



CONSTRUCTION SIGNSDESIGN MANUAL

JANUARY 2016



INTRODUCTION

The purpose of this manual is to describe the types of signs that may be posted at construction sites and to provide a framework so the information looks good, functions optimally and adequately conveys the Sound Transit brand.

Construction sites are dynamic, particularly at the beginning. Until semi-permanent walls or polyethylene-screened fences go up, construction sites are typically characterized by movable chain link fences and temporary road and sidewalk closures. Even after the sites become more stabilized, the need remains to provide project and contact information, to direct pedestrians and bicyclists around the site, to help local businesses remain viable and to brand it as a Sound Transit project.

To keep construction sites interesting and active during the building period, the Sound Transit Art Program (STart) may use construction fencing or wall space for temporary art installations. In addition, contractors have requirements for traffic control, access and safety information. All of this leads to numerous postings around construction sites.

The table at right shows the types of signs addressed in this manual. As required by Sound Transit facility contract specifications, traffic control, access and safety signs conform to the Manual on Uniform Traffic Control Devices (MUTCD) and/or the Washington State Department of Transportation (WSDOT) Standard Specifications and so are not included.

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CONSTRUCTION STAGES

Construction signs are not installed all at once. As mentioned, construction sites are dynamic and progress through stages: property acquisition, demolition, utility relocation and road work, excavation (if applicable), light rail guideway and station construction, and restoration. Construction stages vary depending on the site and the type of guideway to be built.

Property acquisition results in the installation of 6 or 8 foot chain link fencing around the site. No trespassing signs discourage entry. Depending on the location of the site, temporary banners containing project and contact information and/or the announcement of upcoming public meetings may be hung as well.

Demolition and site prep work marks the point at which project identification signs are installed. Pedestrian access signs may be added if sidewalks are affected. Temporary banners containing general business mitigation messaging may also be used.

During utility relocation and road work, fencing installed with 88 percent minimum light blockout polyethylene screening and/ or construction walls may be installed. Wall color varies and is determined by STart and the community. Wall height varies and is determined by the type of development around the site. Construction walls and polyethylene-screened fencing mark the point at which semi-permanent signs can be installed and the Sound Transit branding emphasized. By this time, the business relations strategy for the location has been developed (if applicable), so the general business relations banners (if used) can be taken down.

FABRICATION

Construction signs can be temporary or semi-permanent, the distinction being the type of substrate and the duration of posting.

Temporary signs are typically solid or mesh vinyl banners hung on fencing or are sticky-back vinyl applied to A-boards. Solid vinyl banners hung on fencing require wind slits; mesh do not. Temporary signs are posted for a week on up to a year. Temporary signs should be removed or replaced regularly to maintain appearance.

Semi-permanent signs are exterior-grade MDO plywood or aluminum composite with applied graphics. These signs should not be hung on fencing because they lack wind filtration and could take down the fence. Semi-permanent signs can remain posted for several years.

Following are the material specifications. Aboards are not included because the prints are produced by the Sound Transit General Services Center using sticky-back vinyl they have in stock.

Mesh vinyl banners

Mesh vinyl banners are lightweight and allow wind filtration. They are best used when presenting large graphics and text and when minimal light will pass through from behind.

- Minimum eight ounce weight water-resistant, PVC coated mesh vinyl material
- Minimum 13 mil thickness
- Minimum 1000 by 1000 yarn denier
- Maximum 40 percent air-flow through
- Printed one side with full color UV inks at minimum 300 dpi

- Finished with grommets approximately every two feet
- Hemmed edges with reinforced webbing for additional wind resistance

Solid vinyl banners

Solid vinyl banners are best used when presenting detailed graphics and text and when light could pass through from behind.

- Minimum 13 ounce weight scrim vinyl material
- Printed one side with full color UV inks at minimum 300 dpi
- Finished with wind slits and grommets approximately every two feet (no wind slits needed if attaching to solid wall or fence)
- Hemmed edges with reinforcement for additional wind resistance

MDO plywood panel signs

MDO plywood (or aluminum composite) signs are best used when mounting on sturdy posts or a solid surface.

- MDO ½-inch plywood (may substitute aluminum composite material)
- Smooth, uniform surface with smooth finished edges and square corners
- Pre-drilled mounting holes
- Surface-applied color digital graphics, minimum 300 dpi
- Clear UV coating overcoat to protect images and allow cleaning of graffiti or dirt

Reflective aluminum signs

Reflective aluminum is best used for signs that need to be seen in low light conditions.

- Engineer grade chemically treated 0.080-inch reflective aluminum substrate
- 3M Scotchlite Plus "Blue" or "White" or approved equal reflective sheeting with electronically cut graphics on one side
- Three inch radius corners for 48 by 48 inch signs, 1.5-inch radius corners for 30 by 24-inch signs, and .375-inch radius corners for 12 by 18-inch signs
- Pre-drilled mounting holes for wall mounted signs
- Construct in accordance with Sound Transit Contract Specifications and WSDOT Standard Specifications for Road, Bridge and Municipal Construction, Section 9 28

INSTALLATION AND MAINTENANCE

The Resident Engineer approves all signs prior to installation.

The construction contractor locates, installs and maintains semipermanent signs, walls and fences based on Resident Engineer direction and contract specifications.

The Sound Transit Design, Engineering and Construction Management Department (DECM) outreach staff locates, installs and maintains temporary project information and construction update banners.

NO TRESPASSING SIGN

The no trespassing sign is the first to be installed after property aquisition. It hangs on temporary chain link fencing to discourage entry and to help protect the property that Sound Transit has acquired.

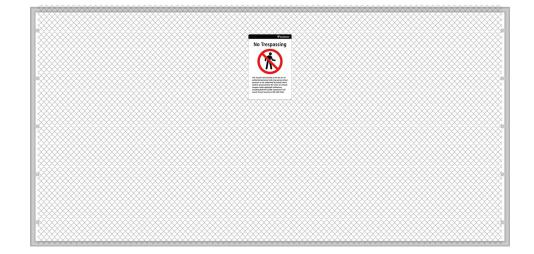
Typically, this sign is aluminum with painted or vinyl graphics.

Fabrication of the no trespassing sign is handled by Sound Transit Facilities and Signage. Artwork is supplied by Sound Transit Marketing & Creative Services.

Once construction begins, the contractor may install other no trespassing signs as defined in the construction contract. Depending on the site, the original no trespassing signs installed upon property aquisition may be removed.



No trespassing sign. 12" by 18" fence mounted. Standard template.



PROJECT IDENTIFICATION SIGN

A project identification sign is installed at the beginning of demolition or site prep. The sign displays the project title, contract number, contact information and the names of one or more of the following: general contractor, civil engineering consultant, design consultant, construction management consultant and architect.

Fabrication and installation of the project identification sign is included in the construction contract. Artwork is supplied by Sound Transit Marketing & Creative Services. If there are multiple contracts for a site, there may be more than one sign or two contracts may be included on the same sign.

RESIDENT ENGINEER'S OFFICE SIGN

A resident engineer's office sign may be requested for a construction trailer as included in the contract.

Typically, both the project identification sign and the resident engineer's office sign consist of full-size vinyl graphics applied to MDO plywood panels. Vinyl banners may be used on a temporary basis.



Example of project identification sign. 96" by 42" post, wall or fence mounted. Variable information.





Examples of resident engineer office sign. 24" by 30" wall mounted. *Variable information*.

24-HOUR CONSTRUCTION HOTLINE SIGN

Sound Transit has established a 24-hour construction hotline phone number so that people affected by latenight noise or other construction-related issues have a venue for their after-hours complaint.

Fabrication and installation of the 24-hour construction hotline sign is included in the construction contract. Artwork is supplied by Sound Transit Marketing & Creative Services.

The 24-hour construction hotline sign is fabricated either as a vinyl banner or is aluminum composite material with surface-applied color digital graphics. The 90-inch by 24-inch size was chosen so that two signs could fit on a standard 96-inch by 48-inch aluminum sheet.

In certain situations, a larger sign may be needed. In that case, a 108-inch by 30-inch format may be used.



For issues that need immediate attention after normal business hours:

24-hour Construction Hotline 1-888-298-2395

For non-emergency questions call 206-398-5300 / TTY: 711, email northlink@soundtransit.org or visit soundtransit.org/northlink.

24-hour hotline sign. 96" by 24" fence or wall mounted. Standard template.

PROJECT INFORMATION SIGNS

The project information sign tells pedestrians what is being constructed. This sign typically includes an illustration of the project along with a short description. A light rail system map can be hung nearby to provide a sense of how the project fits into the overall plan.

Fabrication and installation of the project information sign and light rail system map are included in the construction contract. Artwork is supplied by Sound Transit Marketing & Creative Services.

These signs are produced either as vinyl banners or aluminum composite material with surface-applied color digital graphics.



Example of project linformation sign. 96" by 42" fence or wall mounted. Variable information.



Link light rail system map. 30" by 42" fence or wall mounted. Standard template.



Example of project information sign. 120" by 42" fence or wall mounted. Variable information. Use this size for wider illustration or two illustrations.

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CONSTRUCTION UPDATES AND ALERTS

Construction update banners inform pedestrians about the current phase of a project. A site map showing the location of construction activities alongside a description is typically included. This banner can also be used to announce upcoming meetings or open houses.

Fabrication and installation of vinyl construction update banners is included in the construction contract. Artwork is supplied by Marketing & Creative Services. Height is 42-inches; length can range from 60 to 96-inches depending on the amount of information.

Construction alerts notify pedestrians/bicyclists about detours and other issues. Fabrication of the low-tack vinyl prints for A-boards is done by the Sound Transit General Services Center. Artwork is supplied by Marketing & Creative Services. Content and installation is handled by DECM.



Example of construction alert A-board. 22.5" by 27.5" print applied to standard A-board. *Variable information*.



Example of construction update banner. 72" by 42" fence mounted. Variable information.



Example of construction update banner. 96" by 42" fence mounted. Variable information.

PEDESTRIAN ACCESS SIGNS

Temporary sidewalk closures and detours can happen during construction. To help pedestrians navigate, standard reflective aluminum pedestrian access signs and/or temporary A-boards can be used.

Fabrication and installation of the aluminum pedestrian access signs is included in the construction contract. Artwork is supplied by Sound Transit Marketing & Creative Services. Signs are produced using cut vinyl graphics applied to reflective aluminum sheeting.

Fabrication of the A-board sticky-back vinyl prints is done by the Sound Transit General Services Center. Artwork is produced by Marketing & Creative Services. Content and installation is handled by DECM.





Pedestrian access signs. 30" by 24" tripod mounted. Standard templates.



Example of pedestrian A-board. 22.5" by 27.5" print applied to standard A-board. *Variable information*.

BUSINESS ACCESS SIGNS

Businesses near construction sites can experience noise, reduced parking and detours. DECM outreach staff works with affected businesses to develop a business relations plan, which can include custom signage tailored to the site. If a sign is needed but the business relations plan doesn't include signs, the following standardized signs, banners and A-boards can be used.

Fabrication and installation of aluminum business access signs is included in the construction contract. Signs are produced using cut vinyl graphics applied to reflective aluminum sheeting. Fabrication of vinyl banners and the sticky-back prints for A-boards is done by the Sound Transit General Services Center. In all cases, artwork is supplied by Marketing & Creative Services and content and installation is handled by DECM.

NORTHGATE STATION BUSINESSES ARE OPEN

Example of aluminum business access sign. 48" by 48" tripod mounted. *Variable information*.

Neptune Music Co.

Example of aluminum business access sign. 30" by 24" tripod mounted. *Variable information*.





Examples of business access A-board. 22.5" by 27.5" print applied to standard A-board. *Variable information*.

Marcello Ristorante WE'RE OPEN!

Exampe of business banner. 96" by 30" or other size mounted as appropriate for business. *Variable information*. Note: specialty banners with logos and custom graphics may be requested for heavily impacted businesses.

PARKING SIGNS

Construction can cause parking disruptions that affect businesses. To help customers access businesses, both standard reflective aluminum parking signs and temporary A-boards can be used.

Fabrication and installation of aluminum parking signs is included in the construction contract. Artwork is produced by Sound Transit Creative Services. Signs are produced using cut vinyl graphics applied to reflective aluminum sheeting.

Fabrication of the sticky-back vinyl prints for A-boards is done by the Sound Transit General Services Center. Artwork is supplied by Creative Services. Content and installation is handled by DECM.



Parking Signs: 30" by 36" tripod mounted. Standard templates for left and right arrows.



Parking Signs: 30" by 24" tripod mounted. Standard templates for left and right arrows.



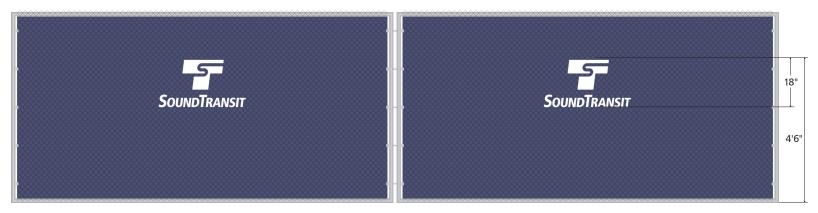


Parking A-boards: 22.5" by 27.5" print applied to standard A-board. *Variable information*.

BRANDED CONSTRUCTION SITE FENCING

To brand Sound Transit construction sites, temporary fencing installed with 88 percent minimum light block-out dark navy blue polyethylene fence screening should be used with the Sound Transit logo applied on public-facing sections.

Sound Transit Marketing & Creative Services will provide printready artwork for the 18-inch logo, which should be installed with the top of stylized "T" 4 feet 6 inches above the ground.



Branded fencing. Zinc-coated chain link fence complying with ASTM A392 requirements and installed with 88 percent minimum light block-out polyethylene screening in dark navy blue color. Logo is white opaque vinyl.

Specs for conractor

200 Series – Privacy Screen Plus, Navy Blue, 8' Tall 88% Blockage. Standard Sized, Finished with Black Binding and Brass Grommets ST Logo applied/stitched on every 50 linear feet:112 Series-Stich-On Logo, print on flex mesh then sewn onto 200 Series Roll

Resource:fencescreen.com

SOUND TRANSIT AWARENESS SIGNS

To generate positive public excitement about Sound Transit projects, the Communications and External Affairs (CEA)

Department encourages the posting of large messages and graphics on prominently public facing walls and fencing. The design and message can be unique to each site and can change over time.

Fabrication of the mesh or solid vinyl banners is done through Sound Transit's General Services Center. Content is generated by CEA. Artwork is supplied by Marketing & Creative Services. Installation is handled by DECM or the construction contractor.



Example of awareness banner. Custom size, fence or wall mounted. Variable information and design.



Example of awareness banner. Custom size, fence or wall mounted. Variable information and design.

SOUND TRANSIT ART PROGRAM

Construction walls can remain in place for many years so periodic art installations are commissioned by the Sound Transit Art Program (STart) to lessen the visual impact on surrounding neighborhoods. The goal for Sound Transit's temporary art is to keep key spaces around construction sites interesting and active during the building period.

Near the beginning of construction, STart issues a "call for artists" to gather resumes and work samples. A panel of art and design professionals, community representatives and the Lead Artist for each site reviews submissions and selects qualified artists for inclusion on a Temporary Art Roster.

Locations for art are agreed upon by STart, the Resident Engineer and DECM outreach staff. Either the artist or the construction contractor installs the art. The contractor performs maintenance.



Temporary art: Example of a temporary art installation at the Capitol Hill Station construciton site.

FONTS

The following fonts should be used on construction signs. Business mitigation signs are not limited to these choices.

abcdefghijklmnopqrstuvwxyz ABCDEFGHIJKLMNOPQRSTUVWXYZ 1234567890&

Humanist 777 Light Condensed (Bitstream)

abcdefghijklmnopqrstuvwxyz ABCDEFGHIJKLMNOPQRSTUVWXYZ 1234567890&

Humanist 777 Condensed (Bitstream)

abcdefghijklmnopqrstuvwxyz ABCDEFGHIJKLMNOPQRSTUVWXY 1234567890&

Humanist 777 Bold Condensed (Bitstream)

abcdefghijklmnopqrstuvwxyz ABCDEFGHIJKLMNOPQRSTUVWX 1234567890&

Humanist 777 Black Condensed (Bitstream)

COLORS

The following colors and their tints should be used on construction signs. Business mitigation signs are not limited to these choices.



FOR MORE INFORMATION

A PDF of the Temporary Construction Sign Design Manual is found at soundtransit.org/brand. Click on "Templates & Signs."

For more information about construction signs, contact Elizabeth Trunkey, Creative Services Design Manager, at 206-398-5288.

For information about customer signs at Sound Transit facilities, see the May 2013 Customer Signage Design Manual, found at soundtransit.org/brand. Click on "Templates & Signs."