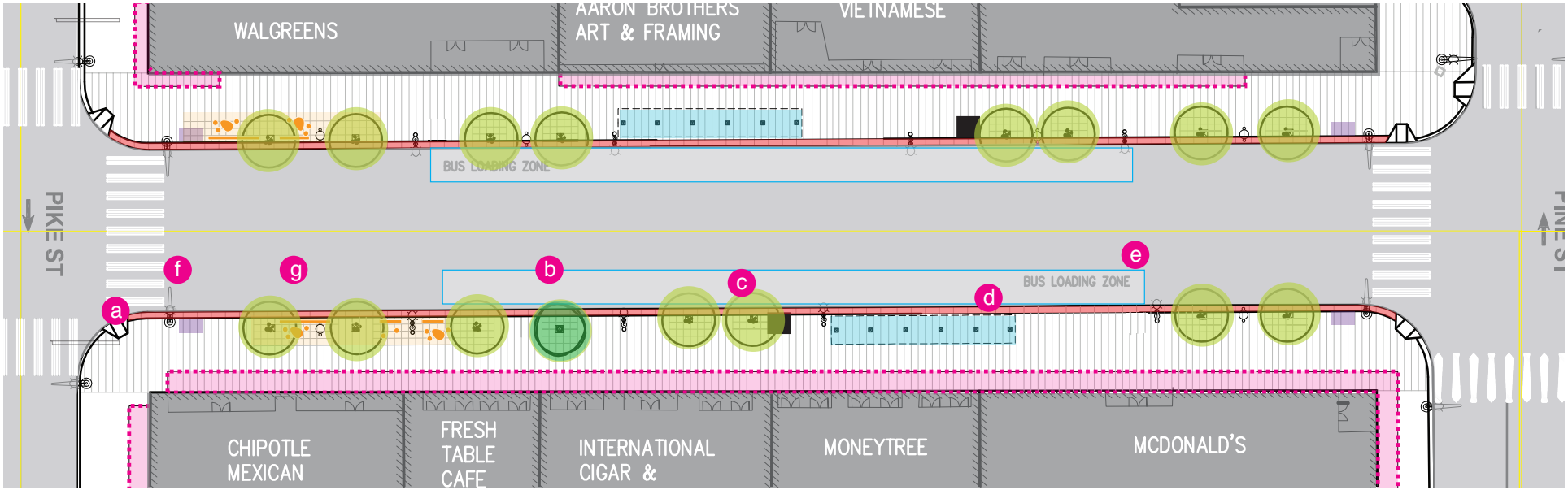
KEY

TRANSIT CANOPY | STREET LOUNGE | EXISTING TREE | PROPOSED TREE | ITS KIOSK + TICKET VENDING

EXISTING SIGNAL LIGHIT | EXISTING STREET LIGHIT | EXISTING PEDESTRIAN LIGHIT | EXISTING STREET + PEDESTRIAN LIGHIT

STREET ELEMENTS ZONE | BUILDING CANOPY | EXISTING STREET LIGHIT WITH PROPOSED PEDESTRIAN LIGHT | PROPOSED PEDESTRIAN LIGHT

Pike to Pine - East



BLOCK DESIGN CONCEPTS

a New paving with photocatalytic material and new patterning

b Add trees along block face

c Infill existing pull-out and extend bus zone to the North

d Add street furnishings including street lounge and new transit canopy

e Add energy efficient pedestrian lights, either new or on a shared pole

f Add “street elements zone” to organize trash cans and bike racks

g New red curb treatment

PRIVATE ACTIONS / PARTNERSHIPS

- Add missing canopy glass; consider canopy lighting
- Stewardship of street furnishings and street lounge

KEY

TRANSIT CANOPY | STREET LOUNGE | EXISTING TREE | PROPOSED TREE | ITS KIOSK + TICKET VENDING

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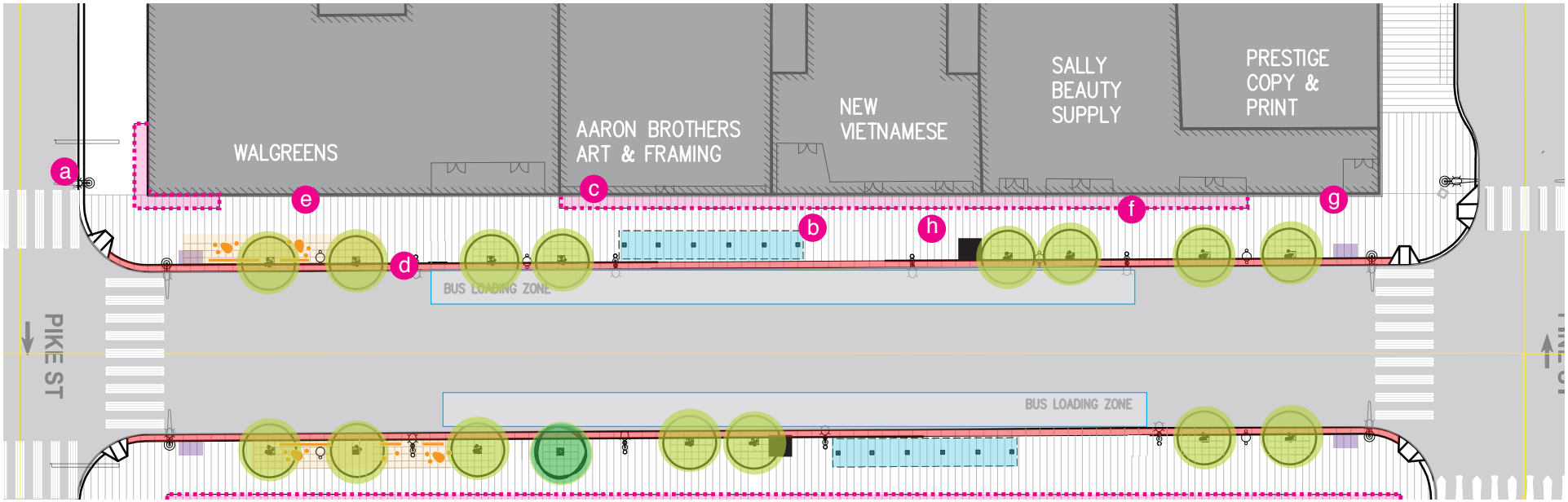
STREET ELEMENTS ZONE | BUILDING CANOPY | EXISTING STREET LIGHIT WITH PROPOSED PEDESTRIAN LIGHT | PROPOSED PEDESTRIAN LIGHT

Pike to Pine - West



BLOCK DESIGN CONCEPTS

a New paving with photocatalytic material and new patterning

b Infill existing pull-out

c Remove existing transit shelter and add Third Avenue signature transit canopy

d Move head of bus zone away from intersection

e Add street furnishings including street lounge and new transit canopy

f Add energy efficient pedestrian lights, either new or on a shared pole

g Add “street elements zone” to organize trash cans and bike racks

h New red curb treatment

PRIVATE ACTIONS / PARTNERSHIPS

- Lighting to highlight architectural details
- Consider canopy lighting
- Stewardship of street furnishings and street lounge

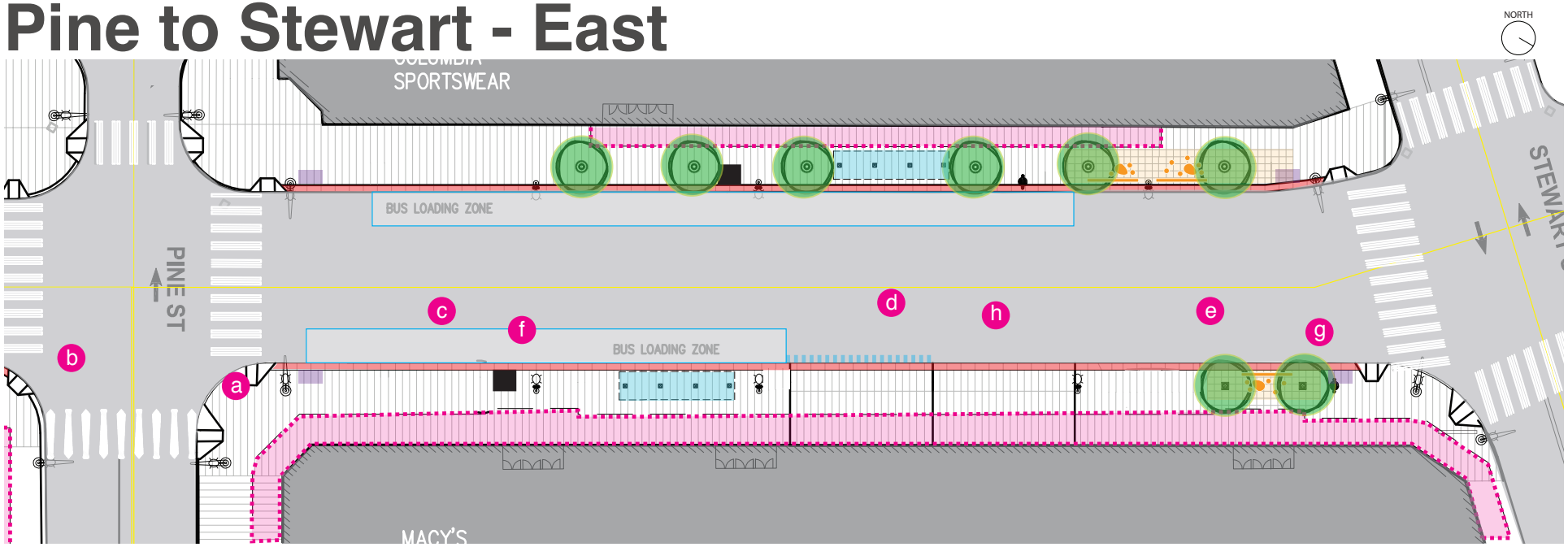
KEY

TRANSIT CANOPY | STREET LOUNGE | EXISTING TREE | PROPOSED TREE | ITS KIOSK + TICKET VENDING

EXISTING SIGNAL LIGHIT | EXISTING STREET LIGHIT | EXISTING PEDESTRIAN LIGHIT | EXISTING STREET + PEDESTRIAN LIGHIT

STREET ELEMENTS ZONE | BUILDING CANOPY | EXISTING STREET LIGHIT WITH PROPOSED PEDESTRIAN LIGHT | PROPOSED PEDESTRIAN LIGHT

Pine to Stewart - East



BLOCK DESIGN CONCEPTS

a. New paving with photocatalytic material and new patterning - expanded width of sidewalk by 6 feet

b. New artistic intersection treatment, such as a neck tie design

c. Add trees where possible as indicated

d. Expand bus operations north 40 feet in the South Bay of Macy's loading dock while not in use

e. Add street furnishings including street lounge and new transit canopy

f. Add energy efficient pedestrian lights, either new or on a shared pole

g. Add "street elements zone" to organize trash cans and bike racks

h. New red curb treatment

PRIVATE ACTIONS / PARTNERSHIPS

- Rent corner space or allow non-profit use
- Artistic panels at loading dock, lit from above
- Light architectural details of facade and canopy edge
- Improve lighting below canopy
- Add interest in store windows. Partnering with non-profits or artists is encouraged
- Add lighting that will enliven the parking garage facade and the skybridge; create "Macy's space" both sides of street
- Stewardship of street furnishings and street lounge

KEY

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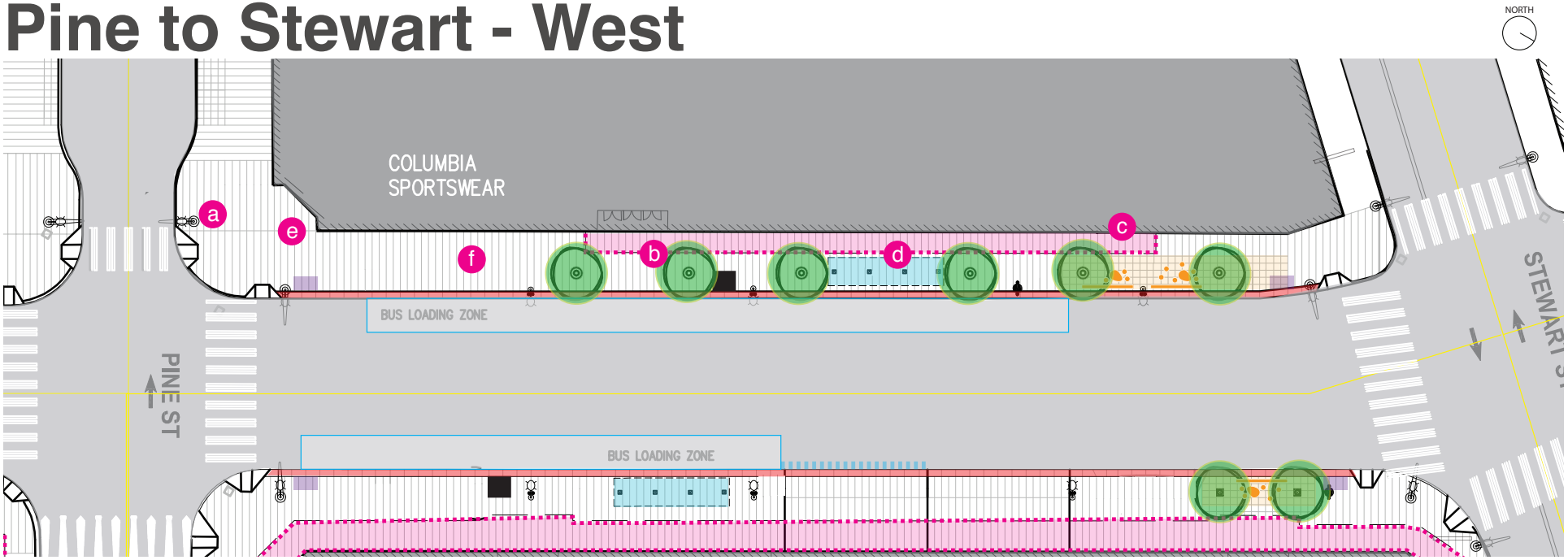
Pine to Stewart - West



BLOCK DESIGN CONCEPTS

a New paving with photocatalytic material and new patterning

b Add trees where possible

c Add street furnishings including street lounge and new transit canopy

d Add energy efficient pedestrian lights, either new or on a shared pole

e Add “street elements zone” to organize trash cans and bike racks

f New red curb treatment

PRIVATE ACTIONS / PARTNERSHIPS

- Activate corner space with new program
- Consider canopy lighting
- Work with Macy’s on lighting schemes to energize block

-Stewardship of street furnishings and street lounge

Implementation

a. quick wins for Third Avenue
b. street lounge phasing
c. operations and maintenance
e. cost estimate - 10% design level
d. acknowledgments

Quick Wins for Third Avenue

QUICK WINS IN CREATING A NEW THIRD AVENUE

There is value in starting to contribute now to the vision of Third Avenue with implementation of a couple of quick wins. The following recommendations can be low-cost ideas that potentially have a large impact in how Third Avenue develops.

STREET LOUNGE KICKOFF

To gain public support and test the ideas of what a street lounge could bring to Third Avenue, the project could incorporate an event or "kickoff" to help with programming and incorporate low-cost design elements such as seating and other furnishings. For example, a group, such as 72 Hour Action (www.72hoururbanaction.com) could be engaged to with help with the process.

INTERSECTION ART

Simple and creative ideas, such as "piano keys" crosswalks, can be quick and of low-cost to implement while creating a large impact.

THIRD AVENUE BLOOMS

A low-cost way of providing an element of human enjoyment along the street, while also connecting to Pike Place Market and showing a level of care and support for a positive change.

CREATING A THIRD AVENUE IDENTITY

To help advance Third Avenue towards a positive vision, create an identity package containing a website, apps, and graphics.

CURATED DIGITAL ART

Utilizing Hot Spots: Hot spots are made by creating specific, magical, isolated spaces in the public realm that trigger lighting or sound experiences. A pedestrian can be walking along the sidewalk in front of Benaroya Hall and suddenly hear the swells of Beethoven's 9th symphony. If he steps out of the hot spot the sound disappears. Friends and strangers will call to each other to come join them in the hot spot for a symphony.

Augmented Reality: Augmented reality functions by sending messages to pedestrians, through an app, to their smart phones. Sensors are discretely mounted along the storefronts or in the canopies of the buildings. Messages could consist of a myriad of things including coupons for lunch or a description of an upcoming cultural event.

SMALL-SCALE TEMPORARY INSTALLATIONS

Art can help in providing placemaking to a space. Engage local artists to participate in a temporary art program, such as the SDOT and Office of Arts and Culture Affairs art interruptions program.

Street Lounge Phasing

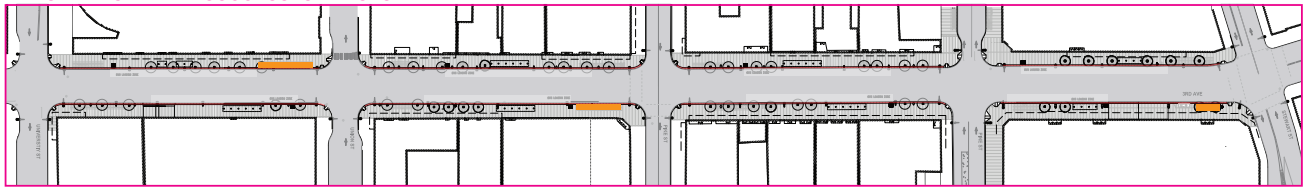
With the ultimate goal of providing at least one street lounge per block face, implementation of the street lounge program is contingent on the larger Third Avenue construction schedule. Generally, street lounges are to be coordinated and built with the package of streetscape improvements on each block face. At this time we recommend the primary elements be installed: paving and trees; barrier wall and bench; canopy; Third Avenue Post; and drinking fountain. This baseline street lounge provides at least a basic level of amenity for pedestrians, and also creates an advanced starting point for secondary improvements by a sponsor in the future.

However, to invigorate the street lounge program, streamline construction efforts, and expedite the positive impacts, it is preferable that the entire design—comprising both primary, standard elements and additional, unique elements—be planned in the same timeframe, even if implementation is phased. Potential sponsors should be engaged and the street lounge Request for Proposals issued well before block face construction, to allow adequate time for organizing design and financing efforts.

As a first step, we recommend three key pilot locations along the four block corridor 1) outside of Benaroya Hall, 2) outside of Ross Dress for Less and 3) outside the Macy's by Stewart Street. These meet essential functional criteria; each serves a proximate bus loading zone and transit shelter and is large enough to provide a waiting area to transit riders. Moreover, they hold potential to invite street life and attract sponsors to advance their use and value. For example, the location in front of Benaroya Hall may provide a waiting and overflow area for patrons, or accommodate intimate music performances programmed by the Seattle Symphony. Similarly, the proposed street lounge in front of Ross engages the existing pretzel vendor and leverages the activity of its customers. Waves of shoppers help energize the street lounge at the Macy's entrance near Stewart and can be proposed in the first construction wave. These recommendations will be vetted through a pilot temporary street lounge program before finalized.

After the pilot phase is analyzed for performance, eight total street lounge locations—one per block face—are recommended in this document as a second phase of development coordinated in the same way, through interested sponsors and assessed by the City.

PHASE 1 : POTENTIAL SUCCESSFUL PILOTS



PHASE 2 : ONE STREET LOUNGE PER BLOCK

Example of an event by urbanism group 72 Hour Action. They run events that spark new ideas for cities across the world.

Operations and Maintenance

MAKING O&M A PRIORITY

Stewardship and maintenance is fundamental to the quality of the streetscape. During outreach discussions, this has been a recurring topic among Seattle's Third Avenue stakeholders and a priority for the Mayor and City Council members. City resources available for operations and maintenance are virtually nonexistent. From 10% design onward, this question should remain at the forefront of decision-making.

Resources available for ongoing maintenance set the design parameters for our city. The design for Third Avenue strives to create a level of value and engagement that will foster stewardship. For Seattle's Third Avenue, key programs provided by the Downtown Seattle Association (DSA) and the Metropolitan Improvement District (MID) greatly contribute to the appearance of downtown Seattle. These types of maintenance and operations strategies need to be leveraged and supplemented in order to create a pleasant downtown

THIRD AVENUE AS A PREMIERE PUBLIC SPACE

Great urban places require a high level of maintenance to operate successfully; this regular care contributes to how the space functions and is perceived. For comparison, annual O&M budgets for places such as Brooklyn Bridge Park in New York City, Rose Kennedy Greenway in Boston, and Millennium Park in Chicago range from $200,000 to $600,000. Although these examples are public parks, the O&M budgets associated with them is valuable in determining the level of O&M investment needed for key streetscapes to function truly as high quality public spaces.

The examples of public spaces above are given priority in funding because they are often heavily used and provide an identity for the city. This should also be the case for Seattle's Third Avenue. With over 65,000 users a day, the downtown corridor is an important place with a great opportunity to show residents, tourists, business owners, and commuters that a busy transit street can be an important part of downtown's public realm and provide a good experience for everyone.

PUTTING A PLAN IN PLACE

Exceptional maintenance of a city space shows a high level of care, and also requires a thoughtful plan. As part of this plan, the following key strategies could help in making an impactful implementation:

+ **Provide adequate stewardship.** Dedicated partners, employees and stewards would be responsible for the everyday maintenance of each block, assisting with activities, and keeping up to date with maintenance requirements. This person would care for the street and champion others to do the same. One such example of a managed maintenance program is Chicago's Magnificent Mile. Throughout the seasons, city employees are responsible for planting flowers along the corridor, which provide a nice treatment in the streetscape and a visual language of care.

+ **Create a cohesive maintenance schedule to regularly replace out of date elements and fixtures.** This includes taking advantage of any new construction as an opportunity to enhance street elements and elevate the quality of design within the streetscape.

+ **Provide incentives**, such as a streamlined regulatory process, to encourage stewardship and create positive activity within the streetscape, adding to the appearance of care.

+ **Create opportunities for civic engagement.** Programs such as the "Pigs on Parade" sponsored by the Pike Place Market Foundation create small gestures in the streetscape that show compassion and excitement. A similar type of program could be hosted to encourage citizens to participate in streetscape development and maintenance.

Cost Estimate - 10% Design level

The following is a summary of the costs for each proposed “kit of part” proposed at the 10% design level. This estimate includes unit cost and installation estimate and a Total Cost with 30% contingency including planning and design cost and a 40% soft cost estimate.

A comprehensive block by block cost estimate can be found in appendix C

Kit of Part Item	Total Cost for Four Block Area (unit and installation only)	Total Cost for Four Block Area (with 30% contingency and soft costs)
Public Life Amenities a. street lounge,green facade treatment and “street care” vase program	$402,800 - $1,110,800 *(cost range will vary depending on scale of item and materials)*	$1,286,560 *(used midpoint in range)*
Transit Amenities b. Transit Canopy and seating/lean rail (estimated at 60’ length, although sizes will vary)	$1,646,000 *(cost range will vary depending on scale of item and modifications to each canopy)*	$2,798,200
c. Electronic real-time bus arrival sign and ORCA	$400,000	$680,000
Street Elements d. lighting elements (pedestrian, cobrahead and interactive)	$966,690	$1,643,373
f. paving and curb	$1,165,925	$1,982,073
g. new trees with “paver grate system”	$165,120	$280,704
h. trash cans /bike racks/water fountain	$85,280	$144,976

Total Cost
(for Four Block Study area with 30% contingency and soft costs, 10% Planning costs and 25% Design costs)

$11,901,445.43

Acknowledgments

City of Seattle and King County Metro Team (in alphabetical order)

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Dannette Smith, City of Seattle Human Services
Lisa Quinn, Feet First


macys
TasteBar

Appendix

a. site conditions and analysis
b. lighting elevations
c. 10% cost estimate matrix
d. lighting design matrix
e. pedestrian data / level of service report
f. Third Avenue timelapse video description

Appendix A: Site Conditions

In this project, we analyzed the current conditions of Third Avenue, including the surrounding built environment, ecological conditions, existing pedestrian experience and transit conditions.

KEY EXISTING CONDITIONS

- heavily used by transit users (42,000 a day) and people crossing east/west
- a large number of historic buildings in the corridor
- low buildings create abundant sunny spots
- large number of existing areaways
- blank facades, congestion along parts of block and deserted areas of the block
- A large amount of varying canopy heights along block

SITE MAP + BUILDING NAMES

1. Macy's
2. Gilmore
3. Century Square
4. Ross
5. Vance
6. Post Office
7. Garage
8. Benaroya Hall
9.. Mann
10. Glen Hotel
11. 1425
12. Kress
13. Melbourne
14. Aaron Bro
15. Fisher
16. Olymic Tower
17. Macy's garage

THE BUILT ENVIRONMENT

BUILDING HEIGHT

In the heart of downtown, this site is an urban area with varying building heights, creating opportunities for sun and opening views of the sky. (see “Sunny Spots” map on page 17)

HISTORIC DESIGNATION

An important piece of urban fabric in Seattle, Third Avenue contains many buildings that are designated as historic landmarks or City of Seattle historic categories. City of Seattle Categories includes buildings that are eligible (2) or identified (3) Historic landmark nominations.

THE BUILT ENVIRONMENT

EXISTING AREAWAY LOCATIONS

Much of Third Avenue is located above existing areaways (sunken enclosure beneath the street). This diagram shows these locations, which also points out areas that will need to be taken into account for construction.

ECOLOGICAL CONDITIONS

SUNNY SPOTS

Due to low building height found throughout the site, sunny areas are abundant and provide good locations for street life and indoor-outdoor connections.

EXISTING TREE CANOPY

Tree canopy is sporadic along the Third Avenue corridor, especially on the east side of the street.

EXISTING PEDESTRIAN EXPERIENCE

PEDESTRIAN FLOW

According to a Gehl Architects study of Seattle in 2008, the number of people moving along Third Avenue is almost 16,000 people, which shows how busy this site is on a daily basis.

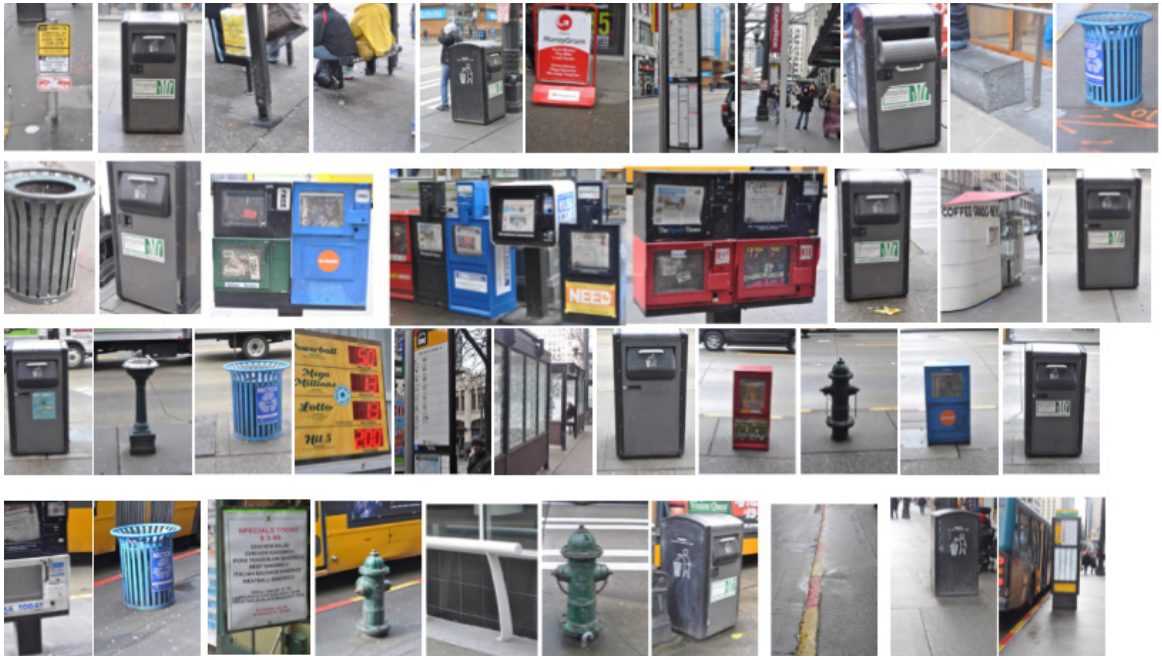
CONGESTED AREAS / BLANK FACADES

Along the block, there are congested clumps of people which creates difficulties in pedestrian flows. Additionally, there are also areas that produce little street activity with blank facades.

EXISTING PEDESTRIAN EXPERIENCE

EXISTING STREET FURNISHINGS + FOOTPATH INTERRUPTIONS

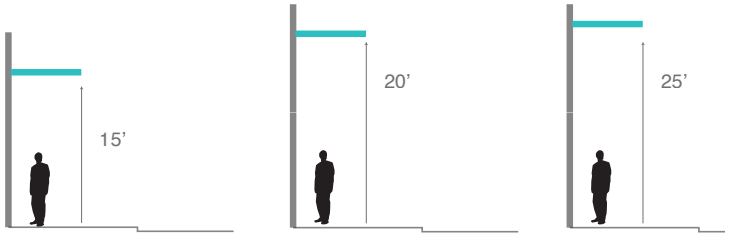
An inventory of existing street furnishings and elements was conducted in this 10% design phase. Currently, there are a number of elements, many of which are important amenities such as trash cans, however they also interrupt pedestrian movement. We recommend that the number of elements be reduced, organized and given a consistent simple palette.



Existing Street Furnishings along Third Avenue Stewart to University Street

CANOPY HEIGHTS

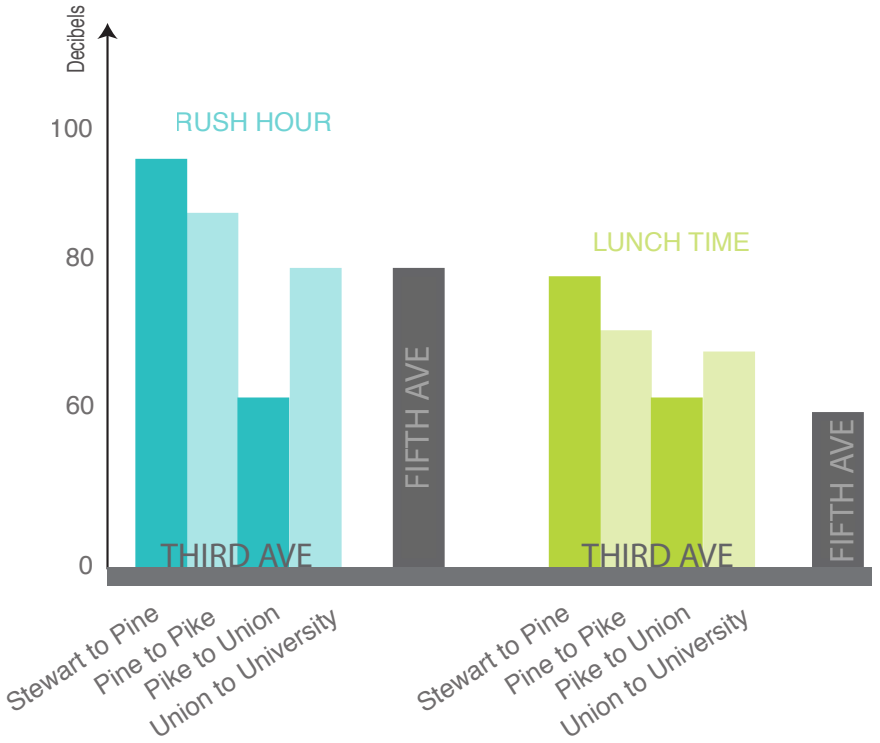
Throughout these four blocks of Third Avenue, there are a number of canopies attached to buildings with varying heights. It is important to recognize how other street elements can be incorporated to provide an elegant design that also functions as weather protection and provides and attractive place to wait.



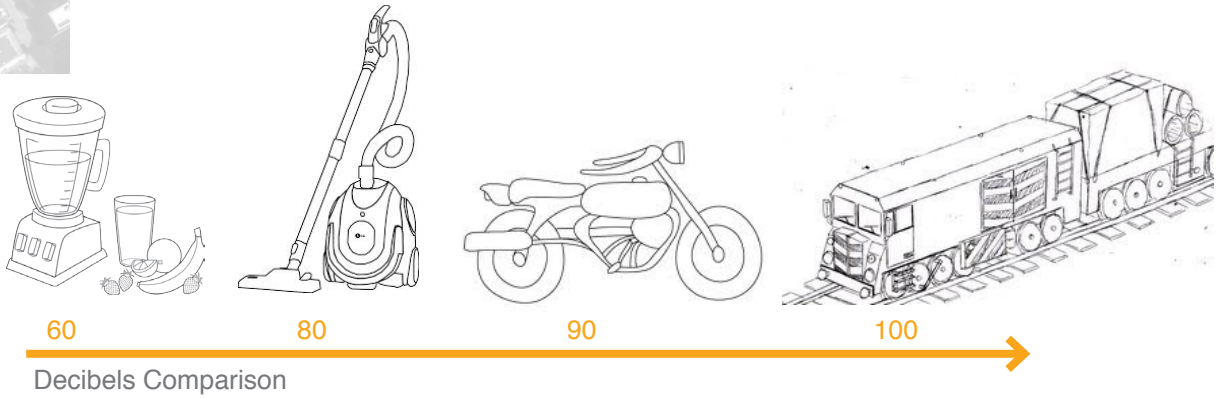
Dark Canopy Conditions under Macy’s Department Store

EXISTING PEDESTRIAN EXPERIENCE

NOISE VOLUMES



Third Avenue, located on Seattle's central transit street contains a range of noise levels.This diagram shows a decibel comparison between blocks, which also highlights areas to buffer noise



TRANSIT AND PEDESTRIAN CONDITIONS

METRO BUS STOPS AND METRO RAPIDRIDE

From Stewart to University, there are bus stops on three blocks, including a RapidRide stop. There may be an opportunity to re-configure some routes to the block between Pike and Union.

BOARDINGS AND ALIGNINGS

According to Metro data, the above diagram provides the volume of people taking the bus daily at these bus stops,boardings and alignings, showing a large transit rider user group along the corridor. A large number of riders also use the tunnel entrances under Third Avenue to reach additional public transit.

TRANSIT CONDITIONS

THIRD AVENUE'S LEVEL OF SERVICE STUDY

Nelson\Nygaard conducted studies of pedestrian level of service in the project area, which is included in its entirety in appendix C to this document. The study found that there is sufficient square footage to accommodate a Level of Service A under current conditions. However, the actual use of space results in areas of congestion and areas that are underutilized:

"It is important to note that field observations indicated that under existing conditions, walking pedestrians often appear impeded by crowds of pedestrians standing on the bus platform. While the analysis shows that there is enough total square footage to meet the needs of both user types, it does not take factors such as the organization of the space into consideration, which is difficult to quantify. Under future conditions, a successful design of the bus platforms on Third Avenue may require both an increase in total space as well as a re-organization of the space. " Memorandum, p.5

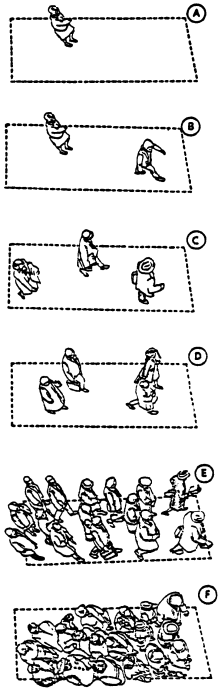
The memorandum also notes that with the shifting of buses from the tunnel to the street on Third Avenue in 2016, existing square footage per passenger at transit stops begins to drop, resulting in lower levels of service.

King County Metro Standing Pedestrian Criteria

King County Metro Criteria	ft²/pedestrian
Desirable	> 17
Constrained	8-17
Uncomfortable	< 8

Example of Study Results on Pike & Pine Block

Diagrams from the Transit Capacity and Quality of Service Manual



LEVEL OF SERVICE A
Walking speeds freely selected; conflicts with other pedestrians unlikely.

LEVEL OF SERVICE B
Walking speeds freely selected; pedestrians respond to presence of others.

LEVEL OF SERVICE C
Walking speeds freely selected; passing is possible in unidirectional streams; minor conflicts for reverse or cross movement.

LEVEL OF SERVICE D
Freedom to select walking speed and pass others is restricted; high probability of conflicts for reverse or cross movements.

LEVEL OF SERVICE E
Walking speeds and passing ability are restricted for all pedestrians; forward movement is possible only by shuffling; reverse or cross movements are possible only with extreme difficulty; volumes approach limit of walking capacity.

LEVEL OF SERVICE F
Walking speeds are severely restricted; frequent, unavoidable contact with others; reverse or cross movements are virtually impossible; flow is sporadic and unstable.

Figure 7 Pine & Pike – East (Northbound)

Scenario	Walkway LOS	Walkway Width (ft)	Standing LOS	Standing Area / Ped (ft²/ped)	KC Metro Rating
Existing	A	4.7	A	27.8	Desirable
Future	A	7.1	A	15.3	Constrained
	B	5.0	A	18.2	Desirable
Proposed	A	7.1	A	29.6	Desirable

Figure 8 Pine & Pike – West (Soutbound)

Scenario	Walkway LOS	Walkway Width (ft)	Standing LOS	Standing Area / Ped (ft²/ped)	KC Metro Rating
Existing	A	4.3	A	24.3	Desirable
Future	A	6.4	A	13.7	Constrained
	C	3.0	A	17.7	Desirable
Proposed	A	6.4	A	39.8	Desirable

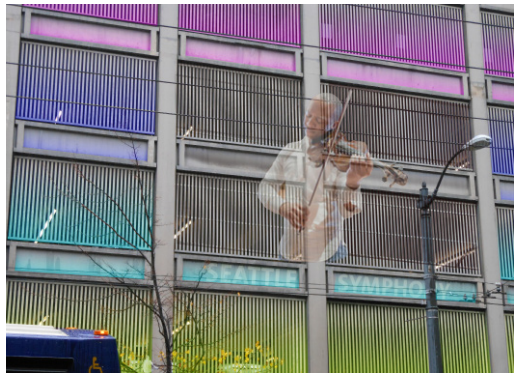
Appendix B : LIGHTING ELEVATIONS

University to Union - East

LIGHTING AND PROJECTION IN ELEVATION

a Mount linear, color changing LEDs inside of garage behind screen. LEDs will light through the screen and be visible from street level. LEDs will be controlled with the light projectors mounted on Benaroya's roof. Typical for 6 levels of garage.

Opportunity for blank facade treatment with green wall



University to Union - West

ARCHITECTURAL LIGHTING AND LIGHTING PROJECTION IN ELEVATION

a Along Benaroya's facade, replace current medium screw base downlight bullets in canopy with hardwired LED bullet downlights for pathway lighting.

b To identify a point of arrival at Benaroya's entry door, mount small projectors within the canopy. Gobos in projectors, which are a physical template used to manipulate the shape of the light, will create an image on the sidewalk at the entry.

c Benaroya to replace gelled fluorescent strip lights in the interior uplight coves with linear, color changing high performing LED fixtures.

d Mount light projectors on Benroya's roof to project recorded and streaming video across the street onto the parking garage facade.

Union to Pike - East

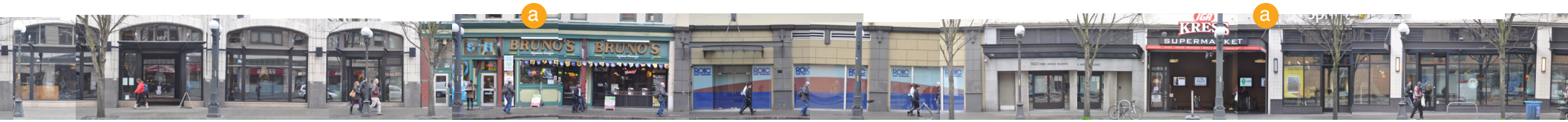
LIGHTING AND PROJECTION IN ELEVATION

a Mount LED panels on blank Terra Cotta walls at Ross's Dress for Less facade. Alternatively, consider installing the LED panels in Ross's storefront windows.

With the help of small, discrete sensors and cameras, the LED panels will be interactive. Pedestrians will be able to change and influence the graphics or video as they pass or touch the panel.

Opportunity for blank facade treatment with green wall

Union to Pike - West



ARCHITECTURAL LIGHTING IN ELEVATION

a Mount LED downlight bullets in canopy for downlighting for walkway lighting.

Consider frosting canopy glass and uplighting it with linear LEDs to create more vertical illumination on pedestrian's faces. Typical for all canopies.

Pike to Pine - East

LIGHTING AND PROJECTION IN ELEVATION

a Mount LED downlight bullets in canopy for downlighting for walkway lighting.

Consider frosting canopy glass and uplighting it with linear LEDs to create more vertical illumination on pedestrian's faces. Typical for all canopies.

Pike to Pine - West

LIGHTING AND PROJECTION IN ELEVATION

a Reveal Art Deco frieze at Kress building facade with small, white, linear LEDs concealed in cornice in front of frieze.

b Mount LED downlight bullets in canopy for downlighting for walkway lighting. Consider frosting canopy glass and uplighting it with linear LEDs to create more vertical illumination on pedestrian's faces. Typical for all canopies.

Pine to Stewart - East

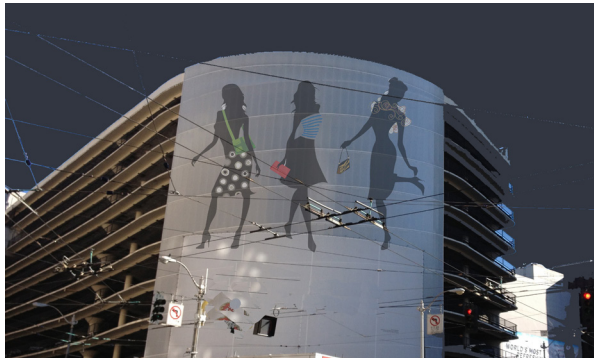
LIGHTING AND PROJECTION IN ELEVATION

a Highlight architectural medallions with small LED fixture mounted at base of medallion.

b Canopy lighting to be re-evaluated and updated with Macy's Public Benefit program.

Canopy lighting will provide downlighting for wayfinding and back lighting of translucent panels in the ceiling of the canopy.

Enhance Macy's loading dock gates with lighting and/or art



Example of Projection on Securities Building garage ramp

Pine to Stewart - West

Note Elevation taken during construction phase

LIGHTING AND PROJECTION IN ELEVATION

a Mount LED downlights to augment uplights at Columbia Sportswear's canopy. LED bullet downlights will provide walkway lighting.

b Mount LED downlight bullets in canopy for downlighting for walkway lighting. Typical for all canopies.

c Mount lighting projectors on Securities' Building to show recorded and streaming video on translucent plastic screen mounted on Macy's garage ramp. Projectors to be controlled via Media Server.

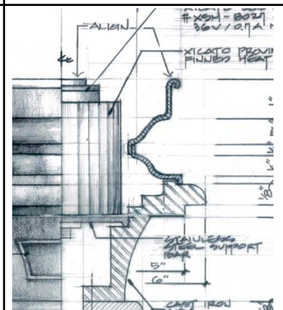
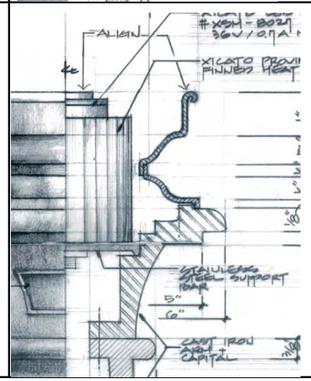
THIRD AVENUE
10% COST ESTIMATE MATRIX - May 23.2013

Item	quantity/unit	total cost estimate	*installation estimate/per item	estimated cost/cost range per block: Stewart to Pine (east and west side)	Pine to Pike (east and west side)	Pike to Union (east and west side)	Union to University (east and west side)	Total Cost for all 4 blocks	Total with Contingency (30%) and Soft Costs (40%)
1. Paving (preferred)									
Plan A									
a. Poured in place (options 1) - Photocatalitic 1"+ standard concrete 3" (sidewalk)	57,613 total SF / $9 per unit	$15 per SF	Price includes subgrade and installation	$248,565 (16,571 SF)	$240,150 (16,010 SF)	$194,250 (12,950 SF)	$181,230 (12,082 SF)	$864,195	
a. Pavers - Photocatalytic .(options 1) - around trees & street lounge	3,310 total SF / $5 per unit	$23 per SF	Price includes subgrade and installation	$14,030 (610 SF)	$21,620 (940 SF)	$18,745 (815 SF)	$21,735 (945 SF)	$76,130	
a. Standard curb (options 2) 6" ht & 2' wide colored paver (colored)	3760 total LF / $10 for typ curb, $17 for red paver	$60 per LF	Price includes subgrade and installation	$48,000 (800 LF)	$81,600 (1360 LF)	$48,000 (800 LF)	$48,000 (800 LF)	$225,600	
								TOTAL FOR PLAN A PAVING $1,165,925	CONTINGENCY AND SOFT COSTS FOR PLAN B **$816,147.50**
Plan B option									
b. Poured in place (options 3) - Standard concrete 4" (sidewalk)	57,613 total SF / $2 per unit	$4.50 per SF	Price includes subgrade and installation	$74,569 (16,571 SF)	$72,045 (16,010 SF)	$58,275 (12,950 SF)	$54,369 (12,082 SF)	$259,258	
b Pavers - Photocatalytic .(options 1) - around trees & street lounge	3,310 total SF / $5 per unit	$23 per SF	Price includes subgrade and installation	$14,030 (610 SF)	$21,620 (940 SF)	$18,745 (815 SF)	$21,735 (945 SF)	$76,130	
b. Standard curb (options 2) 6" ht & 2' wide colored paver (colored)	3760 total LF / $10 for typ curb, $17 for red paver	$60 per LF	Price includes subgrade and installation	$48,000 (800 LF)	$81,600 (1360 LF)	$48,000 (800 LF)	$48,000 (800 LF)	$225,600	
								TOTAL FOR PLAN B PAVING $560,988	
									TOTAL FOR PLAN A COSTS WITH CONTINGENCY/SOFT COSTS FROM PLAN A **$1,982,073**
2. lighting									
a. pedestrian lights and pedestrian pole new	5	$1,000	x1.8 per typ estimate	$3,600	$0	$5,400	$0	$9,000	
a.1 pedestrian lights installed to existing pedestrian poles	15	$700	x1.8 per typ estimate	$3,780	$7,560	$3,780	$3,780	$18,900	
a.2. pedestrian lights mounted to streetlight poles	22	$650	x1.8 per typ estimate	$14,040	$0	$2,340	$9,360	$25,740	
b. cobrahead lighting	45	$750	x1.8 per typ estimate	$13,500	$16,200	$14,850	$16,200	$60,750	
c. canopy mounted cylinder downlights	44	$500	x1.8 per typ estimate	$9,000	$10,800	$10,800	$9,000	$39,600	
d. canopy mounted linear uplights for frosted canopies (in feet)	80	$140	x1.8 per typ estimate	$0	$20,160	$0	$0	$20,160	
e. building mounted "bullet" downlights	14	$450	x1.8 per typ estimate	$4,860	$0	$6,480	$0	$11,340	
f. building feature lighting (rosettes/keystones)	20	$400	x1.8 per typ estimate	$7,200	$7,200	$7,200	$0	$21,600	
g. linear uplight at building facades	100	$120	x1.8 per typ estimate	$10,800	$0	$10,800	$0	$21,600	
h. energize lighting				$0	$0	$0	$0	$0	
- projections/art lighting	2	$130,000	x1.8 per typ estimate	$234,000	$0	$0	$234,000	$468,000	
- interactive wall	1	$150,000	x1.8 per typ estimate	$0	$0	$270,000	$0	$270,000	
								TOTAL FOR LIGHTING **$966,690**	**TOTAL WITH CONTINGENCY AND SOFT COSTS** **$1,643,373**
3. street lounge (2 per block - 1 per each block face)**									
a. convertible canopy	1 CT (2 per street lounge)	$50,000 - $100,000	Price includes installation estimate	$50,000 - $100,000	$50,000 - $100,000	$50,000 - $100,000	$50,000 - $100,000	$200,000 - $400,000	
b. barrier wall	1 CT based on 32 LF	$7,000 - $8,000	Price includes installation estimate	$7,000 - $8,000	$7,000 - $8,000	$7,000 - $8,000	$7,000 - $8,000	$24,000 - $32,000	
c. seat wall	1 CT based on 20 LF	$5,000	Price includes installation estimate	$5,000	$5,000	$5,000	$5,000	$20,000	
d. wood back and seat	1 CT based on 80 LF	$7,200	Price includes installation estimate	$7,200	$7,200	$7,200	$7,200	$28,800	
e. movable / lounge chairs	1CT (3 per street lounge)	$7,500	Price includes installation estimate	$7,500	$7,500	$7,500	$7,500	$30,000	
f. information post	1 CT	$25,000 - $150,000	Price includes installation estimate	$25,000 - $150,000	$25,000 - $150,000	$25,000 - $150,000	$25,000 - $150,000	$100,000 - $600,000	
Total range per street Lounge 99,540 - 275,540								**TOTAL RANGE FOR STREET LOUNGE** **$402,800 - $1,110,800**	**TOTAL WITH 30% CONTINGENCY AND SOFT COSTS (used midpoint in range $756,800)** **$1,286,560**
4. transit canopy ***			installation cost per canopy	*2 canopies proposed*	*2 canopies proposed*	*2 canopies proposed*	*2 canopies proposed*		
a. Shelter/Canopy	1 transit canopy	$180,000	$25,000	$410,000	$410,000	$410,000	$410,000	$1,640,000	
b. Seating	cost includes 4 seats per transit canopy	$600	$150	$1,500	$1,500	$1,500	$1,500	$6,000	
								TOTAL FOR TRANSIT CANOPY **$1,646,000.00**	**TOTAL WITH CONTINGENCY AND SOFT COSTS** **$2,798,200**
5. street elements									
a. Trash cans (proposed) -	4 per block	$1,800	$150	$7,800.00	$7,800.00	$7,800.00	$7,800.00	$31,200	
b. Bike racks (proposed) -	8 per block	$315	$150	$3,720.00	$3,720.00	$3,720.00	$3,720.00	$14,880	
c. water fountains (2 per block, 2 fountains exist so inlcude re-install costs only for Pike - Union block)	2 per block	$6,000	400	$12,800	$12,800	$800.00	$12,800	$39,200	
								TOTAL FOR STREET ELEMENTS **$85,280.00**	**TOTAL WITH CONTINGENCY AND SOFT COSTS** **$144,976**
6. Tree Planting (per tree)				*8 TREES PROPOSED*	*1 TREE PROPOSED*	*6 TREES PROPOSED*	*1 TREE PROPOSED*		
a. 60" Box Tree	1 CT	$4,500		$36,000	$4,500	$27,000	$4,500	$72,000	
b. Planting Soil	23 CY ($45 per unit)	$1,035		$8,280	$1,035	$6,210	$1,035	$16,560	
c. 60" x 96" Paver Grate System	1 CT	$2,645		$21,160	$2,645	$15,870	$2,645	$42,320	
d. Paver Grate and Tree Installation			$1,000	$8,000	$1,000	$6,000	$1,000	$16,000	
e. Underdrain System	1 LS	$750		$6,000	$750	$4,500	$750	$12,000	
f. Paver Grate CIP Footing	26 SF	$390		$3,120	$390	$2,340	$390	$6,240	
								TOTAL FOR TREE PLANTING **$165,120.00**	**TOTAL WITH CONTINGENCY AND SOFT COSTS** **$280,704**
7. ITS Kiosk - Metro Pole				*2 Kiosks proposed - 1 per block face*	*2 Kiosks proposed - 1 per block face*	*2 Kiosks proposed - 1 per block face*	*2 Kiosks proposed - 1 per block face*		
a. Kiosk Unit	2 per block	$50,000	Price includes installation estimate per Kiosk	$100,000	$100,000	$100,000	$100,000	$400,000	
								TOTAL FOR ITS KIOSK **$400,000**	**TOTAL WITH CONTINGENCY AND SOFT COSTS** **$680,000**

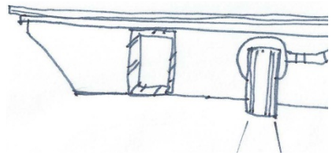
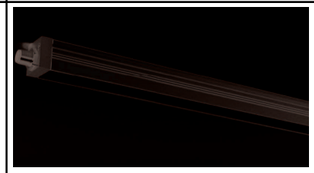
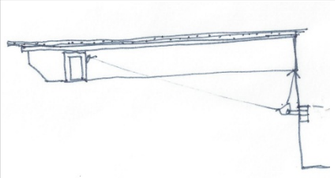
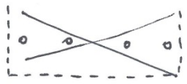
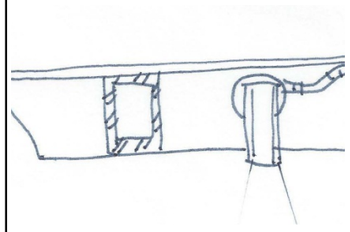
COST ESTIMATE NOTES	FUTURE COSTS TO INCLUDE
** All Installation will vary depending on areaway locations*	*Mobilization and Traffic Control*
*** Street lounges will variey, estimate is for a high quality designed approach, estimate excludes amenities such as heaters, additional lighting, electricity, maintainence*	
**** Transit Canopies can vary in size for each block. Cost is estimated at 60' length*	

Total Cost with Contingency (30%) and soft costs (40%)	**$8,815,886**
Planning Cost (10% of total with Contingency)	**$881,588.55**
Design Cost (25% of total with Contingency)	**$2,203,971.38**
TOTAL COST (with Contingency/Soft Costs, Planning and Design Costs included)	**$11,901,445.43**

Appendix D: 3rd Avenue Lighting

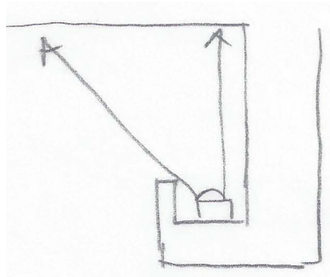
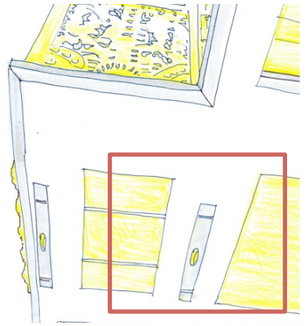
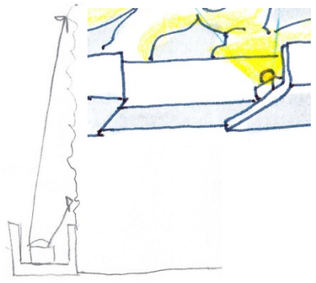
design concept	item	action	symbol	fixtures	sketch	specification	approx. quantity	estimated price
① UNIFORMITY								
	A. Cobraheads	Replace High Pressure Sodium cobra heads with City approved LED cobra heads to improve energy efficiency and provide a whiter light with better color rendering to improve visual acuity and safety.	TBD		TBD	Mounts directly to existing poles. Cobrahead for use with white LED's at 4300K type II distribution.	46	$750
	B. Pedestrian poles	**Globe fixtures attached to street lights:** When sidewalk is widened, add double headed, SDOT and DPA approved, globe pole lights, illuminated with LED modules, in a rhythmic pattern along the west side of the Macy's building.				Retrofit fixture source with white LED. Remote phosphor module. Module to mount to the base of the globe uplighting the globe without glare.	34 existing 8 additional (globe count)	$300 +retrofit labor
		Self standing Globe fixtures: When sidewalk is widened, add double headed, SDOT and DPA approved, globe pole lights, illuminated with LED modules, in a rhythmic pattern along the west side of the Macy's building.				Retrofit fixture source with white LED. Remote phosphor module. Module to mount to the base of the globe uplighting the globe without glare.	24 existing 14 additional (globe count)	$300 +retrofit labor

Appendix D: 3rd Avenue Lighting

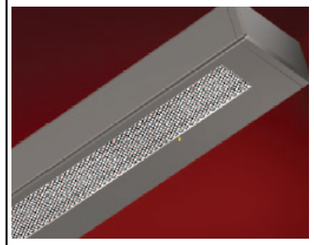
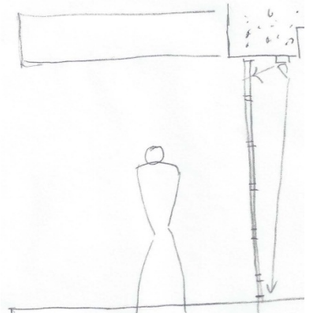
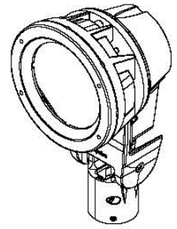
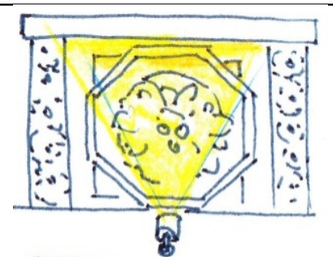
design concept	item	action	symbol	fixtures	sketch	specification	approx. quantity	estimated price
	C. Canopies	**Transparent:** Incorporate downlighting to all canopies along 3rd Ave to provide safety and light patters along the sidewalk.				Surface mounted cylinder downlight for use with white LED's at 3000K. 80+ CRI. 25 degree distribution. 12 watts power consumption. Integral or remote driver depending on mounting conditions	16	$550
		Frosted: Incorporate linear uplighting to the frosted canopies creating bounced light for pedestrians providing vertical illumination for facial recognition.				Surface mounted linear asymmetric uplight for use with white LED's at 3000 K. Wet location rated extruded aluminum housing. Integral driver.	300 ft.	$150 per foot
		No glass: Incorporate downlighting to all canopies along 3rd Ave to provide safety and light patters along the sidewalk.				Surface mounted cylinder downlight for use with white LED's at 3000K. 80+ CRI. 25 degree distribution. 12 watts power consumption. Integral or remote driver depending on mounting conditions	4	$550

	D. Building mounted downlights	Supplement downlight "bullet" fixtures to existing building uplight applications at Columbia outwear store and Wilde Ginger Restaurant.	TBD		TBD	Surface mounted cylinder downlight for use with white LED's at 3000K. 80+ CRI. 25 degree distribution. 12 watts power consumption. Integral driver.	16	$600

Appendix D: 3rd Avenue Lighting

design concept	item	action	symbol	fixtures	sketch	specification	approx. quantity	estimated price
② MACY'S BLOCK								
	A. Macy's cano	**coffers:** Change the current fluorescent fixture in the coffers to a linear, exterior rated LED asymmetric strip light to illuminate coffers. This will also provide soft, vertical illumination along the sidewalk while visually connecting all the elements of the canopies.	TBD			Architectural detail mounted wet location aluminum extrusion asymmetric uplight for use with white LED's. integral driver		$220 per foot
		Store entrances: Narrow rectangular lensed areas at the leading edge of each canopy: Replace lighting element behind the narrow glass panels at the leading edge of each canopy section with small, LED downlight to provide a pathway of lighting along sidewalk.	TBD			Recessed mounted LED downlight for use with white LED's at 3000K	8	$425
		copper frieze: Mount small, linear exterior rate LED strip uplight in small valance on the front of the copper canopies to highlight the frieze. This lighting application will highlight the architectural detail and make the canopy more visible to the public.	TBD			Surface mounted linear asymmetric uplight for use with white LED's at 3000 K. Wet location rated extruded aluminum housing. Integral driver.		$150 per foot

Appendix D: 3rd Avenue Lighting

design concept	item	action	symbol	fixtures	sketch	specification	approx. quantity	estimated price
	B. Loading dock	Remove existing mesh frames mounted in the swinging loading dock doors and replace with a highly durable, UV stabilized, translucent acrylic or polycarbonate panel. Mount a fluorescent or LED linear fixture within the loading dock, at the beam above the doors, to back light the panels so that they glow. This will provide a soft vertical illumination which will increase facial recognition, heighten the sense of security and conceal the back of house loading dock.	TBD			Surface or pendant mounted wet location, lensed asymmetric linear wall wash for use with (1) 54 watts T5HO per 4 ft.		$130 per foot
	C. Architecture	Mount small bullet fixtures at the base of each the decorative, architectural medallions at the 4th floor. This will highlight historical architectural element: increasing the visual interest of the building while reinforcing Macy's branding.	TBD					$450
	D. Projections	Install projectors either in one of the upper offices of the west side of Macy's or on horizontal stanchions at the top of the garage to project runway shows either from the computer or streaming from an in progress runway show. This will promote Macy's branding and identity while providing a fun and interesting visual show for pedestrians.				TBD		

Appendix D: 3rd Avenue Lighting

design concept	item	action	symbol	fixtures	sketch	specification	approx. quantity	estimated price
③ ARCHITECTURAL HIGHLIGHTS								
	A. uplight frieze	Kress building						
	B. highlighting medallions							
	C. backlighting façade	Benaroya garage: Install RGB LED to graze metal structure facade						
④ PROJECTED IMAGES								
	A. interactive w	Ross wall						
	B. words on sidewalk	projections at Benaroya entrances						

Appendix E

Third Avenue Pedestrian Data / Level of Service Report

Introduction

Sidewalks on Third Avenue in downtown Seattle have two primary user groups: pedestrians using the sidewalk to travel within downtown, and transit patrons waiting at bus stops. In order to determine the ability of existing and proposed platform area to meet the needs of both user groups, a Level of Service (LOS) analysis was conducted. This report contains a summary of the methodology used to assess the level of service for walking and standing pedestrians on each bus platform within the study area and the results of the LOS analysis for each block.

Methodology

Level of Service (LOS) for walking pedestrians and standing bus patrons on each bus platform in the study area was measured based on methodology described in TCRP Report 100, the Transit Capacity and Quality of Service Manual[1]. Walkway LOS is determined based on the width of the walkway and the number of people per minute walking on the walkway (called the flow per unit width, pedestrian/foot/minute). This can be calculated by observing the number of people per minute walking through the bus platform and dividing by the width of the walkway, however bus platforms on Third Avenue do not have designated walkways. The minimum walkway width required to achieve each

[1] *Transit Capacity and Quality of Service Manual, Report 100,* Transit Cooperative Research Program, 2003, Part 7, Chapter 3

LOS grade was calculated by dividing the number of people observed walking on the platform by the flow per unit width. The figures below show TCRP LOS grades for pedestrians on walkways and descriptions of those conditions.

Figure 1 TCRP Pedestrian LOS on Walkways

TCRP Walking LOS	pedestrian/ft/min	Description
A	0-7	Walking speeds freely selected; conflicts with other pedestrians unlikely
B	7-10	Walking speeds freely selected; pedestrians respond to presence of others.
C	10-15	Walking speeds freely selected; passing is possible in unidirectional streams; minor conflicts for reverse or cross movement.
D	15-20	Freedom to select walking speed and pass others is restricted; high probability of conflicts for reverse or cross movements.
E	20-25	Walking speeds and passing ability are restricted for all pedestrians; forward movement is possible only by shuffling; reverse or cross movements are possible only by shuffling; reverse or cross movements are possible only with extreme difficulty; volumes approach limit of walking capacity.
F	>25	Walking speeds are severely restricted; frequent, unavoidable contact with others; reverse or cross movements are virtually impossible; flow is sporadic and unstable.

The LOS for standing passengers is based on the number of square feet available per standing pedestrian (ft^2/pedestrian). This can be calculated by dividing the total amount of available space on the bus platform by the maximum number of pedestrians observed standing on the platform. The total area of the bus platform was defined for each block by observing the general area in which waiting passengers stand during the afternoon peak (5:00 PM – 6:00 PM). Street furniture and other unusable space such as the area in front of doorways facing the platform was subtracted out of the total area of the bus platform along with a two foot curb buffer running the entire length of the platform and the area of the walkway (varies depending on the walkway width required to meet each LOS grade). The remaining square footage was considered the total usable space and was divided by the peak number of standing passengers in order to determine the LOS for standing passengers. The figures below contain TCRP LOS grades for standing passengers, and King County Metro's Standing Pedestrian Criteria. King County Metro's ratings are based on the same metric as TCRP, (ft^2 /pedestrian), but the rating categories (desirable, constrained, uncomfortable) have different thresholds. For example, 15 ft^2/pedestrian is considered LOS A by TCRP but "Constrained" by King County Metro standards.

Figure 2 TCRP LOS for Standing Pedestrians

TCRP Standing LOS	ft²/pedestrian	Description
A	> 13	Standing and free circulation through the queuing area possible without disturbing others within the queue.
B	10-13	Standing and partially restricted circulation to avoid disturbing others within the queue is possible.
C	7-10	Standing and restricted circulation through the queuing area by disturbing others is possible; this density is within the range of personal comfort.
D	3-7	Standing without touching is impossible; circulation is severely restricted within the queue and forward movement is only possible as a group; long-term waiting at this density is discomforting.
E	2-3	Standing in physical contact with others is unavoidable; circulation within the queue is not possible; queuing at this density can only be sustained for a short period without serious discomfort.
F	< 2	Virtually all persons within the queue are standing in direct physical contact with others; this density is extremely discomforting; no movement is possible within the queue; the potential for pushing and panic exists.

Figure 3 King County Metro Standing Pedestrian Criteria

King County Metro Criteria	ft²/pedestrian
Desirable	> 17
Constrained	8-17
Uncomfortable	< 8

Data

Figure 4 shows the peak number of people observed walking and standing on each block with a bus stop within the study area. Data was collected between 5:00 PM and 6:00 PM by counting the number of people walking and standing on the platform each minute. The numbers displayed below are the 90th percentile of all observations at each location.

Figure 4 Peak Number of Observed Walking and Waiting Pedestrians by Bus Stop

Block	Stop #	Date	Walking	Standing
Stewart/Pine (NB)	590	2/27/2013	20	59
Stewart/Pine (SB)	430	3/19/2013	21	25
Pine/Pike (NB)	578	3/18/2013	33	64
Pine/Pike (SB)	431	3/20/2013	30	60
Union/University (NB)	570	3/19/2013	15	57
Union/University (SB)	450	3/19/2013	15	26

Analysis

In 2016 Sound Transit will open the LINK light rail extension from Westlake Station to the University of Washington. Buses that currently operate in the downtown transit tunnel will be re-routed on surface streets in downtown. In order to understand how pedestrian conditions may change, a "future" scenario was developed along with the existing scenario by expanding the numbers of walking and standing pedestrians by 50% but keeping the total available space on the platform constant. Additionally, a "proposed" scenario was developed in order to test the ability of the proposed design of the blocks on Third Avenue to mitigate pedestrian congestion under projected future conditions. In this scenario the total available space increases in order to reflect the effect that the proposed design will have on where standing pedestrians choose to wait for the bus. Specifically, the design aims to lengthen the section of each block that patrons occupy while waiting for the bus.

Increased walkway widths result in higher levels of service, but also reduce the amount of available space for passengers waiting for the bus (standing) on the platform. The level of service for walking passengers is inversely related to the level of service for waiting passengers due to the need to share a fixed amount of pedestrian right of way. The ability to achieve high levels of service for both user types depends on the area of the platform and the number of pedestrians walking and standing. In some cases, LOS A is achievable for both groups, while in more constrained conditions, with high volumes of walking and standing pedestrians in smaller platform areas, a high level of service for walkers results in a lower level of service for standing pedestrians and vice versa. As discussed above, King County Metro ratings for are based on different ft^2/pedestrian thresholds, so there are some cases in which LOS A is possible for both walking and standing, but by King County Metro standards, standing passengers are constrained. The following analysis tests whether it is possible for LOS A and a "desirable" King County Metro rating to be achieved for both user groups under existing, future, and proposed conditions.

Figure 5 through

Figure 10 show the results of the analysis for each bus stop in the study area under existing, future, and proposed conditions. The tables show the walkway width required to achieve each walkway LOS grade. The area available per standing pedestrian is shown for the corresponding standing LOS and King County Metro rating. The first row of the table in Figure 5 can be read in the following manner: "if under existing conditions the Walkway LOS is A, then the Standing LOS will be A, and the King County Metro Rating will desirable."

The analysis shows that under existing conditions all stops have sufficient capacity to provide LOS A for both walking and standing pedestrians and achieve a desirable King County Metro rating for standing pedestrians. The future scenario predicts conditions that may occur when there is a 50% increase in pedestrian activity but the area of the platform remains constant. If the amount of space does not change, but the number of walking and standing pedestrians increases, Stewart & Pine East, Stewart & Pine West, and Union & University West have capacity to provide LOS A and desirable conditions. Pine & Pike East, Pine & Pike West, and Union & University East all have the capacity to achieve LOS A for both walking and standing pedestrians under future conditions, however based on the standing area per pedestrian, the King County Metro rating is constrained. A desirable rating can be achieved at Pine & Pike East only if the walkway LOS drops to B, providing more space for standing pedestrians. At Pine & Pike West, a desirable rating can only be achieved if walkway LOS drops to C, and at Union & University East a desirable rating can only be achieved if walkway LOS drops to F. The analysis shows that LOS A and desirable King County Metro rating can be achieved on all blocks in the proposed scenario, which uses the expanded platform area in the proposed design and the predicted increase in pedestrian activity.

Figure 5 Stewart & Pine – East (Northbound)

Scenario	Walkway LOS	Walkway Width (ft)	Standing LOS	Standing Area / Ped (ft^2/ped)	KC Metro Rating
Existing	A	2.9	A	35.9	Desirable
Future	A	4.3	A	23.7	Desirable
Proposed	A	4.3	A	44.5	Desirable

Figure 6 Stewart & Pine – West (Southbound)

Scenario	Walkway LOS	Walkway Width (ft)	Standing LOS	Standing Area / Ped (ft^2/ped)	KC Metro Rating
Existing	A	3.0	A	92.6	Desirable
Future	A	4.5	A	55.4	Desirable
Proposed	A	4.5	A	96.3	Desirable

Figure 7 Pine & Pike – East (Northbound)

Scenario	Walkway LOS	Walkway Width (ft)	Standing LOS	Standing Area / Ped (ft^2/ped)	KC Metro Rating
Existing	A	4.7	A	27.8	Desirable
Future	A	7.1	A	15.3	Constrained
	B	5.0	A	18.2	Desirable
Proposed	A	7.1	A	29.6	Desirable

Figure 8 Pine & Pike – West (Soutbound)

Scenario	Walkway LOS	Walkway Width (ft)	Standing LOS	Standing Area / Ped (ft^2/ped)	KC Metro Rating
Existing	A	4.3	A	24.3	Desirable
Future	A	6.4	A	13.7	Constrained
	C	3.0	A	17.7	Desirable
Proposed	A	6.4	A	39.8	Desirable

Figure 9 Union & University – East (Northbound)

Scenario	Walkway LOS	Walkway Width (ft)	Standing LOS	Standing Area / Ped (ft^2/ped)	KC Metro Rating
Existing	A	2.1	A	23.0	Desirable

Future	A	3.2	A	14.2	Constrained
	F	0.5	A	17.1	Desirable
Proposed	A	3.2	A	32.8	Desirable

Figure 10 Union & University – West (Southbound)

Scenario	Walkway LOS	Walkway Width (ft)	Standing LOS	Standing Area / Ped (ft^2/ped)	KC Metro Rating
Existing	A	3.0	A	92.6	Desirable
Future	A	4.5	A	55.4	Desirable
Proposed	A	4.5	A	96.3	Desirable

The results of the analysis demonstrate that under future conditions, certain blocks in the study area would not have the capacity to provide desirable conditions for standing pedestrians and also LOS A for walking pedestrians. In order to achieve a desirable rating for standing pedestrians, the LOS grade must be compromised to a lower grade. Additionally, the analysis shows that the proposed design would restore conditions to a desirable state for standing pedestrians.

It is important to note that field observations indicated that under existing conditions, walking pedestrians often appear impeded by crowds of pedestrians standing on the bus platform. While the analysis shows that there is enough total square footage to meet the needs of both user types, it does not take factors such as the organization of the space into consideration, which is difficult to quantify. Under future conditions, a successful design of the bus platforms on Third Avenue may require both an increase in total space as well as a re-organization of the space.

Appendix F

Third Avenue Pedestrian TimeLapse Video Commentary

https://vimeo.com/65991279

Pedestrian activity at Third Ave and Pine was observed from the Macy's sky bridge between 5:00 PM and 6:00 PM on March 20, 2013. Timelapse photography was used to compress the activity of one hour into several minutes and can be viewed at the link above. The video was shot at two frames per second and is played back at 30 frames per second.

Observations

When northbound buses arrive (east side of Third Ave), people move across the sidewalk from under the overhang toward the edge of the sidewalk, impeding the flow of pedestrians moving through the walkway. For example, at 0:09 seconds, Rapid Ride arrives and the crowd that forms to queue causes pedestrians who are walking through to weave around them. While not visible in the video, the presence of pedestrians waiting under the awning prevents walking pedestrians from using the space under the awning to travel through the platform unimpeded. Pedestrians also walk on the outer edge of the platform (between street furniture and curb), and also in the loading zone halfway down the block (0:28 seconds), potentially putting them in harm's way.

The flow of people down the sidewalk on the southbound side seems less choppy than the northbound side. The pedestrian Level of Service Analysis showed that both sides of the street at Third Ave and Pine currently have capacity to provide good conditions for walking and standing pedestrians, but it is clear from the video that the northbound side is more congested. The northbound platform contains nothing to draw standing pedestrians away from the wall, leaving people to stand under the overhang while waiting and then move across the flow of walking pedestrians toward the buses when they arrive. The southbound platform has a shelter out toward the curb, drawing waiting pedestrians away from the wall, reducing the amount of cross-cutting movement required to board a bus from the standing location, and creating an aisle behind the shelter for walking pedestrians to use.