APPENDIX A: ACCESSIBILITY ELEMENTS FOR PARKLETS

The City and County of San Francisco seeks to make its public realm accessible to and usable by individuals with disabilities. This goal extends to Parklets, which become an extension of public sidewalks and pedestrian open space. All accessibility elements of the proposed Parklet shall be designed, constructed and/or conform to the applicable provisions, rules, regulations and guidelines of the: San Francisco Building Code (SFBC), Americans with Disabilities Act 2010 Standard's accessibility requirements (ADAAG), and other design criteria included in DPW Order No. 178,989 for Temporary Sidewalk Extensions (Park lets). Additional information and references are located in paragraph B.

- A. **REQUIRED ACCESSIBILITY FEATURES.** The following accessibility features shall be provided for each Parklet: (See Figures D.1 thru D.4).
 - 1. **Sidewalk Condition and Maintenance.** The sidewalk abutting the Parklet shall be in a state of good repair and maintenance¹, with a grade of no more than 5% running slope at the *Parklet Entry*.² Sidewalk flags or cracks shall not exceed ¹/₂" in vertical change of elevation or in horizontal separation. Vertical changes between ¹/₄" and ¹/₂" high shall be beveled. Tree well areas shall be filled level to the sidewalk surface.
 - 2. *Parklet Path*. A *Parklet Path* is an accessible route that connects the sidewalk to the *Parklet Entry*, *Deck Surface*, *Wheelchair Turning Space* and *Wheelchair Resting Space*. (See Figure D.1)
 - a. The *Parklet Path* shall be 72" wide minimum on the sidewalk and not pass over tree wells. When a 72" path is technically infeasible, then consistent with the *City's* Better Streets Plan³, 60" may be allowed, but under no circumstances shall the path be less than 48" wide minimum. Once on the parklet's *Deck Surface*, the *Parklet Path* shall be 36" wide minimum (with a *Wheelchair Turning Space* described in section A5).
 - b. The cross slope along any portion of the *Path* shall not exceed 1:48 (2%). Where this is technically infeasible due to existing conditions, the applicant shall follow the instructions in the attached document title DPW REQUEST FOR DETERMINATION OF TECHNICAL INFEASIBILITY
 - 3. *Parklet's Entry and Deck Surface*. The *Parklet Entry* is where the *Parklet Path* joins the parklet's *Deck Surface*. An ideal *Parklet Entry* should be located in an unobstructed area where there is the least amount of running slope along the sidewalk and curb.
 - a. Any openings between the sidewalk and the *Deck Surface* shall be flush without a horizontal or vertical separation that would allow the passage of a $\frac{1}{2}$ " sphere. (See Figure D.2)
 - b. Where the curb or a portion of the curb is damaged, has settled lower than the deck surface, or has a separation greater than ½", a continuous threshold unit shall span from the deck to the sidewalk surface over the curb. Changes in level from the threshold's top surface material and the deck or the sidewalk shall not exceed ½" maximum. Changes in level of ¼" high maximum shall be permitted to be vertical, and changes in level between ¼" and ½" shall be beveled with a slope not steeper than 1:2. (See Figure D.2).
 - c. Where the *Deck Surface* edge abuts existing driveways or curb ramps, the driveway area or curb ramp shall be temporarily filled-in for the duration of the Parklet's installation.
 - 4. Deck Surface. The Parklet's Deck Surface shall be firm, stable and slip resistant.

¹ Sidewalks which are not in good repair may need replacement. Sidewalk maintenance is the responsibility of the property owner. Due to lease agreements, some or all of the responsibility may be delegated to the tenant.

 $^{^{2}}$ Running slope is the slope measured along the length of a sidewalk, parallel to the street. Cross slope is measured perpendicular to the running slope. Running slopes and cross slopes may be measured with a 48" long electronic level. These devices are available at most big-box hardware-lumber stores

³ San Francisco's Better Streets Plan [http://www.sfbetterstreets.org/] is the City's policy that encourages the design and development of 'Better Streets' – streets that work for all users. A Better Street attends to the needs of people first, considering pedestrians, bicyclists, transit, street trees, stormwater management, utilities, and livability as well as vehicular circulation and parking.

- a. The *Deck Surface's* maximum cross slope shall be no greater than 1:48 (2%) measured perpendicular to the sidewalk or curb. The Parklet's underlying frame or structure may need to be tapered or shimmed in order to accommodate the slope of the crown and the gutter in the street. (See Figure D.2).
- b. The *Deck Surface's* maximum running slope (parallel to the curb) is 1:48 (2%) for the *Wheelchair Turning Space, the Wheelchair Resting Space* and the routes that connect them. For other *Deck Surfaces*, the running slope may not exceed 1:20 (5%) unless otherwise permitted through one of the Exceptions discussed in DPW REQUEST FOR DETERMINATION OF TECHNICAL INFEASIBILITY. The *Deck Surface* materials shall be installed with no gaps between them larger than would permit the passage of a ¹/₂" sphere. Elongated openings shall be placed so that the long dimensions are perpendicular to the dominant direction of travel.
- c. The *Deck Surface* shall have no abrupt changes in level exceeding ¹/₂" along the *Parklet Path*. No changes in level (even if they are less than ¹/₂") are recommended at either the *Wheelchair Turning Spaces* or *Resting Spaces*.
- d. The *Deck Surface* shall all be on one level unless the change in level is served by a ramp, additional *Parklet Entries*, or otherwise permitted on a case by case basis. When stairs or ramps are permitted, they must meet all building code requirements for rise, run, width, handrails, and contrasting stair striping for the visually impaired.
- 5. Wheelchair Turning Space. A Wheelchair Turning Space is an accessibility feature that is a circular area 60" minimum in diameter for use by a person with mobility aid to make a 360 degree turn (See Figure C.2). This space shall be located entirely within the Parklet, unless otherwise permitted. When the turning space is allowed to encroach over the sidewalk, the maximum encroachment shall be 12" unless otherwise permitted on a case by case basis. Within this space there shall be no cross slope in any direction that is greater than 1:48 (2%). Alternatively a "T" shaped Turning Space is permitted in accordance with Figure C.4 A Wheelchair Turning Space is not permitted to under lap tables, counters or other elements. (See Figure D.1).
- 6. Wheelchair Resting Space. A Wheelchair Resting Space has a 30" wide by 48" deep clear floor area. (See Figure C.1). Within this space, there shall be no cross slope in any direction that is greater than 1:48 (2%). The Wheelchair Resting Space is permitted to overlap the Wheelchair Turning Space by 24" maximum in any orientation to one another. Unobstructed knee space at tables and counters is addressed in Paragraph A.9.
- 7. **Head Height Clearance**. An 84" minimum head height clearance is required for the *Parklet Path, Parklet Entry*, and *Wheelchair Turning Space*. With the exception of knee clearance at tables and counters, horizontal protrusions are not permitted at *Wheelchair Resting Spaces*. (See Figure D.1).
- 8. Parklet's *Positive Edge* at Perimeter of *Deck Surface*: Parklets need a *Positive Edge* along the open sides the *Deck Surface* that is parallel to the vehicular traffic lane, to inhibit people who, while lingering, may inadvertently wander into vehicular traffic. *Positive Edges* serve to reduce potential tripping hazards at drop-offs along open sides of the *Deck Surface*.

A *Positive Edge* along vehicular traffic lanes may be achieved by providing a railing of no less than 42 inches in height with openings of no more than 4 inches, or by other means as described in the next paragraph. All railings must be able to withstand a 250 lb. force anywhere and in any direction along the top of the rail from within the parklet. When using a horizontal cable rail or similar flexible design, the barrier shall have a solid cap rail at the top of the barrier, and a solid curb or barrier that is a minimum of 5" high at the bottom of the barrier to provide warning to people who are blind or have low vision. Where a solid railing is provided at the top of the barrier, the railing must be constructed to withstand the forces of people leaning or sitting on it without structural failure. Top rail assemblies shall be designed to resist a load of 50 plf (0.73kN/m) applied in any direction at the top and to transfer this load through the supports to the structure.

Other means for achieving this *Positive Edge* can include raised planters no less than 17 inches high and 12 inches deep, built-in seating or other built-in furnishings no less than 17 inches high and no less than 12 inches deep, dense plantings that visually enclose the space and discourage pass through, bicycle parking arrangements that act to provide a *Positive Edge*, or some other such similar means. In some instances,

such as residential streets, alleys, shared public ways or other non-arterial streets, other barriers may be considered on a case-by-case basis.

At other areas, for example where the edge is perpendicular to the vehicle traffic lane, where any portion of the *Deck Surface's* perimeter is $\frac{1}{2}$ " or more above the street, curb, or sidewalk level, the edge shall be positively marked by a vertical element or barrier that is 17 inches minimum in height. These vertical elements shall have visual contrast with the *Deck Surface* material: either light on dark or dark on light. (See Figures D.3 and D.4)

On streets of 30 mph or greater, streets with four or more auto lanes, or when parklets are installed along a city <u>truck route</u>, or the <u>MUNI Rapid Network</u>, the parklet edge of deck may necessitate a design intervention that exceeds the minimal thresholds cited above.

In instances where a parklet houses bike-racks, gardens, or other such spaces where people are unlikely to linger, the elements described may not be needed. This and other unique conditions will be determined on a case by case basis.

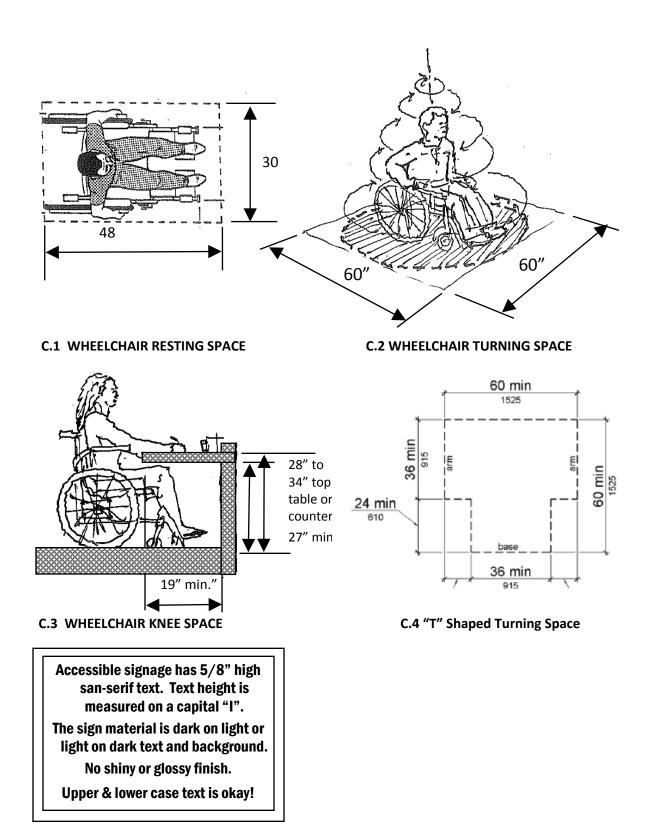
- **9.** Tables, Counters and Drink Rails and Benches. Where tables, counters, drink rails, or benches are provided, at least one of each feature shall be accessible.
 - a. The height of wheelchair accessible tables, counters and or drink rails shall be 28" to 34" above the *Deck Surface* or ground. A *Wheelchair Resting Area* shall be provided adjacent to the accessible tables, counters and drink rails, and the *Wheelchair Resting Area* shall be accessible by a *Parklet Path* and a *Wheelchair Turning Space*. (See Figures D.1 and D.3)
 - b. Wheelchair accessible tables, counters, or drink rails shall be approachable from the front and provide an unobstructed knee clearance that is at least 27" high, 30" wide and 19" deep. (See Figure C.3).
 - c. A minimum of 36" clearance shall be provided between the edge of a table and another vertical obstruction, so that a wheelchair user can maneuver into the knee space. (See Figure D.1).
 - d. Where fixed counters are provided, a 60" long portion of a fixed counter shall provide the unobstructed knee clearance as listed in Paragraph 9b. (See Figure C.3 and D.1).
 - e. Where drink rails are provided, a 60" long portion of a drink rail shall have 36" wide and level space adjacent to it for a side-approach by a wheelchair user.
 - f. At fixed benches, a *Wheelchair Resting Space* shall be provided for a shoulder alignment adjacent to one side of the bench.

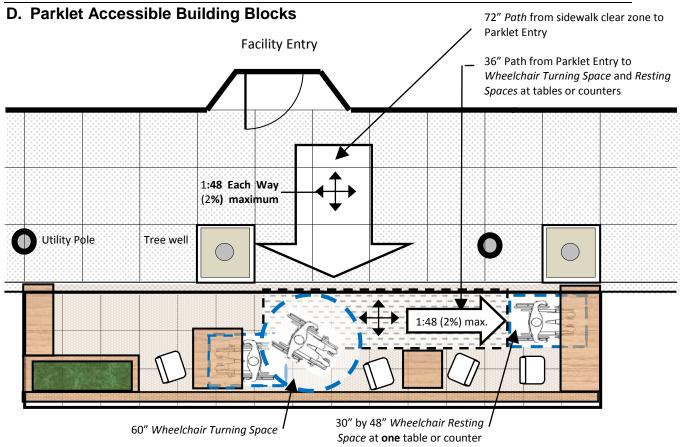
B. DESIGN AND CONSTRUCTION STANDARDS.

- 1. The Parklet shall meet new construction standards of both the SFBC and ADAAG. The pedestrian route to the Parklet shall meet the Alterations standard of the SFBC (Section 1127B.1 Exterior Route of Travel and 1133B.7.1.3 Walks and Sidewalks, Surf ace Cross Slopes) and ADAAG (Section 202 Existing buildings and Facilities).
- 2. Per **DPW Order No: 178.939, Paragraph H** all elements of the above mentioned Parklet shall be constructed and/or installed to conform to the applicable provisions, rules, regulations and guidelines of the:
 - San Francisco Building Code (SFBC), specifically Chapter 11B SFBC is available for inspection and the San Francisco Main Library or the Department of Building Inspection. <u>http://publicecodes.citation.com/st/ca/st/b200v10/index.htm?bu=CA-P-2010-000008</u>
 - 2. The Americans with Disabilities Act (ADA) http://www.ada.gov/regs2010/titleII_2010/titleII_2010_withbold.htm and,
 - 3. The Americans with Disabilities Act Accessibility Guidelines, 2010 Standard (ADAAG). http://www.ada.gov/2010ADAstandards_index.htm .

ACCESSIBILITY ELEMENTS FOR PARKLETS

C. Basic Building Blocks of Accessibility



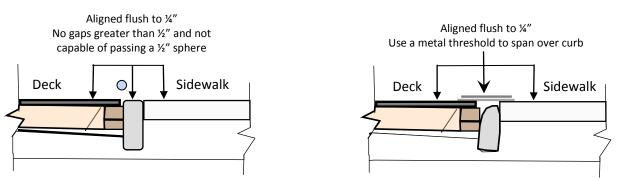


D.1 PARKLET ACCESSIBILITY FEATURES – 1:48 (2%) Maximum Sloped Deck.

The Wheelchair Turning Space and Wheelchair Resting Space shall be located completely on the Parklet deck.

Refer to **DPW Request for Determination of Technical Infeasibility** for sidewalk and Parklet running slopes and cross slopes that exceed 2% maximum. The same form can be used to request a portion of the *Wheelchair Turning Space* to overlap sidewalk.

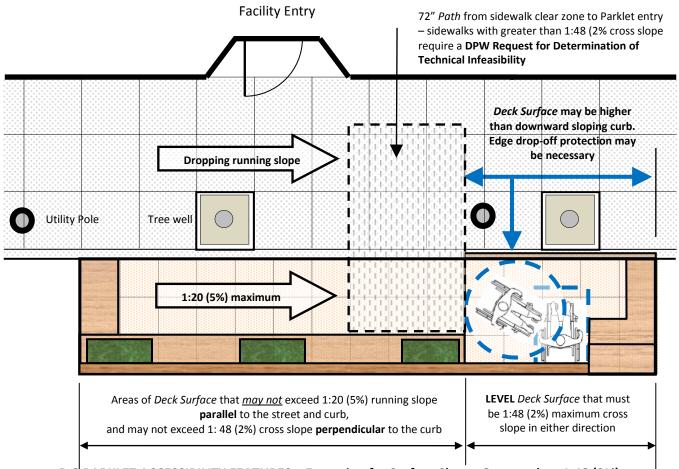
If a Parklet has movable tables, fixed tables or counter, a minimum of one of each type shall have a *Wheelchair Resting Space*, and have unobstructed knee and toe space. The knee and toe space shall be at least 27" high, 30" wide and 19" deep.



D.2 PARKLET ACCESSIBILITY FEATURES – Parklet Entry Joint Threshold.

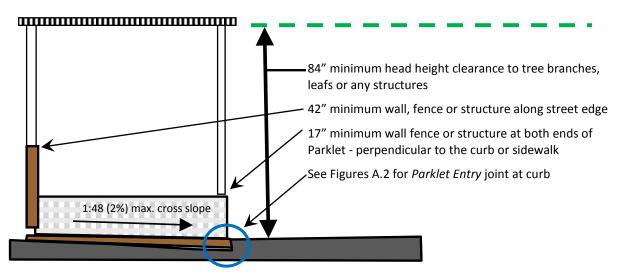
When an existing curb is in good condition, the Deck Surface may be designed and built to be flush with the curb and sidewalk surface. Where the curb is not in good condition, a metal plate or pre-manufactured threshold can be used to span from Deck *Surface* to sidewalk over the curb. A gap shall not permit the passage of a ½" sphere

Changes in level of ¼" high maximum may be vertical. Changes in level ¼" to ½" high maximum shall be beveled with a slope not steeper than 1:2. [2010 ADA Standard 303]



D.3 PARKLET ACCESSIBILITY FEATURES – Exception for Surface Slopes Greater than 1:48 (2%)

Many existing City streets and sidewalks have an existing running slope and or cross slope that exceeds 2%. Parklet Decks may have running slopes between 1:48 (2%) and 1:20 (5%) when the applicant files a **DPW Request for Determination of Technical Infeasibility** for sidewalk and Parklet running slopes and cross slopes that exceed 2% maximum.



D.4 PARKLET ACCESSIBILITY FEATURES – Cross Section and those with Trellises.

Sidewalk and the Parklet pedestrian circulation are required to be 84" clear in height to tree branches and other objects. Walls, fences or other structures shall be provided at the outside ends of the *Parklet deck* to protect users from trip and fall into the street. These elements can function as benches, planters, drink rails or lean rails – and may have openings to provide visual permeability. Where horizontal cables are used at walls or fences, a solid material, top rail and curb that is 5" high minimum shall be provided to provide warning to individuals who are blind or have low vision.