



Bus Stop Design Guidelines

Revised April 2026



Introduction

The SamTrans Bus Stop Design Guidelines seek to improve the experience for all riders, while streamlining and standardizing the bus stop design process.

The SamTrans Bus Stop Design Guidelines provide decision-oriented guidance on preferred bus stop configurations across the SamTrans system, for both new and existing bus stops. These guidelines represent SamTrans' policy and expectations for amenities and features at SamTrans bus stops. These guidelines apply any time changes are made to the bus stop.

Typical scenarios that present opportunities to bring bus stops into compliance with this document include:

- A **new development** adjacent to a bus stop
- A **streetscape project** that requires modification to a bus stop
- **Local jurisdiction plans** that would modify the bus stop or roadway/sidewalk adjacent to the bus stop
- Any **proposed changes to bus stops**, including stop relocation or new stops

Local city staff, staff at other agencies, and developers should use these guidelines to understand the process of improving a SamTrans bus stop. SamTrans riders and other members of the public are also encouraged to read through the document to better understand the policies and procedures related to SamTrans stops. Depending on the scope of a particular project, users of this guide may need to reference just one, a handful, or all sections of the guidelines.

SamTrans' Vision for Bus Stops

SamTrans is committed to providing a **comfortable, convenient, and dignified** experience for riders at bus stops. SamTrans has set the following goals for every rider's experience when waiting for the bus:



Convenient

Provide a stop environment that is convenient to use, featuring appropriate curb access and a sidewalk free from obstructions.



Informative

Provide service information to riders at bus stops, including schedules and the ability to access real-time arrival data.



Comfortable

Provide shelter and a place to sit at all-day stops.

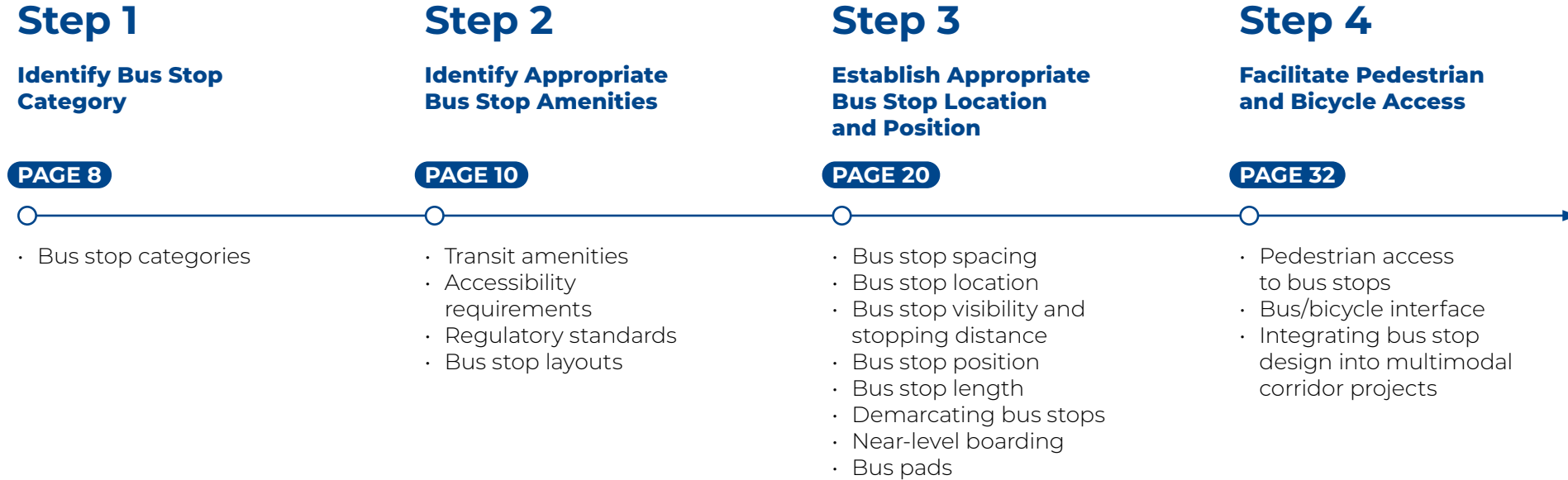


SamTrans recognizes the effort and resources required for bringing every SamTrans stop into compliance, and this document should not be interpreted as binding guidance with which all stops must immediately comply. Instead, this document presents a vision for incremental change across the system as new developments, other jurisdictions' plans, and street improvement projects allow for the upgrade or addition of bus stops.



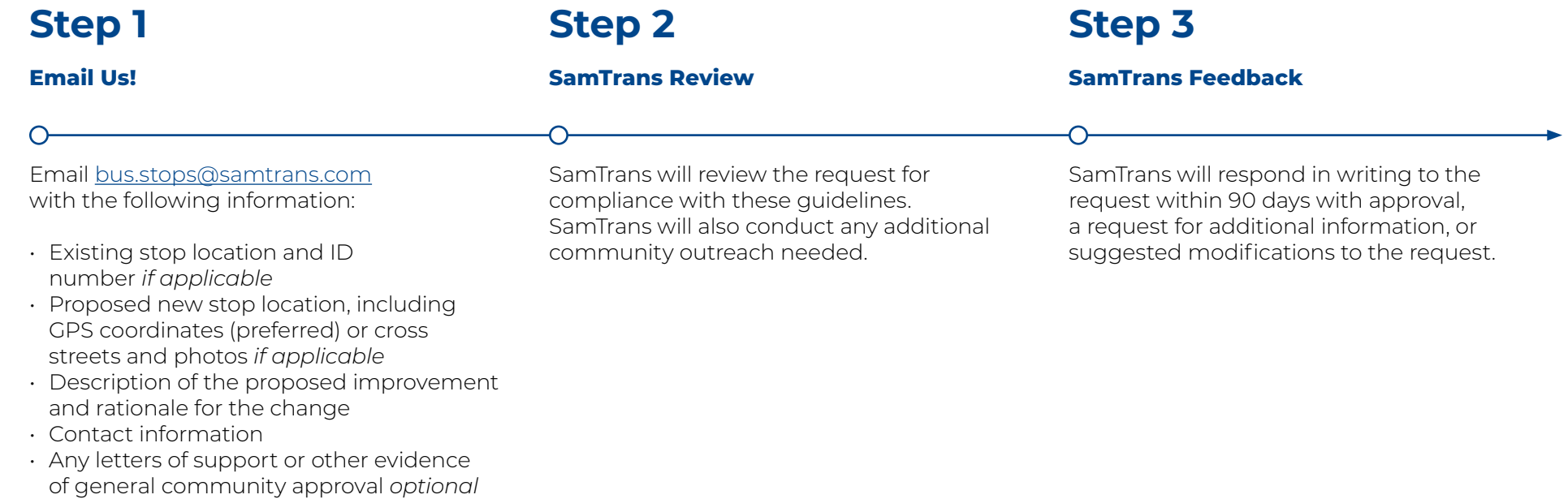
Improving a SamTrans Bus Stop

SamTrans approval and local permits are required for all stop modifications. Coordinate with SamTrans early and often for assistance in the planning process.



Requesting Changes to Bus Stops

No matter the change or addition, always consult SamTrans throughout the bus stop improvement process by emailing bus.stops@samtrans.com. Development projects should reach out to SamTrans at least twice before construction: 1) ahead of submitting the planning application and 2) ahead of permit requests.



Who Owns and Maintains the...

Bus stop signs, poles, and pole seats

SamTrans

Bus benches and shelters

Green shelters: SamTrans
 Brown shelters: SamTrans
 Brown composite wood benches: SamTrans
 Green benches: SamTrans
 Other shelters and benches: Ownership varies.
 Typically local jurisdiction or neighboring business

Trash receptacle

Green or concrete trash receptacles: SamTrans
 Other receptacles: Ownership varies.
 Typically local jurisdiction or neighboring business

Sidewalks and crosswalks

Right-of-way owner.
 Typically local agencies, San Mateo County, or Caltrans

Roads and bikeways

Right-of-way owner.
 Typically local agencies, San Mateo County, or Caltrans

Traffic signals and signs

Right-of-way owner.
 Typically local agencies, San Mateo County, or Caltrans

Street trees

Right-of-way owner.
 Typically cities, County of San Mateo, or Caltrans

Bus stop advertisements

SamTrans

Concrete bus pads

Right-of-way owner.
 Typically local agencies, San Mateo County, or Caltrans

Street lighting

Right-of-way owner.
 Typically local agencies, San Mateo County, or Caltrans



Bus Stop Ownership and Maintenance Responsibilities

Ownership and maintenance duties vary and may involve a number of parties, including SamTrans, local municipalities, Caltrans, and third-party contractors. Determining the ultimate owner of a bus stop amenity or feature is critical to ensure proper installation and maintenance. Maintenance agreements may be developed between SamTrans, the right-of-way owner, and/or the adjacent developer. This graphic is an example of the ownership structure of a typical SamTrans bus stop. Additional information on specific amenities can be found in the **Amenity Specifications** section of these guidelines.

Identify Bus Stop Category

Bus Stop Categories

To provide guidance on amenities and operational considerations, SamTrans has sorted bus stops into three categories:

- Frequent
- Standard
- School-oriented/other

Stop categories are defined by how often a bus stop is served by one or more SamTrans routes throughout the day.

Bus Stop Categories

Category	Definition	Typical SamTrans Service	Estimated Percentage of Stops
Frequent	Stops served by a bus at least four times an hour, for at least 12 hours per weekday	ECR, 120, 130, and 296 plus bus stops that serve multiple local routes	20%
Standard	Stops served by a bus 1-3 times per hour, for at least 12 hours per weekday	Most three-digit routes (100s, 200s)	45%
School-Oriented/Other	Stops only served by school-oriented routes. A bus may come as infrequently as once per day	School-oriented routes (two-digit routes), rush hour-only routes (FCX), Shuttle service	35%

i Visit our [online dashboard](#) to view each bus stop's category. The screenshot on the facing page shows how to use the dashboard. If you have a question about which category applies to an existing or proposed stop, please contact SamTrans at bus.stops@samtrans.com.

SamTrans Bus Stop Improvement Plan - Stop Categories
This inventory reflects SamTrans bus stops in service as of August 7, 2022.

Place: No Selection

Bus Stop ID: No Selection

Stop Category: No Selection

Place: Lets you filter bus stops by city or Census-designated place

Bus Stop ID: Lets you search for a bus stop by its stop ID, which can be found on the bus stop sign

Stop Category: Lets you filter bus stops by Frequent, Standard, or School-Oriented/Other

Bus Stop Categories

- Frequent
- Standard
- School-Oriented/Other

Toolbar

- Search: Lets you search for an address or place
- Legend: Shows the map legend
- Layers: Shows the map layers
- Basemap: Lets you change the basemap

Zoom map

California State Parks, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA
Powered by Esri

Step 2

Identify Appropriate Bus Stop Amenities

Transit Amenities

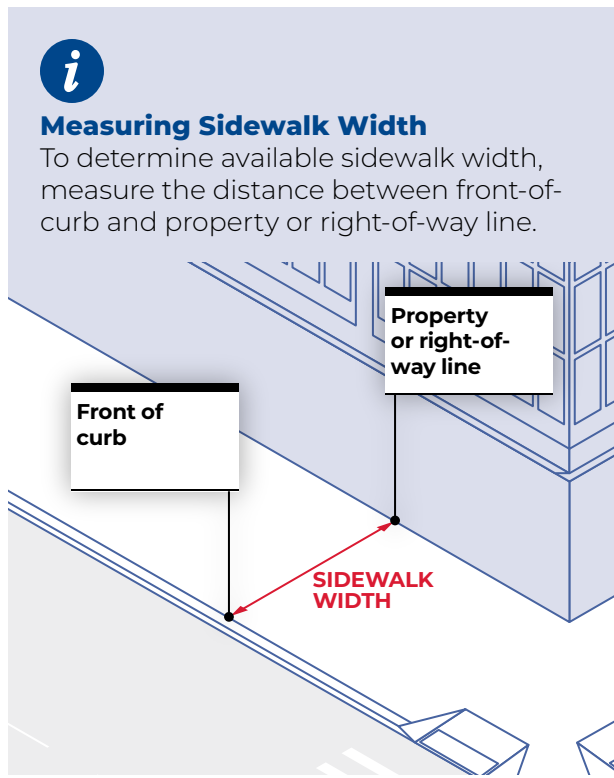
A bus stop's category determines the appropriate bus stop amenities. To determine the bus stop category, refer to the **Identify Bus Stop Category** section of these guidelines. The table below outlines the minimum amenity recommendations for each category. To be able to provide bus stop amenities, the newly constructed or altered bus stop must have at least eight feet of sidewalk width.

For stops where the available sidewalk width is less than eight feet, upgrades may be necessary to ensure pedestrian and passenger accessibility prior to amenity improvements. Stop relocation may be necessary for new or altered stops. Contact SamTrans at bus.stops@samtrans.com to determine the best path forward.

Transit Amenities by Category

Category	Minimum Recommended Amenities
Frequent (Includes Transit Centers)	<ul style="list-style-type: none"> • Bus bulb or bus boarding island to widen the sidewalk (refer to the Bus Stop Position section of these guidelines) • Standard sign and pole • Shelter with lighting • Real-time information provided via digital signage • Service map and schedule
Standard	<ul style="list-style-type: none"> • Standard sign and pole • Shelter or shade structure and bench/Simme-Seat with lighting • Service map and schedule • Real-time information provided via digital signage
School-Oriented/ Other	<ul style="list-style-type: none"> • Standard sign and pole • Real-time information provided via QR codes that direct riders to a stop-specific webpage

*Note: Additional information on specific amenities can be found in the **Amenity Specifications** section of these guidelines.*



Measuring Sidewalk Width

To determine available sidewalk width, measure the distance between front-of-curb and property or right-of-way line.



Trash Cans

SamTrans is moving away from providing and maintaining trash cans at stops, and instead provides trash cans on all buses. Local jurisdictions may still choose to add and maintain their own trash cans adjacent to bus stops as they see fit.

Accessibility Requirements

SamTrans strives to provide meaningful access to its transportation services, including its fixed-route service. All of SamTrans' buses are accessible, and many persons with disabilities are able to use SamTrans bus service. SamTrans provides paratransit for persons with disabilities who cannot independently use SamTrans bus service through RediWheels on the bayside of the county and RediCoast on the coastsides.

Any amenities provided must respect the legally required dimensions, regardless of bus stop category. The table below outlines the California Building Code requirements for minimum clear width, clear width at right-of-way restrictions, cross slope, and passenger landing pad dimensions at new or altered bus stops. Local applicable standards should be followed for areas outside of SamTrans jurisdiction. When in doubt, contact SamTrans at bus.stops@samtrans.com to determine the best path forward.

Access to bus stops are outside the jurisdiction of SamTrans. Refer to the **Ownership and Maintenance** graphic on page 6 for more details.

California Building Code Specifications¹

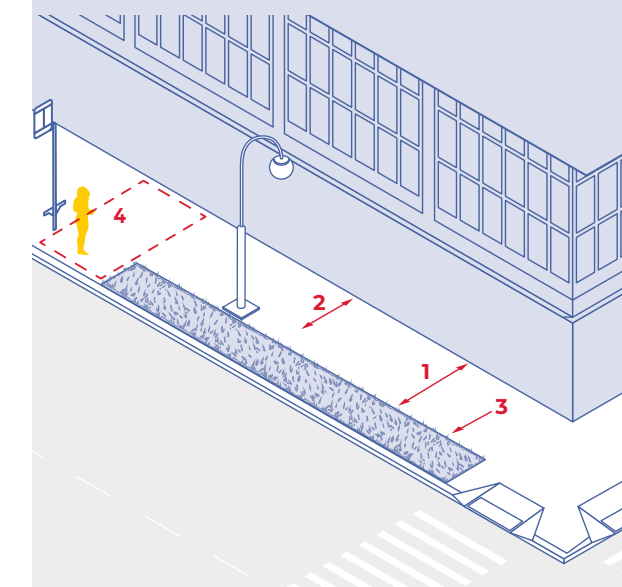
Item	Specification
Minimum clear width	48"
Minimum clear width at right-of-way restrictions	36"
Maximum cross slope	1:48
Minimum bus boarding/alighting area (passenger landing pad)	96" deep x 60" wide

Notes:

1. California Building Code 2022 Triennial Edition, Chapter 11B



Understanding Minimum Widths and Maximum Slopes



- 1 Minimum Clear Width
- 2 Minimum clear width at right-of-way restrictions
- 3 Minimum cross slope
- 4 Minimum bus boarding/alighting area

Regulatory Standards

While the design guidance presented in these guidelines aligns with federal and state standards as published, this is not a regulatory document. To ensure bus stop designs meet applicable standards, consult the regulatory standards including but not limited to those in the table below.

Regulatory Standards Governing Bus Stops

Standard	Notes
2006 Americans with Disabilities Act (ADA) Accessibility Guidelines	Section 810 (Transportation Facilities) contains bus stop requirements.
Federal Transit Administration (FTA) Circular C 4710.1	This document provides FTA's guidance concerning the ADA.
California Building Code	Chapters 11B-403 and 11B-810 contain requirements for walking surfaces and transportation facilities, respectively.
Local applicable design standards	Consult local design standards in addition to federal and state guidance.

Bus Stop Layouts

Cities and developers may choose to procure and install their own bus stop infrastructure separately from SamTrans. This is permitted; however, all non-standard amenities would need to be maintained by the local jurisdiction or property owner. Please coordinate with SamTrans throughout the process to ensure installation meets accessibility and operational requirements.

The bus stop layouts shown at right and detailed on the following pages:

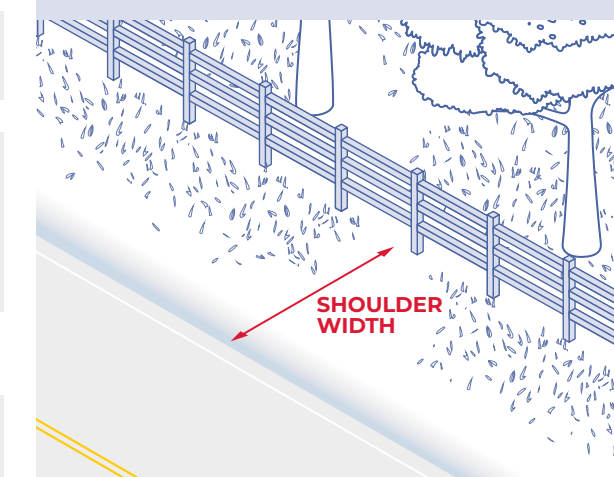
- Provide the recommended configurations of bus stop amenities
- Specify minimum dimensions for rider usability

Each bus stop location is unique. Not all locations may fit neatly into one of these examples, particularly when above-ground utilities are present. Contact SamTrans at bus.stops@samtrans.com for support in determining the optimal bus stop layout at your location.

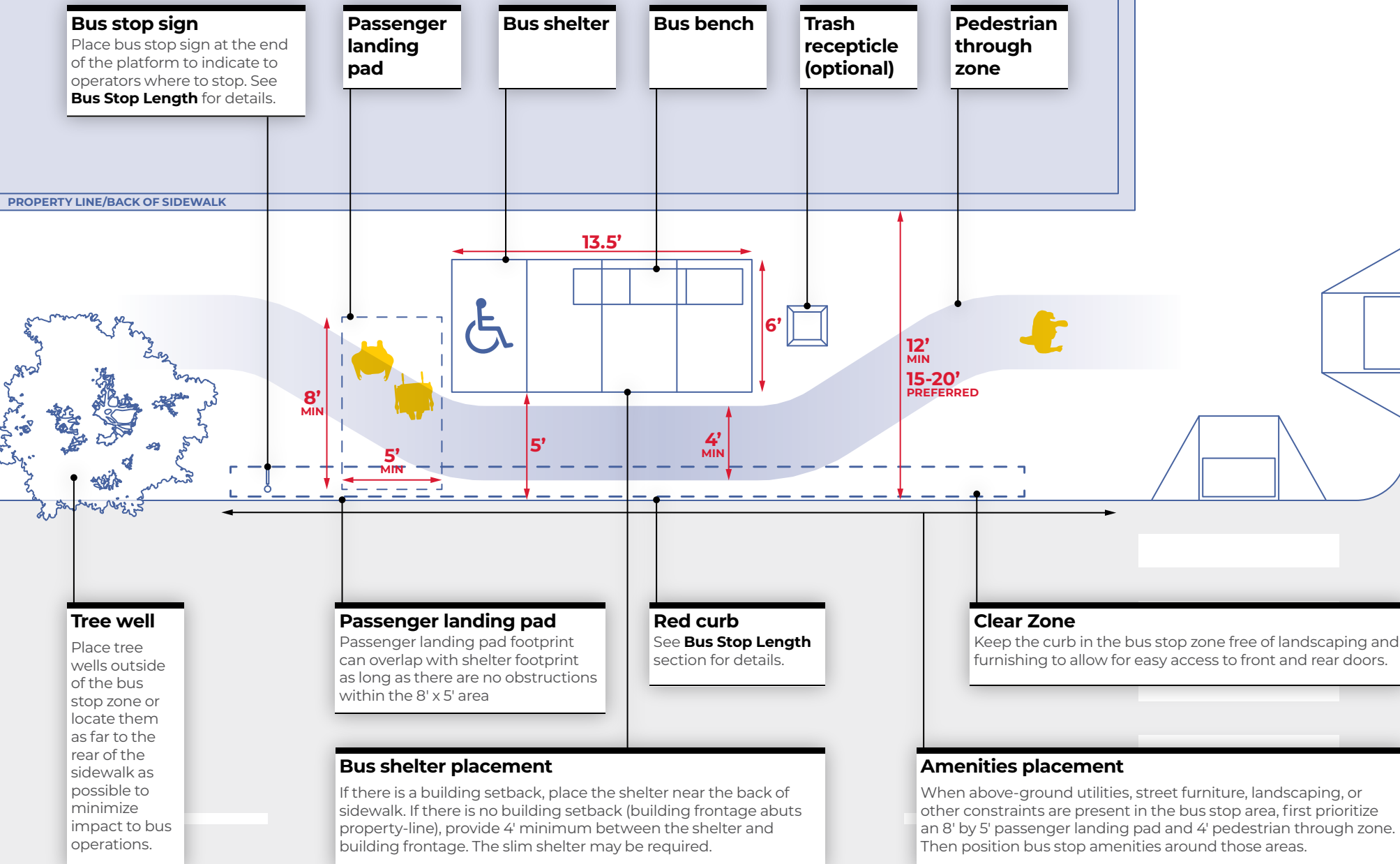


Bus Stops on Rural Roads

Some SamTrans bus stops are located on roads without sidewalks and/or without curb and gutter. For improvements at these stop locations, additional work will likely need to be done to prepare the location for additional amenities. At a minimum, a concrete slab installation and utility coordination will need to be completed, which will have cost implications to the project. Please reach out to SamTrans at bus.stops@samtrans.com for more information. Include the width from the edge of the roadway to the adjacent property line (right-of-way limits) in your email.

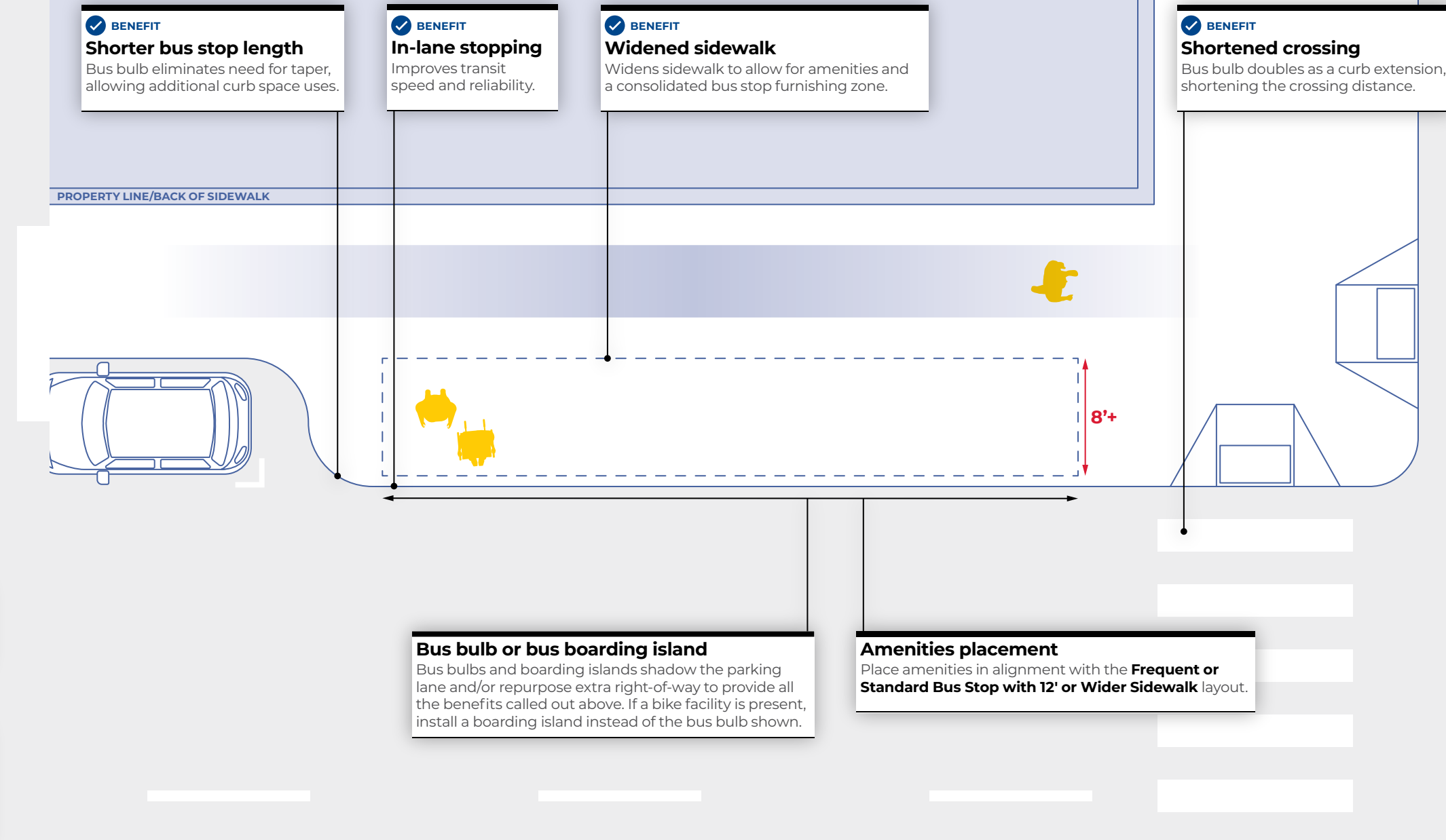


Frequent or Standard Bus Stop with 12' or Wider Sidewalk

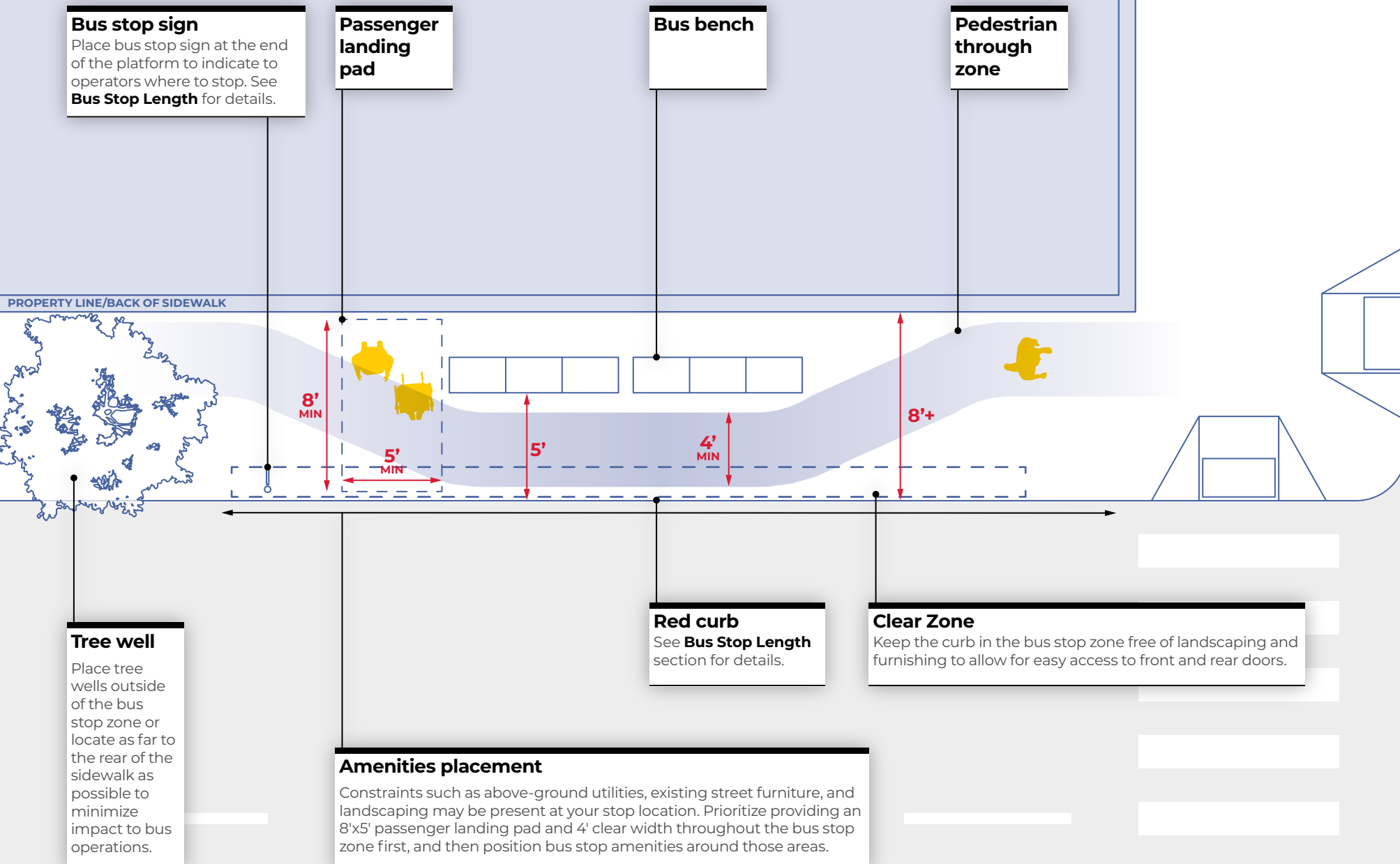


Bus Bulb or Boarding Island Application

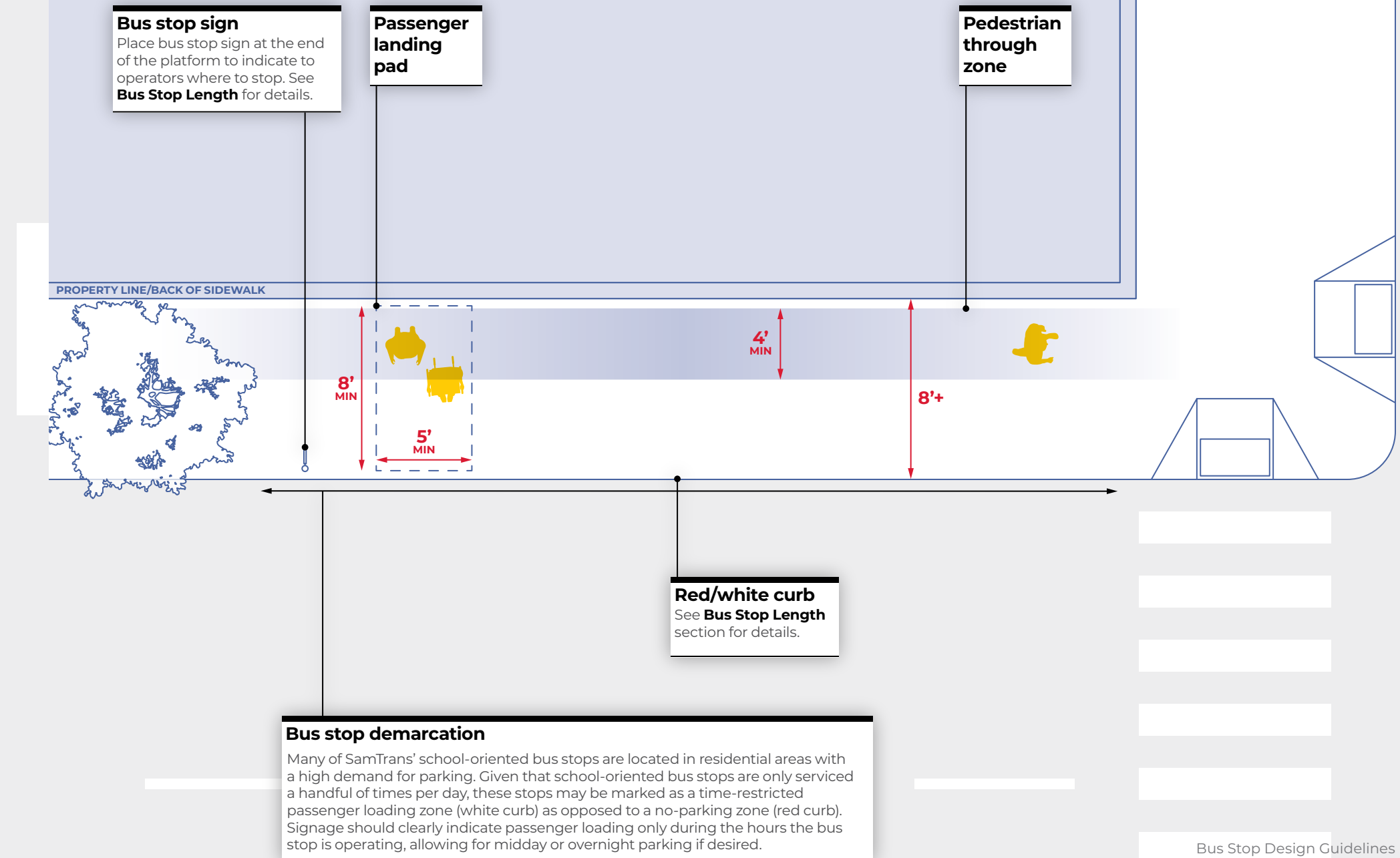
Follow process in **In-Lane Stopping Flow Charts** to determine whether your stop is eligible for a bus bulb or bus boarding island.



Standard Bus Stop with 8' Sidewalk



School-Oriented Bus Stop



Amenity Specifications

This section provides a general description of adopted shelter amenity types, and maintenance responsibilities for each SamTrans rider amenity. See **Attachment A** for additional details and specifications.

SamTrans continues to work with vendors to expand and deliver our current set of standard amenities to include appropriate seating types, real-time information, lighting options, solar capabilities. Please reach out to SamTrans for a status update if you are interested in these amenities.

Shelter Design Types

Standard Four-Post Shelter

Manufacturer

Varies

Maintenance Responsibilities:

SamTrans

Description

Standard shelter design, includes advertising panel



Narrow Four-Post Shelter

Manufacturer

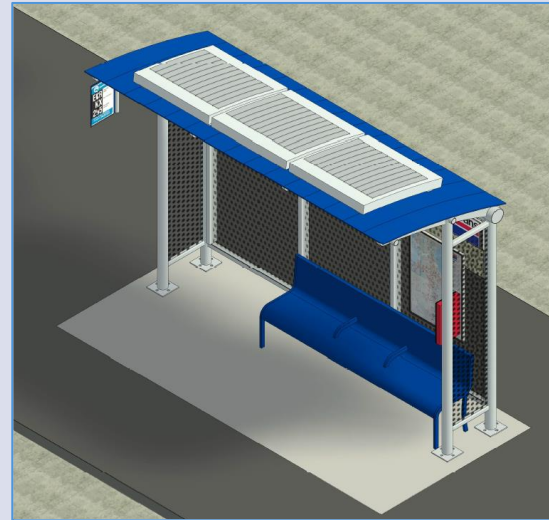
Varies

Maintenance Responsibilities:

SamTrans

Description

Compact shelter for space-constrained locations



Two-Post Shelter

Manufacturer

Varies

Maintenance Responsibilities:

SamTrans

Specification Reference

Alternative compact design for locations with even less space



Seating Options

Perforated Metal Bench

Manufacturer

Varies

Maintenance Responsibilities:

SamTrans

Description

Standard bench design; Preferred option for stops where BSIP recommends a bench and shelter



Simme Seat

Manufacturer

Varies

Maintenance Responsibilities:

SamTrans

Description

Option for locations where a full bench cannot fit



Perch Bench

Manufacturer

Varies

Maintenance Responsibilities:

SamTrans

Description

Potential option for high frequency stops or in areas with extreme space constraints



Step 3

Establish Appropriate Bus Stop Location & Position

Bus Stop Spacing

Appropriate bus stop spacing balances convenient access for passengers and efficient bus operations for reliable service. Bus stops should be close enough that passengers can walk to them easily, but far enough apart that buses can travel efficiently.

SamTrans establishes its bus stop locations using spacing guidance in the [SamTrans Service Policy Framework](#) and in consultation with cities and other partners. If you would like to add a new stop or discuss adjusting an existing stop location, contact SamTrans at bus.stops@samtrans.com using the process outlined in the **Requesting Changes to Bus Stops** section.

Bus Stop Location

As shown in the graphic on the facing page, there are three potential locations for a bus stop:

- The far-side of an intersection
- The near-side of an intersection
- Mid-block

SamTrans bus stops should be located on the far-side of the intersection. Far-side stops minimize bus conflicts with autos and pedestrians while reducing delays.

Only consider near-side and mid-block stops under the special circumstances shown on this page, which are at the discretion of SamTrans. These stop location guidelines align with the [SamTrans Service Policy Framework](#)

If there is an existing near-side stop and you are considering amenity improvements to that stop, first explore if it can be relocated to the far-side.



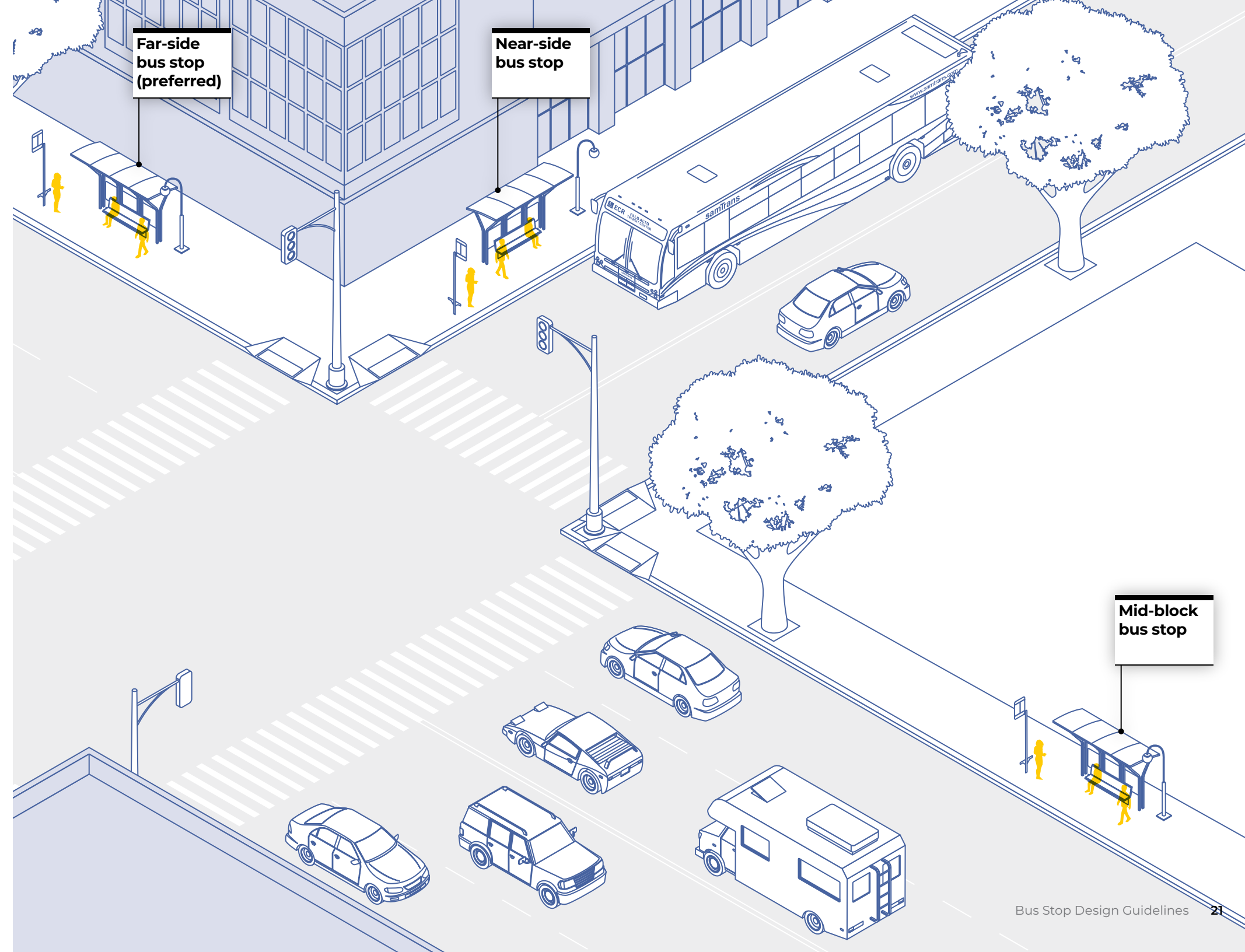
Special Circumstances for Near-Side Bus Stops

- Locations where a far-side stop would be unsafe or impractical, and the stop cannot be moved to a different intersection
- Locations with a high volume of transfers, where there is a need to minimize street crossings for transferring passengers
- Stops that serve multiple routes that go in different directions after the downstream intersection

Special Circumstances for Mid-Block Bus Stops

- Locations where the alignment of the route requires the bus to make a left turn, and it is not feasible to locate the bus stop on the far-side of the intersection (i.e., the bus cannot physically get to the curb due to turning radii)
- Locations with a high-ridership generator mid-block, such as a hospital or school

Contact SamTrans at bus.stops@samtrans.com to determine if these circumstances apply.



Bus Stop Visibility and Stopping Distance

Bus stops should be placed in locations with clear sight lines both for the transit operator and other road users. Avoid placing bus stops on the crest of a hill, in or immediately after a curve to the right, or in any location where visibility may be reduced due to obstructions. This is particularly important for in-lane stops (see the **Bus Stop Position** section). Any proposed stop location should be approved by SamTrans.

Bus Stop Visibility and Stopping Distance

Design Speed (MPH)	Stopping Sight Distance (Feet)
20	125
25	150
30	200
35	250
40	300
45	360
50	430
55	500

Source: Caltrans Highway Design Manual, Chapter 400. Reference local standards if available.

Bus Stop Position

As shown in the graphics below, there are three potential positions for a bus stop:

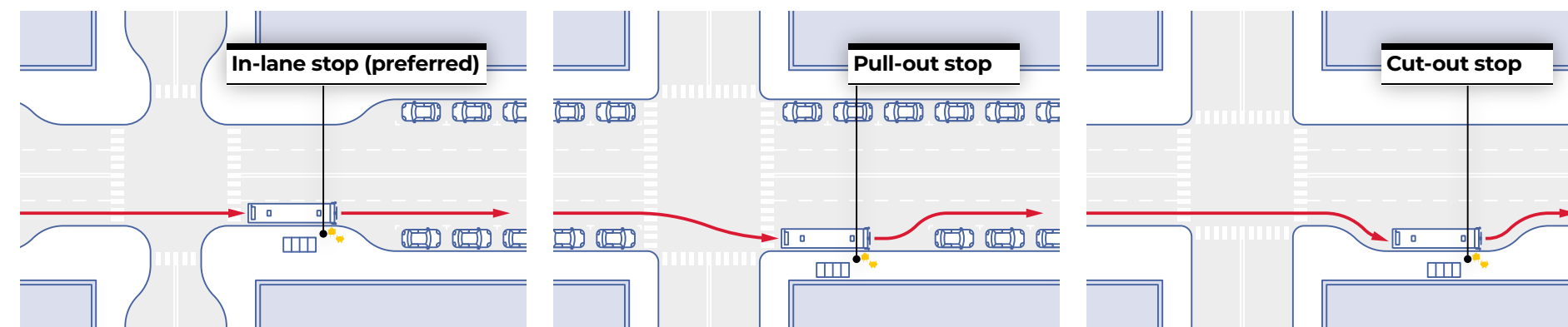
- In-lane, where the bus stops directly in the travel lane
- Pull-out, where the bus pulls into a parking lane
- Cut-out, where the bus pulls into a recessed area

SamTrans prefers in-lane stops for the majority of bus stops and strongly recommends them for Frequent bus stops.

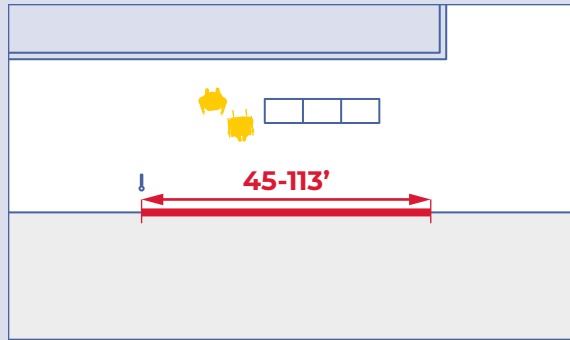
Pull-out stops can be upgraded to in-lane stops using bus bulbs or bus boarding islands at stops that meet a variety of roadway conditions. **Use the flow-charts on the following pages** to determine

if a bus boarding island or bus bulb is appropriate at the stop location in question.

Avoid cut-out stops, with the exception of bus layovers. Cut-out stops often result in a narrowing of the pedestrian environment and make it challenging for bus operators to merge back into traffic.



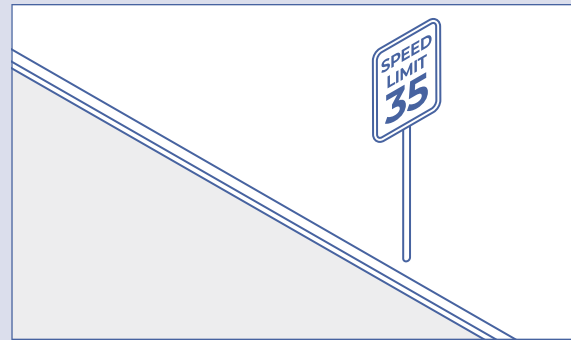
i In-Lane Bus Stop Flow Chart: Far-Side



Curb Length

Does your bus stop location have the minimum curb length required for a bus stop? Refer to the **Bus Stop Length** section for more details.

YES



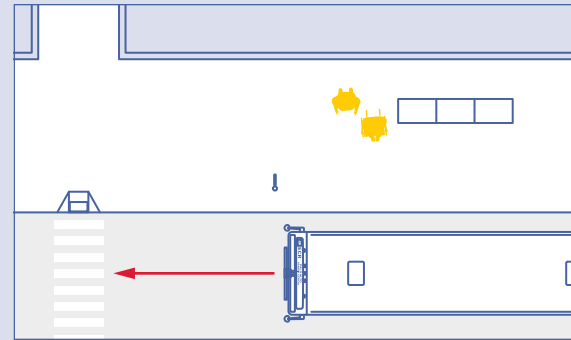
Posted Speed

Is the posted and observed roadway speed 35MPH or less?

YES

NO

In-lane stops are not recommended on high-speed roadways. Implement speed management strategies or implement a pull-out stop.



Sight Distance

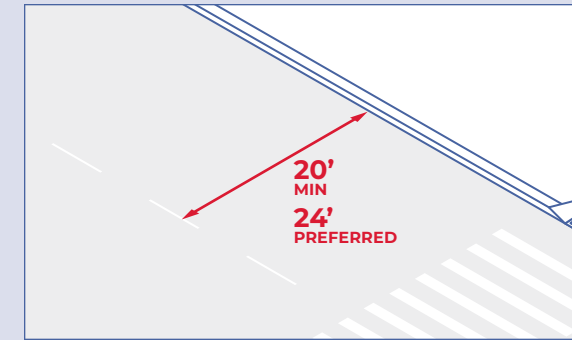
Is there an uncontrolled crosswalk within the stopping sight distance downstream from the bus stop? Refer to the **Bus Stop Visibility and Stopping Distance** section for stopping distances.

YES

YES

In-lane stops block sight lines for cars queueing behind the bus. Cars may choose to go around a bus stopped at the bus stop and be unaware of conflict points downstream. Determine if relocation of bus stop and/or crosswalk is feasible. If not, leave the existing bus stop as a pull-out.

NO



Roadway Width

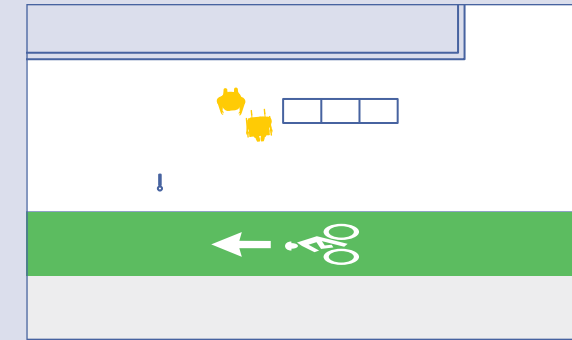
Is there at least 24' (preferred) or 20' (minimum) from the existing curb line to the outer edge of the travel lane (inclusive of the parking lane, bikeway, and curbside travel lane)?

YES

NO

Benefit/cost may be less for bus bulb/boarding island in these instances, as often the bus is already stopping in-lane under this condition.

Leave curb line as is unless there are strong pedestrian safety benefits to installation.



Bike Facility

Is there an existing or planned bike facility on the corridor/through the stop zone?

YES

NO

Recommendation

Implement a bus boarding island. Refer to the **Bus/Bicycle Interface** section for design options.

Subject to design and engineering feasibility

Implement a bus bulb

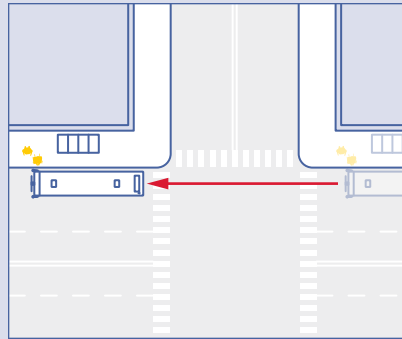
Subject to design and engineering feasibility

Leave existing curb/bus stop as is.

Relocate the stop to another far-side location.

NO

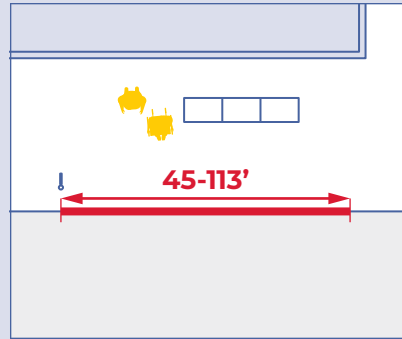
i In-Lane Bus Stop Flow Chart: Near-Side



Far-Side Relocation

SamTrans prefers far-side stops. Can the stop be moved to the far-side? Check the curb length and sidewalk width at the far-side. Refer to **Bus Stop Location** and **Bus Stop Length** for more details.

YES

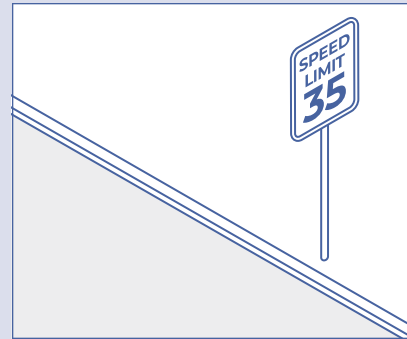


Curb Length

Does your bus stop location have the minimum curb length required for a bus stop? Refer to the **Bus Stop Length** section of the Guide for more details.

NO

NO



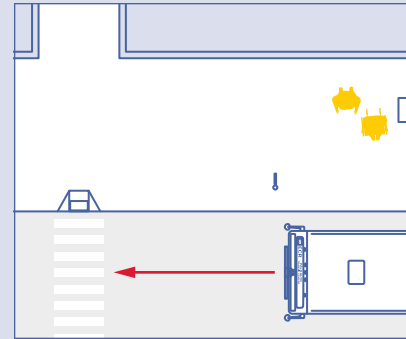
Posted Speed

Is the posted and observed roadway speed 35MPH or less?

YES

NO

In-lane stops are not recommended on high-speed roadways. Implement speed management strategies or implement a pull-out stop.



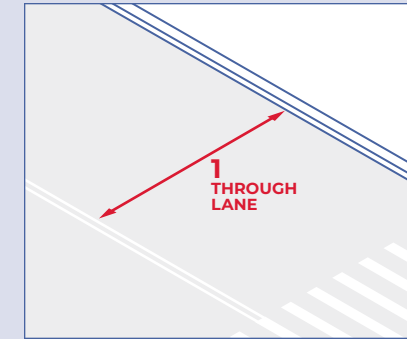
Sight Distance

Is there the adequate stopping sight distance for downstream crosswalks? Is the intersection approach controlled, either by a signal or an all-way stop?

YES

NO

In-lane stops block sight lines for cars queueing behind the bus, and therefore are not recommended at uncontrolled intersection approaches or upstream from crosswalks. Cars may choose to go around a bus stopped at the bus stop and lack the appropriate stopping sight distance.



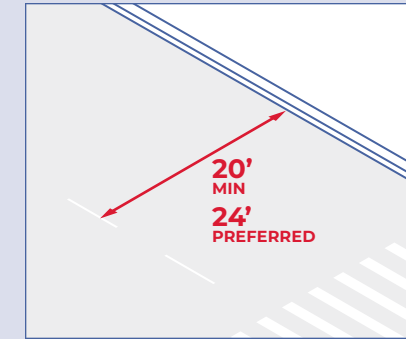
Number of Lanes

Is there only one through lane in the direction of travel?

YES

NO

Near-side in-lane stops are not recommended on multi-lane roads without significant design treatments such as routing right turns behind the bus boarding island and/or right turn prohibitions to mitigate drivers from making right turns in front of the bus.



Roadway Width

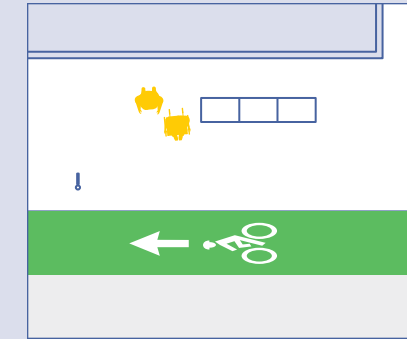
Is there at least 24' (preferred) or 20' (minimum) from the existing curb line to the outer edge of the travel lane (inclusive of the parking lane, bikeway, and curbside travel lane)?

YES

NO

Benefit/cost may be less for bus bulb/boarding island in these instances, as often the bus is already stopping in-lane under this condition.

Leave curb line as is unless there are strong pedestrian safety benefits to installation.



Bike Facility

Is there an existing or planned bike facility on the corridor/through the stop zone?

YES

NO

Recommendation

Implement a bus boarding island. Consider installing transit signal priority and a bike signal or leading pedestrian interval with sign R9-5 "Bikes Use Ped Signal" to give bikes a head start at the intersection.

Subject to design and engineering feasibility

Implement bus bulb. Consider installing transit signal priority.

Subject to design and engineering feasibility

Leave existing curb/bus stop as is. Consider installing transit signal priority.

Relocate the stop to a far-side location.

Bus Stop Length

SamTrans requires a minimum stop length of 45 to 113 feet, depending on the type of buses serving the stop, location and position of the stop, and roadway speed. The elements that comprise the total bus stop length include platform length, pull-in/out taper, entering/exiting bike lane taper, and clearance from the crosswalk. The tables on page 29 outline the minimum bus stop lengths that are required for a given stop and roadway configuration.

Platform Length

The platform length is determined by the number and type of buses serving the stop. If a stop will be serviced by multiple routes, reach out to SamTrans directly at bus.stops@samtrans.com for the appropriate platform length.

Pull-In/Pull-Out Taper

The pull-in/pull-out taper allows the bus to smoothly maneuver into and out of a pull-out stop. Providing the appropriate taper length also allows the bus to be flush with the curb and appropriately serve passengers with mobility impairments who may need to use the wheelchair ramp. The taper length varies by roadway speed and bus stop location and only applies to pull-out and cut-out stops.

Entering/Exiting Bike Lane Taper

This taper applies to stops with bus boarding islands that have a bike bypass zone behind the platform. Tapers are needed to help bicyclists easily maneuver into and out of the bypass zone.

Clearance from Crosswalk

This applies to all stops located at the intersection. Appropriate clearance should be provided to support a comfortable walking environment.

Minimum Bus Stop Length: Pull-Out and Cut-Out Stops

	Far-Side Stop		Near-Side Stop		Mid-Block and Cut-Out Stop	
	<35 MPH	>35 MPH	<35 MPH	>35 MPH	<35 MPH	>35 MPH
Platform: 40' Bus	40'	40'	40'	40'	40'	40'
Pull-In Taper	—	—	15'	25'	15'	25'
Pull-Out Taper	15'	25'	—	—	15'	25'
Clearance from Crosswalk	10'	10'	10'	10'	—	—
Stop Length: 40' Bus	65'	75'	65'	75'	70'	90'
Additional Platform Length: 60' Bus ^{1,2}	20'	20'	20'	20'	20'	20'
Stop Length: 60' Bus	85'	95'	85'	95'	90'	110'

Notes:

1. SamTrans prefers planning for 60' buses to allow for more flexibility in bus selection.

2. If multiple buses are anticipated to serve the stop at the same time, platform length should be (bus #1 length)+(20' spacing)+(bus #2 length).

Minimum Bus Stop Length: In-Lane Stops (All Speeds)

	Far-Side Stop	Near-Side Stop	Mid-Block Stop
Platform: 40' Bus	45'	45'	45'
Clearance from Crosswalk	10'	10'	—
Bus Bulb Stop Length: 40' bus	55'	55'	45'
Additional Platform Length: 60' Bus ^{1,2}	20'	20'	20'
Bus Bulb Stop Length: 60' bus	75'	75'	65'
Entering Bike Lane Taper ³	—	18-24'	18-24'
Exiting Bike Lane Taper ³	18-24'	—	18-24'
Bus Boarding Island Stop Length: 40' bus	73-79'	73-79'	81'-93'
Bus Boarding Island Stop Length: 60' bus	93-99'	93-99'	101-113'

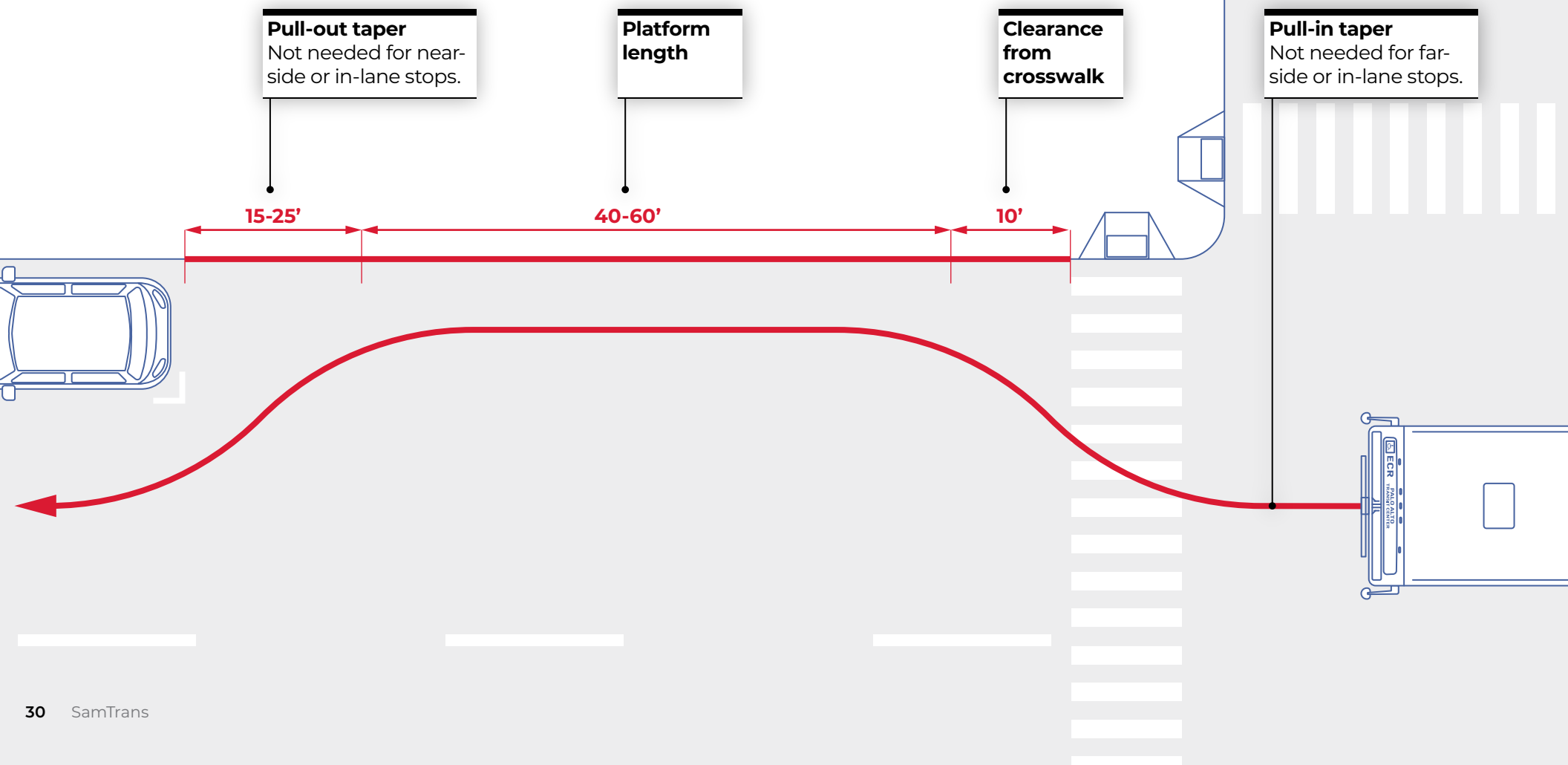
Notes:

1. SamTrans prefers planning for 60' buses to allow for more flexibility in bus selection.

2. If multiple buses are anticipated to serve the stop at the same time, platform length should be (bus #1 length)+(20' spacing)+(bus #2 length).

3. Standard bike lane adjacent to parking is 24'; separated, parking-protected bikeway is 18'.

Components of Bus Stop Length



Demarcating Bus Stops

All SamTrans bus stops should be demarcated with red curb and/or no parking signs to ensure the bus stop zone remains clear. The red curb and the no-parking zone should extend for the entire length of the bus stop. Keeping the bus stop zone clear allows buses to access the stop and provide efficient and accessible loading of passengers.

Many of SamTrans' school-oriented bus stops are located in residential areas with a high demand for parking. Given that school-oriented bus stops are only serviced a handful of times per day, these stops may be marked as a time-restricted passenger loading zone (white curb) as opposed to a no-parking zone (red curb). Signage should clearly indicate passenger loading only during the hours the bus stop is operating, allowing for midday or overnight parking if desired.

Near-Level Boarding

If installing a bus boarding island or bus bulb, consider providing near-level boarding. Near-level boarding allows for faster boarding and alighting for all passengers by mitigating the need for wheelchair ramp deployment. To provide near-level boarding, the bus bulb/boarding island curb height should be between 8 and 11 inches to meet the floor of the transit vehicle, typically done by gradually sloping up from sidewalk level (6 inches typical). Ensure that the stop is accessible via a ramp with a maximum cross slope of 2%.

Bus Pads

The weight and heat generated by repeated, frequent heavy vehicle movements at bus stops can distort the asphalt-based pavement at bus stops, leading to wave-shaped mounds in the pavement at the stop location. Concrete bus pads are more durable than asphalt against wear and tear, which can ease maintenance needs over the long term.

SamTrans suggests that cities or other roadway owners/operators install bus pads at bus stops, with Frequent bus stops being the highest priority. While concrete bus pads may reduce maintenance costs in the long term, they can be costly to implement. Prior to installation, reach out to SamTrans to confirm the bus stop location is optimal and no service changes are anticipated.

Bus pad construction should adhere to Caltrans-published standards. Bus pads should have a minimum width of 10 feet and a minimum length of 80 feet (for an articulated bus) to allow for all wheels of the vehicle to be on the pad when at a stop. Local conditions must still be considered when developing engineering diagrams for specific bus pad installations.

Facilitate Pedestrian & Bicycle Access

Pedestrian Access to Bus Stops

SamTrans riders should be provided comfortable access to bus stops throughout the service area, including a sidewalk, curb ramps, and places to cross the street. SamTrans may pursue relocation of any bus stop where the local jurisdiction has not provided safe and accessible pedestrian access, and no plans exist to improve conditions.

Sidewalks and Curb Ramps

Sidewalks surrounding the stop should be in good condition: free of gaps, obstructions, cracks, and deterioration. While a minimum clear width of 4 feet is required, a width of at least 5 to 8 feet is suggested. Curb ramps should be provided at all intersections. Sidewalks and curb ramps should comply with all standards in the **Accessibility Requirements** and **Regulatory Standards** sections of these guidelines.

Crosswalks

Crosswalks should be provided adjacent to all SamTrans stops such that riders can comfortably cross the street to access the stop. Crosswalks should comply with all standards in the **Accessibility Requirements** and **Regulatory Standards** sections of these guidelines. The preferred placement of crosswalks is upstream

from (behind) the bus stop to provide adequate sightlines for pedestrians and approaching vehicles. If crosswalks must be placed downstream from (in front of) the bus stop, they should be placed with adequate stopping sight distance (refer to the **Bus Stop Visibility and Stopping Distance** section of these guidelines).

For crosswalks at uncontrolled or mid-block locations, refer to FHWA's Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations and local plans and policies for guidance on the appropriate crosswalk enhancements to consider.

Bus/Bicycle Interface

Buses and bicyclists often have a similar average speed (10 to 15 miles per hour) when traveling along a corridor, creating a "leapfrogging" effect where buses and bikes repeatedly pass each other when buses move to the curb to board and alight passengers. This increases the number of interactions between transit vehicles and people on bikes, resulting in safety risks and discomfort for both bicyclists and bus operators, making consideration of their interface a particularly important consideration for transit planning and bus stop design.

Bus Bulb and Boarding Island Design

Separation of buses and bicyclists is recommended via protected bike lanes (Class IV facilities), striped bike lanes (Class II facilities), or multi-use trails (Class I facilities). This separation should be maintained at bus stops through bus boarding islands that provide a bike bypass zone.

The following pages provide design guidance for bus boarding islands. Refer to the flow chart in the **Bus Stop Position** section to determine if a bus boarding island is recommended at your stop location. SamTrans recommends a bus boarding island with a fully separated bike bypass zone; however, if the location is space-constrained, a shared bike/bus boarding island may be considered. Contact SamTrans at bus.stops@samtrans.com for support in determining layouts for bus/bicycle lane interactions.

Integrating Bus Stop Design into Multimodal Corridor Projects

Many bus stop design features have co-benefits that extend to pedestrians and cyclists and can be valuable additions to multimodal corridor projects. The table on the following page summarizes the benefits, co-benefits, and trade-offs of the design elements discussed in these guidelines.

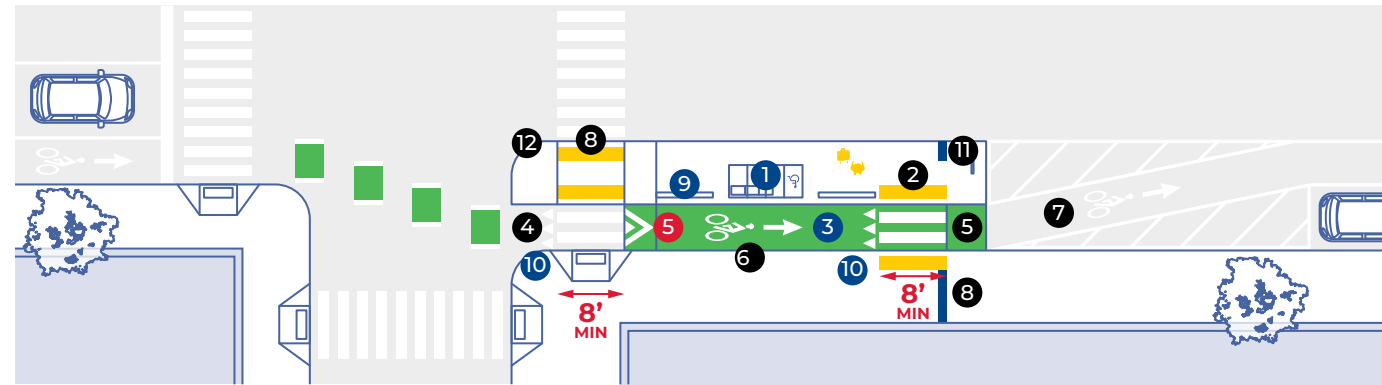
Benefits, Co-Benefits, and Trade-Offs of Bus Stop Improvements

Bus Stop Improvement	Transit Travel Time & Reliability	Pedestrian Safety & Access	Bike Safety & Access
Bus bulb	<ul style="list-style-type: none"> Benefit. Can provide significant travel time savings on congested corridors by facilitating in-lane stopping and removing the need for the bus to weave into and out of traffic. 	<ul style="list-style-type: none"> Co-benefit. If extended to the intersection, bus bulbs double as curb extensions for pedestrians. They also create additional waiting space for riders and bus stop amenities, as well as help make riders more visible to operators approaching the stop. 	<ul style="list-style-type: none"> Trade-off on high-frequency bus routes and corridors with existing/planned protected bikeways. Bus bulbs preclude the ability for cyclists to bypass the bus stop and instead require cyclists to either wait or merge into the general-purpose lane. Mitigate this trade-off by providing bus boarding islands with bypass zones instead. <p>Bus bulbs may be acceptable on corridors with no bike facilities or standard bike lanes, especially if there are low transit frequencies.</p>
Boarding islands with bike bypass zone	<ul style="list-style-type: none"> Benefit. Same travel time savings as a bus bulb. 	<ul style="list-style-type: none"> Co-benefit. Same benefits as a bus bulb. 	<ul style="list-style-type: none"> Benefit. Boarding islands allow cyclists to bypass the bus stop in a dedicated, separated space.
Shared bike/bus boarding islands	<ul style="list-style-type: none"> Benefit. Same travel time savings as a bus bulb. 	<ul style="list-style-type: none"> Trade-off. Riders are required to board and alight in a bike mixing zone which can be uncomfortable and potentially lead to pedestrian/bicycle conflicts. 	<ul style="list-style-type: none"> Co-benefit. Cyclists bypass the bus stop via a pedestrian/bike mixing zone, minimizing conflicts with autos but creating a less comfortable experience than a fully separated bypass zone.
Stop optimization & consolidation	<ul style="list-style-type: none"> Benefit. Can provide significant travel time savings by relocating stops to the far-side and minimizing how many times the bus needs to stop. 	<ul style="list-style-type: none"> Trade-off. May result in some riders needing to walk further to access transit, which may be particularly challenging for riders with disabilities. Mitigate this trade-off by pairing with sidewalk and crossing improvements. 	<ul style="list-style-type: none"> Co-benefit. Minimizes the amount of "leapfrogging" between cyclists and buses, when they share a lane, by reducing the total number of stops.
Transit signal priority/queue jumps	<ul style="list-style-type: none"> Benefit. Can provide significant travel time savings. Should be paired with stop optimization (relocating near-side stops to the far-side) and transit approach lanes to maximize the benefits. 	<ul style="list-style-type: none"> Co-benefit. Transit signal priority provides an opportunity to also install Leading Pedestrian Intervals (LPIs) with little to no additional impacts to auto delay. LPIs provide pedestrians a head-start and increase their visibility when crossing. 	<ul style="list-style-type: none"> Trade-off. Curb-adjacent queue jumps on corridors with Class II bike facilities and mixing zones at the intersections can be particularly complex to navigate. Mitigate this trade-off by providing separated space for cyclists at the intersection.

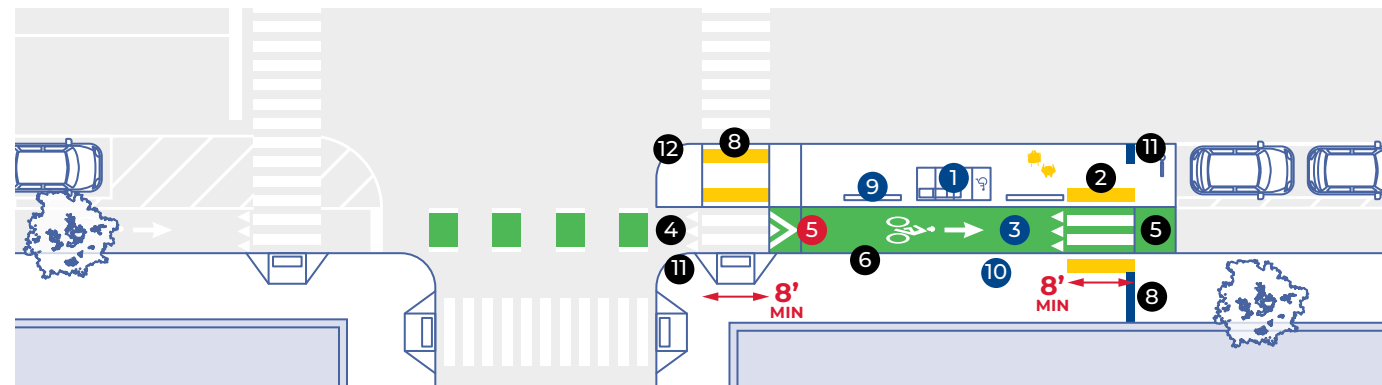
Specifications for Bike/Bus Interactions at Bus Stops

- **Bus boarding Island**
Raised bike lane or street-level bike lane based on jurisdiction preference. Alternative curb ramp design would need to be used for street-level bike lanes. Refer to the **Bus Stop Length** section for all measurements not shown directly on the graphics.
- **Optional item**
- 1 **Bus shelter**
- 2 **Accessible landing zone**
Minimum: 5' x 8'
- 3 **Green pavement**
- 4 **Bicyclist yield area**
- 5 **Bicycle ramp**
Maximum: 1:10 slope
- 6 **Furnishing zone/ detectable edge**
- 7 **Bike lane taper**
Preferred: 1:10 / Maximum: 1:5
- 8 **Detectable warning surface (yellow) or tactile directional indicators (blue)**
- 9 **Vertical railing**
- 10 **Bikes yield to peds sign**
- 11 **Bus stop sign**
- 12 **Reflective Markers**

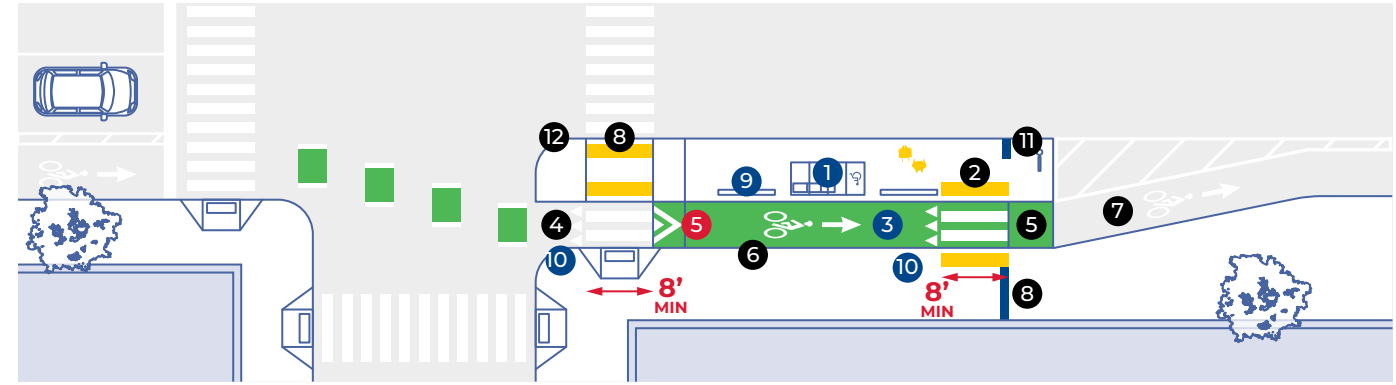
Bikeway with On-Street Parking



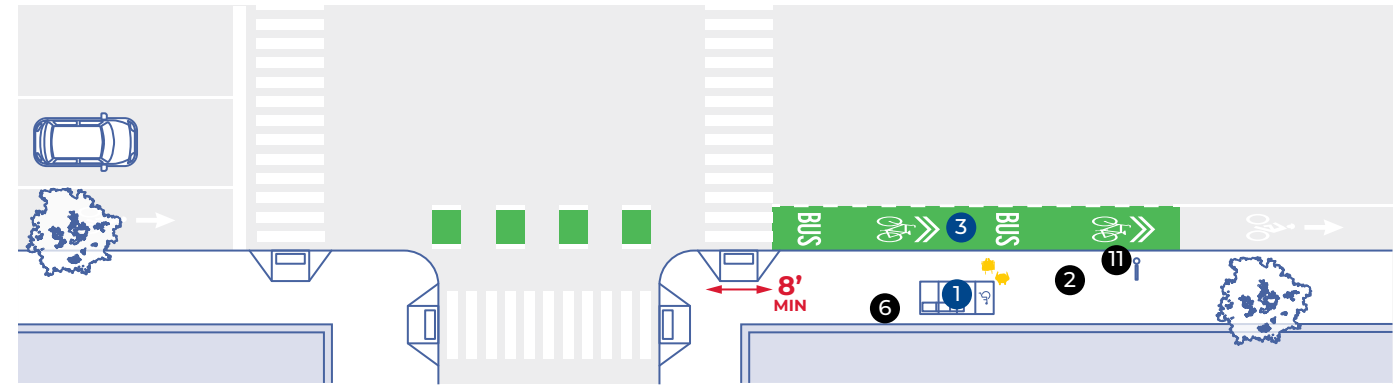
Bikeway between Curb and On-Street Parking Lane



Bikeway between Curb and General Traffic Lane

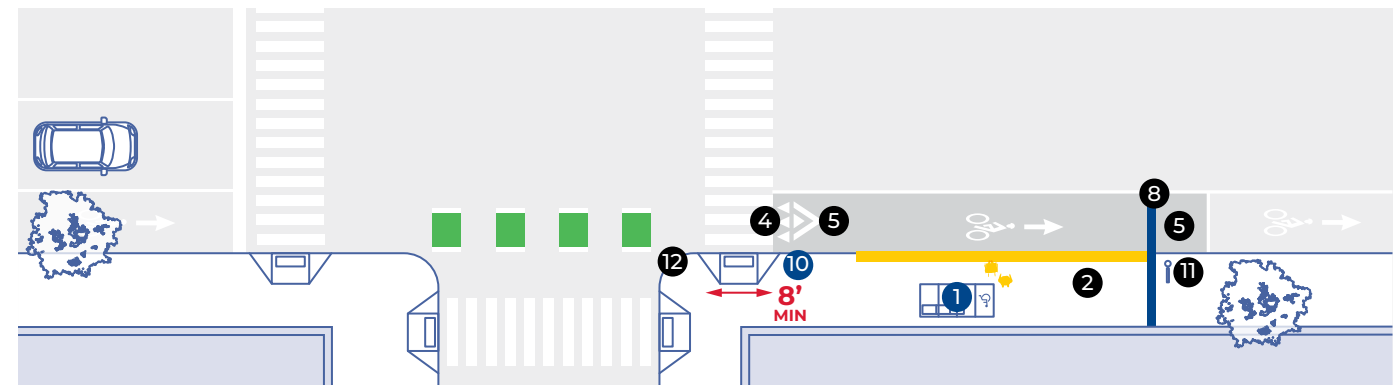


Bikeway between Curb and General Traffic Lane with Bus Pull-Out



Shared Bike/Bus Platform

This design has significant accessibility and waiting environment trade offs and should be reserved for constrained conditions.



Attachment A

SamTrans BSIP Menu of Amenities

A0	COVER PAGE
A00	PROJECT DATA, LEGENDS AND SCHEDULES
A000	MONO-POST BUS STOP POLE RENDERING
A01	4 POST SYSTEM - CURVED ROOF
A02	4 POST SYSTEM- CURVE ROOF NARROW
A03	2 POST SYSTEM CURVED ROOF NO SIDE PANELS
A04	FOLIAGE PATTERN WALLS
A05	MONO POST BUS STOP POLE
A06	DETAILS - FOUR POST CURVED ROOF STANDARD LENGTH 54831
A07	DETAILS - FOUR POST CURVED ROOF EXTENDED LENGTH 54833
A08	DETAILS - FOUR POST CURVED ROOF STANDARD LENGTH NARROW 54830
A09	DETAILS - FOUR POST CURVED ROOF EXTENDED LENGTH NARROW 54832
A10	DETAILS - TWO-POST CANTILEVERED CURVED ROOF 54868
A11	DETAILS - FOLIAGE PATTERN OPTION
A12	DETAILS - MONO-POST BUS STOP POLE
A13	STRUCTURAL - BUS SHELTER DETAILS
A14	STRUCTURAL - BUS SHELTER DETAILS-WIND COVER ASSEMBLY
A15	STRUCTURAL - MONO POST BUS STOP POLE
A16	AMENITY ACCESSORIES (BENCH, PERCH BENCH, SIMME SEAT, TRASH)
A17	AMENITY ACCESSORIES (REAL TIME, GUIDE A RIDE, SOLAR, ADS)

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PROJECT DATA:

KIT OF PARTS BUS SHELTERS: CURVED ROOF SHELTERS

- 4 POSTS STANDARD WITH ADVERTISING PANEL ON THE LEFT SIDE AND NARROW END PANEL ON THE RIGHT SIDE
- 4 POST NARROW END PANELS AT LEFT AND RIGHT SIDE
- 2 POST CANTILEVERED ROOF WITHOUT SIDE PANELS
- 4 POST LASER CUT PATTERN WALL PANELS (FOLIAGE PATTERNS)
- MONO-POST BUS STOP WITH A VERTICAL SUN SCREEN

BUS SHELTER NOMINAL DIMENSIONS:

LENGTH: +/-11'-6" (STANDARD THREE BACK WALL PANELS) TO 15'-2" (EXTENDED FOUR BACK WALL PANELS) RANGE
 DEPTH: +/-6'-4"
 HEIGHT: +/-9'-0"

MONO-POST BUS STOP:

LENGTH: +/-2'-4"
 DEPTH: +/-2'-0"
 HEIGHT: +/-11'-8"

NOTE: PROVIDE ACCOMMODATIONS FOR BUS SHELTERS AND MONO-POST BUS STOP POLE INSTALLED AT SLOPE CONDITIONS: SHELTER POST AND MONO-POST MODIFIED BASE.

ALTERNATE WALL PANEL ASSEMBLY: FOR WINDY CONDITIONS

- PERFORATED WALL PANEL / LEXAN POLYCARBONATE PANEL / PERFORATED WALL PANEL ASSEMBLY

ALTERNATE WALL PANEL UPGRADE: LASER CUT FOLIAGE PATTERN

- REQUIRES DESIGN VARIANCE PROCESS WITH SAMTRAMS FACILITIES FOR CITIES OPTING TO USE THE UPGRADE FOLIAGE PATTERN ON BUS SHELTERS.

CONCRETE FOUNDATION PER SHELTER MANUFACTURER'S STRUCTURAL REQUIREMENTS, BY OTHERS.

- FOR 4 POST SHELTERS- 6" MINIMUM THICKNESS
- FOR TWO POST SYSTEMS: REQUIRES STRUCTURAL ENGINEER'S CALCULATIONS FOR REQUIRED FOUNDATION DEPENDENT ON VARIOUS SITE CONDITIONS SUCH AS SLOPING SIDEWALKS.

GRAPHICS PER SAMTRANS DIRECTION. LOGO DESIGN IS PLACEHOLDER. CREATIVE SERVICES/COMMS TO PROPOSE MORE APPROPRIATE DESIGN/SIGN SIZE AND DIMENSIONS.

- ADD/OPTION OF DIGITAL ADVERTISING PANEL ON THE LEFT SIDE OF BUS SHELTER AND/OR WALL BACK PANEL.

Sheet Index	
Sheet Number	Sheet Name
A0	COVER PAGE
A00	PROJECT DATA, LEGENDS AND SCHEDULES
A000	MONO-POST BUS STOP POLE RENDERING
A01	4 POST SYSTEM - CURVED ROOF
A02	4 POST SYSTEM- CURVE ROOF NARROW
A03	2 POST SYSTEM CURVED ROOF NO SIDE PANELS
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A11	FOLIAGE PATTERN
A12	MONO-POST BUS STOP POLE
A13	BUS SHELTER DETAILS
A14	BUS SHELTER DETAILS-WIND COVER ASSEMBLY
A15	MONO POST BUS STOP POLE DETAILS
A16	AMENITY ACCESSORIES
A17	AMENITY ACCESSORIES

SamTrans Style Guide

Primary Colors

The brand's primary colors are blue (PMS 287), red (PMS 186), black, & silver, and should be used dominantly on all communications materials. Tints of blue (PMS 287), red (PMS 186), black, and silver colors can also be used.

All color specifications are the same for coated or uncoated paper stock, as well as fabric application.

In lieu of using the Pantone Matching System color, acceptable substitutes are noted below:

Blue (PMS 287) COATED: Pantone 287 C -

CMYK 100, 75, 2, 18

Blue (PMS 287) UNCOATED: Pantone 287 U -

CMYK 92, 62, 0, 0

Red (PMS 186) COATED: Pantone 186 C -

CMYK 2, 100, 85, 6

Red (PMS 186) UNCOATED: Pantone 186 U -

CMYK 1, 91, 72, 3

Black COATED: PANTONE Black C -

CMYK 63, 62, 59, 94

Black UNCOATED: CMYK 0 0 0 100

White: PANTONE Bright White -

CMYK 0, 0, 0, 0

PROPER COLOR USAGE OF LOGO:

For multicolor printing, use the official black, white, silver, blue (PMS 287) and red (PMS 186).

For single-color printing, use black or white only.

COLOR PALLETTE LEGEND

(BLUE)	(RED)	(SILVER)	(BLACK)
PANTONE 287 Hex: #003087	PANTONE 186 Hex: #C8102E	Silver Hex: #C8D2D8	Black Hex: #000000
R: 0 G: 48 B: 135	C: 100 % M: 75 % Y: 2 % K: 18 %	R: 200 G: 16 B: 46	C: 2 % M: 100 % Y: 85 % K: 6 %
R: 0 G: 210 B: 216	C: 7 % M: 3 % Y: 0 % K: 15 %	R: 0 G: 0 B: 0	C: 0 % M: 0 % Y: 0 % K: 100 %

BUS SHELTER KIT OF PARTS MATERIAL COLOR LEGEND

SHELTER ELEMENT	MATERIAL	COLOR	FINISH	PAINT	NOTES
CELLULAR POLYCARBONATE ROOF PANEL	3/8" THICK CELLULAR POLYCARBONATE ROOF PANEL	BLUE	SEE NOTE	INTEGRAL COLOR	MATTE FINISH ON BOTH TOP AND BOTTOM SIDES
ROOF BEAMS ASSEMBLY	METAL STRUCTURE WITH ALUMINUM FINISH CLADDING	SILVER	SEMI-GLOSS	SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS.	-
POSTS ASSEMBLY	METAL STRUCTURE WITH ALUMINUM FINISH CLADDING	SILVER	SEMI-GLOSS	SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS.	-
FRAMED PERFORATED METAL PANEL ASSEMBLY AT BACK WALL AND SIDE WALL	ROUND, ALUMINUM, ALLOY 3003-H14, .1250" THICK (8 GAUGE), 1/4" ROUND ON 5/16" STAGGERED CENTERS, 58% OPEN AREA	SILVER	SEMI-GLOSS	SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS.	-

ACCESSORIES

SOLAR PANELS ROOF MOUNTED RMS RAD SOLAR PANEL SYSTEM OR SIMILAR	PER MANUFACTURER	SILVER	SEMI-GLOSS	SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS.	ALTERNATE: SOLAR PANELS ON CANTILEVERED FIN TYPE SUPPORT BRACKETS OR SAN DIEGO MTS PV ROOF MOUNTED
TWO-SIDED ADVERTISING PANEL HINGED FRAME	ALUMINUM	SILVER	SEMI-GLOSS	SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS.	OPTIONAL/ALTERNATE STATIC ADVERTISING DISPLAY AT SHELTER BACK PANELS. TBD PER SAMTRANS
LED DIGITAL DISPLAY ADVERTISING PANEL-TWO SIDED	ALUMINUM FRAME	SILVER	SEMI-GLOSS	SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS.	OPTIONAL/ALTERNATE TO STATIC ADVERTISING DISPLAY, TBD PER SAMTRANS. NEMA RATED WEATHER RESISTANT ENCLOSURE, TYP
SIGN PANEL WITH GRAPHICS AT BACK WALL	1/8" THICK ALUMINUM PANEL	SILVER	SEMI-GLOSS	SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS.	GRAPHICS AND SIZE TBD PER SAMTRANS
LED CEILING MOUNTED 24" STRIP DOWNLIGHT	PER MANUFACTURER	PER MANUFACTURER	PER MANUFACTURER	-	-
METAL BENCH- PERFORATED	ALUMINUM	BLUE	SEMI-GLOSS	SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS.	TOLAR CONTOUR 6'
PERCH METAL BENCH- THREE SLAT SEATING	ALUMINUM	BLUE	SEMI-GLOSS	SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS.	6' EURO LEANING RAIL WITH 1 CENTER V-BAR https://tolarmfg.com/products/street-furniture/seating/sfben-35/
SIMME BENCH- PERFORATED WITH DIVIDER	ALUMINUM	BLUE	SEMI-GLOSS	SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS.	- https://simmeseat.com/products/
REAL TIME INFORMATION DISPLAY & QR CODE LABEL	PER MANUFACTURER	BLUE, SILVER, RED COLOR OPTIONS	PER MANUFACTURER	-	E-INK DISPLAY; 3"x3" QR CODE LABEL STICKER ON METAL PLATE MOUNTED ON POST, LOCATION PER SAMTRANS
GUIDE A RIDE FRAME AND TUBE KIT	PER MANUFACTURER	-	PER MANUFACTURER	-	ALTERNATE OPTION FOR REAL TIME INFORMATION DISPLAY-SEE SHEET A15.
TRASH RECEPACLE- 32 GALLON	STEEL	BLUE	SEMI-GLOSS	SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS.	36 GALLON TRASH CAN WITH CONVEX LID
MAP CASE FOR BUS ROUTE	ALUMINUM	BLACK	MATTE	-	PER SAMTRANS APPROVED MANUFACTURER

ALTERNATE WALL PANEL ASSEMBLY

LASER CUT PATTERN (FOLIAGE)	1/8" THICK ALUMINUM PANEL	SILVER	SEMI-GLOSS	SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS.	MOZ DESIGN: https://mozdesigns.com/products/sheet-metal-metal/laser-cut/ ; BOK Modern: https://mozdesigns.com/products/sheet-metal-metal/laser-cut/
SOLID POLYCARBONATE PANEL (LEXAN)	1/4" THICK LEXAN PANEL	CLEAR	CLEAR	-	-

MONO- POST BUS STOP ASSEMBLY

POST	2" DIAMETER X 1/8" THICK STEEL POST	SILVER	GALVANIZE	SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS.	ALTERNATE: 2" SQUARE GALAVANIZE STEEL POST WITH 3/8 DIAMETER HOLES @ 1" O.C.
FRAMED PERFORATED METAL PANEL ASSEMBLY AT BACK WALL AND SIDEWALL	ROUND, ALUMINUM, ALLOY 3003-H14, .1250" THICK (8 GAUGE), 1/4" ROUND ON 5/16" STAGGERED CENTERS, 58% OPEN AREA	BLUE	SEMI-GLOSS	SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS.	-
TRANSIT POST SOLAR PANEL AND LIGHTING	PER MANUFACTURER	PER MANUFACTURER	PER MANUFACTURER	-	https://www.urbansolarcorp.com/transit-pole-lighting
ALUMINUM EXTRUSION SIGNAGE	ALUMINUM,, .1250" THICK (8 GAUGE), THREE SIDED	SILVER	SEMI-GLOSS	SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS.	WITH TEXT GRAPHICS
REAL TIME INFORMATION DISPLAY & QR CODE LABEL	PER MANUFACTURER	RED	PER MANUFACTURER	-	E-INK DISPLAY ; QR CODE ON METAL PLATE MOUNTED TO POST

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	12/17/2025				FINAL SUBMITTAL						

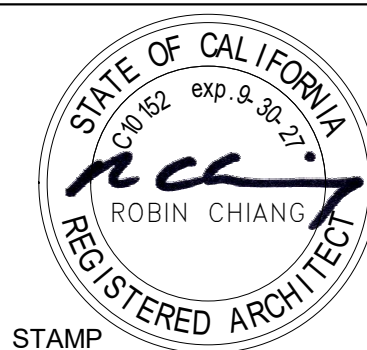
DESIGNED:
R. BUTIONG
 DRAWN:
E. PETRIE
 CHECKED:
R. BUTIONG
 APPROVED:
R. CHIANG
 DATE:
11/11/25

Fehr & Peers

Fehr and Peers
 345 California Street
 Suite 450
 San Francisco, CA 94104
 Main: 415-348-0300
 Fax: 415-773-1790



Robin Chiang & Company
 381 Tehama Street
 San Francisco, CA 94103



**SAN MATEO COUNTY TRANSIT DISTRICT
 BUS STOP IMPROVEMENT PLAN**

**ARCHITECTURAL
 BUS SHELTER KIT OF PARTS
 PROJECT DATA, LEGENDS AND SCHEDULES**

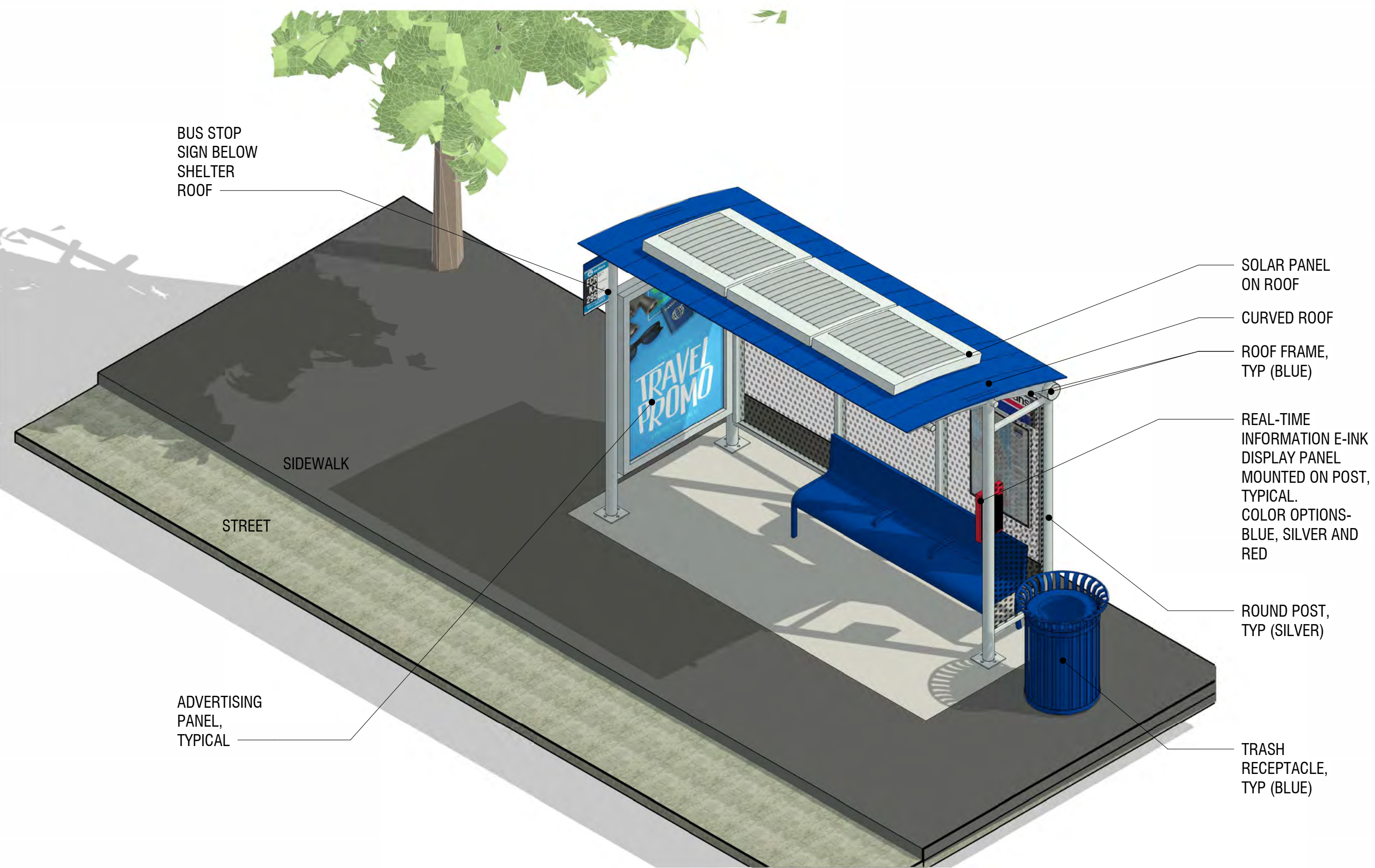
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SHEET NUMBER: A00	
PAGE NO.:	

1. STANDARD FOUR POST BUS SHELTER CURVED ROOF

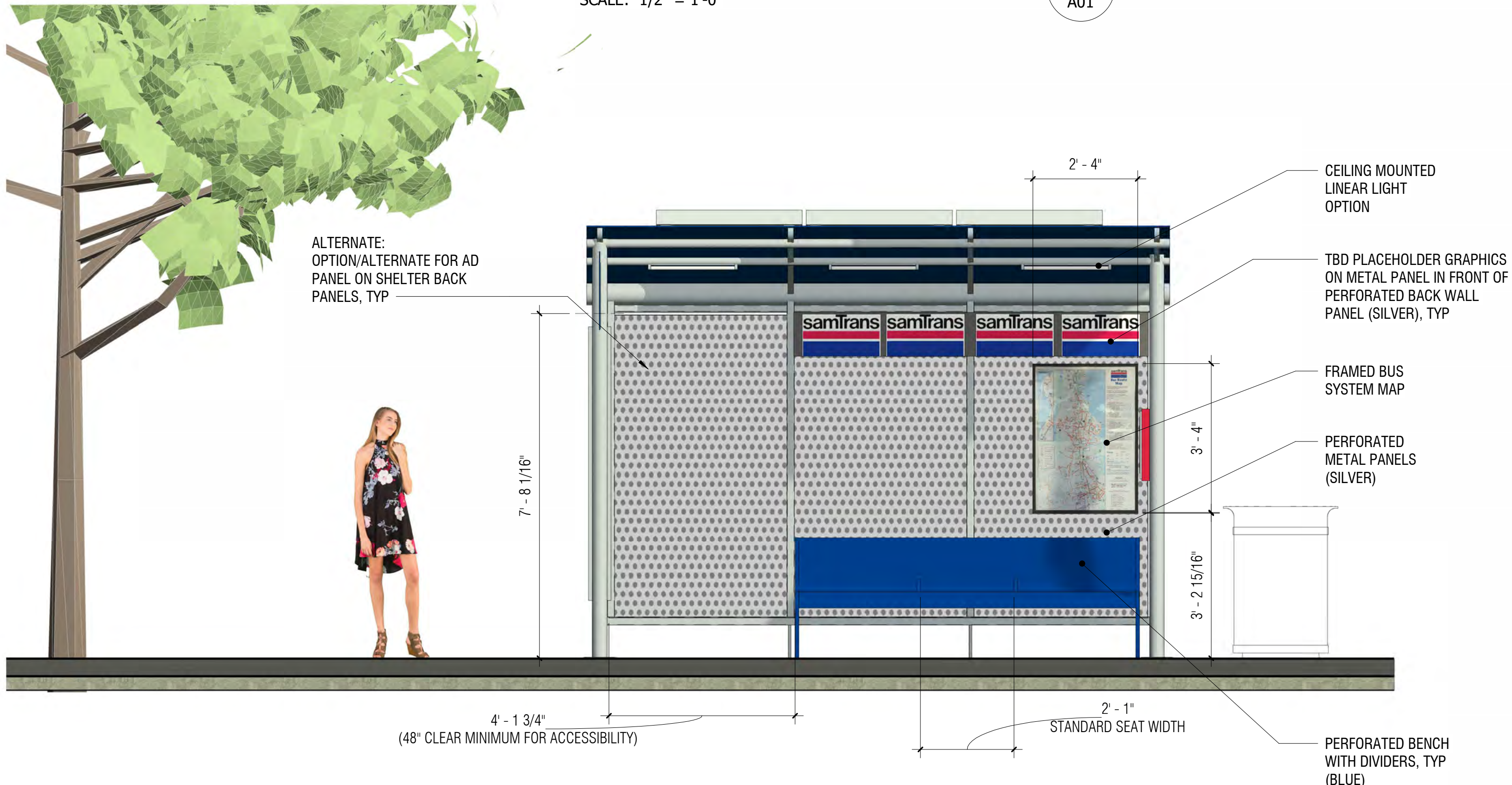
NOTE: FOR DETAIL INFORMATION REFER TO SHEET A06 FOR STANDARD LENGTH THREE PANEL AND A07 FOR EXTENDED LENGTH FOUR PANEL TYPES.



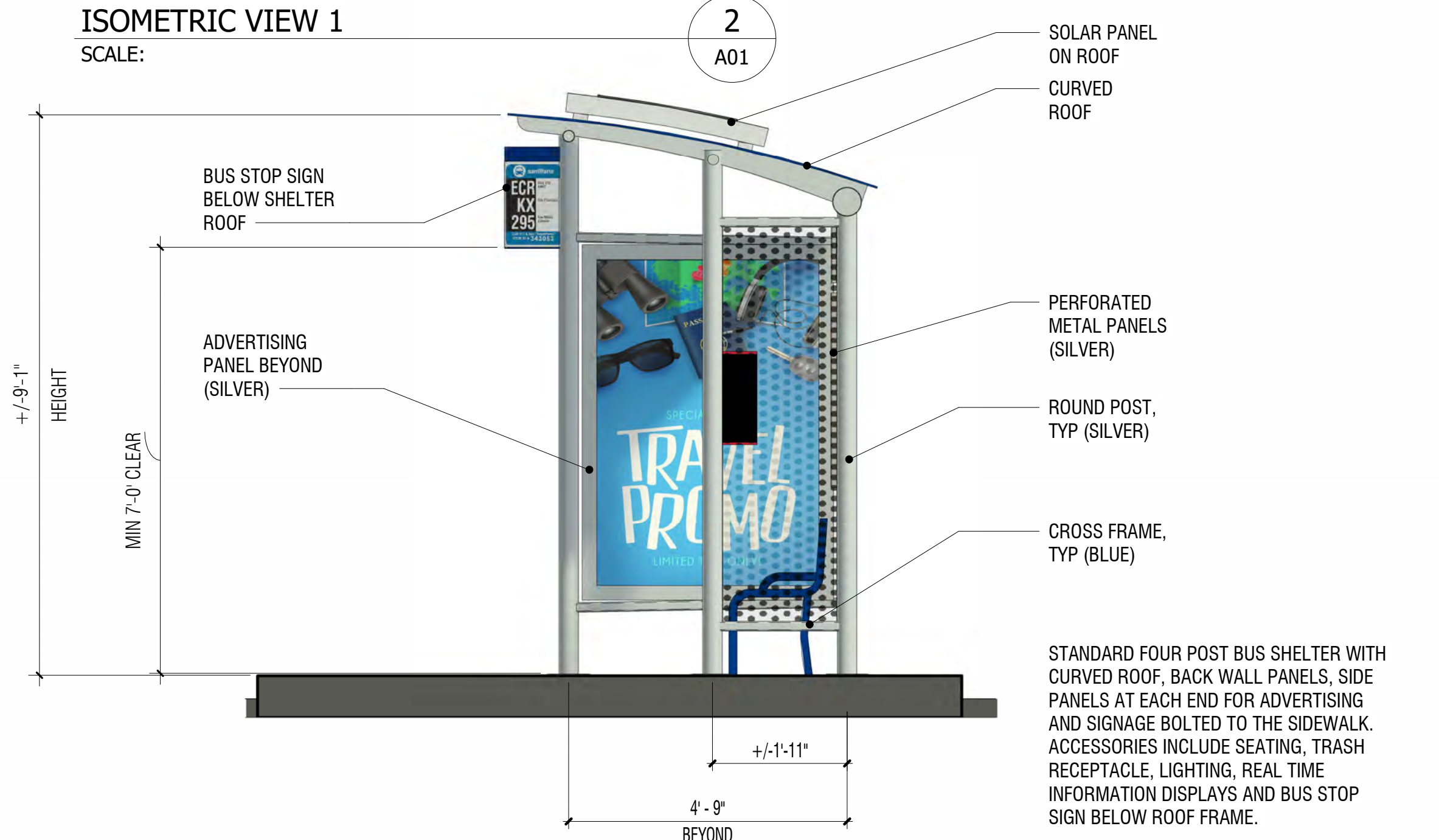
ROOF PLAN 1
SCALE: 1/2" = 1'-0"
1 A01



ISOMETRIC VIEW 1
SCALE:
2 A01



FRONT ELEVATION 1
SCALE: 1/2" = 1'-0"
3 A01



RIGHT SIDE ELEVATION 1
SCALE: 1/2" = 1'-0"
4 A01

STANDARD FOUR POST BUS SHELTER WITH CURVED ROOF, BACK WALL PANELS, SIDE PANELS AT EACH END FOR ADVERTISING AND SIGNAGE BOLTED TO THE SIDEWALK. ACCESSORIES INCLUDE SEATING, TRASH RECEPTACLE, LIGHTING, REAL TIME INFORMATION DISPLAYS AND BUS STOP SIGN BELOW ROOF FRAME.

GRAPHICS PER SAMTRANS DIRECTION. LOGO DESIGN IS PLACEHOLDER. CREATIVE SERVICES/COMMS TO PROPOSE MORE APPROPRIATE DESIGN/SIGN COPY, TYP.

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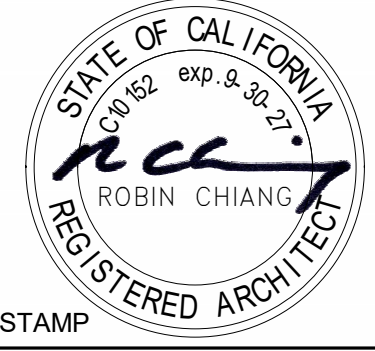
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REV.	DATE	BY	SUB	APP.	DESCRIPTION	REV.	DATE	BY	SUB	APP.	DESCRIPTION
	12/17/2025				FINAL SUBMITTAL						

DESIGNED:
R. BUTIONG
DRAWN:
E. PETRIE
CHECKED:
R. BUTIONG
APPROVED:
R. CHIANG
DATE:
11/11/25

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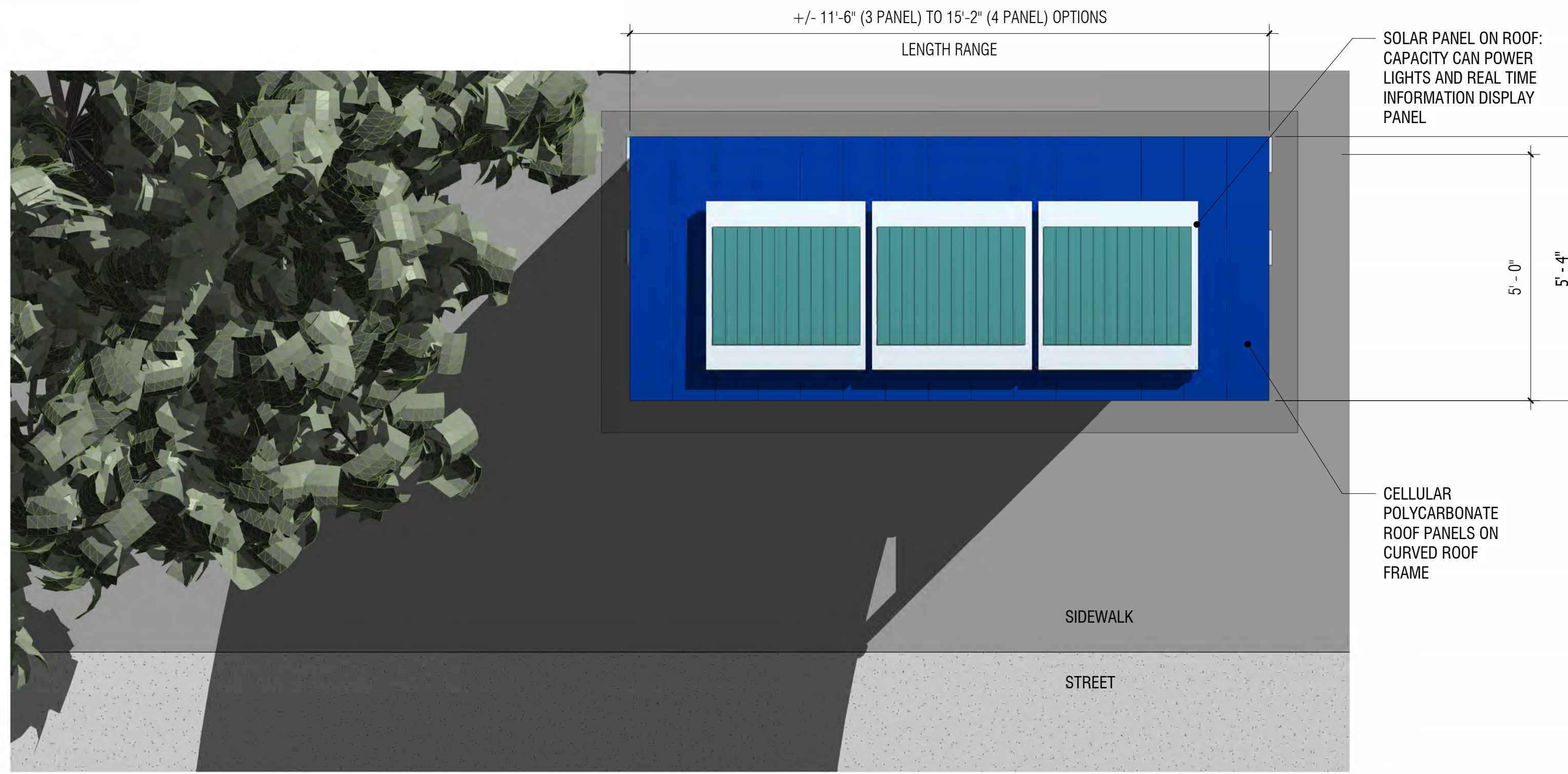
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381 Tehama Street
San Francisco, CA 94103



**SAN MATEO COUNTY TRANSIT DISTRICT
BUS STOP IMPROVEMENT PLAN**

**ARCHITECTURAL
BUS SHELTER KIT OF PARTS
4 POST SYSTEM - CURVED ROOF**

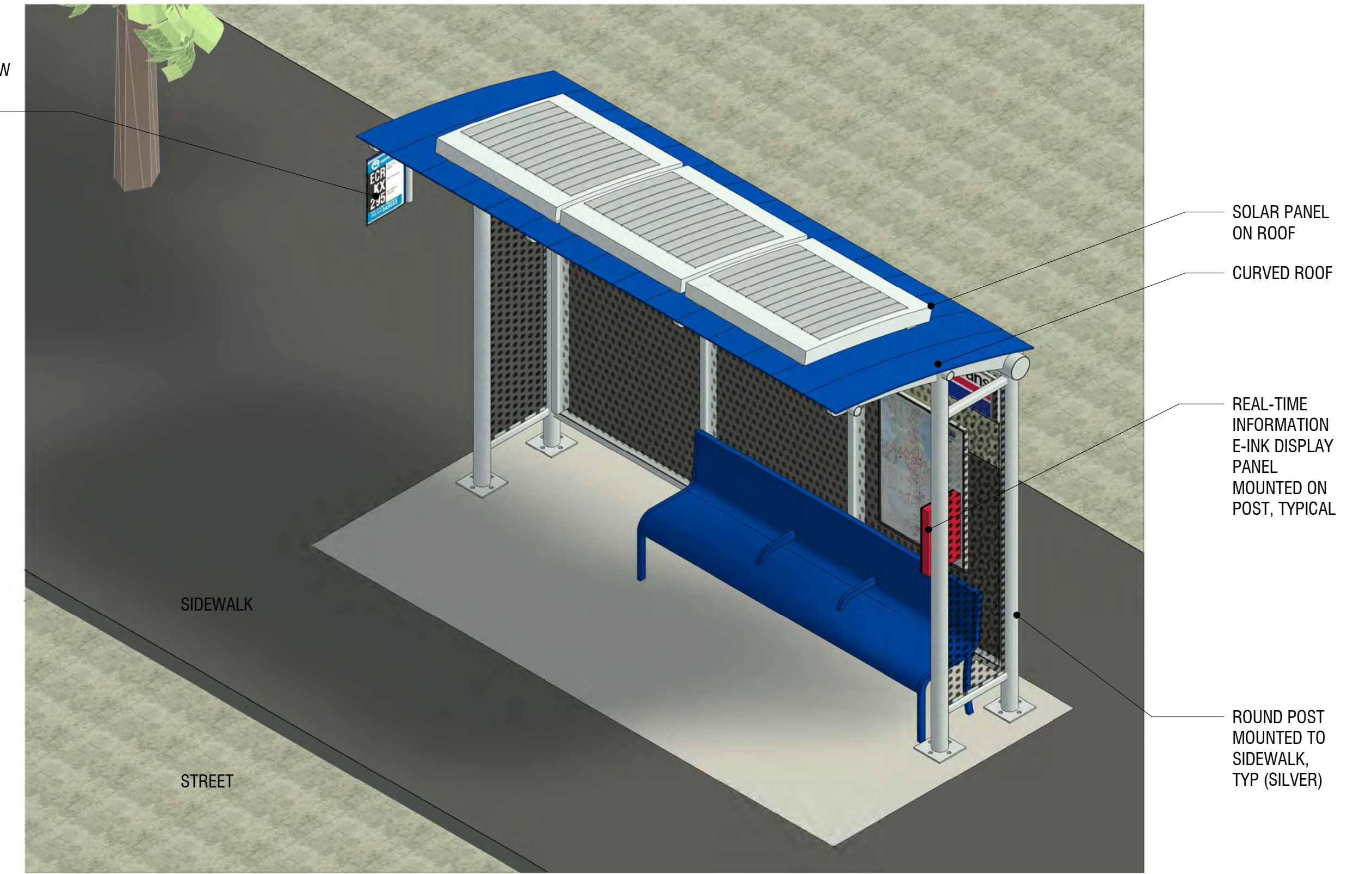
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SHEET NUMBER A01	
PAGE NO.	



ROOF PLAN 2
SCALE: 1/2" = 1'-0"

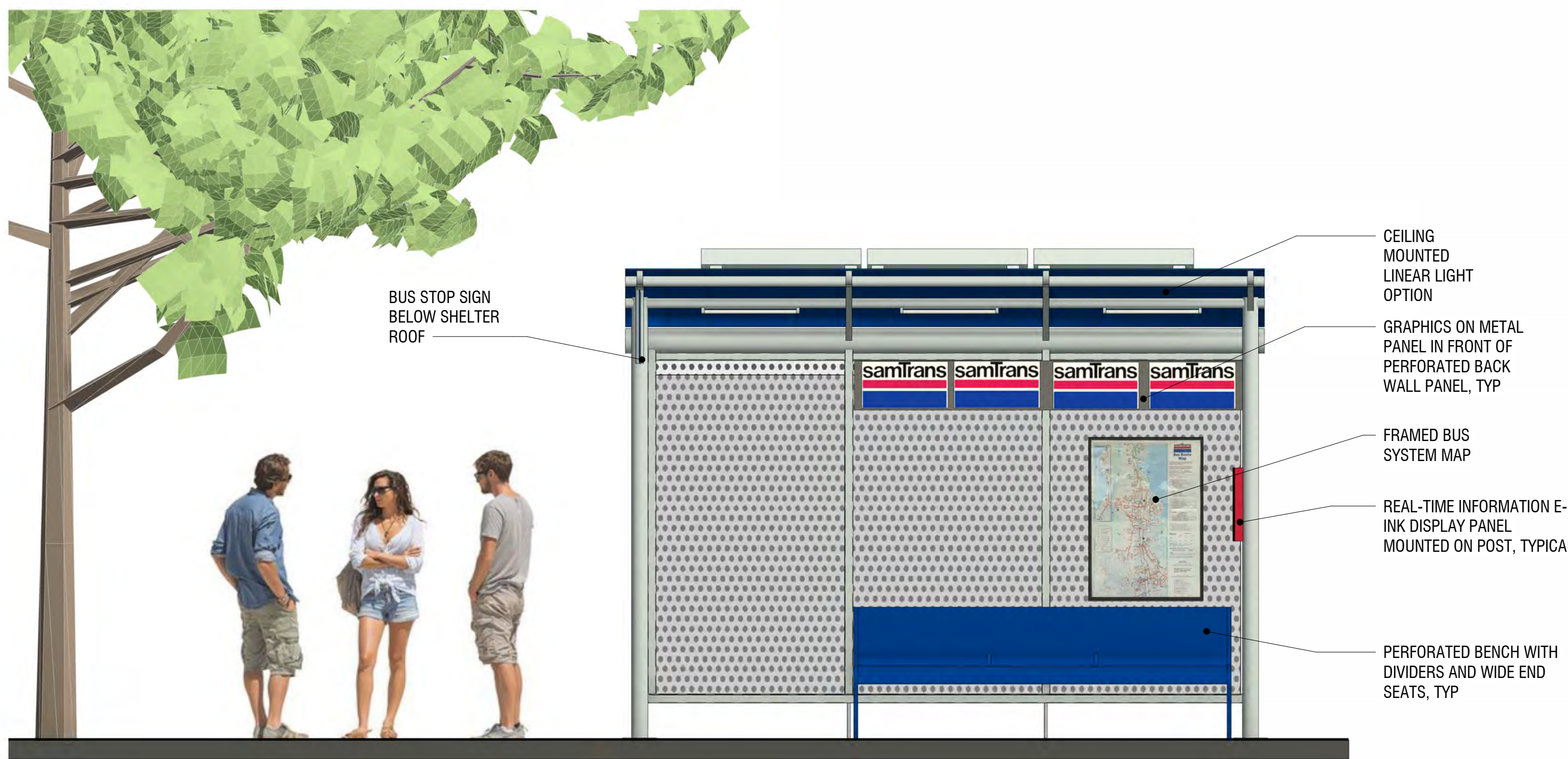
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A02

2. STANDARD FOUR POST BUS NARROW SHELTER CURVED ROOF
NOTE: FOR DETAIL INFORMATION REFER TO SHEET A08 FOR STANDARD LENGTH THREE PANEL AND A09 FOR EXTENDED LENGTH FOUR PANEL TYPES.



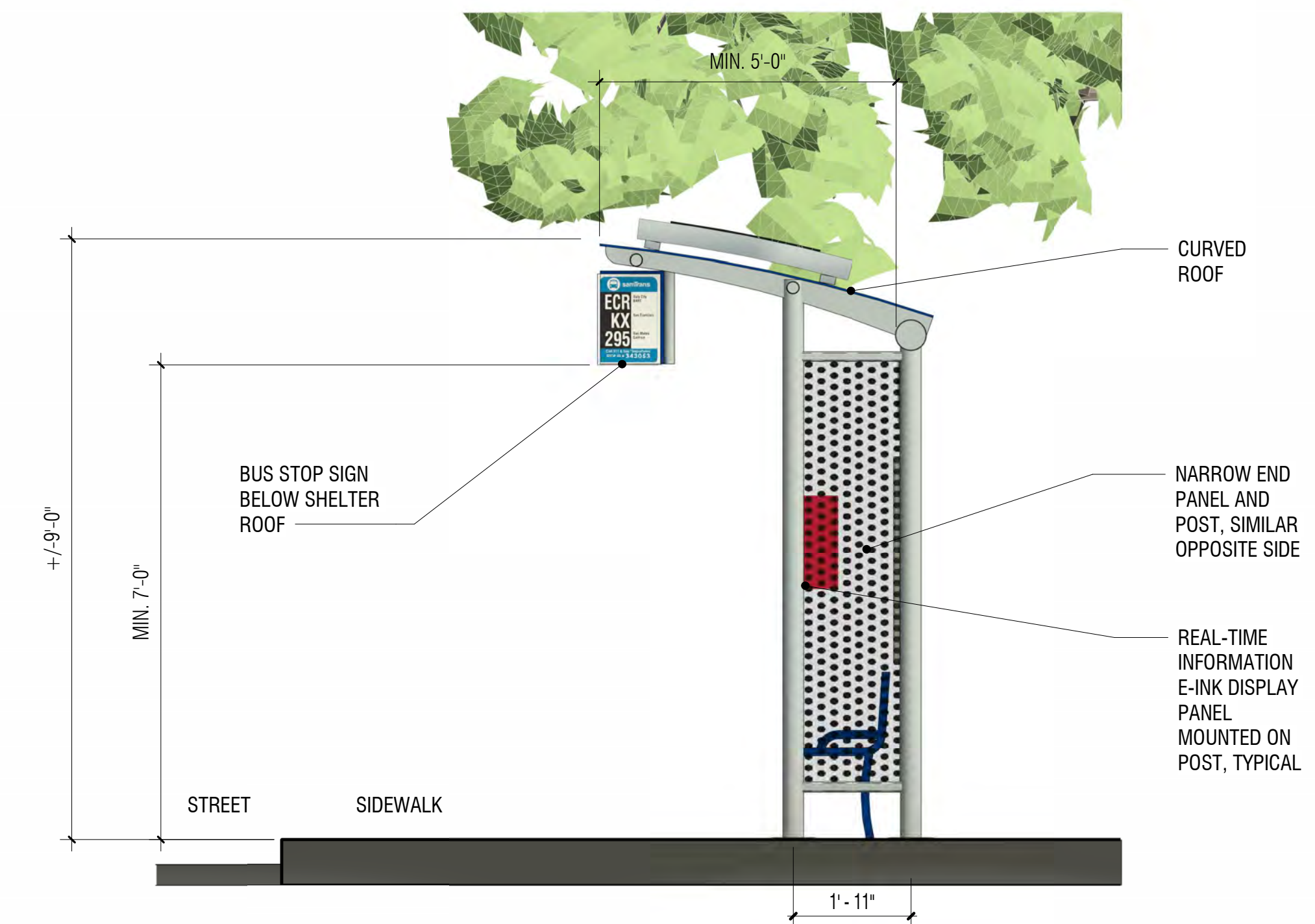
ISOMETRIC VIEW 2
SCALE:

4
A02



FRONT ELEVATION 2
SCALE: 1/2" = 1'-0"

2
A02



RIGHT SIDE ELEVATION 2A
SCALE: 1/2" = 1'-0"

3
A02

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E. PETRIE
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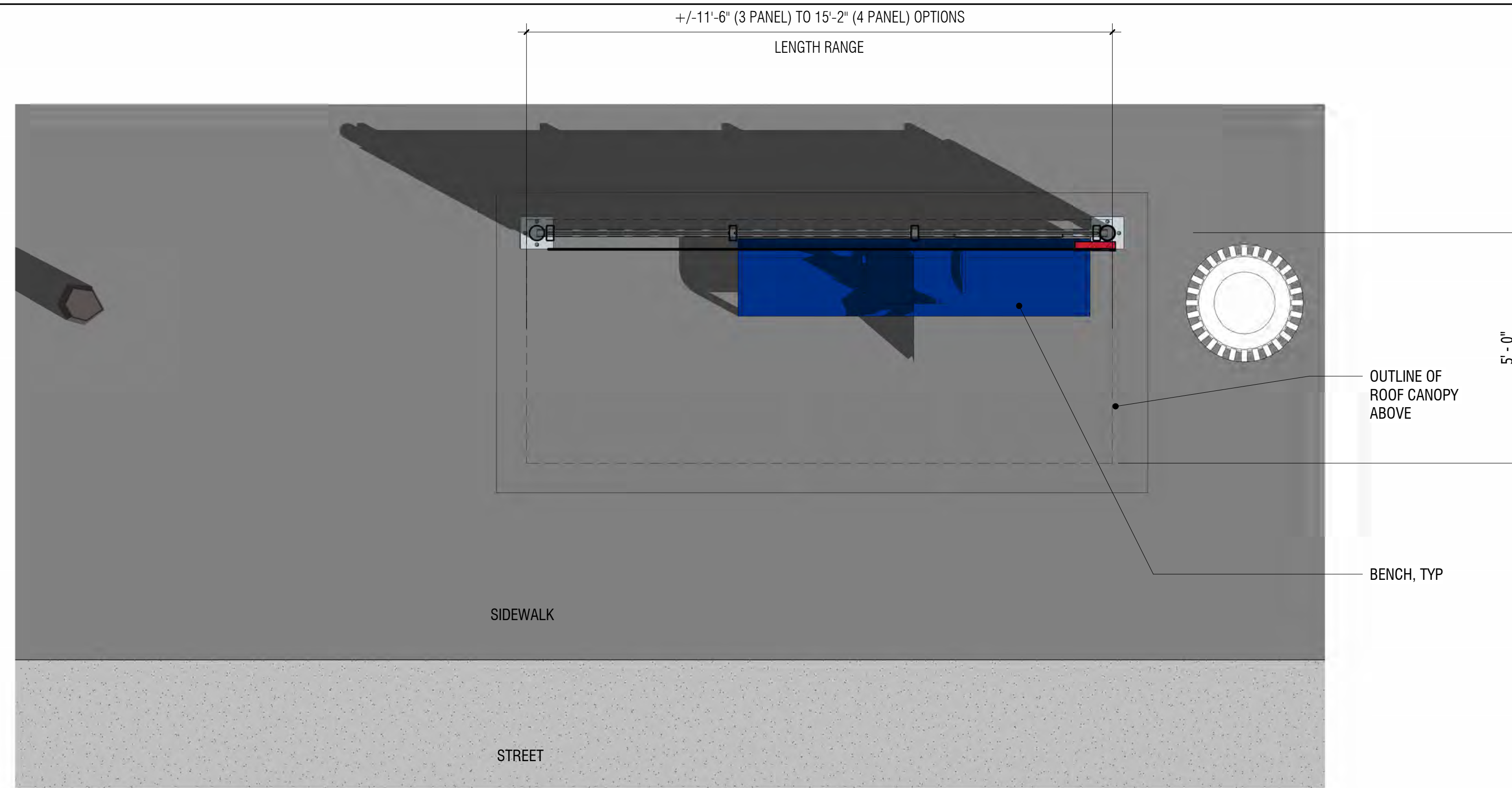
**SAN MATEO COUNTY TRANSIT DISTRICT
BUS STOP IMPROVEMENT PLAN**

**ARCHITECTURAL
BUS SHELTER KIT OF PARTS
4 POST SYSTEM- CURVE ROOF NARROW**

SIZE: D	SCALE: AS NOTED
SHEET NUMBER A02	
PAGE NO.	

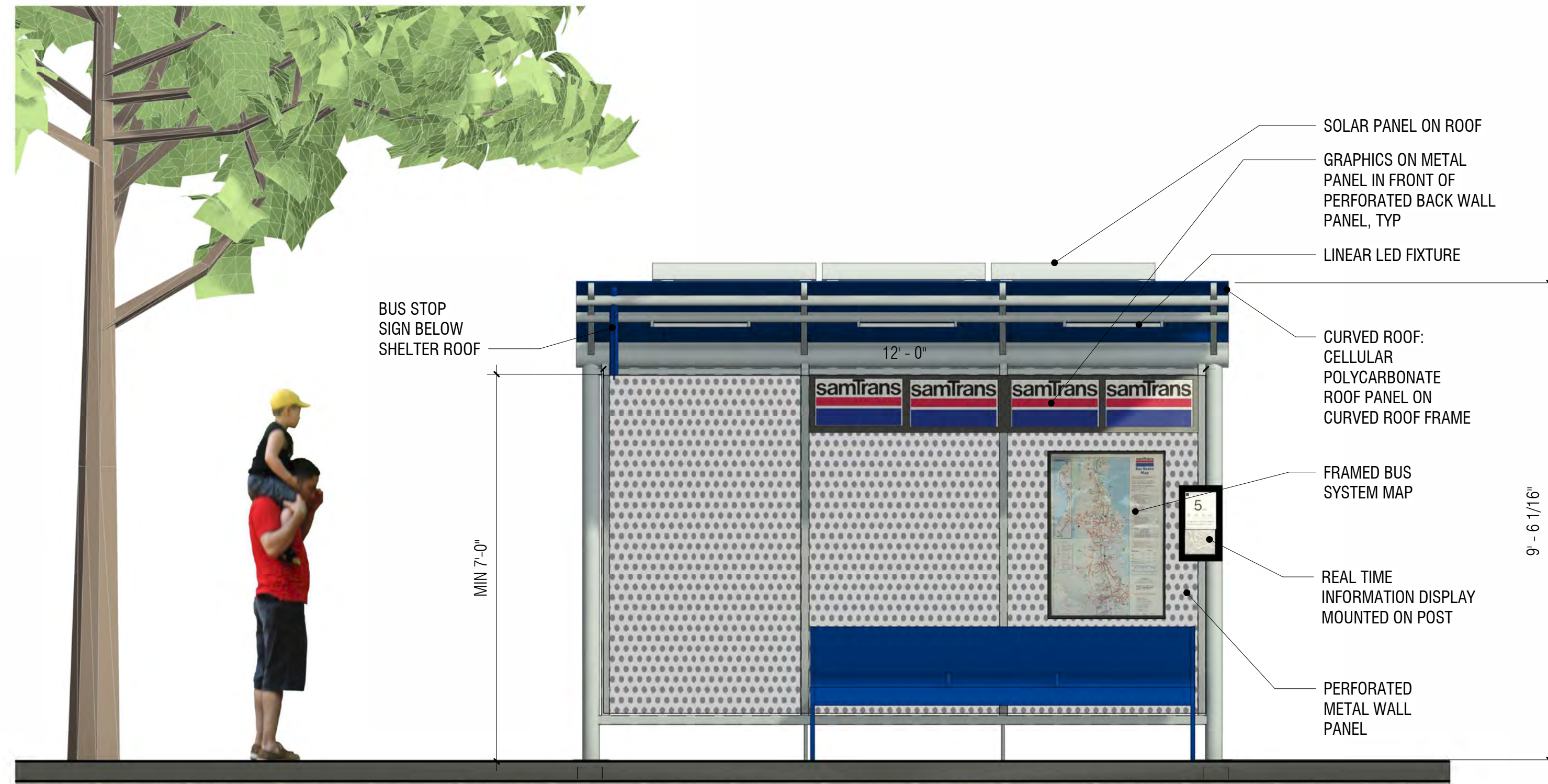
3. STANDARD TWO POST CANTILEVER BUS SHELTER CURVED ROOF - NO SIDE PANELS

NOTE: FOR DETAIL INFORMATION REFER TO SHEET A10.



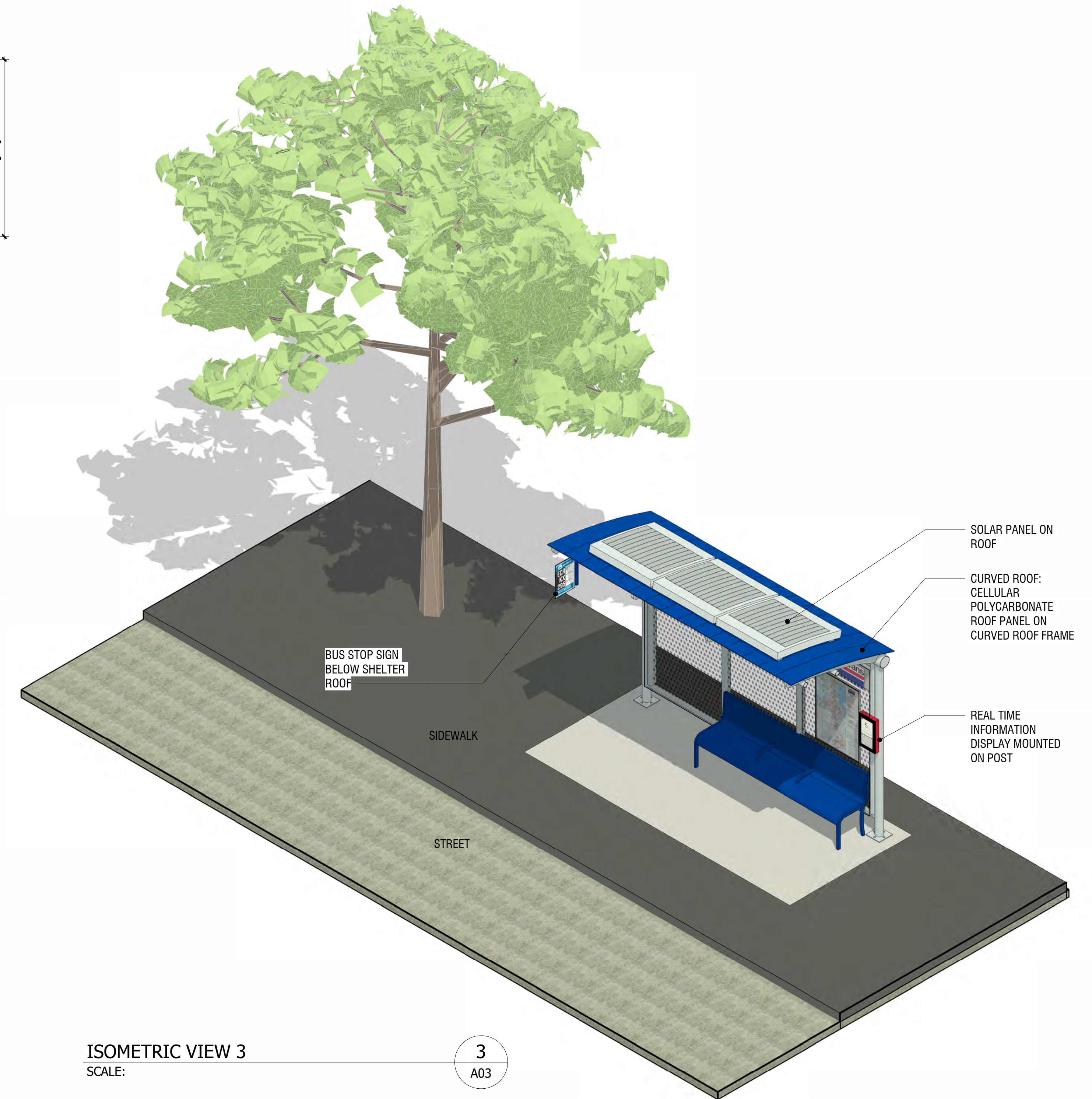
PLAN VIEW 3
SCALE: 1/2" = 1'-0"

1
A03



FRONT ELEVATION 3
SCALE: 1/2" = 1'-0"

2
A03



ISOMETRIC VIEW 3
SCALE:

3
A03

STANDARD TWO POST BUS SHELTER WITH CURVED ROOF AND BACK WALL PANELS WITH FOUNDATION BELOW SIDEWALK. ACCESSORIES INCLUDE SEATING, TRASH RECEPTACLE, LIGHTING, REAL TIME INFORMATION DISPLAYS AND BUS STOP SIGN ON ROOF STRUCTURE.

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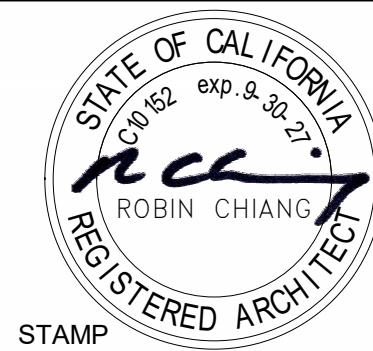
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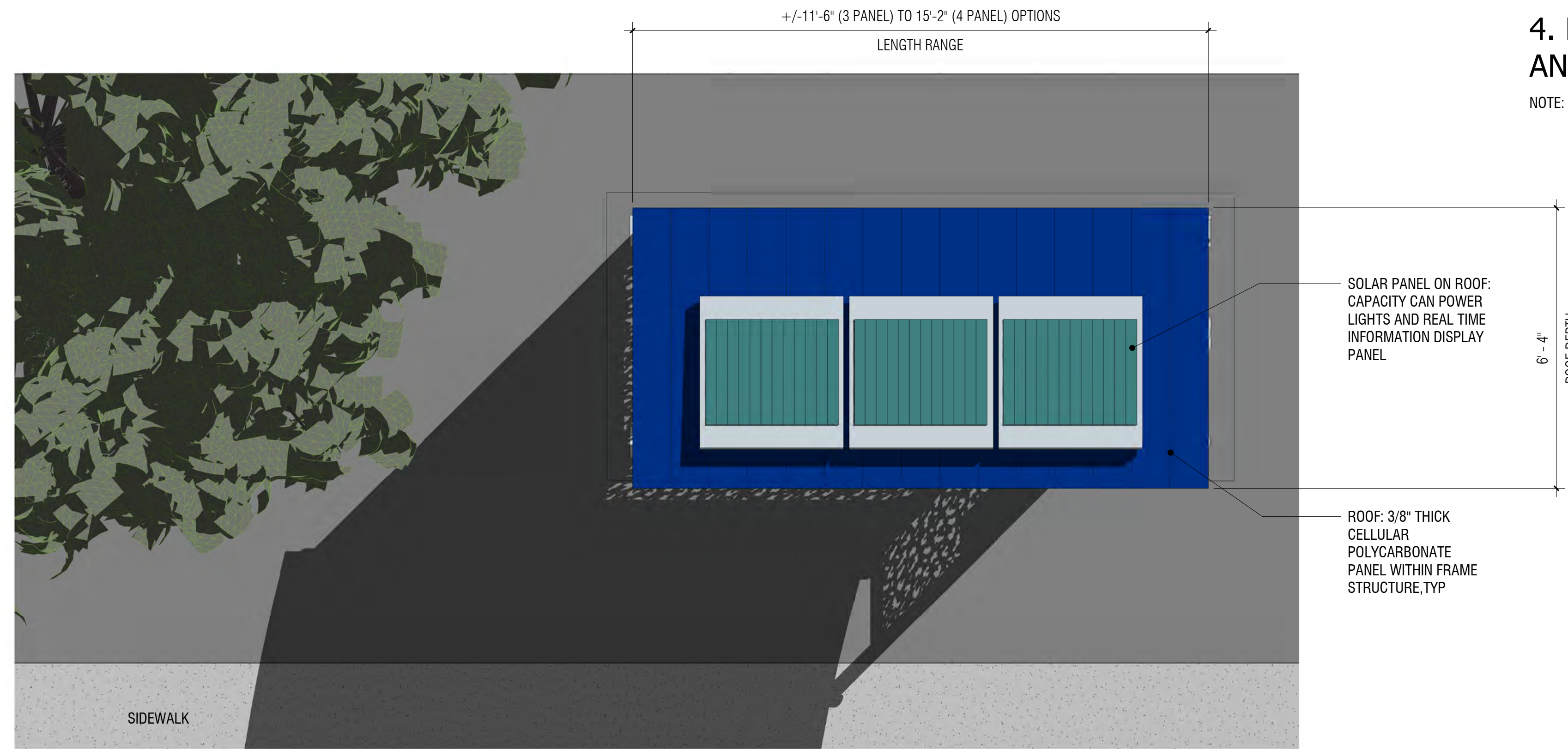
**SAN MATEO COUNTY TRANSIT DISTRICT
BUS STOP IMPROVEMENT PLAN**

**ARCHITECTURAL
BUS SHELTER KIT OF PARTS
2 POST SYSTEM CURVED ROOF NO SIDE
PANELS**

SIZE: D	SCALE AS NOTED
SHEET NUMBER A03	
PAGE NO.	

4. FOUR POST SHADE STRUCTURE WITH FOLIAGE PATTERNED LASER CUT WALL PANELS AND POLYCARBONATE WALL PANEL ASSEMBLY (FOR WINDY SITE CONDITIONS)

NOTE: FOR DETAIL INFORMATION REFER TO SHEET A11.



ROOF PLAN 4
SCALE: 1/2" = 1'-0"

1
A04



PERSPECTIVE VIEW OF SHELTER
SCALE:

3
A04



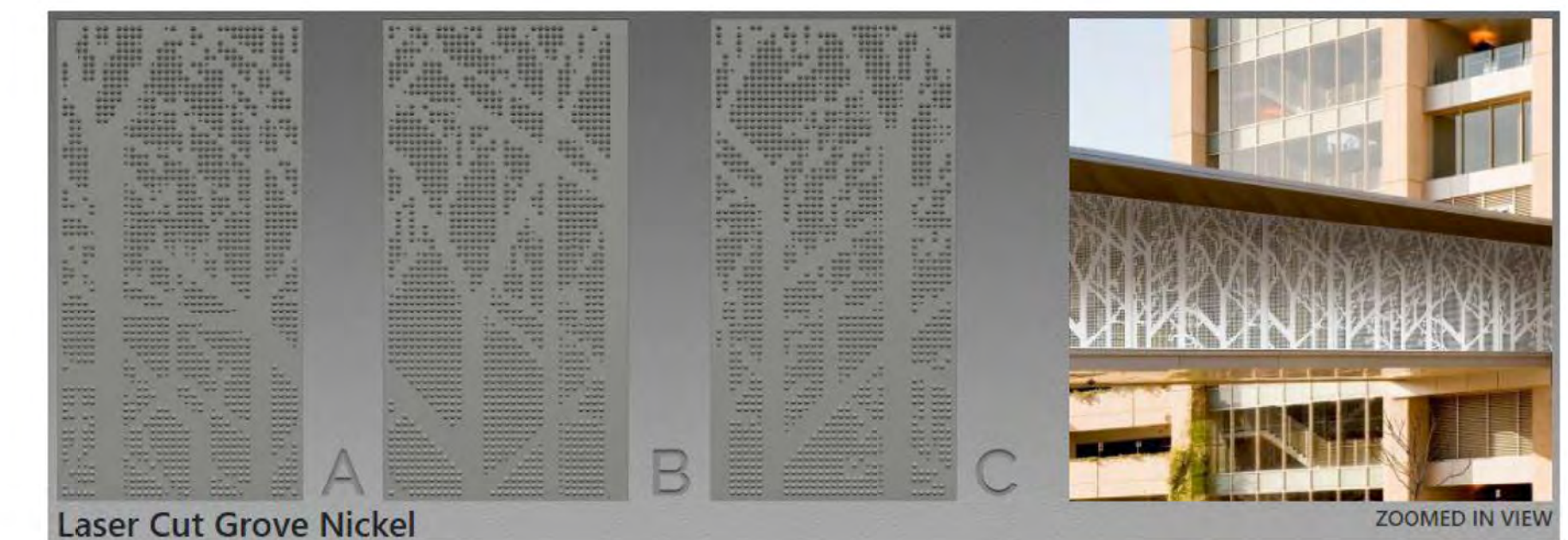
FRONT ELEVATION 4
SCALE: 1/2" = 1'-0"

2
A04

LEAF PATTERN
OPTION 1: LASER CUT ALUMINUM MOSAIC PATTERN BY MOZ DESIGNS
<https://mozdesigns.com/metal-collections/mosaic/>



FOREST TREES PATTERN
OPTION 2: LASER CUT ALUMINUM GROVE PATTERN BY MOZ DESIGNS
<https://mozdesigns.com/metal-collections/grove/>



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	12/17/2025				FINAL SUBMITTAL					

DESIGNED:
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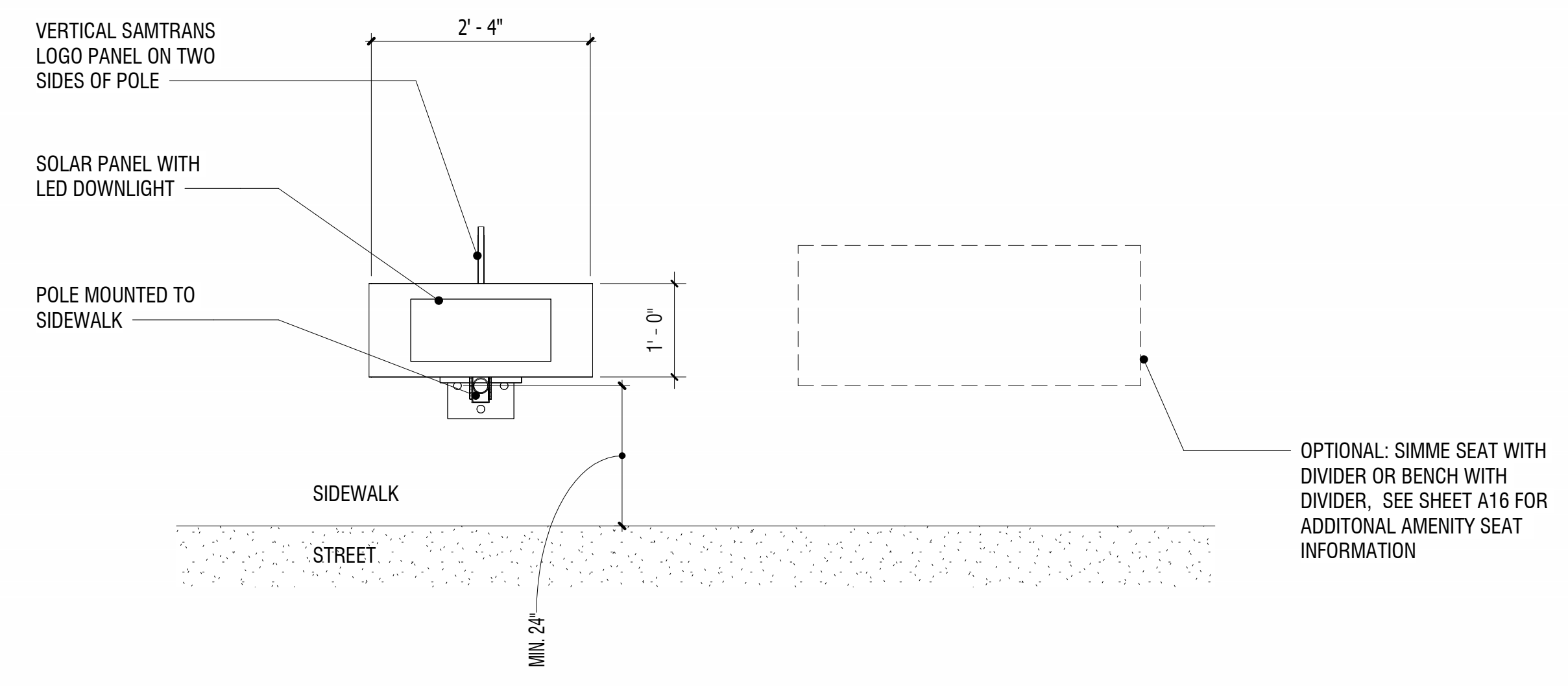
**SAN MATEO COUNTY TRANSIT DISTRICT
BUS STOP IMPROVEMENT PLAN**

**ARCHITECTURAL
BUS SHELTER KIT OF PARTS
FOLIAGE PATTERN WALLS**

SIZE: D SCALE AS NOTED
SHEET NUMBER **A04**
PAGE NO.

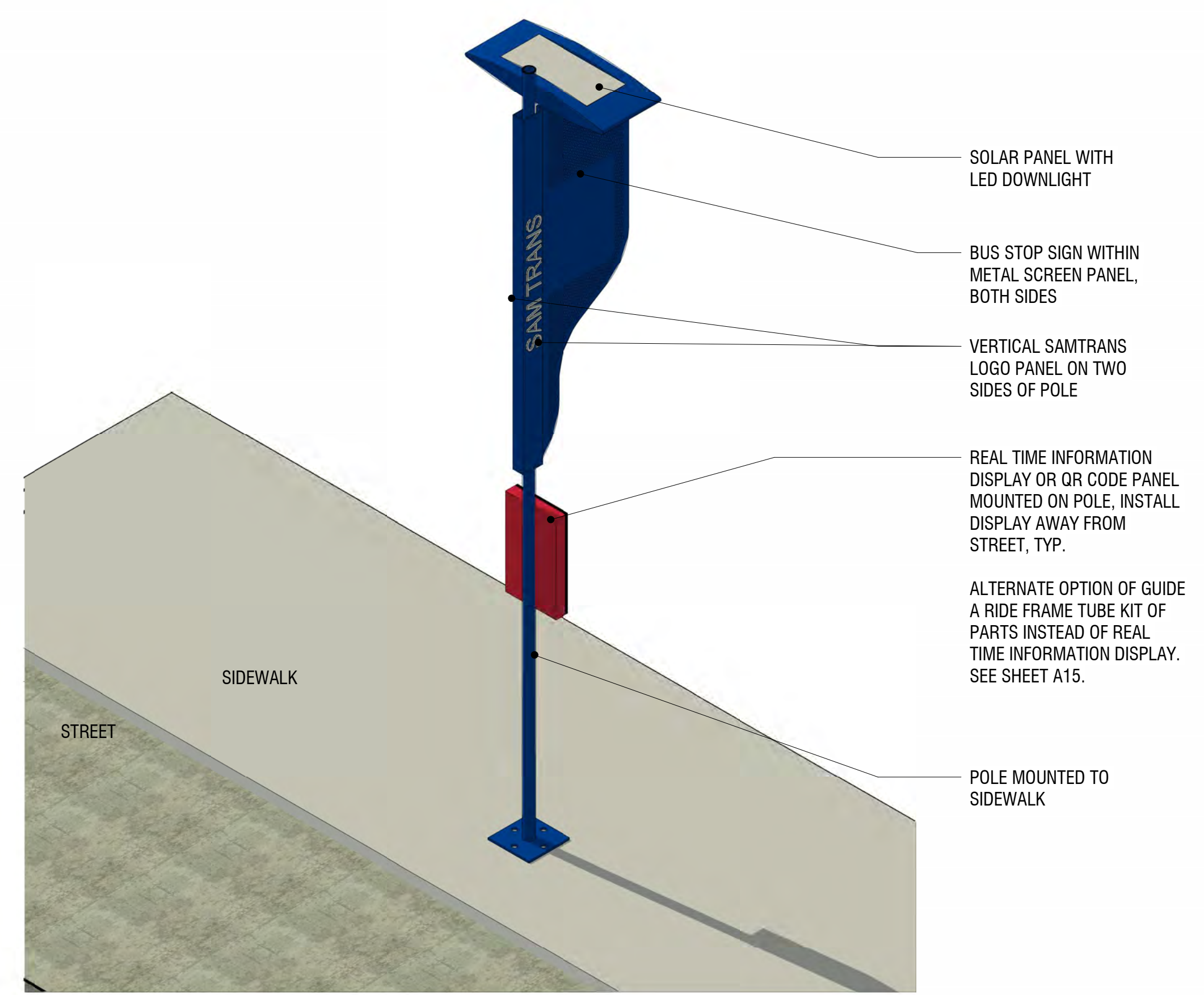
5. MONO-POST BUS STOP POLE

NOTE: FOR DETAIL INFORMATION REFER TO SHEET A12.



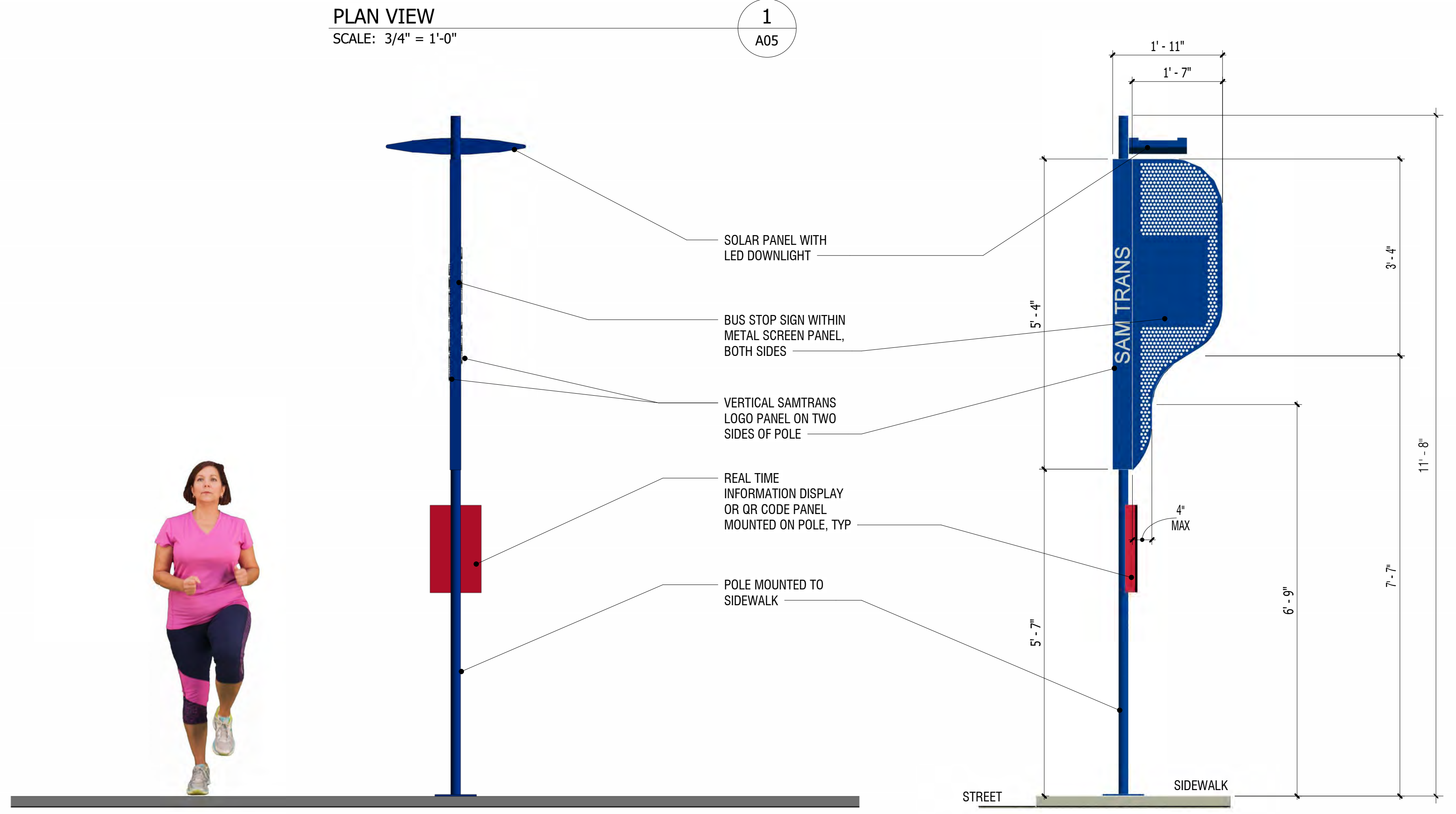
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PLAN VIEW
SCALE: 3/4" = 1'-0"

A05



5
ISOMETRIC VIEW
SCALE:

A05

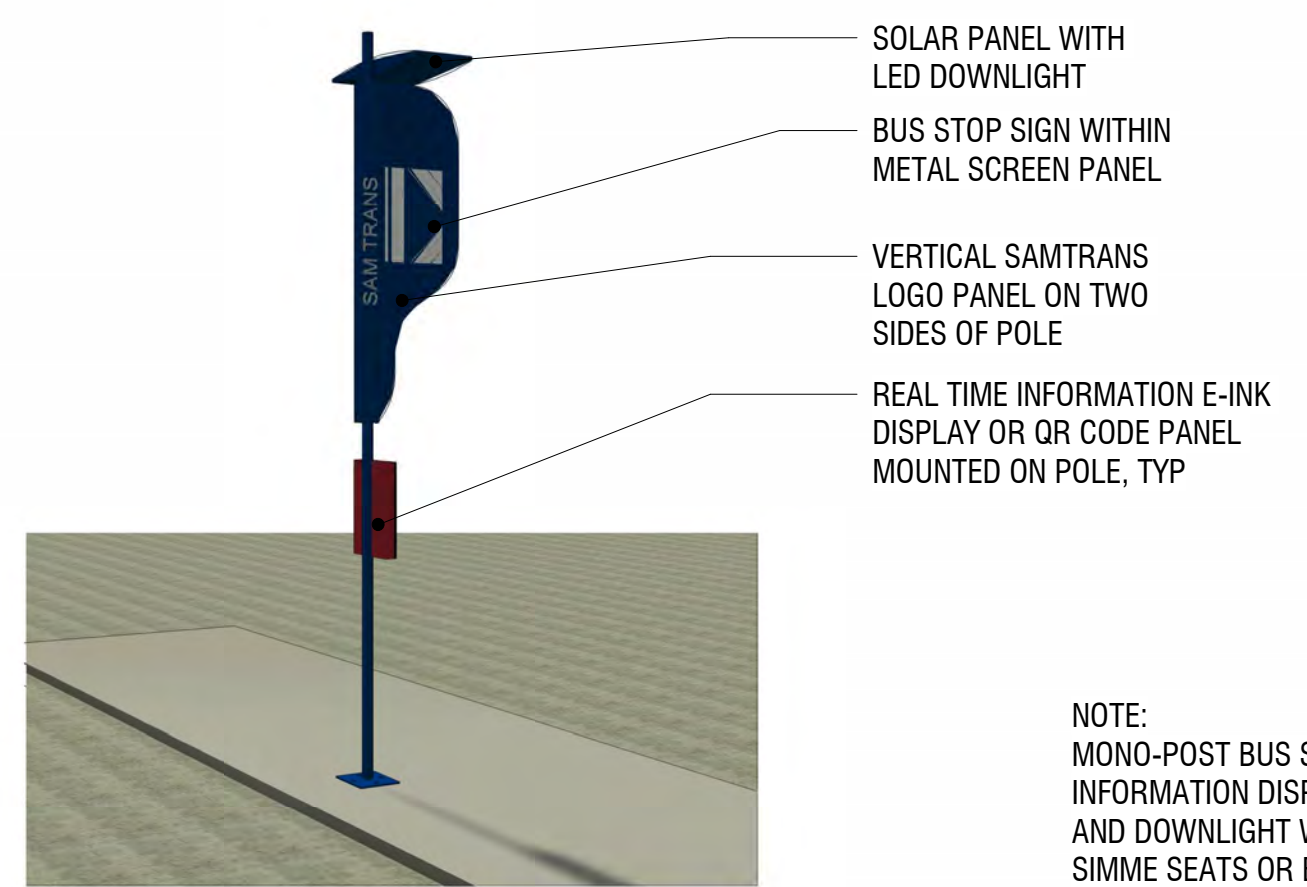


2
ELEVATION ALONG THE STREET
SCALE: 3/4" = 1'-0"

A05

3
RIGHT SIDE ELEVATION 2
SCALE: 3/4" = 1'-0"

A05



4
PERSPECTIVE VIEW
SCALE:

A05

NOTE: MONO-POST BUS SHELTER WITH ROUTE SIGN, REAL TIME INFORMATION DISPLAY, VERTICAL SCREEN, SOLAR PANEL AND DOWNLIGHT WITH ADJACENT OPTIONAL SEATING-SIMME SEATS OR BENCH. BOTH ELEMENTS SHALL BE BOLTED TO THE SIDEWALK.

ALTERNATE OPTION OF GUIDE A RIDE FRAME TUBE KIT OF PARTS INSTEAD OF REAL TIME INFORMATION DISPLAY. SEE SHEET A15.

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STATE OF CALIFORNIA
REGISTERED ARCHITECT
ROBIN CHIANG
exp. 8-30-27

**SAN MATEO COUNTY TRANSIT DISTRICT
BUS STOP IMPROVEMENT PLAN**

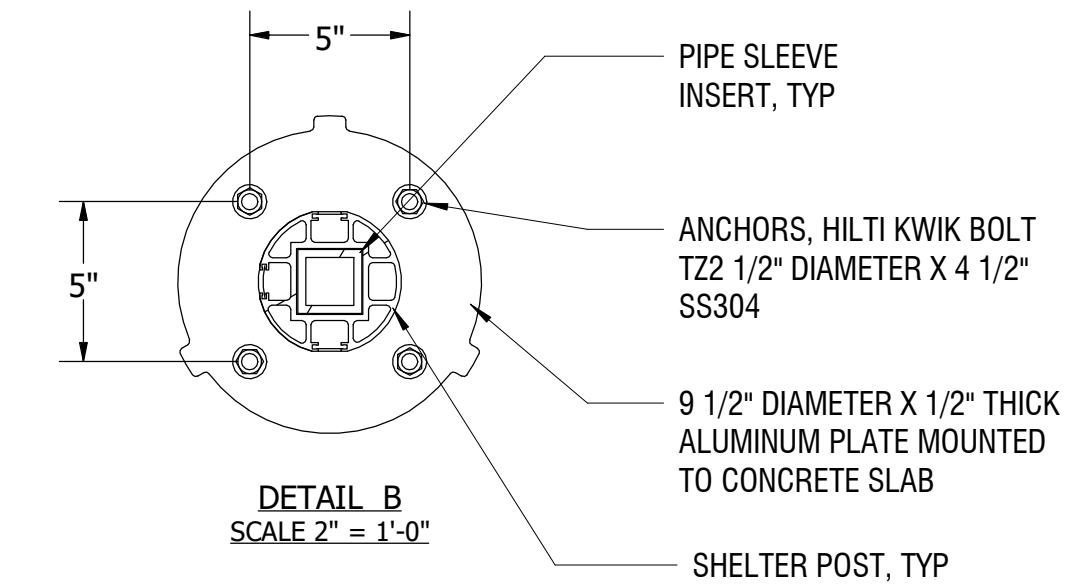
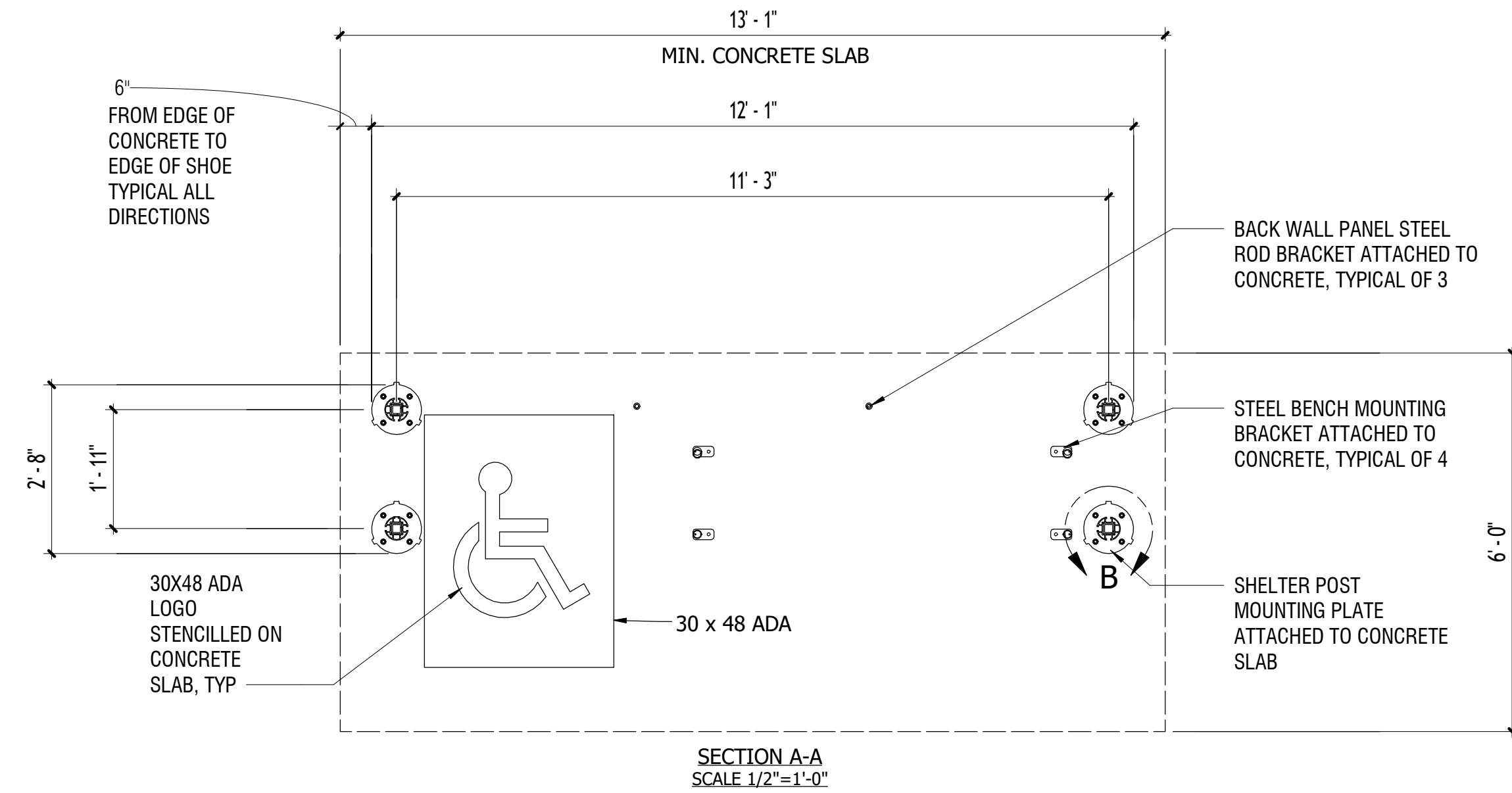
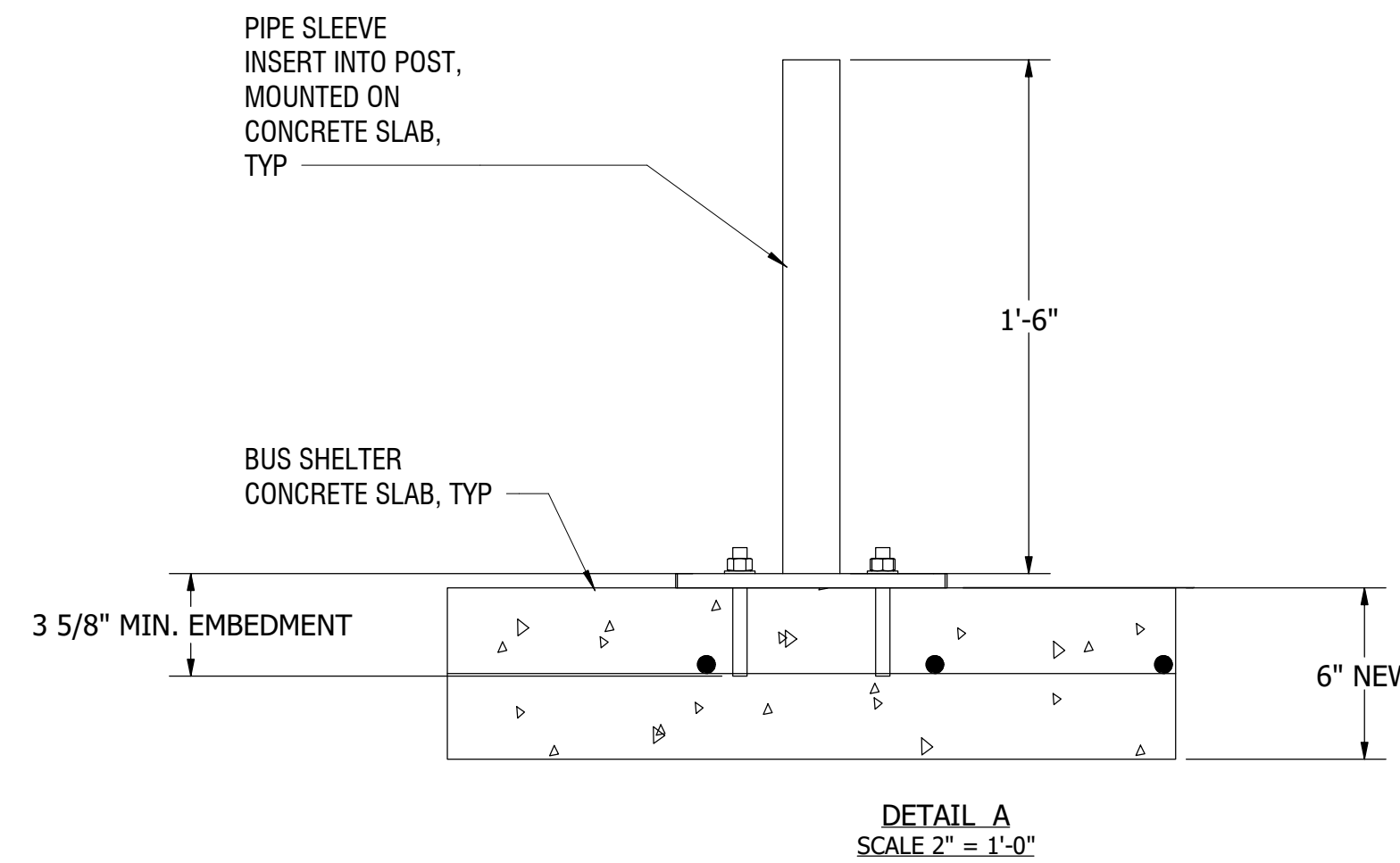
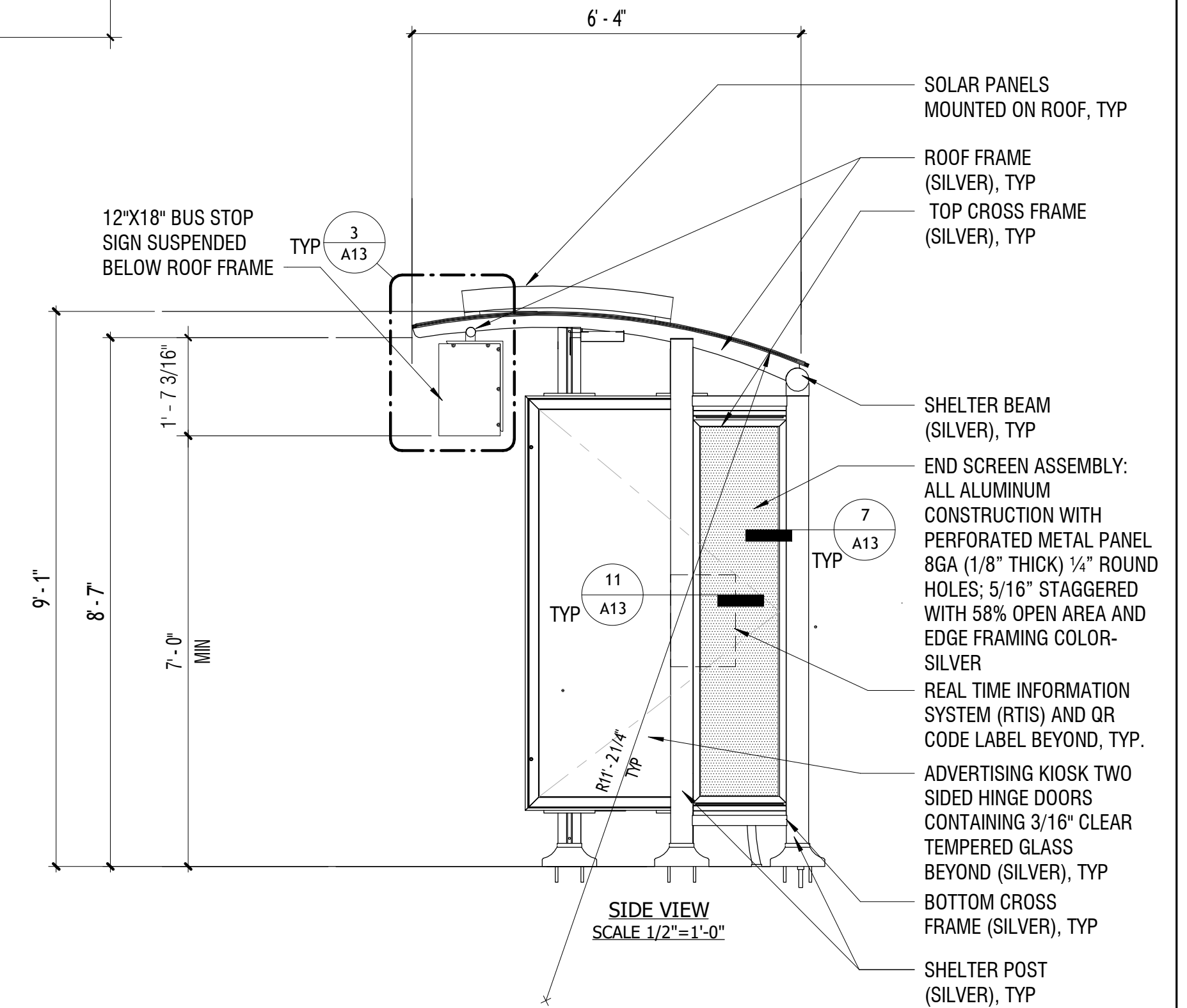
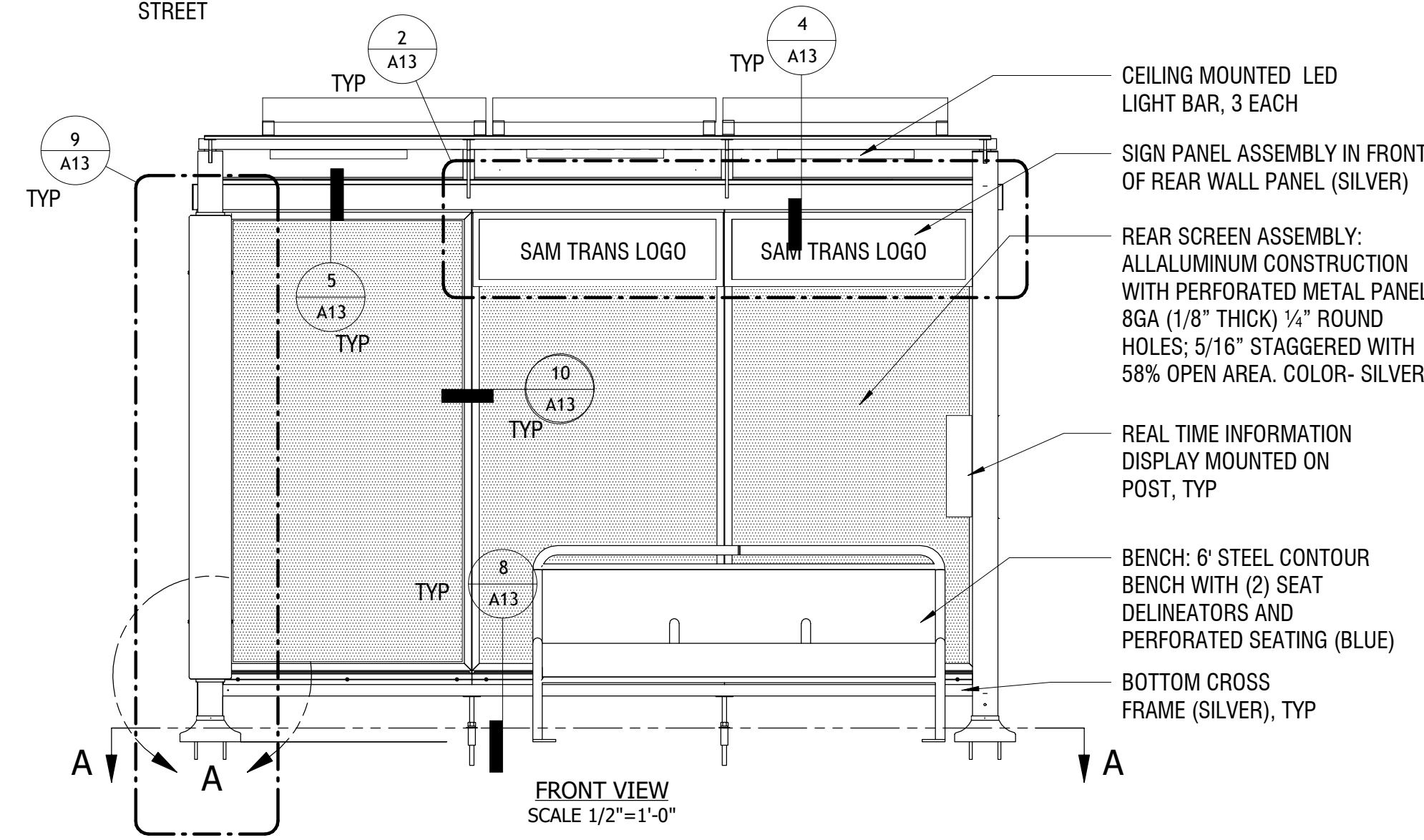
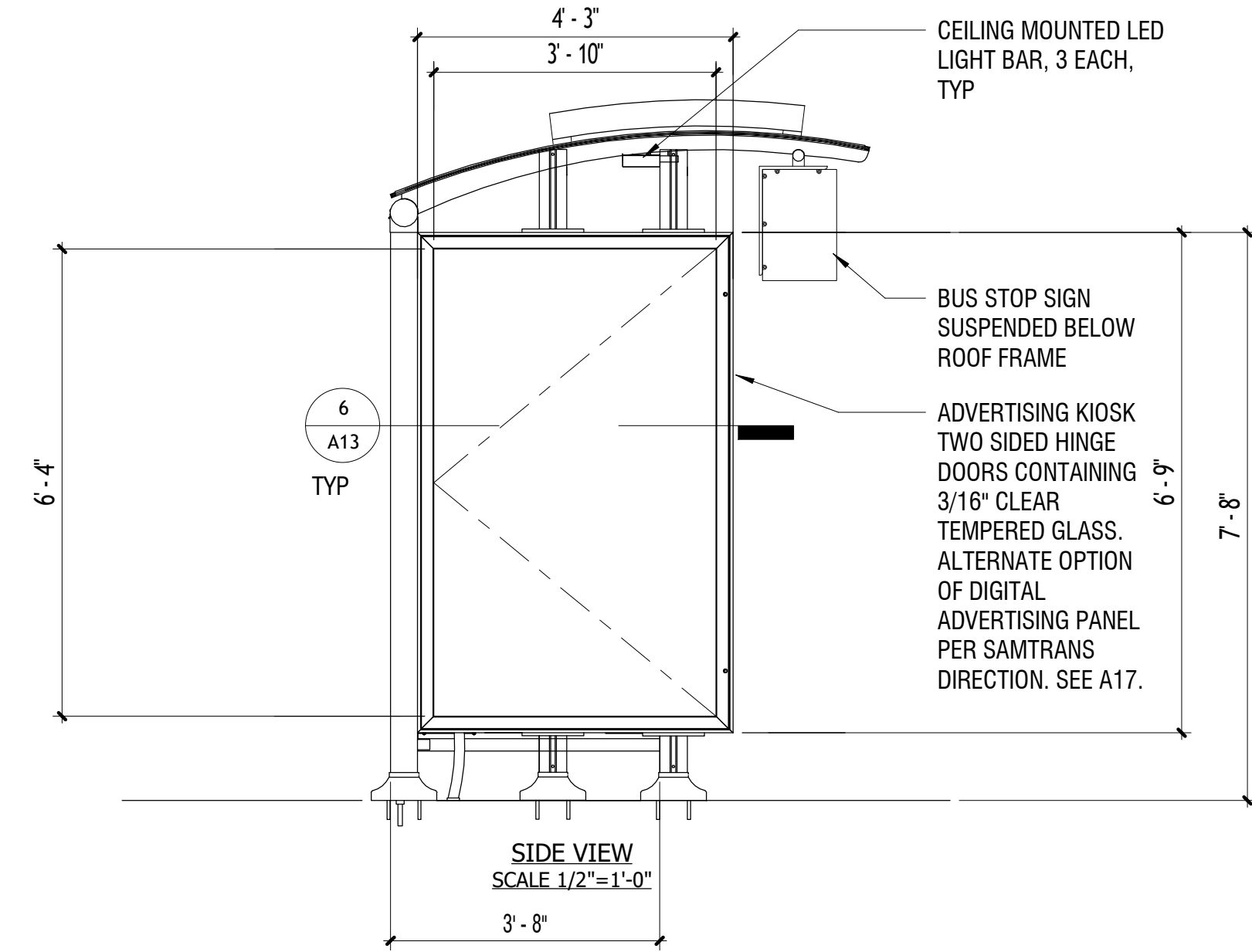
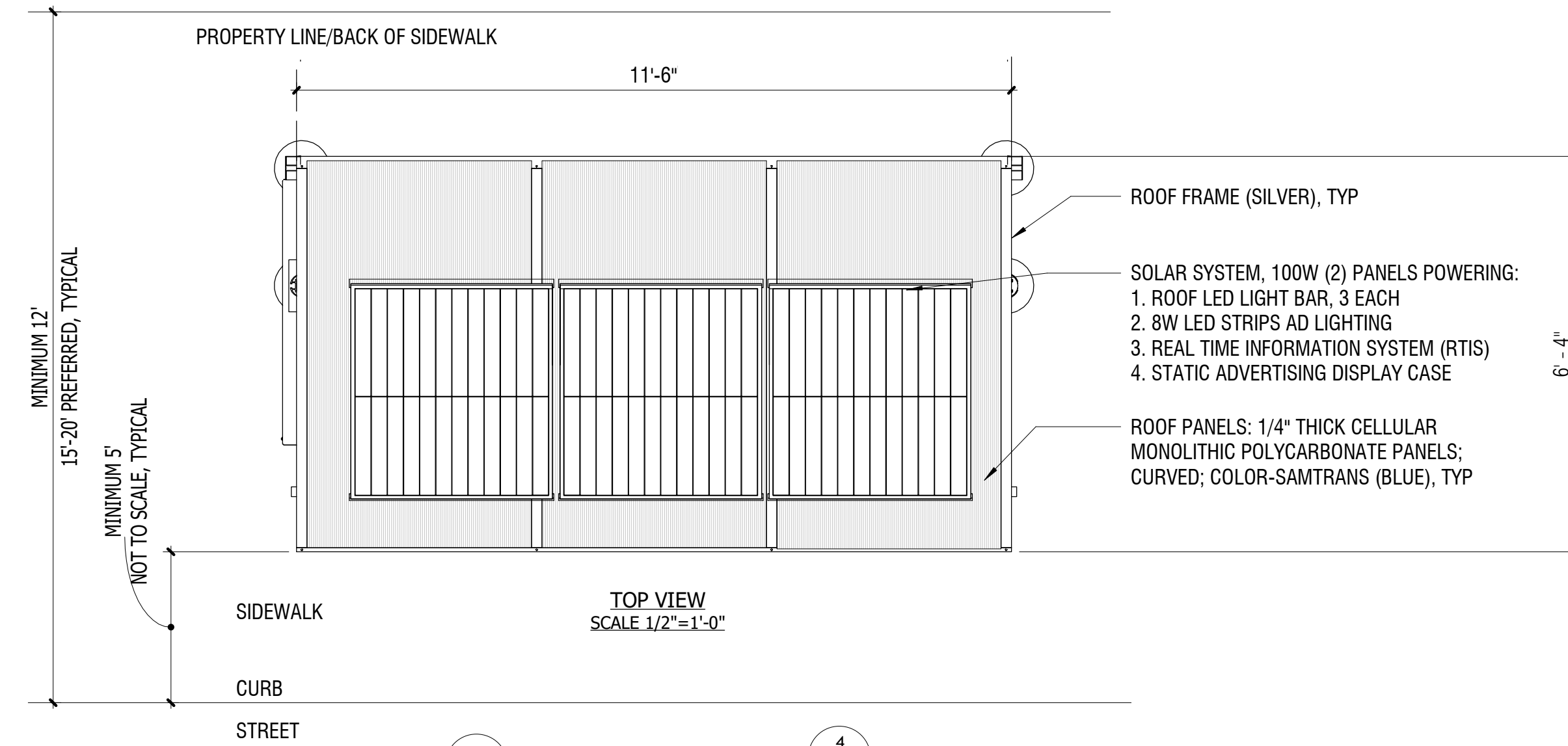
**ARCHITECTURAL
BUS SHELTER KIT OF PARTS
MONO POST BUS STOP POLE**

SIZE: D	SCALE AS NOTED
SHEET NUMBER A05	
PAGE NO.	

GENERAL NOTES:

1. ALL STRUCTURAL STEEL, UNLESS OTHERWISE NOTED, SHALL BE ASTM A-36, MINIMUM YIELD STRENGTH 36,000 PSI.
2. ALL STRUCTURAL ALUMINUM MEMBERS, UNLESS OTHERWISE NOTED, SHALL BE OF ALLOY 6063-T5 OR GREATER.
3. ALL HOLES TO BE DRILLED OR PUNCHED.
4. STEEL WELDING SHALL CONFORM TO AMERICAN WELDING SOCIETY STANDARD D1. 1-10. ELECTRODES SHALL CONFORM TO AWS 5.1, CLASS E70S-5.
5. ALUMINUM WELDING SHALL CONFORM TO AMERICAN WELDING SOCIETY STANDARD D1. 2-08. ELECTRODES SHALL CONFORM TO AWS/SFA 5.10 CLASS ER4043.
6. ALL WELDING TO BE DONE AT MANUFACTURERS FACILITY.
7. ALL CORPORATE PROCEDURES, INCLUDING FABRICATION, MUST BE IN COMPLIANCE WITH MANUFACTURER'S QUALITY CONTROL MANUAL.
8. THE CONCRETE PAD SIZES SHOWN ARE STANDARD MINIMUM REQUIREMENTS FOR THE STRUCTURE AND ARE FOR REFERENCE ONLY. THE PAD MAY NEED TO BE REINFORCED OR ENLARGED DEPENDING ON LOCAL CODES AND LOADING CONDITIONS AND DOES NOT INCLUDE ADA CLEAR PATH REQUIREMENTS.
9. SINGLE PANEL UPGRADE WALL PANEL (LASER CUT FOLIAGE PATTERN) DETAIL SIMILAR TO PERFORATED WALL PANEL DETAILS ON SHEET A013.
10. FOR WINDY CONDITIONS: SEE DETAILS ON SHEET A014 FOR DUAL WALL PANEL WITH LEXAN POLYCARBONATE PANEL IN BETWEEN ASSEMBLY.
11. FOR COLOR AND MATERIAL INFORMATION: REFER TO SHEET A0.
12. BATTERIES TO HAVE NEMA TYPE OF WEATHER PROTECTIVE ENCLOSURE.
13. PAINT SHELTERS: SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS. ALTERNATE: SHELTERS AT COASTAL AREAS- 70% FLUROPON 70% PVDF EXTERIOR COATING.
14. GRAPHICS PER SAMTRANS DIRECTION. LOGO DESIGN IS PLACEHOLDER. CREATIVE SERVICES/COMMS TO PROPOSE MORE APPROPRIATE DESIGN/SIGN COPY.
15. ALTERNATE: OPTION/ALTERNATE FOR AD PANEL ON SHELTER BACK PANELS, TYPICAL.
16. REFER TO SHEET A15 FOR AMENITY ACCESSORIES (BENCH, TRASH RECEPTACLE, REAL TIME INFORMATION PANEL, PERCH SEATING AND SIMME SEAT).
17. REFER TO SHEET A16 FOR AMENITY ACCESSORIES ALTERNATE SINGLE PANEL RCH INFORMATION HOLDER INSTEAD OF REAL TIME INFORMATION PANEL AT BUS SHELTER.
18. QR CODE 3"X3" LABEL ON METAL PLATE FRAME MOUNTED ON SHELTER POST; MAXIMUM 48" ABOVE FINISH SLAB, TYPICAL.
19. BUS STOP SIGN BELOW SHELTER ROOF: LARGER SIGNS WILL BE INSTALLED OUTSIDE ADJACENT TO SHELTER AS DETERMINED BY SAMTRANS.
20. ALTERNATE OPTION: DIGITAL DISPLAY PANELS IN PLACE OF STATIC ADVERTISING PANEL ON THE LEFT SIDE OF SHELTER. TBD BY SAMTRANS
21. BUS SHELTER AND MONO-POST BASE: PROVIDE ACCOMMODATIONS FOR SLOPE SITES WITH MODIFIED BASE AS NEEDED.

1. STANDARD FOUR POST BUS SHELTER CURVED ROOF-THREE WALL PANEL



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**SAN MATEO COUNTY TRANSIT DISTRICT
BUS STOP IMPROVEMENT PLAN**

**ARCHITECTURAL
BUS SHELTER KIT OF PARTS
FOUR POST CURVED ROOF STANDARD
LENGTH 54831**

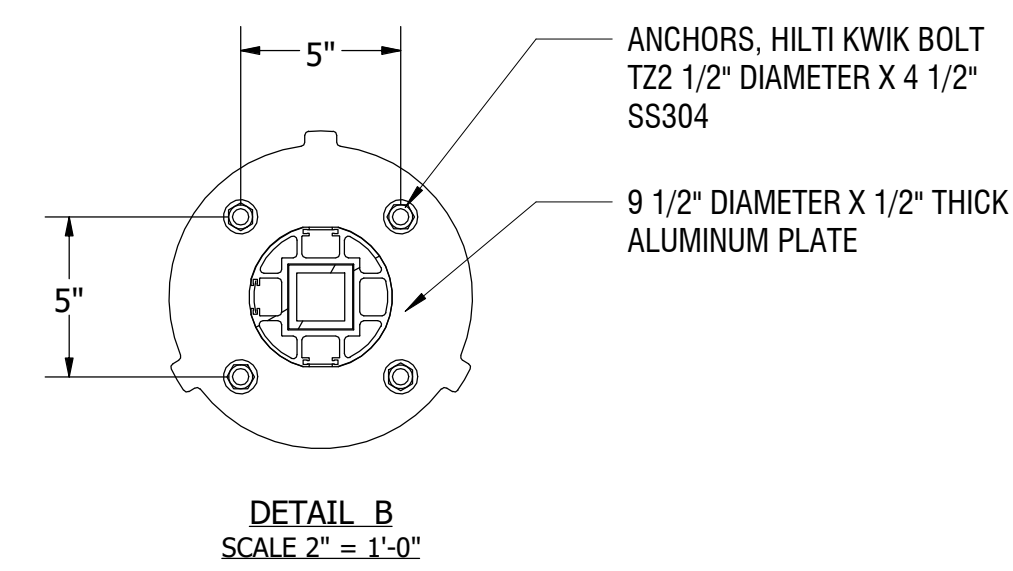
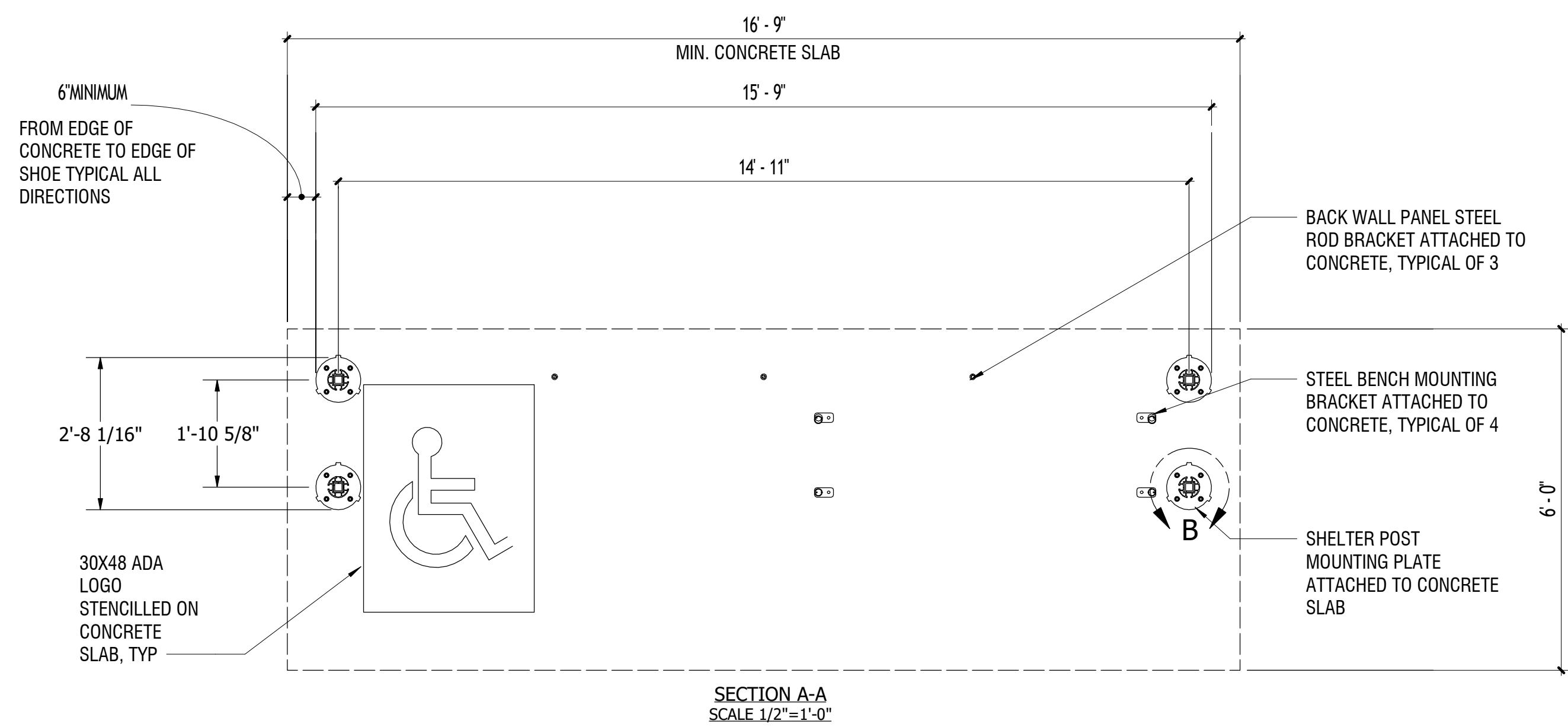
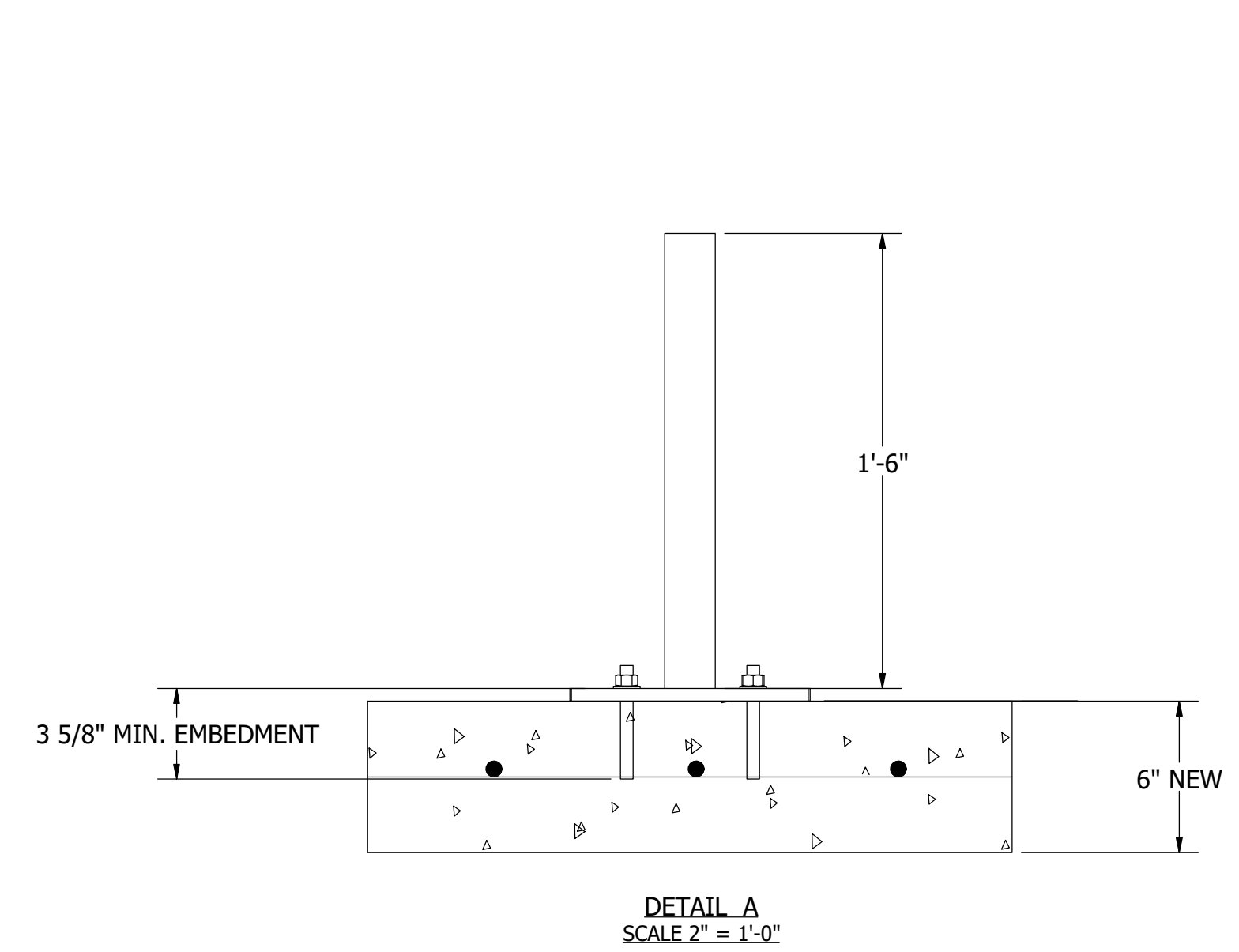
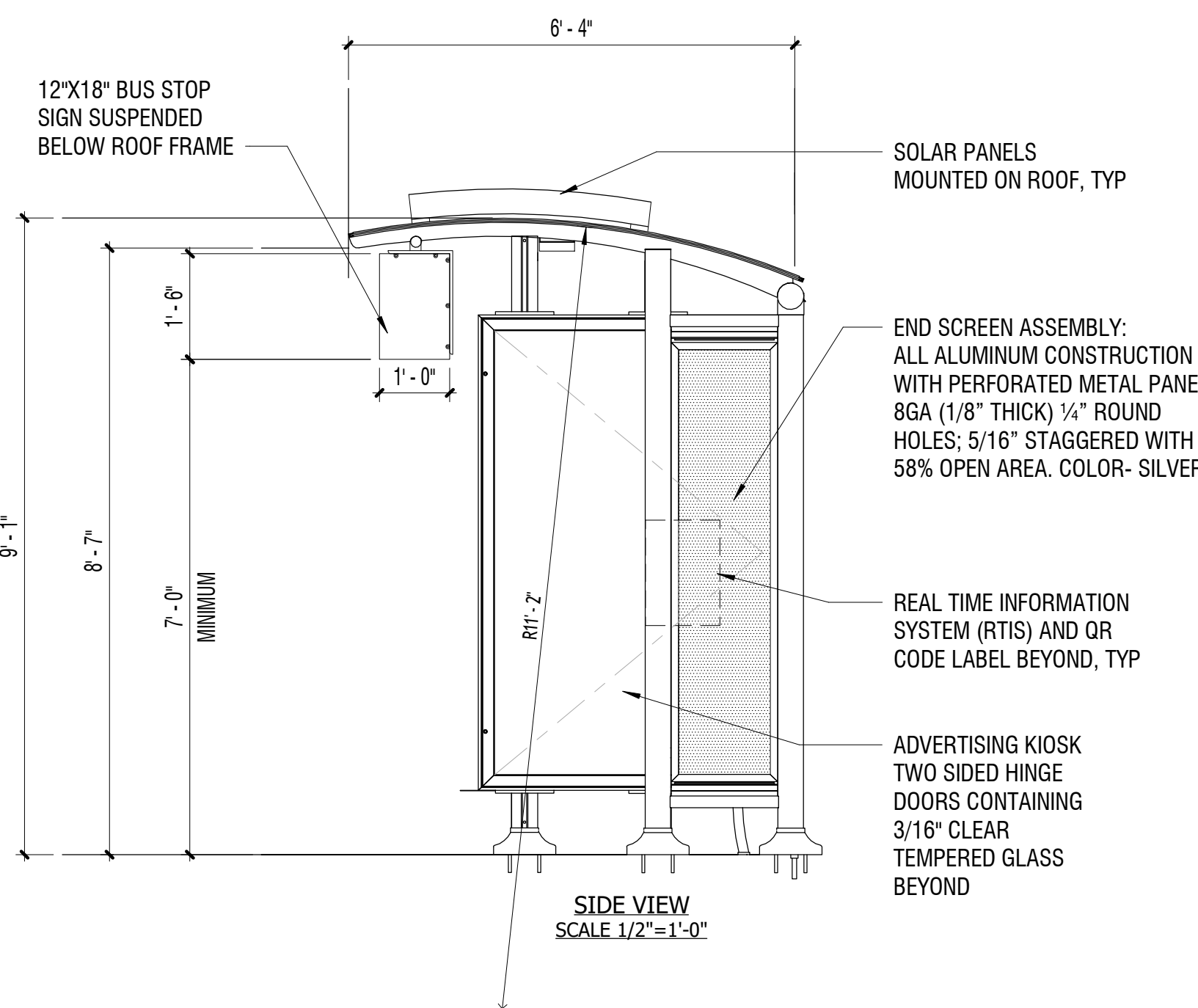
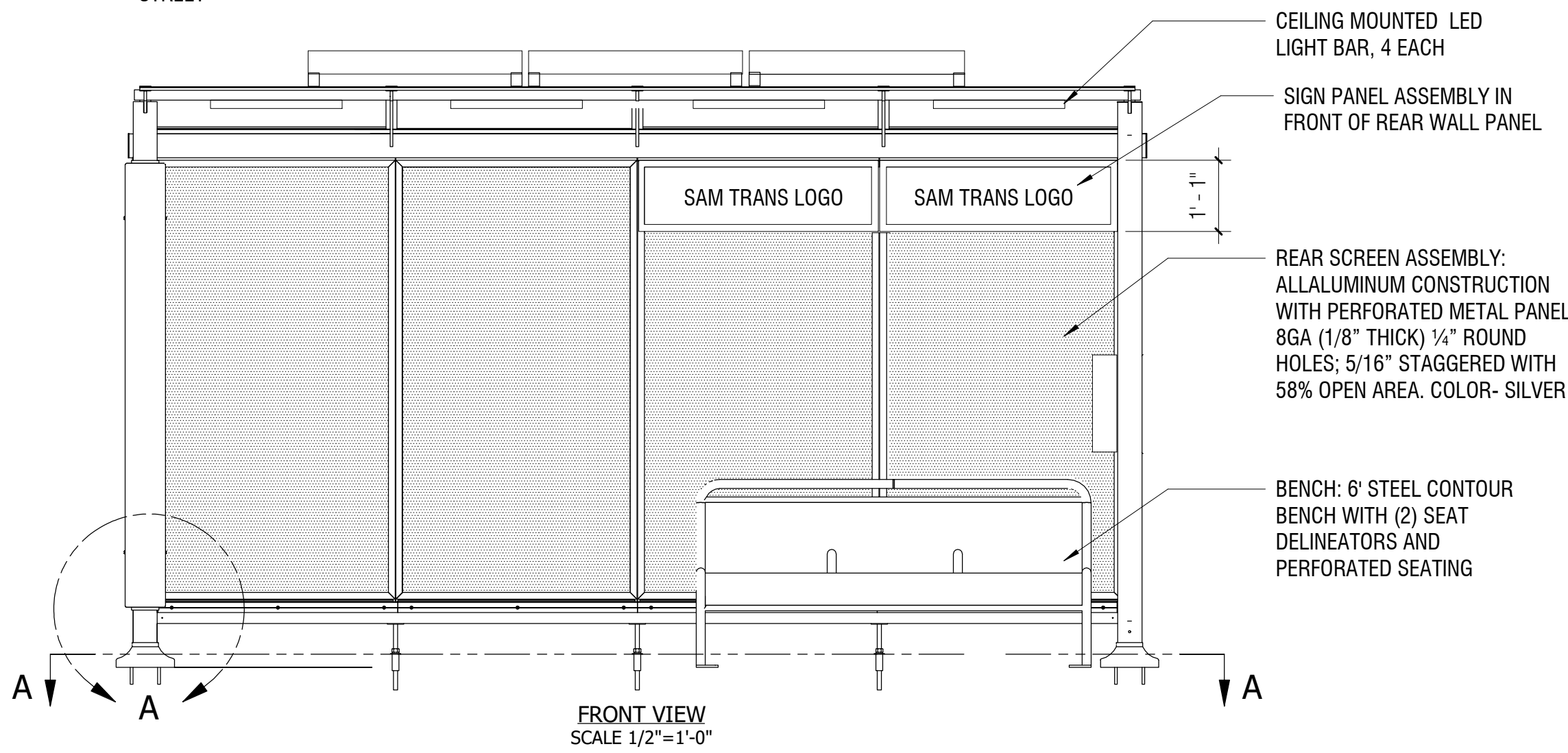
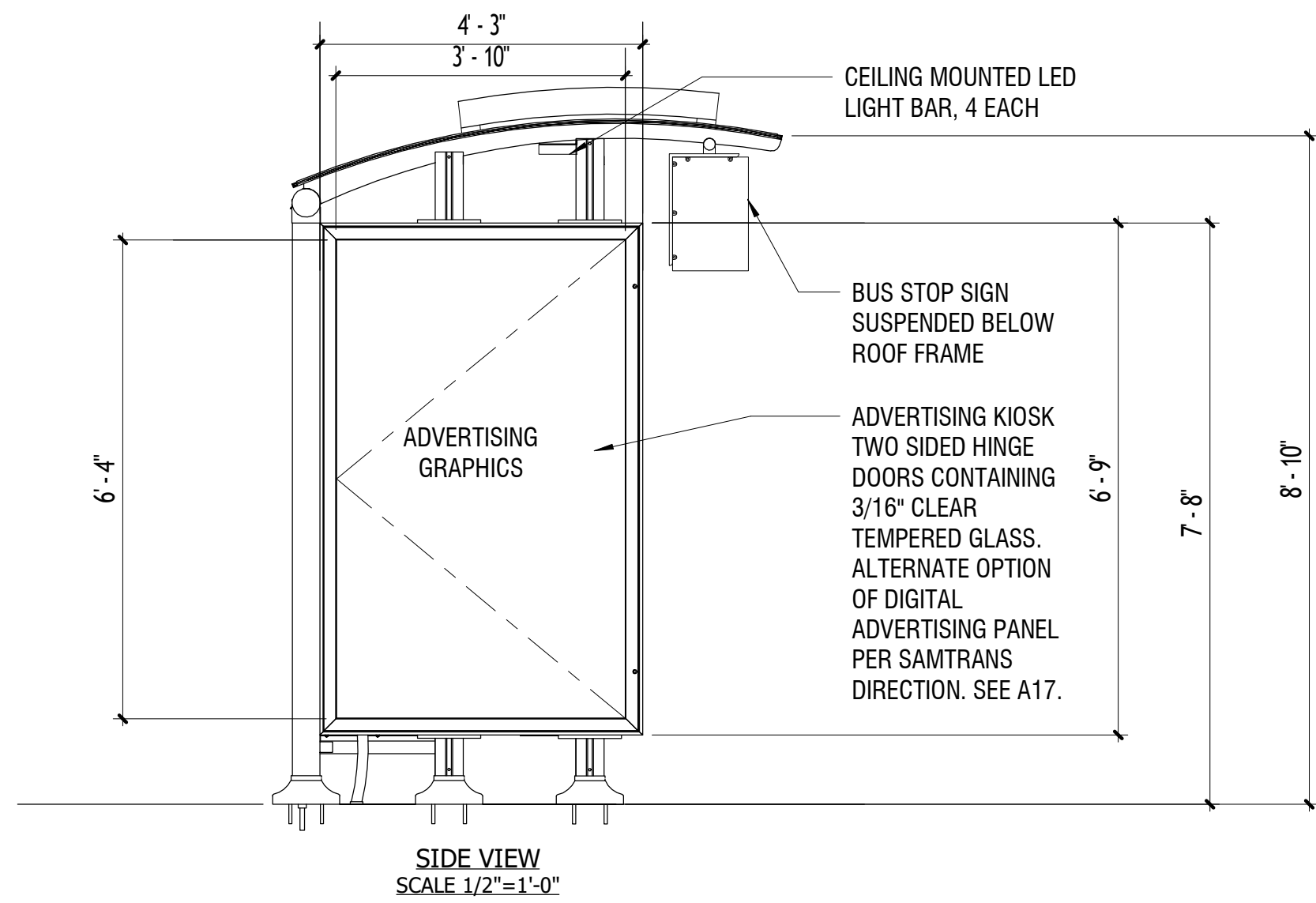
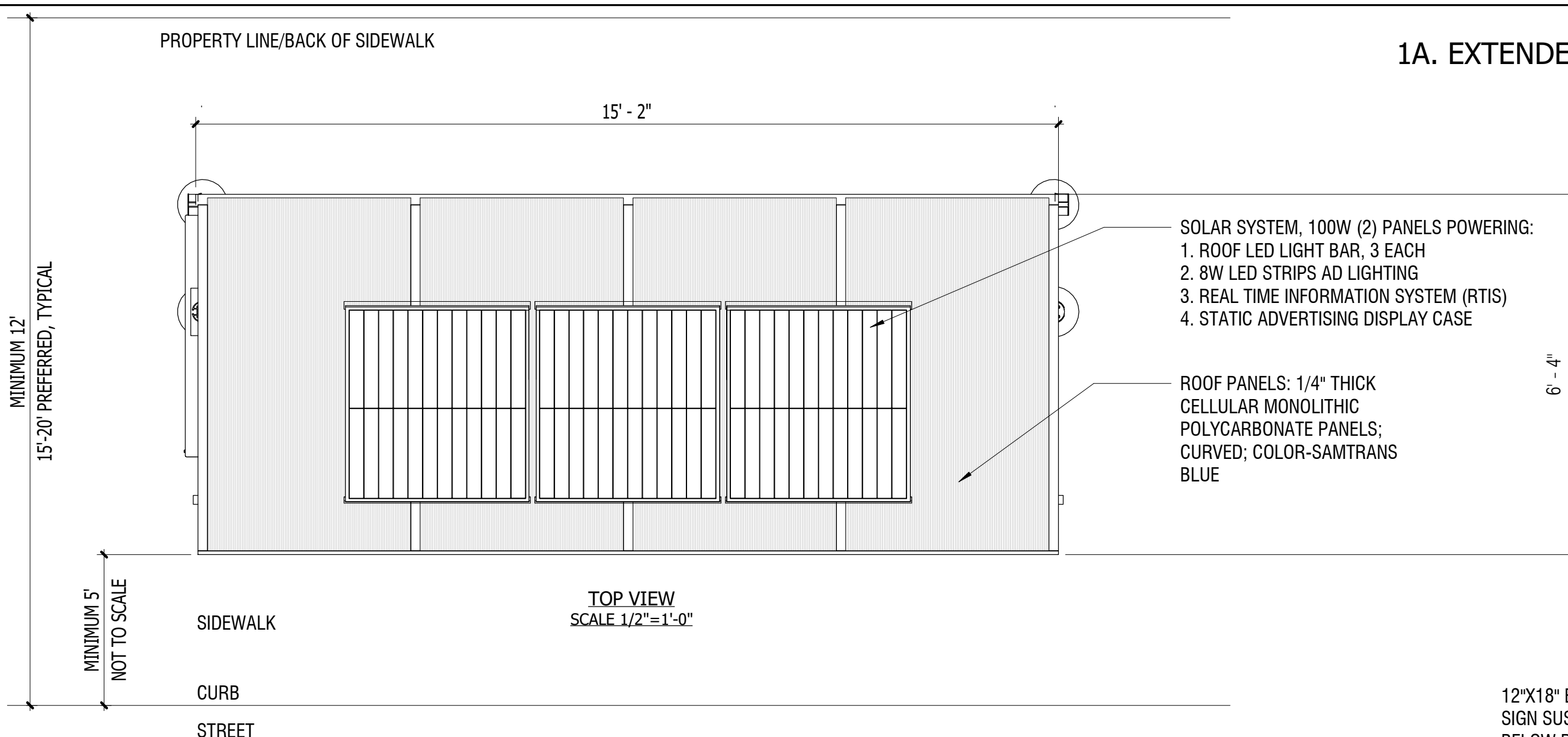
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54831-00

GENERAL NOTES:

1. ALL STRUCTURAL STEEL, UNLESS OTHERWISE NOTED, SHALL BE ASTM A-36, MINIMUM YIELD STRENGTH 36,000 PSI.
2. ALL STRUCTURAL ALUMINUM MEMBERS, UNLESS OTHERWISE NOTED, SHALL BE OF ALLOY 6063-T5 OR GREATER.
3. ALL HOLES TO BE DRILLED OR PUNCHED.
4. STEEL WELDING SHALL CONFORM TO AMERICAN WELDING SOCIETY STANDARD D1. 1-10. ELECTRODES SHALL CONFORM TO AWS 5.1, CLASS E70S-5.
5. ALUMINUM WELDING SHALL CONFORM TO AMERICAN WELDING SOCIETY STANDARD D1. 2-08. ELECTRODES SHALL CONFORM TO AWS/SFA 5.10 CLASS ER4043.
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9. SINGLE PANEL UPGRADE WALL PANEL (LASER CUT FOLIAGE PATTERN) DETAIL SIMILAR TO PERFORATED WALL PANEL DETAILS ON SHEET A013.
10. FOR WINDY CONDITIONS: SEE DETAILS ON SHEET A014 FOR DUAL WALL PANEL WITH LEXAN POLYCARBONATE PANEL IN BETWEEN ASSEMBLY.
11. FOR COLOR AND MATERIAL INFORMATION: REFER TO SHEET A0.
12. BATTERIES TO HAVE NEMA TYPE OF WEATHER PROTECTIVE ENCLOSURE.
13. PAINT SHELTERS: SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS. ALTERNATE: SHELTERS AT COASTAL AREAS- 70% FLUROPON 70% PVDF EXTERIOR COATING.
14. GRAPHICS PER SAMTRANS DIRECTION. LOGO DESIGN IS PLACEHOLDER. CREATIVE SERVICES/COMMS TO PROPOSE MORE APPROPRIATE DESIGN/SIGN COPY.
15. ALTERNATE: OPTION/ALTERNATE FOR AD PANEL ON SHELTER BACK PANELS, TYPICAL.
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20. ALTERNATE OPTION: DIGITAL DISPLAY PANELS IN PLACE OF STATIC ADVERTISING PANEL ON THE LEFT SIDE OF SHELTER. TBD BY SAMTRANS
21. BUS SHELTER AND MONO-POST BASE: PROVIDE ACCOMMODATIONS FOR SLOPE SITES WITH MODIFIED BASE AS NEEDED.

1A. EXTENDED FOUR POST BUS SHELTER CURVED ROOF-FOUR WALL PANEL



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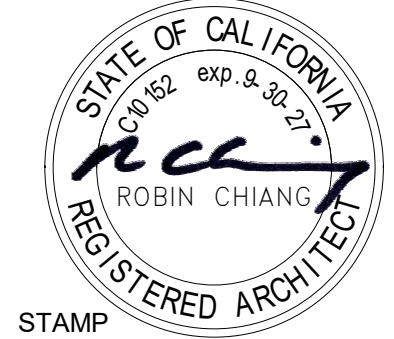
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DATE:
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**SAN MATEO COUNTY TRANSIT DISTRICT
BUS STOP IMPROVEMENT PLAN**

**ARCHITECTURAL
BUS SHELTER KIT OF PARTS
FOUR POST CURVED ROOF EXTENDED
LENGTH 54833**

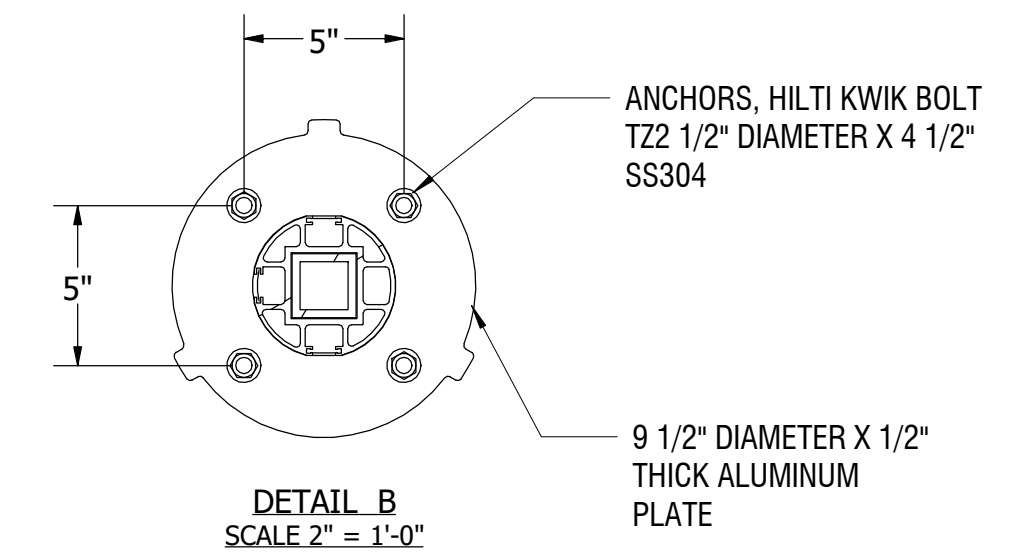
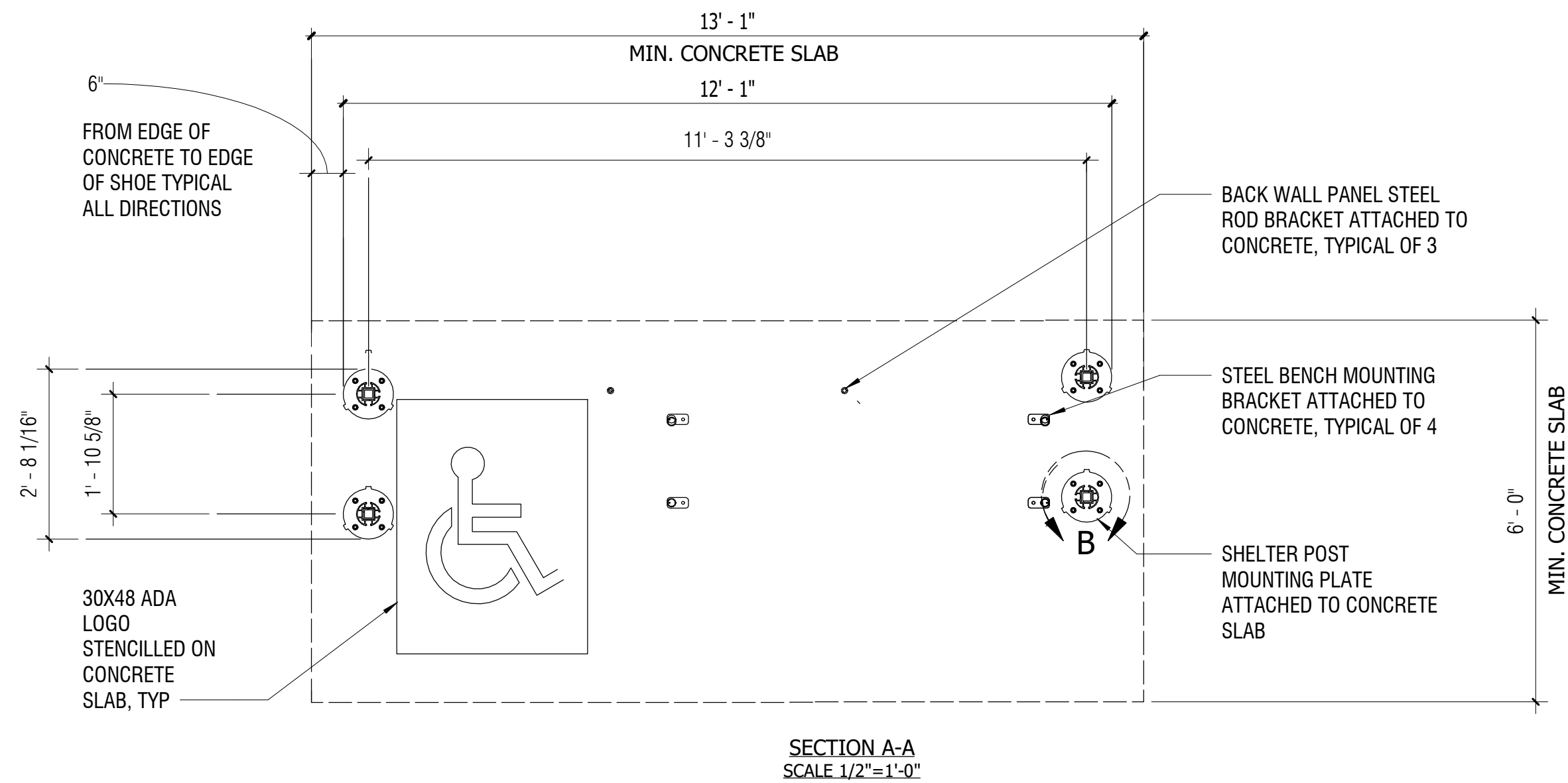
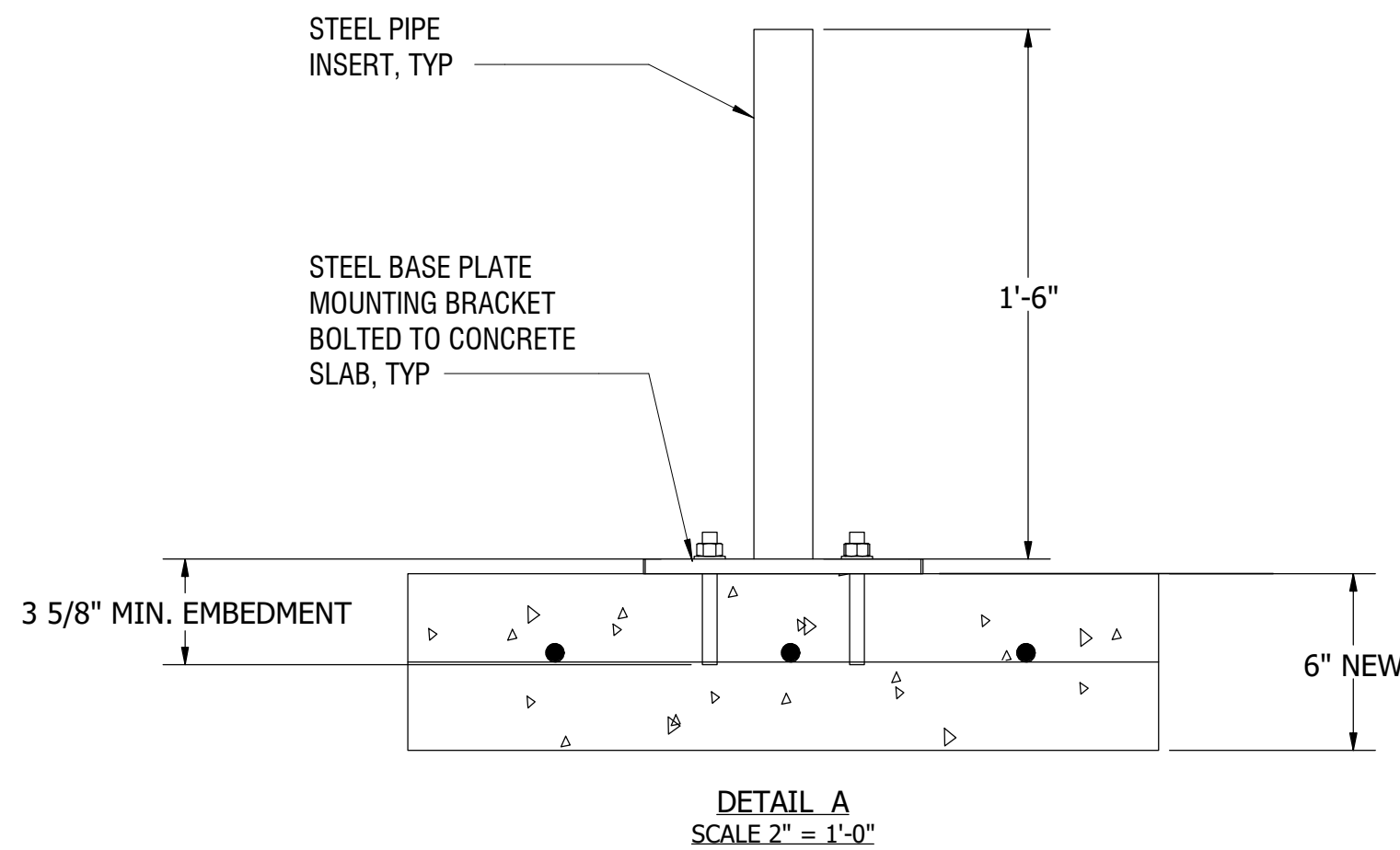
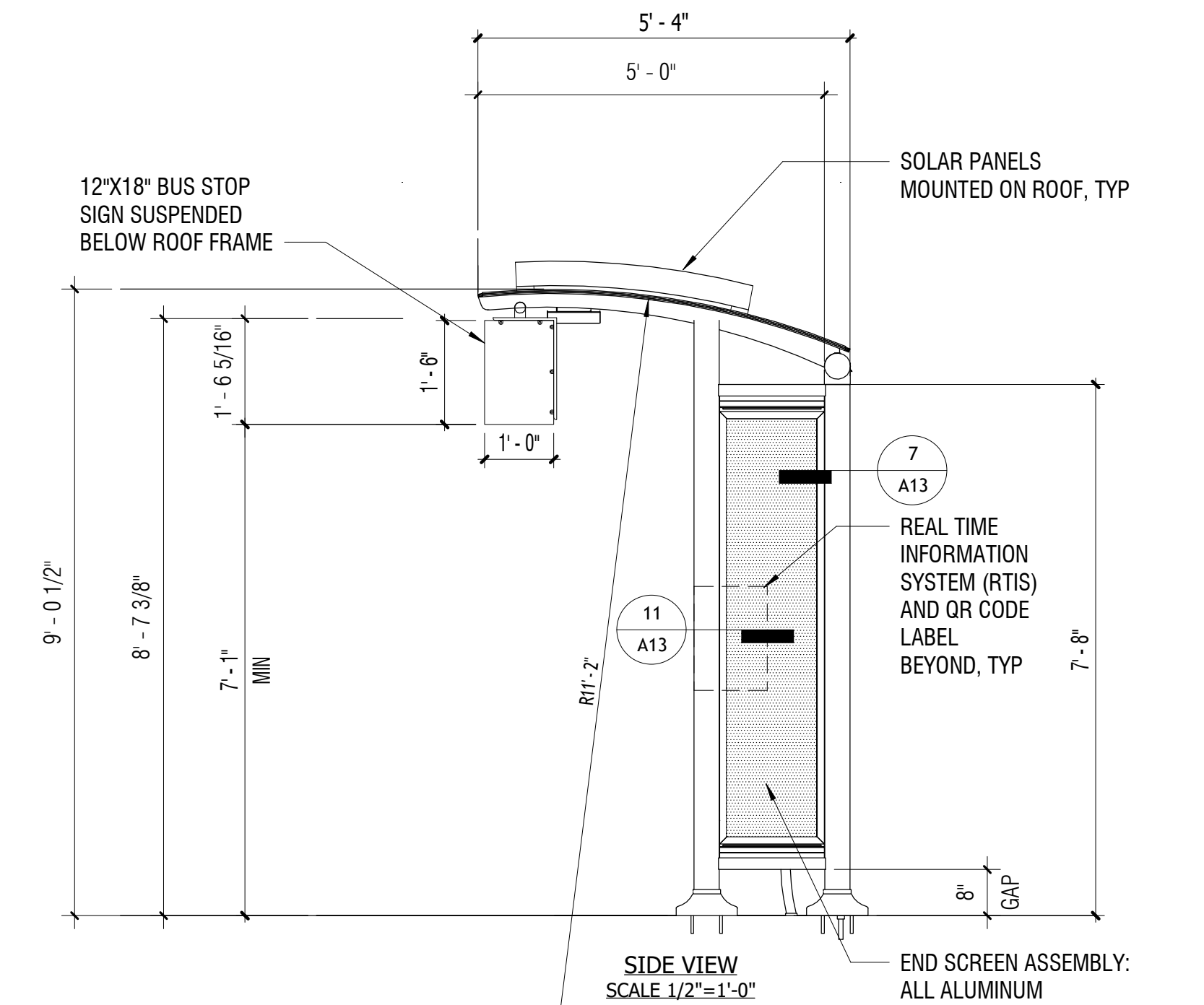
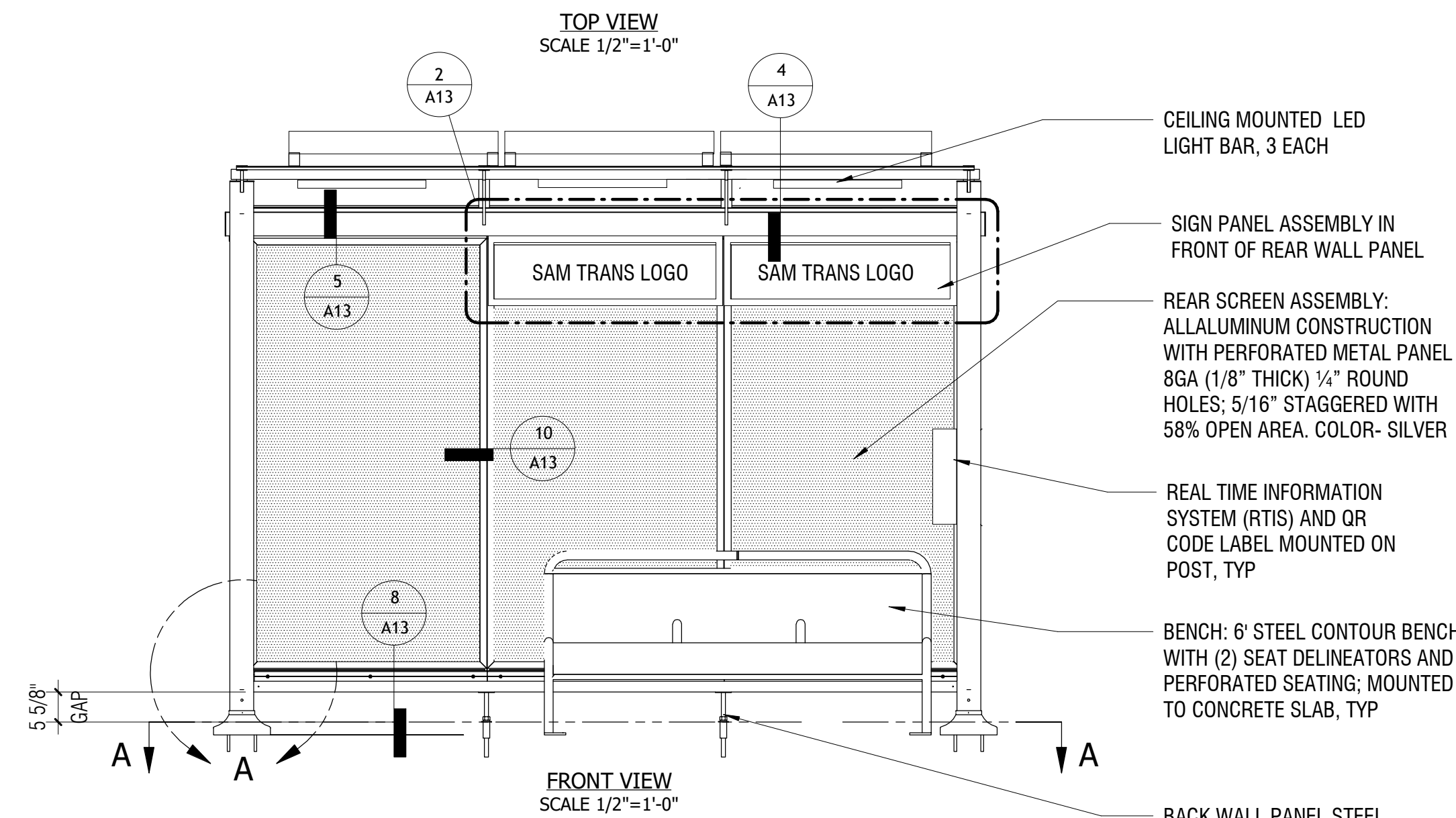
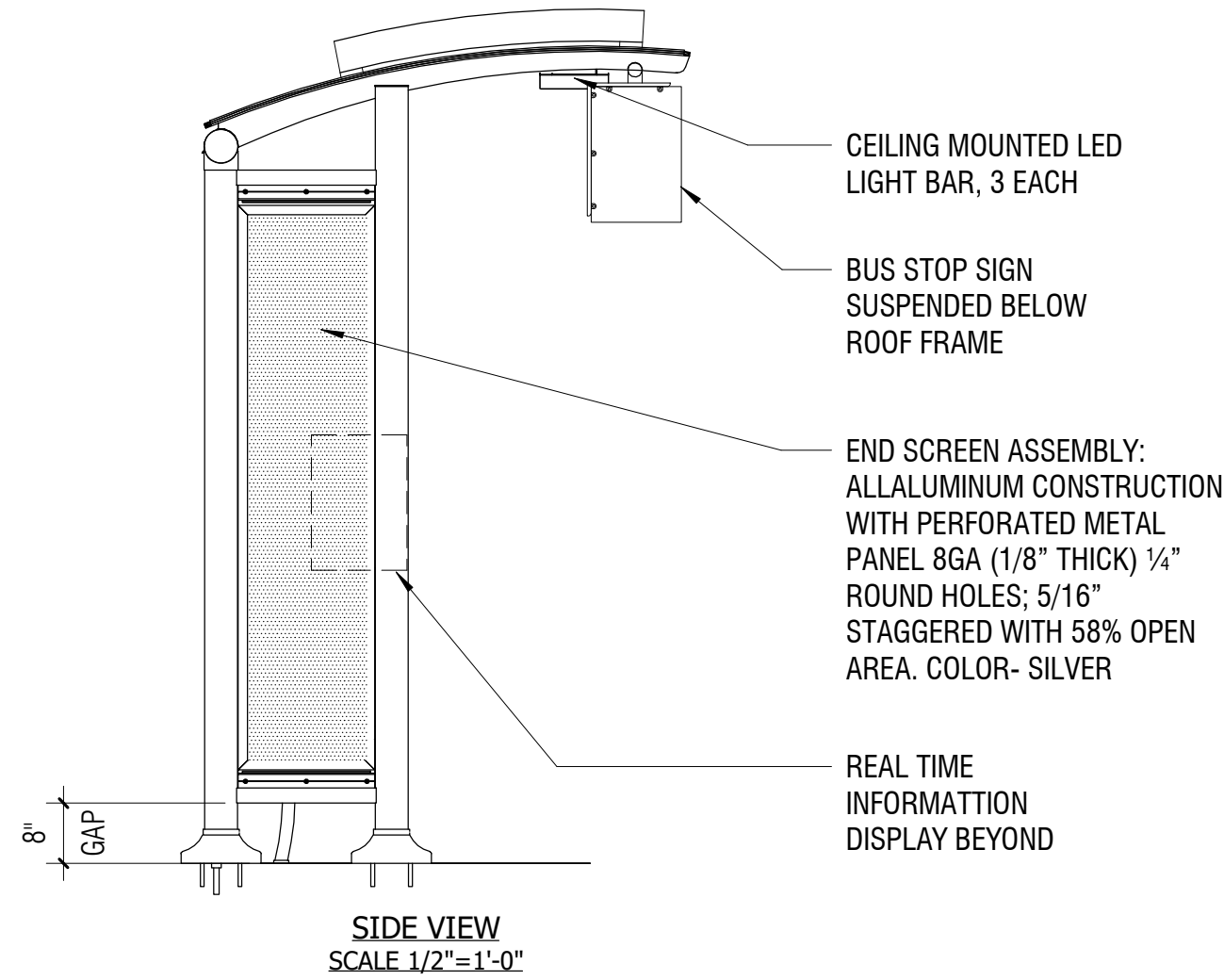
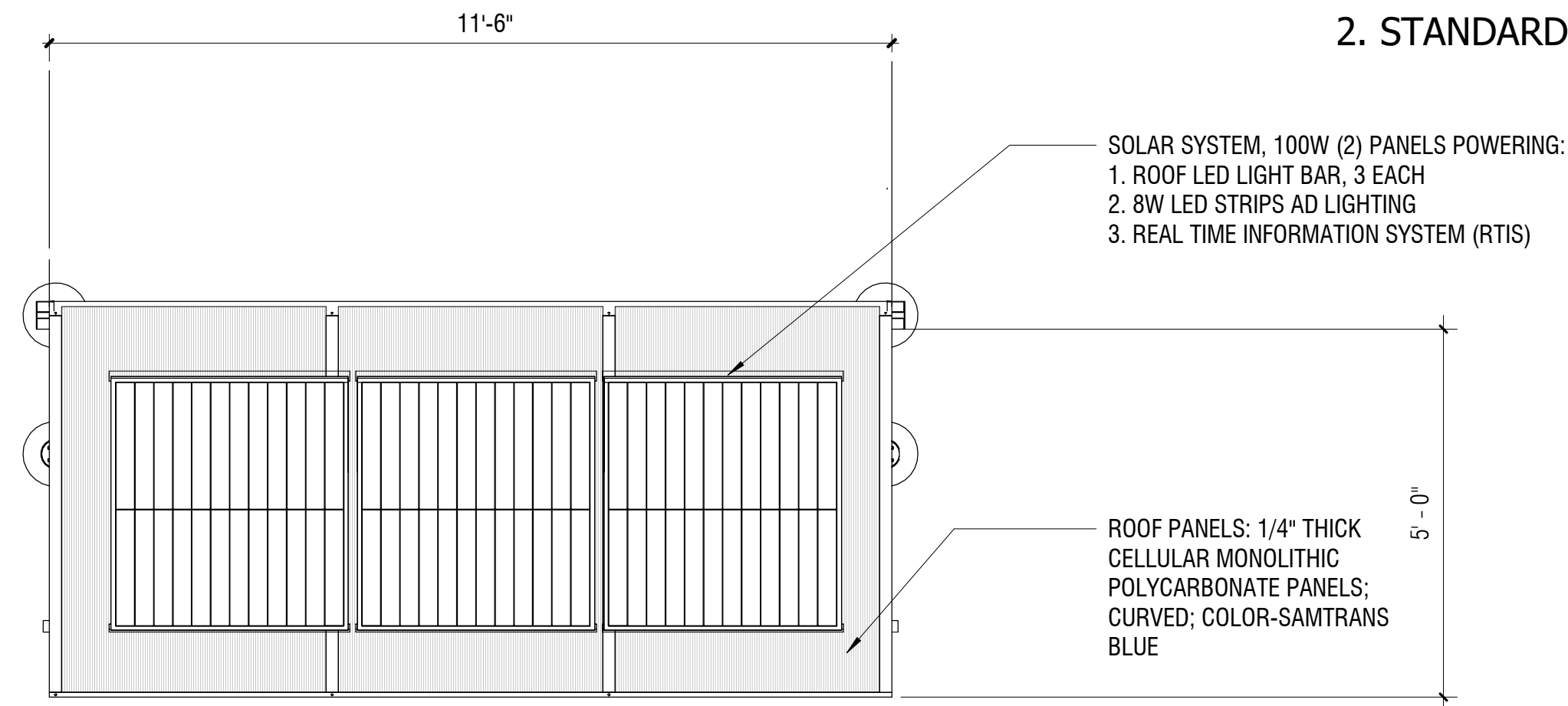
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SHEET NUMBER: A07	
PAGE NO.	

54833-00

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1. ALL STRUCTURAL STEEL, UNLESS OTHERWISE NOTED, SHALL BE ASTM A-36, MINIMUM YIELD STRENGTH 36,000 PSI.
2. ALL STRUCTURAL ALUMINUM MEMBERS, UNLESS OTHERWISE NOTED, SHALL BE OF ALLOY 6063-T5 OR GREATER.
3. ALL HOLES TO BE DRILLED OR PUNCHED.
4. STEEL WELDING SHALL CONFORM TO AMERICAN WELDING SOCIETY STANDARD D1. 1-10. ELECTRODES SHALL CONFORM TO AWS 5.1, CLASS E70S-5.
5. ALUMINUM WELDING SHALL CONFORM TO AMERICAN WELDING SOCIETY STANDARD D1. 2-08. ELECTRODES SHALL CONFORM TO AWS/SFA 5.10 CLASS ER4043.
6. ALL WELDING TO BE DONE AT MANUFACTURERS FACILITY.
7. ALL CORPORATE PROCEDURES, INCLUDING FABRICATION, MUST BE IN COMPLIANCE WITH MANUFACTURER'S QUALITY CONTROL MANUAL.
8. THE CONCRETE PAD SIZES SHOWN ARE STANDARD MINIMUM REQUIREMENTS FOR THE STRUCTURE AND ARE FOR REFERENCE ONLY. THE PAD MAY NEED TO BE REINFORCED OR ENLARGED DEPENDING ON LOCAL CODES AND LOADING CONDITIONS AND DOES NOT INCLUDE ADA CLEAR PATH REQUIREMENTS.
9. SINGLE PANEL UPGRADE WALL PANEL (LASER CUT FOLIAGE PATTERN) DETAIL SIMILAR TO PERFORATED WALL PANEL DETAILS ON SHEET A013.
10. FOR WINDY CONDITIONS: SEE DETAILS ON SHEET A014 FOR DUAL WALL PANEL WITH LEXAN POLYCARBONATE PANEL IN BETWEEN ASSEMBLY.
11. FOR COLOR AND MATERIAL INFORMATION: REFER TO SHEET A0.
12. BATTERIES TO HAVE NEMA TYPE OF WEATHER PROTECTIVE ENCLOSURE.
13. PAINT SHELTERS: SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS. ALTERNATE: SHELTERS AT COASTAL AREAS- 70% FLUOROPOLYMER 70% PVDF EXTERIOR COATING.
14. GRAPHICS PER SAMTRANS DIRECTION. LOGO DESIGN IS PLACEHOLDER. CREATIVE SERVICES/COMMS TO PROPOSE MORE APPROPRIATE DESIGN/SIGN COPY.
15. ALTERNATE: OPTION/ALTERNATE FOR AD PANEL ON SHELTER BACK PANELS, TYPICAL.
16. REFER TO SHEET A15 FOR AMENITY ACCESSORIES (BENCH, TRASH RECEPTACLE, REAL TIME INFORMATION PANEL, PERCH SEATING AND SIMME SEAT.
17. REFER TO SHEET A16 FOR AMENITY ACCESSORIES ALTERNATE SINGLE PANEL RCH INFORMATION HOLDER INSTEAD OF REAL TIME INFORMATION PANEL AT BUS SHELTER.
18. QR CODE 3"X3" LABEL ON METAL PLATE FRAME MOUNTED ON SHELTER POST; MAXIMUM 48" ABOVE FINISH SLAB, TYPICAL.
19. BUS STOP SIGN BELOW SHELTER ROOF: LARGER SIGNS WILL BE INSTALLED OUTSIDE ADJACENT TO SHELTER AS DETERMINED BY SAMTRANS.
20. ALTERNATE OPTION: DIGITAL DISPLAY PANELS IN PLACE OF STATIC ADVERTISING PANEL ON THE LEFT SIDE OF SHELTER. TBD BY SAMTRANS.
21. BUS SHELTER AND MONO-POST BASE: PROVIDE ACCOMMODATIONS FOR SLOPE SITES WITH MODIFIED BASE AS NEEDED.

2. STANDARD FOUR POST BUS NARROW SHELTER CURVED ROOF-THREE WALL PANEL



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REV.	DATE	BY	SUB	APP.	DESCRIPTION	REV.	DATE	BY	SUB	APP.	DESCRIPTION
	12/17/2025				FINAL SUBMITTAL						

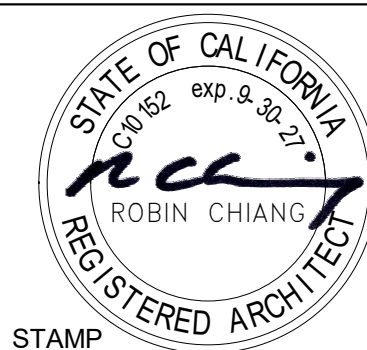
DESIGNED:
R. BUTIONG
DRAWN:
E. PETRIE
CHECKED:
R. BUTIONG
APPROVED:
R. CHIANG
DATE:
11/11/25

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Robin Chiang & Company
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San Francisco, CA 94103



**SAN MATEO COUNTY TRANSIT DISTRICT
BUS STOP IMPROVEMENT PLAN**

**ARCHITECTURAL
BUS SHELTER KIT OF PARTS
FOUR POST CURVED ROOF STANDARD
LENGTH NARROW 54830**

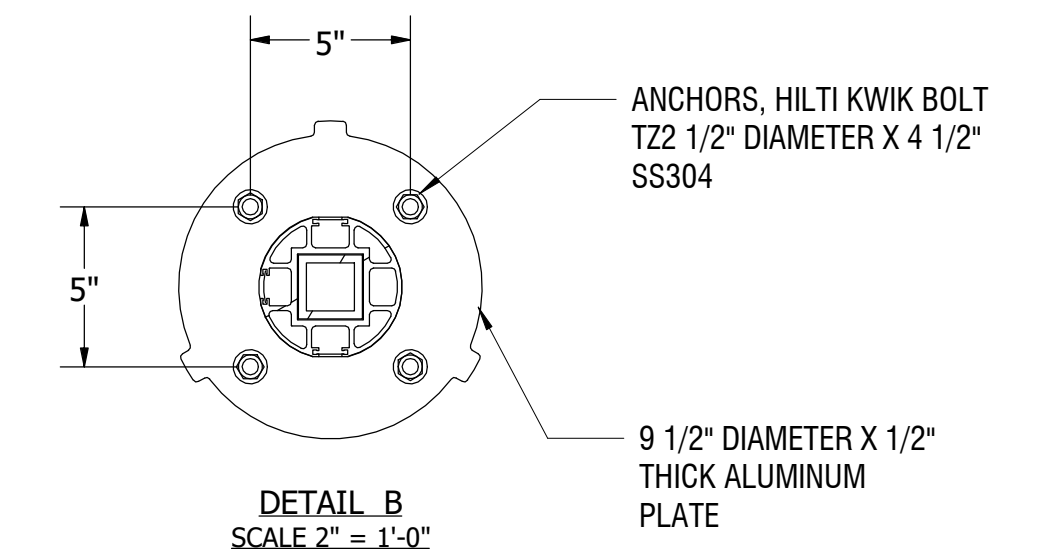
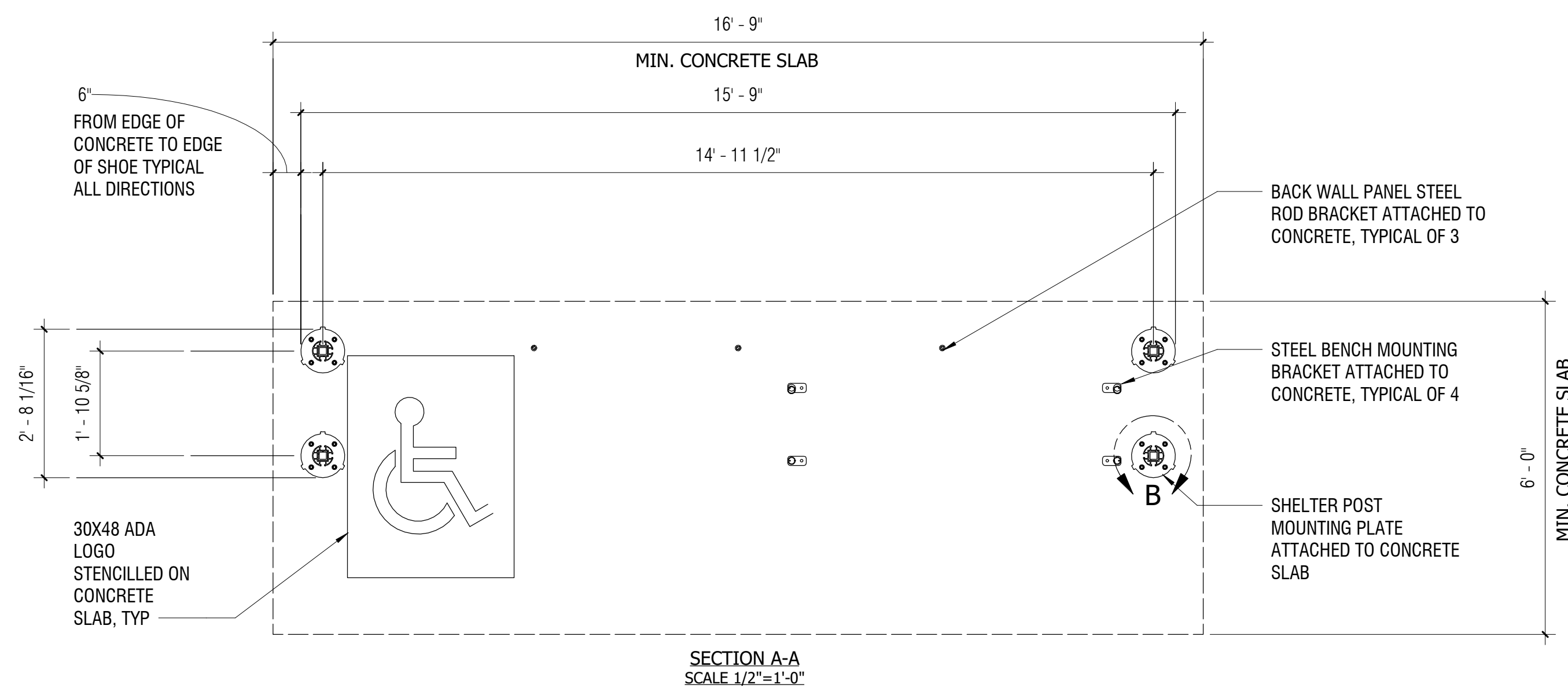
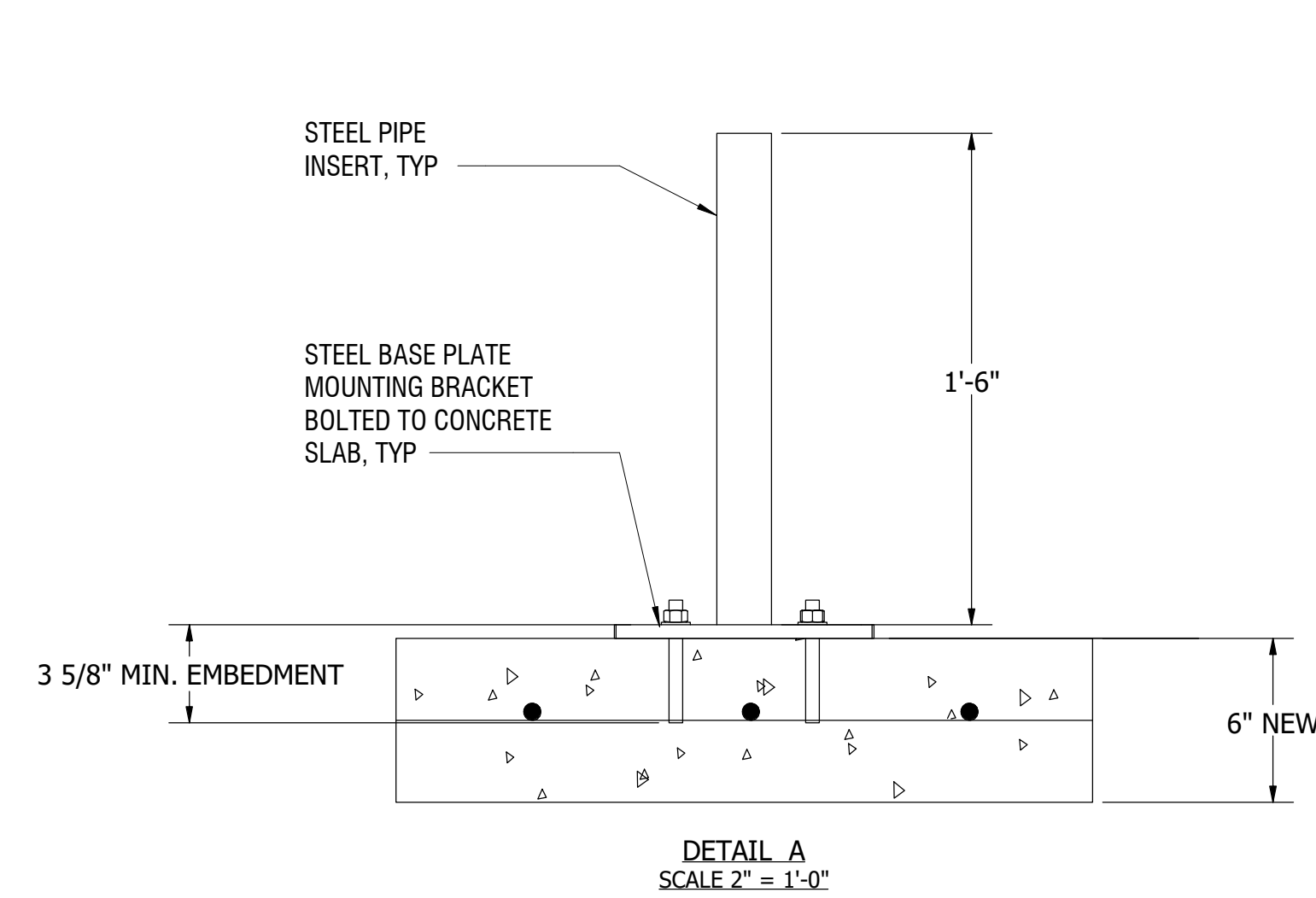
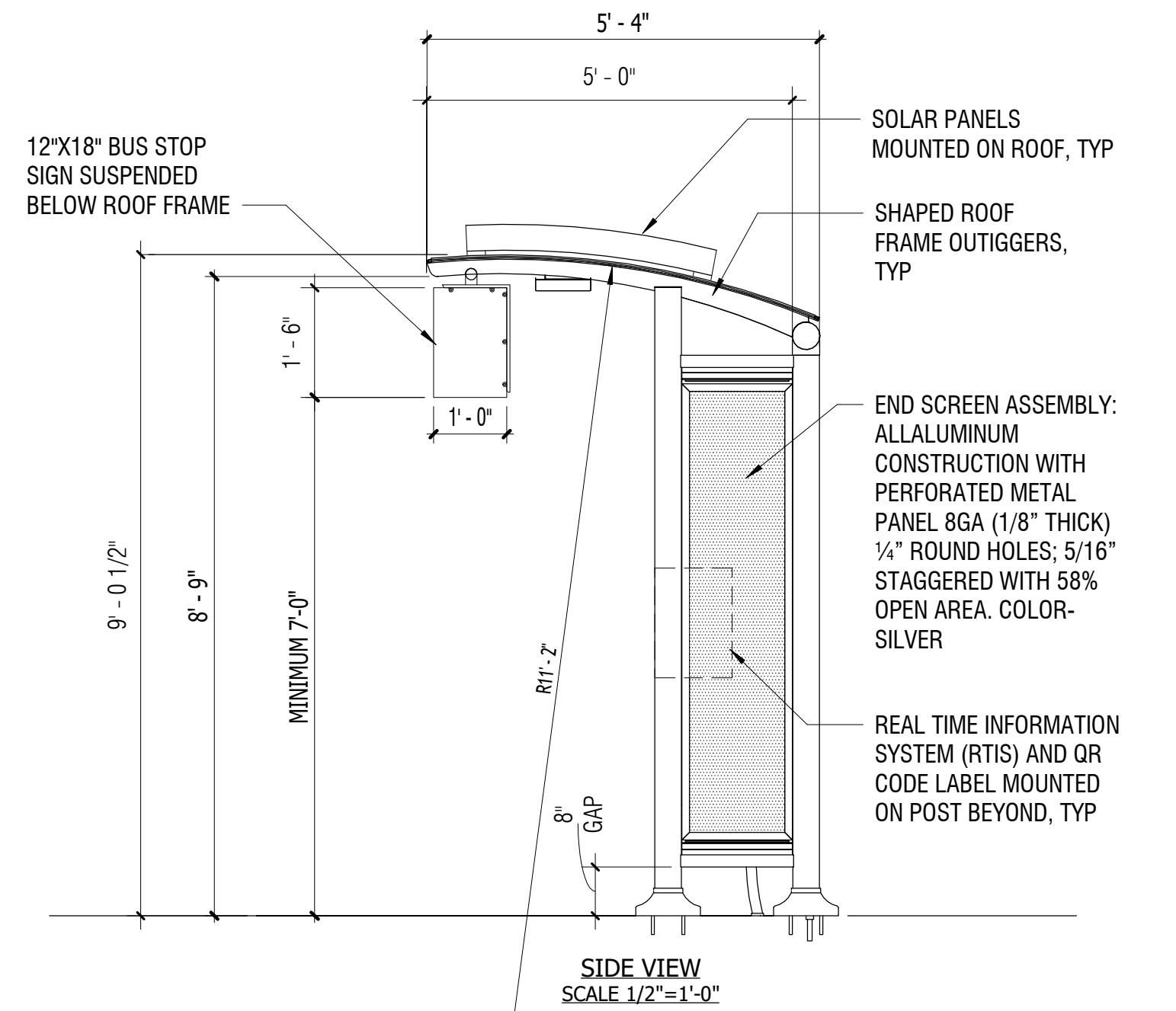
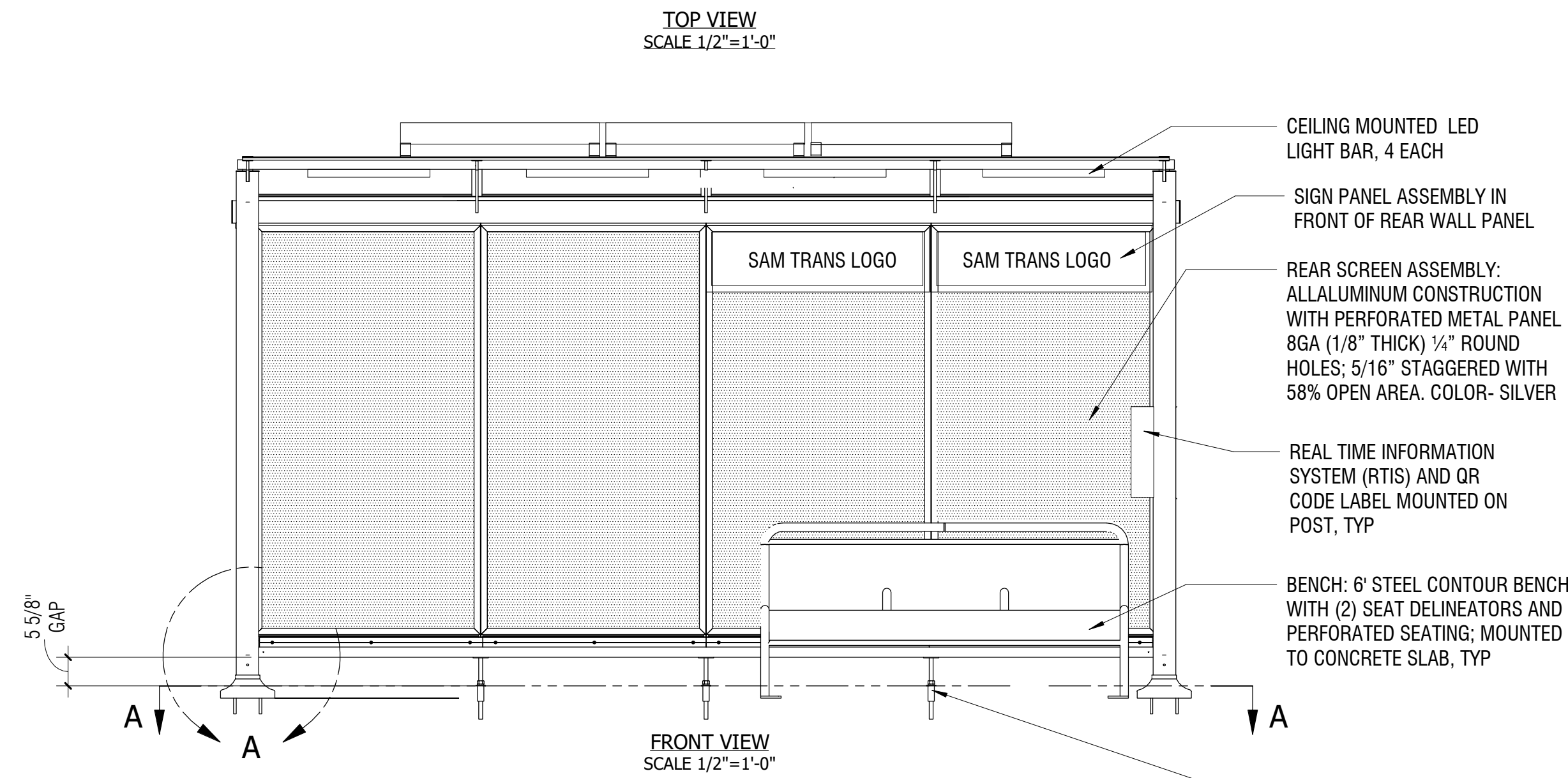
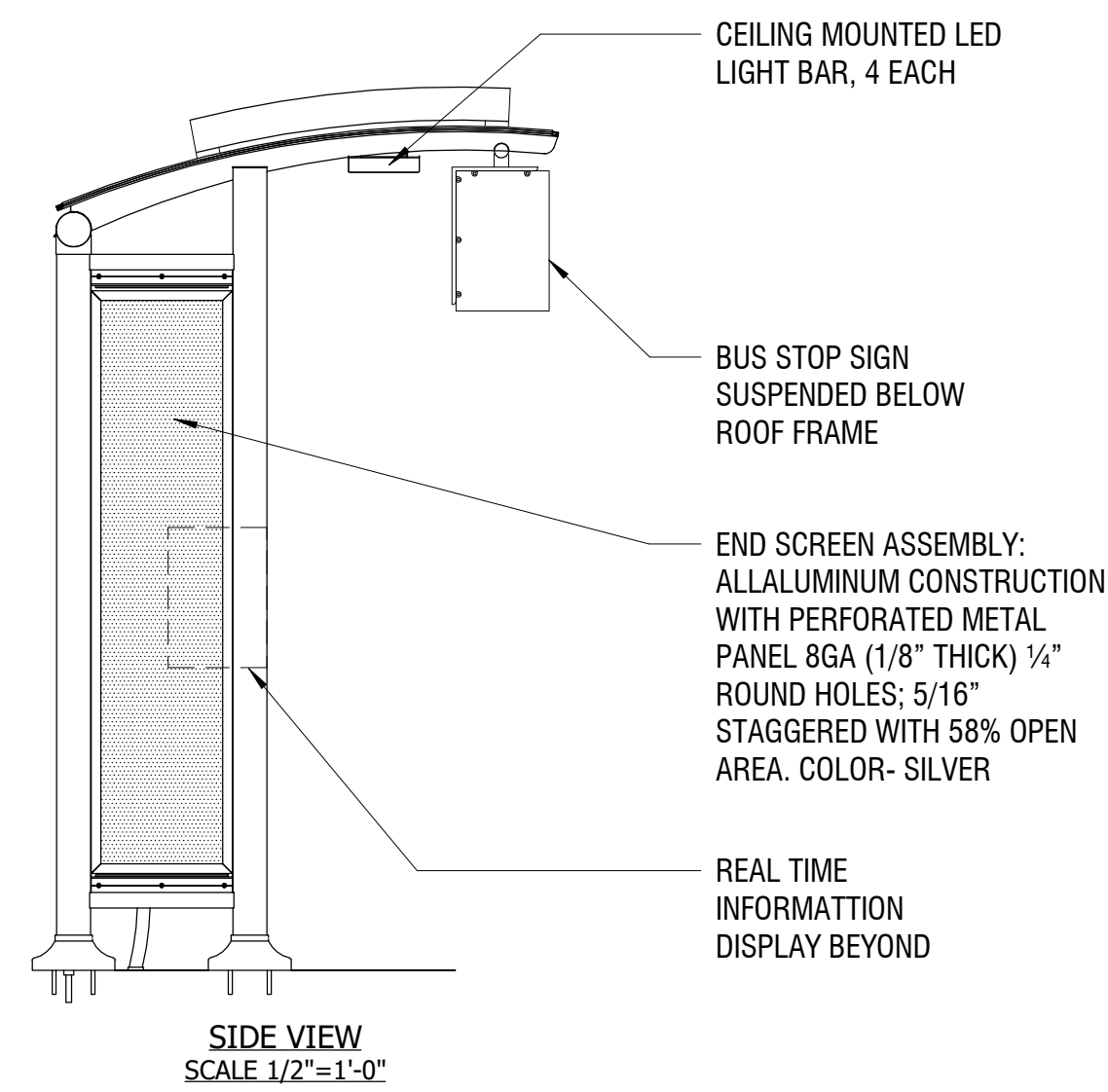
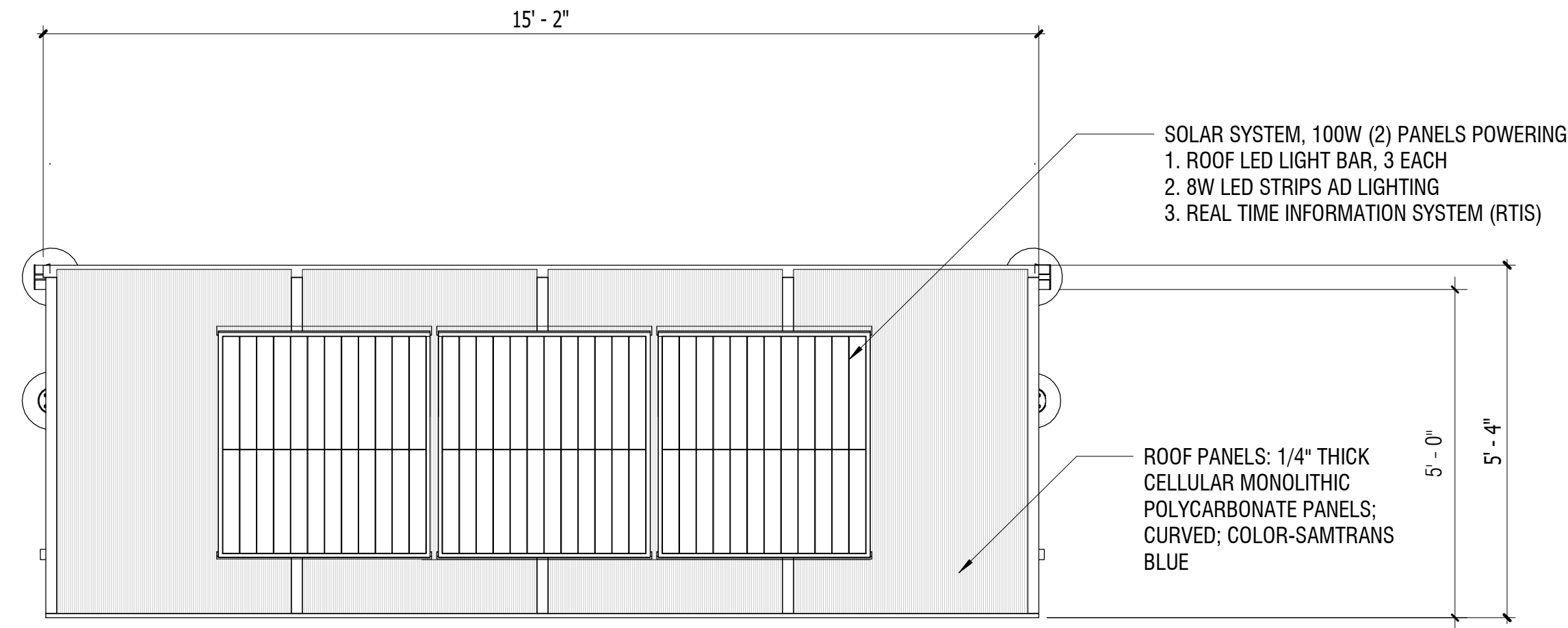
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SHEET NUMBER: **A08**
PAGE NO.

54830-00

GENERAL NOTES:

1. ALL STRUCTURAL STEEL, UNLESS OTHERWISE NOTED, SHALL BE ASTM A-36, MINIMUM YIELD STRENGTH 36,000 PSI.
2. ALL STRUCTURAL ALUMINUM MEMBERS, UNLESS OTHERWISE NOTED, SHALL BE OF ALLOY 6063-T5 OR GREATER.
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20. ALTERNATE OPTION: DIGITAL DISPLAY PANELS IN PLACE OF STATIC ADVERTISING PANEL ON THE LEFT SIDE OF SHELTER. TBD BY SAMTRANS
21. BUS SHELTER AND MONO-POST BASE: PROVIDE ACCOMMODATIONS FOR SLOPE SITES WITH MODIFIED BASE AS NEEDED.

2A. EXTENDED FOUR POST BUS NARROW SHELTER CURVED ROOF-FOUR WALL PANEL



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REV.	DATE	BY	SUB	APP.	DESCRIPTION	REV.	DATE	BY	SUB	APP.	DESCRIPTION
	12/17/2025				FINAL SUBMITTAL						

DESIGNED:
R. BUTIONG
DRAWN:
E. PETRIE
CHECKED:
R. BUTIONG
APPROVED:
R. CHIANG
DATE:
11/11/25

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**SAN MATEO COUNTY TRANSIT DISTRICT
BUS STOP IMPROVEMENT PLAN**

**ARCHITECTURAL
BUS SHELTER KIT OF PARTS
FOUR POST CURVED ROOF EXTENDED
LENGTH NARROW 54832**

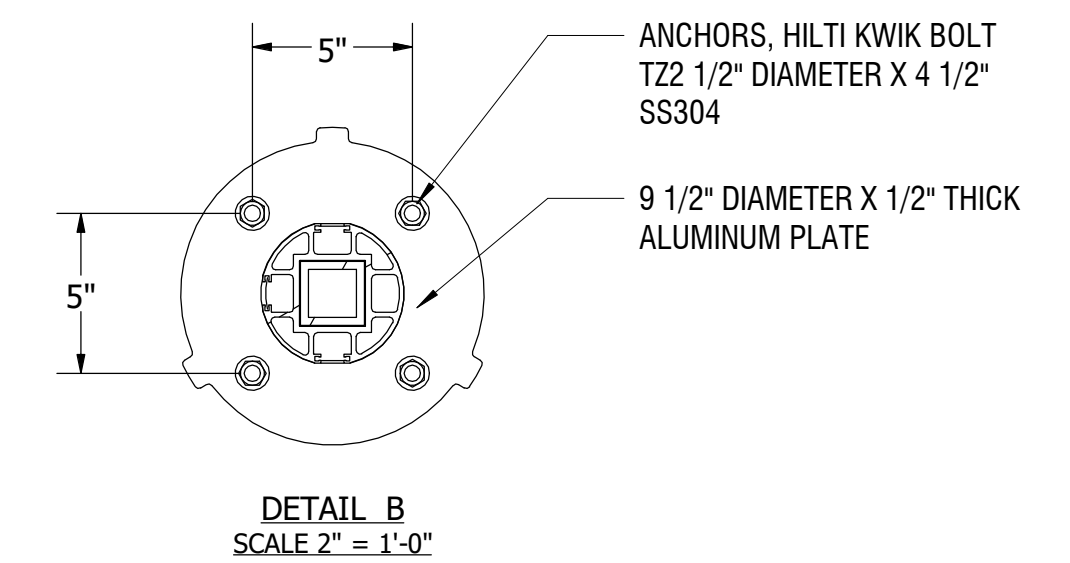
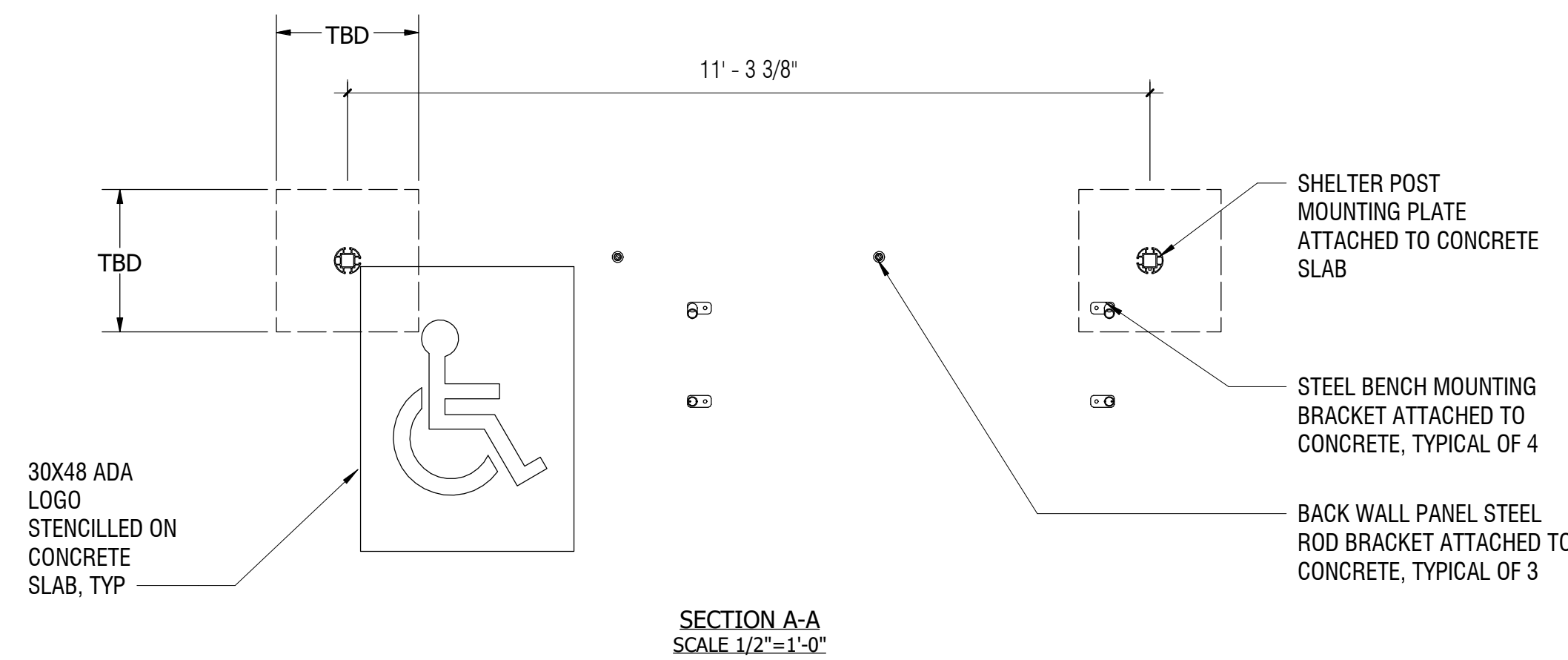
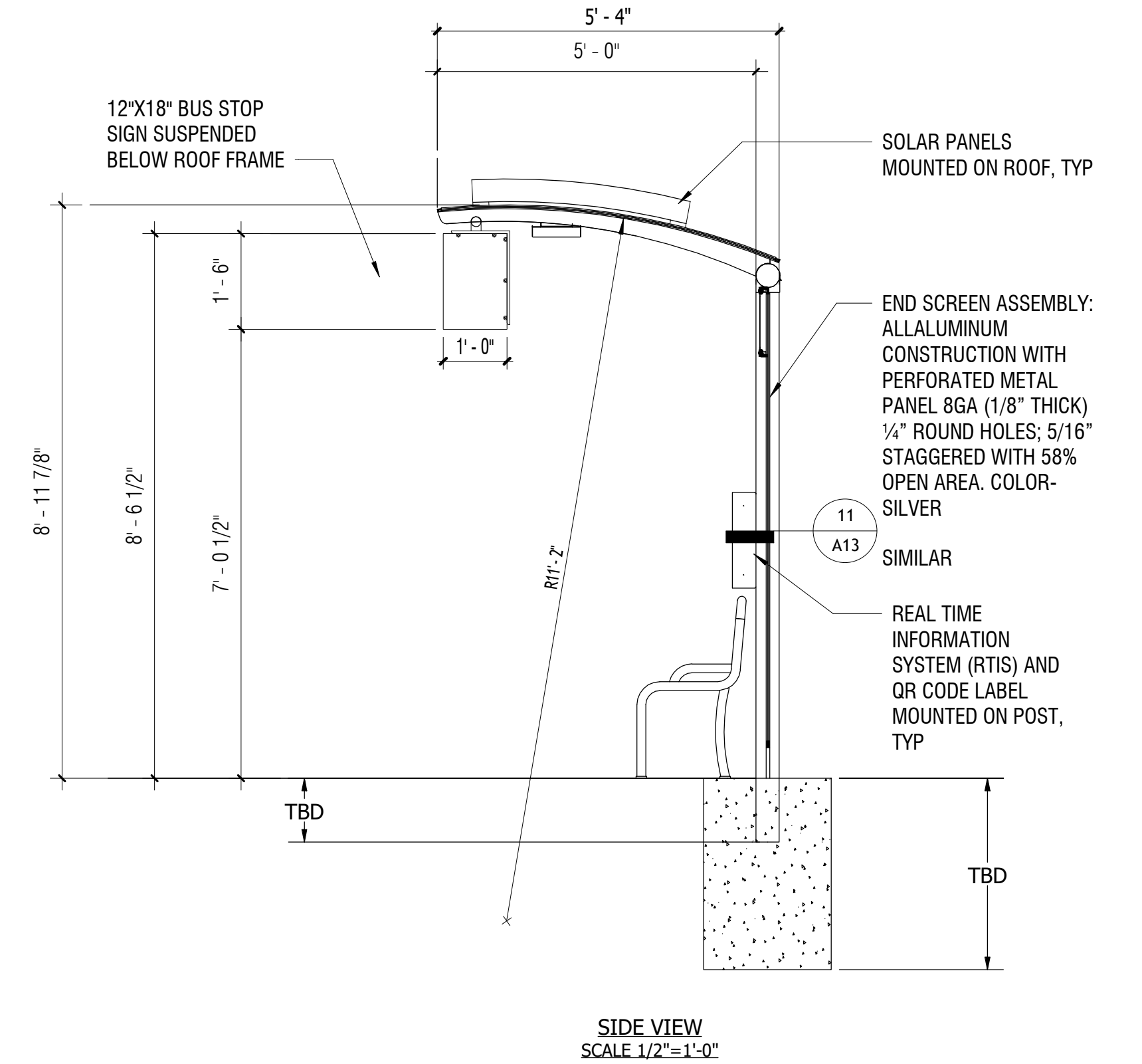
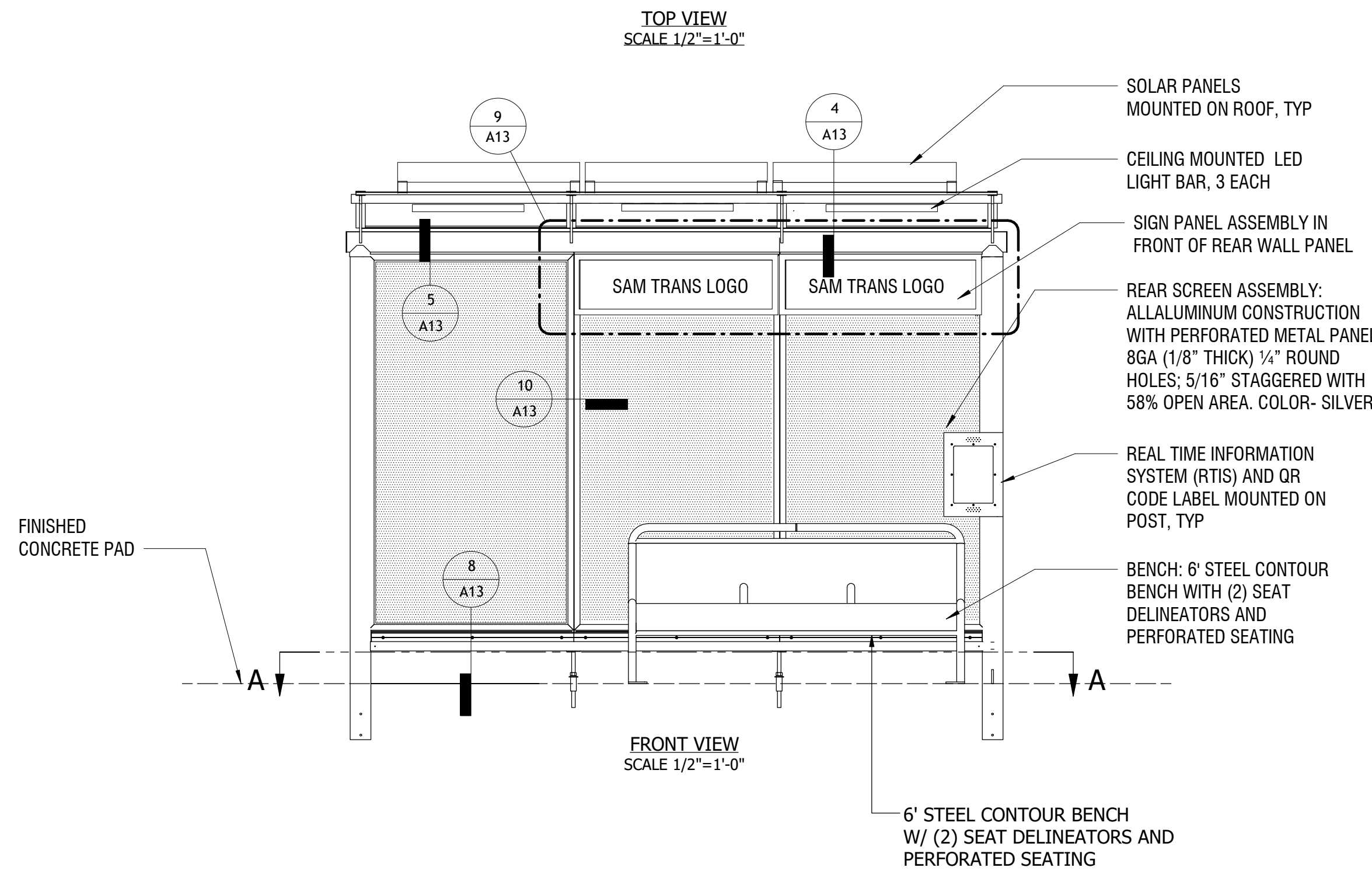
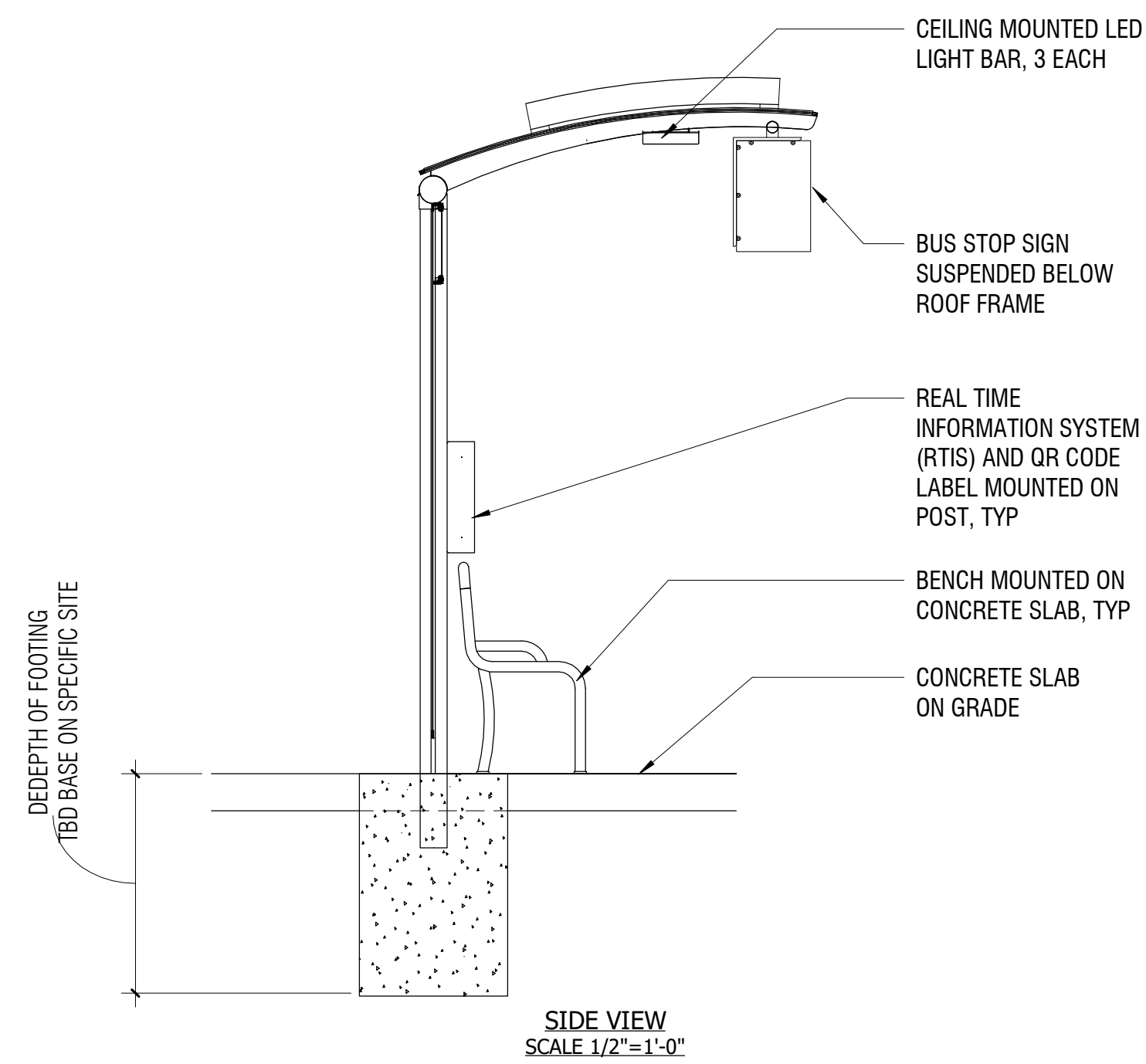
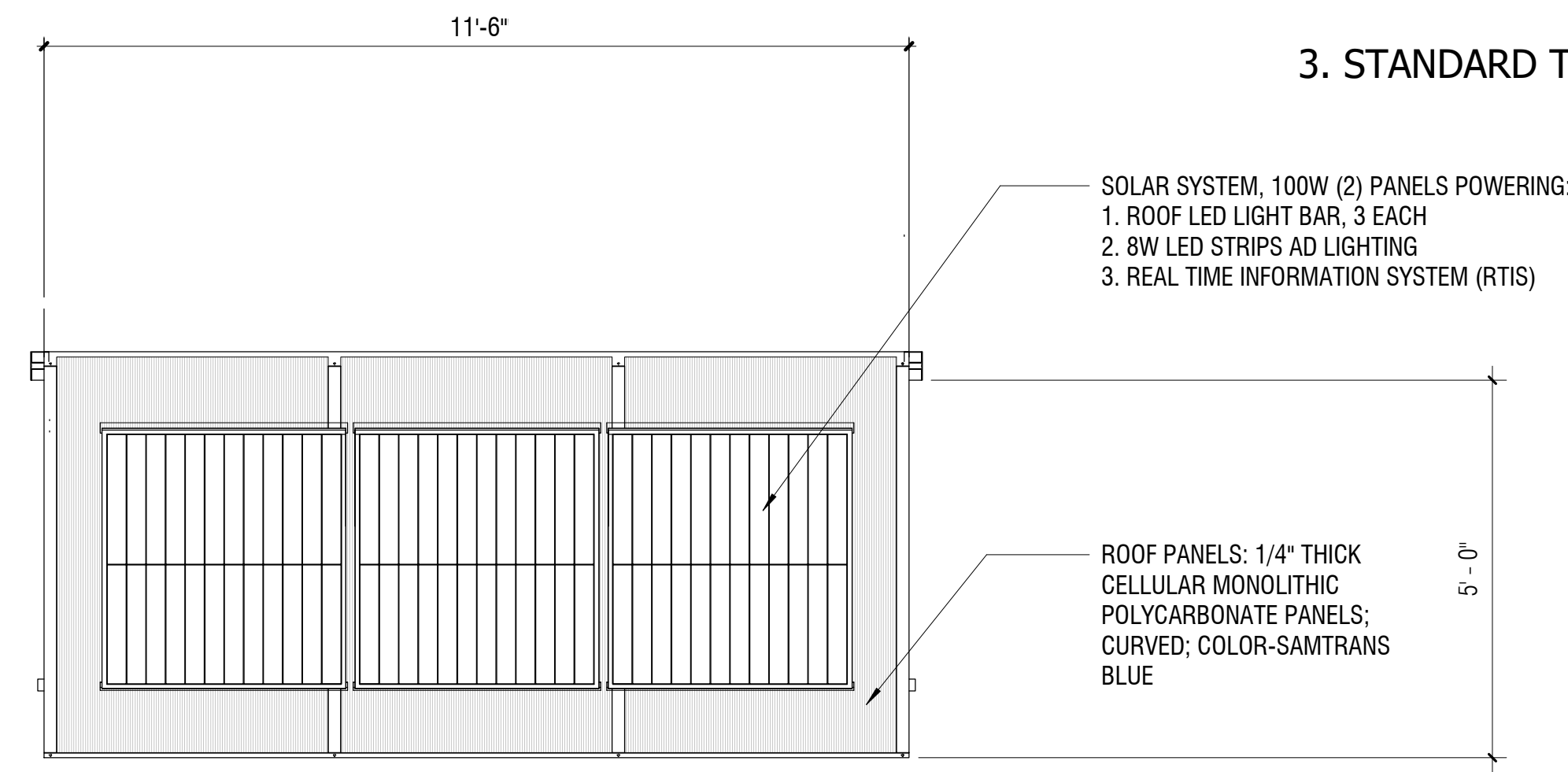
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PAGE NO.	

54832-00

GENERAL NOTES:

1. ALL STRUCTURAL STEEL, UNLESS OTHERWISE NOTED, SHALL BE ASTM A-36, MINIMUM YIELD STRENGTH 36,000 PSI.
2. ALL STRUCTURAL ALUMINUM MEMBERS, UNLESS OTHERWISE NOTED, SHALL BE OF ALLOY 6063-T5 OR GREATER.
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13. PAINT SHELTERS: SUPER DURABLE BAKED POWDER COAT ENAMEL FINISH, 5 MIL FINAL THICKNESS. ALTERNATE: SHELTERS AT COASTAL AREAS- 70% FLUROPON 70% PVDF EXTERIOR COATING.
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21. BUS SHELTER AND MONO-POST BASE: PROVIDE ACCOMMODATIONS FOR SLOPE SITES WITH MODIFIED BASE AS NEEDED.

3. STANDARD TWO POST CANTILEVER BUS SHELTER CURVED ROOF - NO SIDE PANELS



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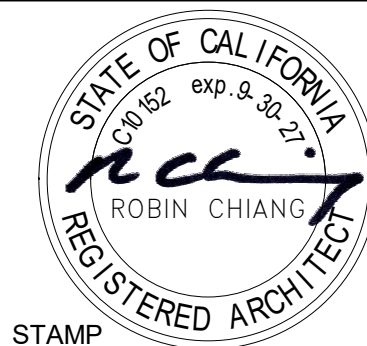
DESIGNED:
R. BUTIONG
DRAWN:
E. PETRIE
CHECKED:
R. BUTIONG
APPROVED:
R. CHIANG
DATE:
11/11/25

Fehr & Peers

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Robin Chiang & Company
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**SAN MATEO COUNTY TRANSIT DISTRICT
BUS STOP IMPROVEMENT PLAN**

**ARCHITECTURAL
BUS SHELTER KIT OF PARTS
TWO-POST CANTILEVERED CURVED ROOF
54868**

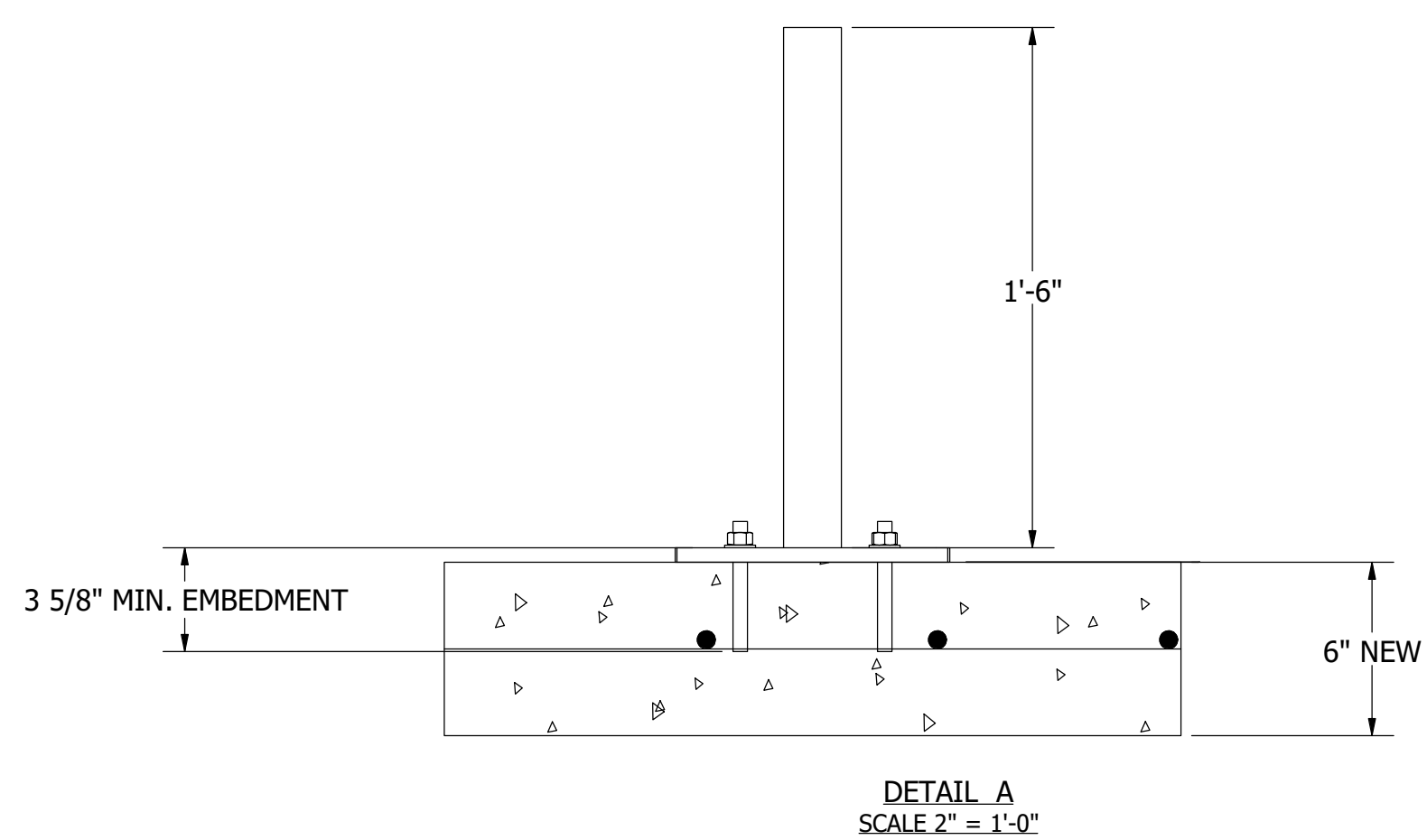
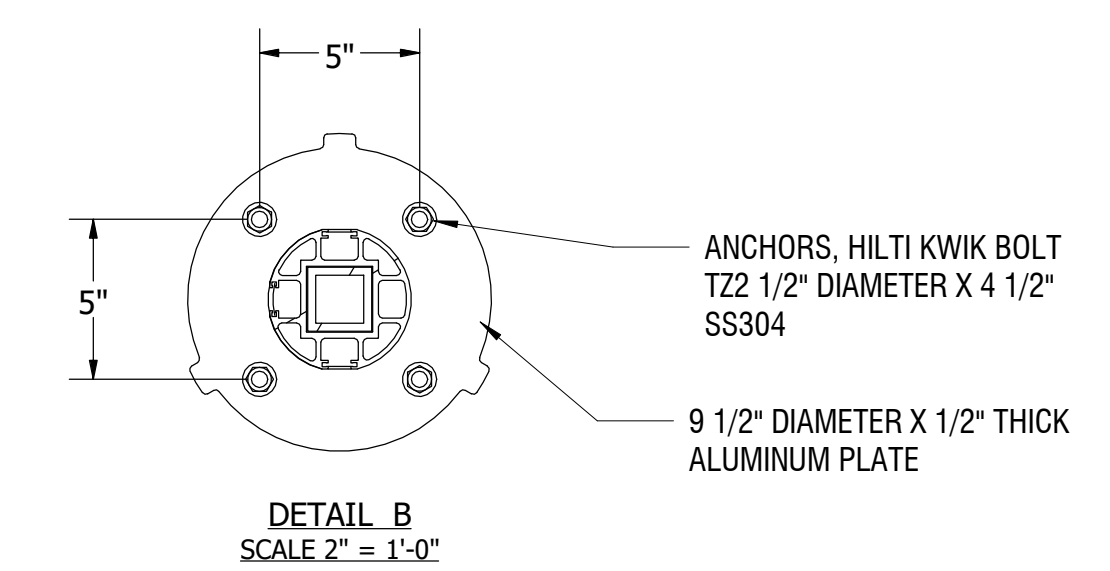
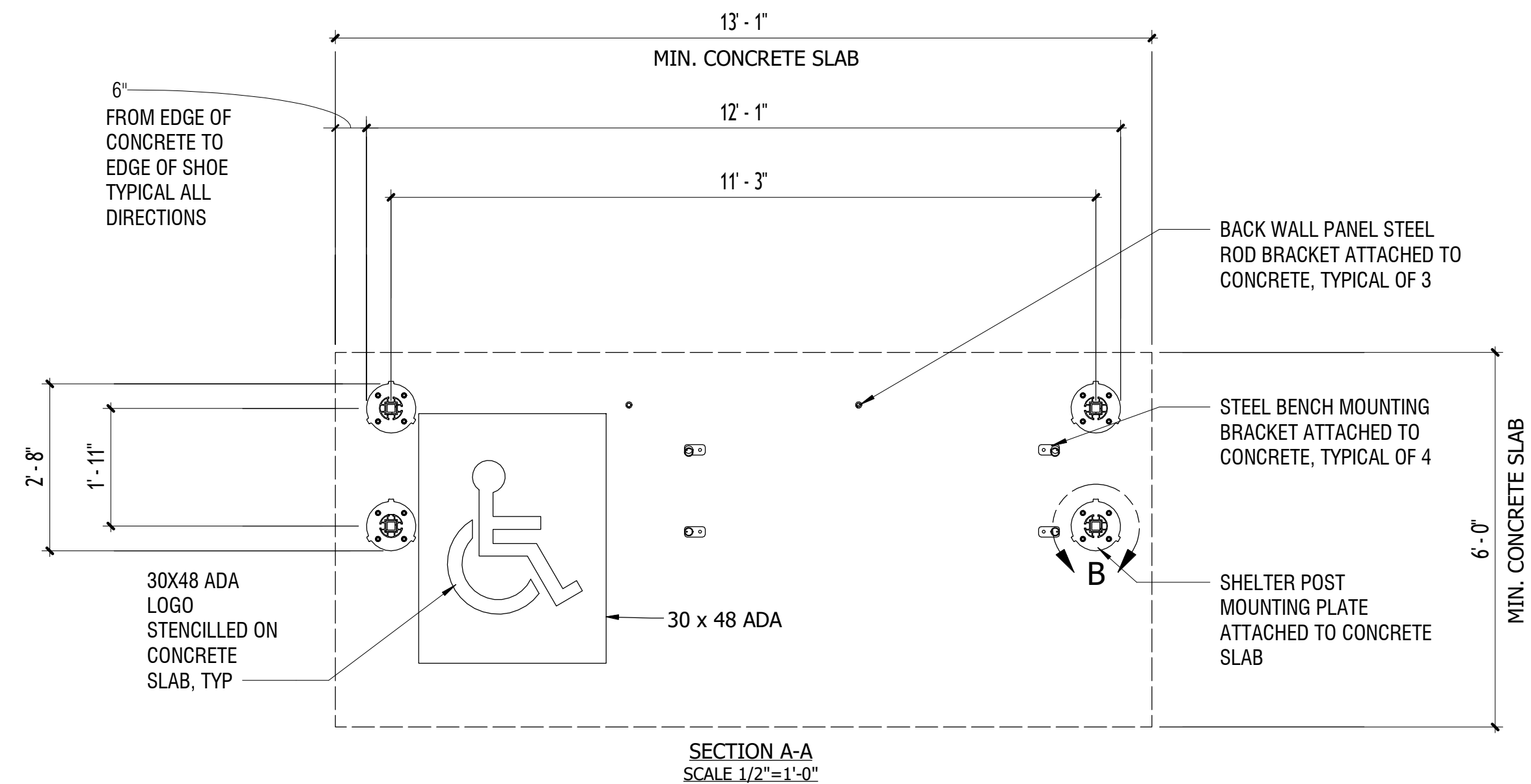
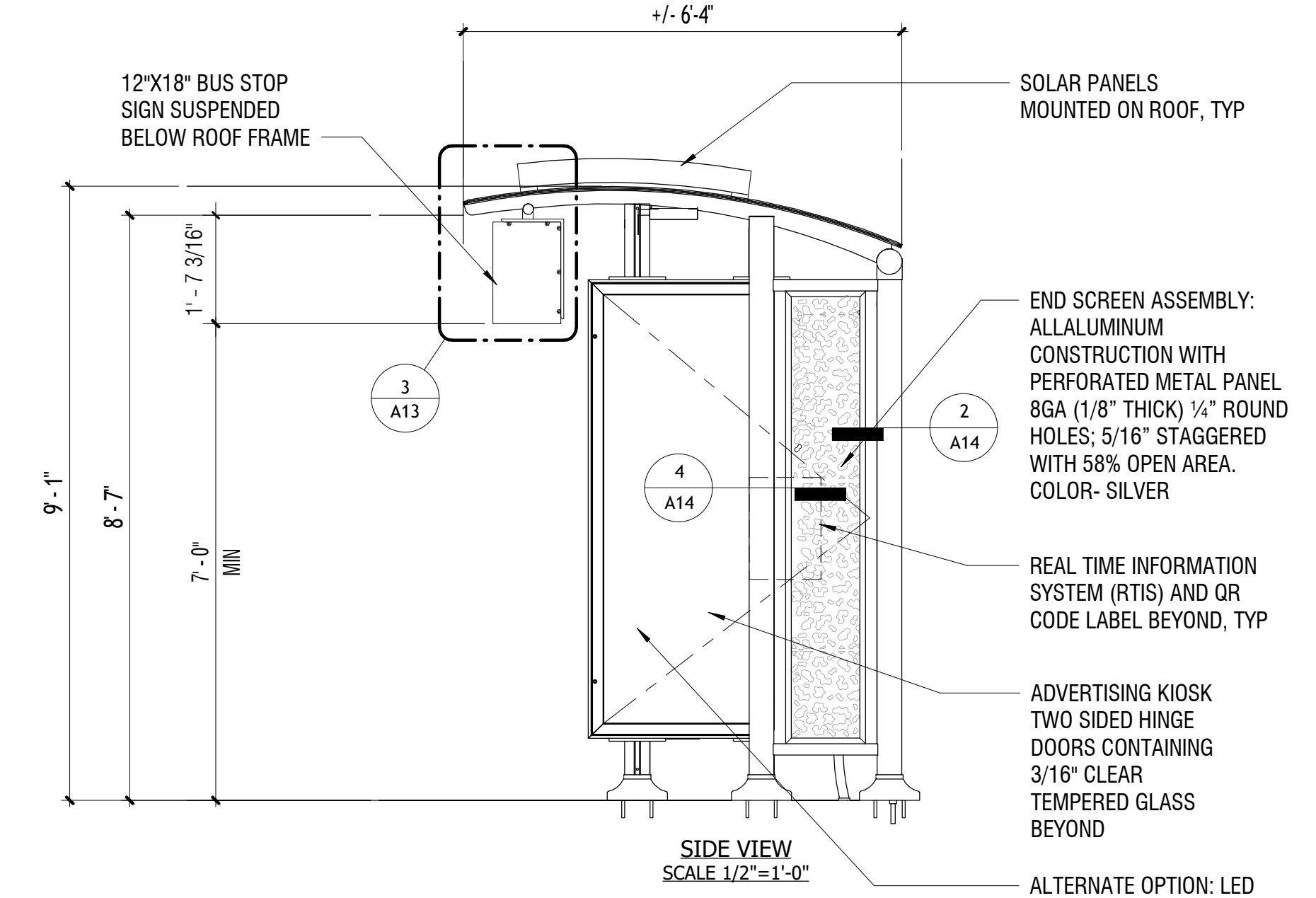
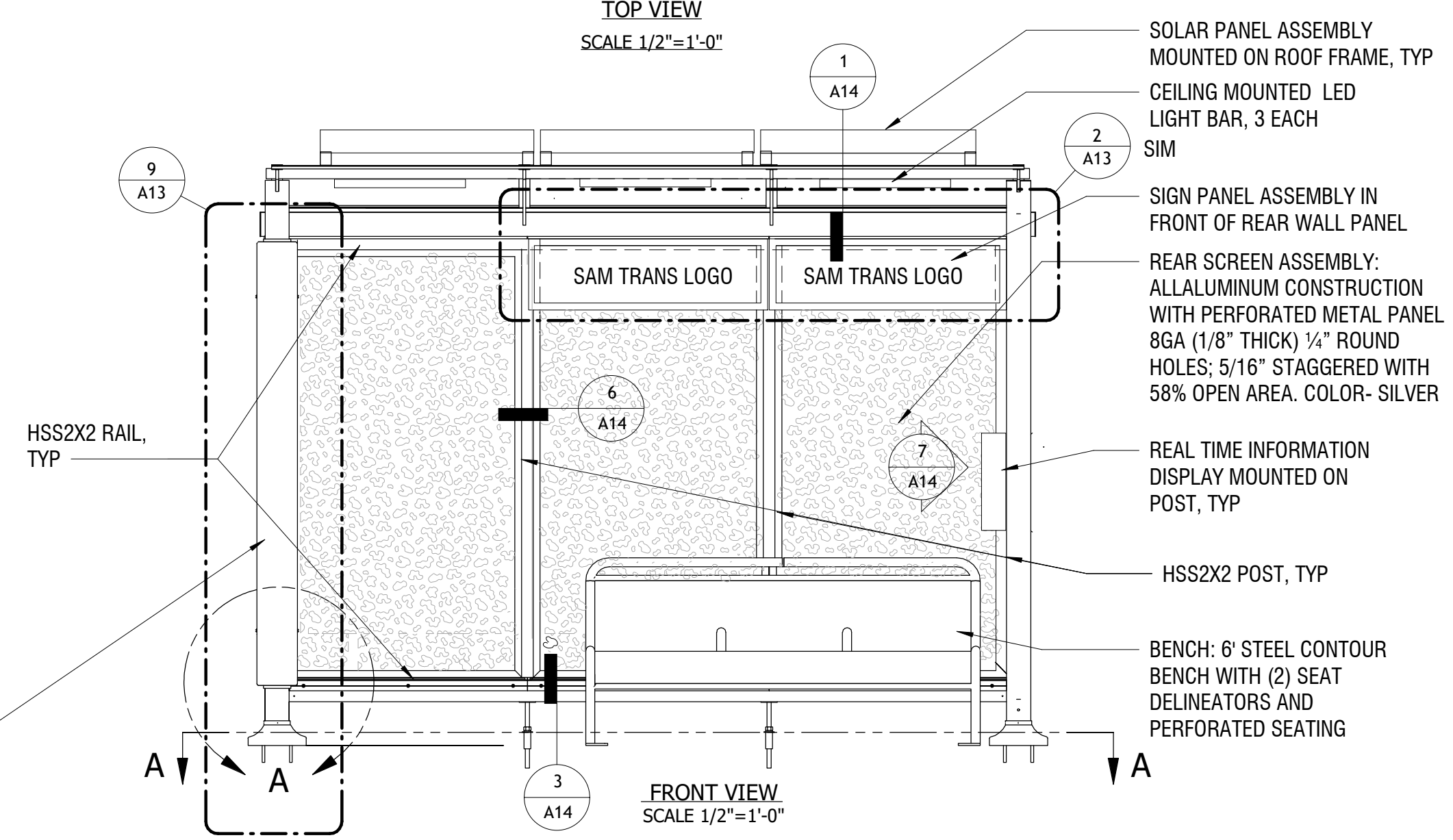
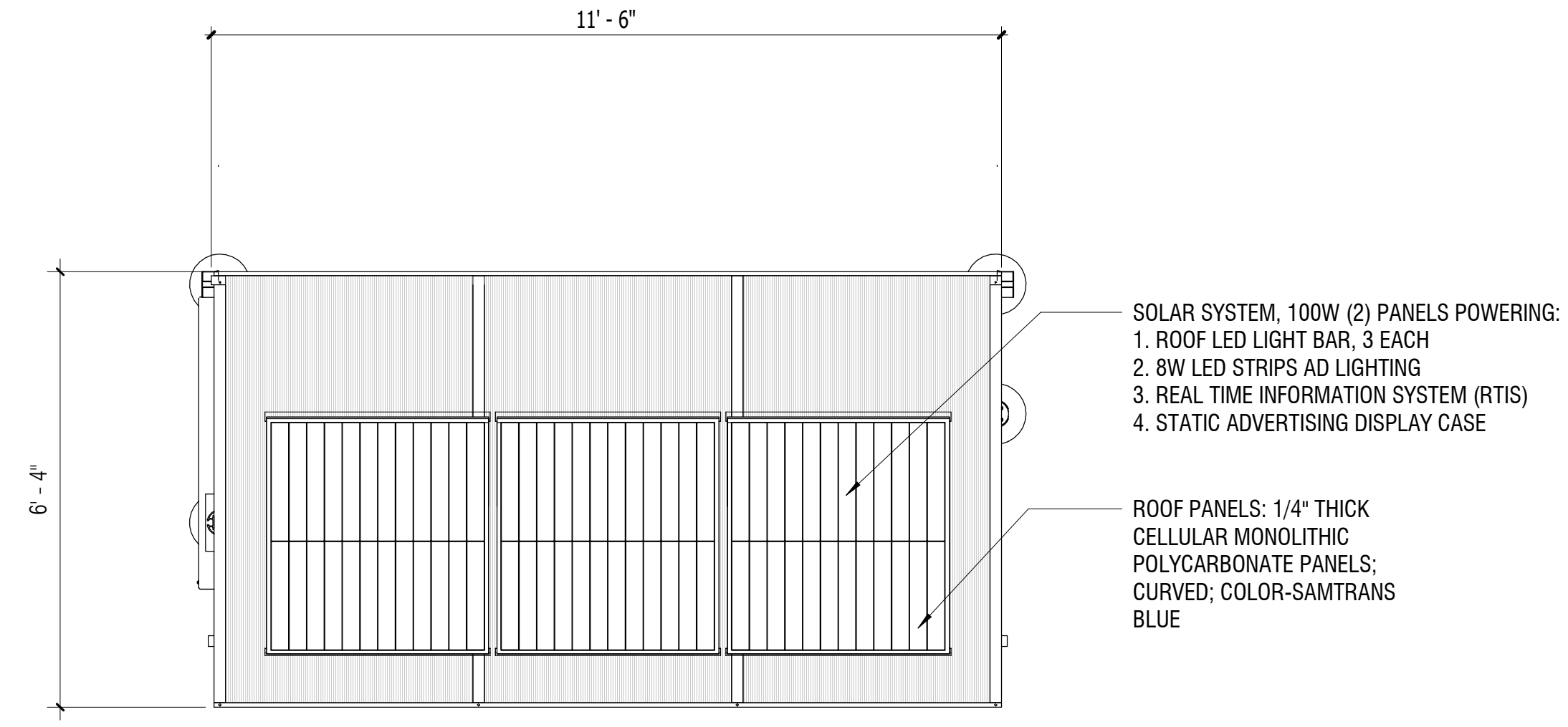
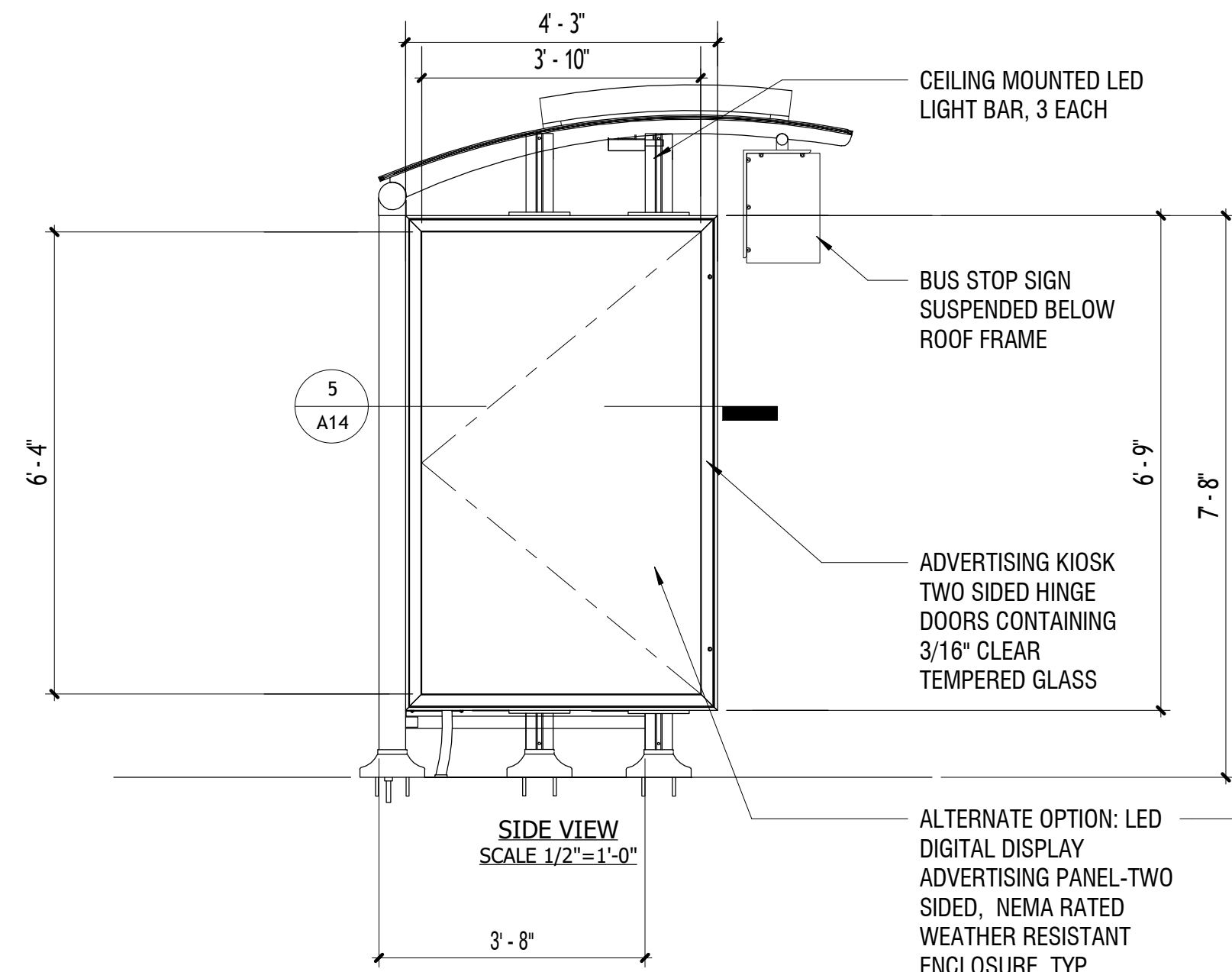
SIZE: D SCALE AS NOTED
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PAGE NO.

54868

GENERAL NOTES:

1. ALL STRUCTURAL STEEL, UNLESS OTHERWISE NOTED, SHALL BE ASTM A-36, MINIMUM YIELD STRENGTH 36,000 PSI.
2. ALL STRUCTURAL ALUMINUM MEMBERS, UNLESS OTHERWISE NOTED, SHALL BE OF ALLOY 6063-T5 OR GREATER.
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4. FOUR POST SHADE STRUCTURE WITH FOLIAGE PATTERN STAMPED STEEL WALL PANELS AND CELLULAR POLYCARBONATE ROOF PANELS



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DESIGNED:
R. BUTIONG
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**SAN MATEO COUNTY TRANSIT DISTRICT
BUS STOP IMPROVEMENT PLAN**

**ARCHITECTURAL
BUS SHELTER KIT OF PARTS
FOLIAGE PATTERN**

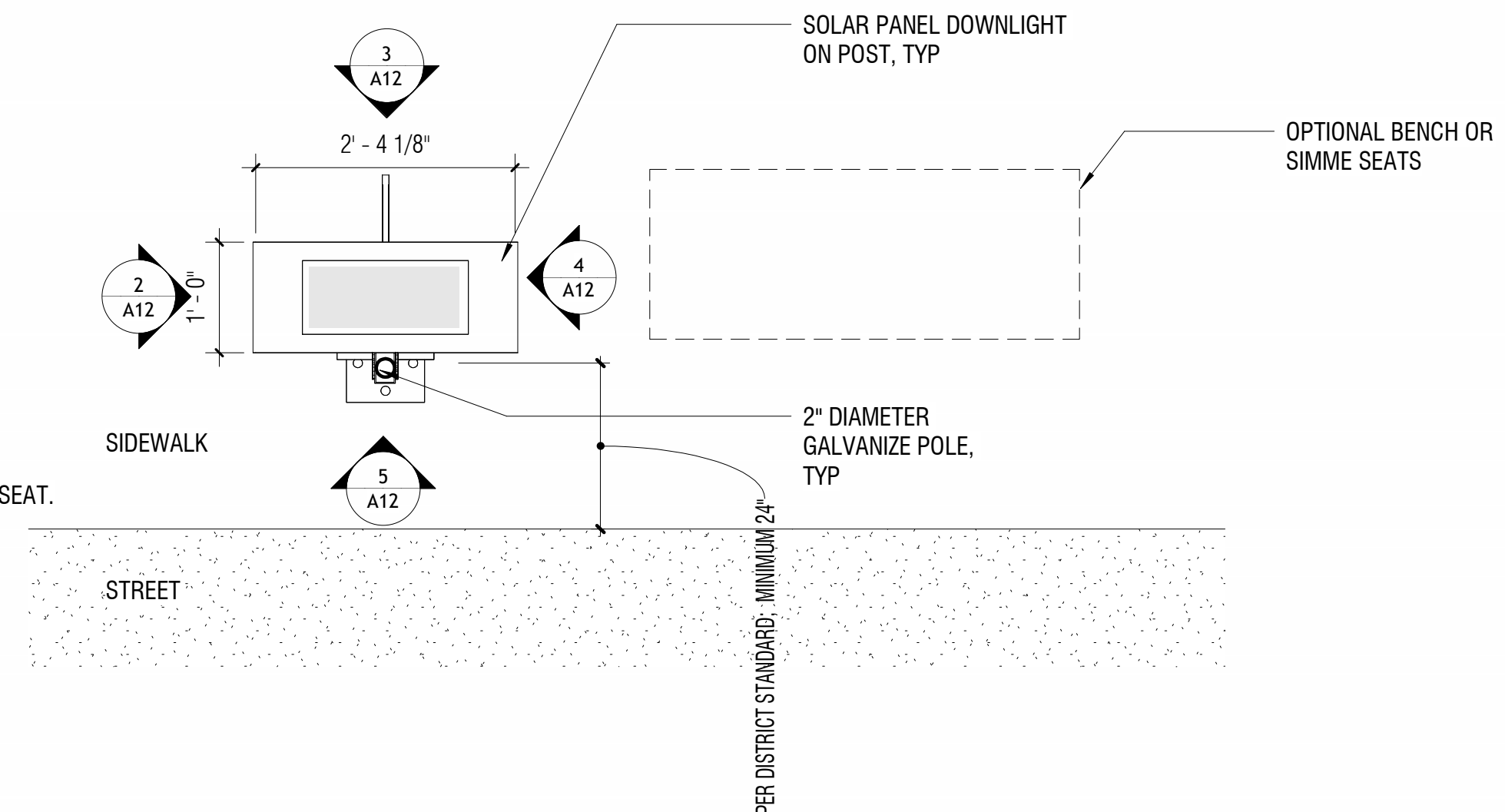
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PAGE NO.	

54831-00

GENERAL NOTES:

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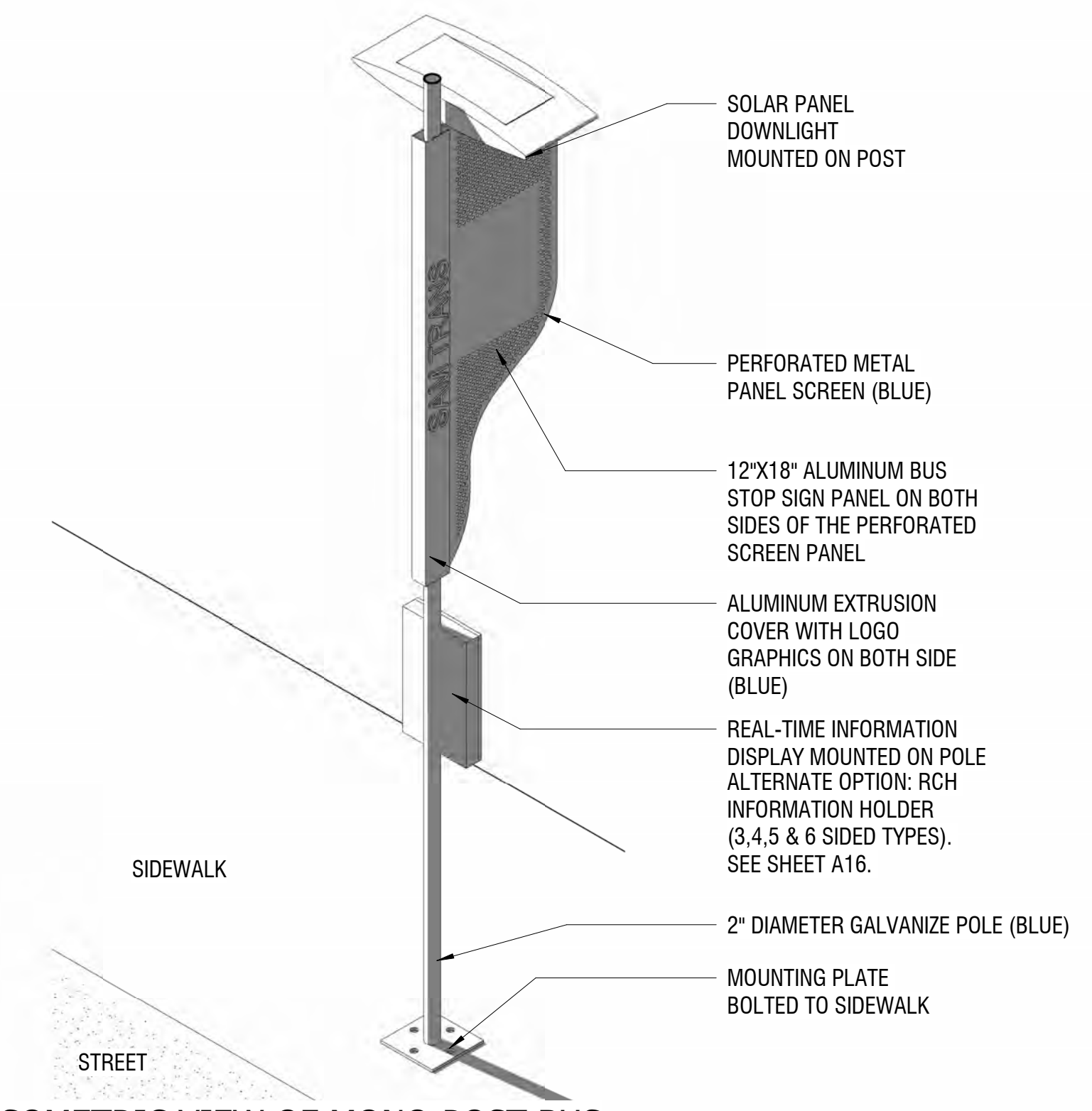
5. MONO-POST BUS STOP POLE



PLAN DETAIL OF MONO POST BUS POLE ASSEMBLY

SCALE: 3/4" = 1'-0"

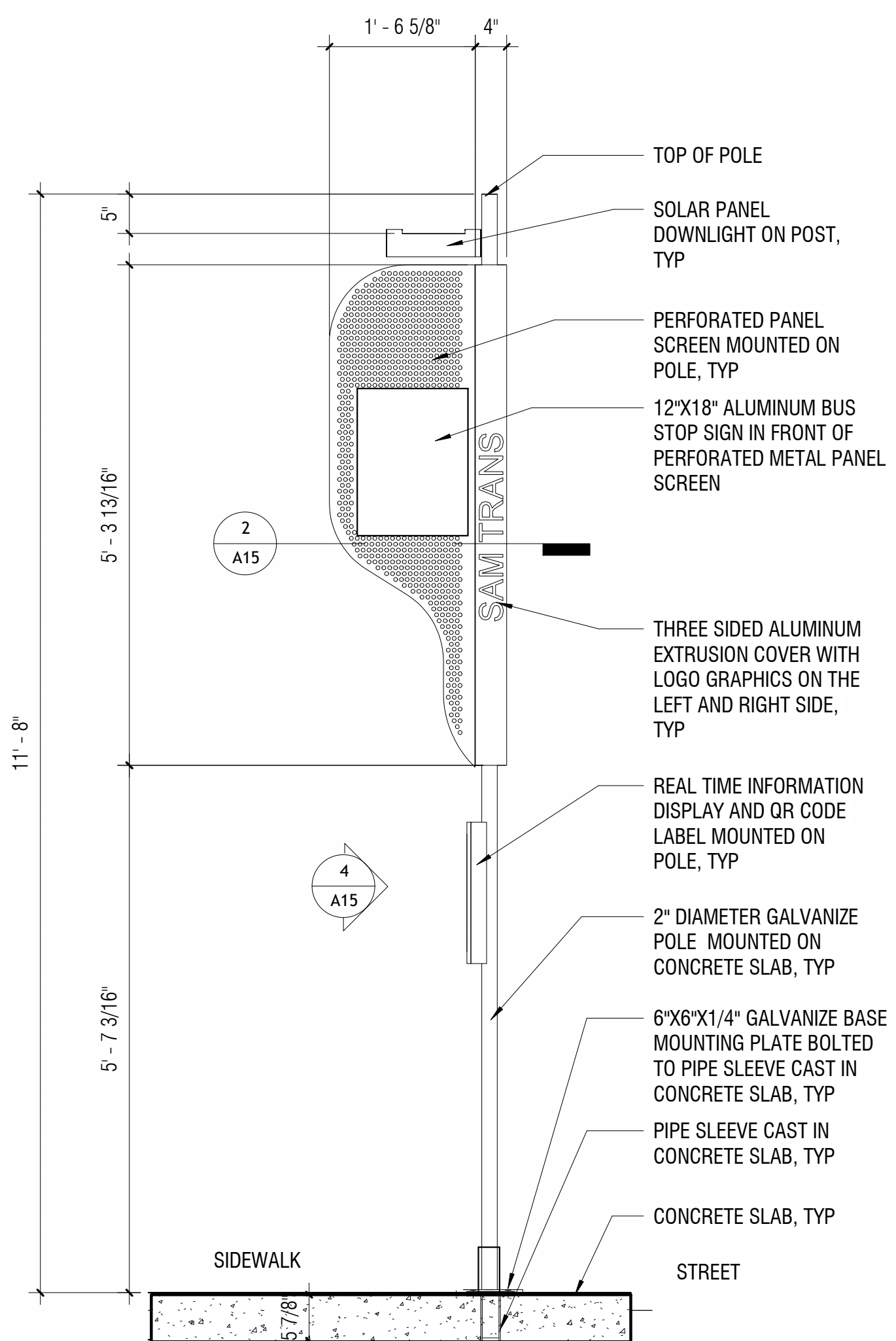
1
A12



ISOMETRIC VIEW OF MONO-POST BUS POLE ASSEMBLY

SCALE:

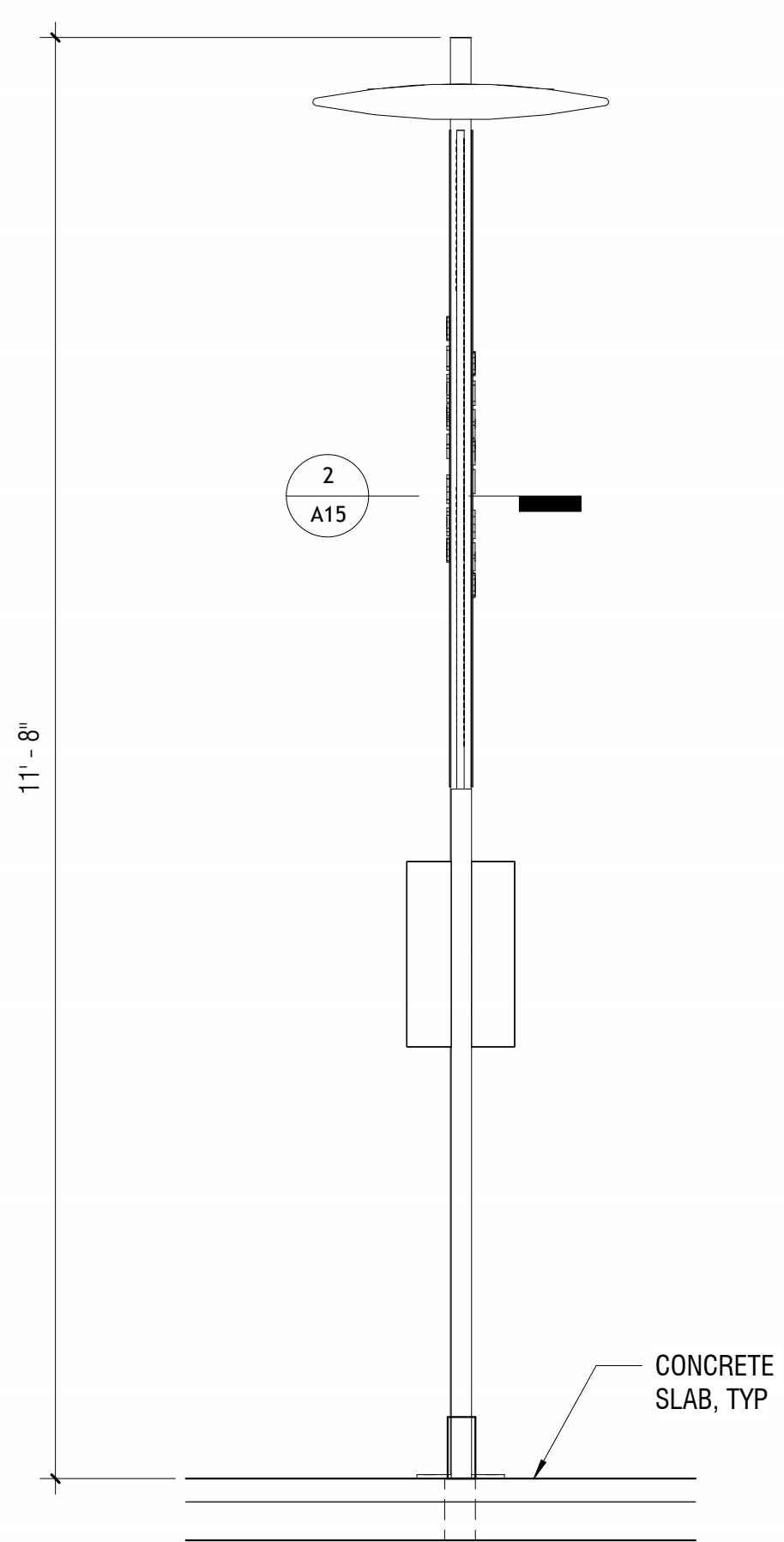
6
A12



LEFT SIDE ELEVATION

SCALE: 3/4" = 1'-0"

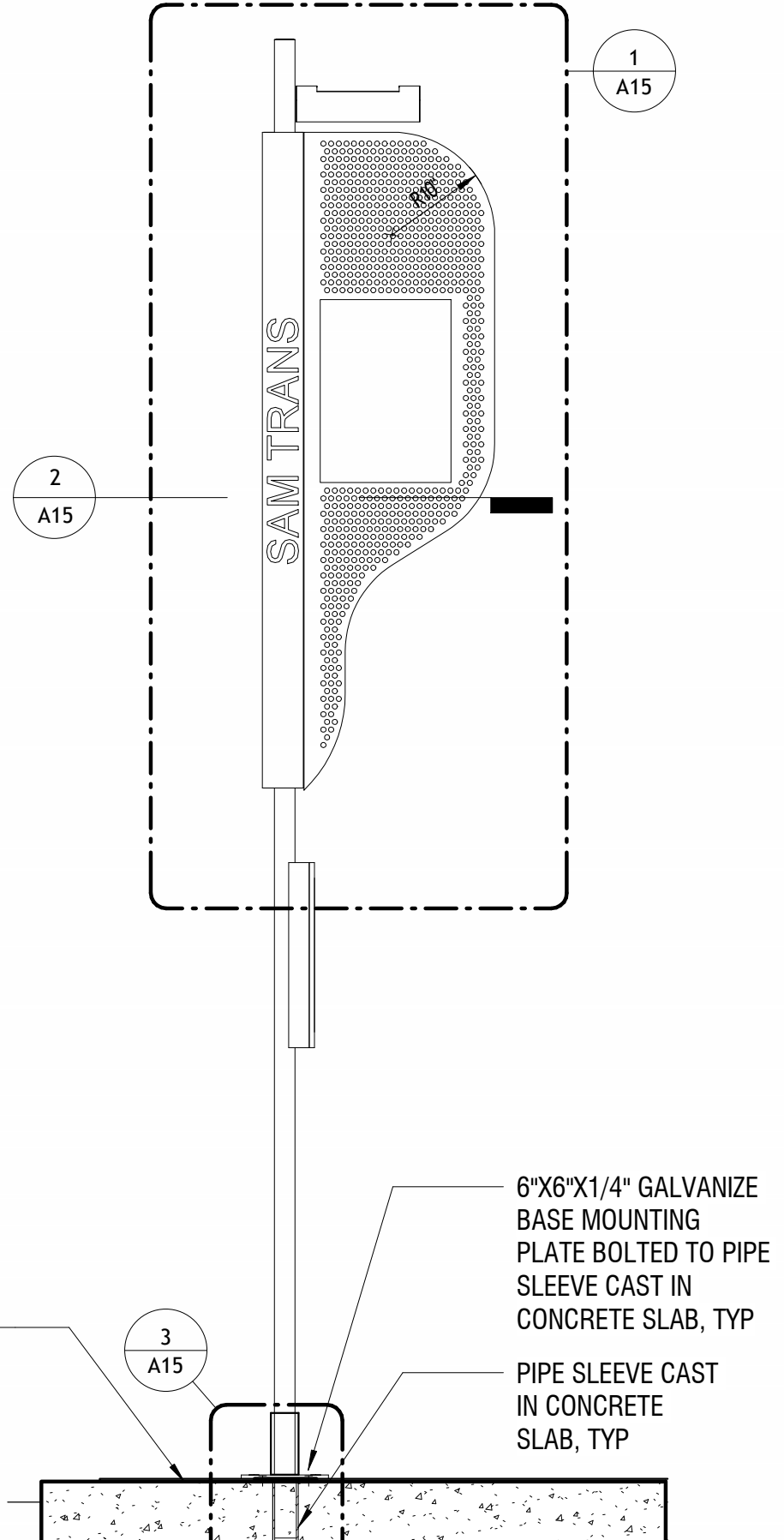
2
A12 A12



STREETSIDE ELEVATION

SCALE: 3/4" = 1'-0"

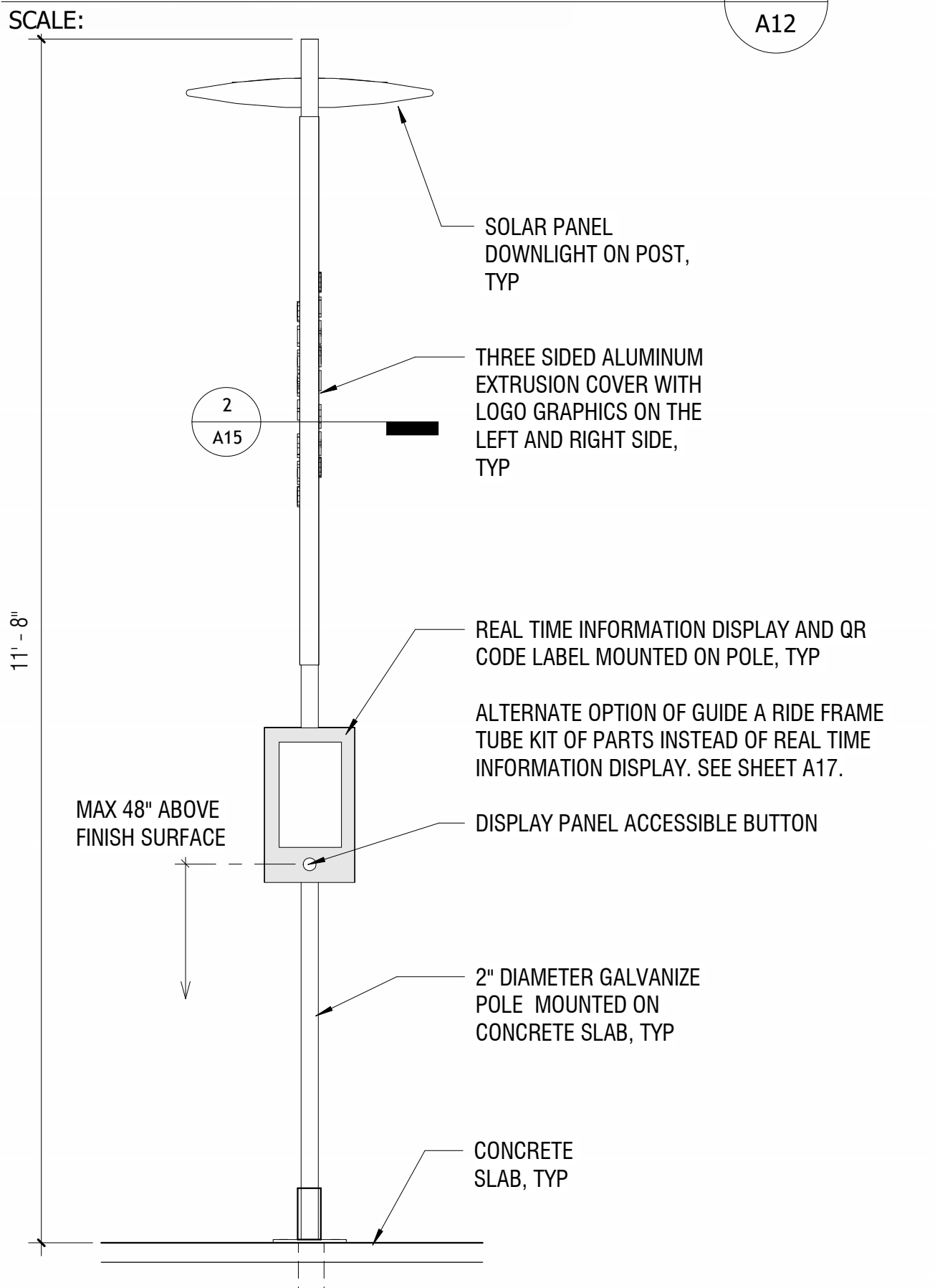
3
A12 A12



RIGHT SIDE ELEVATION

SCALE: 3/4" = 1'-0"

4
A12 A12



SIDEWALK SIDE ELEVATION

SCALE: 3/4" = 1'-0"

5
A12 A12

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REV.	DATE	BY	SUB	APP.	DESCRIPTION	REV.	DATE	BY	SUB	APP.	DESCRIPTION
	12/17/2025				FINAL SUBMITTAL						

DESIGNED:
R. BUTIONG
DRAWN:
E. PETRIE
CHECKED:
R. BUTIONG
APPROVED:
R. CHIANG
DATE:
11/11/25

Fehr & Peers
Fehr and Peers
345 California Street
Suite 450
San Francisco, CA 94104
Main: 415-348-0300
Fax: 415-773-1790

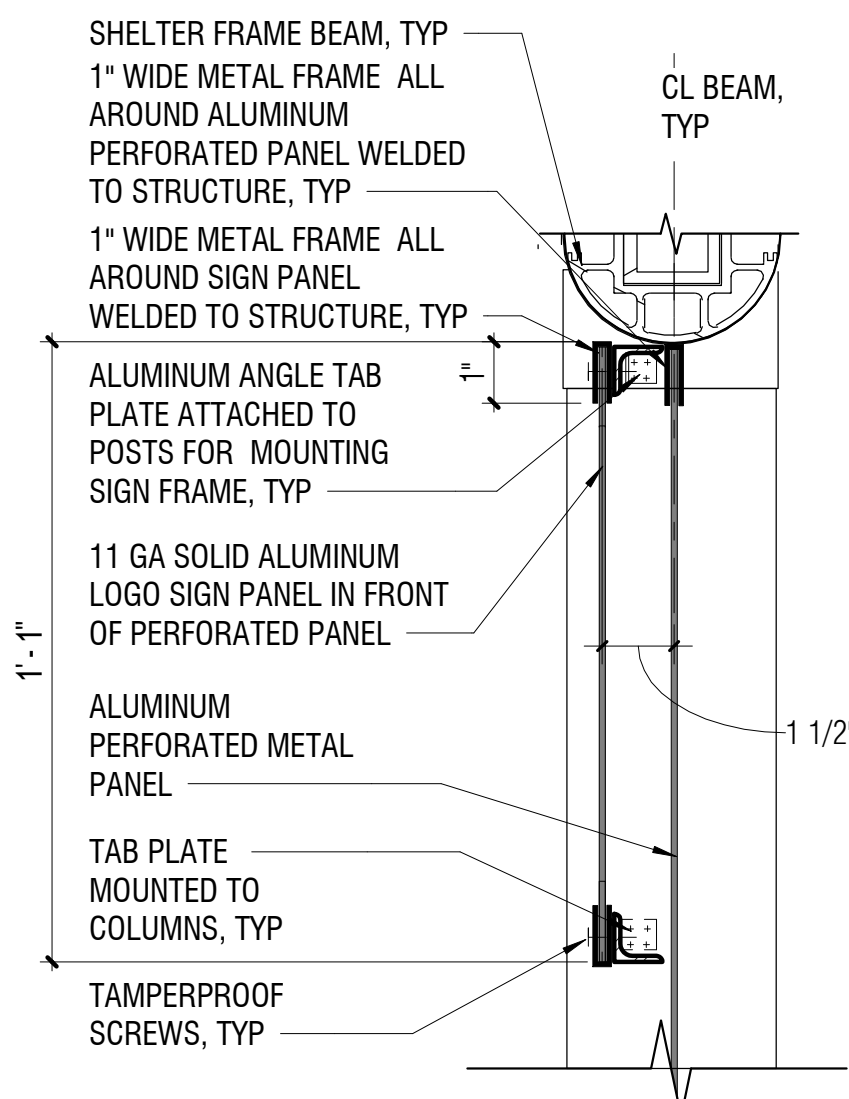
Robinson Chiang & Company
381 Tehama Street
San Francisco, CA 94103

STATE OF CALIFORNIA
REGISTERED ARCHITECT
ROBIN CHIANG
STAMP

SAN MATEO COUNTY TRANSIT DISTRICT
BUS STOP IMPROVEMENT PLAN

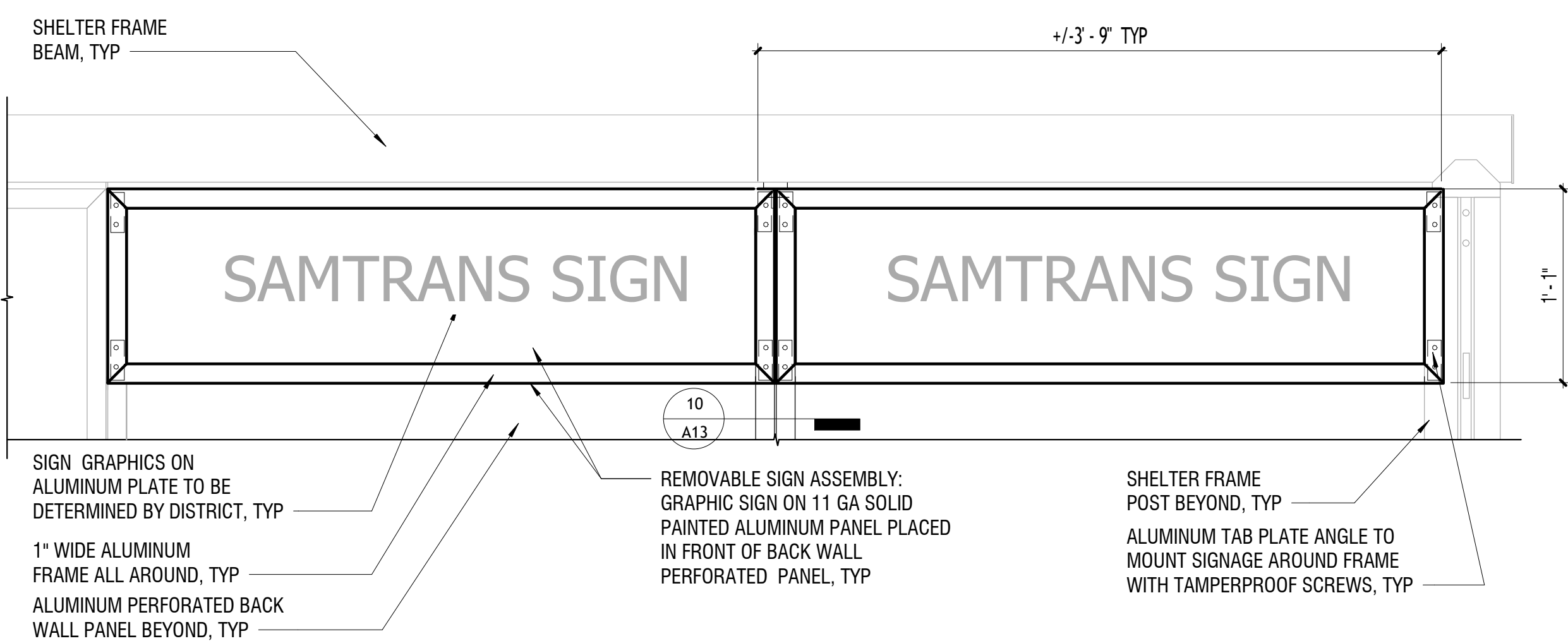
ARCHITECTURAL
BUS SHELTER KIT OF PARTS
MONO-POST BUS STOP POLE

SIZE: D	SCALE: AS NOTED
SHEET NUMBER A12	
PAGE NO.	



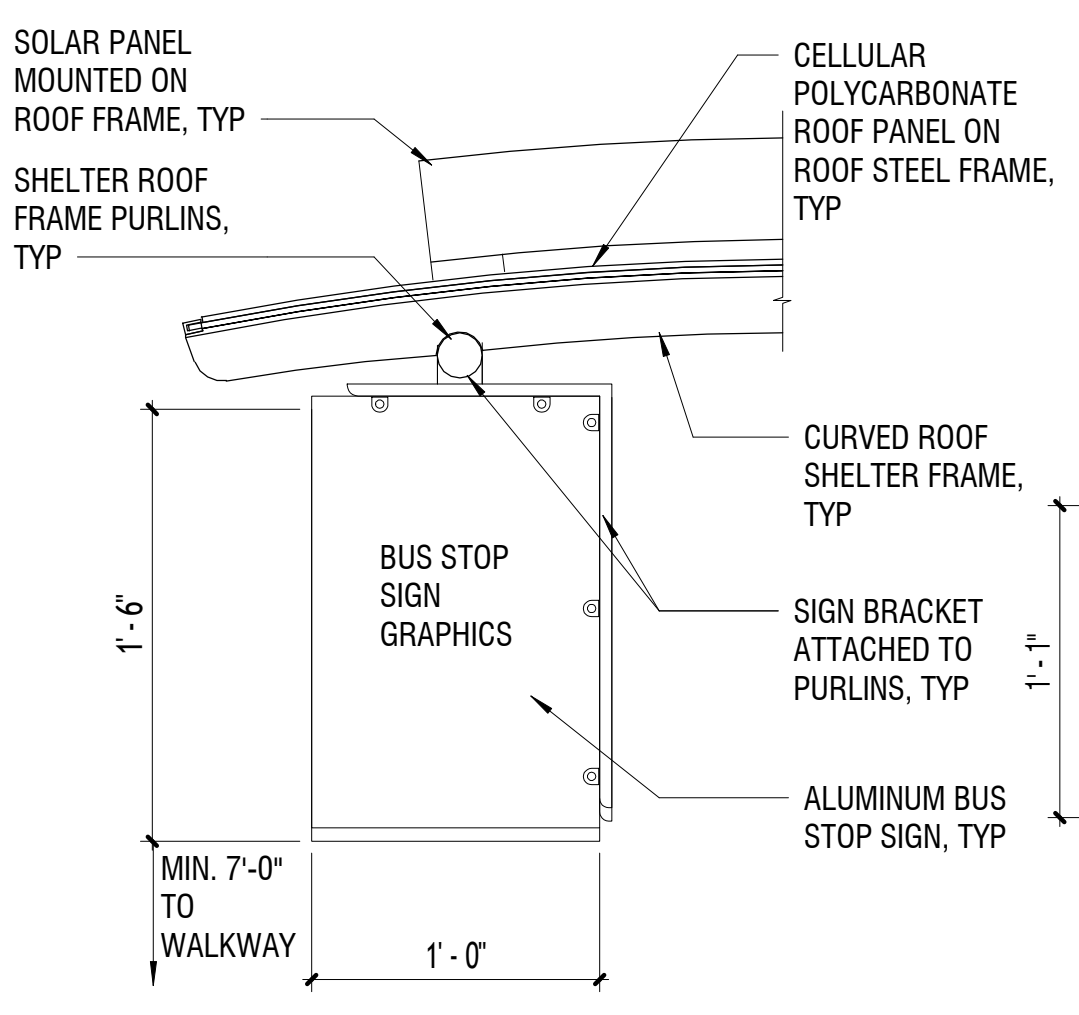
SIGN PANEL SECTION DETAIL 1
SCALE: 3" = 1'-0"

1
A13 A13



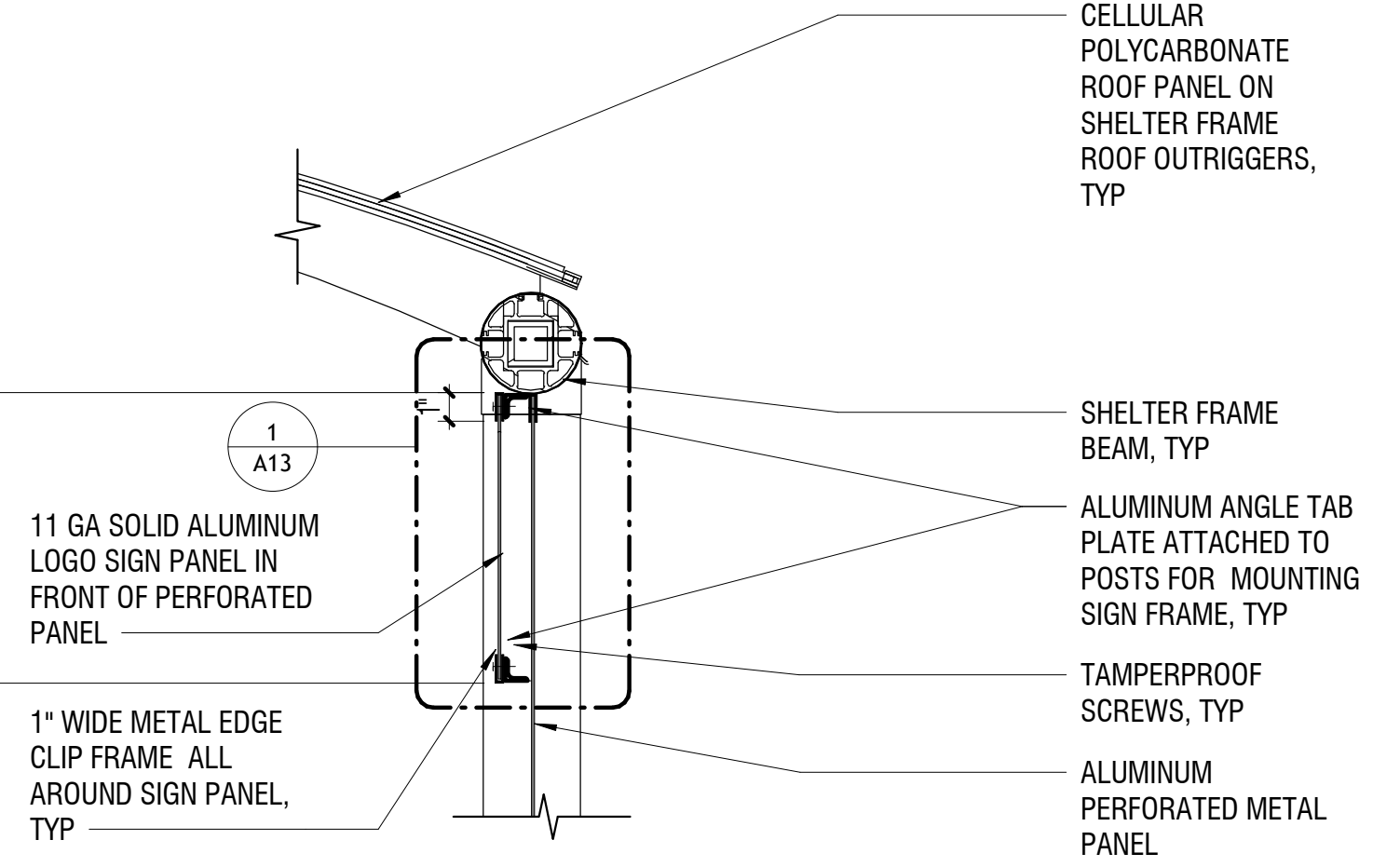
BUS SHELTER SIGN PANEL FRONT ELEVATION
SCALE: 1 1/2" = 1'-0"

2
A13 A06



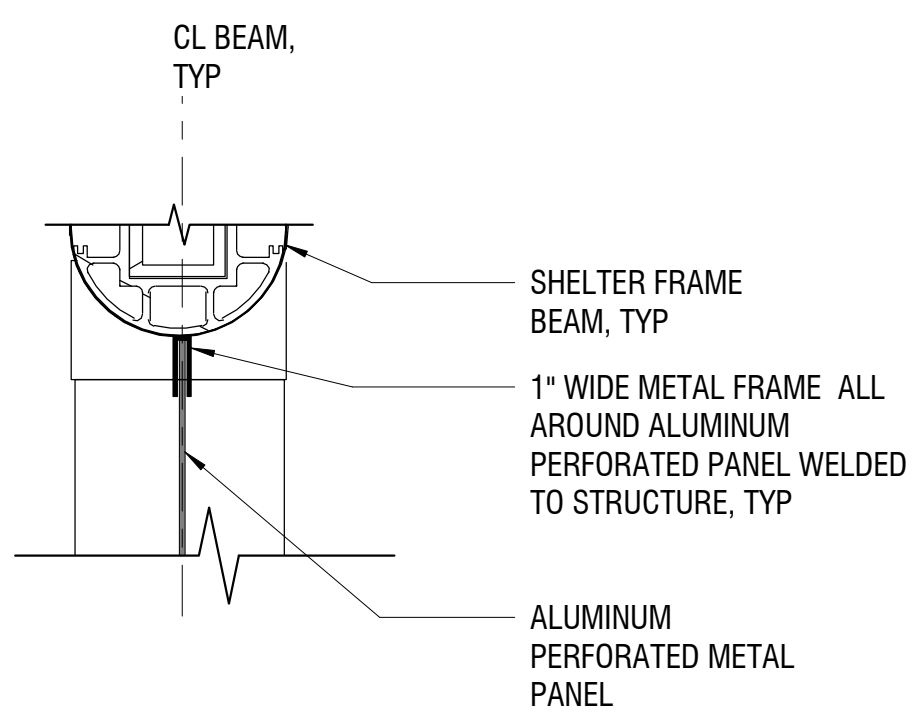
BUS STOP SIGN ELEVATION DETAIL
SCALE: 1 1/2" = 1'-0"

3
A13 A06



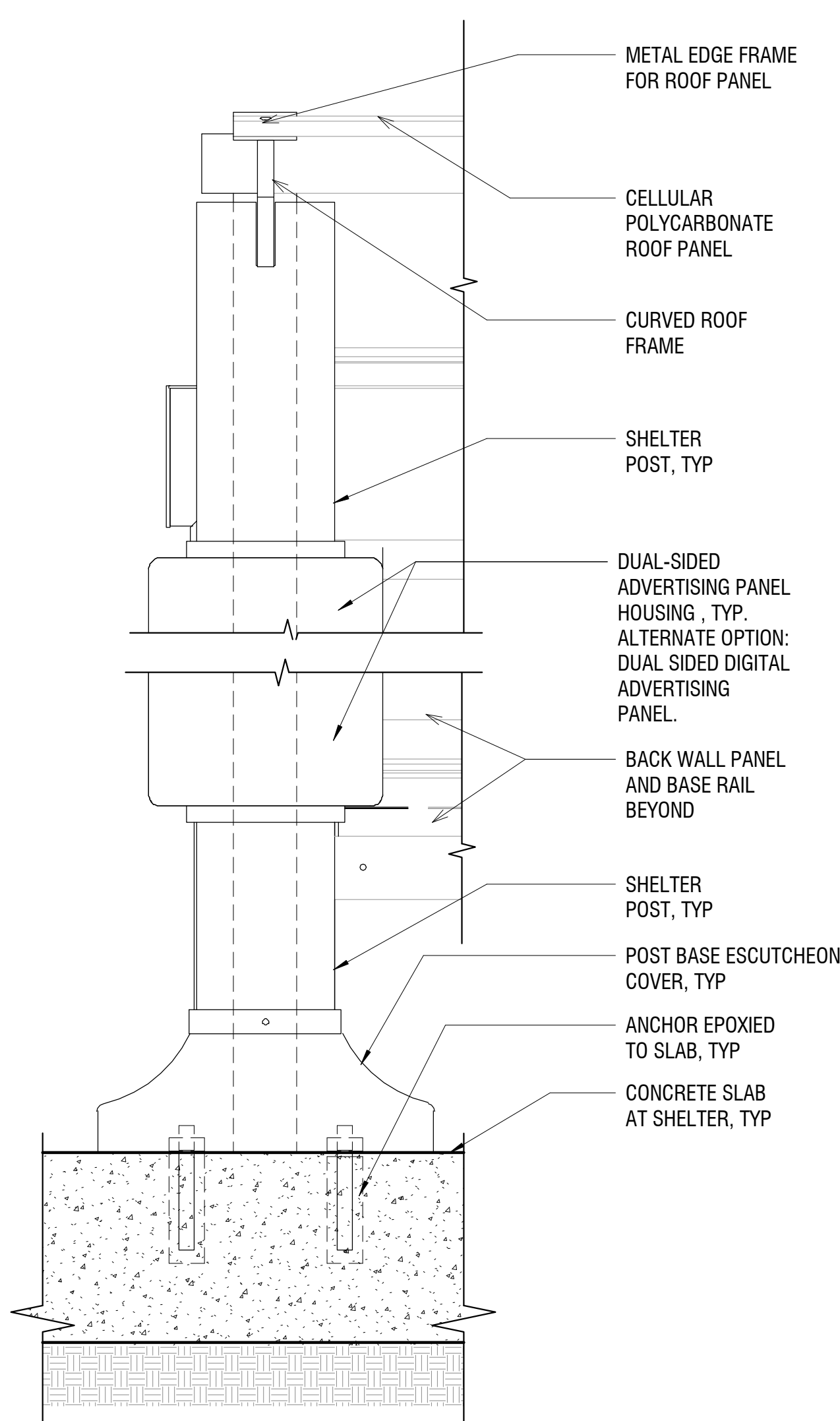
SIGN PANEL SECTION DETAIL
SCALE: 1 1/2" = 1'-0"

4
A13 A06



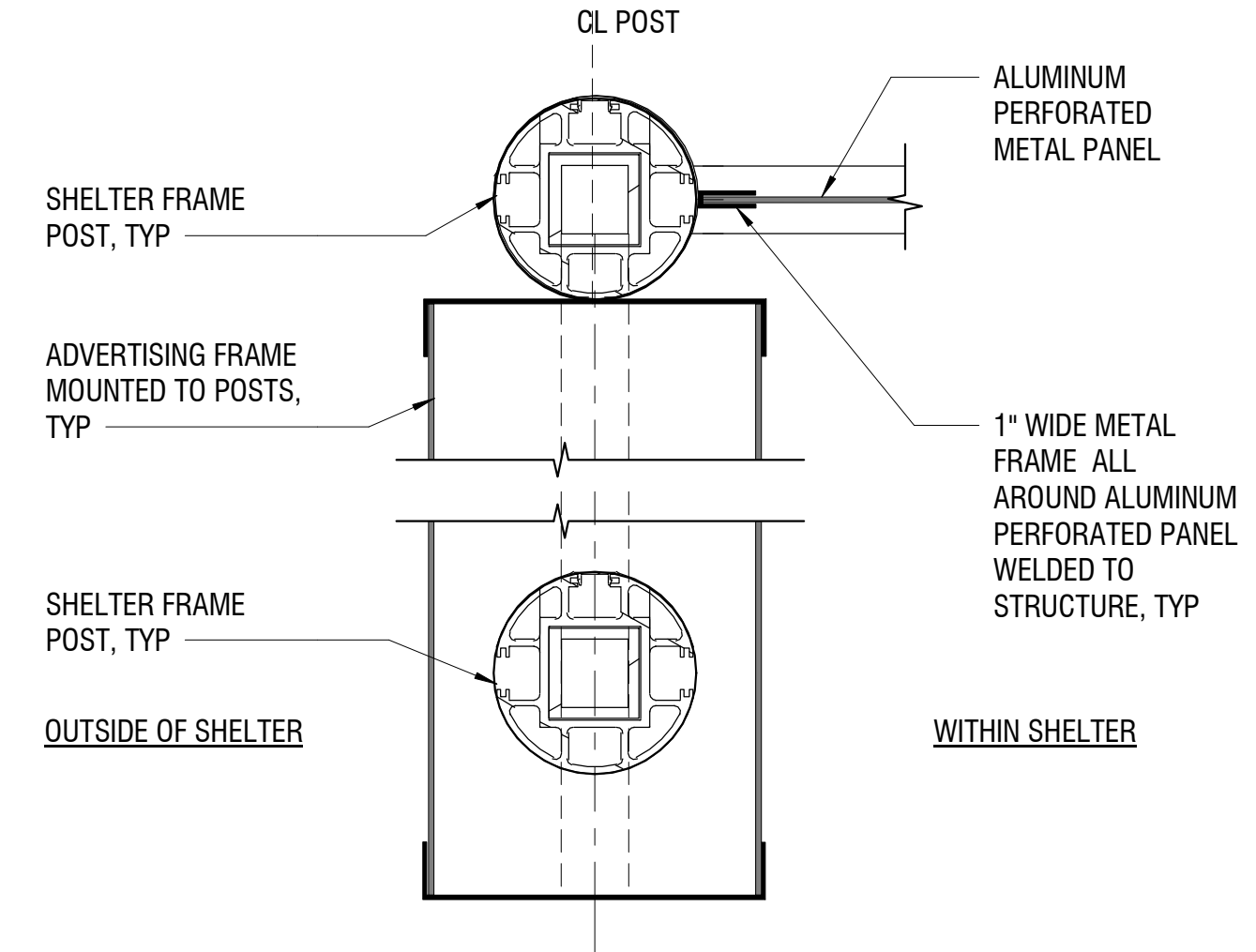
PERFORATED PANEL TOP SECTION DETAIL
SCALE: 3" = 1'-0"

5
A13 A06



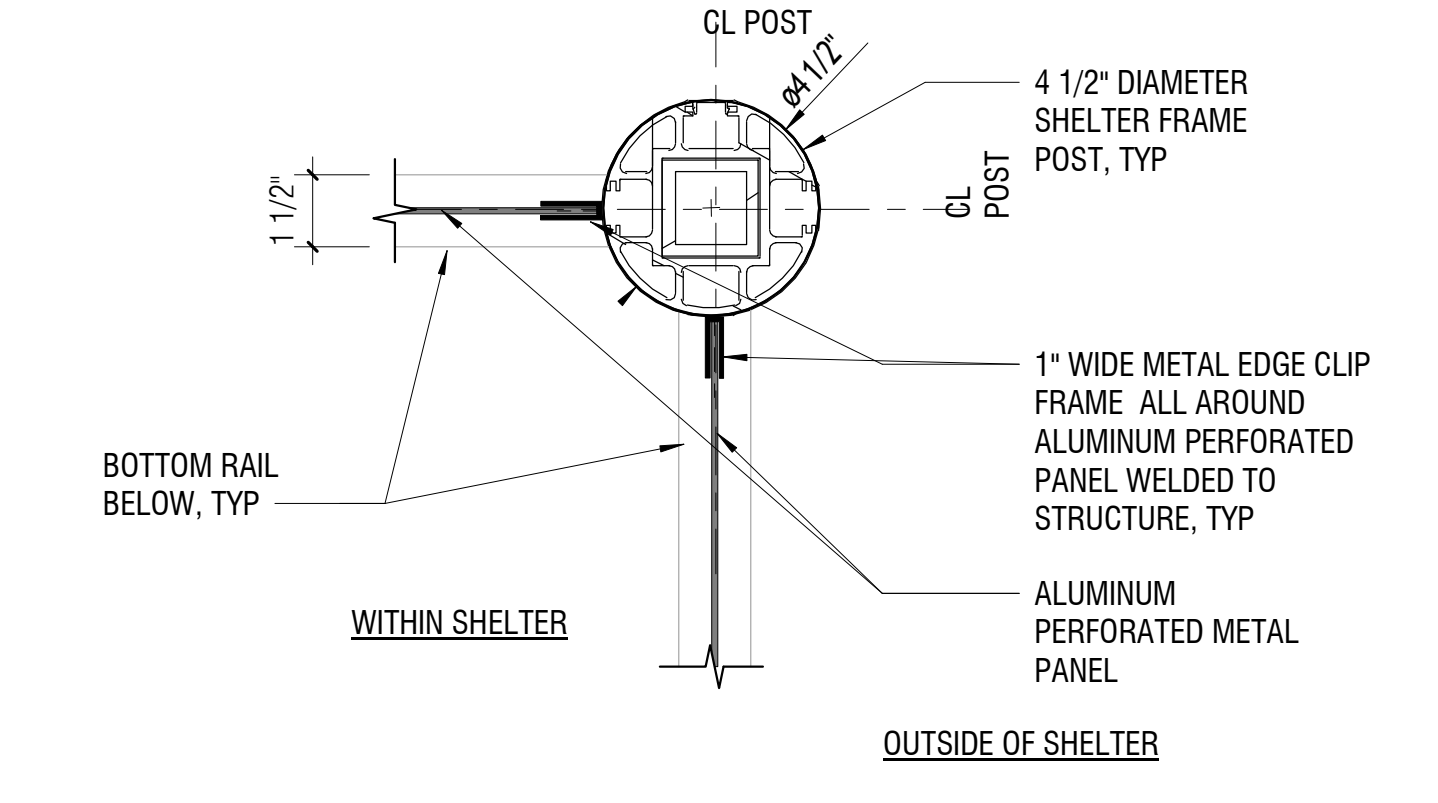
BUS SHELTER POST AT AD PANEL
SCALE: 3" = 1'-0"

9
A13 A06



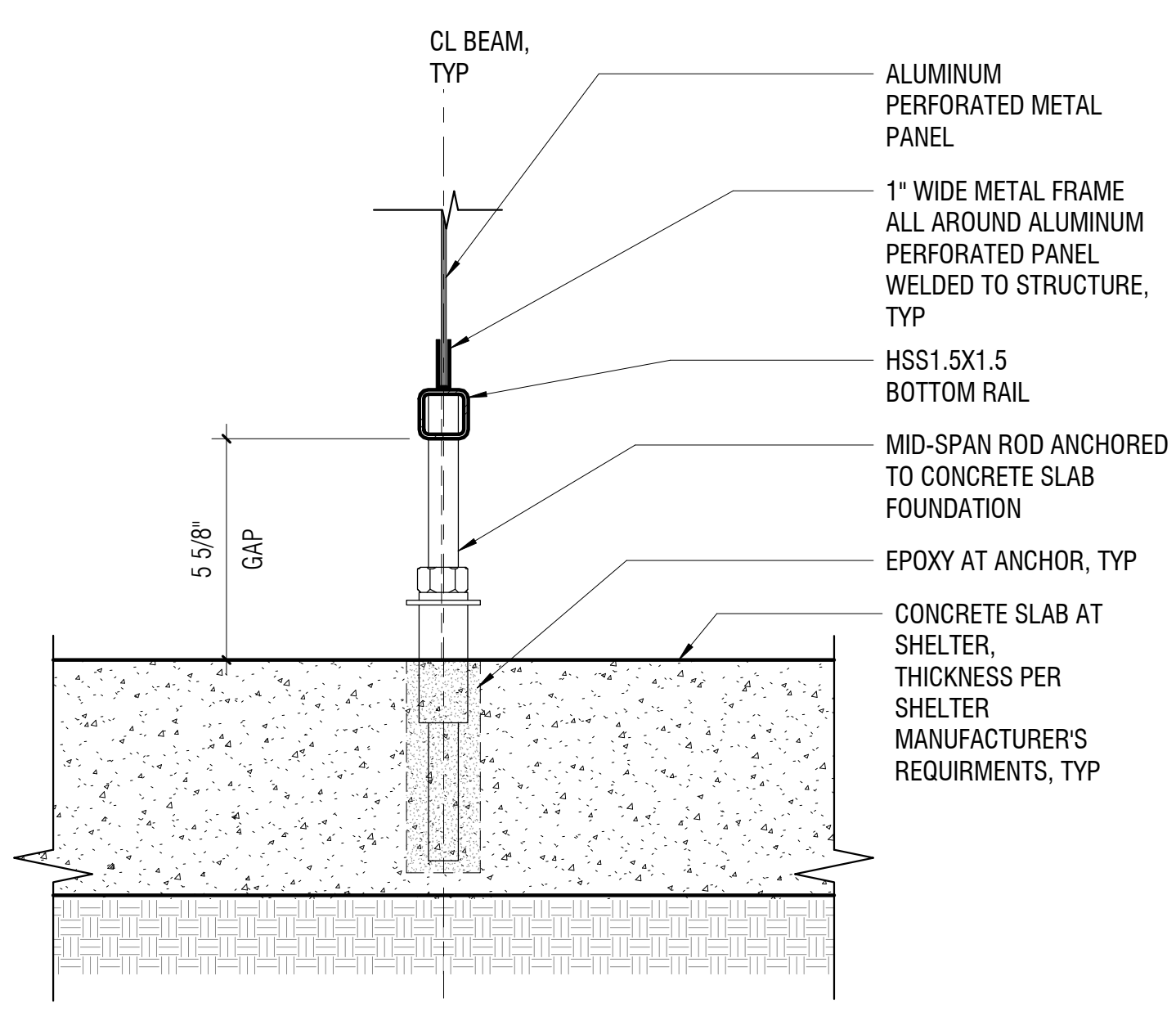
CORNER POST AT ADVERTISING PANEL PLAN DETAIL
SCALE: 3" = 1'-0"

6
A13 A06



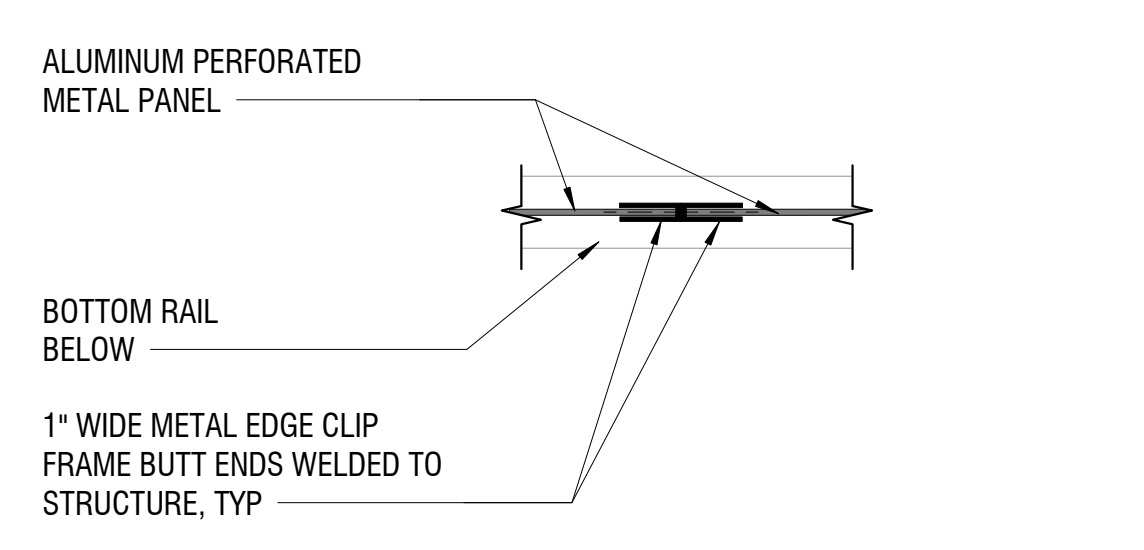
CORNER POST PLAN DETAIL
SCALE: 3" = 1'-0"

7
A13 A06



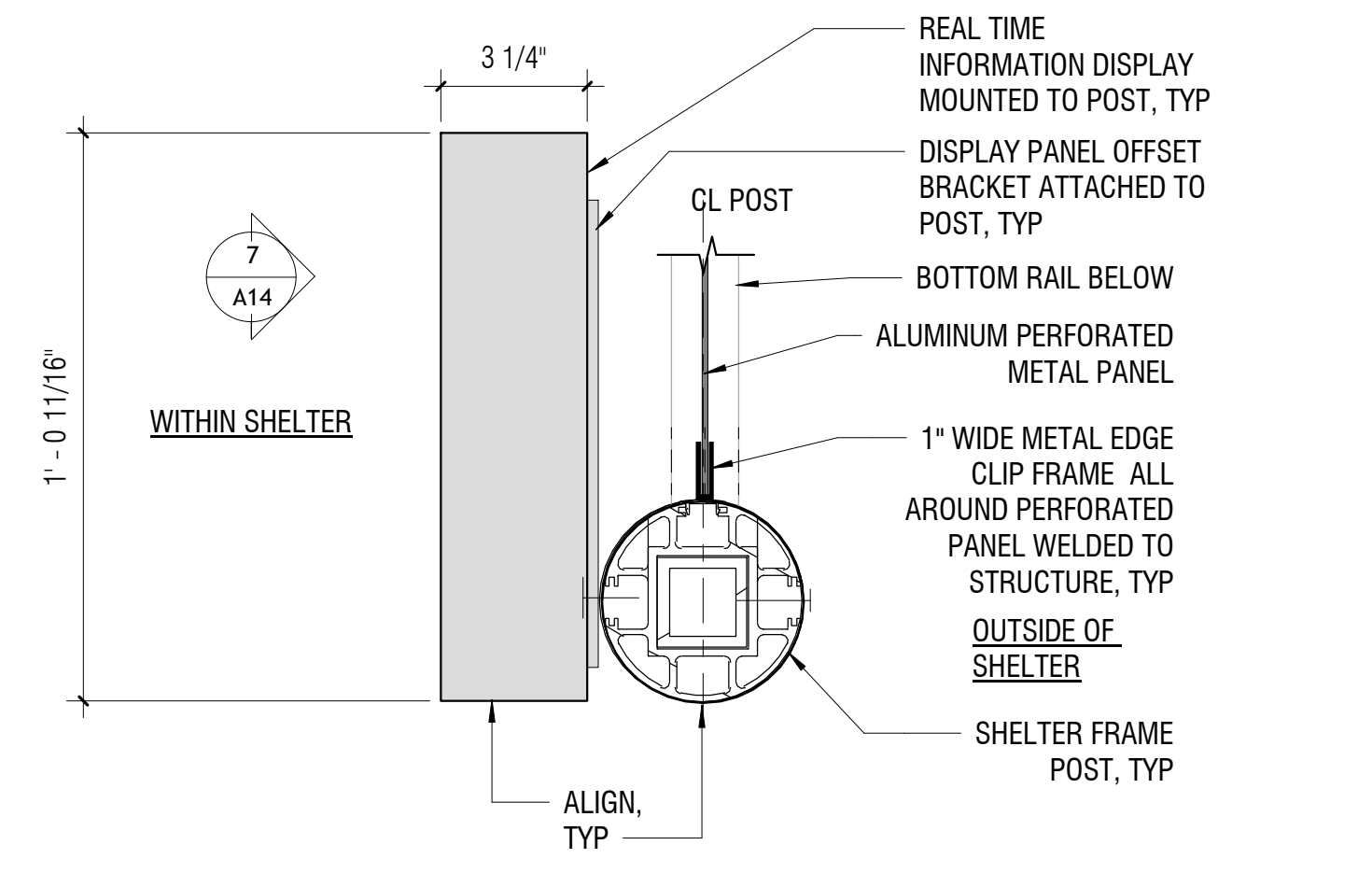
PERFORATED PANEL BASE SECTION DETAIL
SCALE: 3" = 1'-0"

8
A13 A06



PANEL TO PANEL PLAN DETAIL
SCALE: 3" = 1'-0"

10
A13 A06



FRONT POST AT REAL TIME INFORMATION PANEL
SCALE: 3" = 1'-0"

11
A13 A06

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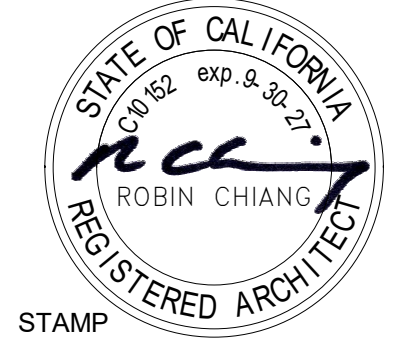
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REV.	DATE	BY	SUB	APP.	DESCRIPTION	REV.	DATE	BY	SUB	APP.	DESCRIPTION
	12/17/2025				FINAL SUBMITTAL						

DESIGNED:
R. BUTIONG
DRAWN:
E. PETRIE
CHECKED:
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APPROVED:
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381 Tehama Street
San Francisco, CA 94103



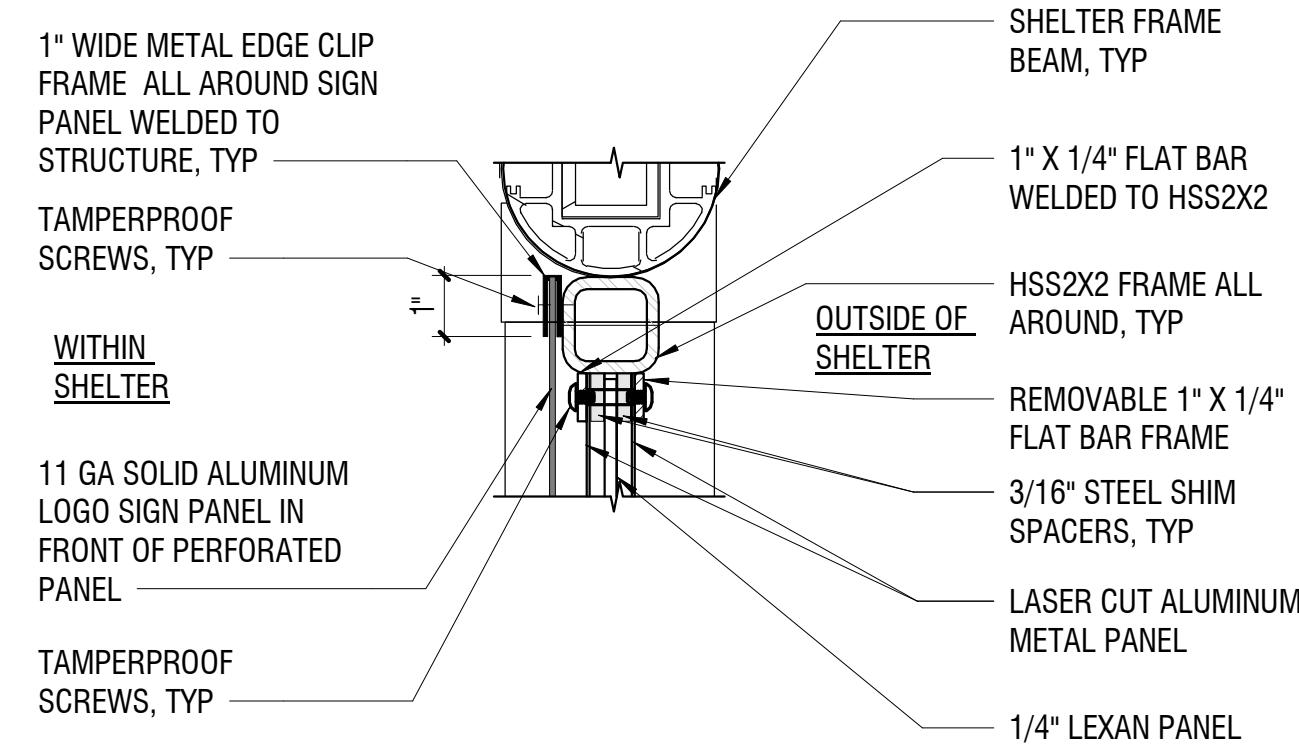
**SAN MATEO COUNTY TRANSIT DISTRICT
BUS STOP IMPROVEMENT PLAN**

**ARCHITECTURAL
BUS SHELTER KIT OF PARTS
BUS SHELTER DETAILS**

SIZE: D	SCALE: AS NOTED
SHEET NUMBER: A13	
PAGE NO.	

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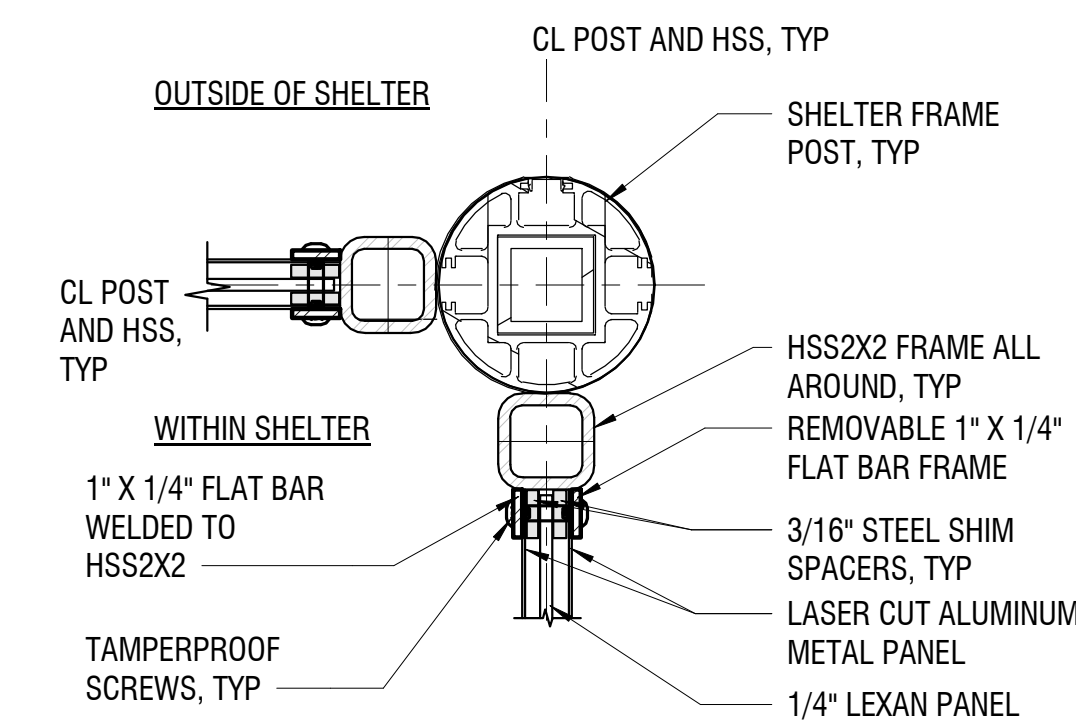


WIND COVER PANEL ASSEMBLY- TOP RAIL DETAIL

SCALE: 3" = 1'-0"

1

A14 A11

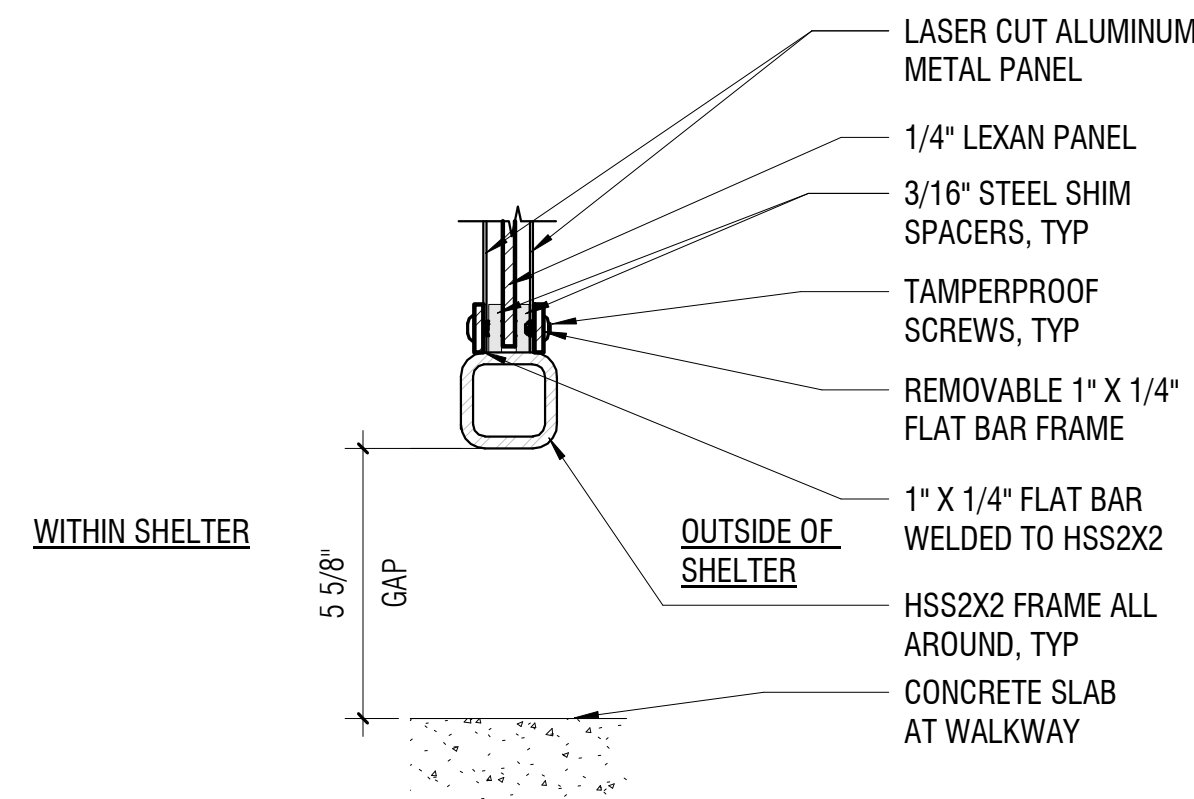


WIND COVER PANEL ASSEMBLY CORNER POST PLAN DETAIL

SCALE: 3" = 1'-0"

2

A14 A11

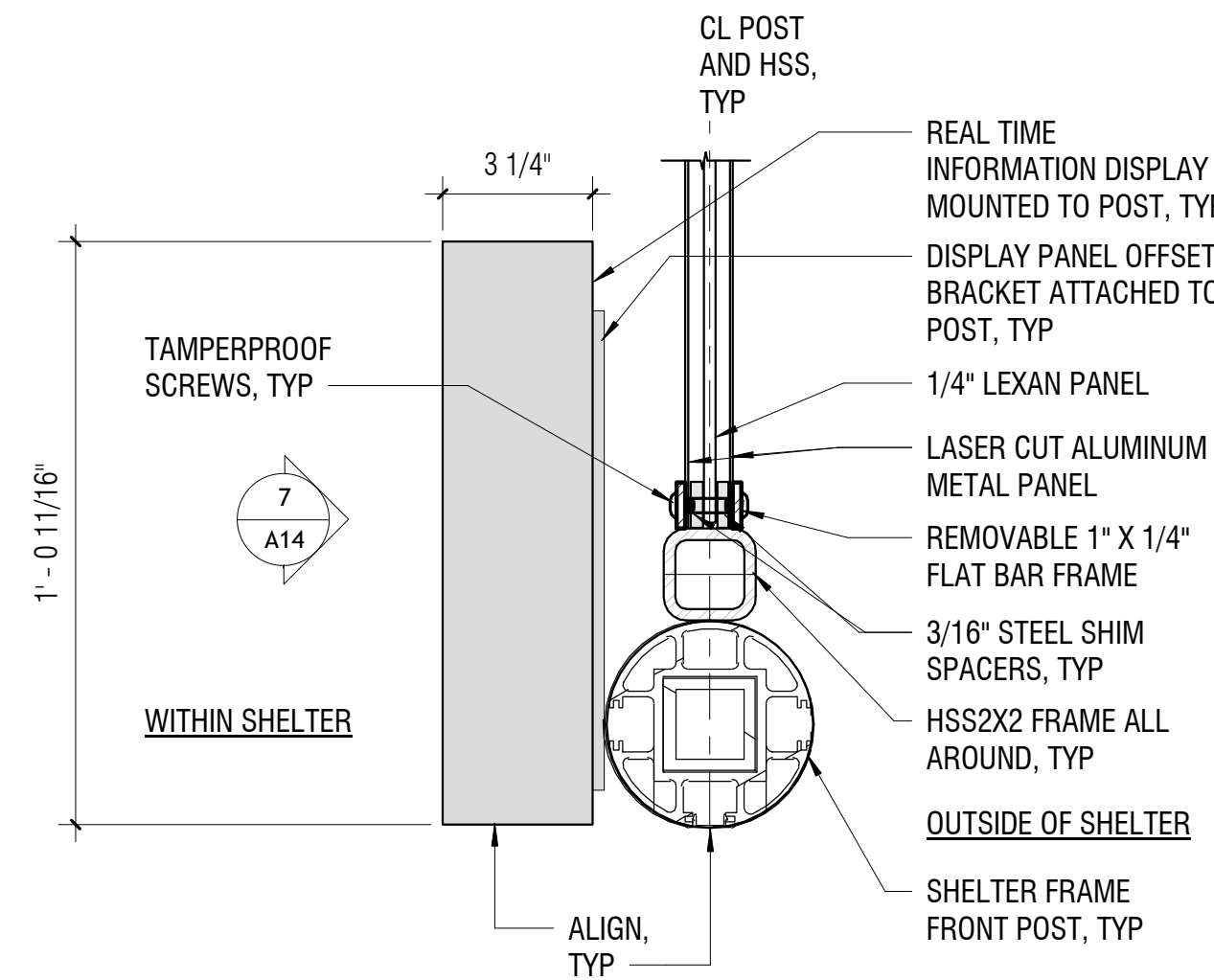


WIND COVER PANEL ASSEMBLY BASE DETAIL

SCALE: 3" = 1'-0"

3

A14 A11

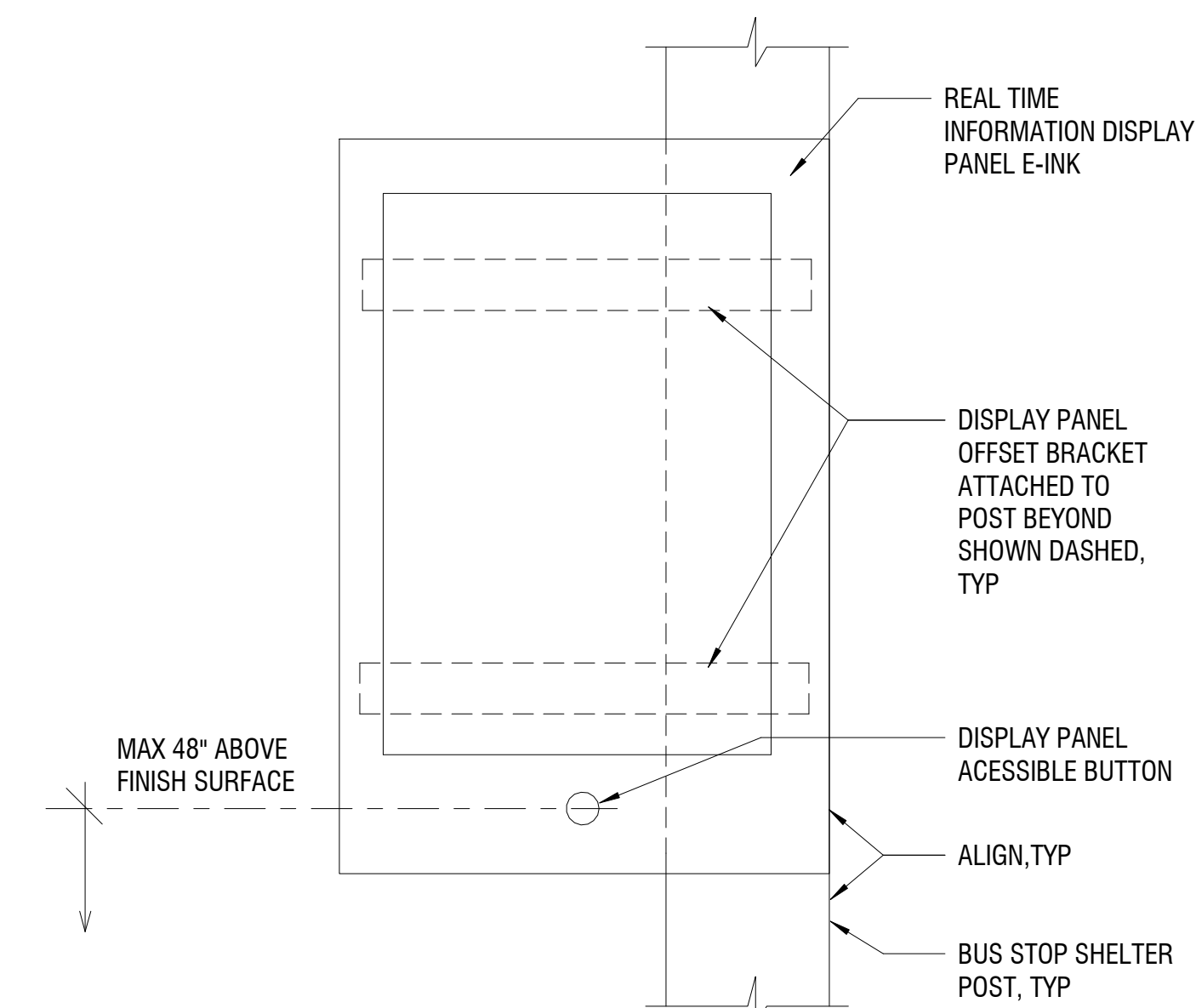


WIND COVER PANEL ASSEMBLY FRONT POST PLAN DETAIL

SCALE: 3" = 1'-0"

4

A14 A11

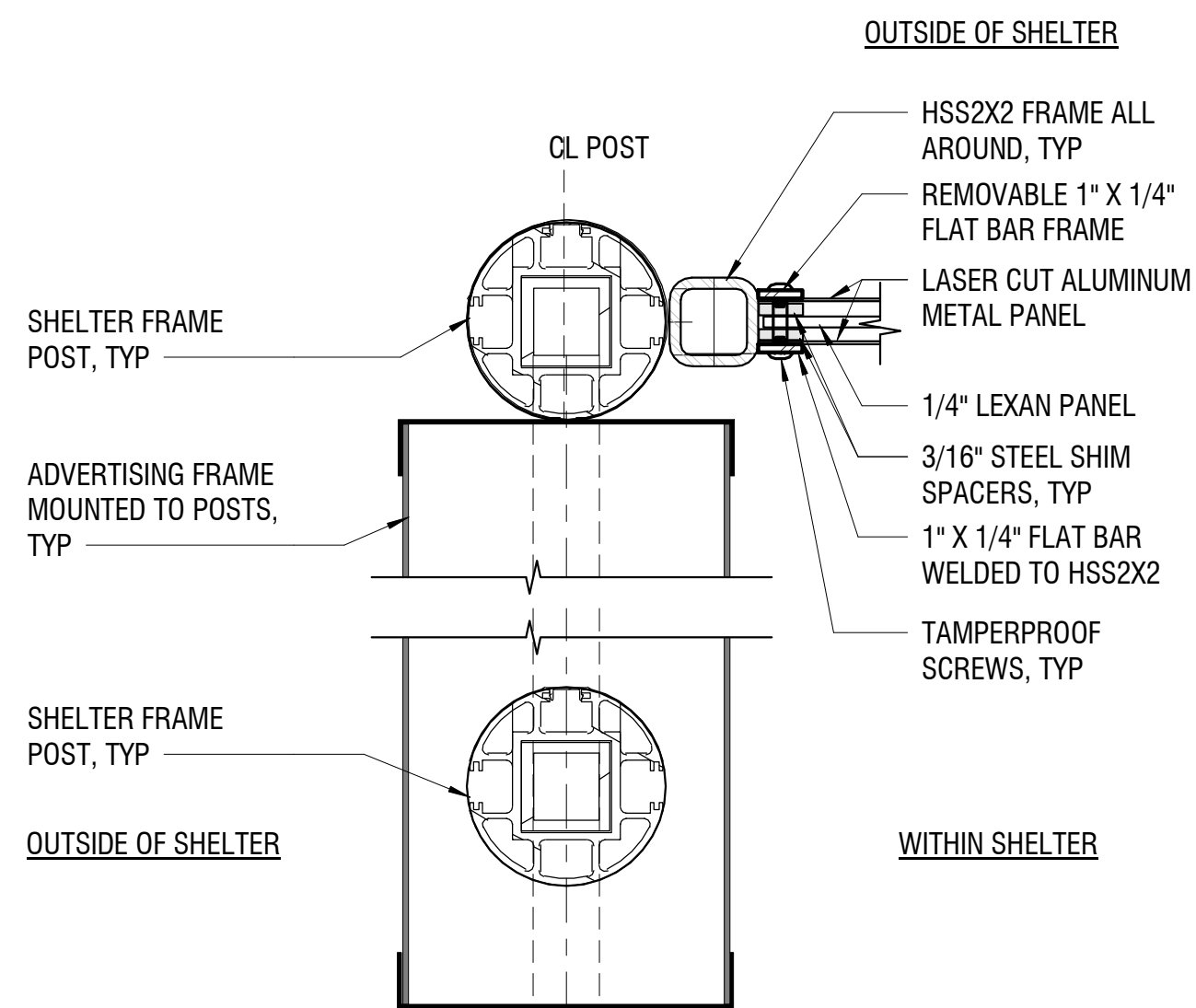


REAL TIME INFORMATION DISPLAY PANEL ELEVATION

SCALE: 3" = 1'-0"

7

A14 A11

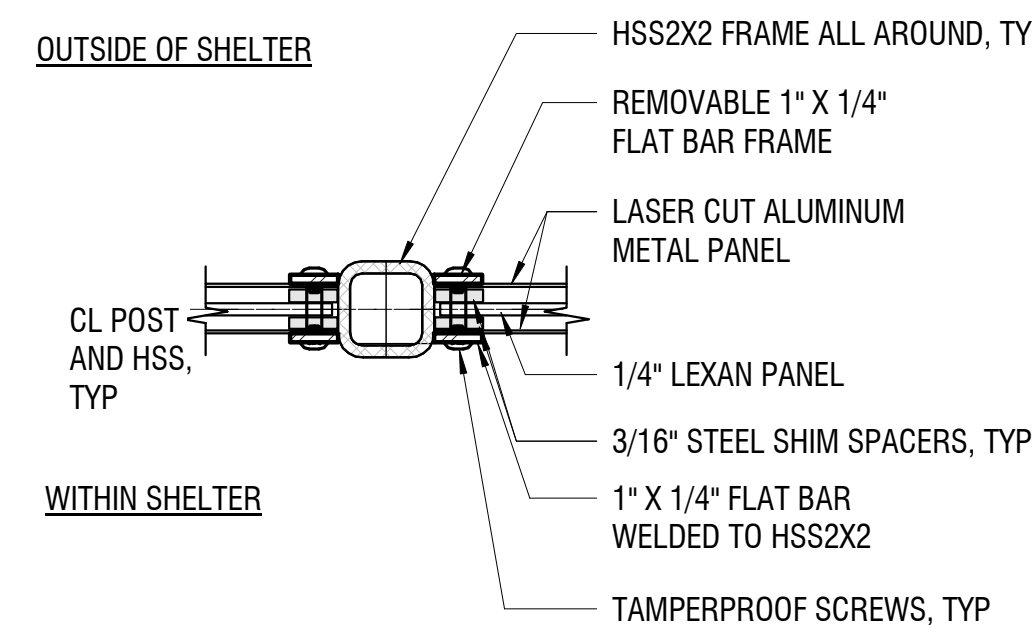


PLAN DETAIL AT SHELTER AD PANEL SIDE

SCALE: 3" = 1'-0"

5

A14 A11



PERFORATED WALL PANEL TO PANEL PLAN DETAIL

SCALE: 3" = 1'-0"

6

A14 A11

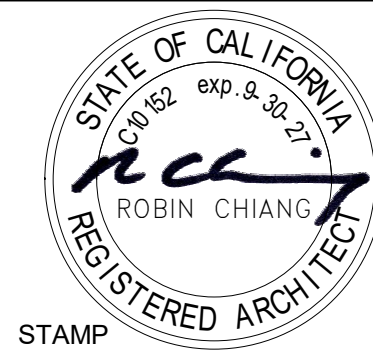
DESIGNED: R. BUTIONG
DRAWN: E. PETRIE
CHECKED: R. BUTIONG
APPROVED: R. CHIANG
DATE: 11/11/25

Fehr & Peers

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Suite 450
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381 Tehama Street
San Francisco, CA 94103



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**SAN MATEO COUNTY TRANSIT DISTRICT
BUS STOP IMPROVEMENT PLAN**

**ARCHITECTURAL
BUS SHELTER KIT OF PARTS
BUS SHELTER DETAILS-WIND COVER
ASSEMBLY**

SIZE: D SCALE: AS NOTED

SHEET NUMBER

A14

PAGE NO.

REV.	DATE	BY	SUB	APP.	DESCRIPTION	REV.	DATE	BY	SUB	APP.
	12/17/2025				FINAL SUBMITTAL					

THIS DRAWING HAS BEEN GENERATED AND IS MAINTAINED BY A CAD SYSTEM. CHANGES SHALL ONLY BE INCORPORATED AS DIRECTED BY TOLAR MANUFACTURING CO., INC.'S ENGINEERING DEPT.

ZONE	REV	DESCRIPTION	DATE	APPROVED
A		SEE ECR E0287	12/21/10	VB
B		ADDED REFERENCE	05/24/11	VB

CONFIGURATION A	CONFIGURATION B - ANCHORS	CONFIGURATION C - FINISH
1 PLANT 1	0 NO ANCHORS	0 NONE
2 PLANT 2	1 1/2" X 3 3/4" SUP-R ANCHORS, ZINC	1 STANDARD POWDER COAT
	2 1/2" X 3 3/4" SUP-R ANCHORS, STN STL	2 STANDARD POWDER COAT WITH CLEAR COAT
	3 1/2" X 4 1/4" SUP-R ANCHORS, ZINC	3 PREMIUM POWDER COAT
	4 1/2" X 4 1/4" SUP-R ANCHORS, STN STL	4 PREMIUM POWDER COAT WITH CLEAR COAT
	5 1/2" X 3 3/4" HILTI TZ ANCHORS, ZINC	5 TBD
	6 1/2" X 3 3/4" HILTI TZ ANCHORS, STN STL	6 TBD
	7 1/2" X 4 1/2" HILTI TZ ANCHORS, ZINC	7 TBD
	8 1/2" X 4 1/2" HILTI TZ ANCHORS, STN STL	8 TBD
	9 SPECIAL - SPECIFIED ON SALES ORDER	9 SPECIAL - SPECIFIED ON SALES ORDER

EXAMPLE: 14001-211

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona, CA 92879

DESCRIPTION: BENCH, 6' PERF. CONTOUR WITH 2 ANTI-VAGRANT BARS

CUSTOMER/VENDOR: WITH 2 ANTI-VAGRANT BARS

SIZE: A MATL: 14001 REV: B

SCALE: DATE: 12/13/2010 DRAWN BY: VB

A: BENCH

GENERAL NOTES:
 1. ALL STRUCTURAL STEEL, UNLESS OTHERWISE NOTED, SHALL BE ASTM A36, MINIMUM YIELD STRENGTH 36,000 PSI.
 2. ALL STRUCTURAL ALUMINUM MEMBERS, UNLESS OTHERWISE NOTED, SHALL BE OF ALLOY 6063-T5 OR EQUIVALENT.
 3. ALL HELDS TO BE DRILLED OR PUNCHED.
 4. STEEL WELDING SHALL CONFORM TO AMERICAN WELDING SOCIETY STANDARD D1. 1-10. ELECTRODES SHALL CONFORM TO AWS E5.1, CLASS E70S.
 5. ALUMINUM WELDING SHALL CONFORM TO AMERICAN WELDING SOCIETY STANDARD D1. 2-10. ELECTRODES SHALL CONFORM TO AWS A5.10 CLASS ER40.
 6. ALL WELDING TO BE DONE AT TOLAR MANUFACTURING COMPANY, INC. FACILITY.
 7. ALL CORPORATE PROCEDURES, INCLUDING FABRICATION, MUST BE IN COMPLIANCE WITH TOLAR MANUFACTURING CO., INC.'S QUALITY CONTROL MANUAL.

CONFIGURATION A	CONFIGURATION B - ANCHORS	CONFIGURATION C - FINISH
1 PLANT 1	0 NO ANCHORS	0 NONE
2 PLANT 2	1 1/2" X 3 3/4" SUP-R ANCHORS, ZINC	1 STANDARD POWDER COAT
	2 1/2" X 3 3/4" SUP-R ANCHORS, STN STL	2 STANDARD POWDER COAT WITH CLEAR COAT
	3 1/2" X 4 1/4" SUP-R ANCHORS, ZINC	3 PREMIUM POWDER COAT
	4 1/2" X 4 1/4" SUP-R ANCHORS, STN STL	4 PREMIUM POWDER COAT WITH CLEAR COAT
	5 1/2" X 3 3/4" HILTI TZ ANCHORS, ZINC	5 TBD
	6 1/2" X 3 3/4" HILTI TZ ANCHORS, STN STL	6 TBD
	7 1/2" X 4 1/2" HILTI TZ ANCHORS, ZINC	7 TBD
	8 1/2" X 4 1/2" HILTI TZ ANCHORS, STN STL	8 TBD
	9 SPECIAL - SPECIFIED ON SALES ORDER	9 SPECIAL - SPECIFIED ON SALES ORDER

EXAMPLE: 114348-111

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona, CA 92879

DESCRIPTION: PERCH SEATING WITH 3 SLATS

CUSTOMER/VENDOR: PERCH SEATING WITH 3 SLATS

SIZE: A MATL: 14348 REV: A

SCALE: DATE: 02/25/11 DRAWN BY: VB

B: PERCH SEATING NOTE: MODIFIED PERCH SEATING WITH THREE SLATS

CONFIGURATION A	CONFIGURATION B - ANCHORS	CONFIGURATION C - FINISH
1 PLANT 1	0 NO ANCHORS	0 NONE
2 PLANT 2	1 1/2" X 3 3/4" SUP-R ANCHORS, ZINC	1 STANDARD POWDER COAT
	2 1/2" X 3 3/4" SUP-R ANCHORS, STN STL	2 STANDARD POWDER COAT WITH CLEAR COAT
	3 1/2" X 4 1/4" SUP-R ANCHORS, ZINC	3 PREMIUM POWDER COAT
	4 1/2" X 4 1/4" SUP-R ANCHORS, STN STL	4 PREMIUM POWDER COAT WITH CLEAR COAT
	5 1/2" X 3 3/4" HILTI TZ ANCHORS, ZINC	5 TBD
	6 1/2" X 3 3/4" HILTI TZ ANCHORS, STN STL	6 TBD
	7 1/2" X 4 1/2" HILTI TZ ANCHORS, ZINC	7 TBD
	8 1/2" X 4 1/2" HILTI TZ ANCHORS, STN STL	8 TBD
	9 SPECIAL - SPECIFIED ON SALES ORDER	9 SPECIAL - SPECIFIED ON SALES ORDER

EXAMPLE: 30530-111

Tolar Manufacturing Company, Inc
258 Mariah Circle, Corona, CA 92879

DESCRIPTION: 36 GAL TRASH CAN W. CONVEX LID

CUSTOMER/VENDOR: SAN MATEO COUNTY TRANSIT

SIZE: B MATL: ALL STL REV: 1

SCALE: DATE: 4/24/2018 DRAWN BY: RFarr

D: TRASH RECEPTACLE

SS-1

NOTE: WHEN INSTALLED ACCORDING TO THESE INSTRUCTIONS, THIS STRUCTURE WILL WITHSTAND THE WIND SHEAR FORCES CREATED BY MAXIMUM WIND VELOCITIES OF 125 MILES PER HOUR.

INSTALLATION ON EXISTING CONCRETE

SIMME L.L.C.
555 CHERRY DRIVE
EUGENE, OR 97401

TEL. (541)338-7993
WWW.SIMMESEAT.COM
SIMME-SEAT@COMCAST.NET

C: SIMME SEAT

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REV.	DATE	BY	SUB	APP.	DESCRIPTION
12/17/2025					FINAL SUBMITTAL

DESIGNED:	DRAWN:	CHECKED:	APPROVED:
R. BUTTIONG	E. PETRIE	R. BUTTIONG	R. CHIANG

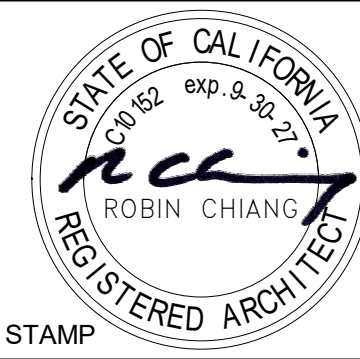
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345 California Street
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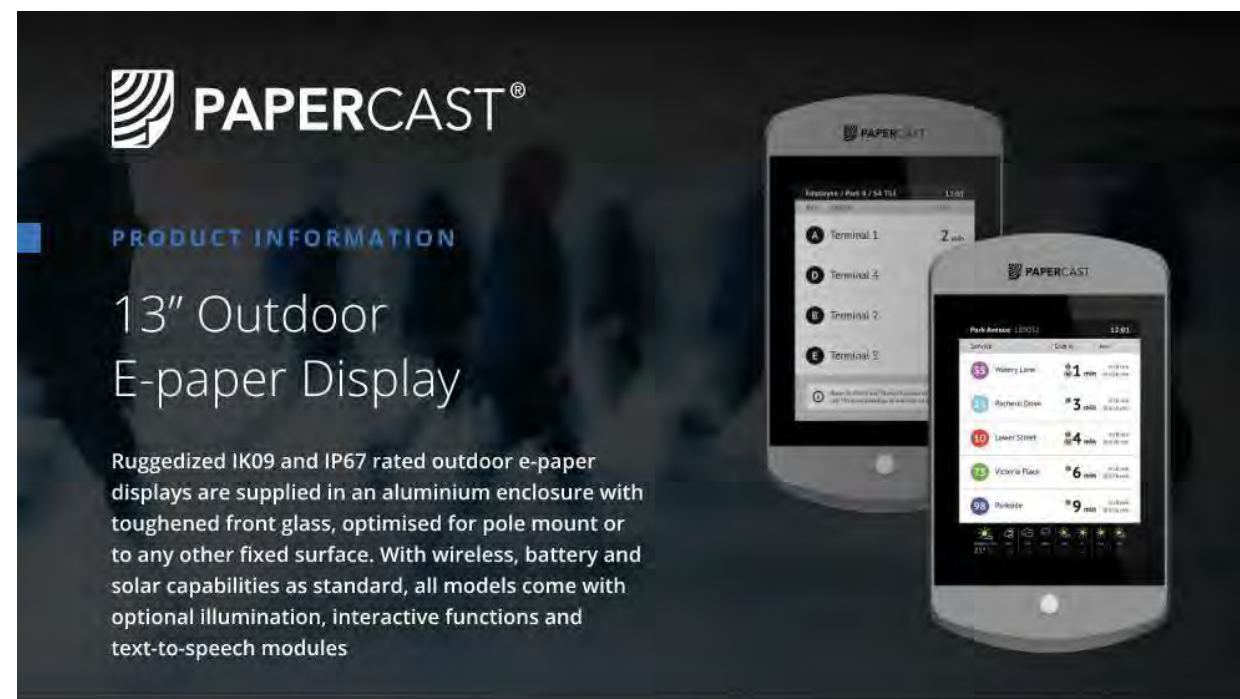
Robin Chiang & Company
381 Tehama Street
San Francisco, CA 94103



**SAN MATEO COUNTY TRANSIT DISTRICT
BUS STOP IMPROVEMENT PLAN**

**ARCHITECTURAL
BUS SHELTER KIT OF PARTS
AMENITY ACCESSORIES**

SIZE: D	SCALE: AS NOTED
SHEET NUMBER: A16	
PAGE NO.	



GENERAL		CONNECTIVITY OPTIONS	
Dimensions	469 x 269 x 65 mm	Cellular network	2G, 3G, 4G, LTE
Weight	7 kg	WiFi (optional)	Dual band (2.4/5 GHz) 802.11 ac/n
Mounting type	Round Post / Square Post / Wall	Ethernet (optional)	10/100/1000 Mbps
Enclosure colour	BrushedRAL 9005 (jet Black) / Interpon 610 - Blismuth (Textured) / Custom Colours	Bluetooth (optional)	Bluetooth 4.1
DISPLAY		ACCESSIBILITY	
Greyscale		Text-to-speech (optional)	<input type="checkbox"/>
Active display area	267 x 200 mm	External push button (optional)	<input type="checkbox"/>
Display resolution (Pixels)	1600 x 1200	Braille button ID (optional)	<input type="checkbox"/>
Grey levels	16		
Colour		CERTIFICATIONS	
Active display area	267 x 200 mm	Certificate of Conformity (CE)	<input type="checkbox"/>
Display resolution (Pixels)	1600 x 1200	Certificate of Conformity (UK)	<input type="checkbox"/>
Display colour	4096	IP67 Ingress Protection Rating	<input type="checkbox"/>
Illumination (optional)	Embedded LED front illumination, adjustable	IK09 Impact Protection Rating	<input type="checkbox"/>
Mean time before failure	>12 years (At 20°C and 65% Humidity)	MANAGEMENT & CONTROL	
		Real-time data integration: GTFS, SIRI, API open standards, bespoke	
		Content management: Fully configurable graphical area, award-winning design system, defined & custom layouts & templates, Paperstore app & widget library	
		Device control: Set-up, power, connectivity, activity periods, content mode, illumination, text-to-speech, interactive modes	
		Monitoring & diagnostics: Temperature, humidity, power status, data consumption, movement detection, analytics & reporting	
		Alarms & notifications: Via text, email or dashboard for various alert conditions	
ENVIRONMENT		POWER OPTIONS	
Operating temp (Greyscale)	-20°C - 70°C	Solar power	20W or 40W 24Ah or 48Ah
Operating temp (Colour)	-15°C - 65°C	Integrated rechargeable battery	LiFePO4 14.4V 123Ah
		Long-life battery	LiFePO4 14.4V 123Ah
		Mains power	90-250Vac 50-60Hz to 12Vdc 5A
		Street light power	90-250Vac 50-60Hz to 12Vdc 24Ah LifePO
		Power over Ethernet (PoE)	IEEE 802.3af standard

Papercast Limited
123 Buckingham Palace Road, London, SW1W 9SH, United Kingdom
t +44 (0) 20 7043 1355 e info@papercast.com w papercast.com

E: REAL TIME INFORMATION DISPLAY

RCH INFORMATION HOLDERS

TRANSIT INFORMATION PRODUCTS

Smooth Rounded Corners - Safer for Public Environments
Used by over 400 Transit Authorities throughout the United States & Canada. Designed for use at bus stops, shelters, transit centers or anywhere that transit information is displayed in a public environment - indoors or outdoors. The RCH Series features an exceptionally rugged all-metal design with hemispherically rounded corners for maximum public safety. Mounts quickly on round, square or U-channel bus stop poles, walls or shelters.

RCH Features

- Modular design allows you to post as little or as much info as needed at a bus stop.
- Available with 3, 4, 5 and 6-sided rotating kiosk frames.
- 180 custom colors available.
- Fully recessed stainless steel tamper-proof cap locking screws.
- Rugged aluminum construction with durable powdercoat finish.

INSTALLS INDIVIDUALLY OR INSTALL ON MULTI-SIDED ROTATING FRAMES

SINGLE PANEL

RCH-11 LETTER SIZE 8 1/2" x 11" DISPLAY	RCH-14 LEGAL SIZE 8 1/2" x 11" DISPLAY	RCH-17 8 1/2" x 11" DISPLAY	RCH-22 8 1/2" x 22" DISPLAY
RCH-6/14 8 1/4" x 14" DISPLAY	RCH-6/17 8 1/4" x 17" DISPLAY	RCH-11/17 TABLOID SIZE 11" x 17" DISPLAY	RCH-11/22 11" x 22" DISPLAY

LARGE FORMAT RCH MAP CASE
24" x 36" Display
Smooth Rounded Corners

INSTALLS VERTICALLY OR HORIZONTALLY
CUSTOM SIZES AVAILABLE

TRANSIT INFORMATION PRODUCTS
A DIVISION OF WEBB & ASSOCIATES, INC.
5052 FORNI DR., STE. B • CONCORD, CA 94520
(925) 676-8900 Fax (925) 676-3030
www.transitproducts.com

F: GUIDE A RIDE SPECIFICATIONS

Mounting Hardware for RCH Schedule Holders

TRANSIT INFORMATION PRODUCTS

Installing RCH Schedule Holders on: Round Bus Stop Poles
2 3/8" O.D.
SINGLE SIDED INSTALLATION
2 BRACKETS REQUIRED PER INSTALLATION

Installing RCH Schedule Holders on: Perforated Square Posts
SINGLE SIDED INSTALLATION
1 1/2" x 1 1/2" x 1/8" (3/16") Perforated Post
1 3/8" x 2" Square Perforated Post

Installing RCH Schedule Holders on: U-Channel Poles
SINGLE SIDED INSTALLATION
U-Channel Post
1 1/2" x 1 1/2" x 1/8" (3/16") Perforated Post
1 3/8" x 2" Square Perforated Post

Installing RCH Schedule Holders on: Round Bus Stop Poles
2 3/8" O.D.
BACK-TO-BACK INSTALLATION
2 BRACKETS REQUIRED PER INSTALLATION

Installing RCH Schedule Holders on: Perforated Square Posts
BACK-TO-BACK INSTALLATION
1 1/2" x 1 1/2" x 1/8" (3/16") Perforated Post
1 3/8" x 2" Square Perforated Post

Installing RCH Schedule Holders on: U-Channel Poles
BACK-TO-BACK INSTALLATION
U-Channel Post
1 1/2" x 1 1/2" x 1/8" (3/16") Perforated Post
1 3/8" x 2" Square Perforated Post

ROTATING RCH KIOSK FRAMES
RCH Schedule Holders can also be installed on rotating kiosk frames for high use stops where more information is needed. Rotating kiosks also provide unmatched ADA access with fingertip rotation.

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5052 Forni Drive, Ste. B
Concord, CA 94520
(925) 676-8900
www.transitproducts.com

- NOTE:
- SINGLE PANEL RCH INFORMATION HOLDER: ALTERNATE OPTION FOR REAL TIME INFORMATION PANEL MOUNTED ON BUS SHELTER POST. INSTALL AT LOCATIONS WHERE NO ELECTRICAL POWER IS AVAILABLE.
 - 3-SIDED, 4-SIDED, 5 & 6 SIDED RCH INFORMATION HOLDER: ALTERNATE OPTION FOR MONO-POST BUS STOP POLE.

RMS RAD PV Shelter



RMS RAD PV Shelter



DSTD-21

This 17-R Sunset bus shelter provides 86 inches of digital advertising space via a display on its end wall. The bus shelter is supported by aluminum support posts protected by spun escutcheon shoe covers. The perforated aluminum rear and end wall showcase agency branded graphics and an end wall provides a map case lit with 110v LED. Roof lighting offers passenger security while Mesa-style seating provides passenger comfort. Waste and recycle receptacles round out the bus stop.

Exploded View Example of a Typical System

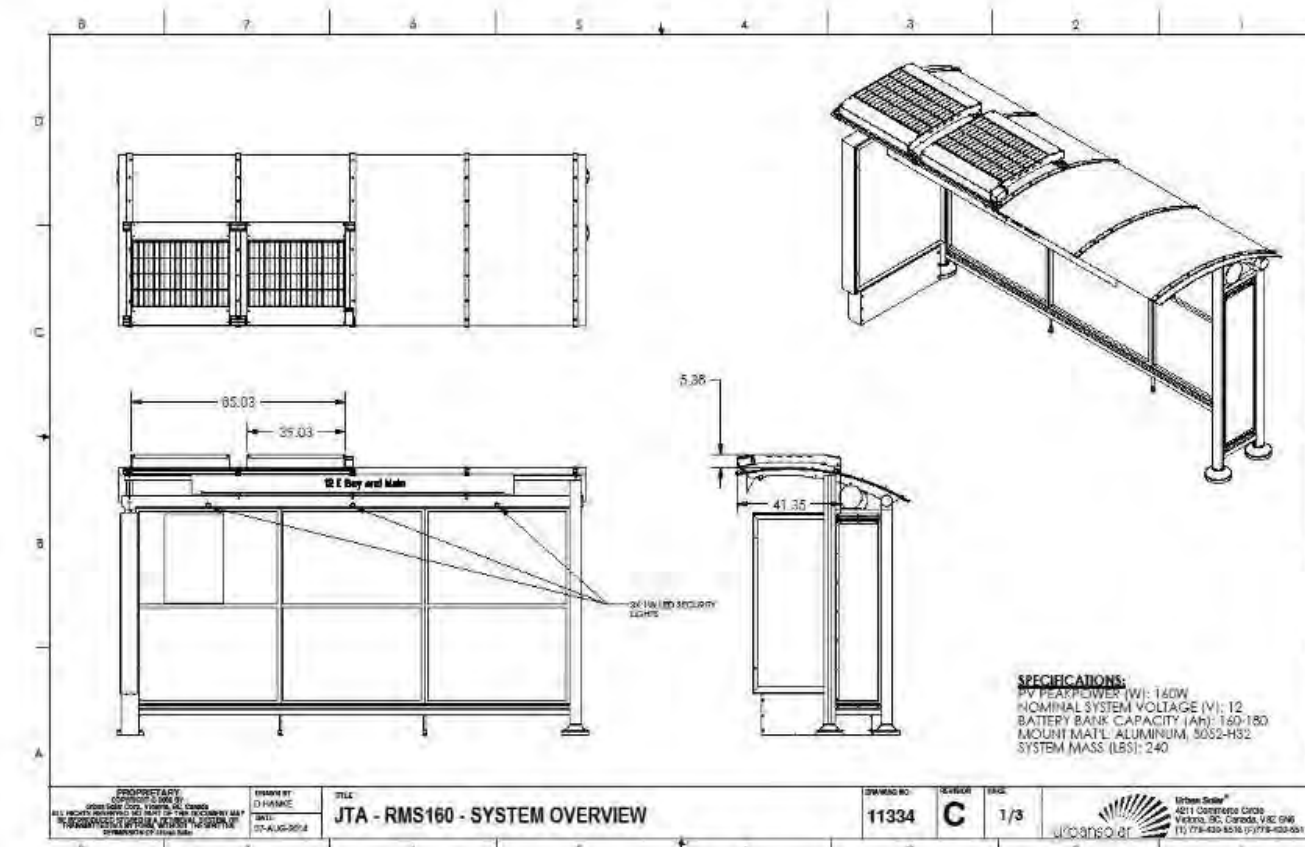


Figure 1.

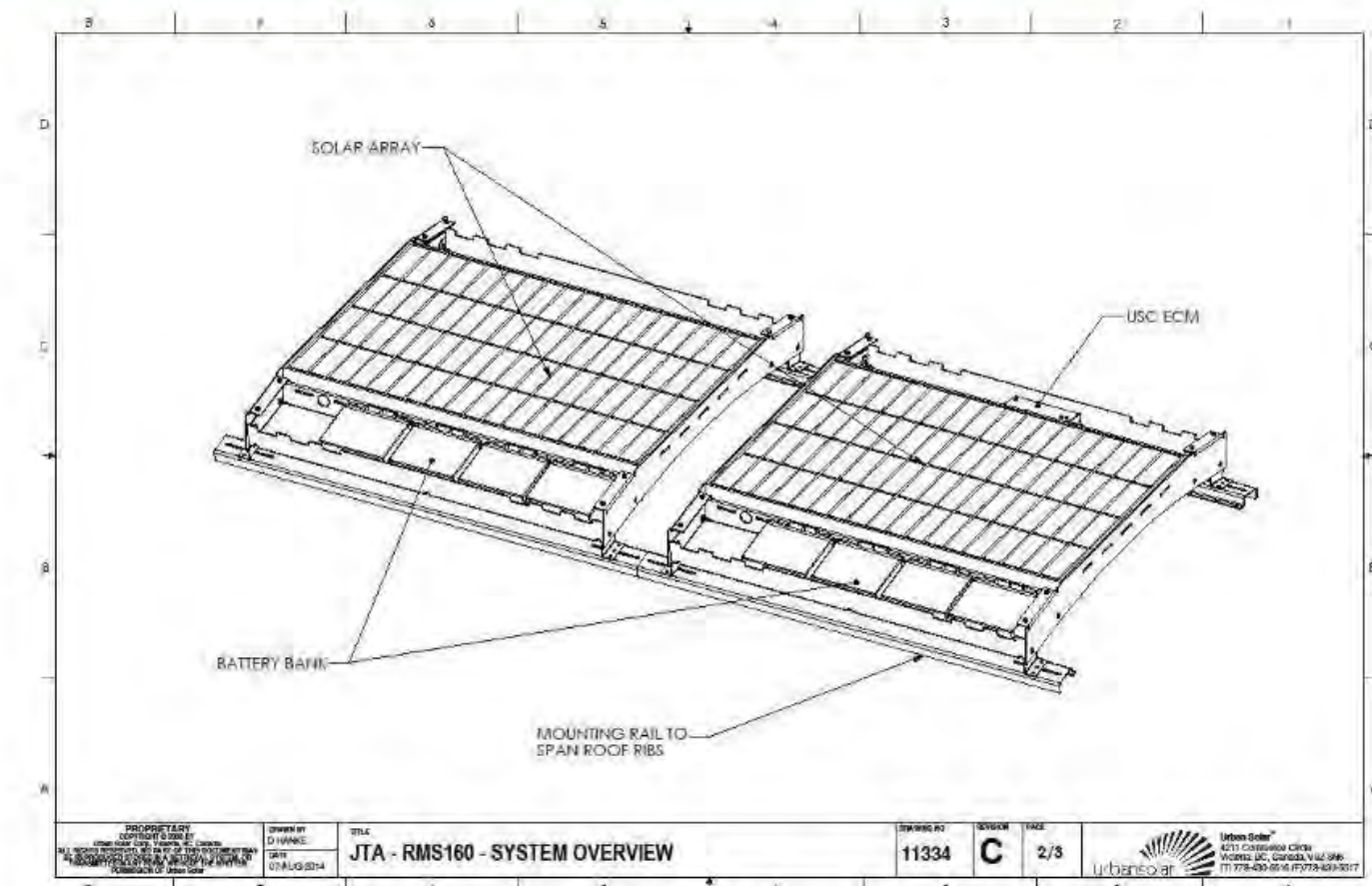
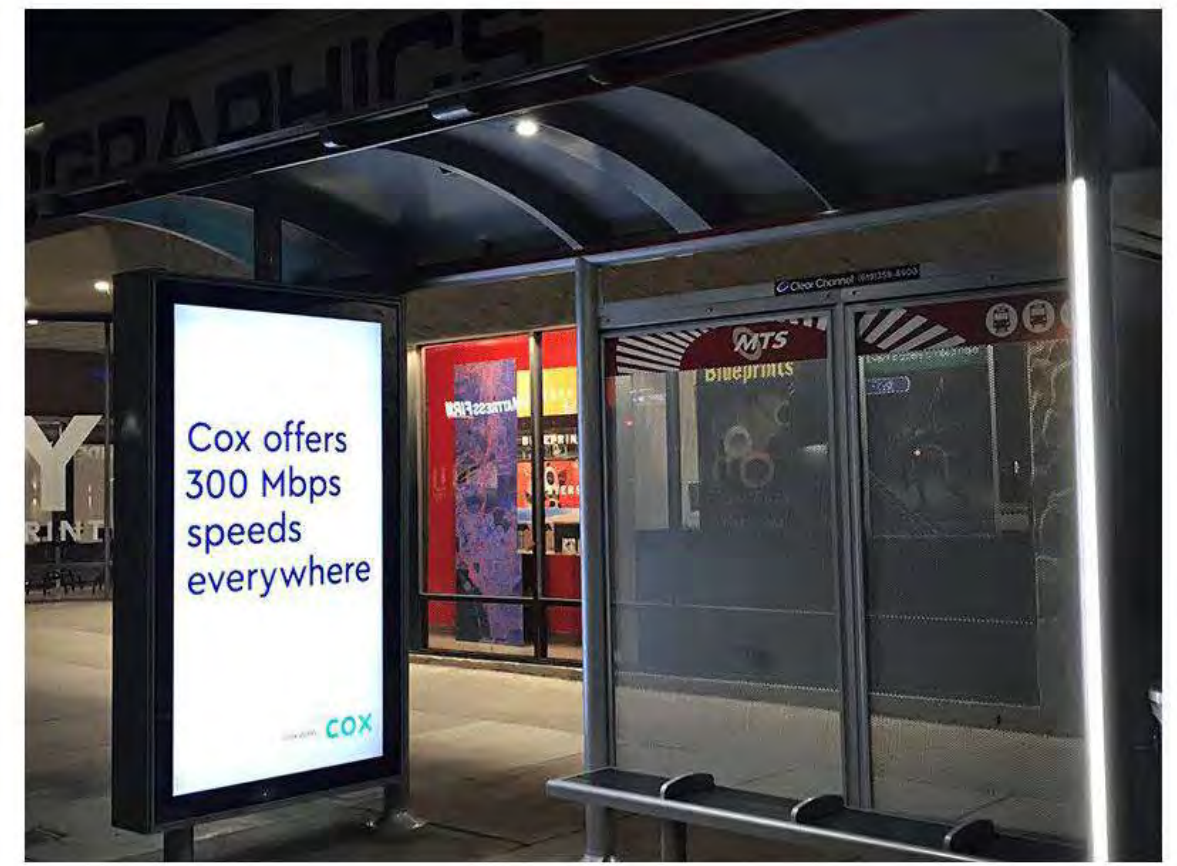


Figure 2.

G: ROOF MOUNTED SOLAR PANEL

H: DIGITAL ADVERTISING PANEL

https://tolarmfg.com/products/digital-solutions/dstd-21/



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REV.	DATE	BY	SUB	APP.	DESCRIPTION	REV.	DATE	BY	SUB	APP.
	12/17/2025				FINAL SUBMITTAL					

DESIGNED:	R. BUTIONG
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SAN MATEO COUNTY TRANSIT DISTRICT BUS STOP IMPROVEMENT PLAN

ARCHITECTURAL BUS SHELTER KIT OF PARTS AMENTITY ACCESSORIES

SIZE:	D	SCALE:	AS NOTED
SHEET NUMBER:	A17		
PAGE NO.:			

samTrans

The logo graphic consists of two horizontal white bars stacked vertically, positioned directly below the text 'samTrans'. The top bar is thin, and the bottom bar is significantly thicker.