Northbound Columbia St and Alaskan Way (Stop 1558) - 61 Columbia St
Northbound Alaskan Way and S Jackson St (New Stop) - 304 Alaskan Way S/74 S Jackson St
Southbound Alaskan Way and S Jackson St (New Stop) - 401 Alaskan Way S

Jerry Roberson, (206) 263-0776

Application: December 1, 2020

Contents

- Project Description
- Design Plans Waterfront Seattle Civil Plans
- Design Plans RapidRide 2 Kit of Parts 100% Design
- Station Renderings
- Prototype Photographs
- Existing Site Photographs
- Proposed color samples
- Details of method of attachment for the bus shelter, tech pylon, and sign
- Lighting description and specifications
- Real-time Information System (RTIS) Sign and ORCA Reader descriptions and specifications

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Jerry Roberson, (206) 263-0776

Application: December 1, 2020

Project Description

King County Metro seeks Pioneer Square Preservation Board approval for the installation of three new RapidRide Stations on Alaskan Way.

Background - New Transit Routing

- Prior to Alaskan Way Viaduct Demolition, Metro routes serving West Seattle and Southwest King County traveled along the Viaduct and used the Columbia and Seneca Street ramps to connect to the Seattle CBD.
- With the completion of the Viaduct Demolition, Alaskan Way Reconstruction, and Columbia St
 2-Way Project, these routes now use SR 99, the Alaskan Way surface street, and Columbia St for both ingress and egress of the Seattle CBD.
- In 2021, Waterfront Seattle will add transit-only lanes from S Dearborn St to Columbia St to improve transit speed and reliability.

New RapidRide Stations on Alaskan Way

- Being able to run on Alaskan Way and Columbia St allows Metro to better serve people who live, work, and visit Pioneer Square and Downtown.
- Temporary bus stops are currently provided at Columbia St, but current construction of Waterfront Seattle doesn't allow for temporary stops at S Jackson St.
- In 2021, permanent RapidRide stations will be constructed at Columbia St and S Jackson St.
 - These will serve RapidRide C and H Lines and routes 21, 37, 55, 56, 57, 113, 121, 122, 123, 125
- In Fall 2021, the existing Route 120 will be upgraded to the RapidRide H Line.

New RapidRide Kit of Parts

- Metro's new RapidRide "kit of parts" is at 100% design.
 - Kit of Parts includes: shelter, tech pylon, bench, and lean rail
- The new kit of parts is designed to be more rider-friendly: more transparent surfaces, higher-quality materials, and flexible configuration.
- RapidRide brand will be consistent across King County
 - o Important for rider's ease of understanding regardless of where they are.
- RapidRide kit of parts flexibility
 - Shelters come in small/medium/large lengths and narrow/wide roofs
 - Windscreens on sides and back can be added or removed based on site constraints

- Stations have a typical layout, but elements can be moved around based on site constraints.
- Cladding colors are applied to station furnishings as a final installation element.

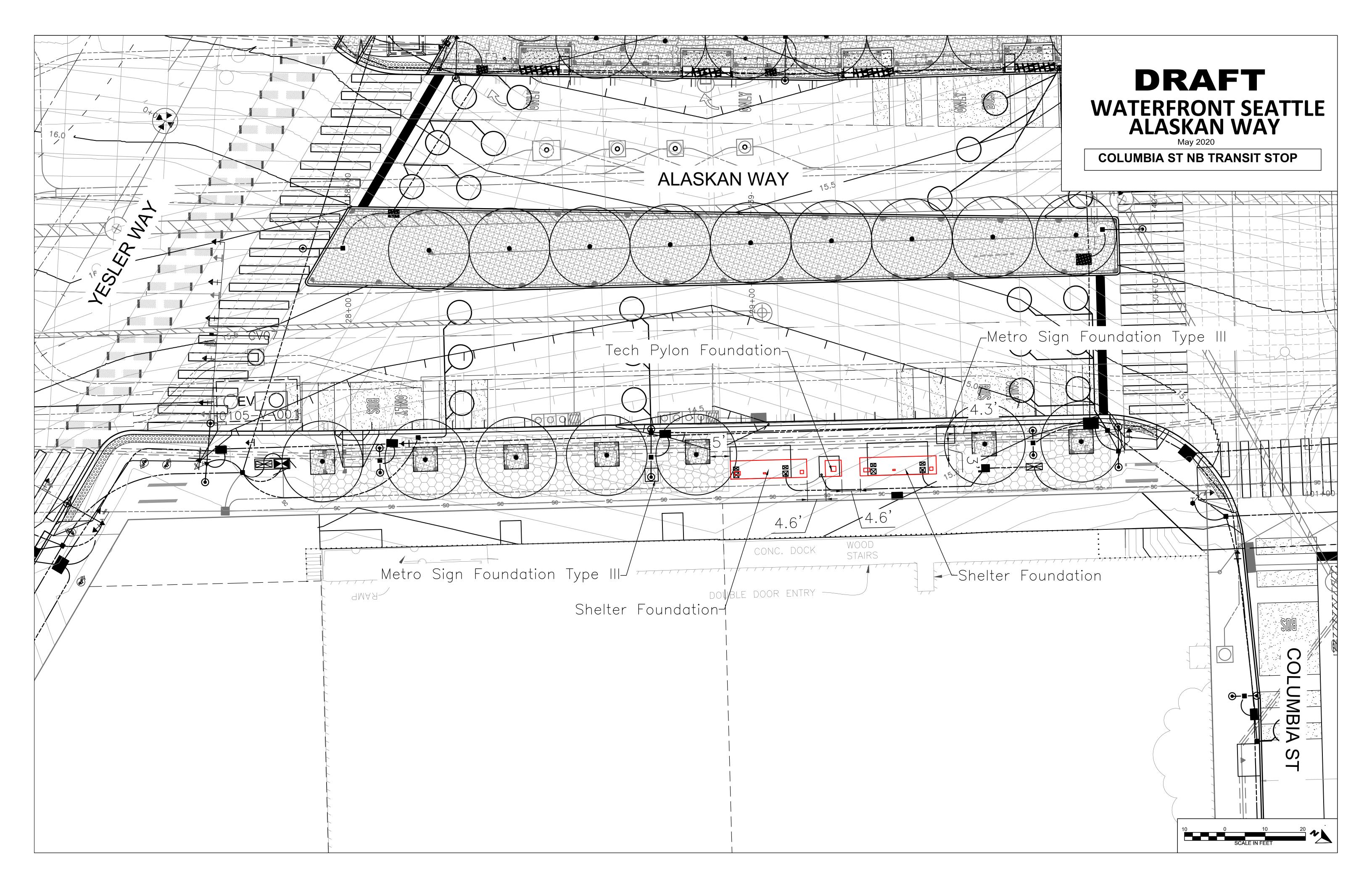
RapidRide Stations Description

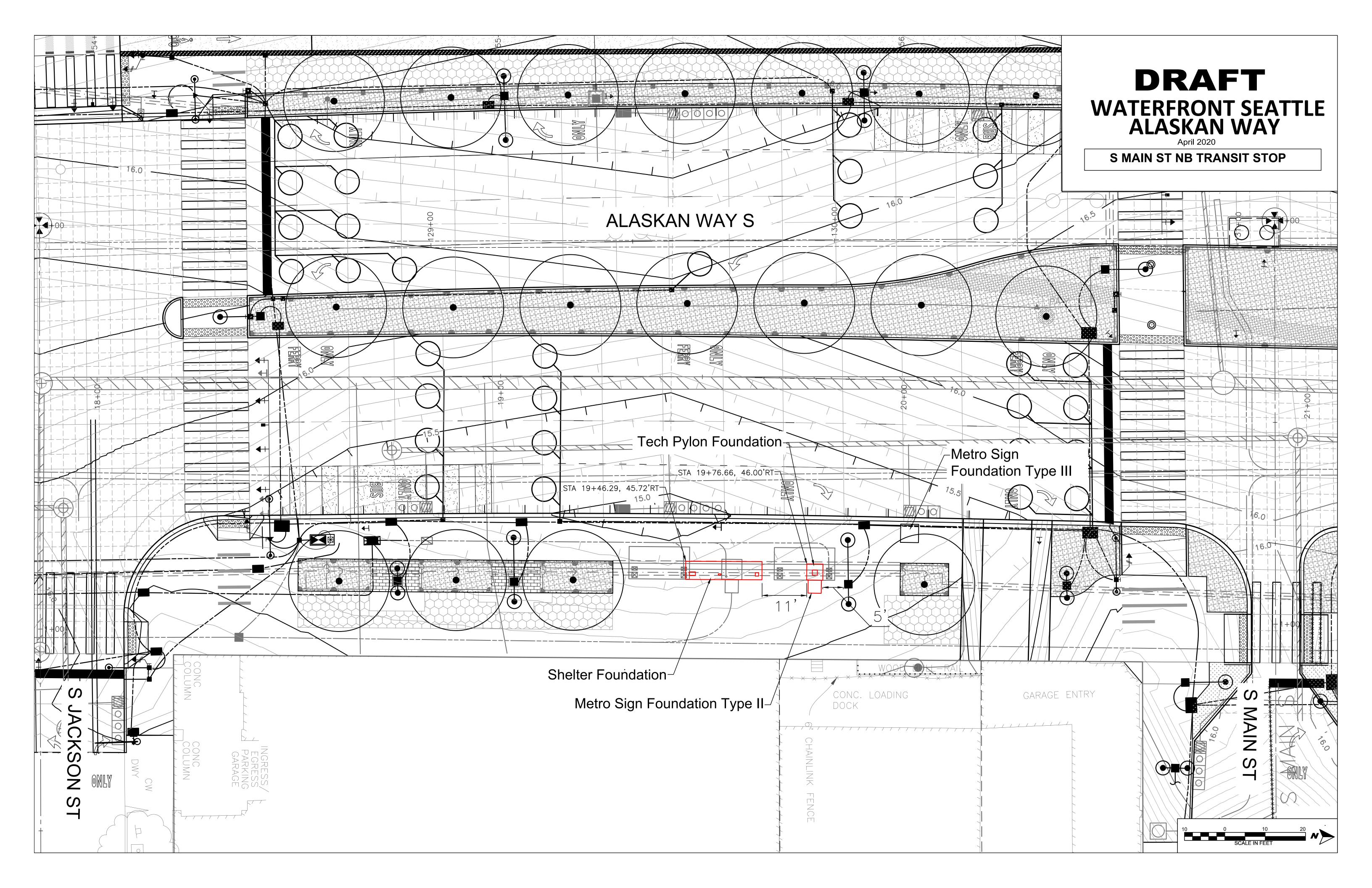
- The locations of the three new RapidRide stations and the civil work to support them (e.g., foundations, conduit) have already been approved by the Office of the Waterfront. The design for Waterfront Seattle has already been approved by the Pioneer Square Preservation Board. This application pertains only to the above-ground elements of the stations.
- Each RapidRide station will include the following elements:
 - RapidRide shelter (2 at northbound Columbia, 1 at northbound Jackson, 2 at southbound Jackson
 - Each shelter is cantilevered and installed in a concrete foundation.
 - Each shelter consists of a steel frame, a portion of which is covered in aluminum cladding, rear and side windscreens made of clear glass, steel roof frame, and frosted glass roof panels.
 - Each shelter includes light strips on the front sign band and around the map case.
 - Each shelter includes a map case and applied graphics indicating the stop location, RapidRide line letters, and regulatory information.
 - RapidRide tech pylon
 - Each tech pylon consists of a steel frame covered in aluminum cladding, two real-time information system (RTIS) displays, an ORCA card reader, backlit "RapidRide" logo, a small down light for visibility, and internal electronics.
 - Each tech pylon includes applied graphics indicating RapidRide route information, RapidRide line letters, and regulatory/accessibility information.
 - Signage: one route information sign at the head of the stop and one with area information at the rear of the stop
 - Standard 35-gallon trash receptacle
 - Standard small electrical cabinet
- Area lighting (pedestrian-scale) will be provided by Waterfront Seattle. Metro will not be installing additional lighting beyond what's provided by the shelter and tech pylon.
- The RapidRide station elements will be installed in the June 2021 and March 2022. Timeframe is dependent on Waterfront Seattle construction, Metro kit of parts availability, and contractor selection.

Architectural Review Committee (ARC) Decision – Cladding Color

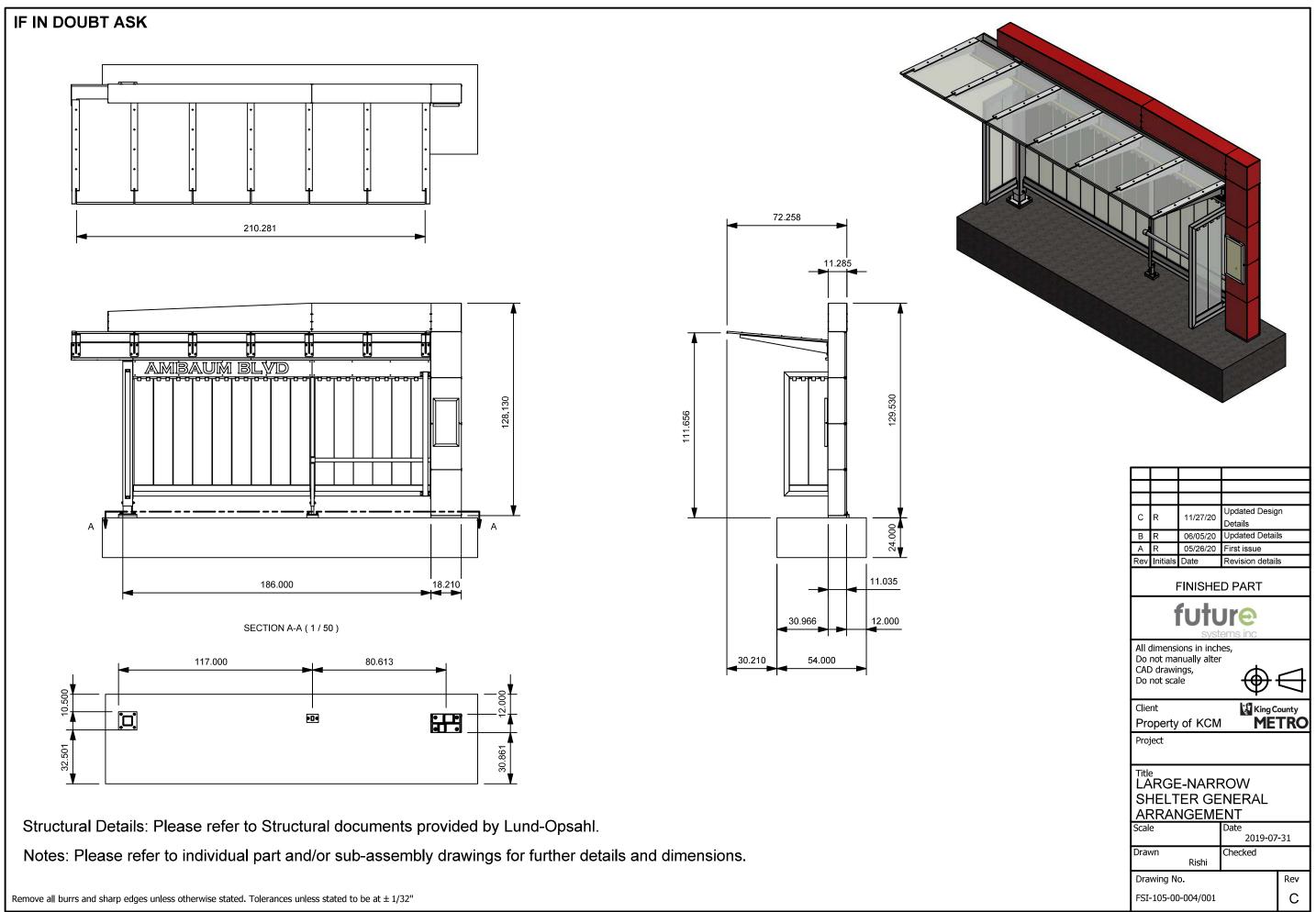
- Metro is seeking approval to use its standard "RapidRide Red" color for the cladding on the shelter and tech pylon.
 - Bus rider focus groups identified the red color as distinctive to the brand, and understood that it meant they could show up at the station and knew a bus would arrive shortly.
 - A consistent color scheme helps riders identify RapidRide stations across the entire county.

- The portion of the historic district where the new stations will be built is almost entirely new. There will be new roadways, sidewalks, plazas, bike paths, and landscaping, so the new RapidRide kit of parts will be compatible even clad in red.
- The PSPB has allowed use of other bright, non-neutral colors in the district. Example:
 northeast corner of 1st and Jackson building trim is bright blue and railing is pink.
- Light gray is presented as alternative, but not preferred, cladding option. The cladding would be the same color as the painted steel part of the frame.
 - This light gray is an inferior option to the RapidRide red because extensive use of the light gray instead of red takes away consistent, branded visibility of important transit destinations for the public.
 - Transit riders will be approaching and looking for these RapidRide stations from all directions. The extensive light gray in place of the red is unhelpful for a rider looking for a RapidRide station.
 - While this option shows one area of RapidRide Red on the top of the tech pylon, this signage won't be easily visible from all points of view/approach for a prospective rider.

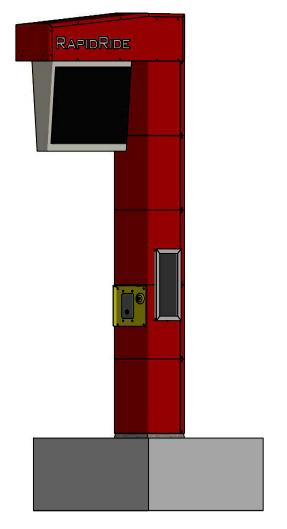


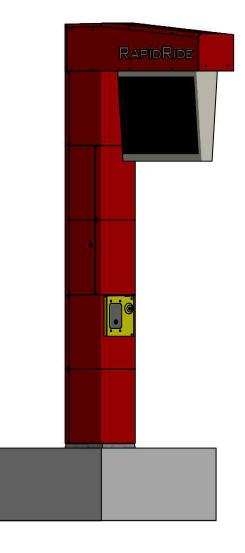


DRAFT WATERFRONT SEATTLE ALASKAN WAY S JACKSON ST SB TRANSIT STOP Metro Sign Foundation Type II-Tech Pylon Foundation Metro Sign Foundation Type III-Shelter Foundation Shelter Foundation # ALASKAN WAY S **JACKSON** ST



IF IN DOUBT ASK





		PARTS	SLIST			
ITEM	QTY	DRAWING NUMBER	DESCRIPTION			
1	1	FSI-105-01-004_MOD3	TECH PYLON FRAME ASSEMBLY			
2	1	ORCA Reader				
4	63	1-4 20 X 1 TAMPER PROOF SS SCREW	MCMASTER 95635A542 SS PIN-IN-HEX			
7	1	FSI-105-02-018	TECH PYLON CLADDING PANEL - New Gen ORCA			
15	1	3-8 16 SS SOCKET HEAD CAP SCREW	3/8-16 SS SOCKET HEAD MCMASTER 92196A622			
17	1	FSI-105 TECH PYLON FOUNDATION GROUT				
18	1	FSI-105 TECH PYLON FOUNDATION				
19	8	3-4 IN GALV STEEL FLAT WASHER	3/4" HIGH STRENGTH GALV WASHER MCMASTER 98119A036			
20	12	3-4 10 HIGH STRENGTH STEEL HEX NUT	3/4-10 GR8 HEX NUT MCMASTER 94895A036			
23	1	ORCA Reader_New Gen_Cover Plate	INIT BACK PLATE PRM03MZS020A			
27	1	FSI-105-02-032	TECH PYLON TOPMOST CLADDING PANEL ASSEMBLY			
33	1	NEMA BOX				
35	8	SELF-DRILLING STEEL SCREW	#10 X 5/8" SELF-DRILLING STEEL SCREW - MCMASTER 90064A440			
36	8	1/4-20 3/4" TAMPER-RESISTANT MACHINE SCREW	TAMPER-RESISTANT SCREW - MCMASTER 94135A824			
39	1	FSI-105-02-043	TECH PYLON TOP HORIZONTAL CLADDING ASSEMBLY			
44	1	FSI-105-02-053	ORCA READER HOOD			
55	1	FSI-105-01-020	NEMA DOOR ASSEMBLY			
56	1	RTIS MOUNT				
57	2	E_INK_42_INCH_SCREEN	EINK 42" DISPLAY			
58	1	FSI-105-01-021	DEPARTURE-SIDE SIGN PANEL ASSEMBLY			
59	1	FSI-105-01-022	APPROACH-SIDE SIGN PANEL ASSEMBLY			
61	54	1-4 20 SS FLANGE NUT	1/4-20 SS FLANGE NUT MCM 94758A028			
63	4	3-4 10 X 7 HILTI CHEMICAL ANCHOR	3/4-10 X 7" STEEL HILTI CHEMICAL ANCHOR			
64	2	3-8 16 ZINC-PLATED FLANGE NUT	3/8-16 ZINC COATED FLANGE NUT			
65	1	FSI-105-01-030	PYLON MAP CASE			
68	2	PYLON LED STRIP LIGHT	SOLID APOLLO 5050 72W LED STRIP LIGHT			
69	1	CHK41	FALCON PTT BUTTON			
70	1	FSI-105-02-033	TECH PYLON BOTTOM CLADDING PANEL			
71	3	FSI-105-03-028	TECH PYLON REAR CLADDING PANEL			
72	1	FSI-105-02-061	NEMA-LEVEL CLADDING PANEL ASSEMBLY			
76	1	FSI-105-02-062	NEMA DOOR ADJACENT CLADDING PANEL ASSEMBLY			
77	1	2259N350_PIANO HINGE WITH SLOTS	2" X 4FT SS PIANO HINGE WITH SLOTS			
79	1	FSI-105-03-031	TECH PYLON TOP CLADDING UNDERTRAY			
80	1	QTRAN VERS-06-SW 14	VERS-06-SW-3.0-35-ENC-TL-CC-14" LINEAR LED FIXTURE			
81	2	90198A107_FLAT HEAD PHILLIPS SCREW FOR SHEET	4 X 5/8" SS FLAT HEAD SELF-DRILLING SCREW			
		MET				

All dimensions in inches, Do not manually alter CAD drawings, Do not scale



Client

Property of KCM

FSI-105-00-003/01

Projec

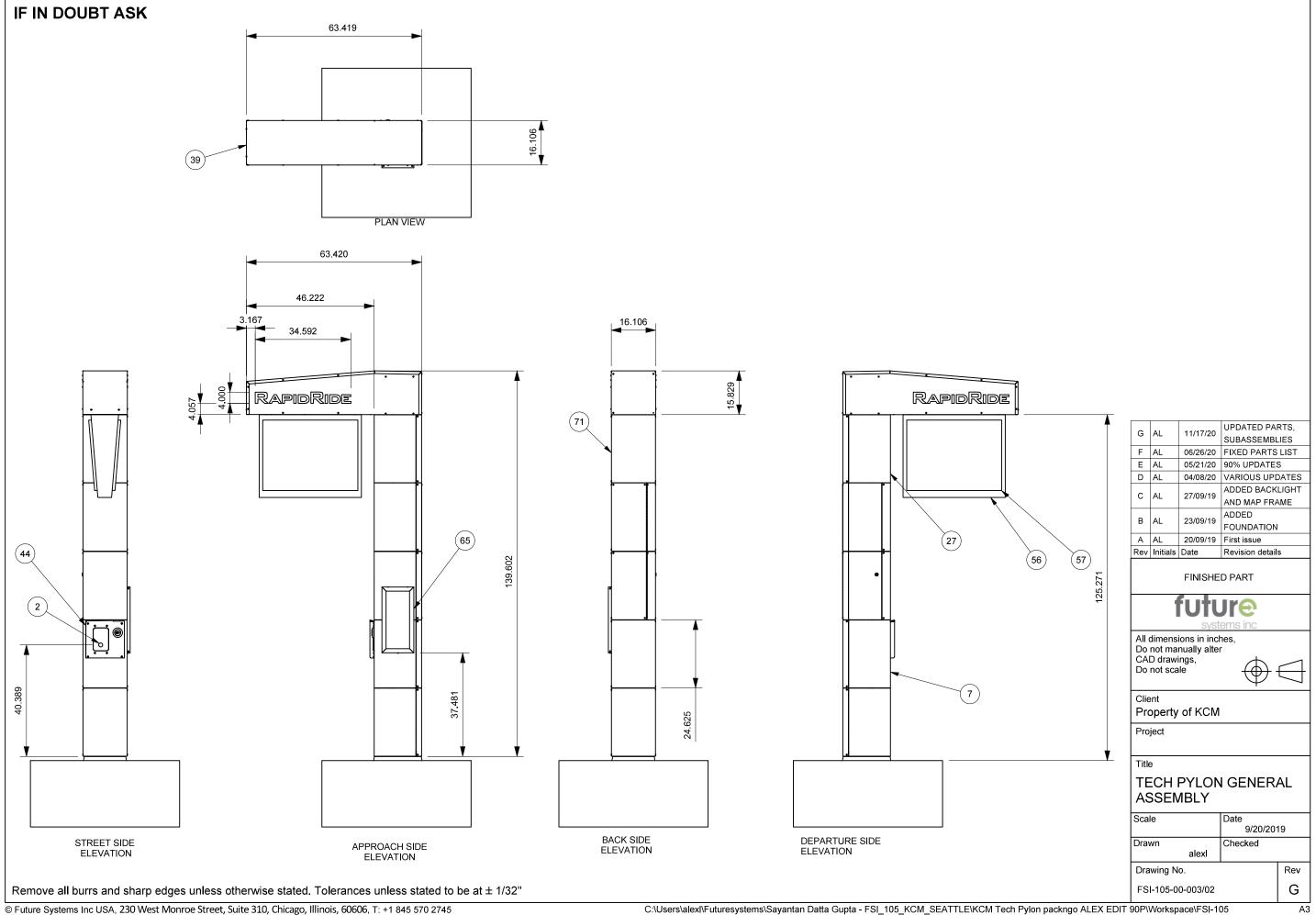
Title

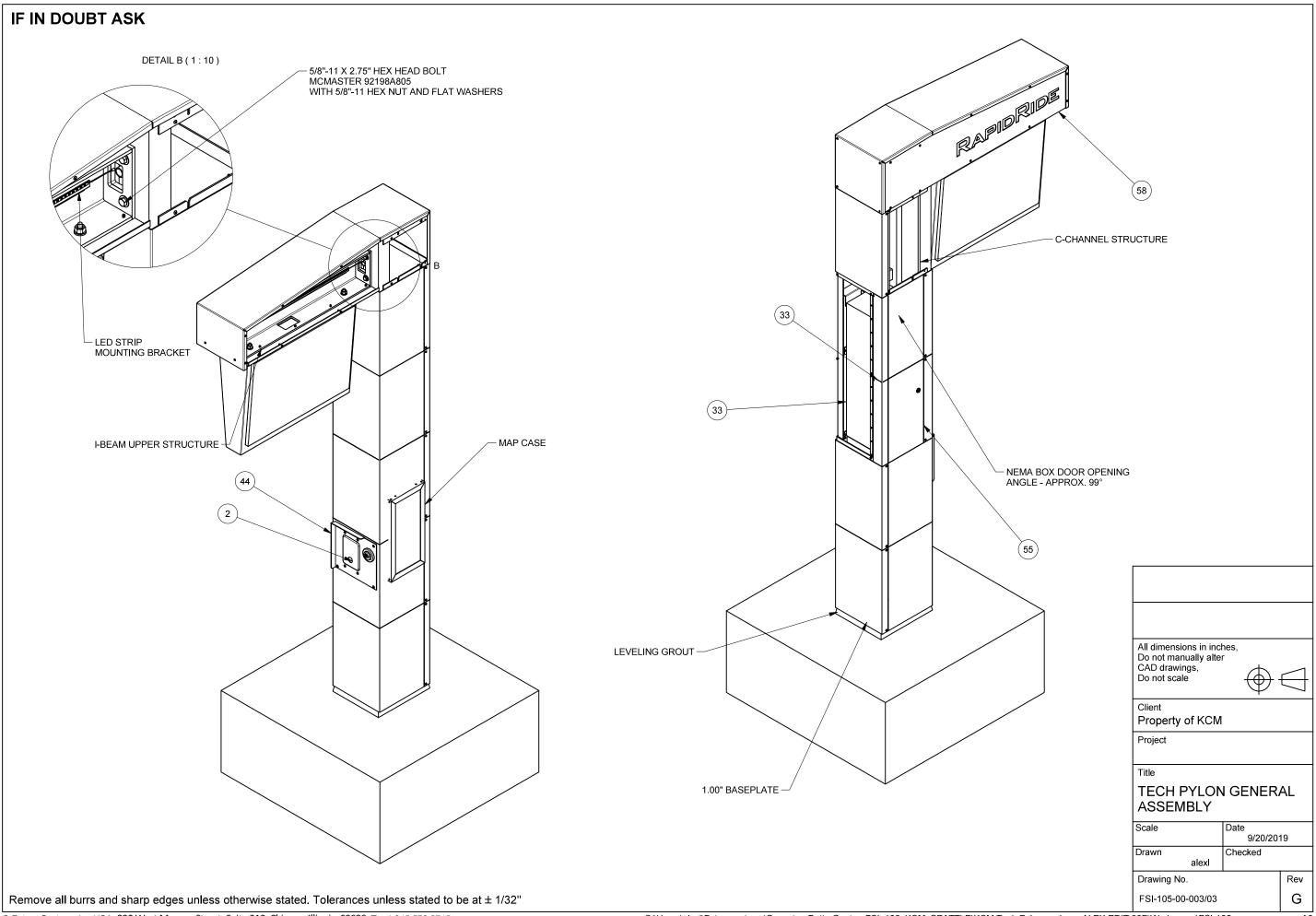
TECH PYLON GENERAL ASSEMBLY

Scale	Date	
Coalo	9/20/20	19
Drawn	Checked	
alexl		
Drawing No.		Rev

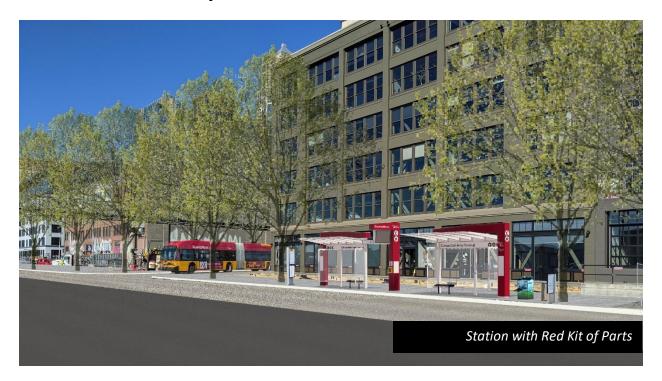
Remove all burrs and sharp edges unless otherwise stated. Tolerances unless stated to be at \pm 1/32"

G





NB Colman Dock Ferry Terminal Station- Columbia St





Material Samples to be shown on separate page.

NB Colman Dock Ferry Terminal Station- Columbia St

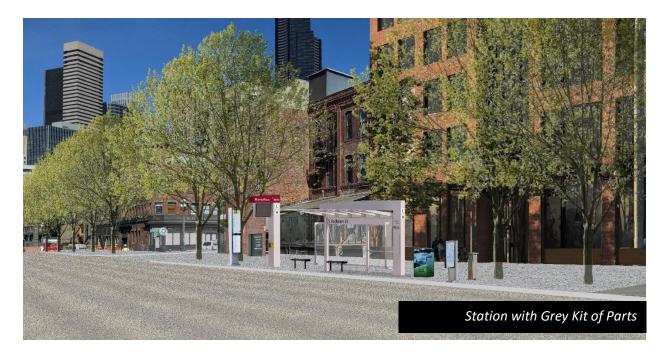




Material samples to be shown on a separate page.

NB Jackson Street Station





Material samples to be shown on a separate page.

NB Jackson Street Station





Material samples to be shown on a separate page.

SB Jackson Street Station





Material samples will be shown on a separate page.

SB Jackson Street Station





Material samples will be shown on a separate page.

King County Metro Transit Bus Stop Expansion Project
Northbound Columbia St and Alaskan Way (Stop 1558) - 61 Columbia St
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Jerry Roberson, (206) 263-0776

Application: December 1, 2020

Prototype Photos

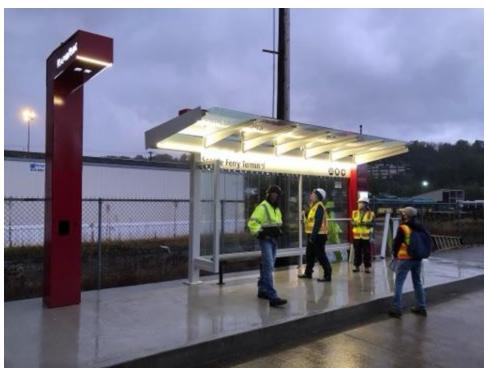
- Below are photos showing the new RapidRide Shelter and Tech Pylon prototypes.
- These were constructed at 90% design, and aesthetically they will be the same as the 100% design to be built on the Waterfront.



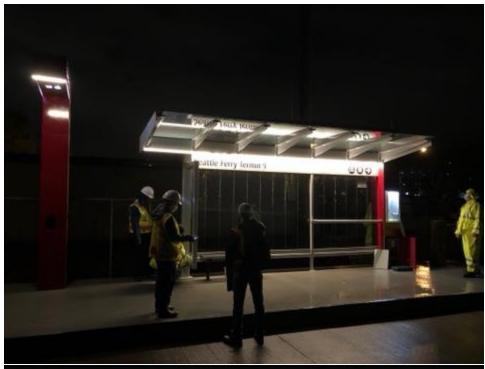






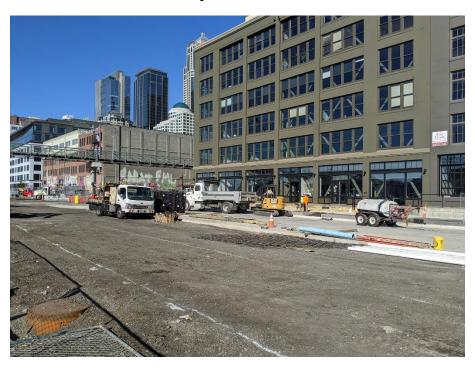




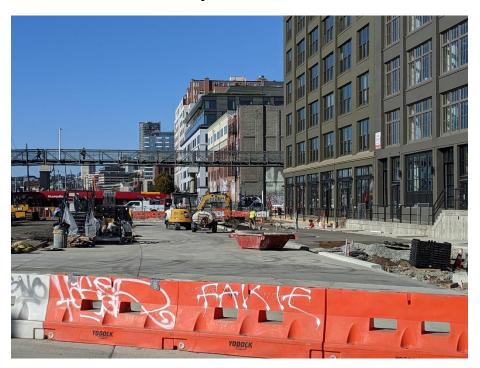




NB Colman Dock Ferry Terminal Station- Columbia St



NB Colman Dock Ferry Terminal Station- Columbia St



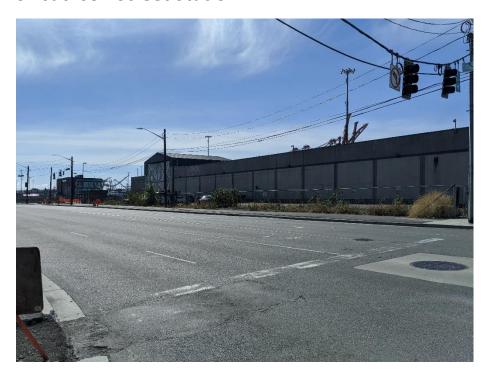
NB Jackson Street Station



NB Jackson Street Station



SB Jackson Street Station



SB Jackson Street Station



Northbound Columbia St and Alaskan Way (Stop 1558) - 61 Columbia St
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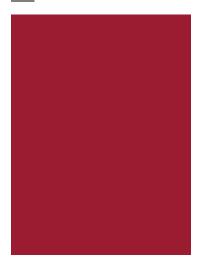
Jerry Roberson, (206) 263-0776

Application: December 1, 2020

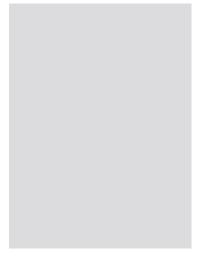
Proposed Color Samples

- For the shelter, Metro proposes to use the light gray on the steel frame and the red on the cladding.
- For the tech pylon, Metro proposes to use the red color on cladding.

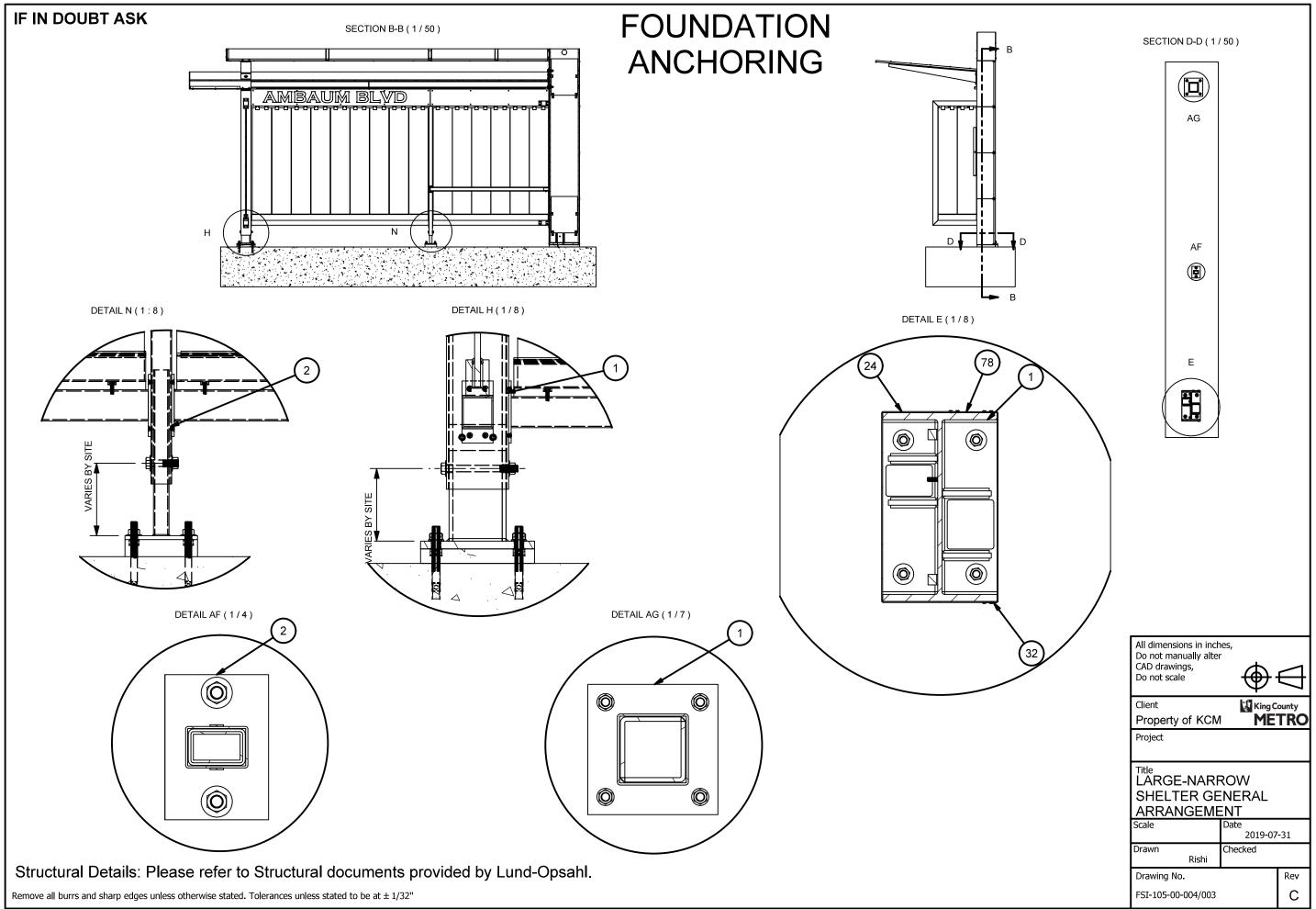
Red

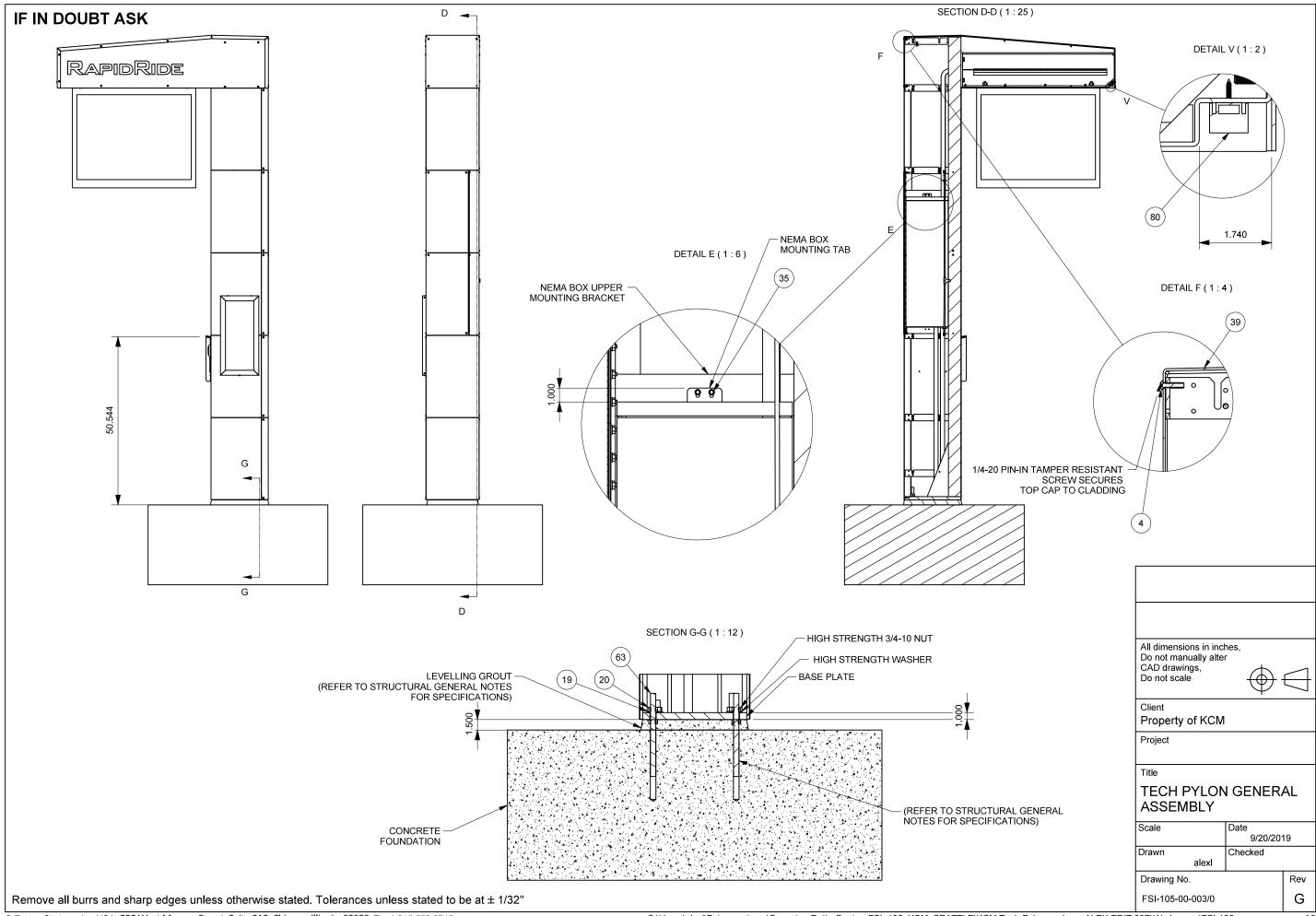


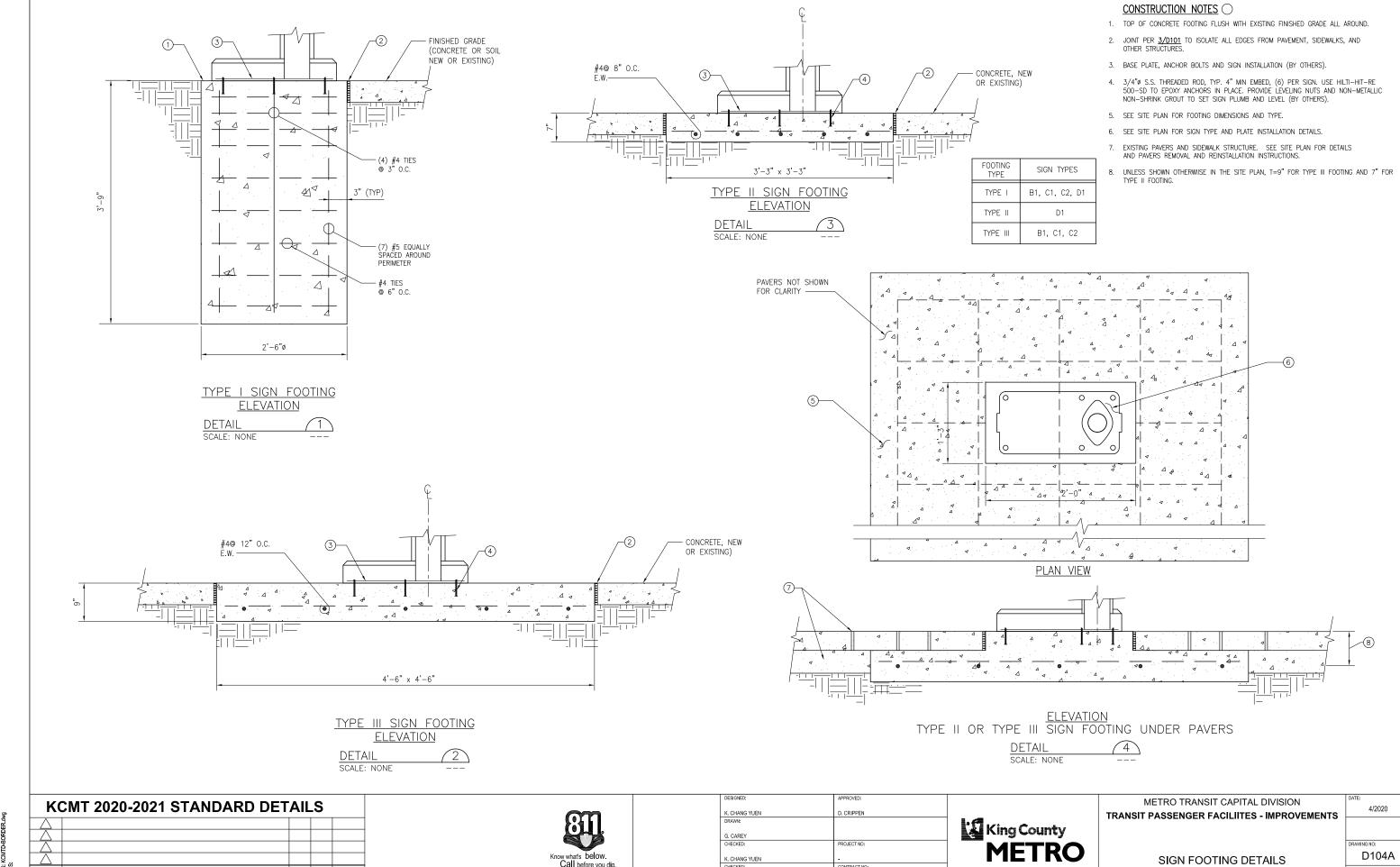
Light Gray



Note: Actual materials samples to be shown during videoconference.







K. CHANG YUEN

C. ASQUITH

D104A

11 20

SHEET NO: OF

SIGN FOOTING DETAILS

Know what's below

Call before you dig.

REVISION

BY APP'D

DATE

Northbound Columbia St and Alaskan Way (Stop 1558) - 61 Columbia St
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Lighting Description

- Each shelter includes light strips on the front sign band and around the map case.
 - The shelter roof glass is frosted, which will contain/minimize light pollution.
- Each tech pylon includes a backlit "RapidRide" logo and a small down light for visibility.
- The shelter and tech pylon will use QTran LED Lighting, Model VERS-Encapsulated (06). Website: https://www.q-tran.com/products/linear-fixtures-vers-encapsulated-06/
- The station lights will be connected to dimmers so that the brightness will be adjustable per bus station.
- The light temperature will be "warm" (3,000K).
- A technical specifications sheet is attached separately.

Lighting Photos from Prototype

Below are photos showing details of the lighting on the RapidRide shelter and tech pylon. Please refer to the separate "Prototype Photos" file showing the entire station lit up at night.

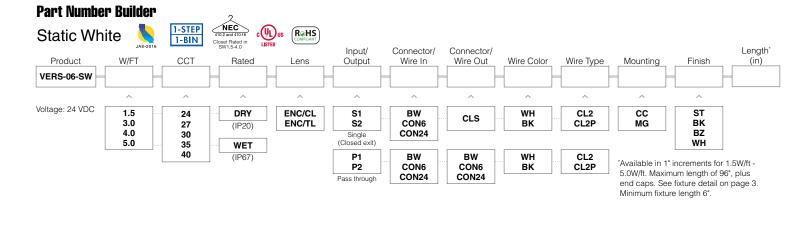


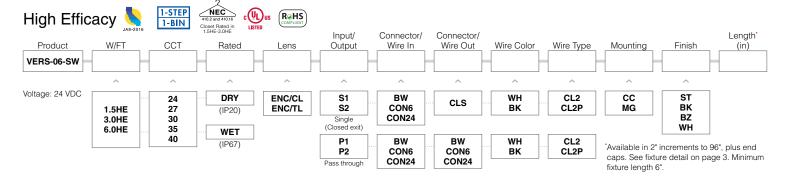


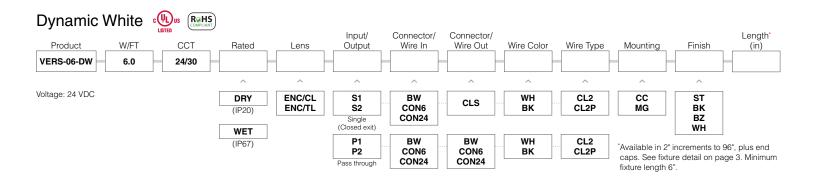
VERS-ENCAPSULATED (06) Linear Fixtures









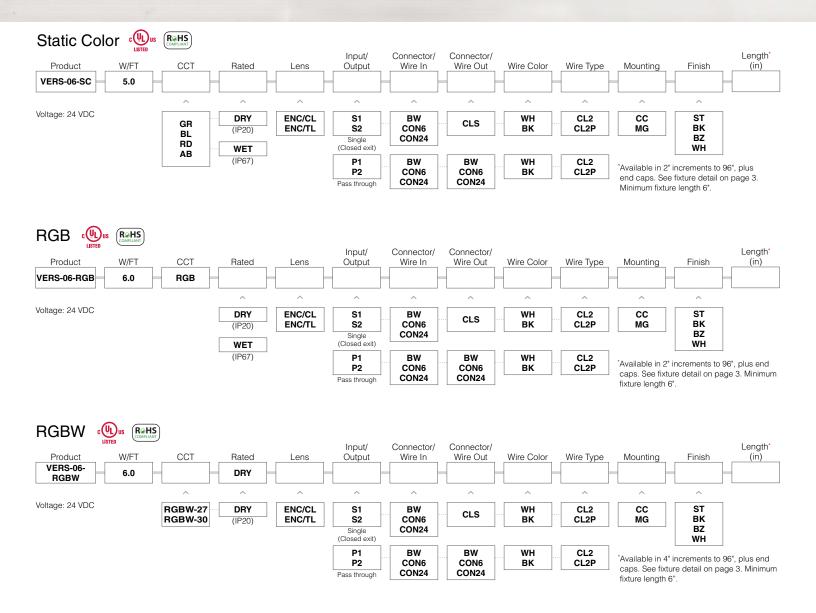


- 1 BW comes in standard 36"- request custom length (Max 120") by writing it in inches next to "BW" in the order code box (ex. BW48)
- 2 Connector/Wire In or Out not needed to specify product. Standard configuration is Type S1, Connector/Wire In: BW & Connector/Wire Out: CLS
- 3 Specify **CL2P** for plenum rated wire
- 4 One Step, One Bin based on 5W/ft
- 5 CON6 and CON24 are not to be used with IP67 rated strips

VERS-ENCAPSULATED (06) Linear Fixtures







- 1 BW comes in standard 36"- request custom length (Max 120") by writing it in inches next to "BW" in the order code box (ex. BW48)
- 2 Connector/Wire In or Out not needed to specify product. Standard configuration is Type S1, Connector/Wire In: BW & Connector/Wire Out: CLS
- 3 Specify CL2P for plenum rated wire
- 4 CON6 and CON24 are not to be used with IP67 rated strips
 - Field modifications void warranty
 - •Data subject to change, all data has +/- 5% tolerance
 - Contact Q-Tran for compatible power supplies
- •NRTL Listed for install in Storage Areas with Clothing, NEC Field 410.2 and 410.16 when assembled as a fixture, at Q-Tran facility

VERS-ENCAPSULATED (06) Linear Fixtures





Technical Information

Static White [Calculated L70(6k) = 70000 hours] Tested with VERS-06-SW-**-30-DRY-**

	1.5W/FT		3.0W/FT		4.0W/FT		5.0W/FT	
	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI
ENC/CL	139	96	242	96	286	96	347	96
ENC/TL	125	96	204	96	273	96	307	96

Static Color [Calculated L70(6k) = 30000 hours] Tested with VERS-06-SC-5.0-**-DRY-*

	Red		Green		Blue		Amber	
	LM/FT	Wavelength	LM/FT	Wavelength	LM/FT	Wavelength	LM/FT	Wavelength
ENC/CL	108	632	450	516	105	465	108	594
ENC/TL	100	632	395	515	98	465	98	594

Dynamic White

[Calculated L70(6k) = 70000 hours] Tested with VERS-06-DW-6.0-**-DRY-**

	240	00K	3000K		
	LM/FT	CRI	LM/FT	CRI	
ENC/CL	204	92	218	94	
ENC/TL	187	93	189	96	

High Efficacy [Calculated L70(6k) = 70000 hours] Tested with VERS-06-SW-**-30-DRY-**

	1.5HE	W/FT	3.0HE	W/FT	6.0HE W/FT	
	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI
ENC/CL	185	97	335	96	575	96
ENC/TL	154	97	283	96	490	96

RGB [Calculated L70(6k) = 55000 hours] Tested with VERS-06-RGB-6.0-RGB-DRY-**

	Red		-	Green	Blue		
	LM/FT	Wavelength	LM/FT	Wavelength	LM/FT	Wavelength	
ENC/CL	85	631	160	522	47	469	
ENC/TL	71	631	127	523	37	470	

RGBW [Calculated L70(6k) = 30000 hours] Tested with VERS-06-RGBW-6.0-**-DRY-**

	2700)K	3000)K		Red		Green	Blue	
	LM/FT	CRI	LM/FT	CRI	LM/FT	Wavelength	LM/FT	Wavelength	LM/FT	Wavelength
ENC/CL	116	92	115	92	35	630	99	514	31	466
ENC/TL	92	92	104	93	32	633	87	512	28	464



Encapsulated in Clear

Encapsulated in Translucent

ENC/TL



SINGLE (Input only)

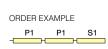






PASS THROUGH (Input/Output)

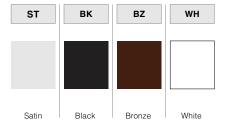




Beam Angle



Finish



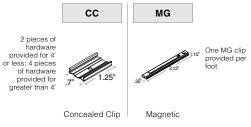
Connector/Wire - In/Out







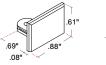
Mounting



Dimensions



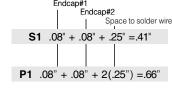
End Caps





LED Length (in): Add to nominal LED length for fixture length















<u>connectpoint</u>°

Connectpoint® 42"

42" Digital Real Time Display

Connectpoint's newest generation of large ePaper displays have rugged protection, enhanced energy management and superb clarity. The CP-42 offers a customizable presentation of visual mapping, real-time departures, custom messaging, and optional advertising. This display can be either AC or solar-powered and mounted to a shelter frame or enclosed in a freestanding totem.

The CP-42 has been tested for extreme weather and outdoor use and offers a high-resolution ePaper screen with crisp daytime and nighttime visibility. The system's power and content are remotely managed by its cloud-based Connectpoint Asset Management System (CPAM™) from the convenience of a desktop or mobile device.



CP 42 Specifications

Active Area	42 inches
Dimensions	38"H x 28"W x 2"D
Weight	49 lbs
Resolution	2880 x 2160
Orientation	Landscape or Portrait
Screen Protection	2 layered: 3mm Tempered and 2mm Gorilla Glass 3 (anti-glare & UV stability) / IK07
Viewing Angle	Ultra-Wide 160°
Screen Color	16 level Greyscale Monochrome
Screen Illumination	Direct Light Guide
Connectivity	Wireless Cellular (4G) or WiFi or Ethernet
Operating Temperature	-20°C to 60°C
IP Rating	IP 66
Text-to-Speech	TTS capable with audio button option
Power Requirements	Ultra Low Power 12 v, Solar/LiFePo Battery, 110v Adapter
Installation Applications	Shelter, Wall, Totem, Kiosk, Custom Build

Ordering Matrix

Code	Model	Power Source	SIM Provider	Connection Type	Orientation	Text to Speech
СР	42	DC (Solar)	CS (Connectpoint)	C (Cellular Wireless) W (WIFI)	P (Portrait) L (Landscape)	Optional
Example: CP-42	2-DC-CS-C-P-B					

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Application: December 1, 2020

RTIS Example Photos

Below are photos showing the Connectpoint e-reader real-time information system (RTIS) signs used at other transit systems' bus stops. Metro's will look the same but hung from the technology pylon in landscape orientation.



Image Sources: Connectpoint, Solar Powered Real-time Signage, Interactivity and Smart Lighting, Presentation, February 2019.

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New ORCA Reader

Metro will be installing new ORCA readers systemwide starting in 2021, including at the three stations along the Waterfront. One ORCA reader will be installed in each technology pylon.

Description

- The photo below provides an example of what Metro's new ORCA reader will look like. It is the same model used in TriMet's system in Portland, OR.
- There will be ORCA-specific messaging and visual indicators that this is an ORCA reader, but those are still being finalized.
- The outer color will likely be yellow and will be set into the new RapidRide technology pylon so that the face of the reader is almost flush.



Image Source: TriMet, *TriMet Fares*, https://trimet.org/fares/img/header.jpg, 2020.

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Jerry Roberson, (206) 263-0776

Application: December 1, 2020

Statement of Owner Consent

- This project is located entirely within Seattle Department of Transportation (SDOT) right-of-way along Alaskan Way S; therefore, a statement of owner consent from a private property owner is not applicable.
- Metro has been closely coordinating with the Office of the Waterfront/SDOT for over three years on planning for the three new RapidRide stations on the Waterfront.
- The locations of the three new RapidRide stations and the civil work to support them (e.g., foundations, conduit) have already been approved by the Office of the Waterfront.
- The design for Waterfront Seattle has already been approved by the Pioneer Square Preservation Board. This application pertains only to the above-ground elements of the stations.
- Any permits required by SDOT for installation of the station elements, traffic control, or other installation-related requirements will be obtained prior to installation.