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HOW TO PLAN, DOCUMENT AND IMPLEMENT PEDESTRIAN MOBILITY IN AND AROUND **WORK ZONES**

CLIENT ASSISTANCE MEMO

SEATTLE PERMITS - Part of a multidepartmental City of Seattle series on getting a permit

www.seattle.gov/transportation

Last Revised 12/5/17

On January 1st, 2016, the Seattle Department of Transportation (SDOT) published a revised Director's Rule for Pedestrian Mobility In and Around Work Zones (SDOT DR 10-2015). The new rule requires existing sidewalks adjacent to work sites remain open for the duration of the project. Mobility must be maintained on these sidewalks with appropriate pedestrian protection and according to the new rule.

This Client Assistance Memo (CAM) will help you plan, document and implement pedestrian access in and around your work zone.

Understandably, some circumstances do not allow for the existing sidewalk to remain open. SDOT DR 10-2015 (the Rule) provides guidance on how requests for sidewalk closures are evaluated and, where approved, alternative methods that can be used to provide pedestrian mobility.

The Rule does not list all of the protection requirements within Seattle Municipal Code (SMC) Title 15, but interprets key provisions to provide a standard for compliance.

Warning and guidance devices and signs, along with protective barriers where appropriate, must be used so that pedestrian passage is safe, well-defined and compliant with the Seattle Traffic Control Manual for In Street Work and Americans with Disability Act (ADA) codes.

This CAM provides guidance on safety and channelization requirements for pedestrian mobility. The sections are organized by methods: Open

Walkways, Reroutes, Detours, Corner Work, Covered Walkways and Scaffolding.

A full copy of SDOT Director's Rule 10-2015 can be downloaded at: www.seattle.gov/Documents/ Departments/SDOT/About/DocumentLibrary/ DirectorsRules/SDOTDR%2010-2015Signed.pdf.

RESOURCES

General information regarding application materials, forms and Client Assistance Memos are available online at: www.seattle.gov/transportation/ permits-and-services/permits

Information on materials and personnel for traffic control can be found in the City of Seattle Traffic Control Manual for In-street work: www.seattle.gov/ transportation/document-library/manuals/trafficcontrol-manual

All current SDOT Director's Rules can be found online at: www.seattle.gov/transportation/documentlibrary/directors-rules-and-ordinances

SDOT Traffic Control Plan Base Map Tool: http://web6.seattle.gov/sdot/trafficcontrolplanmap/

SDOT Construction Use & Simple Utility Site Plan templates:

www.seattle.gov/transportation/permits-andservices/permits/permit-templates-and-checklists

Permittee Checklist or Pedestrian Mobility In and Around Construction Zones: www.seattle.gov/ Documents/Departments/SD0T/Services/Permits/ TemplatesAndChecklists/PedChecklist.pdf

LEGAL DISCLAIMER: This Client Assistance Memo (CAM) should not be used as a substitute for codes and regulations. The applicant is responsible for compliance with all code and rule requirements, whether or not described in this CAM.

HOW TO PLAN FOR PEDESTRIAN MOBILITY

The earlier you plan for pedestrian mobility in all phases of your project, the easier it will be to budget for and implement. SDOT provides assistance with early planning:

On how to plan right of way (ROW) impacts:

- If your project triggers the State Environmental Policy Act (SEPA) through the Master Use Permit process, you must provide pedestrian mobility strategies in your Construction Management Plan (CMP) for early SDOT feedback
- You may request a preliminary ROW use planning meeting with SDOT with an email to SDOTPermits@Seattle.gov
- We suggest a discussion of ROW use planning with your SDOT inspector in all preconstruction meetings

On how to minimize ROW impacts:

- Plan lay-down areas and other structure staging on private property or in a way that pedestrian mobility can be maintained in the existing sidewalk or adjacent curb lane
- Plan material storage and movement on top of, or over, a covered structure to allow pedestrian mobility in the existing sidewalk
- Plan crane placements on private property
- Plan site logistics to open pedestrian mobility after work hours in the existing sidewalk or adjacent curb lane
- Phase the project in a way to avoid closures on multiple adjacent and/or opposite frontages
- Coordinate work with other adjacent and/or opposite frontage projects

HOW TO DOCUMENT PEDESTRIAN MOBILITY

Beginning March 31, 2016, the following documentation is required for all Street Use permit applications:

- Completed Pedestrian Mobility In and Around Work Zones Permittee Checklist
- Site and traffic control plans showing pedestrian mobility methods for work and non-work hours at each phase of construction.

Pedestrian mobility elements must include the following:

- Barrier and barricade locations and type
- Lighting locations and type
- Gate locations showing movement inward toward construction site

- Sign locations and type
- · ADA compliant ramps if required
- Covered walkways or scaffolds used to keep the existing sidewalk open.
- ADA and signal infrastructure maintained at intersections

HOW ALTERNATIVE METHODS ARE EVALUATED

A sidewalk closure will be considered a last resort where an applicant can demonstrate reasonable impracticality for maintaining the existing walkway adjacent to the work site. Where pedestrian mobility on the existing walkway is not feasible, SDOT may allow an alternate method for maintaining access.

In considering alternative methods we evaluate the:

- Purpose of the proposed use
- Duration of the proposed use
- Potential hazard to the public
- User's need for control of right of way
- Traffic patterns (pedestrian, bicycle and vehicular)
- Terrain
- Impact of a reroute or closure on adjoining properties and businesses
- Expense of keeping the existing path open
- Inconvenience to the public (for example, sidewalk closures on opposite sides of a street at the same time are not allowed)
- · Adjacent construction activity
- Access to bus stops, street cars and bike lanes
- Freight and delivery routes that may be impacted

If travel on the existing sidewalk isn't practical based on the criteria above, SDOT may authorize a pedestrian reroute into an adjacent right of way, such as a parking lane, around the work area.

Limited, intermittent sidewalk closures of a few minutes duration (for example, short term deliveries or temporary material staging) may be allowed, however, flaggers are required to manage pedestrian traffic during these closures.

Where a reroute isn't viable, SDOT may authorize closure of the existing sidewalk with a well-defined detour across the street from the work zone during work hours. The sidewalk should be reopened during non-work hours. The detour will only be permitted for the phase of construction where hazards or other reasonable impracticalities exist.

HOW TO IMPLEMENT PEDESTRIAN MOBILITY

Section 7 of the Rule provides general requirements for all pedestrian mobility methods. Sections 8-13 provide further requirements specific to each pedestrian mobility method. The checklists provided in this CAM can assist you in planning and implementation for each method in the Rule.

Pedestrian mobility shall also meet requirements of the Seattle Traffic Control Manual for In-street Work, SMC Title 15 and ADA code.

The type of barriers required for your project will depend on the location and duration of work.

In high impact areas and all major arterials, an impact rated barrier adjacent to the travel lane is required for pedestrian reroutes. If using waterfilled barriers they must be connected and filled to manufacturer's specifications.

Continuous rail systems, such as split rail or interlocking Strongwall ADA barricades, may be approved for use on arterials if the work is short term and the barricades need to be moved frequently.

On non-arterials, a continuous rail system with detectable kickboards may be used for reroutes. Stabilizers, such as sand bags, should be placed on the vehicle lane side of the rail to avoid trip hazards on the pedestrian side.

If a work area, excavation or trench is below grade, an anchored barrier sufficient to prevent falls must be placed between the work site and sidewalk.

METHOD 1: OPEN WALKWAYS

An open walkway on the existing sidewalk is the standard for maintaining pedestrian access. The sidewalk must meet the conditions on the checklist below.

OPEN WALKWAY CHECKLIST Walking surface

Minimum of 4 feet wide with no protrusions (8 feet may be required in heavy pedestrian areas)
Continuous, solid, slip-resistant and well drained walkway provided for the entire length of path

Lighting

Walkway continuously well-lit between sunse and sunrise
If existing street lighting is removed for construction, the existing level of street illumination maintained

Parricades and Parriers

Dai	Dailicaues allu Dailieis				
	The project has appropriate protection between the work site and the sidewalk for the entire length of the pedestrian path.				
	Protective screening adjacent to the worksite provided for activities that create flying debris o dust				
	Gates swing inward, away from the pedestrian pathway, and remain closed and securely fastened when not in use				
	Access to existing ADA infrastructure, signaling devices and transit facilities maintained				

Signage

Intersection walkway

A "Pedestrian Access" sign with way-finding arrow provided at the preceding intersection or crosswalk

Mid-block partial walkway

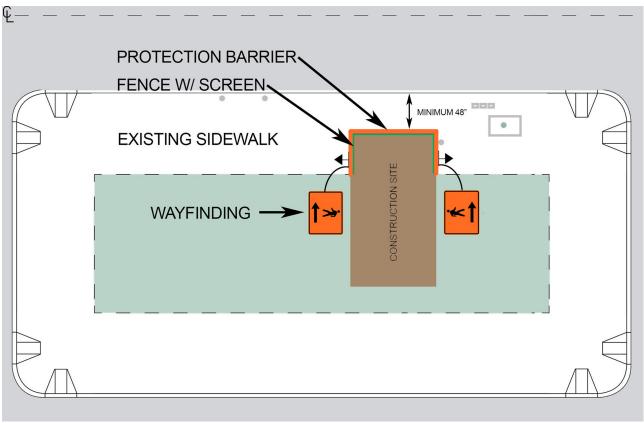
"Pedestrian Access" sign provided at the
preceding intersection or crosswalk

- "Pedestrian symbol with arrow" sign attached to the partial closure at ingress and egress access points
- Business Open Ahead" sign provided at the preceding intersection or crosswalk if business access exists on block with the partial closure

ADA

Continuous cane-detectable surface or kickboard system highlighted in a high contrast color (4"H x 1"W minimum) provided on both sides for the length of walkway. Existing curbs are considered a detectable surface.



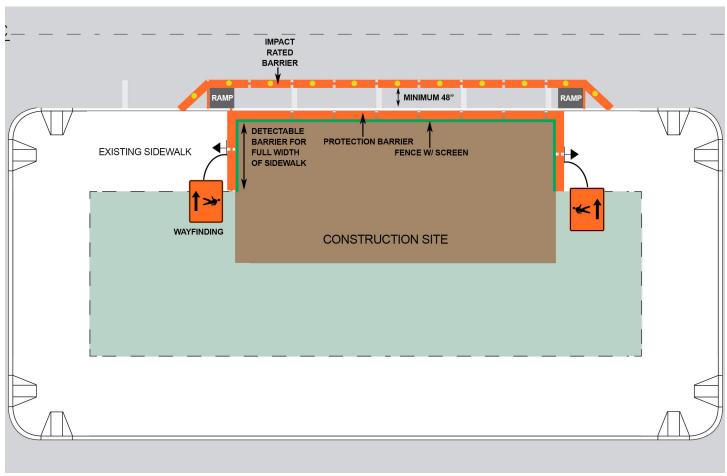


METHOD 2: PEDESTRIAN REROUTES Where use of the existing walkway is not practical,	Signage Intersection reroute			
SDOT may allow a pedestrian reroute into the adjacent right of way, for instance a parking or curb lane.	 "Pedestrian Access" sign provided at the preceding intersection or crosswalk 			
REROUTE CHECKLIST Walking surface	 "Pedestrian symbol with arrow" sign attached to the closure at the reroute ingress and egress 			
Minimum of 4 feet wide with no protrusions (8 feet may be required in heavy pedestrian areas)	Mid-block reroute			
Continuous, solid, slip-resistant and well drained walkway provided for the entire length of the path	 A "Pedestrian Access" sign with way-finding arrow provided at the preceding intersection or crosswalk 			
Screening Protective screening adjacent to the worksite provided where activity may create flying debris	 "Pedestrian symbol with arrow" sign attached to the closure at the reroute ingress and egress access points "Business Open Ahead" sign provided at the 			
or dust Transparent wire mesh screening 4 to 7 feet in height adjacent to the roadway corner provided where the closure is within 30 feet of an	preceding intersection or crosswalk where business access exists on the block with the reroute			
intersection or corner	ADA			
Lighting Walkway continuously well-lit between sunset and sunrise	Continuous cane-detectable surface or kickboard system highlighted in a high contrast color (4"H x 1"W minimum) provided on both sides for length of walkway. Existing curbs are considered			
If existing street lighting is removed for construction, the existing level of street illumination maintained	a detectable surface ADA ramps			
Barricades and Barriers	Prefabricated ramps are provided at the reroute			
Continuous, impact-resistant, anchored or stabilized Jersey barrier (or equivalent), in orange or orange and white, provided for the entire length of the walkway (preferred). Four or more amber lights (every 20 feet) when employed for	 ingress and egress access points (preferred) Site designed hot mix asphalt ramps are provided at the reroute ingress and egress access points (alternate) Ramps must meet the following: 			
nighttime use Guardrail, split rail or other approved devices	 Flush transition at top and bottom of ramp Detectable surfaces at top and bottom of ramp 			
provided at each transition taper	and detectable kickboards on exterior ramp edges. (4"H x 1"W minimum)			
Gates swing inward, away from the pedestrian pathway, and remain closed and securely fastened when not in use	3. Uniform and slip resistant surface4. Hand rail or board edge installed on inside edge (ramps with a rise greater than six inches			
 Access to existing ADA infrastructure, signaling devices such as crosswalk buttons and transit facilities maintained 	require a handrail on both sides) 5. Ramp edges highlighted with high contrast color			

6. Slopes and landing meet ADA requirements to

the maximum extent feasible





METHOD 3: PEDESTRIAN DETOURS

Where pedestrian access cannot be maintained adjacent to the worksite for reasons of pedestrian safety or other considerations as allowed in Seattle Municipal Code, pedestrians will be directed to the opposite open sidewalk.

The closure of the existing sidewalk will be limited to

	hours or phase of work that presents a pedestriar zard only.
	TOUR CHECKLIST
	Walkway continuously well-lit between sunset and sunrise
	If existing street lighting is removed for construction, the existing level of street illumination maintained
Scı	reening
	Protective screening adjacent to the roadway provided where activity may create flying debris or dust
	Transparent wire mesh screening 4 to 7 feet in height adjacent to the roadway corner provided if the closure is within 30 feet of an intersection or corner
Ba	rricades and Barriers
	Gates swing inward, away from the pedestrian pathway, and remain closed and securely fastened when not in use

Crosswalk detour

of the crosswalk placed in advance of a closed crosswalk (preferred) Cane-detectable barricade that extends the full width of the crosswalk placed in advance of a closed crosswalk (alternate)

Water-filled barriers that extend the full width

Access to existing ADA infrastructure, signaling

devices and transit facilities maintained

Sidewalk detour

Water-filled barriers that extend the full width of the sidewalk placed in advance of a closed sidewalk (preferred)
Cane-detectable barricade that extends the full width of the sidewalk placed in advance of a closed sidewalk (alternate)

Signage

Crosswalk detour

Crosswalk closed" sign attached to the crosswalk barricade

Sidewalk detour

"Sidewalk closed ahead" sign provided at the
preceding intersection or crosswalk
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"Sidewalk Closed" sign attached to the closure

Mid-block detour

"Sidewalk closed ahead" sign provided at t	:he
preceding intersection or crosswalk	

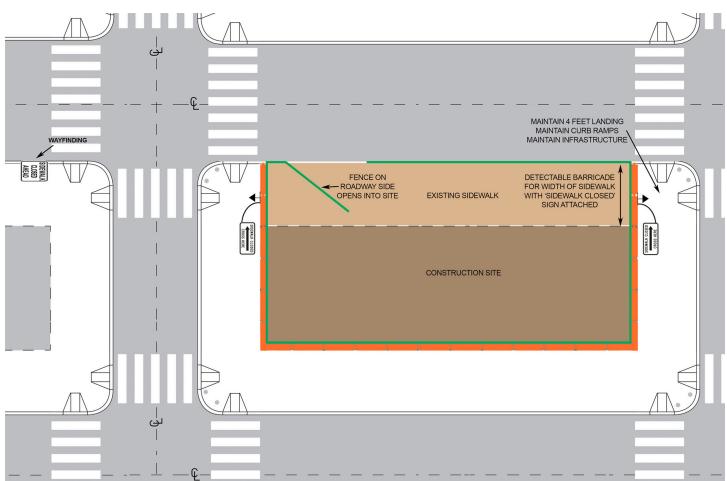
)'	'Sidewalk	Closed"	sign	attached	to	the	closure	4
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"Business Open Ahead" sign provided at the
preceding intersection or crosswalk where
pedestrian access is maintained prior to the
closure and business access exists on the block
with the closure

ADA

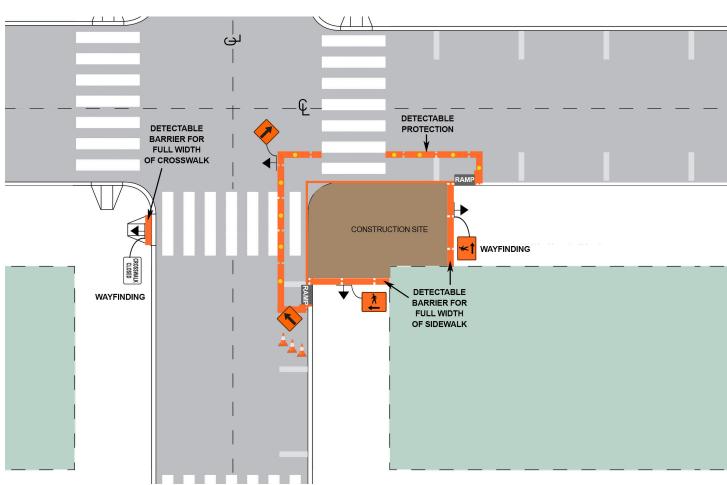
Continuous cane-detectable surface or kickboard system highlighted in a high-contrast color (4"H x 1"W minimum) provided for the width of the closure, for example, the width of the sidewalk





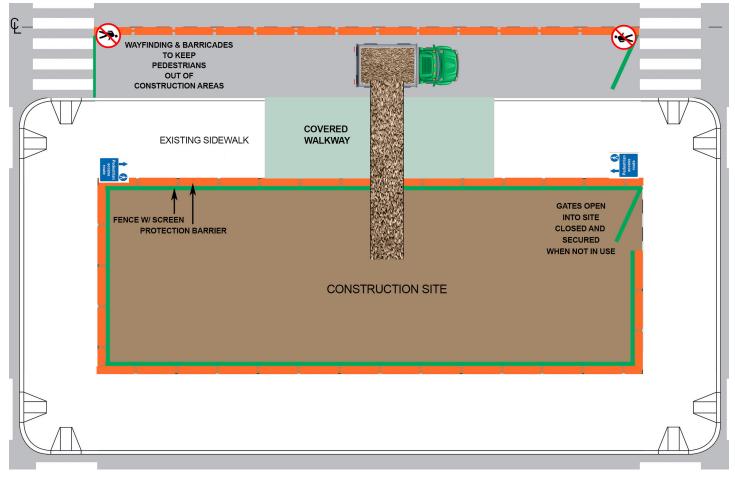
METHOD 4: CORNER WORK Where safety or other conditions require pedestrian closures at an intersection, the Rule specifies standards for visibility, crosswalk access, and	 On non-arterials, continuous rail system in place, such as split rail or interlocking Strongwall ADA barricades, where the work is short term.
access to working call buttons and existing ADA infrastructure. Note that temporary ADA companion	Sidewalk or intersection detour (if parking lane does not exist)
corner work checklist	Water-filled barrier that extends full width of the sidewalk closure (preferred)
Walking Surface Minimum of 4 feet wide with no protrusions	Cane-detectable wood, fence or other approved barrier that extends full width of the sidewalk
(8 feet may be required in heavy pedestrian areas)	
Continuous, solid, slip-resistant and well drained walkway provided for the entire length of the path	_
Lighting	"Crosswalk closed" sign attached to the crosswalk barricade
Walkway continuously well-lit between sunset and sunrise	Sidewalk or Intersection closure with reroute in parking lane
If existing street lighting is removed for construction, the existing level of street illumination maintained	"Pedestrian Access" sign provided at the preceding intersection or crosswalk
Barricades and Barriers	"Pedestrian symbol with arrow" sign attached to the closure at the reroute ingress and egress
 Access to existing ADA infrastructure, signaling devices and transit facilities maintained 	"Businesses Open Ahead" sign placed at preceding intersection where applicable
Crosswalk detour	Sidewalk and/or Intersection detour
Water-filled barriers that extend the full width of the crosswalk placed in advance of the crosswalk (preferred)	"Sidewalk Closed Ahead" sign provided at the preceding intersection or crosswalk
Cane-detectable barricade that extends the full	"Sidewalk Closed" sign attached to the closure
width of the crosswalk placed in advance of the crosswalk (alternate)	ADA
Sidewalk or Intersection closure with reroute in parking lane	Continuous cane-detectable surface or kickboard system highlighted in a high contrast color (4"H x 1"W minimum) provided on both sides for the length of walkway. Existing curbs are
Water-filled barrier that extends the full width of the sidewalk closure (preferred)	considered a detectable surface.
Cane-detectable wood, fence or other approved barrier that extends full width of the sidewalk closure (alternate)	 Access to existing ADA infrastructure, signaling devices and transit facilities maintained
On arterials, continuous, impact-resistant, anchored or stabilized Jersey barrier (or equivalent), in orange or orange and white, provided for the entire length of the walkway on the roadway side (preferred) Four or more amber lights every 20 feet employed for nighttime use	





METHOD 5: COVERED WALKWAYS Where safety or other conditions require a covered walkway, the covered walkway must be structurally	 The covered walkway structure incorporates and/ or maintains access to existing sidewalk fixtures (e.g. fire hydrants)
sound and may require additional technical review by Street Use. COVERED WALKWAY CHECKLIST Walking surface	 Access to existing ADA infrastructure, signaling devices and transit facilities such as working call buttons, maintained When required by SMC 15.22.122, a continuous
Continuous, solid, slip-resistant and well drained walkway provided for the entire length of the path	Signage
Lighting	 Advanced signage placed at the preceding intersection or crosswalk on both ends of the
Interior continuously well-lit between sunset and sunrise along entire length of the covered walkway	covered walkway structure noting "Covered walkway ahead" or "Pedestrian Access" with a way-finding arrow.
Roof	ADA
Clear and unobstructed ceiling height of not less than 8 feet vertical above the walkway	Continuous cane-detectable surface or kickboard system highlighted in a high contrast color
Roof is designed to carry the loads imposed upon it. Minimum live load carrying capacity is not less than 150 pounds per square foot, uniformly loaded (if live and/or loads exist, the roadway side of the scaffolding extends at least1 foot past the roof)	(4"H x 1"W minimum) provided on both sides for length of walkway
	 Slope-compliant, stable and slip-resistant transition ramp is provided at the covered walkway ingress and egress access points,
Tightly boarded with covering of roofing paper or other material to prevent water from falling through	with edges highlighted with high contrast color (handrail required on both sides if rise is greater than 6 inches)
Barricades and Barriers	Maintenance
Where the covered walkway is within a roadway, the vehicle traffic side has Jersey barriers or equivalent impact resistant water-filled barriers with a continuous reflector system adjacent to travel lane	 No postings other than signs permitted under SMC 23.55
	The walls, roof, and floor of the covered walkway are washable and maintained free of postings, graffiti, or advertising of any type
Covered walkways greater than 10 feet in length have openings above the impact resistant barrier or guardrails to the maximum extent feasible on the roadway side	Where visibility into a covered walkway is limited due to placement of the walkway or existing structures, security monitoring may be required
The covered walkway structure does not impede sight distance at corners	
The covered walkway structure does not impede bus or heavy vehicle mirror encroachments	
The covered walkway structure does not impede the 3 feet door-swing radius where adjacent parking is allowed	





METHOD 6: SCAFFOLDING Where safety or other conditions require a scaffold,	When required by SMC 15.22.122, a continuous
the scaffold must be structurally sound and may require additional technical review by Street Use.	
SCAFFOLD CHECKLIST	
Walking surface	
 Minimum of 4 feet wide with no protrusions (8 feet may be required in heavy pedestrian areas 	_
Continuous, solid, slip-resistant and well drained walkway provided for the entire length of path	walkway, along with sufficient way finding in advance of the walkway to distinguish pedestrian
Lighting	access from construction site access
Interior continuously well-lit between sunset and sunrise along entire length of the scaffold	ADA
Fixtures	 Continuous cane-detectable surface or kickboard system highlighted in a high contrast color
Scaffolding designed to incorporate and/or maintain access to existing sidewalk fixtures (e.g. fire hydrants, poles, parking meters etc.)	(4"H x 1"W minimum) provided on both sides for the length of walkway. Existing curbs are considered a detectable surface.
Roof	Slope-compliant stable and slip-resistant transition ramp is provided at the scaffolding
Clear and unobstructed ceiling height of not less than 8 feet vertical above the walkway	ingress and egress access points with edges highlighted in high contrast color material
Roof is designed to carry the loads imposed upon it. Minimum live load carrying capacity not less	(handrail required on both sides if rise is greater than 6 inches)
than 150 pounds per square foot, uniformly loaded (if live and/or loads exist, the roadway side of the scaffolding extends at least 1 foot past the roof)	Maintenance ☐ No postings other than signs permitted under SMC 23.55
Tightly boarded and covered with roofing paper or other material to prevent water from falling through	31410-20.33
Barricades and Barriers	
If the scaffold is within a roadway, the roadway side has Jersey barriers or equivalent impact resistant water-filled barriers with a continuous reflector system adjacent to travel lane	
Scaffold is open to the maximum extent feasible on the roadway side	
The scaffold structure does not impede sight distance at corners	
The scaffold structure does not impede bus or heavy vehicle mirror encroachments	Access to Information Client Assistance Memos are available online at:
The scaffold structure does not impede the 3 feet door-swing radius where adjacent parking is	www.seattle.gov/transportation/document-library/client- assistance-memos. Paper copies of these documents are available at our Permit Services Counter located on the

allowed

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23rd floor of the Seattle Municipal Tower at 700 5th Avenue in downtown Seattle; phone number (206) 684-5253.



