FINAL REPORT

Balboa Park BART Station
Design Concept and Modernization Plan

June 2020

AECOM

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Balboa Park BART Station

Design Concept & Modernization Plan

Final Report

This conceptual design plan documents a comprehensive effort to modernize and re-envision the Balboa Park Bay Area Rapid Transit (BART) Station.

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Acronyms and Abbreviations

ADA	Americans with Disabilities Act
AFC	automatic fare collection
AFM	add-fare machine
BART	Bay Area Rapid Transit
BARTnet	Bay Area Rapid Transit internal fiber-optic network
BCC	bill-to-bill changer
BFS	BART Facility Standards
BOSC	BART Only Smart Cards
CCSF	City College San Francisco
CCTV	closed-circuit television
CNI	Capital Needs Index
DSS	Destination Signs
EOL	end-of-life
HVAC	heating, ventilation, and air conditioning
LED	light-emitting diode
LRV	Light rail vehicle
Muni	San Francisco Municipal Railway
Muni Metro	San Francisco Municipal Railway light rail
OD	origin–destination
PA	public address
Plan	Balboa Park BART Station Design Concept and Modernization Plan
PD	Police Department
RPP	Residential Parking Permit
RWQCB	Regional Water Quality Control Board
SFCTA	San Francisco County Transportation Authority
SFMTA	San Francisco Municipal Transportation Agency
TOD	Transit Oriented Development
TVM	ticket vending machine
UP/DN	up/down
UPS	Uninterruptable Power Supply
VOC	volatile organic compound

Executive Summary

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Existing Station Platform Level
Photograph taken by AECOM in 2019

1. Executive Summary

This conceptual design plan documents a comprehensive strategy to modernize and re-envision the Balboa Park Bay Area Rapid Transit (BART) Station, which opened in 1973.

BART is currently embarking on a Station Modernization Program that is intended to enhance the quality of life around stations and ensure that existing stations and surrounding areas have the capacity to serve forecasted increases in transit ridership. Together with BART's collaborative station area planning work and Transit Oriented Development (TOD) program, the proposed station improvements will support the goals of Plan Bay Area, the San Francisco Bay's long-range integrated transportation and land use/housing strategy.

The Station Modernization Program will improve the look, feel, and usability of BART stations for riders, as well as enhance the safety and comfort of the work environment for BART employees. The program addresses all aspects of the stations, including buildings, escalators and elevators, circulation and signage, plazas and waiting areas, lighting and ambient environment, advertising, public art, materials and finishes, and other station equipment.

The Balboa Park BART Station Design Concept and Modernization Plan (Plan) has been prepared to assess the station's needs and to identify and prioritize opportunities for improving the station. It establishes a comprehensive vision for updating the functionality and look and feel of the station to benefit BART customers and the surrounding community. The projects presented in this plan are recommendations intended to guide BART's approach to renovations and the use of funding at the station. The concept and design of individual projects are intended to be representative, and will be revisited when specific projects are moving forward with implementation.

The project team undertook a methodical process to develop the station's modernization design concept. Station walk- throughs and workshops were conducted with BART staff and stakeholder organizations to identify issues of interest or concern in the existing station. Multiple in-station public outreach events and an accompanying survey gave the public opportunities to provide input on the modernization effort. Based on this initial analysis, the project team developed a preliminary list of proposed improvement projects and design alternatives for architectural elements of the station. These alternatives were the subject of further workshops with BART staff and stakeholders to refine the options into a preferred alternative for the design concept. The project team then conducted a second public outreach event and survey to validate the elements of the preferred design concept and enable further refinements. The results of this methodical and inclusive approach are documented in this Plan.

1.1 Project Goals and Objectives

The three main goals of BART's Station Modernization Program are:

1. **Make Transit Work:** Ensure the BART system is reliable and has the capacity to meet customer and employee needs.
2. **Connect to Community:** Improve the connectivity to and within BART stations and connect to the community by responding to their priorities. Ensure BART investments align with regional goals and future growth, and that they are equitable.
3. **Create Place:** Encourage the BART station to integrate into the surrounding community and to contribute to the community's livability, safety, and vitality.

These goals were used to guide the development of more specific project goals for the Balboa Park Station, which are listed below.

1. Enhance the Balboa Park Station to establish it as an inviting public space and community hub.
2. Modernize and update the physical conditions of the station.
3. Ensure that the station reflects BART's sustainability goals.
4. Improve the station's access, capacity, and operations.
5. Support the neighborhood vision and integrate an improved Balboa Park Station with community priorities.

The above goals for the Balboa Park Station Modernization Plan were developed through a community engagement process. BART engaged the community by sharing the proposed improvements and solicited input on and prioritization of the recommended projects through a variety of mechanisms, including online and in-person surveys, two sets of public in-station events in June 2016 and March 2018, and the project website (http://www.bart.gov/about/planning/balboa-park). The surveys received a combined total of more than 600 responses and were used to inform the development and prioritization of the Balboa Park Modernization Plan.

1.2 Assessment and Needs

BART strives to provide its customers with a pleasant, high-quality experience throughout its system. While the Balboa Park BART Station currently functions well, specific concerns and opportunities for improvement were identified. Given the station's age and heavy use, elements of the station's systems and infrastructure are due for updates and repair. These include some systems supporting BART operations as well as elements of the station environment such as bike lockers, pest protection, agent booths, and platform edge strips.

The Balboa Park Upper Yard Redevelopment project is currently underway as part of the City's larger Balboa Park Station Area Plan. The project, which includes modification of the existing kiss-and-ride area at the Balboa Park Station, presents a significant opportunity to enhance the south entrance to the station as a gateway to the neighborhood and also to address existing deficiencies related to Americans with Disabilities Act (ADA) compliance. The design for the station plaza at this location can aim to create a seamless, integrated space with the public pedestrian way.

Consideration should also be given to redesigning the walls and other vertical concrete surfaces in a cohesive fashion within the public pedestrian way to address vandalism issues while also providing protection from the elements. Lighting at this location should also be improved to help deter criminal activity and ensure that the public pedestrian way remains a safe and inviting space for both casual use and passenger use at all times of the day and evening.

Although the station has sufficient capacity to accommodate current and projected ridership levels, vertical circulation between the street and the two station levels can be inconvenient, especially for customers with limited mobility. The Balboa Park Station currently has only one elevator that provides access to each of the three station levels (surface, concourse, and platform). This single elevator limits passenger flow and creates a fare evasion opportunity, as it serves both the public surface "free" area and the below-grade "paid" areas. Access could be further improved through additional infrastructure to support the storage of bicycles at the station.

The station design and systems could better support the accessibility needs of BART customers. In addition to the vertical circulation issues already identified, improvements to hand railings, accessible elevators, and other infrastructure elements are needed to bring the station into full ADA compliance.

Opportunities for improvements related to environmental safety and security were also identified. Fare evasion is an ongoing issue at the station, due to low-height barriers and unattended platform access points. Isolated locations, poor sightlines, and dim lighting in some areas create security concerns.

Appendix A provides a list of the supporting documents prepared during the project to analyze needs and opportunities in support of development of this Plan.

1.3 Design Concept

The design concept presented in this Plan is based on a set of station-specific objectives developed to support BART's Station Modernization Program's stated objectives and to address the interests and concerns identified during the project. The design objectives were as follows:

- Highlight the quality of the original Brutalist station design with improvements that complement the existing station architecture.
- Embrace overall design themes of transparency, durability, accessibility, and sustainability.
- Improve the passenger experience, specifically circulation and accessibility from the surface level down through the concourse and ultimately to an improved platform area that will increase the distribution of passengers along the platform length.
- Improve safety and security while increasing connectivity to the surrounding Balboa Park neighborhood.

The project team developed a design concept and list of projects that target four categories of improvements: passenger access and circulation; safety and security; placemaking, aesthetics, and customer experience; and facility and system upgrades. These are addressed through a series of station-wide improvements, such as adding new hand rails and elevators to improve ADA accessibility; improving existing and adding new vertical circulation; upgrading bike access and parking; installing new headhouses and fencing; renovating public plaza areas; and improving station infrastructure and facilities. A separate suite of improvements termed "Early Wins" identifies simple, low-cost improvements that can have a significant effect on the overall function and appeal of the station and can be implemented before other planned improvements, since they can be handled by BART maintenance staff. "Early Win" improvements include relocating trash containers, removing inactive fare machines and pay phones, installing storage cabinets, scheduling general cleaning and repair, and incorporating other fixes throughout the station.

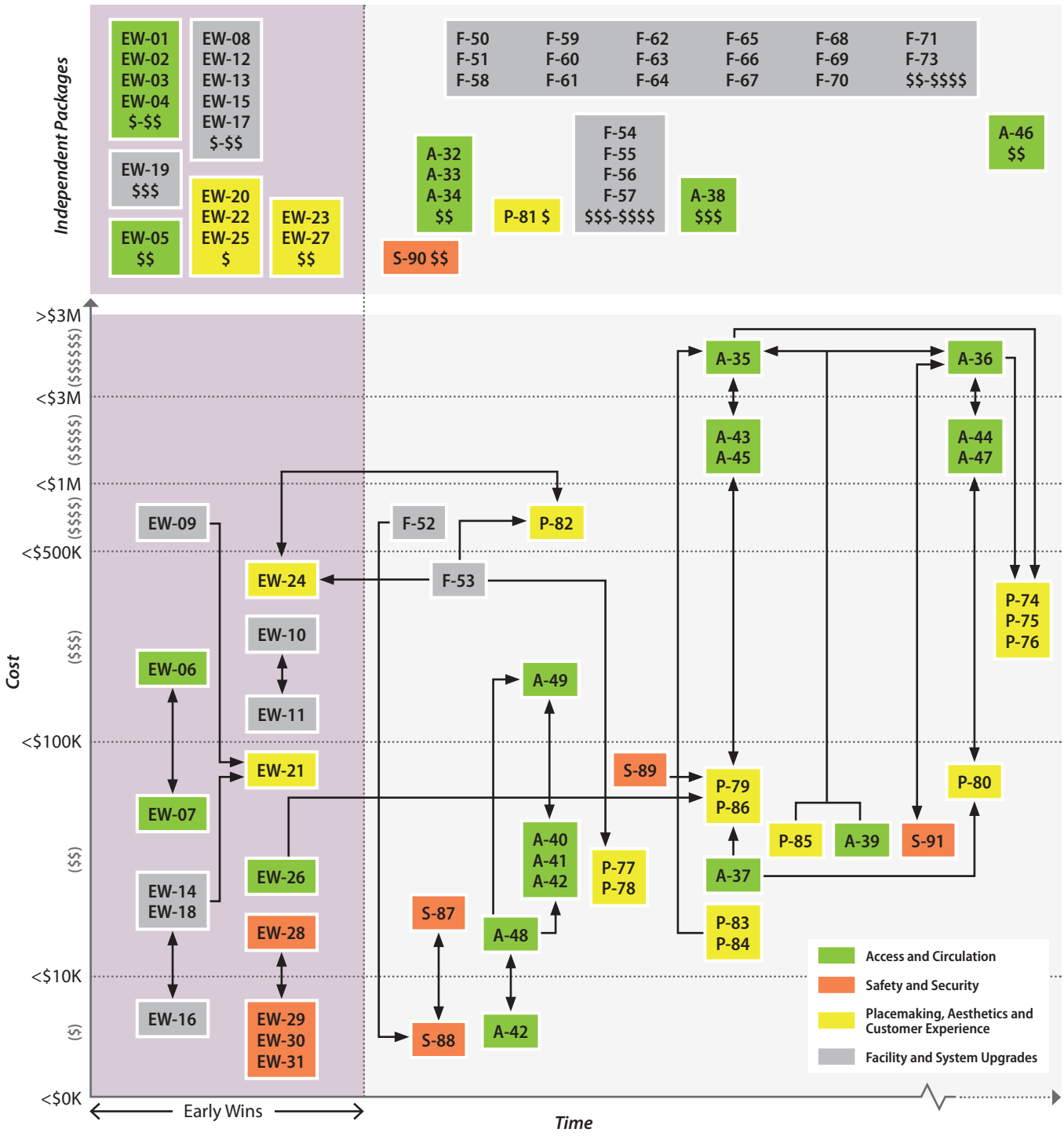
The projects presented in this Plan reflect input provided by BART staff, community stakeholders, and the public. The result is a plan that responds to the specific needs of the community and the needs and opportunities at the station with a set of projects that will enable the Balboa Park BART Station's successful operation long into the future.

1.4 Implementation

This Plan includes a proposed implementation framework and schedule for the improvement projects included in the design concept. This provides a realistic roadmap for completing the projects, given the budget and schedule constraints.

Each project was organized based on its category, station level, and cost, and on whether the improvement would be independent of or dependent on other improvements. Projects were also assessed to determine their relative priority to BART, stakeholders, and the public; ease of implementation; and benefits to the station and the BART system. The projects were then organized chronologically based on the listed factors and the anticipated funding streams for station improvements. **Figure 1-1** is a general summary of cost, timing, and sequencing for the projects included in the concept plan. This summary constitutes a long-term vision for the station and can be used as guidance for the selection and implementation of individual projects as opportunities to do so arise. BART will continue to refine the project list based on evolving conditions at the station and in the Balboa Park neighborhood.

Figure 1-1: Balboa Station Implementation Plan



Project Goals, Process & Vision

2

Existing Stairwell from Concourse to Platform
Photograph taken by AECOM in 2018

2. Project Goals, Process & Vision

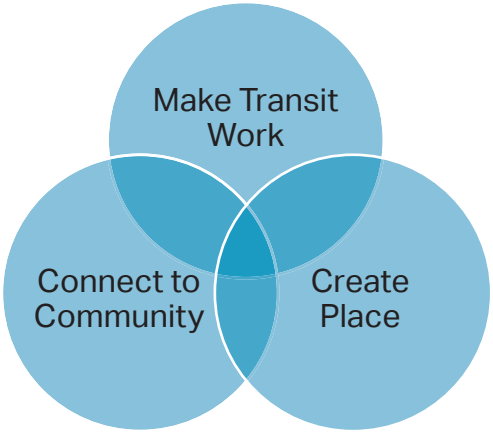
This Plan is part of BART's Station Modernization Program, which invests resources and efforts into the existing core stations and surrounding areas to advance transit ridership and enhance the quality of life around the stations.

2.1 Station Modernization Program & Goals

This project is part of BART's Station Modernization Program, which invests resources and efforts into the existing core stations and surrounding areas to advance transit ridership and enhance the quality of life in the community. The Plan identifies projects that will modernize and improve the station's functionality and overall customer experience.

BART has the following overriding goals for station modernization studies: Make Transit Work, Connect to Community, and Create Place. These goals and their supporting objectives were presented to the BART Board of Directors in the spring of 2014. The relationship of these goals is illustrated conceptually in **Figure 2-1**.

Figure 2-1: Station Modernization Goals



The goals are articulated below and supported by objectives and measurable actions that can be taken in an effort to achieve the goals.

2.1.1 Make Transit Work

Ensure the BART system is reliable and has the capacity to meet customer and employee needs.

- Maintain reliability: Protect investment in the existing system through systematic replacement of aging components and infrastructure, with an emphasis on positive customer experience.
- Increase station capacity: Optimize the BART system's ability to meet projected ridership increases by increasing BART's capacity to carry customers.
- Improve employee environment: Ensure that the BART workforce has the tools and space needed to support a healthy, safe, and productive workplace.
- Advance sustainability: Reduce BART's environmental footprint through implementation of sustainable and cost-effective techniques, such as conserving resources, lowering greenhouse gas emissions, and reducing maintenance costs.

2.1.2 Connect to Community

Improve the connectivity to and within BART stations and connect to the community by responding to their priorities. Ensure that BART investments align with regional goals and future growth and that they are equitable.

- Connect BART: Maximize connectivity and facilitate multi-modal access to stations and within station areas, including transit, walking, and biking.
- Expand universal design: Improve universal design of BART stations and access to stations to provide access for all in accordance with the ADA.
- Incorporate community input: Respond to community and customer input regarding which improvements are perceived as most important.

2.1.3 Create Place

Encourage the BART station to integrate into the surrounding community and to contribute to the community's livability, safety and vitality.

- Enhance the customer experience: Contribute to beautification, comfort, and placemaking (e.g. art, architecture, ambience) to enhance livability and vitality at stations and to support regional goals.
- Ensure safety and security: Enhance customer and system, and real and perceived, safety and security.
- Leverage partnerships: Protect the investment in rail transit through forming strategic partnerships and leveraging outside funding to match BART investments.

The BART modernization goals and objectives were used to guide the development of more specific project goals for the Balboa Park Station.

2.2 Stakeholder & Community Process

At different points in the project, the project team solicited input from stakeholders and the surrounding community to develop a set of targeted, station-specific goals and to later refine the preferred design concept. Details of this process, and the results, are discussed below.

2.2.1 BART and Community Stakeholders

BART engaged a joint team of engineers, planners, and architects from AECOM, Robin Chiang & Company, and Merrill Morris Partners to develop and assess conceptual design options for the Balboa Park Station. In preparing the Plan, input was solicited from stakeholders and the surrounding community, including these agencies and organizations:

- City of San Francisco – Department of Public Works
- City of San Francisco – Department of Planning
- San Francisco Mayor's Office of Housing
- San Francisco Recreation and Parks
- San Francisco Municipal Transportation Agency (SFMTA)
- San Francisco County Transportation Authority (SFCTA)
- City College San Francisco (CCSF)

The stakeholders were invited to multiple workshop sessions to identify existing conditions and needs, discuss and refine proposed improvements, and help prioritize the recommended improvements.

2.2.2 Community Input

BART engaged the community by sharing the proposed improvements and solicited input by asking for feedback on and prioritization of the recommended projects. BART developed a project website (https://www.bart.gov/about/planning/balboa-park) to publicize information about the project and held two sets of public events. During these events, project staff members were on hand to present the proposed improvements and answer questions. Customers were asked to fill out either an online or paper survey to help prioritize the issues and improvements they thought were most important.

The first in-station events were held on Wednesday, June 15, 2016, from 7:00 to 10:00 a.m. and from 4:00 to 7:00 p.m. Between in-station and online surveys, more than 400 customers completed surveys and provided almost 300 comments. The results of this input are provided in **Appendix B**.

The second set of in-station events were held on March 27, 2018, from 4:00 to 6:00 p.m., and on March 29, 2018, from 7:00 to 9:00 a.m. Between in-station and online surveys, more than 200 customers completed surveys and provided almost 400 comments. The results of this input are provided in **Appendix C**.

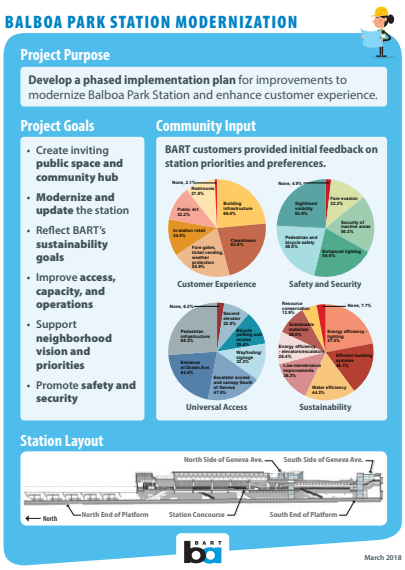
2.3 Project Goals & Community Priorities

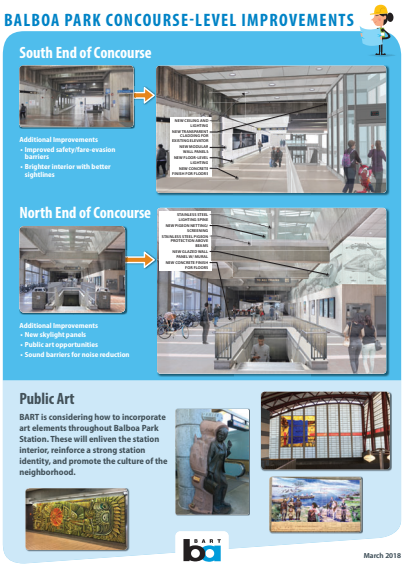
Based on input from stakeholders, the community, and BART staff on the specific issues and opportunities at the Balboa Park Station, the project team developed a specific set of goals for this Plan.

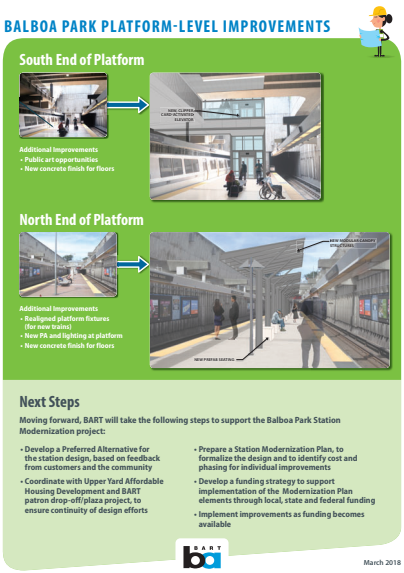
These goals were designed to represent the collective priorities for the project, and guided the design process that led to the specific concepts and projects presented in this Plan.

- **Enhance Balboa Park Station to establish it as an inviting public space and community hub.**
- **Modernize and update the physical conditions of the station.**
- **Ensure that the station reflects BART's sustainability goals.**
- **Improve the station's access, capacity, and operations.**
- **Support the neighborhood vision and integrate an improved Balboa Park Station with community priorities.**

Public Outreach Event #1 – June 15, 2016







BART asked customers to share their thoughts on project goals and opportunities for improving different aspects of the station

Existing Conditions Assessment

3

Existing Conditions of Concourse Level
Photograph taken by AECOM in 2018

3. Existing Conditions Assessment

3.1 Land Use and Geographical Context

Balboa Park Station is located in the Balboa Park neighborhood in southern San Francisco, close to the southern city limits bordering Daly City and the rest of San Mateo County. The station is located near the confluence of three major arterial corridors (Geneva Avenue, San Jose Avenue, and Ocean Avenue) and Interstate 280 (I-280), which has an interchange at Geneva Avenue / Ocean Avenue. Neighborhoods in the vicinity of the station include Sunnyside to the north, Mission Terrace to the northeast, the Excelsior to the east, Crocker–Amazon to the southeast, Cayuga Terrace and Outer Mission to the south, Oceanview to the southwest, Ingleside (Lakeview) to the west, and Westwood Park to the northwest.

Specifically, the station is located within the area defined by Ocean Avenue to the north, Niagara Avenue to the south, I-280 to the west, and San Jose Avenue to the east. Most of the rest of the area immediately surrounding the station is occupied by facilities and infrastructure supporting the San Francisco Municipal Railway (Muni) light rail (Muni Metro) and historic streetcar operations.

The immediate area surrounding the station is illustrated in **Figure 3-1**.

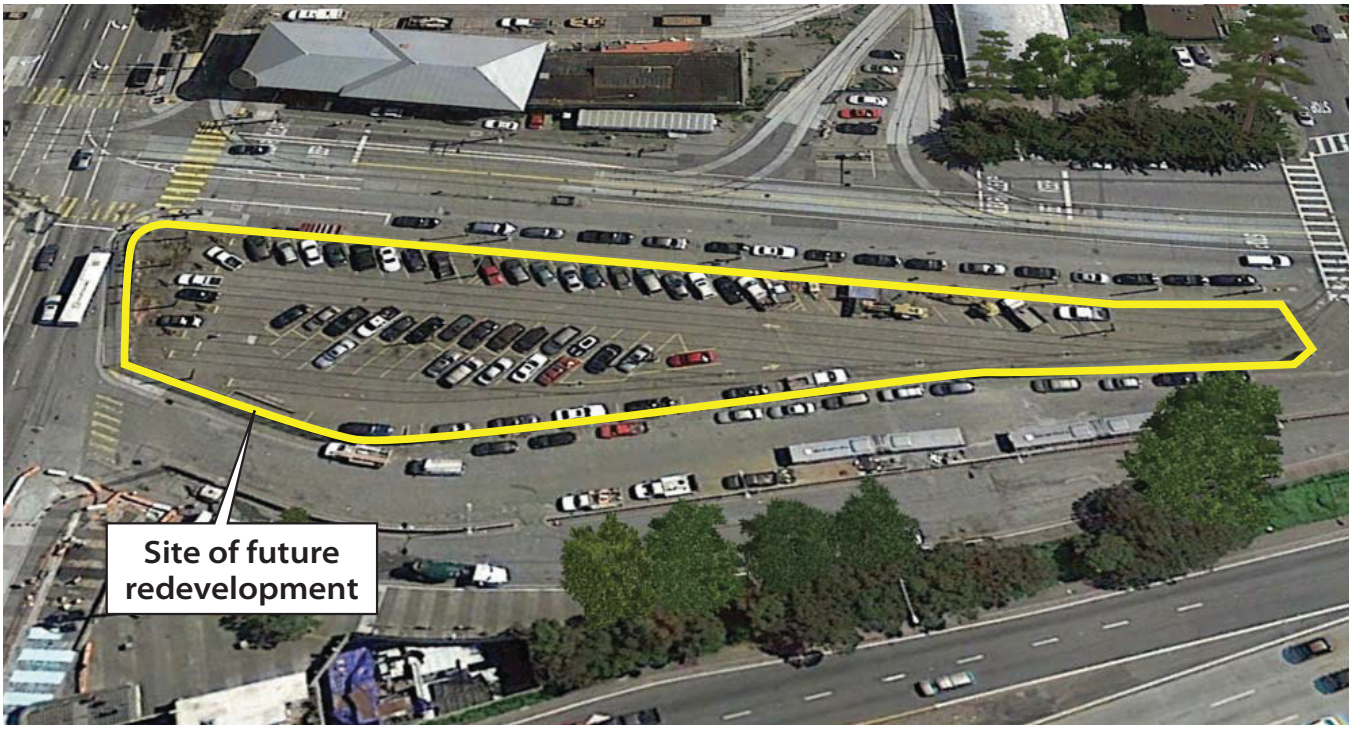
Figure 3-1: Balboa Park Station Area

The most recent major planning efforts for the area surrounding Balboa Park Station were undertaken as part of the Balboa Park Station Area Plan. The Balboa Park Station Area Plan, enacted on May 18, 2009, attempts to capitalize on the rich local and regional transit options available at the station by establishing land use guidelines for the parcels immediately surrounding the station and along the Ocean Avenue commercial corridor to the west.

Major infill sites identified by the plan include the Balboa Reservoir, the Phelan Loop, and nearby parcels (including the former Kragen Auto Parts site, the former Sunset Garage site, and the Firehouse site), as well as various sites at and around Muni facilities at the station, including the Geneva Upper Yard and the historic Geneva Car Barn and Powerhouse. The plan also envisioned small-site infill along both Ocean Avenue and San Jose Avenue.

The Upper Yard area that currently serves as a transportation facility has been identified for redevelopment that will include TOD, affordable housing, and other community amenities (see **Figure 3-2**). The development will contain up to 131 units of affordable housing; community, commercial, and retail space on the ground floor; and 15,000 square feet of open space.

Figure 3-2: Upper Yard Redevelopment Area



3.2 Station Profile and Customer Access

Balboa Park Station is a two-track station with a single center platform, located in a cut along the east side of I-280 roughly between Ocean Avenue and Geneva Avenue. The majority of the southern half of the station is covered by a combination of the station headhouse and the Geneva Avenue overpass across I-280, but the northern third of the station and the very southern end of the station are open-air.

Customers enter the station through four station entrances, illustrated in **Figure 3-3**.

The station is served by a comprehensive multi-modal transportation network that facilitates access by transit, on foot, by bicycle, and by automobile. The station serves as the primary hub of local and regional transit services for southern San Francisco. Most local public transit services are provided by Muni, which operates three light rail lines and several bus routes at the station, providing high-frequency service along all three streets surrounding the station and extending out into the station's expanded catchment area. Several public and private shuttle services also connect the station with areas farther away where public transit service is less frequent, including Daly City, Brisbane, and Executive Park.

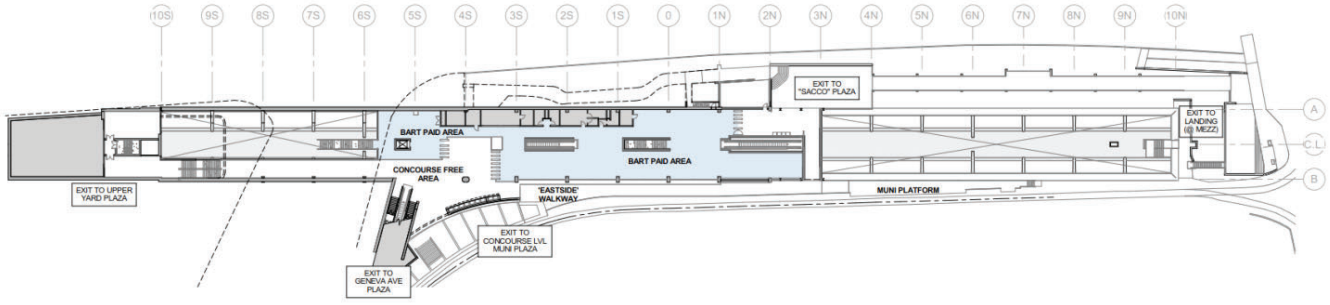
The area is also well served by local and regional roadway access, as it is located at the intersection of three major arterials (Geneva Avenue, San Jose Avenue, and Ocean Avenue) and adjacent to an interchange on I-280. Bicycle and pedestrian access in the area ranges from adequate to poor due to topography, incompatible land uses, traffic congestion, and deficient street and roadway design.

3.2.1 Travel Characteristics

Of the average weekday ridership (station entries) at Balboa Park Station, results from the Station Profile Study show that approximately 68% are from home origins, while the remaining 32% are from non-home origins, reflecting a relatively high degree of bidirectional passenger activity at the station.

The growth in ridership since 2000 has been slow at 0.4% compared to the last few years at 1.7% since 2014. Anticipated growth in 2040 for Balboa Park Station is 57%, similar to the projected system growth at 61%.

Figure 3-3: Station Layout – Concourse Level



Source: RRC, 2016.

3.2.2 Mode Share

The overwhelming majority of trips to the station are made on foot or by transit, including 76% of home-based trips and 91% of non-home-based trips. Automobile modes ("drive alone," "carpool," or "dropped off") represent only a marginal share (6%) of non-home-based trips, increasing to approximately 22% for home-based trips. Of these passengers, most are dropped off—which is likely a reflection, at least in part, on the lack of dedicated parking at the station. Despite this, 7% of passengers arriving at the station from home reported driving alone, which probably indicates some level of on-street commuter parking activity in the surrounding neighborhoods.

Table 3-1: 2008 BART Station Profile Study – Mode Share for Trips to Station

Trip Origin	Mode					
	Walk (only)	Bus / Transit	Drive alone	Carpool	Dropped off	Bicycle
Home	30%	46%	7%	1%	14%	2%
Non-home	68%	23%	1%	1%	4%	2%

Source: BART Marketing and Research Department; Corey, Canapary & Galanis Research. *2008 BART Station Profile Study*. Online: http://www.bart.gov/sites/default/files/docs/2008StationProfileReport_web.pdf

Table 3-2: 2008 BART Station Profile Study – Trip Destination

Trip Origin	Destination						
	Work	School	Visit Friends / Family	Personal Errands	Work-Related Activity	Shopping	Other
Home	78%	6%	3%	2%	2%	2%	7%
Non-home	27%	61%	4%	2%	3%		3%

Source: BART Marketing and Research Department; Corey, Canapary & Galanis Research. *2008 BART Station Profile Study*. Online: http://www.bart.gov/sites/default/files/docs/2008StationProfileReport_web.pdf

3.3 Station Ridership and Capacity

3.3.1 Existing Ridership

BART provided passenger origin–destination (OD) trip data by station pairs, compiled in hourly slices and averaged across all weekdays in April and May 2015. These data are summarized in **Table 3-3** for the 3-hour weekday AM and PM peak periods (7:00 AM to 10:00 AM and 4:00 PM to 7:00 PM), which capture the full range of passenger activity (i.e., both entries and exits) at the station.

Approximately 25,000 passengers use the station on an average weekday, primarily for trips to and from stations north of Balboa Park. Passenger activity to and from stations south is only a small fraction of the total ridership. This is likely a reflection of several factors, including general ridership patterns in the system, regional land use patterns and associated commuting patterns, and the geographic location of the station near the southern end of BART's alignment through San Francisco and the Peninsula.

The dominant ridership pattern reflects traditional commute patterns for residential communities surrounding BART stations, but there is also an appreciable share of reverse-commute demand (passengers exiting the station during the weekday AM peak period and entering the station during the weekday PM peak period). The maximum passenger flow through the station during any single 1-hour period is approximately 3,000 passengers during the 8:00 AM hour.

3.3.2 Existing Capacity

The capacity of the station is generally dependent on three components of the station's physical infrastructure: the platforms, the vertical circulation, and the fare gates. The capacity of each of these components can be estimated, with the most constrained component governing the overall capacity of the station.

The crowding level on the platform under both normal conditions and delay conditions was estimated for both existing and future ridership and service levels. The results indicate that the platform does not currently have a capacity issue and does not hit the platform capacity threshold of 7.0 square feet per passenger under normal conditions. Crowding levels in 2040 would still be well above the platform capacity threshold of 5.0 square feet per passenger under delay conditions.

Table 3-3: Balboa Park Station Comprehensive Station Plan – Recommended Improvements

Passenger Activity	Weekday Daily	Weekday AM Peak Period				Weekday PM Peak Period			
		7:00 AM – 7:59 AM	8:00 AM – 8:59 AM	9:00 AM – 9:59 AM	Total	4:00 PM – 4:59 PM	5:00 PM – 5:59 PM	6:00 PM – 6:59 PM	Total
Entries									
To stations north	12,324	1,671	2,246	1,357	5,274	657	610	490	1,757
To stations south	869	80	81	57	218	67	65	53	185
Subtotal	13,192	1,751	2,326	1,414	5,492	724	675	543	1,942
Exits									
From stations north	11,299	503	585	502	1,590	1,127	1,789	1,457	4,374
From stations south	792	62	73	56	192	55	77	77	209
Subtotal	12,091	566	658	558	1,782	1,182	1,867	1,534	4,583
Total	25,283	2,317	2,985	1,972	7,274	1,906	2,542	2,077	6,525

Source: BART, 2015.

Based on the existing passenger activity at the station, the vertical circulation between concourse and platform levels at the station has sufficient capacity to accommodate current ridership levels. In particular, the peak 60-minute volume in any one direction at the station is only approximately 2,300 passengers (passengers entering the station during the 8:00 AM hour). The existing vertical circulation system has a fixed capacity to accommodate 4,500 passengers per hour in each direction (up to concourse level or down to platform level), plus an additional 5,140 passengers per hour in variable capacity from stairways. Ridership activity at the station could approximately double in intensity before vertical circulation capacity constraints begin to become an issue. Thus it is likely that the existing vertical circulation would be sufficient to handle future expected ridership growth within the horizon year of this study, and no specific improvements are needed to increase capacity.

In addition to platform capacity and vertical circulation capacity, the capacity of the station can also be considered a function of the capacity of the station's fare gate equipment—namely, the aggregate rate at which the fare gate equipment at the station can process ticketing for passengers entering and exiting the station.

Based on the existing passenger activity at the station, the station's fare gates have sufficient capacity to accommodate current ridership levels. In particular, the peak 60-minute volume in any one direction at the station is only approximately 2,300 passengers (passengers entering the station during the 8:00 AM hour). The existing fare gates at the station have an aggregate capacity well in excess of this, and it is likely that no specific improvements will be needed within the horizon year of this study to increase capacity.

3.4 Capital Improvements Underway

Balboa Park Station Comprehensive Station Plan

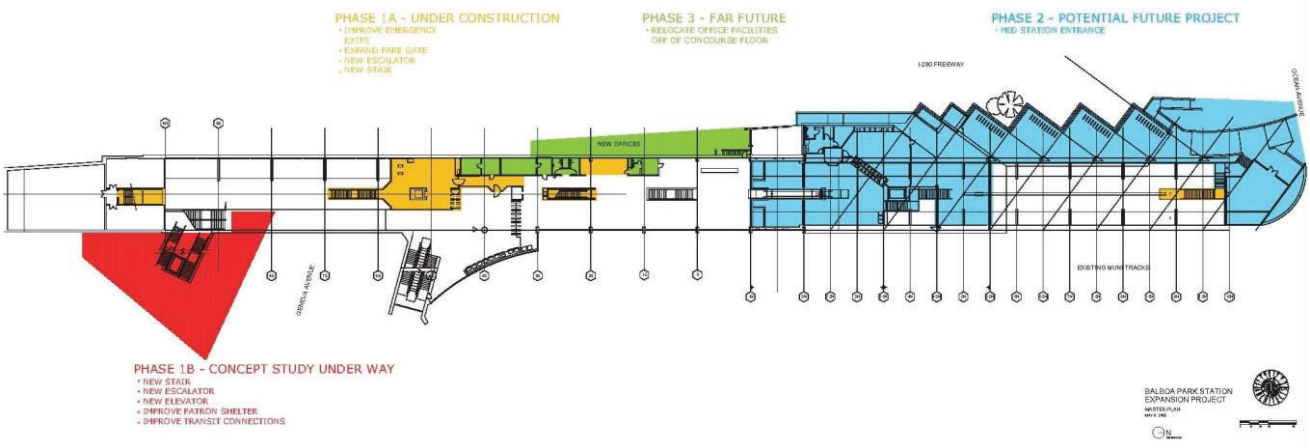
BART's most recent comprehensive evaluation to identify needed improvements at the station is the *Balboa Park Station Comprehensive Station Plan*, published in 2002. The plan identified several improvements to be undertaken by BART as the part of the Balboa Park Station Expansion Project, summarized in **Table 3-4** and illustrated in **Figure 3-4**.

Table 3-4: Balboa Park Station Comprehensive Station Plan – Recommended Improvements

Phase	Improvement	Benefits	Status
Phase 1A Station capacity expansion	More fare gates	Reduce queuing at stairs and fare gates Improve emergency egress capacity	Completed
	New stair and escalator at platform level		Completed
	Upgraded emergency stairs		Completed
Phase 1B Station capacity expansion to south side of Geneva Avenue	Could include new escalator and elevator on south side of Geneva Avenue	Ease transfers to Muni Improve accessibility Enhance access to Upper Yard development	
Phase 2 Ocean Avenue entrance	Direct station entrance from Ocean Avenue	Enhance overall station capacity Provide safe, direct access from Ocean Avenue, including City College Provide rider amenities such as a café	Partially complete
	New fare gates, stair, and elevator		Partially complete
Phase 3 Increased concourse capacity	Relocate offices on concourse	Provide more space for movement within the station	

Source: San Francisco Bay Area Rapid Transit District. *Balboa Park Station Comprehensive Station Plan* (September 2002).

Figure 3-4: Balboa Park Station Comprehensive Station Plan – Recommended Improvements



Source: San Francisco Bay Area Rapid Transit District. *Balboa Park Station Comprehensive Station Plan* (September 2002).

Balboa Park Station Access Improvements

BART is currently in the process of implementing a series of access improvements to the station, some of which are recommended under the Balboa Park Station Expansion Project in the *Balboa Park Station Comprehensive Station Plan*. The access improvements have been broken down into three phases, the first two of which would implement the Phase 2 recommendations of the *Balboa Park Station Comprehensive Station Plan*.

Phase 1, the Westside Walkway and Station Entrance Project, is already complete. This phase created a new, fully accessible walkway from Ocean Avenue along the west side of the station, connecting into the existing westside walkway from Geneva Avenue and a new north ticketing entrance.

Phase 2, the Eastside Connection, builds upon these improvements by constructing an accessible, structurally reinforced pathway to connect the completed westside walkway with a new eastside walkway. A new deck and headhouse structure have been completed to the east of the westside walkway and station entrance. An accessible pathway connects to a new Muni Metro stop at the site of the current ADA boarding / alighting ramp. To the south, a separate accessible pathway—elevated to match the height of the station's concourse level—continues along the east side of the station to the existing concourse-level station entrance as well as a new station entrance adjacent to the existing ticket vending machines (TVMs) at the station. Interior upgrades include clerestory glass panels, ceiling panels, enhanced lighting, and new pigeon-proof screens.

Phase 3 improvements will focus on station access and plazas at Geneva Avenue and Ocean Avenue.

3.5 Design Considerations and Existing Physical Conditions

3.5.1 Station Entrances

The four station entrances are described below.

- Geneva Avenue north side, street-level. This entrance is located at street level along the north side of Geneva Avenue, adjacent to the Muni bus stop for buses traveling westbound along Geneva Avenue. This entrance features one double-width escalator sandwiched between two two-way stairways and a concrete enclosure over the top and along the sides of the entrance that provides some level of protection from the elements.
- Geneva Avenue north side, concourse-level. This entrance is located at the station's concourse level (i.e., below-grade) along the north side of Geneva Avenue, adjacent to and at the same elevation as the light rail terminal loop for Muni's Green Division. This entrance is step-free and can be accessed from the northwest corner of the Geneva Avenue / San Jose Avenue intersection, from Ocean Avenue, or after alighting from the Muni Metro Light Rail Vehicles on the J Church and K Ingleside lines arriving at the station. However, the effective width of the pedestrian path of travel is constrained along most of the terminal loop and is particularly narrow at several locations.
- Geneva Avenue south side. This entrance is located along the south side of Geneva Avenue just east of the I-280 northbound off-ramp, adjacent to the kiss-and-ride area and the Muni bus stop for buses traveling eastbound along Geneva Avenue. This entrance is connected to the ticketing hall by a concourse-level catwalk above the northbound track, and features a large two-way stairway, but no escalators or elevators. This entrance avoids street-level traffic and is the preferred route for passengers traveling to and from the Muni stop along eastbound Geneva Avenue.
- Ocean Avenue south side. This entrance opened on April 15, 2011, as part of the Westside Walkway and Station Entrance Project and is fully accessible and step-free. The entrance is connected to Ocean Avenue by an accessible path and to Geneva Avenue by the existing segment of the westside walkway. This entrance is the preferred access for passengers heading to and from City College of San Francisco, and also serves passengers making connections with Muni service.

A single station elevator, located along the north side of Geneva Avenue east of the I-280 northbound on-ramp, connects the station's concourse and platform levels with the street level.

Plazas and open space are provided at three locations near station entrances, including at the Geneva Avenue south-side and street-level north-side entrances and at the Ocean Avenue entrance (along Ocean Avenue). In general, however, these areas are hardscaped, functional spaces used primarily by passengers waiting for connecting transit services or to be picked up by automobile. There is a distinct lack of amenities, such as seating, greening/ landscaping, retail, or public art that can attract casual (i.e., non-passenger) use and enhance community identity and placemaking.

3.5.2 Safety and Security

The Balboa Park Station layout allows for a general sense of overall passenger safety, but there are areas with limited sightlines, including the exit to Upper Yard, the westside walkway, and the wedge-shaped area at the far south corner of station. The lighting outside the station is dim on the south side of the station. Several customers of Muni or BART enter through the Muni yard area, which could cause conflicts between trains and pedestrians, especially students.

The stairs to the Upper Yard area cannot be secured, so BART has some vagrancy issues at this location. The BART Police Department (PD) noted that there are incidents of petty crime at the south concrete enclosure because it forms a visual obstruction for security. The design should consider limiting access to the roof, which faces I-280 and is therefore a high graffiti target. The westside walkway is also a loitering location.

CCTV is not present in all the required locations and cannot be monitored from the station agent booth. Some areas mentioned by BART PD include entrances, the platform, the train tunnel, stairs, and escalators.

Fare evasion occurs in the station predominately through the elevator and through the entrance at Sacco Plaza, which is furthest from the station agent booth. The fare barrier heights are low.

Access to and from and around the station is congested, and San Francisco's Vision Zero strategy has identified Ocean Avenue, Geneva Avenue, and San Jose Avenue south of Geneva Avenue as part of the City's High Injury Network.

3.5.3 Bicycle Parking

Bicycle parking at the station is primarily provided by 30 U-shaped bicycle racks located at concourse level in the station's paid area. Additional publicly accessible bike parking is provided at two locations at street level, including three five-loop wave racks along the west side of the kiss-and-ride access road just south of the Geneva Avenue south-side station entrance and one five-loop wave rack behind the street-level station entrance along the north side of Geneva Avenue. The station also features 12 keyed bike lockers at street level.

3.5.4 Passenger Loading

A kiss-and-ride loop is provided southeast of the station, with two-way access (ingress and egress) at two locations: the San Jose Avenue / Niagara Avenue intersection and along eastbound Geneva Avenue between I-280 and San Jose Avenue.

The kiss-and-ride area is generally underutilized, given its size and capacity, and many passengers being picked up or dropped off at the station choose to do so informally, in areas or locations not explicitly designated for pick-up and drop-off activities.

3.5.5 Vehicle Parking

Balboa Park does not provide any dedicated off-street parking for BART passengers, and the area has no privately owned facilities providing public parking for BART patrons. Many of the areas surrounding the station are residential neighborhoods and some participate in SFMTA's Residential Parking Permit (RPP) program.

3.5.6 Interior Layout and Vertical Circulation

Concourse Layout

The station's ticketing hall is located roughly in the center of the station at concourse level, adjacent to the concourse-level station entrance along the north side of Geneva Avenue. The street-level entrance from the north side of Geneva Avenue and the catwalk leading from the street-level entrance on the south side of Geneva Avenue also meet in this area, which serves as the primary free area of the station and has the station's two primary fare gate arrays and the only station agent booth.

The station's secondary free area connects to the Ocean Avenue entrance and features the station's third fare gate array. There is currently no interior connection between

the primary and secondary free areas—access at the secondary free area is restricted to BART passengers entering or exiting the fare gates and non-passengers requesting use of the station's elevator to and from street level along Geneva Avenue. The only existing connections between these two free areas for other passengers are circuitous routes using the westside walkway to reach Geneva Avenue at street level or circling back to Ocean Avenue and along the Muni Metro terminal loop to reach the concourse-level station entrance on the north side of Geneva Avenue. The majority of the paid area at concourse level along the west wall of the station is occupied by station offices.

Vertical Circulation

Vertical circulation in the paid area of the station consists of two double-width escalators and two two-way stairways, spread across four locations along the southern two-thirds of the platform.

There is a single elevator serving both station levels and street level. The paid area at concourse level is contiguous, and passengers entering or exiting any of the three fare gate arrays have access to and from all vertical circulation.

Automatic Fare Collection Equipment

Automatic fare collection (AFC) equipment at the station, including fare gates, TVMs, bill-to-bill changers (BBCs), and add-fare machines (AFMs) are present at the station.

One SFMTA TVM is also provided in the ticketing hall, allowing passengers to purchase tickets or passes for connecting Muni service or load Muni Fast Passes for use on BART.

Amenities

Restrooms are provided for passenger use in the paid area of the station, and are located along the west wall just north of the primary free area. A newspaper stand is provided within the free area of the station, adjacent to the concourse-level station entrance and the concourse-level landing for the street-level entrance from the north side of Geneva Avenue. A stand-alone information display for brochures and other pamphlets is provided in the ticketing hall.

Retail and Advertising

Currently, retail and advertising are limited at the station. The station features one retail vendor (occupied at present by a flower shop), unusual in that it is located inside the paid area of the station's concourse level, near the southernmost fare gate array and station elevator. The concourse level of the station currently features a substantial amount of blank or underutilized wall surface area with little existing advertising.

3.5.7 Universal Access and ADA Compliance

Regarding universal access and ADA compliance, opportunities for improvement at the station exist. For example, the existing concourse connection underneath Geneva Avenue lacks adequate lighting, is not ADA compliant and lacks escalators and an elevator, making the path difficult to use for the elderly, passengers with mobility devices, or passengers with bicycles, luggage, or other large or heavy objects. Sidewalk width along streets adjacent to and leading to or from the station varies, but is generally narrow along all three major streets (Geneva Avenue, Ocean Avenue, and San Jose Avenue). In addition, the sidewalks contain obstructions such as streetlamps, traffic signal poles, bus stop shelters, and landscaping features that can reduce the effective width available for pedestrian circulation. Pavement condition ranges from adequate to poor, but can be particularly poor along crosswalks with high volumes of conflicting traffic, such as on- and off-ramps and the kiss-and-ride area.

Additional conditions include:

- Some ramps are missing, and not all existing ramps are in compliance for slope or cross slope.
- Geneva Avenue and Ocean Avenue have slopes that are not compliant.
- Handrail heights are not compliant.
- Directional signs are faded and missing for the elevator.
- Cane detectors are not installed.
- Universal access routes within the station are lacking, including the placement of elevators relative to street, transit and paratransit drop-off locations.

Conceptual Design & Improvements

4

Proposed New Elevator between
Concourse and Platform

4. Conceptual Design & Improvements

4.1 Introduction and History

Balboa Park Station was built as part of the original BART system to serve the southern neighborhoods of San Francisco. It was designed by the same consultant team who created the Glen Park Station, which many consider to be BART's finest architecturally. Because Glen Park station's architecture has been widely praised, people are surprised to learn that the fortress-like Balboa Park Station was designed by the same team. Differences in site and surroundings may have been responsible—influencing their respective layouts and, ultimately, their character:

1. The contiguous part of Balboa Park Station property is larger—allowing the station headhouse to extend over more of the platform.

2. The trackway at Balboa Park Station, partly underground and mostly exposed, and the topography of surrounding streets, including an original idea to berth buses on the property, made the site more challenging—requiring access at different levels.

3. Balboa Park Station had been planned to work with SFMTA's light rail line—this resulted in more complicated concourse layout.

4. Balboa Park Station is separated from its neighborhood by I-280 and its ramps as well as SFMTA's light rail facility that was built shortly after the station opened—the vastness of the surrounding infrastructure may have inspired the team to make the station appear bigger to be visible to passengers/passersby and more robust to holds its own amidst so much concrete.

The architecture of both stations adhered to a popular design approach at the time called Brutalism. Several stations from that era could be classified as Brutalist design. Adopting Brutalism may have been due to BART's own requirements for its stations (operational function and lasting durability), which match the characteristics of Brutalism. It was a design style that acknowledged functional components of a building and relied on them—instead of ornament—to create visual interest.

Factories and infrastructure were studied for their composition and appearance. Borrowing industrial materials and finishes completed the overall aesthetic of Brutalism.

Rooted in the Industrial Revolution, Brutalism owed its development and refinement to innovations and trends spurred by a universal desire in the twentieth century for modernity, expressed culturally in industrial design, art, and architecture.

Creators of modern icons were influenced by nontraditional sources. Abstract art was inspired by artifacts from Africa and the Pacific Islands as well as by basic geometric forms. In turn, early Brutalism was influenced by experiments in abstract art. Its first examples were buildings fashioned in the shape of expressionist sculpture. This style became popular in emerging countries for practical reasons, as shaping structures in concrete was more affordable for these countries than steel-frame structures. Eventually, in rich countries such as the UK, steel and glass were harnessed to create a lighter variant of Brutalism. Among the original BART stations are examples of both eras of Brutalism, applied mainly in accordance with programmatic need. For the modernization of Balboa Park Station, BART's desire to "lighten and brighten" inspired the design team to introduce late Brutalist steel and glass to complement and contrast with the existing concrete forms of the early Brutalist architecture.

4.2 Design Approach

The design improvements proposed in this Plan were developed through a collaboration with BART staff along with input from BART riders and neighborhood residents through public outreach. These steps were undertaken to allow the new planning concepts to satisfy as many of the needs and interests as possible. The project team worked early to define a set of high-level design goals that support the overall project goals and that set a framework for the design process. These goals were developed into a more detailed set of design proposals, based on input from BART, its stakeholders and the public.

This iterative process provided more concrete guidance for the selection of conceptual design elements and station improvements that are in alignment with feedback from all project stakeholders. The project illustrations included in this document are intended to be representative and will be refined when specific projects move forward for implementation.

4.2.1 Design Goals

The focus for an improved station experience was guided by the following design goals, selected and refined with BART to support the overall project goals:

- Highlight the quality of the original Brutalist station design with improvements that complement the existing station architecture.
- Embrace overall design themes of transparency, durability, accessibility, and sustainability.
- Improve the passenger experience, specifically circulation and accessibility from the surface level down through the concourse and ultimately to an improved platform area that will increase the distribution of passengers along the platform length.
- Improve safety and security while increasing connectivity to the surrounding Balboa Park neighborhood.

4.2.2 Design Objectives

To further guide the design process, the project team developed, with input from BART, a longer set of detailed design objectives to address more specific elements of the design concept:

Passenger Accessibility

- Bring the station into compliance with accessibility requirements.
- Improve the station passenger circulation, including reconfiguring existing elevator service, providing additional elevators and escalators where needed, and providing maintenance repairs to existing systems to improve reliability.
- Improve pedestrian wayfinding by increasing visibility and using appropriate art and design solutions.
- Consider options to enhance the user experience through real-time digital display information.

Safety and Security

- Promote a safe environment by activating isolated areas, securing vulnerable back-of-house locations and improving lighting.
- Reduce fare evasion.
- Increase transparency and limit hiding places, and improve visibility at locations such as stairs and elevators.
- Reconfigure station entries to limit vandalism and debris accumulation.

Retail

- Implement retail space(s) in the station that aligns with BART's system-wide retail program and integrates retail improvements (kiosks) within the existing station architecture.

Advertisement

- Coordinate the location of permitted advertising areas within the station to complement the existing station architecture. Introduce new wall panels to incorporate advertising displays to reduce haphazard display placement so that visual information is clear to passengers.

Materials and Finishes

- Select materials based on durability, low maintenance, replacement considerations, and functional qualities while improving overall aesthetics.
- Select materials that complement the existing station materials while considering colors that will reflect light, improve brightness, increase transparency, and make the station feel more open.

Lighting

- Upgrade station lighting to improve brightness, assist passenger wayfinding, and reduce energy costs.
- Enhance the passenger experience by bringing more natural light into the station, specifically by introducing new, translucent headhouse areas at existing entries.
- Introduce new lighting fixtures to match with previous renovation projects to create a more cohesive station appearance.
- Combine LED lighting with daylight sensors and dimming controls that automatically reduce artificial light levels when not needed in order to achieve further energy cost savings.

Art

- Align with BART's recently-approved Art Program Policies.
- Engage artists early in the design process to influence the design of surfaces, furnishings, or functional elements to the fullest extent possible.
- Consider art as a wayfinding element that leads passengers to areas of entrance and egress.
- Enlist art to encourage passengers to transition from crowded concourse or platform areas to less congested spaces through the use of color, sound, texture, or lighting.

- Leverage station construction funds by including standard architectural materials, such as glass, tile, or metalwork, in the art budget.
- Through artwork, bring a unique character to the station that relates to the surrounding Balboa Park neighborhood and the existing station architecture.

Sustainability

- Use local and renewable materials with lower embodied energy.
- Reduce energy cost by upgrading mechanical equipment and systems.
- Provide energy cost savings by reconfiguring the existing elevator and upgrading to a higher efficiency system.
- Reduce escalator energy cost by upgrading to high-efficiency escalators.
- Improve water efficiency and reduce water use by upgrading plumbing fixtures and considering gray water recycling in conformance with municipal codes.
- Reduce emittance of volatile organic compounds VOCs through low- or no-VOC materials.
- Provide opportunities for improved recycling and waste reduction.

4.2.3 Space Planning Framework

In establishing the space planning approach for the Balboa Park Station modernization, the planning team worked closely with BART and community stakeholders, incorporating survey input from community stakeholders and the public in order to identify and prioritize the improvement needs and opportunities for the station within the framework of the established design goals. Program and operational areas that were studied for surface level areas, the station concourse, and the station platform include:

- Surface-level circulation (plaza circulation / neighborhood connectivity)
- Surface-level facilities (trash collection, bike parking, assembly spaces, SFMTA bus connections)
- Station interior circulation (existing/additional vertical circulation)
- Public concourse facilities (bike parking, public restrooms)
- Station agent booths
- Ticket vending / Fare machines
- Retail (kiosks)
- Back of house (staff spaces)
- Public art
- Advertising and placement
- Signage and Information

Careful consideration was given to the station's current uses and operations, along with input from BART and community stakeholders and opinions received from riders during BART's public outreach. The design concept for the surface level, concourse, and platform is shown in **Figure 4-1** through **Figure 4-14**. The design concept identifies major uses of space within areas of the station as well as specific improvements in features and finishes.

4.2.4 Sustainability

Environmental sustainability is part of the primary overarching goals for BART's Station Modernization Program and was identified as a high priority by community stakeholders and the public. Any projects undertaken by BART should support sustainability objectives and should be completed in an environmentally sustainable manner. The modernization plan helps to bring the station up to current practices for environmental sustainability through the use of low-impact or renewable materials and energy-saving features. Sustainability is a theme that underlies all aspects of this Plan; elements and projects were selected with sustainability in mind. In addition, some projects were selected to directly support sustainability: the introduction of energy-cost-saving elevator and escalator systems, replacement of old fluorescent lighting technology with high-efficiency and longer lasting LEDs, and the installation of locally sourced, recycled and low- or no-VOC materials and finishes whenever possible.

With each of the proposed improvements discussed in the following sections under the four broad categories, the aim is always to make sustainable design choices that are cost-effective, readily maintained, and enduring.

4.2.5 Public Art

BART recently updated its Public Art policy, to better promote the inclusion of artistic elements into station design. In accordance with this, the conceptual design includes the incorporation of public art throughout the station. These art installations will enhance the station's aesthetics while reinforcing Balboa Park's sense of identity and culture. The selection and implementation of public art in the station will be part of the ongoing station modernization process. BART will involve local artists and

art institutions in future design phases to take advantage of opportunities to incorporate art into other projects. The intent is always to include art as part of the design process and, in this way, promote a comprehensive, integrated art program for the station.

It is anticipated that public art elements will range from small features to larger elements in the station, increasing opportunities for placement of art throughout the space. While public art will ideally be present in all station areas, stakeholders expressed a preference for providing maximum visibility within the station while maintaining open sightlines. Some separation of public art pieces from other uses of space (retail, advertising, etc.) was also desired, both to feature the artwork more prominently and to avoid visual clutter.

Locations favored for placement of public art are numerous and include:

- Integration with the new glazed wall above the back-of-house spaces at the concourse, one of the most prominent areas of the station
- Integration with the new entry headhouses at both the north and south sides of Geneva Avenue.
- Placement at the public plaza at the north side of Geneva Avenue once the canopy and bike lockers are removed/ relocated (leaving the plaza much less cluttered)
- Integration with the new public plaza at the south side of Geneva Avenue (to be coordinated with TOD and driveway renovations)

The final selection of both the locations and the artwork will be done using the process outlined above. On the platform level, space constraints and higher levels of dirt and dust (and corresponding cleaning requirements) often dissuade the installation of larger art pieces. There are, however, opportunities to incorporate art in the new platform canopies, elevator enclosure, floor, or walls.

4.3 Design Concepts

The design objectives above have guided the concept design for the proposed improvements described in this Plan. Some key considerations given by the planning team are highlighted in the following sections and are organized by five broad categories:

Early Wins

Access and Circulation

Safety and Security

Placemaking, Aesthetics and Customer Experience

Facility and System Upgrades

4.3.1 Early Wins

As part of its Station Modernization Program, BART identified a number of simple, low-cost improvements termed “Early Wins.” These improvements, while small, can have a significant effect on the overall function and appeal of the station. Such projects are typically done in advance of other larger station improvements, since they often can be handled directly by BART maintenance staff or through smaller contracts. Therefore, Early Wins can provide large benefits at a relatively low cost and be completed in a more expeditious timeline. At the Balboa Park Station, Early Wins projects were identified in many of the categories above and include:

- Perform general maintenance.
- Improve concourse sightlines (trash container relocations).
- Remove inactive transfer ticket machines.
- Remove inactive pay phones and phone panels for potential alternate use of wall space.

- Remove redundant/inoperable closed-circuit cameras and conduit.
- Install storage cabinets for station equipment and cleaning supplies to reduce visual clutter.
- Perform station cleaning and ceiling/wall/roof (graffiti) repair.
- Rekey station lock systems.
- Upgrade/replace/relocate bike lockers.
- Repair trash staging area (remove existing concrete "bunker" enclosure).
- Perform minor demolition and repair at surface plazas.
- Perform minor interior partition demolition and replacement at concourse level.
- Install new pigeon/pest protection.
- Seal locations of existing leaks against further water intrusion.
- Renovate/replace station agent booth.
- Implement ADA upgrades.
- Install/adjust fixtures (counters, pay phones, drinking fountains) in ADA-compliant manner.
- Replace fire alarm device and head.
- Upgrade/repair TVM machines.
- Repair swing gates.
- Replace worn platform edge strips.

4.3.2 Access & Circulation

While Balboa Park Station's current design can accommodate both current and projected levels of ridership, providing successful access and circulation goes beyond just station capacity. The ability to move through a station quickly using routes that offer ease of travel to all of BART's riders regardless of mobility is essential to providing effective transit service. BART and community stakeholders have therefore identified improving passenger access as an important part of enhanced passenger experience. The project team noted the following themes as the main opportunities for improvement based on the station assessments conducted:

- Accessibility and ADA improvements
- Modifications to existing vertical circulation (to improve station circulation and operation)
- Introduction of new vertical circulation elements (to improve accessibility and offer redundancy)
- Improvements to bicycle access

The design concept's plan for addressing each of these areas is summarized below, and the locations of specific items are indicated in **Figure 4-4** through **Figure 4-7** for the surface level, **Figure 4-8** through **Figure 4-10** for the concourse level, and **Figure 4-11** through **Figure 4-14** for the platform level.

4.3.2A Accessibility & ADA Improvements

The design concept reflects BART's commitment to ensuring its system and facilities serve all of its customers equally. This includes provisions for riders with mobility impairments and other challenges. As part of improving ADA accessibility throughout the station, the modernization plan calls for:

- Upgrading existing handrails and guardrails to meet ADA standards and provisions of the California Building and Safety Code
- Providing two new accessible elevators for circulation in the BART "free" area between the surface level and concourse level (one each at the south and north sides of Geneva Avenue)
- Remodeling of existing public restrooms to comply with universal access requirements
- New accessible drinking fountains
- Relocating payphones and other fixtures to appropriate locations and heights to conform to updated accessibility requirements

4.3.2B Improvements to Existing Vertical Circulation

Balboa Park station currently has only a single elevator providing access to each of the three station levels (surface, concourse and platform). This single elevator limits passenger flow and creates a fare evasion opportunity, as it serves both the public surface "free" area (surface plaza at the north side of Geneva Avenue) and the below-grade paid areas (at both the concourse and platform levels). One of the main goals of the modernization plan is to reconfigure this existing elevator circulation to serve only the public paid areas from the concourse and platform levels. To minimize the cost of the retrofit, the existing elevator will continue to be accessible at the surface level (for BART maintenance

access only). To accomplish the modification, the controller at the surface level will be updated to allow only maintenance staff access via a keyed system. In addition, at the surface level, signage will direct the public to the new "free" area elevators (as described in the next section). This elevator reconfiguration should eliminate one of the main sources of fare evasion at the station.

4.3.2C New Vertical Circulation Elements

With the reconfiguration of the existing surface elevator (removing the public elevator access at the surface level as noted in the previous section) BART and the team identified providing new elevator access between the concourse and surface free areas as paramount. The plan proposes two new elevators providing access between the surface and concourse level free areas. One elevator would be located at the North side of Geneva Ave in the plaza area (indicated in **Figure 4-1** and **Figure 4-5**).

The new north elevator would be a two-stop elevator installed at the side of the existing parapet wall at the surface level and would land at the exterior concourse level. This elevator would be installed in conjunction with the elimination of the existing underpass to the Muni Curtis E. Green facility (known as the "green yard"), which BART staff have noted as being no longer utilized.

To provide additional access at the southern side of Geneva Avenue, a new a three-stop elevator would be provided adjacent to the existing entry south of Geneva Avenue. Locations available for elevator placement at the surface level are limited, so the new elevator would be installed adjacent to the existing parapet wall (indicated in **Figure 4-1** and **Figure 4-4**) and continue down to a new constructed landing at the concourse-level free area that would tie into the existing free area hallway (indicated in **Figure 4-2** and **Figure 4-8**) under Geneva Avenue. Since the structural support for the new elevator would require landing at the existing BART platform level, the elevator will be designed to provide maintenance-only access to the platform level. This will be a "keyed" access-only option similar to the one noted in Section 4.3.2B for the existing elevator modification.

Since both the elevator installation at the north side of Geneva Avenue and the elevator and walkway installation at the south side of Geneva Avenue would be major projects, each of these projects should be designed and constructed in coordination with the new headhouse enclosures planned for each area. The new headhouse enclosures are two of the additional major improvements proposed in this Plan (indicated in **Figure 4-1**, **Figure 4-4**, and **Figure 4-5**). At the south side of Geneva Avenue, the elevator installation should also be coordinated with the future TOD construction and plaza renovation currently in the planning phase for the adjacent Upper Yard site.

At both sides of Geneva Avenue the goal of combining the new elevator design with the headhouse enclosures is to provide a cohesive design aesthetic and integrate several significant themes of the Plan, including improving vertical circulation and plaza transparency, improving weather protection to increase durability, and improving safety and security at the entry areas. All of these are themes that stakeholders and the public consistently stated a strong interest in improving at the station.

4.3.2D Improvements to Bicycle Access & Parking

As shown in Chapter 3, Existing Conditions Assessment, a significant number of riders accessing the Balboa Park Station use bicycles to access the station, and BART strongly wishes to encourage this behavior. To better serve customers traveling to and through the station with their bicycles, the station modernization plan calls for:

- Upgrading stairs between the street, concourse, and platform levels with bicycle access channels, where possible, to improve the vertical circulation for commuters traveling with their bikes.
- Upgrading the current bicycle storage lockers at the plaza area (north side of Geneva Avenue) to the latest version.
- Relocating the existing bicycle storage lockers (north side of Geneva Avenue) to a renovated roof area (which could be secured) to remove them from the public plaza space in order to minimize debris accumulation, limit maintenance, and improve sightlines (indicated in **Figure 4-1** and **Figure 4-5**).
- Converting an existing area of the concourse paid area into a new bike station to supplement the existing bicycle racks within the concourse paid area and the existing bike lockers at the surface plaza (indicated in **Figure 4-2** and **Figure 4-10**).

4.3.3 Safety and Security

The safety of its riders, its staff, and the public are the highest priority for all aspects of BART's operations. Stations must be designed, maintained, and operated in a manner that promotes a safe and secure environment. The station modernization plan proposes to improve

the safety for customers and increase security features throughout the station by deploying active and passive design solutions.

Safety and security considerations for the station concept design include:

- Construction of a new headhouse at the north side of Geneva Avenue that will minimize the opaqueness and improve sightlines
- Construction of a new headhouse at the south side of Geneva Avenue that will relocate the station entry enclosure to the surface plaza area (as opposed to the base of the existing stair) to minimize debris accumulation and camping
- Installation of new westside walkway fencing to limit/restrict roof access (to minimize vandalism/unauthorized roof access)
- Installation of fall protection on station roofs
- Increase in the height of the existing fare barriers and concourse guardrails to meet the current BART Facility Standards (BFS) .

4.3.4 Placemaking, Aesthetics & Customer Experience

While the primary function of Balboa Park Station is to facilitate transit service, it is also important to provide a functional, comfortable space that allows for placemaking and enhances aesthetics and the customers' experience. In recent years several projects have sought to improve existing conditions and primarily focused on the northern side of the station and the station connection to the Ocean Avenue corridor. Previous projects included the westside walkway extension and Tony Sacco plaza creation (referred to as "Phase 1" improvements), which added a new concourse station entry at the Northwest end of the concourse and dramatically improved the public connection to the Ocean Avenue corridor, facilitating easier connections to San Francisco City College and the surrounding neighborhood. Following Phase 1 improvements, BART initiated a Phase 2 scope of work that included a new glass-encased headhouse, a variety of concourse finish improvements, such as new clerestory glazing, finish ceilings, and lighting replacement, and pigeon-perching improvements. With the headhouse completion, a covered free area connection to a new, level boarding platform serving Muni's J light rail line was created. The Phase 2 improvements also created a new eastside walkway and a new concourse entry, which provides a continuous accessible path from Ocean Avenue to the main concourse.

As part of the collaborative discussion at the start of the planning process, stakeholders and the public all expressed a strong desire for continuing improvements to the station environment and an expansion of the eastside walkway accessible path to both the north- and south-side surface level areas of Geneva Avenue. Given the topography of the station site, the continuation of the accessible path will require installation of new free area elevators.

In addition to improving placemaking and customer experience, many of the Balboa Park materials and finishes have not changed significantly since the station's opening, and many are due for upgrade or replacement. Improvements in this category target both the aesthetics of the station interior and exterior public spaces.

At the **surface level**, planned renovations will improve the appearance of the surface plazas at both the north and south sides of Geneva Avenue and complement the existing work being done at the Upper Yard TOD development and associated surface roadway work. These include:

North side of Geneva Avenue improvements:

- Removal of the existing deteriorating surface-level canopy
- Relocation of bike storage lockers
- Demolition and removal of original concrete planters that no longer contain landscaping
- Demolition and removal of existing concrete "bunker" trash enclosure, which limits visibility
- Removal of concrete headhouse enclosure to improve visibility
- Addition of new paving/finishes to improve plaza appearance
- Construction of new transparent entry headhouse at stair/escalator entry
- Installation of new surface-to-concourse-serving elevator
- Installation of exterior lighting fixtures to match the pedestrian-scaled fixtures previously installed during Phase 1 walkway improvements
- Upgrades of the existing public restrooms to meet accessibility requirements

South side of Geneva Avenue improvements:

- Renovation of public plaza areas to integrate with future TOD development
- Construction of new transparent entry headhouse at existing stair entry
- Renovation of back-of-house wall finish to align with new headhouse materials
- Installation of new surface-to-concourse-serving elevator
- Improved exterior lighting fixtures to match the pedestrian-scaled fixtures previously installed during Phase 1 walkway improvements

At the **concourse level**, planned improvements will brighten and improve appearance of specific areas that could not be incorporated in the previous station renovations. These include:

- Installation of a new modular wall panel system at the south hallway and northwest wall of the station to better integrate advertising displays with wayfinding and lighting
- Improvements to the public-facing finishes covering the staff back-of-house spaces at the middle of the concourse area, including modifications to the existing degraded bird netting, and improvements to the degraded storefront enclosures with new glazed wall panels with lighting
- Replacement of concourse flooring with new material (brighter appearance)
- Addition of more pigeon deterrents
- Evaluation of the installation of an enclosed bike parking station in the concourse paid area

At the **platform level**, many planned improvements will improve the utilization and appearance of the full platform space for riders. These include:

- Installation of a new modular canopy for shade and shelter and to increase passenger distribution and mitigate bunching
- Replacement of existing platform seating with a new, more space-efficient version
- Repair/replacement of existing pigeon deterrents
- Replacement of destination signs
- Reconfiguration of platform to concourse elevator to better serve riders

4.3.5 Facility & System Upgrades (State of Good Repair)

The program of improvements for the Balboa Park Station includes station-wide facility upgrades to address ongoing operations and maintenance needs for the station infrastructure and systems. These help to ensure that BART can continue to provide safe, reliable, and convenient service to its customers. Identified upgrades include:

- Enhanced emergency and life safety systems
- Improved Public Address system
- Accessibility upgrades
- Improved fare control
- Upgrades to train control
- Removal/replacement of outdated hardware and fixtures
- Repairs to station areas receiving excessive wear

Additional details about system and facility projects are provided in Chapter 5, Implementation.

4.4 Design Concept Station Plans & Renderings

This section contains the collected plan diagrams and illustrations that demonstrate the proposed station improvements described in this chapter (**Figure 4-1** through **Figure 4-14**). Exhibits begin with an overview of the station (**Figure 4-1** through **Figure 4-3**), then the surface level (**Figure 4-4** through **Figure 4-7**) followed by the concourse level (**Figure 4-8** through **Figure 4-10**), and then followed by the platform level (**Figure 4-11** through **Figure 4-14**). For clarity, plan diagrams are presented as enlarged sectors of the overall plans by level. Please refer to the key plan on each page to locate the enlarged plan view within the overall station. Proposed improvements are called out on the plan diagrams with a letter and number in a color-coded oval that corresponds to the accompanying plan legend. The legend also shows the corresponding project number referenced in Chapter 5, Implementation, for each improvement. Plan diagrams are followed by more detailed illustrations of proposed station components.

Figure 4-1: Overall Plan - Surface Level

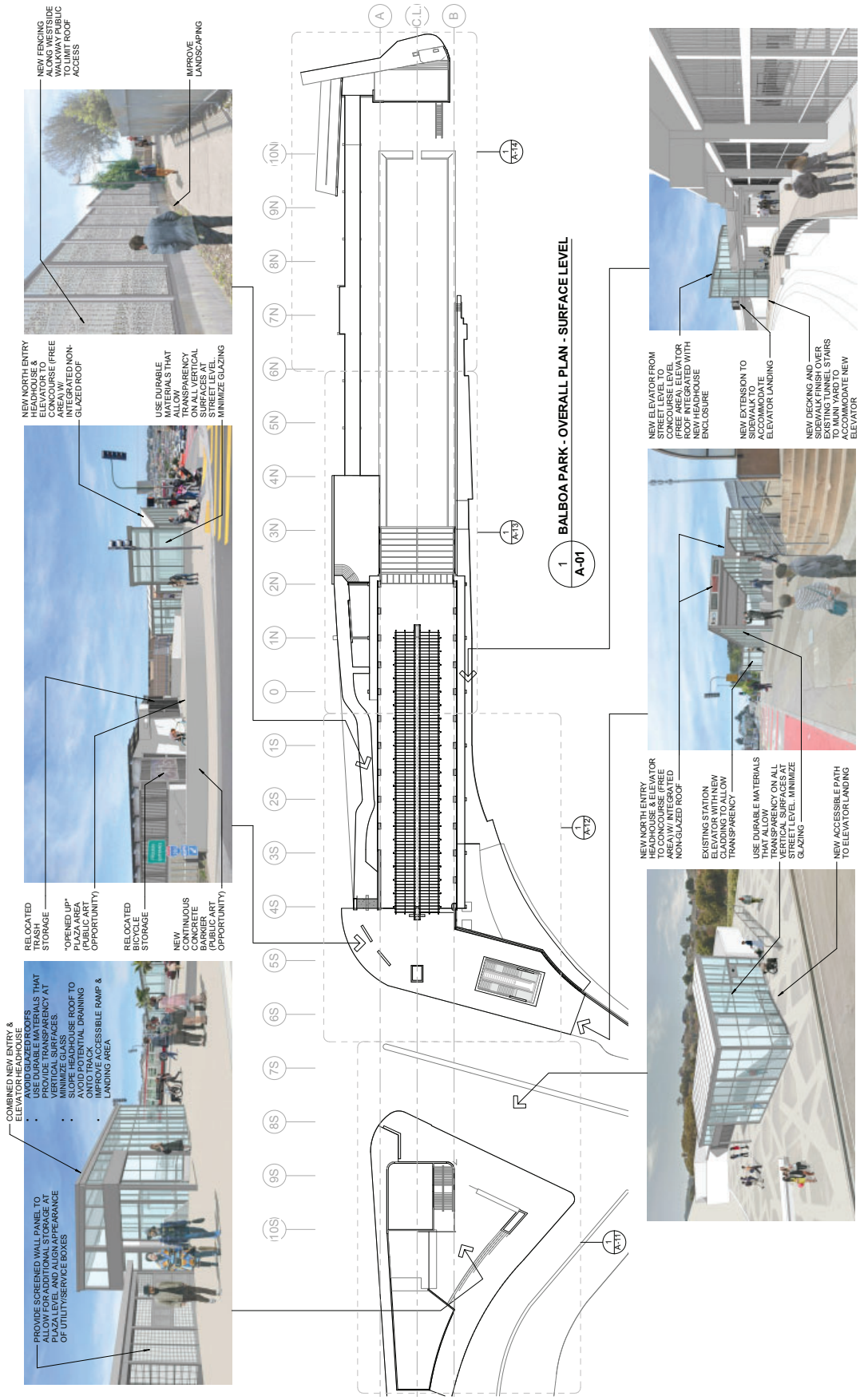


Figure 4-2: Overall Plan - Concourse Level

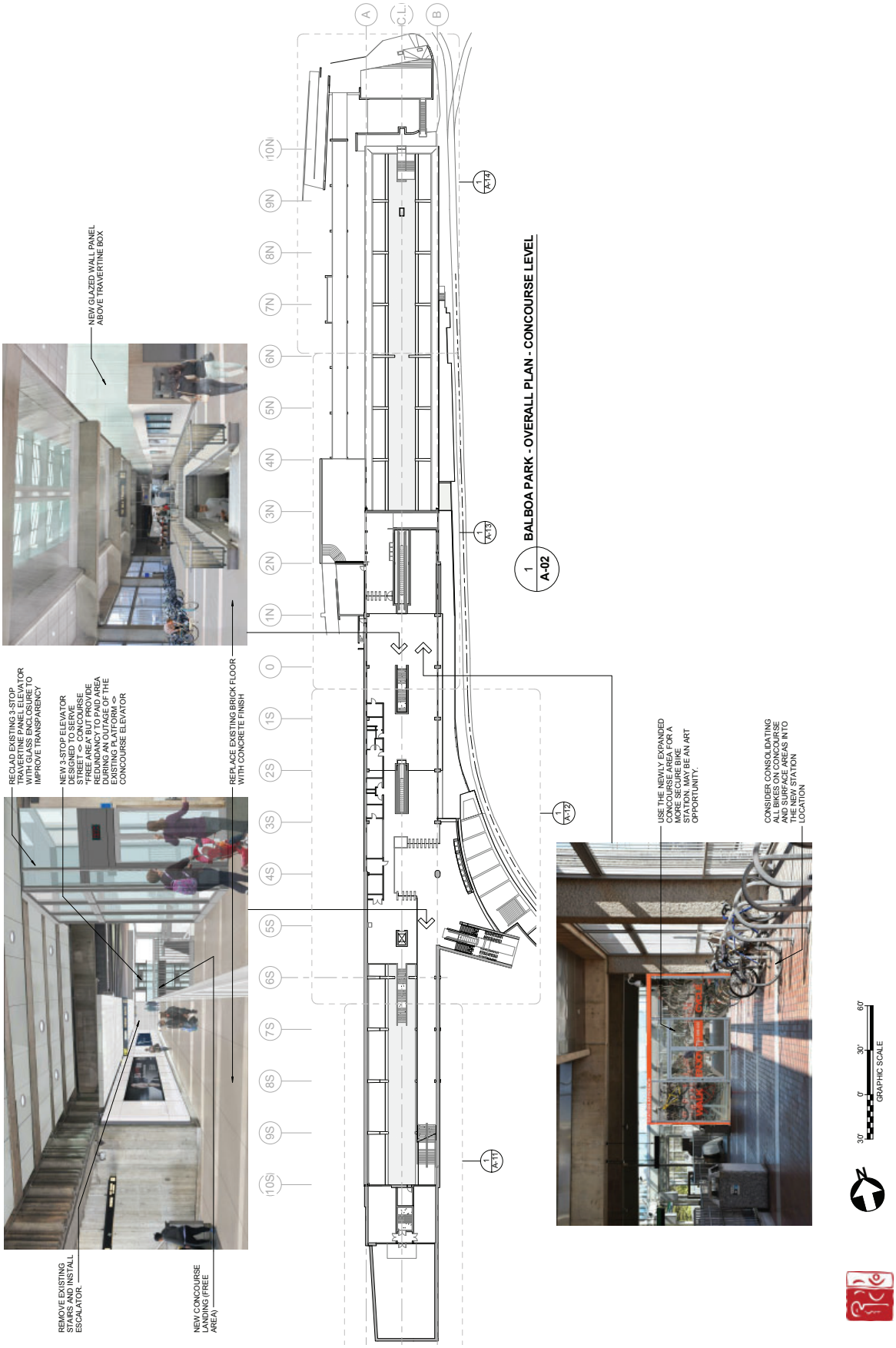


Figure 4-3: Overall Plan - Platform Level

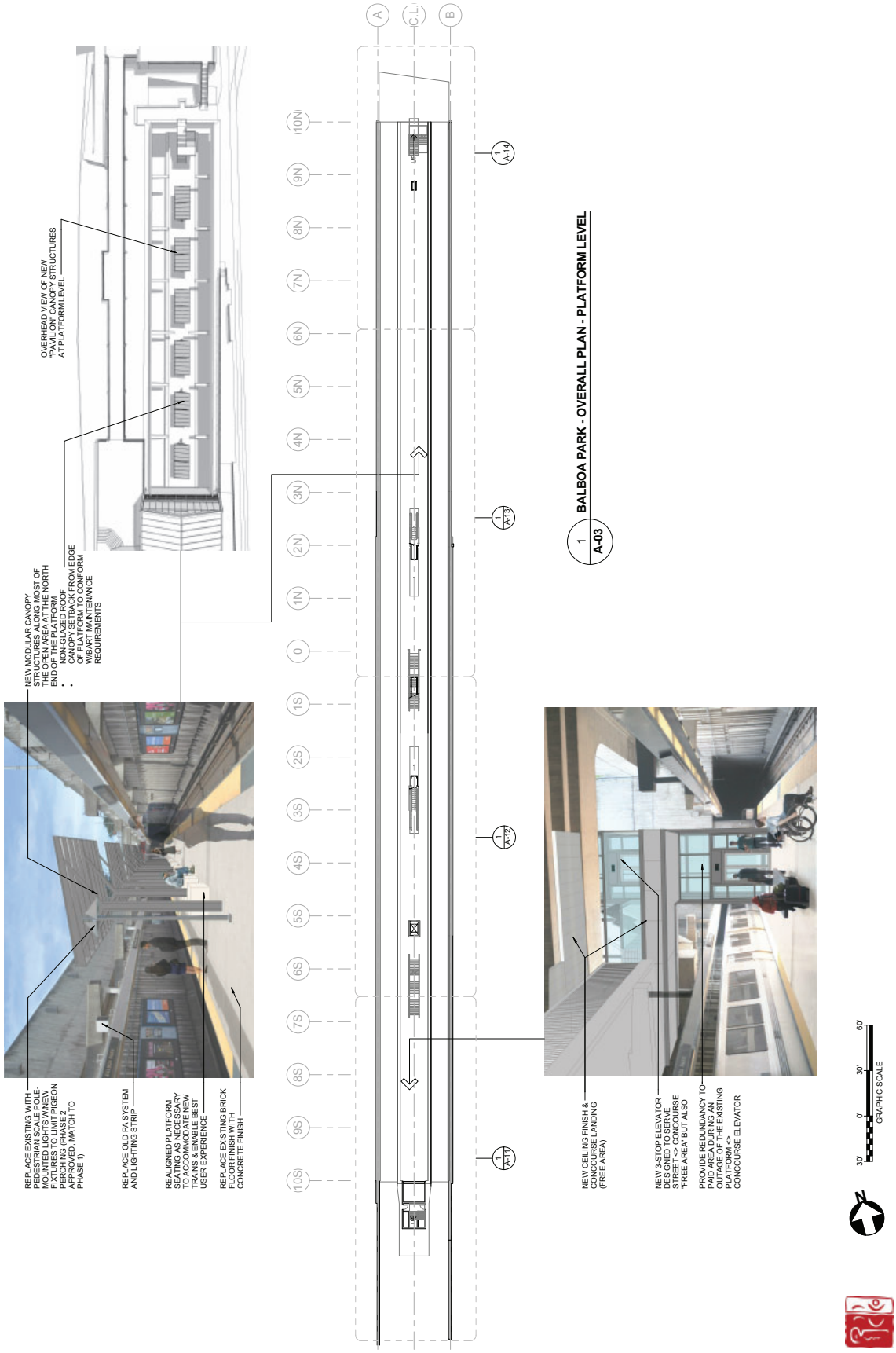


Figure 4-4: Surface Level - Sector 1

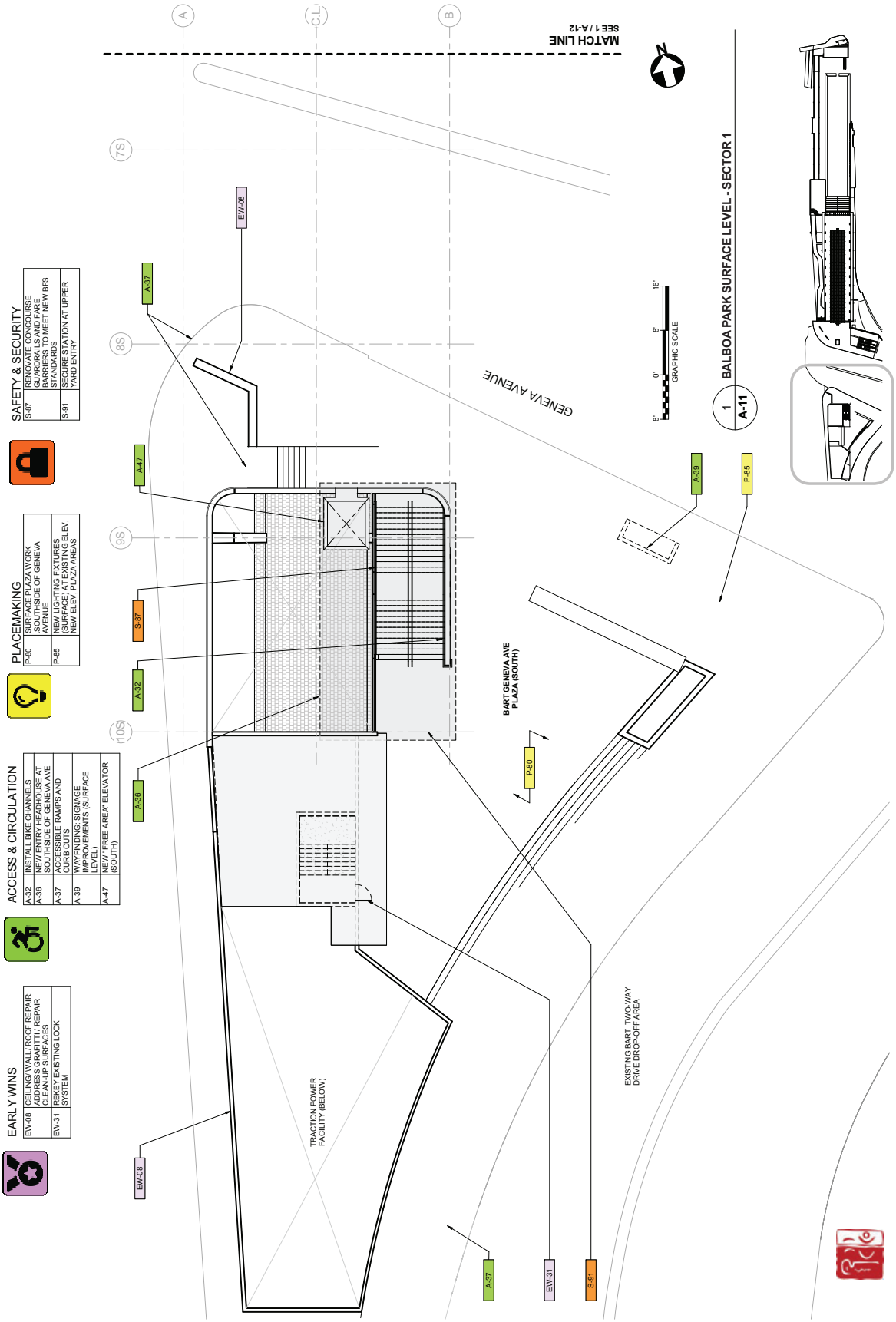


Figure 4-5: Surface Level - Sector 2

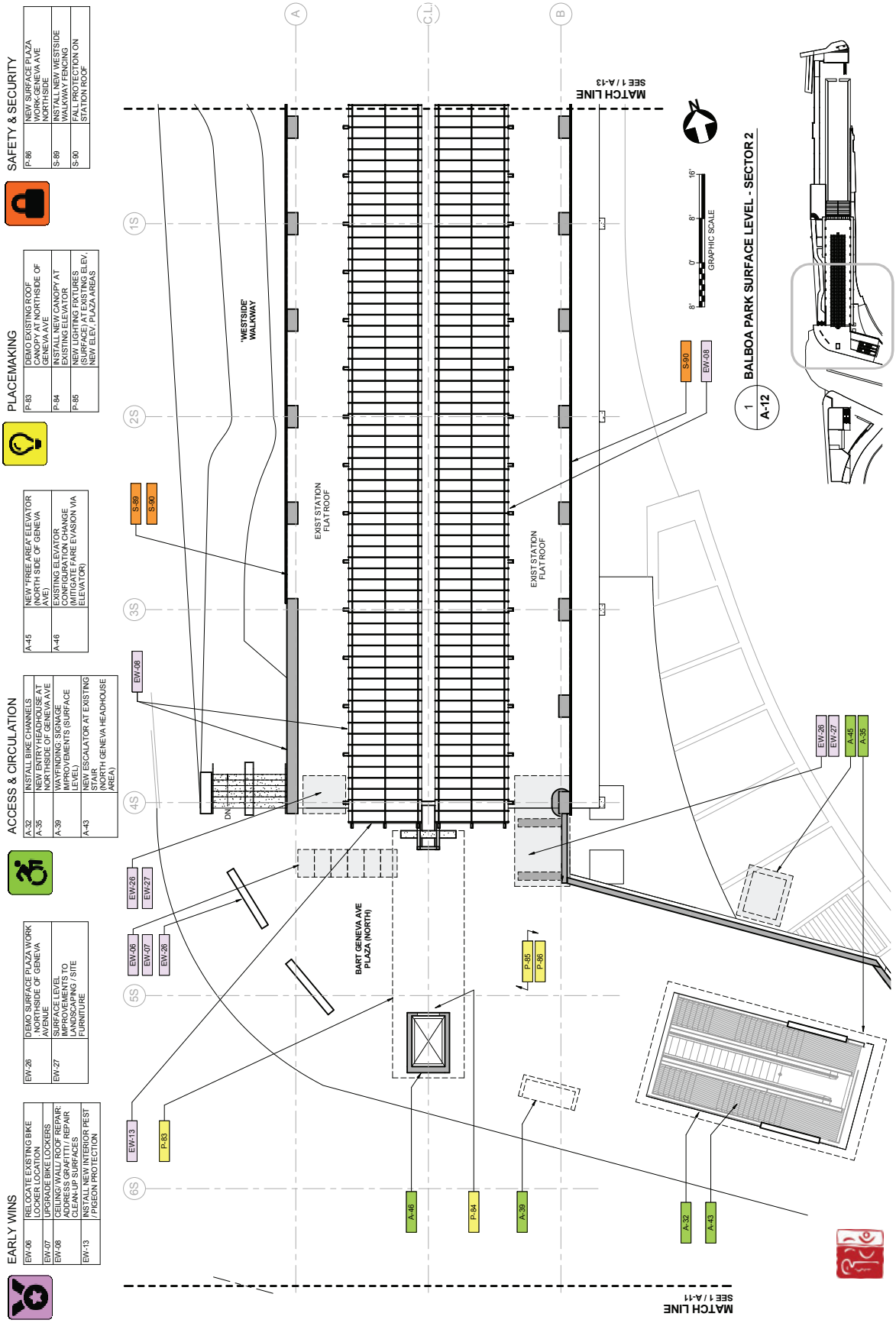


Figure 4-6: Surface Level - Sector 3

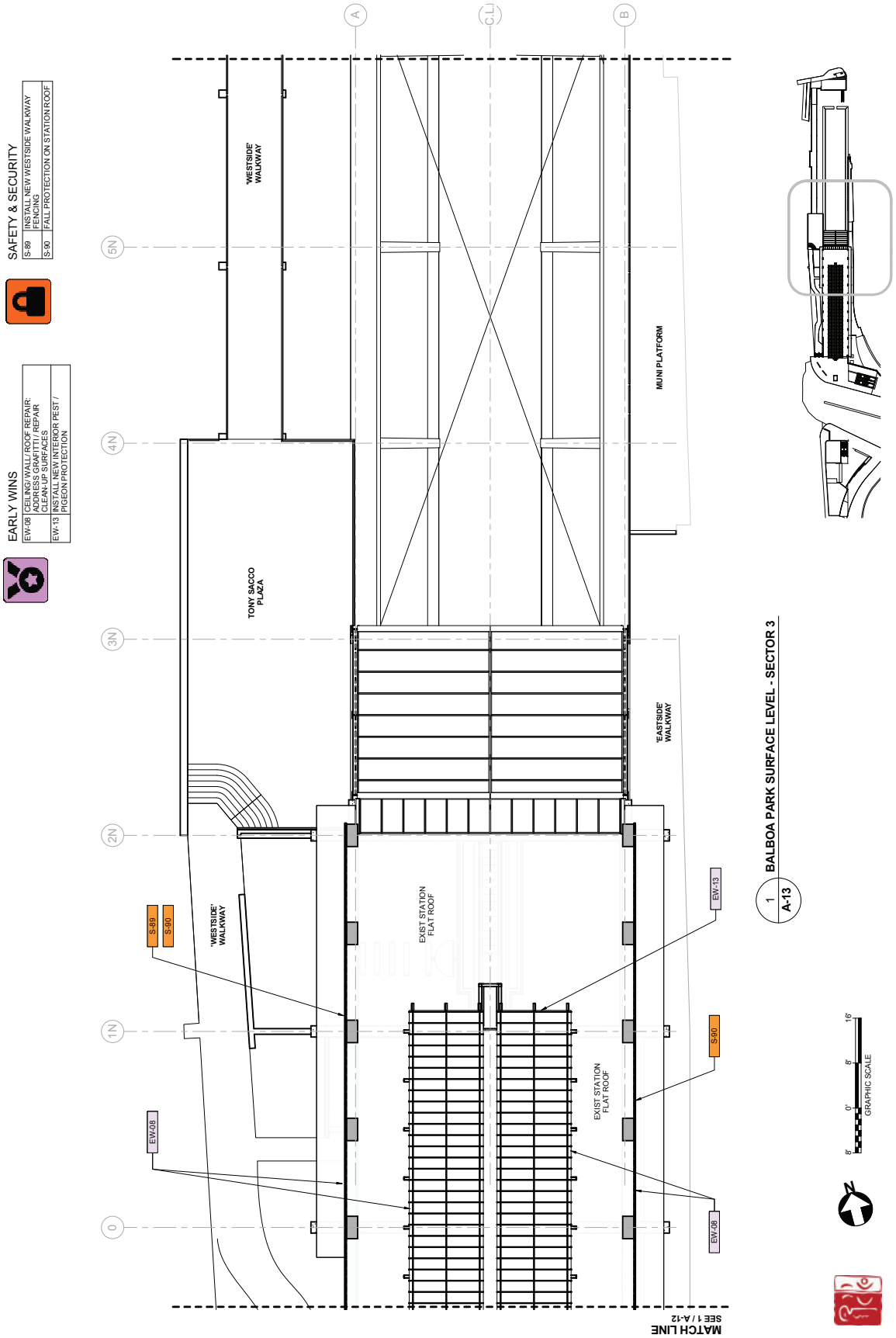


Figure 4-7: Surface Level - Sector 4

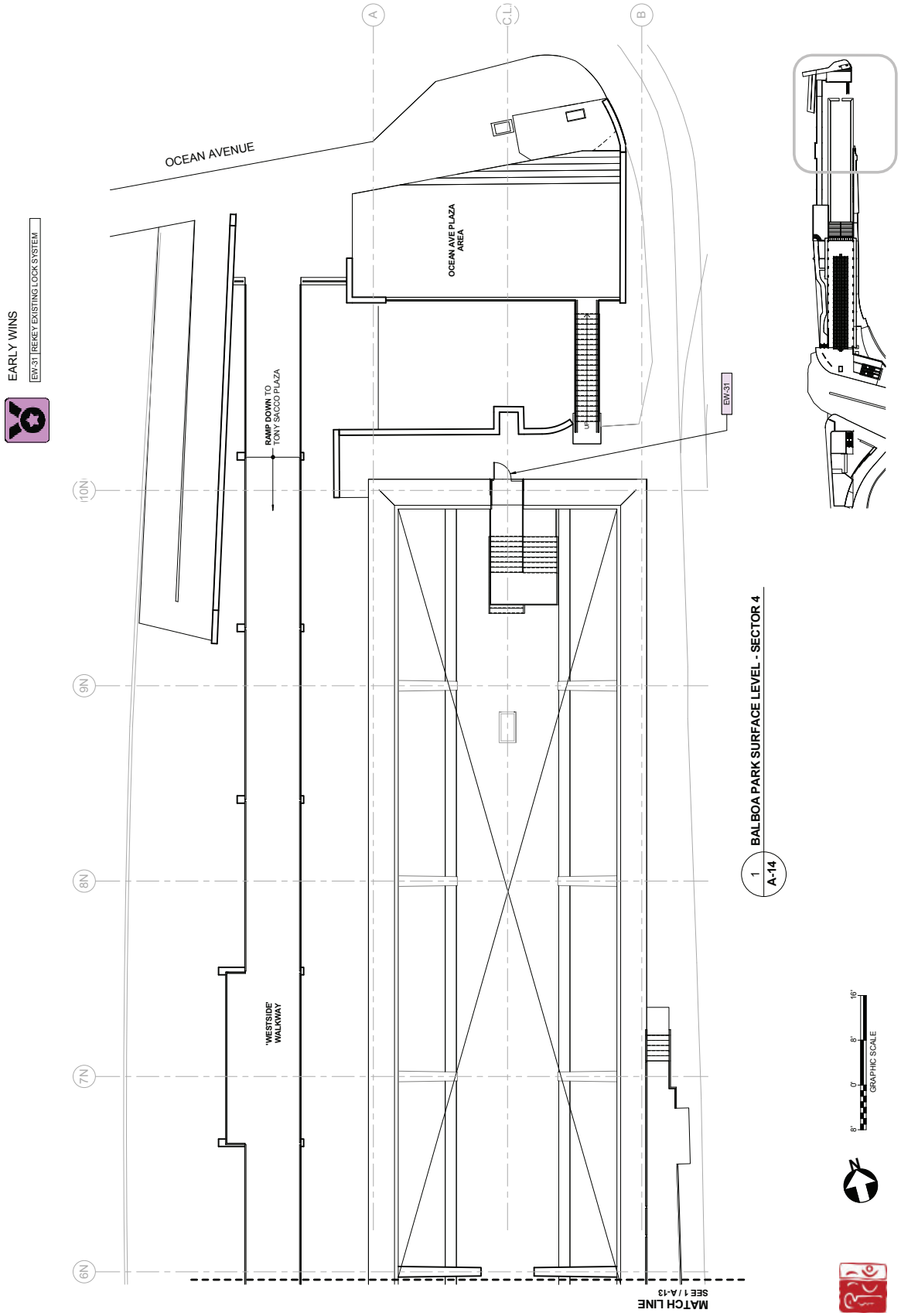


Figure 4-8: Concourse Level - Sector 1

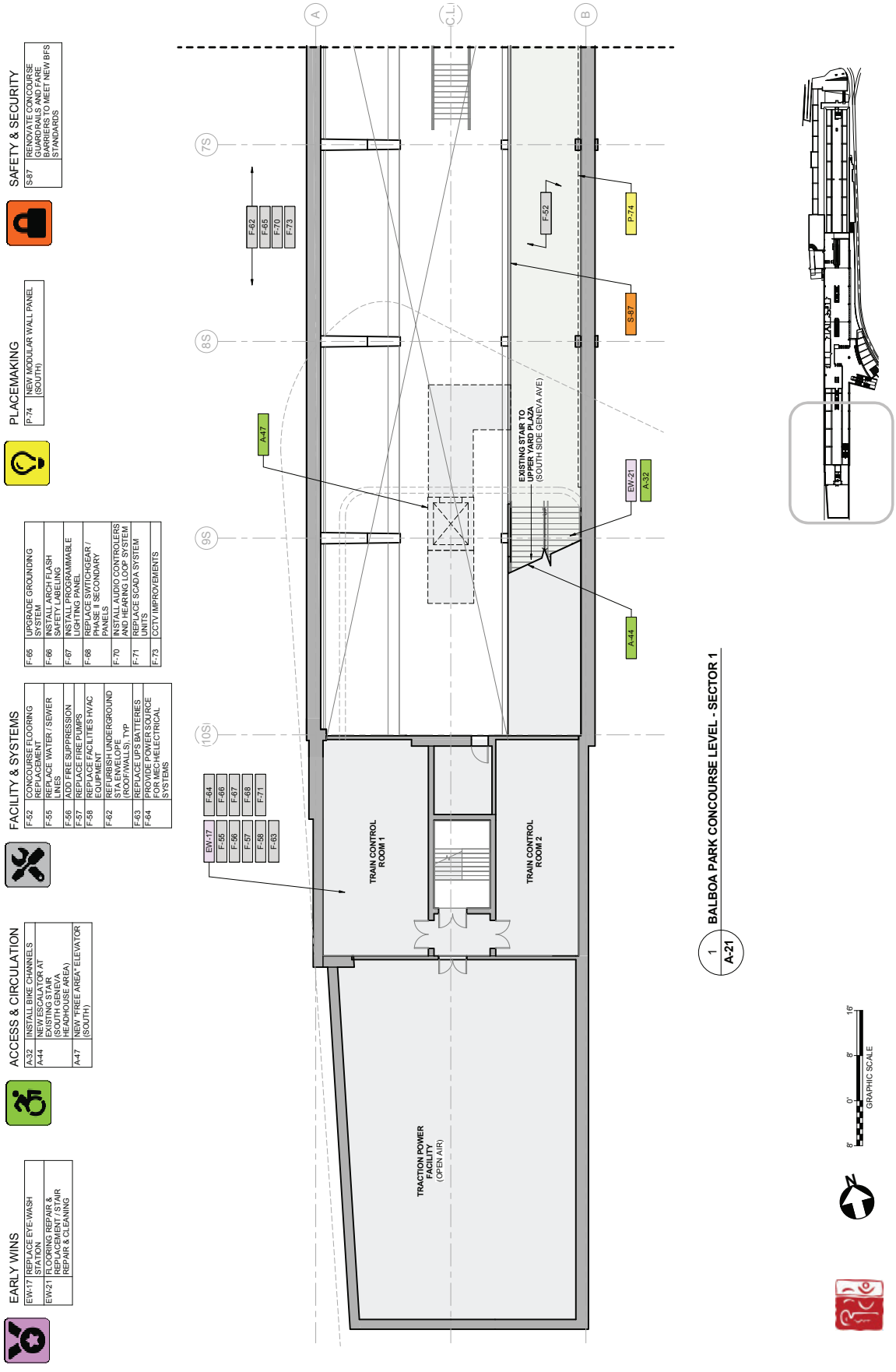


Figure 4-9: Concourse Level - Sector 2

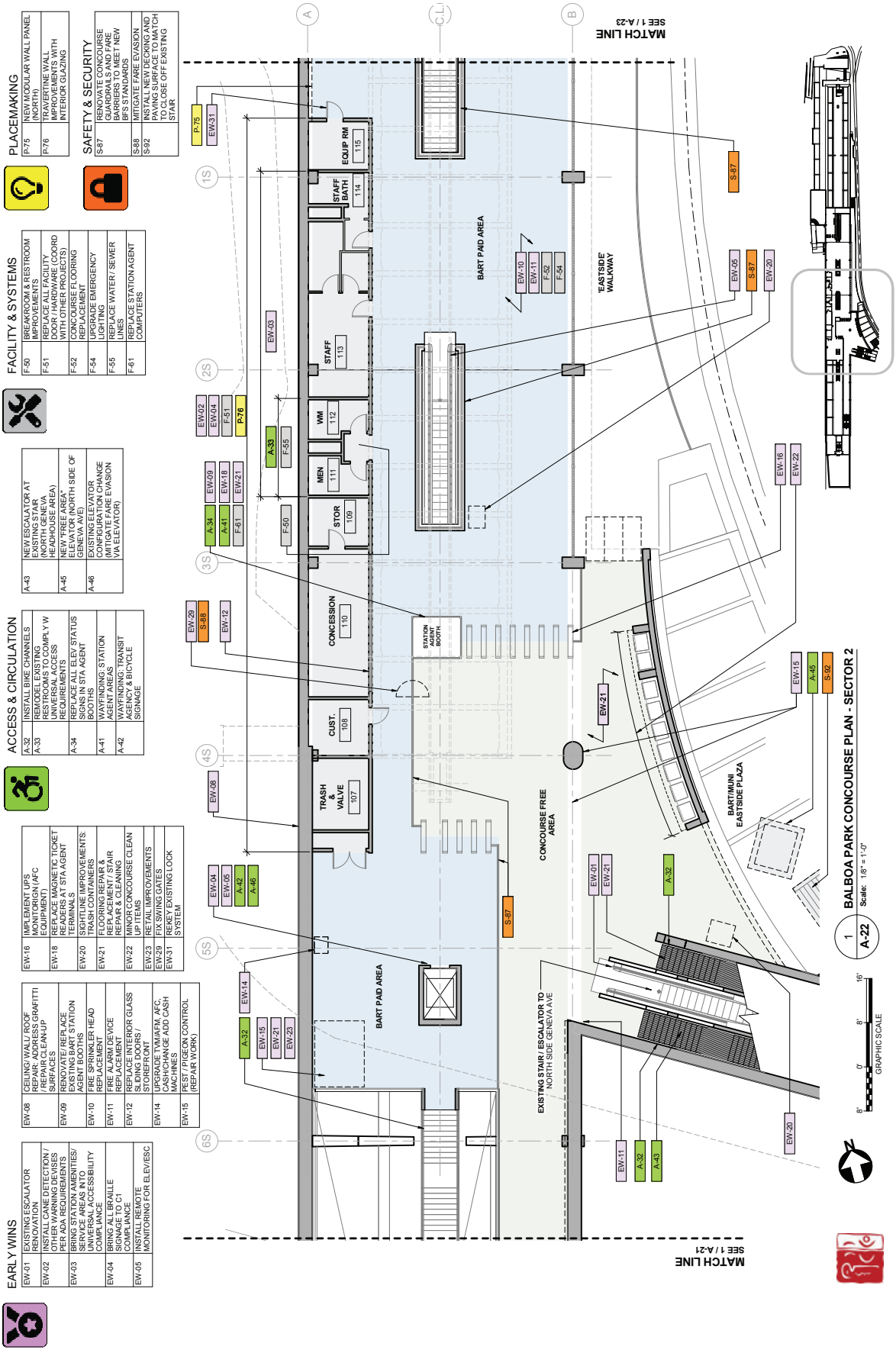


Figure 4-10: Concourse Level - Sector 3

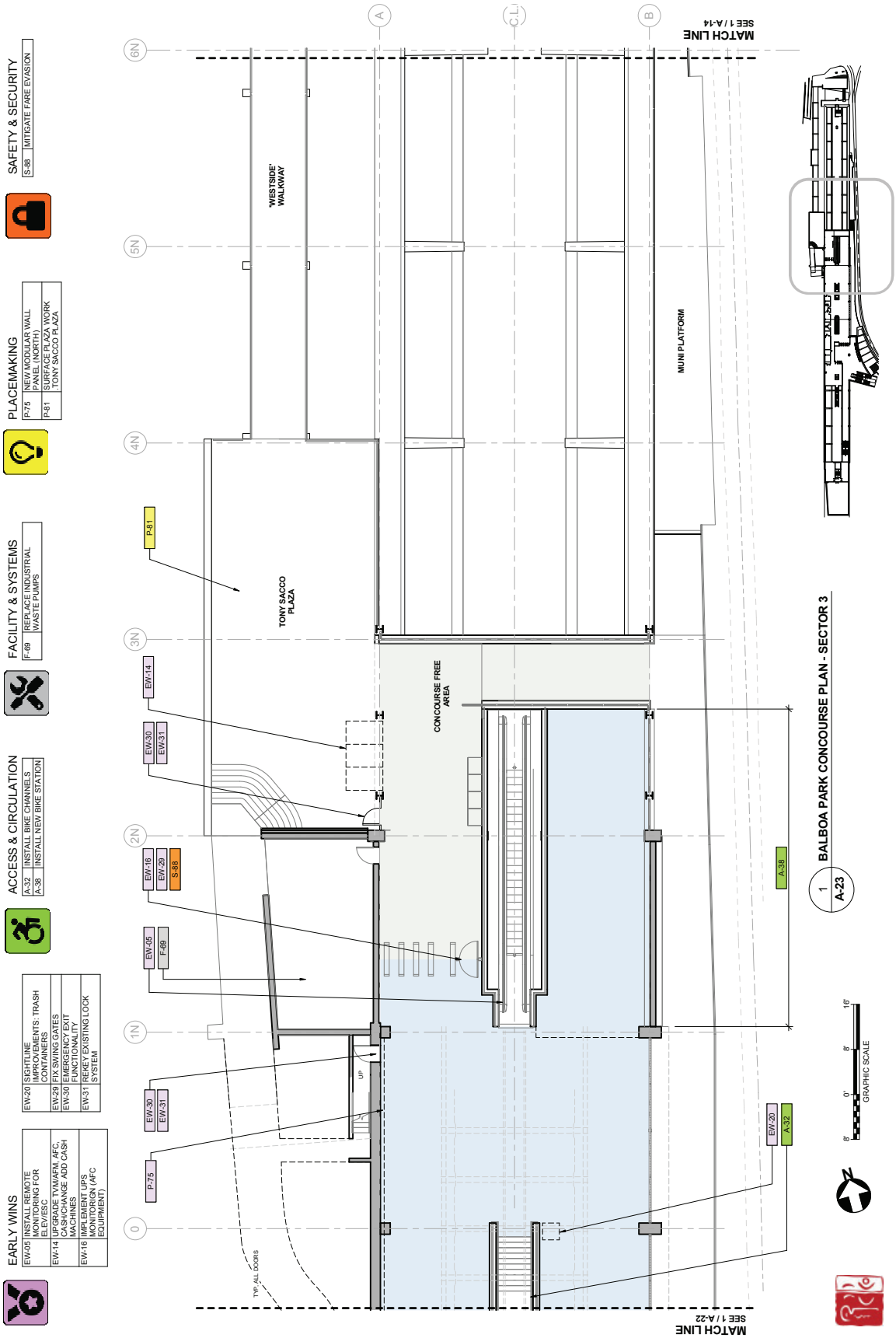


Figure 4-11: Platform Level - Sector 1

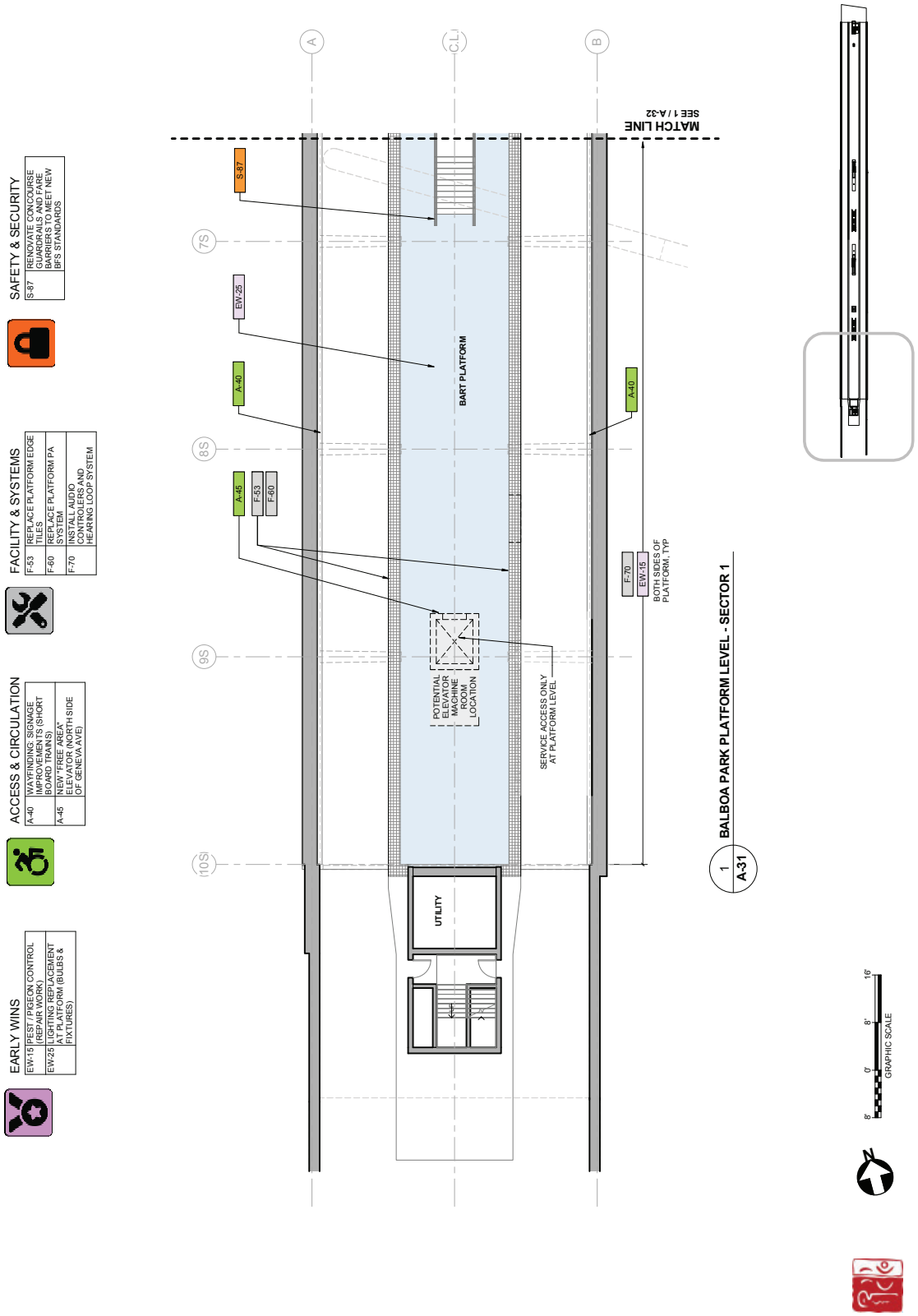


Figure 4-12: Platform Level - Sector 2

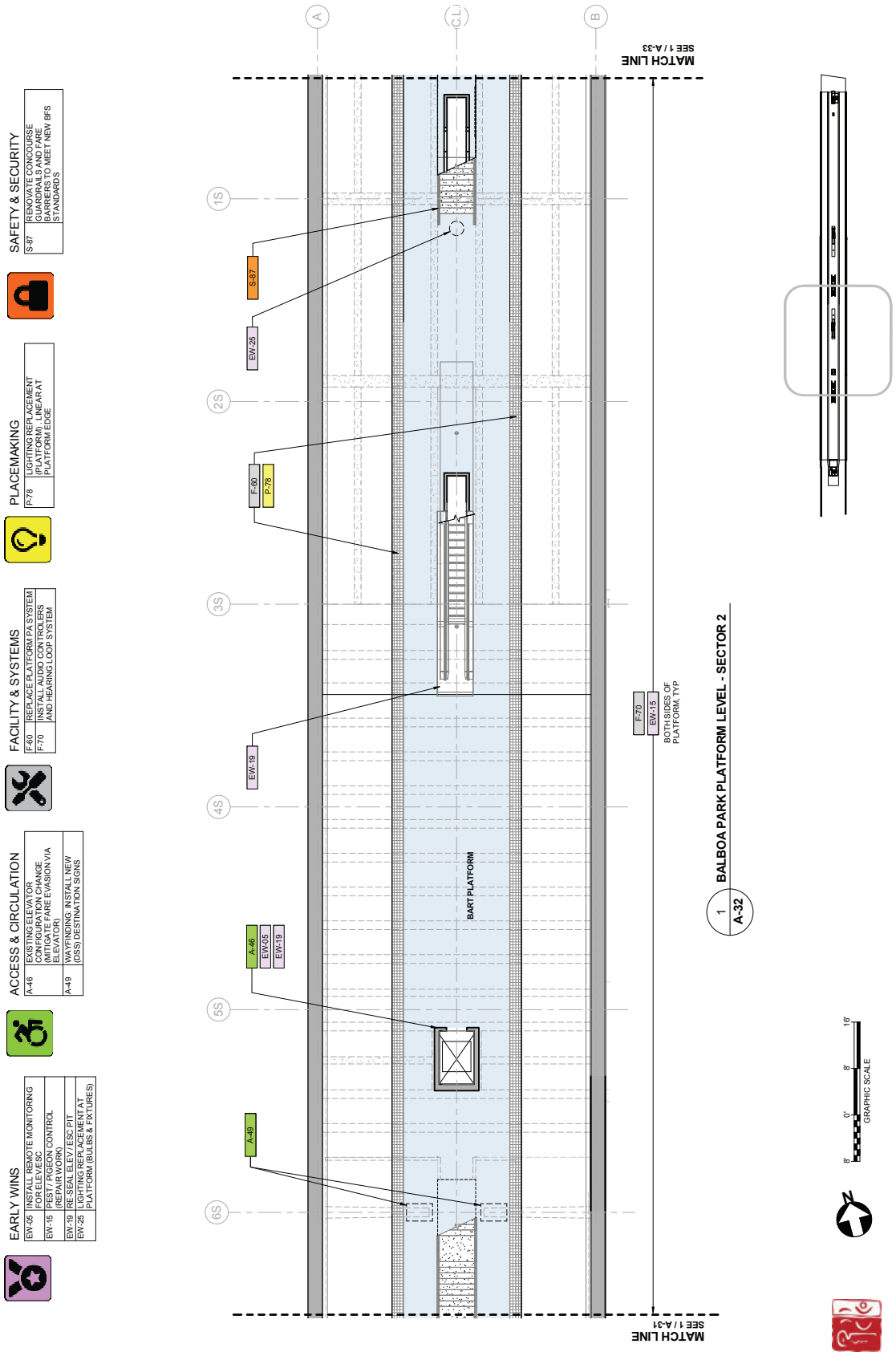


Figure 4-13: Platform Level - Sector 3

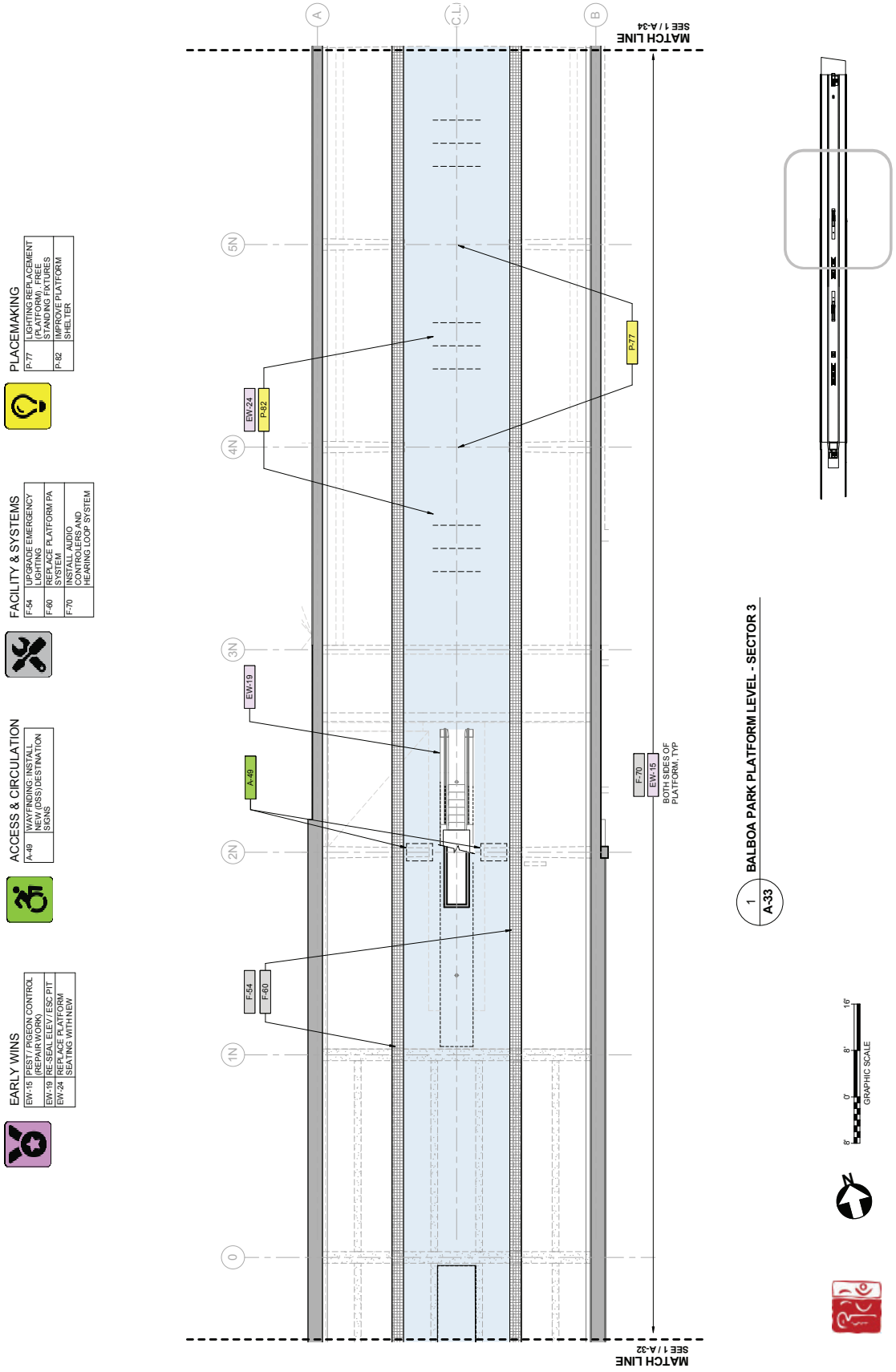


Figure 4-14: Platform Level - Sector 4

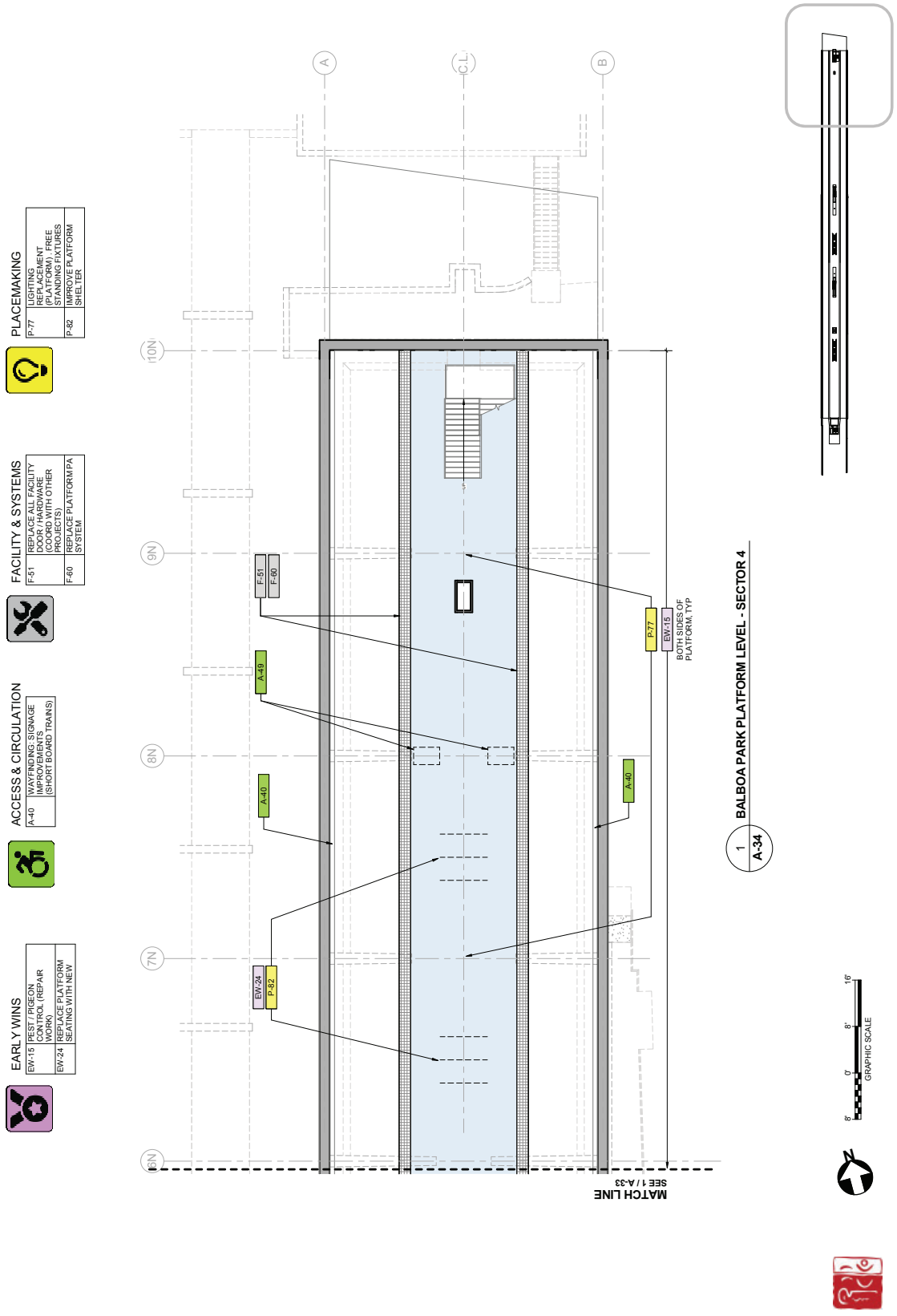


Figure 4-15: New Entry Headhouse on South Side of Geneva Avenue – View #1

Figure 4-16: New Entry Headhouse on South Side of Geneva Avenue – View #2

Figure 4-17: New Entry Headhouse on North Side of Geneva Avenue – View #1

Figure 4-18: New Entry Headhouse on North Side of Geneva Avenue – View #2

Figure 4-19: Westside Pedestrian Walkway

Figure 4-20: Eastside Pedestrian Walkway

Figure 4-21: South End of Concourse, including New Elevator

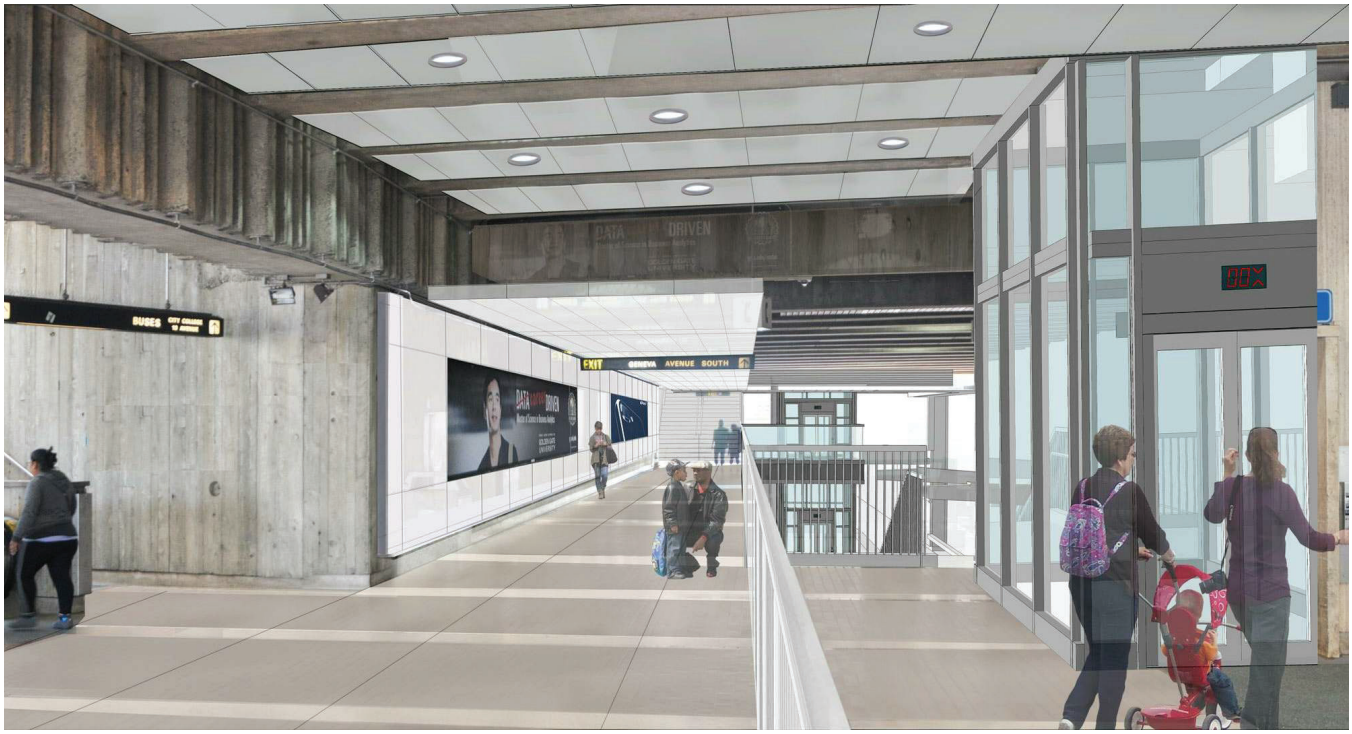


Figure 4-22: New Bicycle Station at Concourse Level

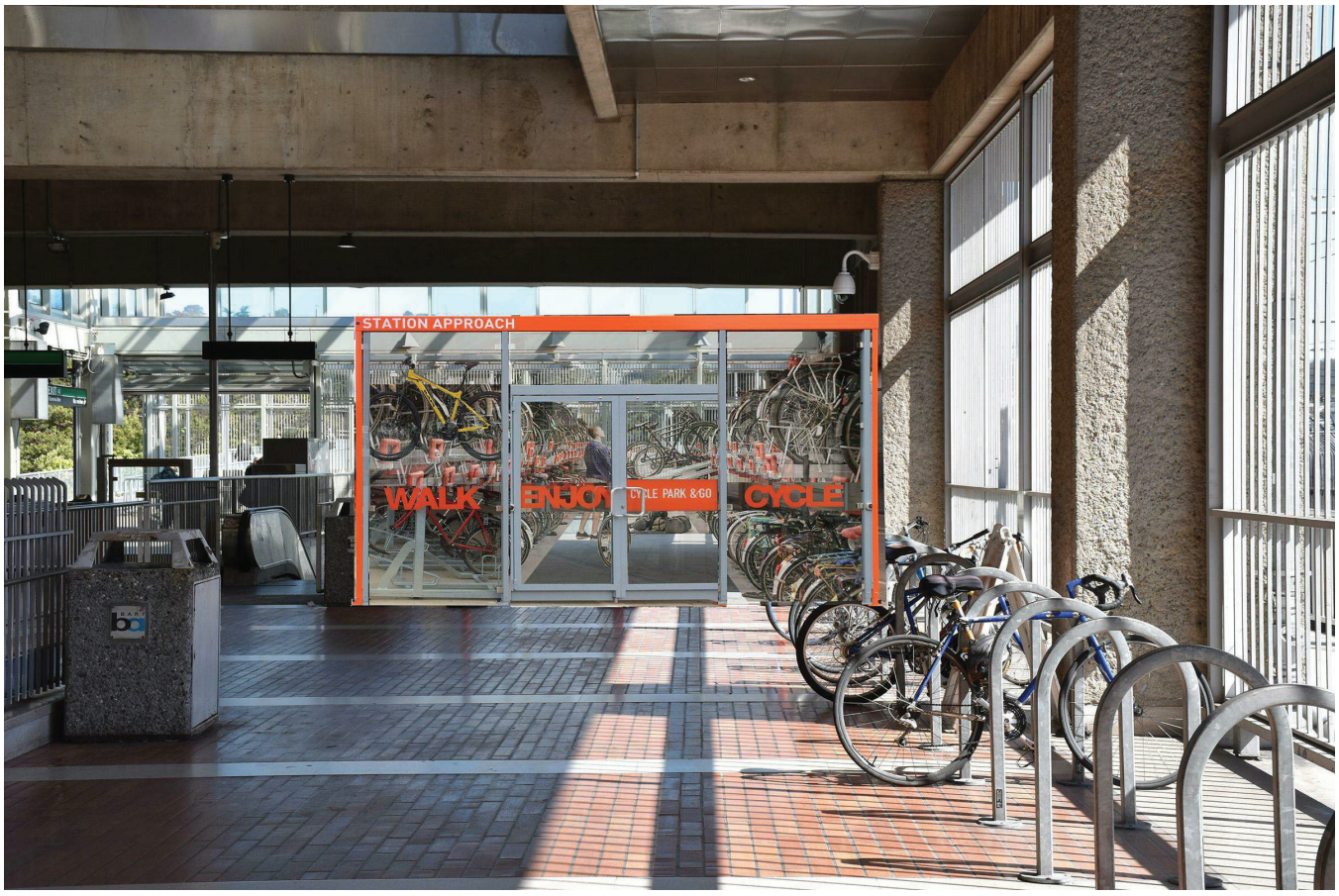


Figure 4-23: North End of Concourse

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Implementation

5

Existing Conditions of Concourse Level
Photograph taken by AECOM in 2018

5. Implementation

The Balboa Park Station Design Concept and Modernization Plan presents a targeted collection of proposed station improvement projects to benefit BART customers and the neighborhood. The implementation plan guiding the suggested phasing of those projects reflects a realistic cost structure and the priorities of BART, its stakeholders, and the community.

The recommended modernization conceptual design plan for the Balboa Park Station identifies numerous projects of varying scale and cost throughout the station. This section details an integrated prioritization strategy that reflects the dependencies between project elements and places each into a proposed phased implementation plan. The implementation plan for the Balboa Park Station reflects the priorities of BART, its stakeholders, and the public; recognizes project predecessor / dependent relationships; and organizes projects into phases that, based on what is currently known, present a logical and feasible approach to implement the recommended Plan.

While the implementation plan represents a comprehensive approach to addressing the Balboa Park Station's modernization needs, additional study and ongoing coordination will be needed as the individual project plans are advanced. These are documented as "Next Steps" to be pursued in conjunction with the implementation plans.

5.1 Prioritization & Phasing Process

Starting with the Master Project List in **Table 5-1** of modernization improvements described in the previous chapter, an integrated prioritization strategy was developed. Modernization improvements were organized into three general time frames: near-term, mid-term, and long-term. The phasing time frame is shown in **Figure 5-1**. The strategy takes the following criteria into consideration to prioritize the improvements:

- Early Wins status
- Predecessor / dependent linkages
- BART priority
- Community stakeholder priority
- Public priority
- Efficiency and estimated cost

Each of the above criteria is explained in greater detail below.

5.1.1 Early Wins Status

A key component of BART's Station Modernization Program is identifying station upgrades that are relatively low-cost investments that can be implemented quickly to bring immediate benefit. These "Early Wins" investments are high-priority improvements intended to be implemented in the short-term time frame, in contrast to medium- and long-term projects that typically require more time and funding for planning, design, engineering, and coordination. Early Wins have higher priority, and are indicated in the Master Project List in **Table 5-1**.

5.1.2 Predecessor / Dependent Linkages

Predecessor / dependent linkages between the proposed improvements were evaluated to identify "critical path"

improvements. Specific project components that require the completion of preceding improvement components indicate that these improvements exhibit a predecessor / dependent relationship. Subphases for which these relationships do not exist generally lie outside the critical path and are more flexible in terms of scheduling. Several predecessor / dependent relationships were identified and are noted in **Table 5-1** and **Figure 5-1**. For these cases, the subsequent improvement requires the completion (or near-completion) of the improvement project before implementation can begin.

5.1.3 BART Priority

BART project staff, internal stakeholders, and the consultant team met regularly throughout all phases of the Balboa Park station modernization conceptual design planning process. Where applicable, individual improvements were noted as having special importance to both BART and the consultant team, and this was factored into the development of the prioritization and phasing for the overall station program.

5.1.4 Community Stakeholder Priority

The project team met multiple times with a group of select stakeholders consisting of local government agencies and organizations. Over the course of multiple meetings and workshops, these stakeholders provided input on both overall priorities and the desirability and importance of individual improvements. The input from these stakeholders was taken into account when prioritizing the improvements in the overall phasing scheme presented below.

5.1.5 Public Priority

The project team conducted direct public outreach in the station twice during the project: the first outreach effort was at the beginning of the design alternatives development (June 2016), and the second during the implementation planning and process (March 2018). Each outreach effort included a public survey (available at the event or online) in which participants identified their preferred types of improvements and desire for specific projects. The results of these surveys were factored into the initial selection of specific projects, and then again into the prioritization of individual projects in the final phasing and implementation scheme. The full results of both public surveys are provided in **Appendices B** and **C**.

5.1.6 Cost Estimates

The final criterion considered the construction cost for each improvement. Typically, all other criteria being equal, lower cost projects would be implemented before higher cost projects, maximizing cost-benefit considerations.

Improvements were assigned one of six estimated construction cost categories, as listed below.

$	Under $10k
$$	$10k-$100k
$$$	$100k-$500k
$$$$	$500k-$1M
$$$$$	$1M-$3M
$$$$$$	Over $3M

Assignments to the cost categories were based on preliminary cost estimates prepared for the individual improvements selected for inclusion in the overall Plan. Estimates were based on direct data from BART for station-specific improvements or for comparable improvements at other BART stations. For those projects on the list for which no comparable cost data were available, the consultant team developed a rough order-of-magnitude cost based on comparable improvements on other systems and/or industry data.

The cost categories assigned to the projects are shown in the Master Project List in **Table 5-1**.

5.2 Implementation Plan

The modernization plan for Balboa Park has several improvements with interdependencies, as illustrated in **Figure 5-1**, which provides a general summary of cost, timing, and sequencing. Relative cost is shown on the vertical axis, with the lowest cost at the bottom.

Elapsed time from the present is shown on the horizontal axis, starting from the left. Sequencing is indicated by the lines and arrows connecting the packages. The category is identified by color.

The relative cost of the Early Wins projects is low, and many of those could start immediately, followed by higher cost projects. One of the principles underlying the implementation plan is minimizing the area within the station under construction at any one time to limit impacts and inconvenience to customers.

Figure 5-1 shows packages of improvements that may be implemented independently, and their placement is indicative of their relative phasing. The improvements and their relative costs are shown by category in **Table 5-1**. Each improvement is identified by number and category. The project numbers and color coding of categories in the table are consistent with those in the notes and callouts shown on the plan sheets in Chapter 4, allowing the improvement description to be cross- referenced with its location.

5.3 Next Steps

The strategy proposed in this plan for the Balboa Park Station establishes a long-term vision for station improvements. The plan's framework of priorities and improvements can be used as a guide for future selection and implementation as BART's scheduling and available funding permit. It is important to note that the plan is intended to provide flexibility in the selection, design, and timing of individual projects. Their implementation will be influenced by evolving priorities and funding availability, among other factors.

Preliminary engineering should begin on selected near-term improvements to enable their implementation on a timely basis. Work on the new street-level station entrance and plaza on the south side of Geneva Avenue should coincide with the timing for construction of the Upper Yard housing development. Other improvements on both sides of Geneva Avenue should be timed in coordination with SFMTA changes to the street and curb line, to minimize disruption to the area. Any opportunities such as these should be leveraged for the completion of complementary improvements.

BART will continue to work with internal and external stakeholders to advance the improvements that require additional coordination, and will continue to engage the communities as designs for individual improvements are further developed.

Figure 5-1: Balboa Station Implementation Plan

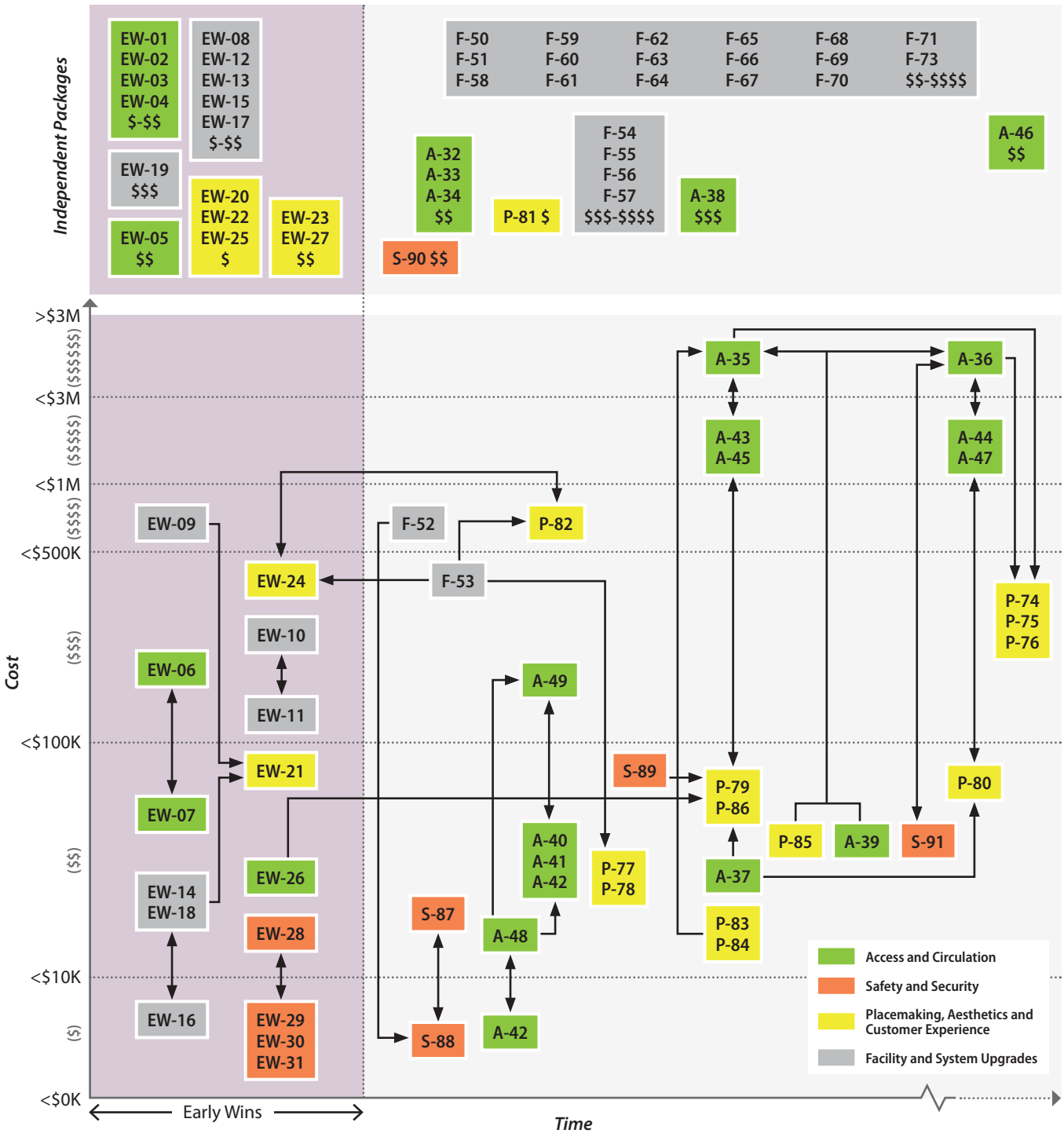

Table 5-1: Balboa Park Station: Preferred Concept - Project List (Revised May 2020)

Early Wins Item	Primary Category	Secondary Category	Project Number	Project Name	Project Description	Station Level	Dependencies	Cost ($ - $$$$$$)
								
X	**Access and Circulation**	Vertical Circulation	**EW-01**	Existing Escalator Renovation (North Geneva Headhouse Area)	• Repair escalator handrail	Concourse	Independent	$ (Under $10k)
X	**Access and Circulation**	Universal Access and ADA Compliance	**EW-02**	Install Cane Detection / Other Warning Devices per ADA Requirements	**(CNI-WF0264) (CNI-WF0265)** • Install cane detector where emergency telephone boxes, utility boxes, water fountains, fire alarms, stairwells, etc. protrude from the wall. Consider replacing metal box detectors on platforms • Replace worn yellow striping on stairs • Add texture to platform at top of stairs to indicate about to enter stairwell	Concourse / Platform		$$ ($10k-$100k)
X	**Access and Circulation**	Universal Access and ADA Compliance	**EW-03**	Bring Station Amenities/ Service Areas into Compliance	**(CNI-WF0264) (CNI-WF0265)** • Move public phones to ADA-compliant height (48" or less) • Lower counters to between 28" and 34" in height. Minimum 36" width • Place wheelchair-accessible ticket entry sign in more visible location, replace old signage, and place braille at reachable height • Add accessible door entry • Provide designated accessible waiting area	Concourse / Platform		$$ ($10k-$100k)
X	**Access and Circulation**	Universal Access and ADA Compliance	**EW-04**	Bring All Braille Signage to C1 Compliance	**(CNI-WF0264) (CNI-WF0265)** Bring all braille signage into C1 compliance including: • Add elevator signage where missing and include C1-compliant braille • Make elevator access signage consistent within station(s) and include C1-compliant braille • Replace bathroom signs on door and include C1-compliant braille • Remove lift not in use to avoid confusion or provide signage (with C1 braille) indicating that it is not in use or is being repaired • Add C1-compliant braille sign at emergency exit	Concourse / Platform		$ (Under $10k)
X	**Access and Circulation**	Universal Access and ADA Compliance	**EW-05**	Install Remote Monitoring for Elevators and Escalators	• Install elevators and escalators remote monitoring/ reporting and monitoring/reporting for display so ADA-affected patrons are alerted to which systems they can egress **(CNI-SY0174)**	All		$$ ($10k-$100k)

Table 5-1: Balboa Park Station: Preferred Concept - Project List (Revised May 2020) (continued)

Early Wins Item	Primary Category	Secondary Category	Project Number	Project Name	Project Description	Station Level	Dependencies	Cost ($ - $$$$$$)
X	**Access and Circulation**	Bike Improvements	**EW-06**	Relocate Bike Parking / Storage / Lockers	• Relocate existing bicycle lockers at the North Geneva Avenue plaza to within the side west wing of the station to behind where the existing rock planter is located • Provide new security gates and fencing that integrate with new security fencing on the westside walkway • Provide additional bike parking lockers	Surface	Simultaneous w/ EW-07	$$$ ($100k-$500k)
X	**Access and Circulation**	Bike Improvements	**EW-07**	Upgrade Bike Lockers	• Upgrade bike parking to lockers of new style • Reposition bike lockers / parking out of pedestrian flow • Move bike parking for better visibility and security. Add security cameras if necessary	Surface	Simultaneous w/ EW-06	$$ ($10k-$100k)
X	**Facility and Systems Upgrade**	Maintenance and Repair	**EW-08**	Ceiling / Wall / Roof Repair	• Address graffiti / glass etching (on exterior surfaces) **(CNI-WF0002)** • Repaint and/or clean up surface at outdoor locations (wall/column/door/bench/roof/ceiling); specific locations to be determined by BART staff • Repair/address concrete spalling/crack or brick disrepair • Sandblast concrete beams/walls at roof structure and apply graffiti coating to exposed concrete (exterior) • Clean and wash roof deck and skylight glazing	All	Independent	$ (Under $10k)
X	**Facility and Systems Upgrade**	Operations/ Employee Environment	**EW-09**	Renovate Existing BART Station Agent Booths	Upgrade BART station agent booths: • Enlarge to allow two people to occupy comfortably • Ensure proper operation of security gates and utilities • Replace floors as needed • Remove clutter and debris from top of booth	Concourse		$$$$ ($500k-$1M)
X	**Facility and Systems Upgrade**	MEP/ Utility	**EW-10**	Fire Sprinkler Head Replacement	• Replace all fire sprinkler heads (per code requirements) **(CNI-WF0166)**	Concourse		$$$ ($100k-$500k)
X	**Facility and Systems Upgrade**	MEP/ Utility	**EW-11**	Fire Alarm Device Replacement	• Replace fire alarm devices with new devices with a visual cue (such as a strobe)	Concourse / Platform		$$ ($10k-$100k)
X	**Facility and Systems Upgrade**	Concourse Improvements	**EW-12**	Replace Interior Glass Doors	• Replace (E) opaque glass sliding doors (at travertine wall area) with (N) stainless-steel sliding doors **(CNI-WF0002)**	Concourse	Independent	$$ ($10k-$100k)

Table 5-1: Balboa Park Station: Preferred Concept - Project List (Revised May 2020) (continued)

Early Wins Item	Primary Category	Secondary Category	Project Number	Project Name	Project Description	Station Level	Dependencies	Cost ($ - $$$$$$)
X	**Facility and Systems Upgrade**	Maintenance and Repair	**EW-13**	Install New Interior Pigeon Protection	• Install infill mesh at north/south ends of station at concrete end walls where pigeon entry is happening **(CNI-WF0231)**	Concourse		$ (Under $10k)
X	**Facility and Systems Upgrade**	Fare Gates / Ticket Vending Machines (TVMs) / Other Systems	**EW-14**	Upgrade for TVM/ Add-Fare Machines (AFM), Automatic Fare Collection (AFC), Cash/Change and BART Only Smart Cards (BOSC) Machines and Equipment	• Replace all fare collection equipment. **(CNI-SY0146)** • Replace all Automatic Fare Collection equipment. **(CNI-SY0076)** • Purchase and install bill recyclers in TVM and AFM **(CNI-SY0126)** • Add change/cash machine (one on each side of concourse) **(CNI-SY0231)** • Replace BOSC readers attached to station agent terminals **(CNI-SY0179)** • Replace bill-to-bill changers **(CNI-SY0180)**	Concourse		$$ ($10k-$100k)
X	**Facility and Systems Upgrade**	Maintenance and Repair	**EW-15**	Pest / Pigeon Control (Repair Work)	**(CNI-WF0094) (CNI-WF0231)** • Repair/replace worn, damaged, or debris-covered pigeon spikes throughout station • Clean (E) concrete sidewalls and remove pigeon waste/debris (pressure washing recommended) • Repair Modernization PH 1 work that left exposed edges below honeycomb stone wall panels at westside floor infill area of platform (existing condition allows for pigeon/rodent nesting and debris accumulation) • Remove (E) nylon bird netting above station agent booth and replace with improved concept • Remove (E) nylon bird netting above retail vendor (flower shop) and replace with improved concept	Concourse / Platform		$$ ($10k-$100k)
X	**Facility and Systems Upgrade**	Fare Gates / TVM / Other Systems	**EW-16**	Implement Uninterruptible Power Supply (UPS) Monitoring (AFC Equipment)	• Modify AFC equipment software to monitor the status of UPS **(CNI-SY0183)**	Concourse		$ (Under $10k)
X	**Facility and Systems Upgrade**	Mechanical/ Plumbing System Improvements	**EW-17**	Replace Eye-Wash Station	• Install and replace eye-wash station **(CNI-PM0118)**	Concourse		$ (Under $10k)
X	**Facility and Systems Upgrade**	Fare Gates / TVM / Other Systems	**EW-18**	Replace Magnetic Ticket Readers	**(CNI-SY0178)** • Replace magnetic ticket readers attached to station agent terminals; they were made by Xico who is no longer manufacturing the readers • Magnetic ticket readers will reach end of their life cycle in 3 years	Concourse		$$ ($10k-$100k)
X	**Facility and Systems Upgrade**	Maintenance and Repair	**EW-19**	Re-seal Elevator/ Escalator Pit	• Re-seal elevator/escalator pit water mediation, including sump pump replacement **(CNI-PM0376)**	Concourse / Platform		$$$ ($100k-$500k)

Table 5-1: Balboa Park Station: Preferred Concept - Project List (Revised May 2020) (continued)

Early Wins Item	Primary Category	Secondary Category	Project Number	Project Name	Project Description	Station Level	Dependencies	Cost ($ - $$$$$$)
								
X	**Placemaking, Aesthetics, Passenger Experience**	Concourse Improvements	**EW-20**	Sightline Improvements: Trash Containers	**(CNI-WF0113) (CNI-WF0243)** • Replace station trash cans District-wide • Move garbage containers located in sightlines or in congested areas to locations along walls (out of the way)	Concourse	Independent	$ (Under $10k)
X	**Placemaking, Aesthetics, Passenger Experience**	Maintenance and Repair	**EW-21**	Flooring Repair and Replacement; Stair Repair and Cleaning	**(CNI-WF0251) (CNI-WF0142) (CNI-WF0253)** • Replace floors in station agent booth • Clean dirty floor locations • Replace/repair worn-down floor / damaged floor • Clean or resurface dirty and grimy stairs, repair where dirty/worn • Clean/patch/repair floor after removal of retail and kiosks • Replace the stair treads and nosings; existing treads are worn and have reduced traction • Refurbish/clean existing entrance stairs (at existing headhouses)	Concourse / Platform		$$ ($10k-$100k)
X	**Placemaking, Aesthetics, Passenger Experience**	Maintenance and Repair	**EW-22**	Minor Concourse Clean-up Items	• Remove outdated fixtures, e.g., ashtrays • Address ticket/receipt trash on floors in front of TVMs (e.g., wall-mounted fixture to catch trash) • Cover/remote abandoned phone booths with stainless-steel plates (short-term) and redesign wall (long-term); remove free-standing empty phone kiosks and associated signage • Conceal electrical conduit and equipment, and cover all junction boxes to improve appearance	Concourse	Independent	$ (Under $10k)
X	**Placemaking, Aesthetics, Passenger Experience**	Retail and Advertising	**EW-23**	Retail Improvements	• Indicate desired retail opportunities consistent with BART's system-wide retail program	Concourse		$$ ($10k-$100k)
X	**Placemaking, Aesthetics, Passenger Experience**	Platform Improvements	**EW-24**	Replace Platform Seating with New Seating	• Remove (E) seating in the outdoor platform area and install (N) benches; align (N) benches as necessary to accommodate (N) BART three-car train doors; coordinate with items.	Platform	After F-53; Simultaneous w/ P-82; Coordinate w/ P-77, P-78	$$ ($10k-$100k)
X	**Placemaking, Aesthetics, Passenger Experience**	Surface Improvements - Plaza	**EW-25**	Lighting Replacement (Platform): Bulbs and Fixtures	• Install LED lighting and programmable control if possible **(CNI-PM0092)** • Replace broken light bulbs - ceilings/wall sconces • Replace or remove broken light fixtures (ceilings/ wall sconces) • Clean/replace filthy lighting (dust, cobwebs, pigeon droppings)	Surface / Platform		$$ ($10k-$100k)

Table 5-1: Balboa Park Station: Preferred Concept - Project List (Revised May 2020) (continued)

Early Wins Item	Primary Category	Secondary Category	Project Number	Project Name	Project Description	Station Level	Dependencies	Cost ($ - $$$$$$)
X	**Placemaking, Aesthetics, Passenger Experience**	Surface Improvements - Plaza	**EW-26**	Demolition Surface Plaza Work - Northside of Geneva Avenue	• Remove exterior communications tower • Remove rock planter boxes, railings, and (E) concrete trash storage that protrudes into the plaza	Surface	Simultaneous w/ P-79, A-35, A-43, A-45, P-86	$$ ($10k-$100k)
X	**Placemaking, Aesthetics, Passenger Experience**	Surface Improvements - Landscaping/ Furniture	**EW-27**	Surface Level Improvements to Landscaping / Site Furniture	• Activate empty/deteriorated planters, dead trees, and sparse landscaping, or remove. Maintain sightlines, max 30-72" height and prevent use as drug-dealing channel • Remove concrete planters/benches and replace/ redesign • Improve landscaping on westside pedestrian walkway	Surface	Independent	$$ ($10k-$100k)
								
X	**Safety and Security**	Maintenance and Repair	**EW-28**	Concourse Entry Repair - Fix Sliding Gates	• Repair sliding gates stuck in tracks; repair/ upgrade security gate/grill to improve operability	Concourse	Independent	$$ ($10k-$100k)
X	**Safety and Security**	Safety and Security	**EW-29**	Fix Swing Gates	• Secure swing gates to deter fare evasion	Concourse		$ (Under $10k)
X	**Safety and Security**	Safety and Security	**EW-30**	Emergency Exit Functionality	• Ensure emergency exit functions (do not wire shut)	Concourse	Independent	$ (Under $10k)
X	**Safety and Security**	Safety and Security	**EW-31**	Rekey Existing Lock System	• District Security: Rekey existing lock system (Phase 1: Safety sensitive locations); electronic lock system should be used **(CNI-WF0211)**	Concourse / Platform		$ (Under $10k)
								
	Access and Circulation	Bike Improvements	**A-32**	Install Bike Channels	• Install stair channels to facilitate bicycle circulation at 2 entrances at Geneva Avenue Coordinate with modernization/upgrades of the two entrances	Concourse	Independent	$$ ($10k-$100k)
	Access and Circulation	Universal Access and ADA compliance	**A-33**	Remodel Existing Restroom to Comply with Universal Access Requirements	• Remodel to provide accessible restrooms for men and women; update ADA **(CNI-WF0264) (CNI-WF0265)**	Concourse	Independent	$$ ($10k-$100k)
	Access and Circulation	Universal Access and ADA compliance	**A-34**	Replace Elevator Status Signs	**(CNI-SY0203) (CNI-SY0233)** • Replace the existing elevator status sign in the station agent booths; existing status signs are obsolete and spare parts are not available; manufacturer no longer manufacturers existing signs; signs are beginning to fail and this is an ADA requirement	Concourse / Platform	Independent	$ (Under $10k)

Table 5-1: Balboa Park Station: Preferred Concept - Project List (Revised May 2020) (continued)

Early Wins Item	Primary Category	Secondary Category	Project Number	Project Name	Project Description	Station Level	Dependencies	Cost ($ - $$$$$$)
	Access and Circulation	Station Entry Improvements at Surface	**A-35**	New Entry Headhouse at Northside of Geneva Avenue	• Remove/upgrade headhouse canopy; redo with roll-up doors integrated into existing structure • Demolish (E) Geneva concrete "bunker" headhouse and replace with (N) glass headhouse (or alternate durable materials that provide similar transparency) to improve sightlines, security, appearance, and maintenance • Integrate (N) street<>concourse elevator in free area as part of design; if (N) headhouse and (N) elevator are different structures, integrate them with continuous roof; do not use glazing on roof per (Mechanical & Electrical (M&E) request • Install lighting/illuminated signage at new Geneva Avenue headhouse	Surface / Concourse	Consider w/ EW-26. Coordinate w/ A-43, A-45, P- 79, P-86	$$$$$$ (>$3M)
	Access and Circulation	Station Entry Improvements at Surface	**A-36**	New Entry Headhouse at Southside of Geneva Avenue	• Install (N) glass (or alternate durable materials that provides similar transparency) to headhouse at Upper Yard entrance to improve security, appearance, maintenance. Integrate 3-stop (N) Street<>Concourse<>Platform elevator. Street<>Concourse to be used by public during hours of BART operation. Access to platform level for maintenance use only (provide keyed access). Public access to platform to be via existing elevator within "paid" area • Slope the headhouse roof to avoid potential drainage onto platform tracks. Do not use glazing on roof per M&E request • Install lighting/illuminated signage at new Geneva headhouse • Install new security gate/door at surface level to deter camping/vandalism	Surface / Concourse	Simultaneous w/ P-80, S-91, A-44, A-37	$$$$$$ (>$3M)
	Access and Circulation	Universal Access and ADA Compliance	**A-37**	Accessible Ramps and Curb-Cuts	**(CNI-WF0264) (CNI-WF0265)** • Add ramps and curb-cuts as necessary at external crosswalks and plazas • Bring existing ramps into compliance (i.e., >5% slope or cross-slope issues) • Coordinate with kiss-and-ride and plaza work at south side of Geneva Avenue	Surface	Link to P-79, P-80	$$ ($10k-$100k)
	Access and Circulation	Bike Improvements	**A-38**	Install New Bike Station (Attended or Self-Serve)	• Consider using new decked over area inside "paid" area at the Ocean Headhouse adjacent to the escalator down to the platform • Study feasibility of consolidating all current bike parking inside and outside of station into this one location, with a secured bike station facility	Concourse	Independent	$$$ ($100k-$500k)

Table 5-1: Balboa Park Station: Preferred Concept - Project List (Revised May 2020) (continued)

Early Wins Item	Primary Category	Secondary Category	Project Number	Project Name	Project Description	Station Level	Dependencies	Cost ($ - $$$$$$)
	Access and Circulation	Wayfinding, Signage and Real-time Displays	**A-39**	Wayfinding and Signage – at Surface Level	• Provide bus schedules and information at new bus shelters • Integrate real-time displays at entrances **(CNI-WF0065)** • Replace/install new bus signs at intermodal station or bus stop at location indicated • Improve signage and markings for drop-off area and shuttles (coordinate with TOD plaza redevelopment) • Add wayfinding to taxi (rideshare) stand	Surface	To be done in conjunction w/ new Headhouse Geneva North A-35 and Headhouse Geneva South A-36	$$ ($10k-$100k)
	Access and Circulation	Wayfinding, Signage and Real-time Displays	**A-40**	Wayfinding: Signage Improvements	• Need signage for where to board short trains (**CNI-WF0066)**	Surface		$$ ($10k-$100k)
	Access and Circulation	Wayfinding, Signage and Real-time Displays	**A-41**	Wayfinding: Station Agent Areas	**(CNI-WF0066)** • Install signs at closed/part-time Station Agent booths providing guidance on where to find Station Agent • Improve/replace “Station Agent Assistance” sign • Provide directional signage to find Station Agent phones • Provide signage to distinguish between Station Agent phones and public pay phones; label unsigned Agent phones - New F13 - Empty BART signs and info cases: use or remove	Concourse		$$ ($10k-$100k)
	Access and Circulation	Wayfinding, Signage and Real-time Displays	**A-42**	Wayfinding: Transit Agency and Bicycle Signage	**(CNI-WF0066)** • Add elevator signage where missing and include C1-compliant braille • Make elevator access signage consistent within station(s) and include C1-compliant braille • Replace “elevator is behind you” graphic signs with clear wayfinding to the elevator; include C1-compliant braille • Replace bathroom signs on door and include C1-compliant braille • Replace broken “Add Fare” sign • Repaint or replace missing/damaged/faded BART sign at station entry with new standard sign • Address bicycle use in station area. Increase size and prominence of “Walk Your Bike” signage and/or formalize bicyclist circulation through station periphery. • Install signage for no bicycles on escalators Work with local transit agency to • Improve real-time information screen content—information is missing or outdated	Concourse		$ (Under $10k)

Table 5-1: Balboa Park Station: Preferred Concept - Project List (Revised May 2020) (continued)

Early Wins Item	Primary Category	Secondary Category	Project Number	Project Name	Project Description	Station Level	Dependencies	Cost ($ - $$$$$$)
	Access and Circulation	Vertical Circulation	**A-43**	New escalator at existing Stair (North Geneva Headhouse area)	• Remove existing stair and install new escalator (one for UP and one for DOWN [DN]) • Coordinate with overall renovation of Geneva North Entrance	Surface / Concourse	Consider w/ EW-26. Coordinate w/ A-43, A-45, P- 79, P-86	$$$$$ ($1M-$3M)
	Access and Circulation	Vertical Circulation	**A-44**	New Escalator at Existing Stair (South Geneva Headhouse Area)	• Install new Surface<>Concourse (free area) escalator (UP-only? Or UP/DN - TBD by BART staff) to connect Upper Yard side of Geneva to South exit (for TOD + drop-off improvements) • Coordinate with overall renovation of Geneva South Entrance	Surface / Concourse	Simultaneous w/ P-80, S- 91, A-36, A-47	$$$$$ ($1M-$3M)
	Access and Circulation	Vertical Circulation	**A-45**	New "Free Area" Elevator (North Side of Geneva Ave.)	**(CNI-PM0309) (CNI-PM0271)** • Install new Surface<>Concourse elevator in free area integrated/adjacent to (N) Geneva Headhouse (to mitigate fare evasion from existing surface elevator). • Coordinate with Overall Renovation of Geneva North Entrance	Surface / Concourse	Consider w/ EW-26. Coordinate w/ A-43, A-35, P- 79, P-86	$$$$$ ($1M-$3M)
	Access and Circulation	Vertical Circulation	**A-46**	Existing Elevator Configuration Change and Renovation	**(CNI-PM0309) (CNI-PM0271)** • Reconfigure existing Street<>Concourse<>Platform elevator to only serve the concourse/platform (limit fare evasion) • Install oils separator in the discharge of elevator pit sump pump to avoid potential for oil to be released into storm drain **(CNI-PM0009)** • Renovate (E) elevator enclosure at street/ concourse/platform levels with CLEAR GLAZING (improve sightlines/improve safety – similar to prior Market Street/Lake Merritt BART renovations). Do not use glazing on roof per M&E request **(CNI-PM0309) (CNI-PM0271)**	All	After A-45, A-47	$$$ ($100k-$500k)
	Access and Circulation	Vertical Circulation	**A-47**	New "Free Area" Elevator (South Geneva Headhouse Area)	• Install (N) 3-stop Surface<>Concourse (free area)<>Platform elevator to connect Upper Yard side of Geneva to South exit. Platform stop accessed with Clipper card integration. • Coordinate with overall renovation of Geneva South Entrance headhouse, stair/escalator reconfiguration, and plaza renovation	All	Simultaneous w/ P-80, S-91, A-36, A-44	$$$$$ ($1M-$3M)
	Access and Circulation	Wayfinding, Signage and Real-time Displays	**A-48**	Wayfinding: Master Plan	• Plan and install comprehensive wayfinding system for bicyclists and pedestrians **(CNI-WF0066)**	All		$$ ($10k-$100k)
	Access and Circulation	Wayfinding, Signage and Real-time Displays	**A-49**	Install New DSS Signs	• Implement new Destination Signs (DSS) as part of system program **(CNI-SY0067)**	Concourse / Platform		$$$ ($100k-$500k)

Table 5-1: Balboa Park Station: Preferred Concept - Project List (Revised May 2020) (continued)

Early Wins Item	Primary Category	Secondary Category	Project Number	Project Name	Project Description	Station Level	Dependencies	Cost ($ - $$$$$$)
								
	Facility and Systems Upgrade	Break Rooms and Restroom	**F-50**	Break Room and Restroom Improvements	**(CNI-PM0282) (CNI-PM0167)** • Install new or repair existing plumbing • New carpentry work needed • Repair/replace floors • Repair/replace paint • Repair/replace furniture • Address other small items	Concourse	Independent	$$ ($10k-$100k)
	Facility and Systems Upgrade	Maintenance and Repair	**F-51**	Replace All Door and Hardware	• Replace and repair all facility doors and hardware **(CNI-WF0107)** • Coordinate with other ongoing projects that include similar work scope	Concourse / Platform	Independent	$$$ ($100k-$500k)
	Facility and Systems Upgrade	Concourse Improvements	**F-52**	Concourse Flooring Replacement	• Remove all existing brick floor surfaces and replace with new concrete-finish flooring at concourse “paid/free” interior areas	Concourse	Needs to be before S-88	$$$$ ($500k-$1M)
	Facility and Systems Upgrade	Platform Improvements	**F-53**	Replace Platform Edge Tiles	• Replace edge strip tiles at platform with new 100% yellow tiles with black directional tile for the blind. Install decals for boarding door locations [currently new layout is in pilot program at Pleasant Hill - coordinate program outcome with future 3-door train “Fleet-of-Future” needs] **(CNI-WF0112)**	Platform	Independent	$$$ ($100k-$500k)
	Facility and Systems Upgrade	Electrical/ Lighting System Improvements	**F-54**	Upgrade Emergency Lighting	• Design and install dedicated circuit for the emergency lighting system, including the UPS and battery system. Emergency back-up system has reached end of life cycle. Upgrade emergency lighting systems to comply with latest emergency lighting codes **(CNI-PM0065)**	Concourse / Platform		$$$ ($100k-$500k)
	Facility and Systems Upgrade	Mechanical/ Plumbing System Improvements	**F-55**	Repair/ Replace Water and Sewer Lines	• Repair or replace water and sewer lines and valves that are not in good state of repair **(CNI-WF0339)**	All		$$$ ($100k-$500k)
	Facility and Systems Upgrade	Mechanical/ Plumbing System Improvements	**F-56**	Add Fire Suppression	• Add fire suppression system in existing train control room. (**CNI-PM-0123)**	Concourse		$$$$ ($500k-$1M)
	Facility and Systems Upgrade	Mechanical/ Plumbing System Improvements	**F-57**	Replace Fire Pumps	• Replace fire pumps when they reach the end of their intended design life **(CNI-PM0154)**	Concourse		$$$ ($100k-$500k)
	Facility and Systems Upgrade	Mechanical/ Plumbing System Improvements	**F-58**	Replace Facilities HVAC Equipment	• Address increased heat load from new and added equipment. Increase heating, ventilation, and air conditioning (HVAC) system capacity in train control rooms, train control bungalows, substations, and other facilities **(CNI-PM0353)**	Concourse		$$$$ ($500k-$1M)

Table 5-1: Balboa Park Station: Preferred Concept - Project List (Revised May 2020) (continued)

Early Wins Item	Primary Category	Secondary Category	Project Number	Project Name	Project Description	Station Level	Dependencies	Cost ($ - $$$$$$)
	Facility and Systems Upgrade	Mechanical/ Plumbing System Improvements	**F-59**	Evaluate Storm, Sewer and Industrial Water Discharges and Comply with RWQCB Storm Water Permit Requirements, Initial Contract.	**(CNI-PM0367)** • Part of study for all stations. • Study to evaluate storm, sewer, and industrial water discharges from mechanical systems; assess floor drains or water discharge from buildings or mechanical systems that might be going into storm drain but should be going into sewer **(CNI-WF0292) (CNI-WF0304)** • Inspect and clean storm drainage system and upload reports to the RWQCB annually • Implement a plan for full trash capture into the storm drain	All		$$ ($10k-$100k)
	Facility and Systems Upgrade	Computer and Communications Systems	**F-60**	Replace Platform Public Address (PA) system	• Replace PA system. Current messages are often inaudible, especially on the platform; include asbestos abatement scope (existing PA system contains asbestos components) **(CNI-SY0034)**	Concourse / Platform	Independent	$$$$ ($500k-$1M)
	Facility and Systems Upgrade	Computer and Communications Systems	**F-61**	Replace Station Agent PCs	• Replace station agents' terminal PCs, LCDs and printers **(CNI-SY0181)**	Concourse	Independent	$$ ($10k-$100k)
	Facility and Systems Upgrade	Maintenance and Repair	**F-62**	Repair or Refurbish Underground Station Envelope (Roofs and Walls)	• Replace roofing and inject grout at underground facilities to mitigate water intrusion; conduct physical assessment of areas to identify limits needing repair **(CNI-WF0039)**	Concourse / Platform		$$$$ ($500k-$1M)
	Facility and Systems Upgrade	Electrical/ Lighting System Improvements	**F-63**	Replace UPS Batteries	• Replace and Install Train Control UPS Batteries. system-wide replacement project of Train Control UPS batteries **(CNI-PM0387)**	Concourse		$$$ ($100k-$500k)
	Facility and Systems Upgrade	Electrical/ Lighting System Improvements	**F-64**	Provide Power Source for Wayside/Subway Ventilation, Sump Pumps, Lighting, Train Control UPS	• Currently, all BART stations are powered by a single power source from Pacific Gas and Electric Company (PG&E). In addition to PG&E, BART would like to use 34.SkV or 4kV as a back-up source. This would provide redundancy to wayside/subway ventilation, sump pumps, lighting, and train control UPS if the PG&E sources go down **(CNI-PM0363)**	Concourse		$$$$ ($500k-$1M)
	Facility and Systems Upgrade	Electrical/ Lighting System Improvements	**F-65**	Upgrade Grounding System	• Provide electrical protection to life and safety equipment by replacing corroded/loss of grounding system; grounding system is deteriorating due to sea environment; study required to determine required upgrades **(CNI-PM0070)**	Concourse		$$$ ($100k-$500k)
	Facility and Systems Upgrade	Electrical/ Lighting System Improvements	**F-66**	Install Arc Flash Safety Labeling for All Medium and Low Voltage Electrical Panels	• Develop plan and installation for arc flash labels on required equipment; arc flash labeling is standard industry requirement **(CNI-PM0052)**	Concourse		$$ ($10k-$100k)

Table 5-1: Balboa Park Station: Preferred Concept - Project List (Revised May 2020) (continued)

Early Wins Item	Primary Category	Secondary Category	Project Number	Project Name	Project Description	Station Level	Dependencies	Cost ($ - $$$$$$)
	Facility and Systems Upgrade	Electrical/ Lighting System Improvements	**F-67**	Install Programmable Lighting Panel	• Install Programmable Lighting Panel or energy and cost savings **(CNI-PM0085)**	Concourse		$$ ($10k-$100k)
	Facility and Systems Upgrade	Electrical/ Lighting System Improvements	**F-68**	Replace 480 VAC Switchgear, Phase III Secondary Panels, Core System	**(CNI-PM0049)** • Provide new switchgear, secondary panels and subpanels (including 480 VAC, 240/120 VAC switchboards and panels) to improve reliability of power • Part of system-wide operations program at all core stations; existing equipment is past its estimated design life	Concourse		$$$$ ($500k-$1M)
	Facility and Systems Upgrade	Mechanical/ Plumbing System Improvements	**F-69**	Replace Industrial Waste Pumps at Shops and Stations.	• Industrial waste pumps at shops and stations must be replaced when they reach the end of their intended design life, including end-of-life (EOL) sinks and kiosks for car cleaning.**(CNI-PM0157)**	Concourse		$$$ ($100k-$500k)
	Facility and Systems Upgrade	Universal Access and ADA Compliance	**F-70**	Install Audio Controllers and Hearing Loop System	**(CNI-SY0024) (CNI-SY0259) (CNI-WF0264) (CNI-WF0265)** • Refresh station audio controllers after initial replacement. Equipment refresh is required every 5 years due to equipment life cycle ($250k every 5 years). Audio controllers produce automated audio announcements regarding train arrivals, which is an ADA Program requirement • Install hearing loop system (distribute announcements at platform and agent booth areas). Include as part of an overall PA system upgrade replacement.	Concourse / Platform		$$ ($10k-$100k)
	Facility and Systems Upgrade	Computer and Communications Systems	**F-71**	Replace SCADA System Units	**(CNI-SY0206)** • Design, furnish, install, and configure replacement SCADA system units. Complete replacement of all PLCS-based SCADA systems is needed. This system supervises and controls elevators, fare gates, etc. • Project should be carried out before or concurrent with station BARTnet wiring improvements	Concourse		$$$ ($100k-$500k)
	Facility and Systems Upgrade	Computer and Communications Systems	**F-73**	CCTV Improvements	• Replace analog CCTV cameras with high-resolution digital system **(CNI-SY0034)** • Install CCTV camera at existing elevator **(CNI-SY0056)** • Add CCTV to shuttle stop zone for access by station agents to improve safety • Install security cameras and loop to police station; BART staff will select specific locations	All		$$$ ($100k-$500k)

Table 5-1: Balboa Park Station: Preferred Concept - Project List (Revised May 2020) (continued)

Early Wins Item	Primary Category	Secondary Category	Project Number	Project Name	Project Description	Station Level	Dependencies	Cost ($ - $$$$$$)
	Placemaking, Aesthetics, Passenger Experience	Concourse Improvements	**P-74**	New Modular Wall Panel - South	• Install (N) modular white wall panel system with integrated grazer lighting at the base (at walkway to Upper Yard exit); coordinate advertising agency to integrate (N) electronic advertising panels with new wall panels; align appearance of utility cables and advertising panels	Concourse	Do after new South headhouse, elevator and escalator	$$$$ ($500k-$1M)
	Placemaking, Aesthetics, Passenger Experience	Concourse Improvements	**P-75**	New Modular Wall Panel - North	• Address haphazard appearance of individual wall-mounted advertising signs along South Concourse East concrete wall • Remove signs (and conduits) • Coordinate advertisement panel removal with ad company; consider (N) digital advertisement panels evenly aligned	Concourse	Do after new South headhouse, elevator and escalator	$$$ ($100k-$500k)
	Placemaking, Aesthetics, Passenger Experience	Concourse Improvements	**P-76**	Above Travertine Wall Improvements	• Remove existing nylon bird netting above travertine stone walls to accommodate new image glazing (see work scope for replacement new glazing) • Install (N) point-supported glazing along concourse above existing travertine walls • Install continuous LED-strip light behind point-supported glazing **(CNI-PM0092)**	Concourse		$$$ ($100k-$500k)
	Placemaking, Aesthetics, Passenger Experience	Platform Improvements	**P-77**	Lighting Replacement (Platform) - Free Standing Fixtures	• Replace 4 existing pole-mounted light fixtures w/ new fixtures • Pedestrian height poles • Install LED lighting and programmable control if possible **(CNI-PM0092)** • Align with rearranged seating and canopies	Platform	After F-53; simultaneous w/ P-78; coordinate w/ EW-24, P-82	$$ ($10k-$100k)
	Placemaking, Aesthetics, Passenger Experience	Platform Improvements	**P-78**	Lighting Replacement (Platform) - Linear at Platform Edge	• Replace lighting strip at platform with (N) system • Install LED lighting and programmable control if possible **(CNI-PM0092)**	Platform	After F-53; simultaneous w/ P-77; coordinate w/ EW-24, P-82	$$ ($10k-$100k)
	Placemaking, Aesthetics, Passenger Experience	Surface Improvements - Plaza	**P-79**	New Surface Plaza Work - Northside of Geneva Avenue	• (N) 3'-0" high concrete continuous wall at Geneva Avenue (North Plaza) as protection from vehicles at freeway entrance; continuous wall provides art opportunity. Alternately, can use (N) fixed bollards designed to withstand high speed (freeway type) impact; bollards provide more transparency to plaza.	Surface	Consider w/ EW-26; coordinate w/ A-35, A-43, A- 45, P-86	$$ ($10k-$100k)

Table 5-1: Balboa Park Station: Preferred Concept - Project List (Revised May 2020) (continued)

Early Wins Item	Primary Category	Secondary Category	Project Number	Project Name	Project Description	Station Level	Dependencies	Cost ($ - $$$$$$)
	Placemaking, Aesthetics, Passenger Experience	Surface Improvements - Plaza	**P-80**	Surface Plaza Work - Southside of Geneva Avenue	• Provide modular wall panel system on (E) concrete wall face to align appearance of utility / service boxes. Alternatively, can provide screened wall panel system that allows for additional storage as well as aligns appearance of utility / service boxes. • Coordinate with overall renovation of Geneva South Entrance.	Surface	Simultaneous w/ S-91, A-36, A-44, A-47	$$ ($10k-$100k)
	Placemaking, Aesthetics, Passenger Experience	Surface Improvements - Plaza	**P-81**	Surface Plaza Work -Tony Sacco Plaza	• Study option for retail/community performance/ free-speech space options for Tony Sacco Plaza	Surface	Independent	$ (Under $10k)
	Placemaking, Aesthetics, Passenger Experience	Platform Improvements	**P-82**	Improve Platform Shelter from Weather for Passengers	• Extend canopy, awning and/or windscreen on platform for shade and shelter at north end of current open-air platform; use modular system to minimize disruption to operations; maintain platform edge clearance requirements to minimize maintenance issues. • Align with rearranged seating, new pedestrian height poles	Platform	After F-53; simultaneous w/ EW-24; coordinate w/ P-77, P-78	$$$$ ($500k-$1M)
	Placemaking, Aesthetics, Passenger Experience	Station Entry Improvements at Surface	**P-83**	Demolish Existing Roof Canopy at Northside of Geneva Avenue	• Demolish (E) station roof canopy structure over plaza area at north side of Geneva Avenue (open up area for other development, improve sightlines, etc.)	Surface	Independent	$$ ($10k-$100k)
	Placemaking, Aesthetics, Passenger Experience	Station Entry Improvements at Surface	**P-84**	Install new canopy at existing elevator.	• Install canopy at existing surface level elevator to provide weather protection at elevator door **(CNI-PM0271)**	Surface	After P-83; coordinate w/ A-35	$$ ($10k-$100k)
	Placemaking, Aesthetics, Passenger Experience	Electrical/ Lighting System Improvements	**P-85**	New Lighting Fixtures (SURFACE)	**(CNI-PM0092)** • Improve BART street lighting at surface level (Plazas at north/south sides of Geneva Avenue); make it pedestrian scale rather than tall (similar to Ocean Avenue and Eastside walkway improvements) • Install station-wide LED lighting and programmable control, if possible • Install lighting/illuminated signage at (N) Geneva elevator • Install lighting/illuminated signage at refurbished elevator • Install lighting/illuminated signage at Geneva Plaza • Install lighting/illuminated signage at Upper Yard area	Surface	Coordinate w/ A-35, A-36	$$ ($10k-$100k)

Table 5-1: Balboa Park Station: Preferred Concept - Project List (Revised May 2020) (continued)

Early Wins Item	Primary Category	Secondary Category	Project Number	Project Name	Project Description	Station Level	Dependencies	Cost ($ - $$$$$$)
	Placemaking, Aesthetics, Passenger Experience	Surface Improvements - Plaza	**P-86**	New Surface Plaza Work - Northside of Geneva Avenue	• At the side east wing of station (behind where the (E) rock planter is located) construct (N) trash storage area with security gate; bring storage area up to code and include any recommendations from appropriate San Francisco city agency; coordinate with Recology on changes for trash pickup	Surface	Consider w/ EW-26. Coordinate w/ A-35, A-43, P-86	$$ ($10k-$100k)
								
	Safety and Security	Universal Access and ADA compliance	**S-87**	Bring Concourse Guardrails and Fare Barriers to Meet New BART Facility Standards (BFS)	**(CNI-WF0264) (CNI-WF0008)** • Handrails required to extend 12" at top and/or bottom of stairs and/or ramp and width no more than 1.25" to 1.5" • Ensure existing guardrail meets BFS and code standards in height or install new railing High priority due to safety concerns • Confirm dimensions and replace or modify to meet code Increase height of railings between paid/ unpaid areas of mezzanines (new 60" barrier) • Install 42" H ST STL replacement guardrail along escalator/stair at concourse openings to platform	Concourse		$$ ($10k-$100k)
	Safety and Security	Safety and Security	**S-88**	Mitigate Fare Evasion	• Upgrade existing fare gates to be retrofitted to make it more difficult for patrons to push fare gate leaves open or hop over them to evade fare **(CNI-SY0239)** • Identify and develop solutions (design, monitoring, field modifications) against Fare Collection **(CNI-SY0206)** • Mitigate fare evasion (elevators used to bypass fare gates); change elevator access to limit public access from surface<>platform in free area by reconfiguring vertical circulation	Concourse	Related to A-46	$ (Under $10k)
	Safety and Security	Safety and Security	**S-89**	Install New Westside Walkway Fencing	• Install (N) perforated or decorative metal fencing along westside public walkway to limit/restrict roof access; art placement opportunity at fencing	Surface	Coordinate w/ P-79	$$ ($10k-$100k)
	Safety and Security	Safety and Security	**S-90**	Fall Protection on Station Roofs	• Design and install fall protection on station roofs **(CNI-WF0301)**	Roof	Independent	$$ ($10k-$100k)
	Safety and Security	Safety and Security	**S-91**	Secure Station at Upper Yard Entry South of Geneva Avenue	• Address camping, vandalism, visibility issues • Current condition has public access to stair available all hours of the day, as the entry gate is located at the bottom of the stair landing; relocate gate/fencing to top of stairs to eliminate access to stairs during off-hours	Surface	Simultaneous w/ P-80, A-36, A-44, A-47	$$ ($10k-$100k)

Appendix

A

Existing Conditions of Platform Level
Photograph taken by AECOM in 2018

Appendix A: List of Existing Conditions Analysis Documents

List of Existing Conditions Analysis Documents

1. Technical Memorandum #1: Goals and Objectives / Existing Conditions Assessment / Constraints and Opportunities; dated October 31, 2016

2. Appendices to Technical Memorandum #1
    a. Future Development and Land Use Changes
    b. Upper Yard Conceptual Layouts
    c. Future Transportation Investments
    d. Station Access
    e. Balboa Park Station Layout
    f. Draft Improvements List
    g. References

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Appendix

B

Existing Conditions of Platform Level
Photograph taken by AECOM in 2018

Appendix B: Public Outreach Event #1 (June 15, 2016) – Information Materials and Survey Results

BETTER STATIONS.

BALBOA PARK STATION MODERNIZATION

Project Purpose

The purpose of the Balboa Park Station Modernization Plan is to **invest resources into the station and surrounding areas** to advance transit ridership and enhance quality of life in the community. The plan will identify projects that will help **modernize and improve the station's functionality** and overall customer experience.

Project Goals

1. Enhance Balboa Park Station to establish it as an inviting **public space and community hub**
2. **Modernize and update** the physical condition of the station
3. Ensure that the station **reflects BART's sustainability goals**
4. Improve the station's **access, capacity, and operations**
5. Support **neighborhood vision** and integrate an improved Balboa Park Station with **community priorities**

BETTER STATIONS.

BALBOA PARK PLANNING CONTEXT

Key Facilities:

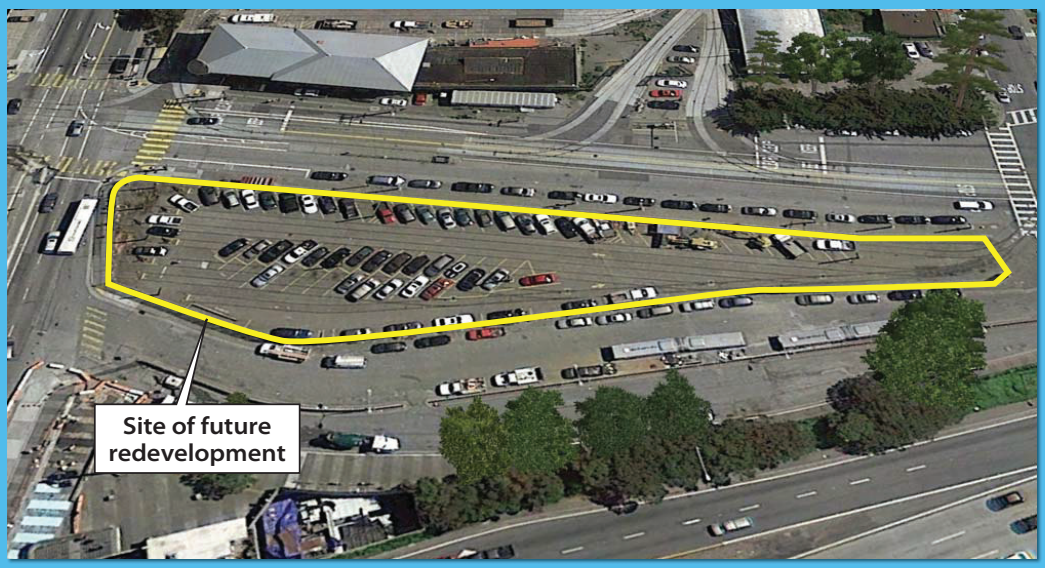
- Muni Station, Yard, and related infrastructure
- City College of San Francisco
- High Schools and Middle Schools
- Balboa Park Reservoir

Transportation Corridor:

- BART
- MUNI
- I-280

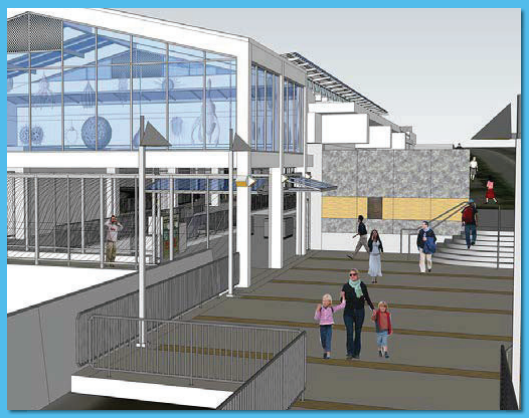
BETTER STATIONS.

BALBOA PARK TRANSFORMATION



The Upper Yard adjacent to the Balboa Park BART Station has been identified for future redevelopment to include Transit Oriented Development - affordable housing and other community amenities.

SFMTA improvements planned in Balboa Park Station area.



BART is coordinating with SFMTA and SFCTA to improve connectivity to MUNI at Balboa Park.

BETTER STATIONS.

BALBOA PARK
ISSUES AND OPPORTUNITIES

State of Good Repair

- Electrical Power and Power Distribution
- Capacity Improvements
- Pest Control / Pigeon Control
- Fare Gate / Ticket Vending Machine & Other Systems
- Break Rooms and Restrooms
- Roof / Ceiling Structure

Aging station components and infrastructure lead to periodic service disruptions.

Increased investment in upkeep and maintenance helps keep BART running.

Safety & Security

- Dim lighting
- Poor visibility/lines of sight
- Remote/inactive areas can feel unsafe
- Fare evasion

Existing station conditions

Improved lighting and sight lines contribute to a safer, more open station environment, as in the example above.

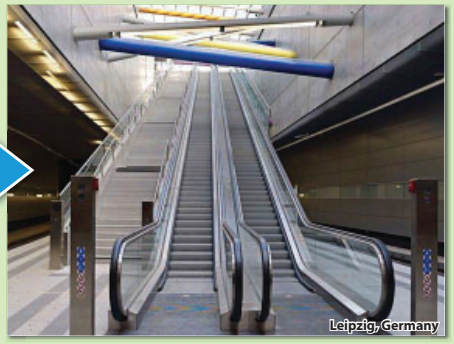
BETTER STATIONS.

BALBOA PARK
ISSUES AND OPPORTUNITIES

Universal Access

- Single station elevator
- Insufficient signage
- Crossing safety improvements
- General pedestrian improvements
- Bicycle access improvements

Existing station conditions



Expanding facilities such as escalators and elevators, and implementing pedestrian safety measures, can help provide safe access for all riders.

Sustainability

- Improve efficiency (daylighting, LED lighting)
- Resource conservation
- Elevators/escalators
- Materials & finishes

Existing station conditions

Incorporating modern design and technology, as in the example of a carbon neutral train station above, can promote sustainability and reduce maintenance costs.

Balboa Park Station Modernization Survey

Improvement Priorities

We are considering changes to improve your BART experience at the Balboa Park Station. Please select up to three responses for each of the following four categories regarding improvements to the station.

* 1. Which of the following new or modernized features do you think BART should invest in related to *State of Good Repair*? Please select your top three improvements:

- [ ] Invest in building infrastructure (floors, stairwells, roof, finishes, electrical systems)
- [ ] Invest in customer functionality (update fare gates and ticket vending machines, install weather protection canopy)
- [ ] Improve overall cleanliness (e.g. housekeeping, pigeon control)
- [ ] Update restrooms
- [ ] Provide in-station retail (e.g. coffee shops), and/or community-focused commercial space (e.g. farmer's markets)
- [ ] Invest in placemaking (e.g. integrate local art into station, reflect culture of the area, plaza upgrades)
- [ ] None of the above

* 2. Which of the following new or modernized features do you think BART should invest in related to *Safety and Security*? Please select your top three improvements:

- [ ] Improve safety and security though better sightlines/visibility
- [ ] Enhance pedestrian scale lighting
- [ ] Increase security of remote/inactive areas
- [ ] Minimize fare evasion
- [ ] Improve pedestrian and bicycle crossing safety
- [ ] None of the above

* 3. Which of the following new or modernized features do you think BART should invest in related to *Universal Access*? Please select your top three improvements:

- [ ] Increase wayfinding signage
- [ ] Improve general pedestrian infrastructure
- [ ] Improve bicycle access (new stairwell channels, more bike parking)
- [ ] Improve station entrance at Ocean Avenue
- [ ] Install a second station elevator (south of Geneva Avenue)
- [ ] Add escalator access and canopy south of Geneva Avenue from street to concourse
- [ ] None of the above

* 4. Which of the following new or modernized features do you think BART should invest in related to *Sustainability*? Please select your top three improvements:

- [ ] Promote sustainability through efficient building systems and design
- [ ] Increase focus on resource conservation
- [ ] Improve energy efficiency of lighting through increased daylighting, LEDs, etc.
- [ ] Improve energy efficiency of elevators and escalators
- [ ] Utilize sustainable materials & finishes
- [ ] Increase water efficiency through permeable surfaces, drought resistant landscaping, and storm water management
- [ ] Increase focus on low-maintenance improvements
- [ ] None of the above

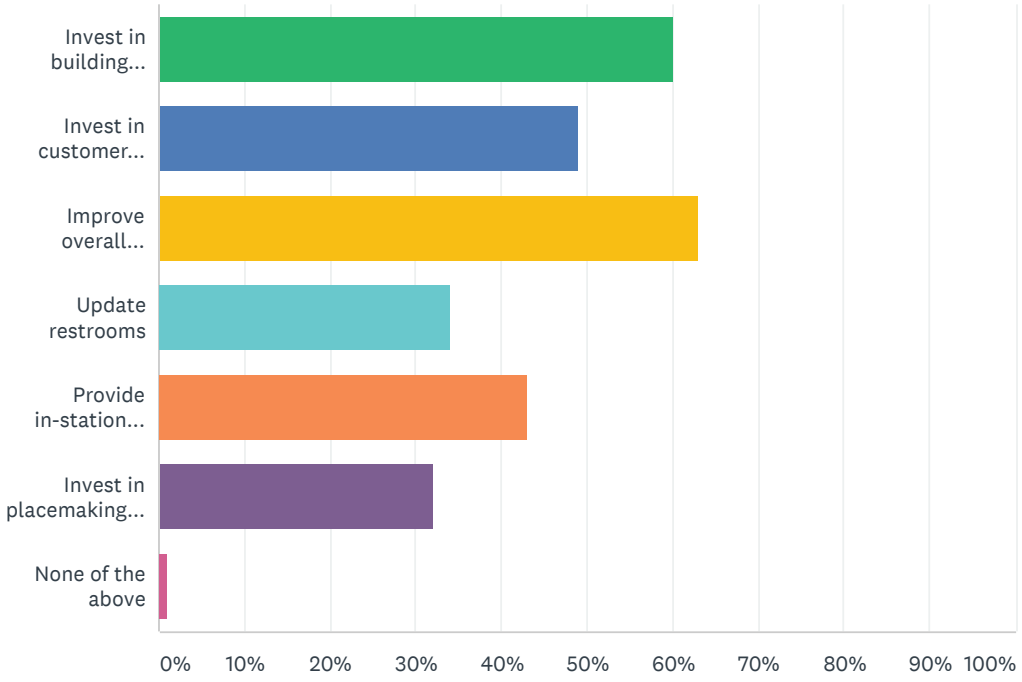
5. Do you have any other suggestions for station improvements?

6. What type of services would you like to see at Balboa Station?

- [ ] Farmer's Market
- [ ] Coffee Kiosk
- [ ] Food Vendor
- [ ] Other (please specify)

Q1

Which of the following new or modernized features do you think BART should invest in related to State of Good Repair? Please select your top three improvements:

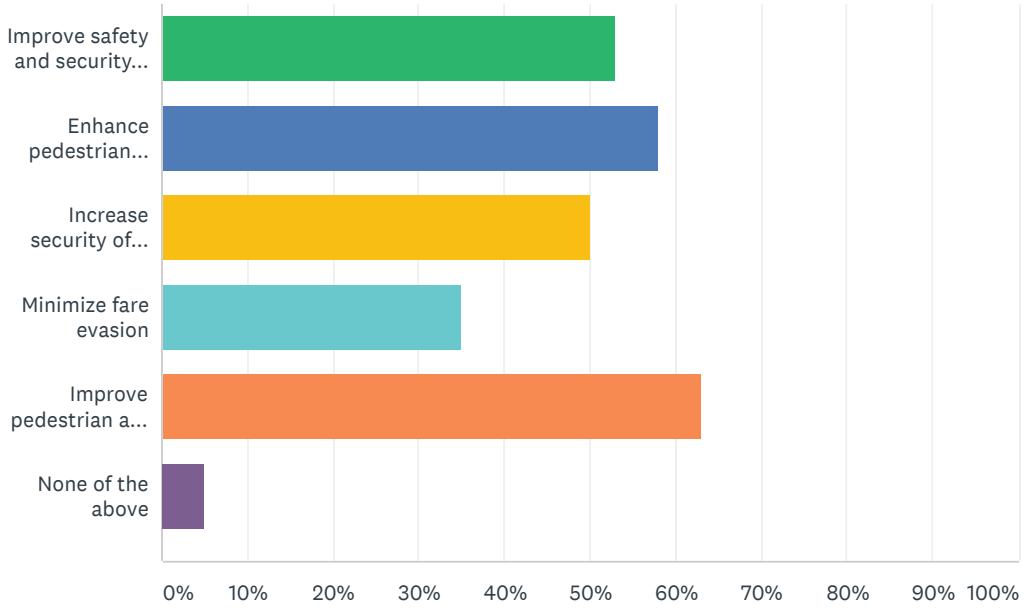


ANSWER CHOICES	RESPONSES	
Invest in building infrastructure (floors, stairwells, roof, finishes, electrical systems)	60.00%	60
Invest in customer functionality (update fare gates and ticket vending machines, install weather protection canopy)	49.00%	49
Improve overall cleanliness (e.g. housekeeping, pigeon control)	63.00%	63
Update restrooms	34.00%	34
Provide in-station retail (e.g. coffee shops), and/or community-focused commercial space (e.g. farmer's markets)	43.00%	43
Invest in placemaking (e.g. integrate art into station, reflect culture of the area, plaza upgrades)	32.00%	32
None of the above	1.00%	1

Total Respondents: 100

Q2

Which of the following new or modernized features do you think BART should invest in related to Safety and Security? Please select your top three improvements:

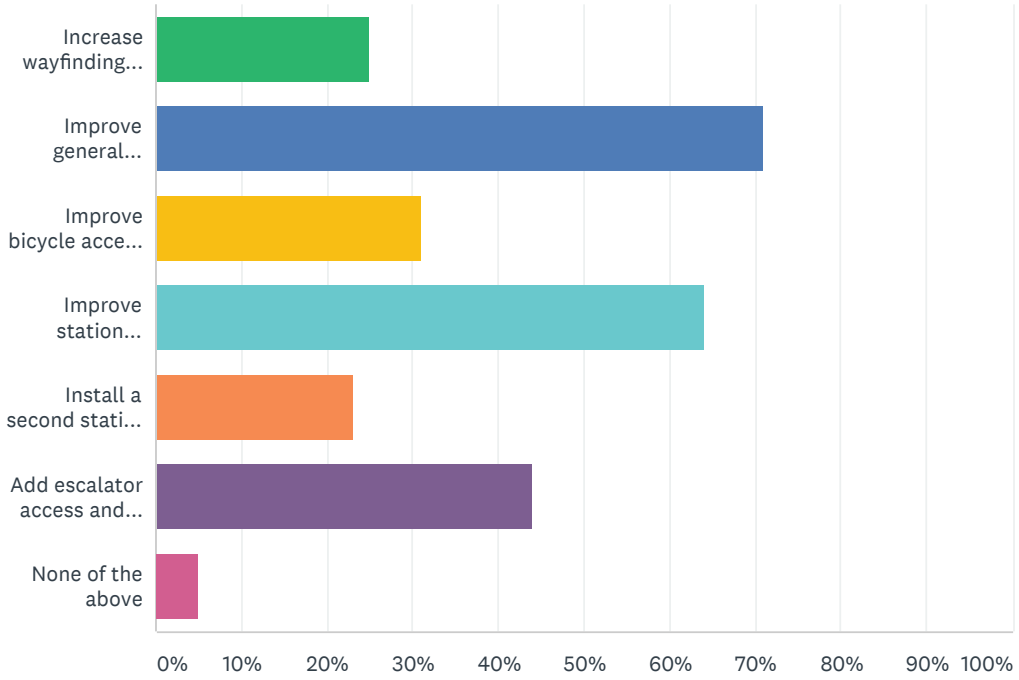


ANSWER CHOICES	RESPONSES	
Improve safety and security though better sightlines/visibility	53.00%	53
Enhance pedestrian scale lighting	58.00%	58
Increase security of remote/inactive areas	50.00%	50
Minimize fare evasion	35.00%	35
Improve pedestrian and bicycle crossing safety	63.00%	63
None of the above	5.00%	5
n/a	0.00%	0
n/a	0.00%	0
n/a	0.00%	0
n/a	0.00%	0

Total Respondents: 100

Q3

Which of the following new or modernized features do you think BART should invest in related to Universal Access? Please select your top three improvements:

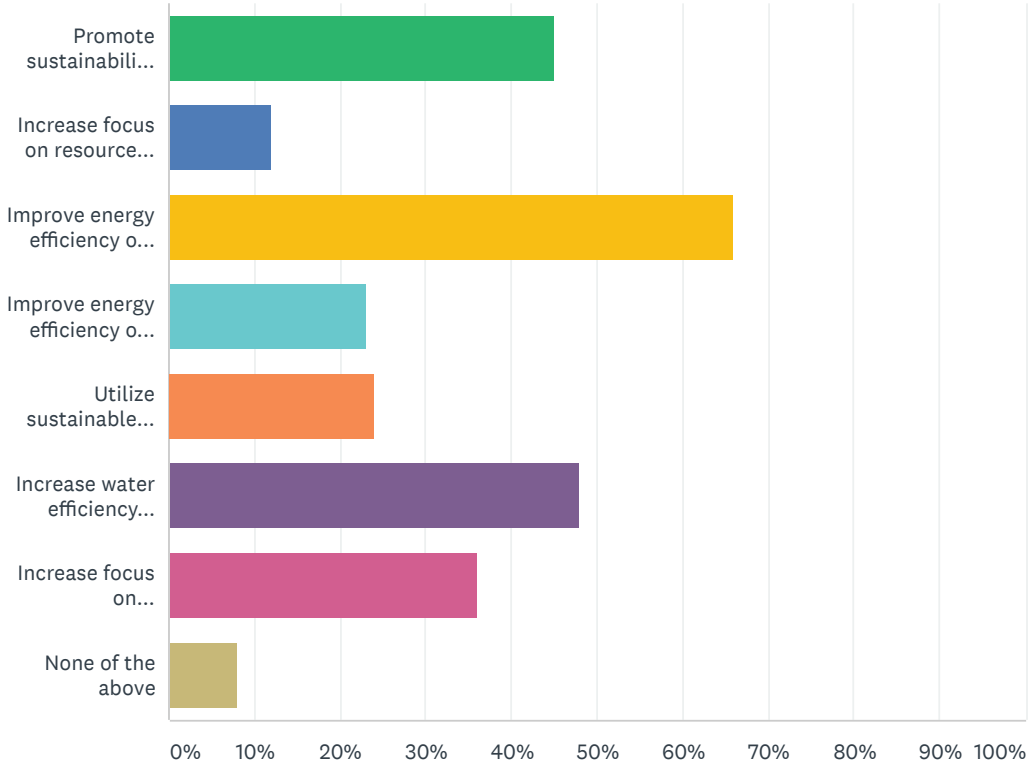


ANSWER CHOICES	RESPONSES	
Increase wayfinding signage	25.00%	25
Improve general pedestrian infrastructure	71.00%	71
Improve bicycle access (new stairwell channels, more bike parking)	31.00%	31
Improve station entrance at Ocean Avenue	64.00%	64
Install a second station elevator (south of Geneva Avenue)	23.00%	23
Add escalator access and canopy south of Geneva Avenue from street to concourse	44.00%	44
None of the above	5.00%	5

Total Respondents: 100

Q4

Which of the following new or modernized features do you think BART should invest in related to Sustainability? Please select your top three improvements:

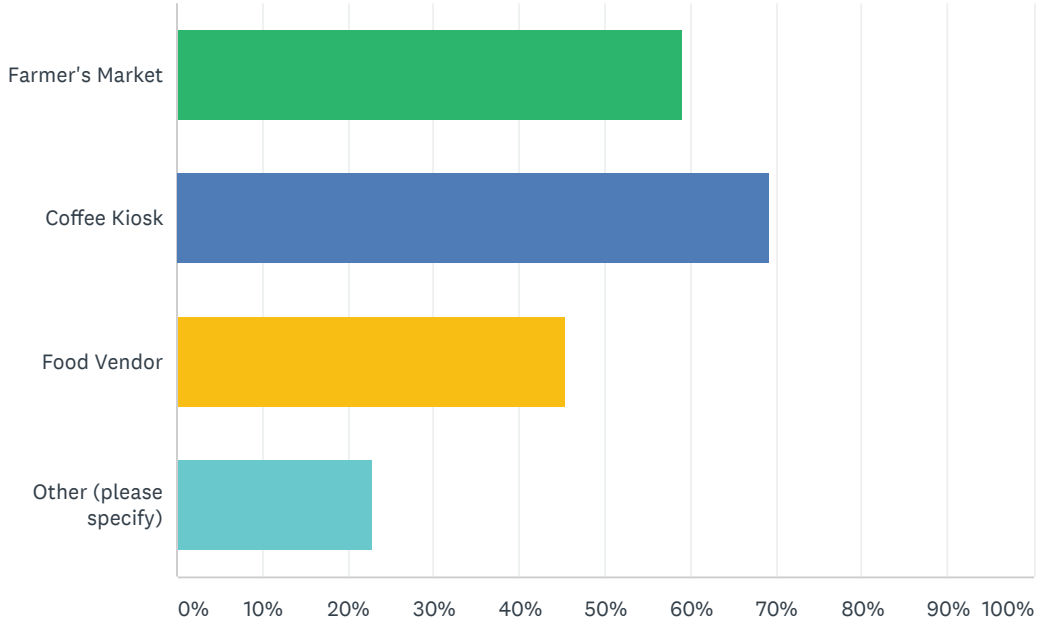


ANSWER CHOICES	RESPONSES	
Promote sustainability through efficient building systems and design	45.00%	45
Increase focus on resource conservation	12.00%	12
Improve energy efficiency of lighting through increased daylighting, LEDs, etc.	66.00%	66
Improve energy efficiency of elevators and escalators	23.00%	23
Utilize sustainable materials & finishes	24.00%	24
Increase water efficiency through permeable surfaces, drought resistant landscaping, and storm water management	48.00%	48
Increase focus on low-maintenance improvements	36.00%	36
None of the above	8.00%	8

Total Respondents: 100

Q6

What type of services would you like to see at Balboa Station?



ANSWER CHOICES	RESPONSES	
Farmer's Market	59.09%	52
Coffee Kiosk	69.32%	61
Food Vendor	45.45%	40
Other (please specify)	22.73%	20

Total Respondents: 88

Appendix

C

Existing Conditions of Platform Level
Photograph taken by AECOM in 2018

Appendix B: Public Outreach Event #2 (March 27, 2018) – Information Materials and Survey Results

BALBOA PARK STATION MODERNIZATION

Project Purpose

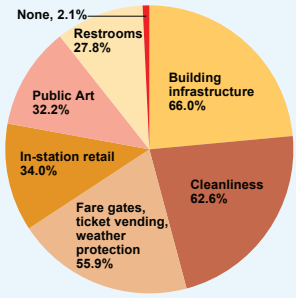
Develop a phased implementation plan for improvements to modernize Balboa Park Station and enhance customer experience.

Project Goals

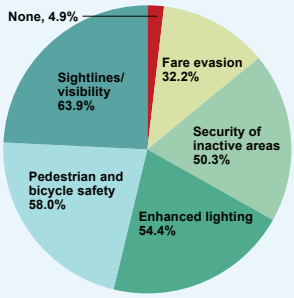
- Create inviting **public space and community hub**
- **Modernize and update** the station
- Reflect BART's **sustainability goals**
- Improve **access, capacity, and operations**
- Support **neighborhood vision and priorities**
- Promote **safety and security**

Community Input

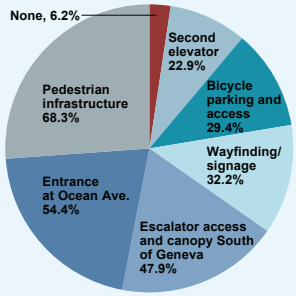
BART customers provided initial feedback on station priorities and preferences.



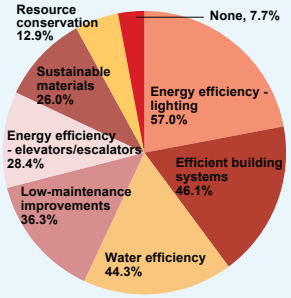
Customer Experience



Safety and Security

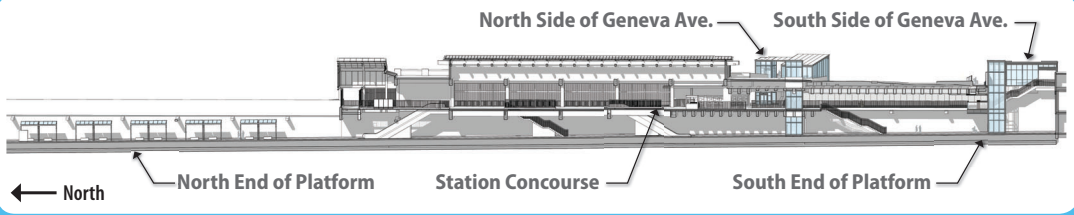


Universal Access



Sustainability

Station Layout

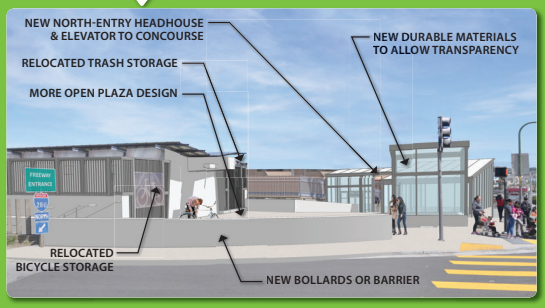


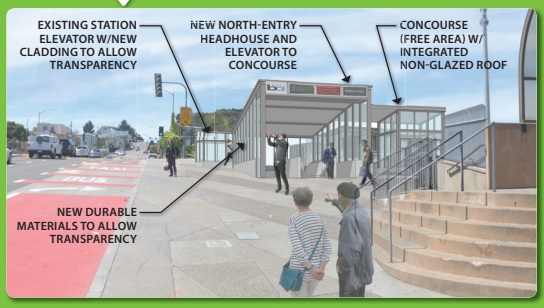
March 2018

BALBOA PARK STREET-LEVEL IMPROVEMENTS

North Side of Geneva Ave.

Additional Improvements
- Design that increases natural light and visibility
- Public art opportunities
- Improved pedestrian access and pathways



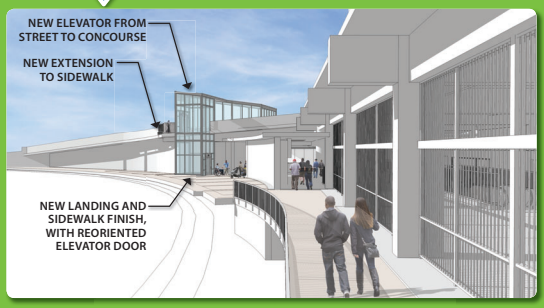


South Side of Geneva Ave.

Additional Improvements
- Design that increases natural light and visibility
- Improved pedestrian and wheelchair access
- Connection to planned plaza

East Side pedestrian walkway

Additional Improvements
- Better connection between walkway and Geneva Ave.
- Reoriented elevator door for easier entrance/exit



West Side pedestrian walkway

Additional Improvements
- Public art opportunities
- Landscaping improvements

BART

March 2018

BALBOA PARK CONCOURSE-LEVEL IMPROVEMENTS

South End of Concourse

Additional Improvements

- Improved safety/fare-evasion barriers
- Brighter interior with better sightlines

North End of Concourse

Additional Improvements

- New skylight panels
- Public art opportunities
- Sound barriers for noise reduction

Public Art

BART is considering how to incorporate art elements throughout Balboa Park Station. These will enliven the station interior, reinforce a strong station identity, and promote the culture of the neighborhood.

BART

March 2018

BALBOA PARK PLATFORM-LEVEL IMPROVEMENTS

South End of Platform

Additional Improvements
- Public art opportunities
- New concrete finish for floors

North End of Platform

Additional Improvements
- Realigned platform fixtures (for new trains)
- New PA and lighting at platform
- New concrete finish for floors

Next Steps

Moving forward, BART will take the following steps to support the Balboa Park Station Modernization project:

- Develop a Preferred Alternative for the station design, based on feedback from customers and the community
- Coordinate with Upper Yard Affordable Housing Development and BART patron drop-off/plaza project, to ensure continuity of design efforts
- Prepare a Station Modernization Plan, to formalize the design and to identify cost and phasing for individual improvements
- Develop a funding strategy to support implementation of the Modernization Plan elements through local, state and federal funding
- Implement improvements as funding becomes available

March 2018

Balboa Park Station

LET US KNOW WHAT YOU THINK!

We are considering changes to improve your BART experience at the Balboa Park Station. The Balboa Park Station Modernization Plan will guide future investments in upgrades to your station, and we value your input. Please let us know about your preferences for the station; this survey should take you less than five minutes to complete:

* 1. What **access improvements** are most important to you? Please select your **top two** improvements:

- ☐ New elevator on South side of Geneva
- ☐ New elevator on North side of Geneva
- ☐ ADA accessibility
- ☐ Bicycle access and storage
- ☐ Improved pedestrian connections to neighborhood

* 2. What aspects of the **station environment** are most important to you? Please select your **top three** improvements:

- ☐ Street-level plazas
- ☐ Cleanliness (waste receptacles, pigeon control)
- ☐ Natural light and visibility
- ☐ Placemaking/station identity
- ☐ Public art
- ☐ Walls/floors/ceiling finishes
- ☐ Landscaping
- ☐ Platform-level shelters
- ☐ Platform-level seating
- ☐ Public address system

1

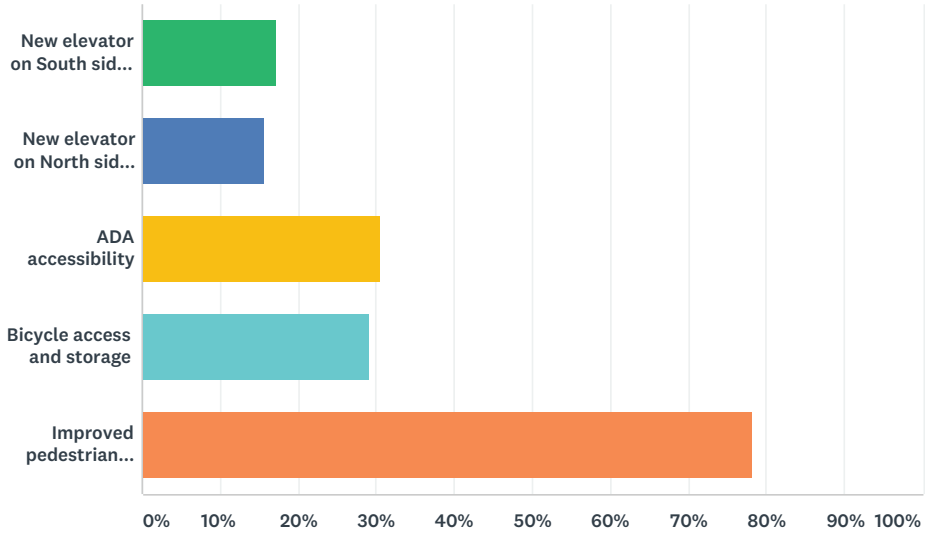
* 3. What aspect of **safety and security** is most important to you? Please select your **top two** improvements:

- [ ] Lighting/brightness
- [ ] Sightlines/visibility
- [ ] Fare evasion
- [ ] Security fencing and railings

2

Q1 What access improvements are most important to you? Please select your top two improvements:

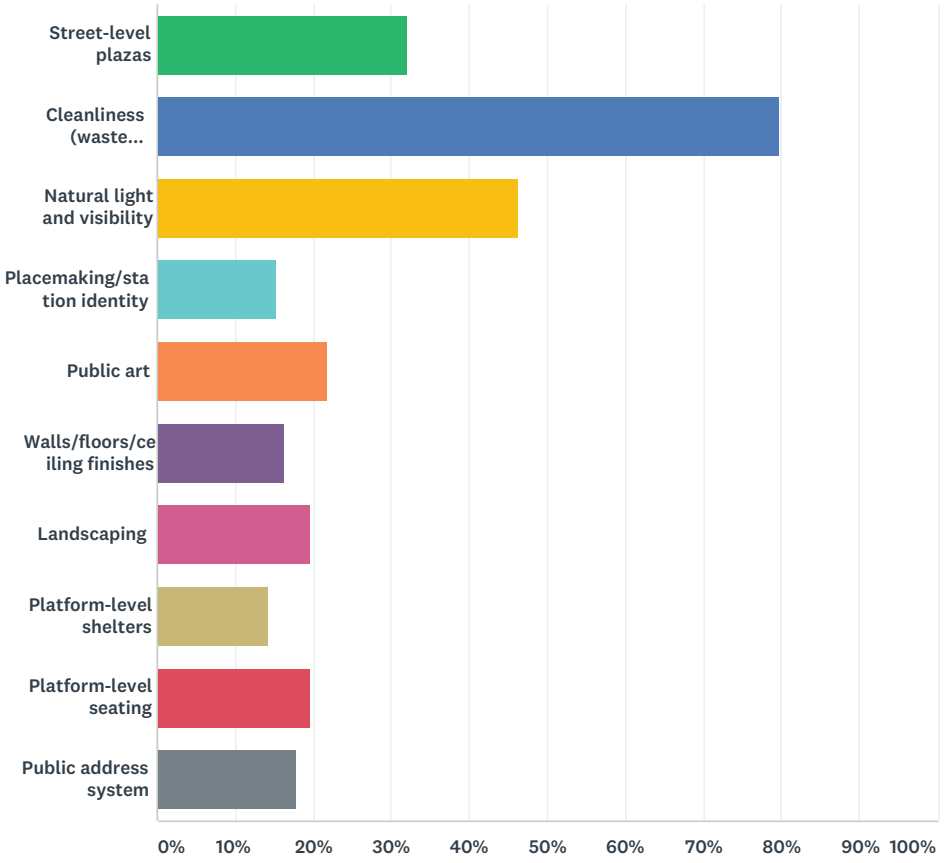
Answered: 203 Skipped: 0



ANSWER CHOICES	RESPONSES	
New elevator on South side of Geneva	17.24%	35
New elevator on North side of Geneva	15.76%	32
ADA accessibility	30.54%	62
Bicycle access and storage	29.06%	59
Improved pedestrian connections to neighborhood	78.33%	159
Total Respondents: 203		

Q2 What aspects of the station environment are most important to you? Please select your top three improvements:

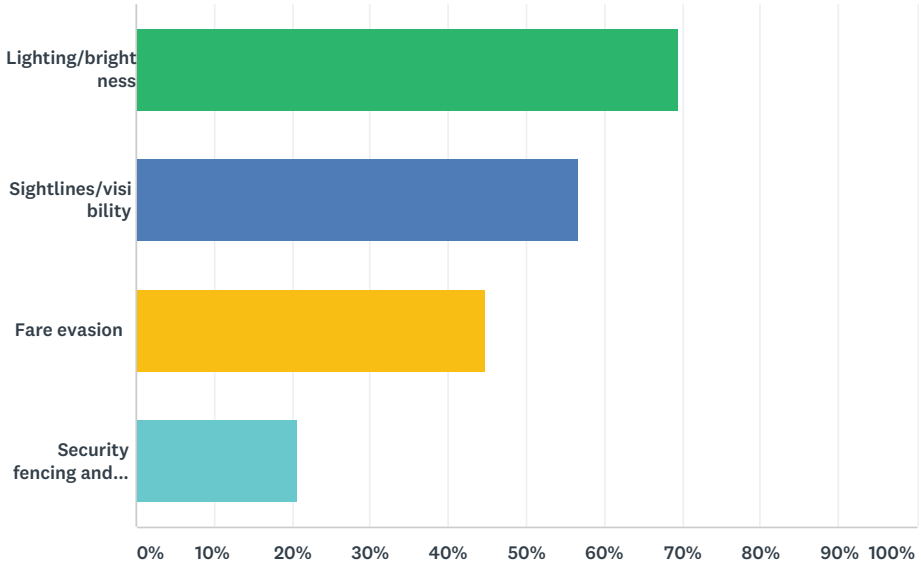
Answered: 203 Skipped: 0



ANSWER CHOICES	RESPONSES	
Street-level plazas	32.02%	65
Cleanliness (waste receptacles, pigeon control)	79.80%	162
Natural light and visibility	46.31%	94
Placemaking/station identity	15.27%	31
Public art	21.67%	44
Walls/floors/ceiling finishes	16.26%	33
Landscaping	19.70%	40
Platform-level shelters	14.29%	29
Platform-level seating	19.70%	40
Public address system	17.73%	36
Total Respondents: 203		

Q3 What aspect of safety and security is most important to you? Please select your top two improvements:

Answered: 203 Skipped: 0



ANSWER CHOICES	RESPONSES	
Lighting/brightness	69.46%	141
Sightlines/visibility	56.65%	115
Fare evasion	44.83%	91
Security fencing and railings	20.69%	42
Total Respondents: 203		

Contact
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