

UNIVERSAL PARK DESIGN SERIES

* TOOLS
  1. PROGRAMMING
  2. PARKING & ENTRY
  3. **INTERIOR SPACES**
  4. PLAYGROUNDS, TRAILS, & GREEN SPACES
  5. BEACHES & WATER ACTIVITIES

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**Disclaimer:** This toolkit is a joint effort between Polk County Conservation, Shive-Hattery, and Uncurbed

(“Parties”). This toolkit provides main summary and technical criteria of universal design considerations related to park design; however, the Parties do not warrant or guarantee the accuracy, completeness, adequacy, or currency of any information referenced or linked within this document. In no event, shall the Parties be liable for any direct, indirect, or incidental damages, injuries, losses, costs, or expenses, howsoever caused, arising out of, or resulting from access to, possession of, or use of this toolkit. The detailed guidance provided here does not represent the only possible solution. Clients or designers may develop additional solutions to meet a diversity of users. New materials and technologies that emerge may present further possibilities for accommodating the diversity of users. Each project should engage the services of a qualified and professional access consultant to ensure that project anomalies or other factors do not adversely affect the design intent.

**COVER PAGE**

**UNIVERSAL PARK DESIGN TOOL – INTERIOR SPACES**

This tool is a compilation of academic, user, and practical research intended for use during the park design process to help list key universal design (UD) considerations needed to support design decision-making for the design of **interior spaces**. It is recommended that this tool be prioritized last, if necessary. This tool is not a one-size-fits-all. It is one component of the universally designed process used during the design of Athene’s Easter Lake North Shore Renovation Project. Each project should incorporate the practice of co-design, engaging active participation from diverse end-users and subject matter experts in universal design and/or other related fields and methodologies (i.e., human-centered design, design thinking, inclusive design, co-design, accessible design, occupational science, etc.) to ensure that project anomalies or other factors do not adversely affect the design intent. UD considerations are provided throughout the tool and while they provide a summary of main considerations and technical criteria, they should not be regarded as an exhaustive list. The detailed guidance provided here does not represent the only possible solution. Members of a co-design team may come up with other ways to meet a diversity of users. New materials and technologies that emerge may open up further possibilities for accommodating the diversity of the population.

Each tool is organized into **5** Categories for Universal Park Design, expanding on the original 7 Principles of Universal Design1 and 8 Goals of Universal Design10 to include an effort toward sustainability2 [**(see Figure 1)**](#figure)**.** These categories were selected based on project initiatives and themes collected from academic, user, and practical research. Variation exists in the categories of **interior spaces** design due to differences in operations, organizational goals between different clients and designers, and user perspectives. The priorities you have set in place for your particular project, the UD categories, user input, and the key questions that you must ask yourself as clients and designers, are the foundation of this tool. Before using the tool, please first go to the [**Home Page**](#home)to learn more about the UD goals, categories, and how to communicate project priorities.

**Figure 1.** Crosswalk (between the 7 Principles of Universal Design1, 8 Goals of Universal Design10, and 5 Categories for Universal Park Design based on project initiatives and themes collected from academic, user, and practical research for Athene’s Easter Lake North Shore Renovation Project.

Chart, diagram

Description automatically generated

The [**Tool Page**](#tool) lists key questions relevant to the 5 specific UD categories for consideration. Below each question, a detailed design feature list is provided and serves as a menu item for clients to choose from and share with the design team at the onset of any park project based on the foundations of UD mentioned above. Designers can refer to the selected menu items throughout the design process and use the tool to validate their design choices. The design considerations and features are based on a review of research literature, best practices, and expert opinions. Clients and/or designers can add new design features based on their literature review, experiences, or user input. There may be instances of trade-offs between the UD categories, and there may be instances where you use some, but not all of the features, depending on the evaluation of value vs. cost by the client (see important notes).

**Notes:**

**Each tool is not meant to be an exhaustive list of minimal standards already covered in available design guidelines. Rather, it provides a structured way for clients and designers to consciously focus on key evidence-based design considerations to optimize design decision-making resulting in the best value for the investment.**

**Gathering user input is one important step in decision-making. This is referred to as co-design. As a design tool, this is not meant to be a one-size-fits-all prescription for design. In many cases, no prescriptive numbers (e.g., space size or length of headwall) are provided because the optimized numbers depend on a thorough understanding of the needs of those affected by the project and the constraints of the project (e.g., operations and costs). Clients and designers should use the key design considerations and design features included in the tool as a basis to determine what are “adequate” or “sufficient” numbers or sizes. Likewise, the client and future users should be consulted regarding subjective aspects (e.g., attractive design). Environmental simulation (e.g., mock-ups, and renderings) may be used in gathering input on these issues.**

**Disclaimer: The tool is based on currently available research evidence and expert opinions therefore may not exhaustively cover all design aspects impacting outcomes. The results produced by using the tool may vary depending on conditions/users.**

**HOME PAGE**

**UNIVERSAL PARK DESIGN TOOL – INTERIOR SPACES**

**To begin, please complete the following information:**

**Client Name:**

**Project Name:**

**Client Contact Person:**

**Lead Designer:**

**Tool Completion Date:**

On the next page is a list of each universal design goal and category, in addition to the category of sustainability. Some goals and categories may be more important for a particular park project. If you are the client, please confirm or change priority ratings based on their relevance to **interior spaces** design by selecting a rating (High, Medium, or Low) from the dropdown list in each cell of Column C. It is recommended to limit the 'High' priority rating to 4 UD goals and categories.

|  |  |  |
| --- | --- | --- |
| 8 Universal Design Goals1 | 5 Universal Park Design Categories1, 2, 10 | Priorities  (Insert High, Medium, Low) |
| 1. Body Fit | 1.1. Physiological & Motor Capabilities |  |
| 1. Comfort | 1.2. Physiological & Motor Capabilities |  |
| 1. Awareness | 2.1. Processing Skills |  |
| 1. Understanding | 2.2. Processing Skills |  |
| 1. Health & Wellness | 3. Health & Safety |  |
| 1. Social Integration | 4.1. Contextual Factors |  |
| 1. Personalization | 4.1. Contextual Factors |  |
| 1. Cultural Appropriation | 4.1. Contextual Factors |  |
|  | 1. Sustainability |  |

**TOOL PAGE**

**UNIVERSAL PARK DESIGN TOOL – INTERIOR SPACES**

The below tool is more than a tick box. It is a menu list and communication tool for potential UD considerations relevant to **interior spaces** design for clients and designers. Marked boxes should be reviewed by both clients and designers to determine whether a UD consideration is applicable, relevant, and achievable for your park project.

**Complete the following steps at the onset of a project:**

If you are the client:

1. Place an **X** in the Client column to indicate which design features should be considered for the project. Items selected should be consistent with project goals, user and expert input, and prioritized based on budget. The Notes column can be used to elaborate on each UD consideration as needed. Please include the date when inserting a note. It is recommended that clients engage in user and professional input when determining a UD consideration.
2. If a UD consideration is not relevant to the project, clients should leave the UD consideration in the Client column unmarked.
3. Share the completed tool with the Lead Designer by the agreed-upon completion date.

If you are a designer:

1. Discuss each marked UD consideration with the client and add to the Notes column to further elaborate on specifications (please include the date).

In general:

1. If you are the client or a designer and wish to add additional design features to the tool, you can add them in the cell beginning with “other:” under each UD category. Please enter only UD considerations supported by academic (newly published or existing unpublished research conducted by design firms, and others), user, and practical research.

**Complete the following steps throughout the project as needed:**

If you are a designer:

1. Place an **X** in the Designer column to indicate whether a UD consideration is included in the current design.
2. If during the design process, a UD consideration is no longer achievable due to unknown or unforeseeable circumstances, designers can flag a UD consideration by placing an **R** in the Designer column to indicate that the UD consideration requires further review with the client.
3. If a UD consideration can only be partially met, place a **P** in the Designer column, and explain in the Note column (please include the date). This explanation may include an alternative option.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UNIVERSAL PARK DESIGN TOOL – INTERIOR SPACES** | | | | |
| **Client** | **Designer** | | **LEGEND**  **X in the Client column indicates that a UD consideration has been requested**  **X in the Designer column indicates that a UD consideration has been met**  **R in the Designer column indicates that a UD consideration requires review**  **P in the Designer column indicates that a UD consideration was partially met**  **Reminder: UD considerations left unmarked indicate that they are not**  **relevant to the project** | |
| **GENERAL FACILITIES** | | | | **NOTES** |
| **3. How should or does the facilities include features that enhance sanitization efforts?** | | | | |
|  |  | Provide sufficient trash disposal throughout the facility. Best practice suggests touchless or without lid trash cans with openings that do not exceed 27" above the finished floor and are either recessed (ADA standard for restroom facilities) or wall mounted. | |  |
|  |  | Establish separate facility for breast-feeding.9 | |  |
|  |  | Provide sanitary waste disposal units in all toilets.9 | |  |
|  |  | In accessible stalls, position sanitary waste bins between toilet and near-side wall.9 | |  |
|  |  | Other: | |  |
| **3. How should or does the design of interior space enhance sanitization efforts?** | | | | |
|  |  | Make sure mechanical ventilation and air-conditioning systems are accessible and able to be well maintained.8 | |  |
|  |  | Integrate air filtration systems.8 | |  |
|  |  | Provide adequate ventilation to all rooms and spaces.8 | |  |
|  |  | Other: | |  |
| **3. What appropriate security measures should or will be put in place to ensure safety in the interior space?** | | | | |
|  |  | Safeguard user privacy by including single-user restrooms or ensuring that there are minimal gaps between each partition and between partitions and the floor in all sanitary facilities.9 | |  |
|  |  | Ensure public announcement systems are clearly audible in all relevant areas of a building.8 | |  |
|  |  | Incorporate a hearing enhancement system in public announcement systems.7 | |  |
|  |  | Ensure alarm systems are effective at alerting all building occupants. Standard alerts include visual and audible strobes.8 | |  |
|  |  | Limit the sound level of audible alarms to 120dB.8 | |  |
|  |  | Ensure alarm sounders achieve an even distribution of the signal.8 | |  |
|  |  | Locate visual alarms so that they can be seen by either eye in all areas of the building.8 | |  |
|  |  | Employ a frequency between two and four hertz for visual alarms, with units synchronized.8 | |  |
|  |  | Consider the use of pager devices to provide tactile alerts.8 | |  |
|  |  | Other: | |  |
| **3. What appropriate safety measures should or will be put in place to ensure safety in the interior space?** | | | | |
| **General - Physical Considerations** | | | | |
|  |  | Ensure slip resistance is maintained when the floor is wet and dry and when spillages occur throughout the internal environment.8 | |  |
|  |  | Ensure changes in floor finish occur away from the direct line of travel or in a doorway throughout the internal environment.8 | |  |
|  |  | Use tactile warning surfaces with 1/8" ridges as they are detectable indoors due to surrounding smooth floor finishes7. For example, place a rubber transition strip of an obvious color between carpet and a smooth surface flooring with a minimum of 70% color contrast. | |  |
|  |  | Use tactile warning surfaces only for internal stairs after all risks have been considered in the form of a risk assessment.8 | |  |
|  |  | Highlight the change in level using floor finishes that visually contrast where tactile warning surfaces are not suitable.8 | |  |
|  |  | Install floor finishes that are firm, even, securely fixed, and non-directional.8 | |  |
|  |  | Avoid the use of deep pile carpets and coir matting.8 | |  |
|  |  | Avoid the use of loose-laid mats.8 | |  |
|  |  | Make sure floor finishes are durable and easy to maintain.8 | |  |
|  |  | Ensure clear, unobstructed floor area for approach.8 | |  |
|  |  | Make sure access to seating is unobstructed.8 | |  |
|  |  | Install storage facilities that are solid and stable, with no sharp edges.7 | |  |
|  |  | Use fixed guarding at entry and exit points and alongside adjacent access routes.8 | |  |
|  |  | Ensure windows do not present an obstruction or hazard when open.7 | |  |
|  |  | Use tactile hazard warning surface at top and bottom of flight, only if deemed appropriate following risk assessment.8 | |  |
|  |  | Provide clear landings at top and bottom of steps, with the length equivalent to the step width.8 | |  |
|  |  | Consider fitting grabrails between urinals.9 | |  |
|  |  | Provide shower curtain for privacy.9 | |  |
|  |  | Incorporate temperature control so the shower is not to exceed 104 degrees (F).8 | |  |
|  |  | Ensure water supply pressure is adjusted appropriately.8 | |  |
|  |  | Ensure outward-opening doors do not obstruct emergency escape routes.8 | |  |
|  |  | Include visible and audible indication within the room that alarm has been raised.8 | |  |
|  |  | Include visible and audible alarm outside the room.8 | |  |
|  |  | Ensure effective differentiation between lines, symbols and other textured surfaces.8 | |  |
|  |  | Provide adequate ventilation to all rooms and spaces.8 | |  |
|  |  | Provide telephone facilities in public service buildings, transport facilities, visitor attractions, and retail developments.7 | |  |
|  |  | Ensure all telephone equipment is accessible, useable, and understandable to everyone, whether the service is provided free or for payment.7 | |  |
|  |  | Ensure payphone handset cords are at least 40" long.7 | |  |
|  |  | Ensure external ATMs are protected by a canopy.7 | |  |
|  |  | Other: | |  |
| **General - Visual Considerations** | | | | |
|  |  | Optimize visual contrast between floor and wall finishes and other features, such as obstructions.8 | |  |
|  |  | Consider the placement of natural and artificial light sources to provide an even level of illumination (IECC Standard).8 | |  |
|  |  | Consider the placement of natural and artificial light sources to provide an even level of illumination (IECC Standard).8 | |  |
|  |  | Consider the use of natural floor coverings to avoid the potential for aggravating allergic reactions.8 | |  |
|  |  | Ensure the placement of windows and artificial lighting minimizes glare and reflection (IECC Standard).8 Consider minimizing glare by providing shading near computer screens and monitors and lensing on light fixtures. | |  |
|  |  | Optimize visual contrast between surfaces and features.8 | |  |
|  |  | Ensure visual contrast between smaller surfaces and objects is greater than for larger surfaces.8 | |  |
|  |  | Consider all sources of natural and artificial light (IECC Standard).8 | |  |
|  |  | Avoid the creation of strong shadows on floors and walls.8 | |  |
|  |  | Consider the use of sun-shading devices and blinds to reduce glare from direct sunlight.8 | |  |
|  |  | Make sure all rooms and surfaces are evenly illuminated.8 | |  |
|  |  | Avoid the use of strobe lighting.8 | |  |
|  |  | Use down lights that incorporate diffusers.8 | |  |
|  |  | Avoid the use of uplights positioned at floor level.8 | |  |
|  |  | Provide a gradual transition between internal and external lighting levels around an entrance (IECC Standard).8 | |  |
|  |  | Position signs where people reading them will not cause an obstruction.11 | |  |
|  |  | Ensure window provision balances environmental performance with safety, security, privacy, and visual comfort.7 This could mean considering glazing in doors or visual access to entry points from inside and out. | |  |
|  |  | Make sure temperature controls are easy to identify. | |  |
|  |  | Consider a smaller or adjustable loop wire or alternative type of system, particularly where confidentiality is paramount.8 | |  |
|  |  | Protect permanently installed loop wires in a non-metallic enclosure.8 | |  |
|  |  | Avoid placement adjacent to any metallic components or electromagnetic equipment.8 | |  |
|  |  | Ensure room loop cables for portable systems are fixed in position to avoid creating a trip hazard.8 | |  |
|  |  | Other: | |  |
| **4.2. What opportunities should there be or are there for personalization, personal choice, or preferences?** | | | | |
|  |  | All doors to the building can be accessed by any visitor. Consider whether access mechanisms (door handles, locks) are accessible and ergonomically correct. | |  |
|  |  | Consider flexibility within lighting design to enable people to control individual lighting levels.8 | |  |
|  |  | Use two- or three-way switching for lights where flexibility is required.4 | |  |
|  |  | Locate quiet rooms away from external noise sources for de-escalation. | |  |
|  |  | Select finishes and methods of installation to achieve a balance of hard and soft surfaces.8 | |  |
|  |  | Consider the most appropriate types of portable system, such as desktop, clipboard, guide loop, or vehicle-based Induction loops that are designed, installed, and commissioned to comply with IEC 60118-4.8 | |  |
|  |  | Provide audible information to supplement visual and tactile signs and maps.8 | |  |
|  |  | Consider the use of individual receivers to provide wayfinding and visitor information.8 | |  |
|  |  | Incorporate audible, visual, and tactile alarms or alerting devices.8 | |  |
|  |  | Install seating areas that accommodate clear areas alongside seats for people with prams and pushchairs; people using wheelchairs and electric scooters; and for assistance dogs.7 | |  |
|  |  | Provide seats of different styles to suit different people.7 | |  |
|  |  | Consider the provision of a textphone at reception desks and service counters.7 | |  |
|  |  | Ensure un-fixed telephones have a long cord to enable them to be repositioned within the booth.7 | |  |
|  |  | Provide a desk or fixed shelf adjacent to the telephone to suit left- and right-hand use.7 | |  |
|  |  | Ensure choice of language is available for on-screen instructions.8 | |  |
|  |  | Install alternative paper or towel facilities to supplement hot-air dryers.8 | |  |
|  |  | Consider the use of adjustable or varying-height units for countertops or changing stations. | |  |
|  |  | Consider future changes and developments in the design and construction of buildings7. For example, if you are the client, consider whether there will be plans to add on to an existing structure in the future and share those plans with the design firm. If you are the designer, consider whether there are design considerations that need to be made on the current project to ensure access for future additions. | |  |
|  |  | Other: | |  |
| **4.1. How should or does the design of the interior space offer opportunities for social integration?** | | | | |
|  |  | Ensure that the main entry point to the building is accessible by a wide variety of visitors. | |  |
|  |  | Install lighting that optimizes lip reading at any reception desks. This includes receptions that are located interiorly and exteriorly (i.e., concessions).8 | |  |
|  |  | Provide passing places of 6'-6" X 5’-0” in corridors less than 5’-0”. | |  |
|  |  | Locate passenger lift adjacent to an accessible flight of stairs.7 | |  |
| **5. What appropriate materials should or will be used to ensure durability?** | | | | |
|  |  | Consider cost and ease of future repair. For example, tile carpet could be used for easy replacement and repair and/or porcelain tiles, epoxy floors, and concrete floors could be used for durability purposes. | |  |
|  |  | Other: | |  |
| **5. What appropriate environmentally sustainable measures should or will be taken?** | | | | |
|  |  | Use durable products and building materials which have a record of longer reduced maintenance costs.12 | |  |
|  |  | Install high efficiency lights (IECC Standard). | |  |
|  |  | Use solar paneling. | |  |
|  |  | Integrate "No Smoking" signage into building. | |  |
|  |  | Design to encourage and permit the collection of recyclables.12 | |  |
|  |  | Where possible purchase locally produced building materials. | |  |
|  |  | Ensure procedures are in place for cleaning and maintaining the interior space, utilities, and equipment.8 | |  |
|  |  | Incorporate suitable waste disposal. Consider whether they include recycling, are placed in logical areas based on traffic patterns and maximum occupancy.9 | |  |
|  |  | Ensure bathing units are fitted with plugs. | |  |
|  |  | Other: | |  |
| **5. What appropriate socially sustainable measures should or will be taken?** | | | | |
|  |  | Integrate "No Smoking" signage into building. | |  |
|  |  | Other: | |  |
| **5. What appropriate economically sustainable measures should or will be taken?** | | | | |
|  |  | Use durable products and building materials which have a record of longer reduced maintenance costs.12 | |  |
|  |  | Install high efficiency lights. | |  |
|  |  | Design to encourage and permit the collection of recyclables.12 | |  |
|  |  | Where possible purchase locally produced building materials. | |  |
|  |  | Other: | |  |
| **EXTERIOR & INTERIOR ACCESS ROUTE & ENTRY POINT CONSIDERATIONS** | | | | |
| **1.1. How should or will a wide range of body sizes and abilities be able to access all parts of the interior space?** | | | | |
|  |  | Ensure that all access routes and entry points to the interior space are accessible.5 | |  |
|  |  | Best: Establish clear landing space outside all entrances at least 8' X 8". Good: Establish clear landing space outside of the main entrance at least 5' X 5'.5 | |  |
|  |  | Ensure recommended 8'-0" width for primary corridors and 6'-6" for secondary corridors in interior spaces.5 | |  |
|  |  | Ensure short constrictions in width are not to be less than 4'-0".6 | |  |
|  |  | Avoid single steps on an access route.6 | |  |
|  |  | Other: | |  |
| **1.2. How should or will a wide range of body sizes and abilities be able to use the doors with ease?** | | | | |
|  |  | Entrance doors to have clear opening of 3’ minimum.5 | |  |
|  |  | Ensure automatic activation system is set to open door when person is no closer than 4'-7".5 | |  |
|  |  | Position controls for manually-activated automatic doors within reach and clear of door swing.5 | |  |
|  |  | Orientate card-swipe devices vertically at front door access point.5 | |  |
|  |  | Incorporate raised buttons and embossed symbols, numbers or letters in keypads at front door access point.5 | |  |
|  |  | Install inward opening doors to open against a side wall.8 | |  |
|  |  | Install low friction hinges to minimize door opening and closing forces.5 | |  |
|  |  | Consider rising-butt hinges for doors not fitted with self-closing devices.5 | |  |
|  |  | Use swing-clear hinges to maximize clear opening width where space is limited.5 | |  |
|  |  | Use lever handles on doors for door hardware.5 | |  |
|  |  | Install thumb turn locks.5 | |  |
|  |  | Install door push operating systems on doors with closers.5 | |  |
|  |  | Position locks above the handle when possible.5 | |  |
|  |  | Ensure push and pull clearance is met per ADA requirements.5 | |  |
|  |  | Install push/pull plates where doors do not have handles per ADA requirements.5 | |  |
|  |  | Provide kick plates to full width doors per ADA requirements.5 | |  |
|  |  | Other: | |  |
| **2.1. How should or will entrances and doors be well defined visually?** | | | | |
|  |  | Entrance is clearly visible and prominent.5 | |  |
|  |  | Incorporate vision panels into all entrance and entrance lobby doors.14 | |  |
|  |  | Make sure that the entrance door and interior doors visually contrast with adjacent walls or screens.8, 5 | |  |
|  |  | Include highly contracting strip on all edges of frameless glass doors.8 | |  |
|  |  | Incorporate visually contrasting markings at two levels on all glazed doors and screens.4 | |  |
|  |  | Highlight door effectively. | |  |
|  |  | Ensure controls for door are clearly visible. | |  |
|  |  | Use lighting to highlight the location of a building entrance.8 | |  |
|  |  | Ensure that handles on doors contrast visually.7 | |  |
|  |  | Illuminate external signage to a minimum of 200 lux.7 | |  |
|  |  | Illuminate approach area to a minimum of 200 lux.7 | |  |
|  |  | Ensure glazed screens are clear and unobstructed.7 | |  |
|  |  | Other: | |  |
| **2-1. How should or will walls & access routes be well defined visually?** | | | | |
|  |  | Highlight glazed walls effectively.3 | |  |
|  |  | Incorporate vision panels wherever practical.3 | |  |
|  |  | Install visually-contrasting handrails.3 | |  |
|  |  | Provide visual and tactile floor numbers at each landing from lifts.10 | |  |
|  |  | Provide a visually dividing strip at ramp landings to clearly define landings.10 | |  |
|  |  | Make sure the footway at each end contrasts visually and install a change in floor finish.8 | |  |
|  |  | Ensure access routes though open-plan areas are well defined visually. | |  |
|  |  | Use tactile warning surfaces with 1/8" ridges as they are detectable indoors due to surrounding smooth floor finishes.8 | |  |
|  |  | Incorporate permanent markings in glazed walls and screens at 34"-40" and 55"-63" for visual awareness.3 | |  |
|  |  | Use lighting that enhances color rendering of surfaces. | |  |
|  |  | Other: | |  |
| **2.1. How should or will the access to entrances and doors be clear to understand?** | | | | |
|  |  | Intercoms at door access to be supplemented with text display for hearing impairment (video intercom with text display is best practice).3 | |  |
|  |  | Consider the use of video intercom to aid identification.8, 3 | |  |
|  |  | Incorporate raised buttons and embossed symbols, numbers or letters in keypads at front door access point.5 | |  |
|  |  | Ensure all access devices are easy to identify.5 | |  |
|  |  | Ensure controls for door have clear signage.5 | |  |
|  |  | Design a passenger lift door arrangement that is consistent and logical.14 | |  |
|  |  | Install doorbells and call buttons that provide clear indication of operation. | |  |
|  |  | Other: | |  |
| **3. What appropriate safety measures should or will be put in place to ensure safety in the entrance space?** | | | | |
|  |  | Maintain access routes carefully and keep them clear of potential obstructions.10 | |  |
|  |  | Avoid potential cross-flow of pedestrians adjacent to automatic doors7. | |  |
|  |  | Ensure outward-opening doors are recessed or guarded.8 | |  |
|  |  | Ensure threshold to entrances are level or no greater than 3/8" with chamfered, pencil-rounded, or ramped profile.5 | |  |
|  |  | Establish clear space at door in accordance with ADA. | |  |
|  |  | Provide ADA operable push button at all doors with closer. | |  |
|  |  | Provide door protection to the lower 10” of a glass door. | |  |
|  |  | Consult ADA for minimums between door swings and operable push button requirements. | |  |
|  |  | Protect outward opening doors with door recess or guardrail.5 | |  |
|  |  | Consider the use of modified strake plate for internal self-closing doors.5 | |  |
|  |  | Use door closing devices where necessary per ADA.5 | |  |
|  |  | Ensure all self-closing devices have controlled action.5 | |  |
|  |  | Make sure door opening forces are within the limits set for each stage of opening cycle.5 | |  |
|  |  | Consider delayed-action door closers for room doors.5 | |  |
|  |  | Choose handles on external doors that are not cold to the touch.5 | |  |
|  |  | Consider improving accessibility with use of electromagnetic hold open devices and swing-free door closing devices.5 | |  |
|  |  | Ensure activation and safety systems protect people who are slow moving or who have fallen in the doorway.5 | |  |
|  |  | Consider the need for additional safety devices for power-assisted doors.5 | |  |
|  |  | Make sure there are guards against all potential finger and body traps near doors’ entrances.5 | |  |
|  |  | Provide break-out or fail-safe systems on all automatic doors situated on exit routes.5 | |  |
|  |  | Other: | |  |
| **HORIZONTAL CIRCULATION CONSIDERATIONS** | | | | |
| **3. What appropriate safety measures should or will be put in place to ensure safety in the horizontal circulation?** | | | | |
| **Circulation Areas** | | | | |
|  |  | Ensure walk-off mats are firm and flush with the adjacent floor surface.8 Best practice: install walk off carpet flush with other flooring finishes. | |  |
|  |  | Use lighting to ease transition from exterior to interior entrances.8 | |  |
|  |  | Avoid glare with lighting solutions.8 | |  |
|  |  | Ensure vestibules are clear of obstructions such as displays or stored items.5 | |  |
|  |  | Fix queuing barriers firmly to the floor entrances.5 | |  |
|  |  | Barriers to incorporate rigid handrail and visually contrast with surrounding surfaces.5 | |  |
|  |  | Sockets for temporary barriers are flush with floor surfaces and incorporate cap or cover.8 | |  |
|  |  | Limit use of fixed barriers.8 | |  |
|  |  | Incorporate handrails to both sides of walkways and provide seating at regular intervals.8 | |  |
|  |  | Provide seating at no more than 65'-8” intervals in long corridors.5 | |  |
|  |  | Install floor surfaces that are hard and firm with appropriate underfoot comfort for staff.8 | |  |
|  |  | Ensure junctions between different floor finishes are fixed with threshold plates.8 | |  |
|  |  | Use fixed guarding at entry and exit points and alongside adjacent access routes of vertical circulation.10 | |  |
|  |  | Other: | |  |
| **COMMUNICATION/SIGNAGE** | | | | |
| **2-1. How should or will the text on all signage be clearly visible?** | | | | |
|  |  | Ensure adherence to ADA-ReadyTM Signage Guidelines | |  |
|  |  | Make sure the text on your sign is easy to read. Avoid fonts that are highly decorative, very bold, condensed or in italics, as these can be difficult to understand and may make the sign more difficult to read. Examples of easy-to-read sans serif fonts for signage include Arial, Helvetica, Tahoma and Futura.11 | |  |
|  |  | Use a minimum of 12-point font size for comfortable reading generally. A person’s speed of reading increases as the size of text is increased.11 | |  |
|  |  | A mixture of upper- and lower-case letters should be used. Avoid using BLOCK CAPITALS.11 | |  |
|  |  | Avoid using italics, underlining.8 | |  |
|  |  | To emphasize a word or words, consider using a bolder weight type or larger-sized font. Avoid using bold for all text in signage.8 | |  |
|  |  | Increase letter and word spacing to ensure they are easily identified.11 | |  |
|  |  | Align wording to the left.11 | |  |
|  |  | Text should be set horizontally. Text at an angle or following a curved line can be more difficult to read. People should not have to rotate their head to read it.11 | |  |
|  |  | The size of letters on signs should be related to the type of sign and viewing distance.11  15'-0" viewing distance = 6" letter height 8'-0" viewing distance = 4" letter height 7'-6" viewing distance = 3" letter height 5'-0" viewing distance = 2" letter height 2'-6" viewing distance = 1" letter height | |  |
|  |  | Other: | |  |
| **2-1. How should or will the design of the signage enhance visibility for a wide range of needs?** | | | | |
|  |  | There should be good contrast between the signboard and any mounting or background surface. This helps draw attention to the sign itself.11 | |  |
|  |  | There should be good contrast between the text/symbols and background sign color. This helps draw attention to the content of the sign.11 | |  |
|  |  | Strive for a minimum of 70% Light Reflectance Value (LRV) contrast between sign text and background color.15 | |  |
|  |  | Signs should have a matt or satin finish. Avoid shiny and reflective surfaces to prevent glare.11 | |  |
|  |  | Signs should be evenly illuminated, with a lighting level of 200 lux.11 | |  |
|  |  | Incorporate wayfinding into the built or natural environment (i.e., paint symbols or letters on access route or on a side of a vertical surface using matte finish). | |  |
|  |  | Other: | |  |
| **2-1. How should or will the positioning of the signage enhance visibility for a wide range of needs?** | | | | |
|  |  | Signs should be positioned at important points along a route, wherever routes intersect or diverge.11 | |  |
|  |  | Position signs where people reading them will not cause an obstruction.11 | |  |
|  |  | Ensure the direction of travel is clearly signed along access routes to entry and exit points. | |  |
|  |  | Ensure lifts are clearly signed from building entrance and other key areas. | |  |
|  |  | Provide a clearly-signed or readily apparent alternative means of access. | |  |
|  |  | Provide signage to clearly indicate the location of the telephone facilities.7 | |  |
|  |  | Ensure signage is clearly displayed to indicate the presence of a hearing enhancement system.11 | |  |
|  |  | Ensure signage is clearly visible from the front and side.7 | |  |
|  |  | Other: | |  |
| **2.2. How should or will the text on all signage be understandable?** | | | | |
|  |  | Ensure adherence to ADA-ReadyTM Signage Guidelines. | |  |
|  |  | Wording on signs should be as simple as possible. Reading level should be no higher than 8th grade reading level.11 | |  |
|  |  | Avoid the use of unfamiliar abbreviations.11 | |  |
|  |  | Information on signs should be listed alphabetically or grouped logically. For example, by floor level.11 | |  |
|  |  | Use Arabic numbers (1, 2, 3), not Roman numerals (i, ii, iii).11 | |  |
|  |  | Wording, font and images should be consistent throughout the building.11 | |  |
|  |  | Other: | |  |
| **2.2. How should or will symbols & arrows on signage be understandable?** | | | | |
|  |  | Use symbols in place of text where the symbol is universally recognized. For example, public information symbols.11 | |  |
|  |  | Use symbols to accompany text where possible. This is particularly relevant for dual-language signs, as they help people to recognize quickly the information being provided.11 | |  |
|  |  | Use arrows to indicate directions and make sure they point in a logical direction.11 | |  |
|  |  | Other: | |  |
| **2.2. How should or will the design of the signage make it easier to understand?** | | | | |
|  |  | Where color coding is used, use colors that are easy to differentiate. Integrate color schemes into wayfinding plan that match the destination.11, 15 | |  |
|  |  | For those with color-vision impairments, make sure to provide information in another way as well. For example, different trails could be marked by types of dotted lines/shapes along with colors.8 | |  |
|  |  | Consider adding a QR code to signs used for wayfinding or to establish points of interest (This may be a great way to showcase the special affordances of the park for visitors without the need for customer services). QR codes could also be used to provide the interpretive information in different languages. | |  |
|  |  | Other additional information that could be added to a sign (although you want to be mindful of visual noise) are navigation features or translation apps that visitors could use (i.e., Google Maps, Camera Translate). | |  |
|  |  | Consider using a 2D or 3D tactile map to showcase the entire layout of the park at the park entrance. At points of interest, consider adding a 2D or 3D tactile map of that point of interest. Braille could be added to describe that point of interest. Consider using braille or tactile symbols to not only communicate interpretive information but also to describe the landscape. | |  |
|  |  | Other: | |  |
| **2.2. How should or will the positioning of the signage make it easier to understand?** | | | | |
|  |  | Position signage at decision points.8 | |  |
|  |  | Make sure that directional signs help people to retrace their steps and identify alternative locations within a building, without having to return to the main entrance.11 | |  |
|  |  | Other: | |  |
| **3. How should or will the signage of the space enhance sanitization efforts?** | | | | |
|  |  | Ensure sanitary facilities are clearly identified.9 | |  |
|  |  | Use symbol and tactile signs.8 | |  |
|  |  | Other: | |  |
| **ALTERNATIVE FORMS OF COMMUNICATION** | | | | |
| **1.1. How should or will alternative forms of communication be usable based on a wide range of physical needs?** | | | | |
|  |  | Ensure embossed letters are between 5/8" and 1" in height.11 | |  |
|  |  | Embossed letters should be raised above the surface of the sign by 3/64" - 1/16" and have a stroke width of 1/16" – 5/64".11 | |  |
|  |  | Consider locating Braille signs on an inclined surface to aid reading and below the related text.11 | |  |
|  |  | Position visual signs for ease of reading.11 | |  |
|  |  | Provide a hearing enhancement system (example: loop).7 | |  |
|  |  | Provide an emergency communication system that is suitable for all users with audio and visual considerations.11 | |  |
|  |  | Integrate the use of video intercom to aid identification and ability to use sign language.11 | |  |
|  |  | Position tactile and Braille signs within reach as defined by ADA.11 | |  |
|  |  | Engraved and indented letters and symbols should be avoided, as they are difficult to read by touch.11 | |  |
|  |  | Other: | |  |
| **2.2. How should or will alternative forms of communication be available to enhance the understanding of interpretive information?** | | | | |
|  |  | Incorporate visual, tactile and audible information in signage.8 | |  |
|  |  | Consider the use of video intercom to aid identification to enter secured areas.8 | |  |
|  |  | Use changes in the color, texture and acoustic characteristics of floor finishes to delineate areas and contribute to a system of wayfinding.8 | |  |
|  |  | Consider the use of color coding for large or complex buildings as an aid to wayfinding.8 | |  |
|  |  | Consider the use of changes in texture to differentiate between internal features or areas.8 | |  |
|  |  | Provide supplementary text and a pictogram wherever communication is important. Consult companies such as assistive technology services.8 | |  |
|  |  | Use embossed symbols and text to allow for tactile reading.8 | |  |
|  |  | Provide hearing enhancement systems where audible communication is an inherent aspect of the space.8 | |  |
|  |  | Install permanent systems in larger spaces.8 | |  |
|  |  | Consider portable systems for some smaller areas and where flexibility is required.8 | |  |
|  |  | Ensure regular testing of systems by a selection of people with hearing difficulties.8 | |  |
|  |  | Incorporate a fault-detection system in all hearing enhancement systems.8 | |  |
|  |  | Obtain specialist advice for all systems - vendors, community members who use devices/systems.8 | |  |
|  |  | Consider for use where multi-channel communication is required and where headsets can be borrowed from a central location.8 | |  |
|  |  | Consider radio systems where they may benefit people with a hearing difficulty who do not wear a hearing aid.8 | |  |
|  |  | Consider using a hierarchical system to avoid over-complex signs.8 | |  |
|  |  | Use arrows in signage to indicate direction.11 | |  |
|  |  | Ensure symbols have a recommended border height of 6".8 | |  |
|  |  | Use Grade 1 Braille for single words.8 | |  |
|  |  | Use Grade 2 contracted Braille for signs with several words.8 | |  |
|  |  | Provide a Braille locator or notch to the side of the sign board.8 | |  |
|  |  | Provide tactile maps or models to aid orientation and wayfinding for people with visual difficulties.8 | |  |
|  |  | Ensure maps and models provide clear, uncluttered information.8 | |  |
|  |  | Provide explanatory and reference information in tactile form.8 | |  |
|  |  | Consider the provision of audible instructions or supplementary information.8 | |  |
|  |  | Use colors that are easy to differentiate where color coding is used.11 | |  |
|  |  | Ensure safety information and warning signs follow the universally established color code.8 | |  |
|  |  | Ensure directional signs enable people to retrace their steps and identify alternative locations within a building, without having to return to the main entrance.11 | |  |
|  |  | Provide audible information to supplement visual and tactile signs and maps.8 | |  |
|  |  | Other: | |  |
| **VERTICAL CIRCULATION CONSIDERATIONS** | | | | |
| **1.1. How should or will the interior space avoid changes in level to accommodate for a wide range of physical needs?** | | | | |
|  |  | Avoid changes in story within an interior space when possible.10 | |  |
|  |  | Avoid changes in level within a story.10 | |  |
|  |  | Other: | |  |
| **1.1. When changes in level within an interior space cannot be avoided, how should or will the vertical circulation options account for a wide range of physical needs?** | | | | |
| **Stairs** | | | | |
|  |  | Check that the total rise on a flight of stairs between landings are no more than 12 steps.10 | |  |
|  |  | Other: | |  |
| **Ramps** | | | | |
|  |  | Ensure maximum gradient of a ramp is 1 in 20, maximum rise 30", and maximum length 30'-0".10 | |  |
|  |  | Make sure the gradient of a ramp slope is constant and consistent throughout and between consecutive ramp slopes.10 | |  |
|  |  | Install ramp with clear width to suit expected level of use, but not less than 5'.10 | |  |
|  |  | Ramp landings to be a minimum of 5' x 5'.10 | |  |
|  |  | Other: | |  |
| **Travelators** | | | | |
|  |  | Restrict inclined travelators to maximum gradient of 1 in 20.10 | |  |
|  |  | Ensure guarding contrasts visually.10 | |  |
|  |  | Ensure emergency stop controls are clear, visible, and accessible to all users.10 | |  |
|  |  | Employ recommended speed of 0.5m per second for travelators.10 | |  |
|  |  | Ensure recommended walkway width of 60" wide and vertical clearance of 90.5".10 | |  |
|  |  | Moving handrails to extend 27.5" minimum beyond the start and end of walkway.10 | |  |
|  |  | Install footway at each end of travelator that contrasts visually and a change in floor finish.10 | |  |
|  |  | Include static level run-off at least 619'-8” long at each end of inclined travelator.10 | |  |
|  |  | Other: | |  |
| **Passenger Lifts** | | | | |
|  |  | Provide passenger lifts in preference to platform lifts, wherever possible.10 | |  |
|  |  | Locate passenger lift adjacent to an accessible flight of stairs.10 | |  |
|  |  | Install control buttons on lifts that are easy to use.10 | |  |
|  |  | Install passenger lifts with the size and capacity to suit building type and occupancy.10 | |  |
|  |  | Ensure that all passenger lifts are accessible, where more than one lift is provided.14 | |  |
|  |  | Ensure that passenger lifts keep to recommended minimum internal dimensions of 6' x 6'.10 | |  |
|  |  | Ensure that passenger lifts incorporate clear door opening width of 3'-2".10 | |  |
|  |  | Ensure passenger lift doors remain open for a minimum of eight seconds.10 | |  |
|  |  | Position landing and passenger lift car controls within reach of all users.10 | |  |
|  |  | Provide half-height mirror to rear wall of passenger lift.10 | |  |
|  |  | Consider the provision of a tip-up seat within passenger lift.10 | |  |
|  |  | Provide vertical platform lifts in existing buildings only, in situations when passenger lifts cannot be installed.10 | |  |
|  |  | Consider the vertical platform lift size, capacity, speed and frequency of use fully.10 | |  |
|  |  | Install a recommended vertical platform size of 44" x 55".10 | |  |
|  |  | Locate manually-activated door controls of vertical platform lifts in a suitable location.10 | |  |
|  |  | Provide inclined platform stairlifts in existing buildings only, in situations when passenger lifts and vertical platform lifts cannot be installed.10 | |  |
|  |  | Install a recommended platform size of 36" wide s 60" long for inclined platform stairlifts.10 | |  |
|  |  | Other: | |  |
| **Escalator** | | | | |
|  |  | Provide maximum step height of 9" or 8" if escalator used for emergency escape when stationary.10 | |  |
|  |  | Employ escalator speed not exceeding 0.75m per second.10 | |  |
|  |  | Other: | |  |
| **3. What appropriate safety measures should or will be put in place to ensure safety in the vertical circulation?** | | | | |
| **Stairs and Ramps** | | | | |
|  |  | Design and maintain stairs to provide safe access at all times even if rarely used.10 | |  |
|  |  | Consider improving controls, signaling, safety, and communication devices, and surface finishes in existing passenger lifts.10 | |  |
|  |  | Make sure each step edge is visually highlighted.10 | |  |
|  |  | Provide handrails on both sides of the steps and continuous around intermediate landings that comply with OSHA regulations.10 | |  |
|  |  | Handrails provided at two heights: 24"- 30" and 36"-38" with a top railing at 42" minimum.10 | |  |
|  |  | Provide an additional central handrail where the stairs are more than 80" wide.10 | |  |
|  |  | Light step, ramp and landing surfaces to 150 lux.10 | |  |
|  |  | Provide handrails on both sides of the ramp and continuous around intermediate landing.14 | |  |
|  |  | Provide a curb upstand or guarding to the side of ramp.14 | |  |
|  |  | Ensure windows at first floor level and above do not open more than 4".7 | |  |
|  |  | Avoid glass passenger lifts.10 | |  |
|  |  | Include clear landing space of 6'-0" x 6'-0" at entry and exit points from lifts.10 | |  |
|  |  | Design lift interior to minimize glare and reflection.10 | |  |
|  |  | Use even level of illumination of 100 lux within passenger lift.10 | |  |
|  |  | Install handrails on all walls without doors of all lifts.10 | |  |
|  |  | Other: | |  |
| **Lifts / Escalators** | | | | |
|  |  | Locate evacuation lifts in fire-resisting enclosure with independent electrical supply and additional controls.10 | |  |
|  |  | Incorporate a gate, barrier and door clear opening width of 36", and ensure all open outwards, when vertical platform lifts have been installed.10 | |  |
|  |  | Provide permanent solid barrier to non-access sides of vertical platform lifts.10 | |  |
|  |  | Include a clear landing space of 8'-0" x 8'-0" when vertical platform lifts have been installed.10 | |  |
|  |  | Avoid inclined platform stairlifts where the device encroaches into the recommended clear width of the stair or compromises the safety of other building users.10 | |  |
|  |  | Ensure inclined platform stairlift has a 43"-high solid side nearest to wall or support rails.10 | |  |
|  |  | Use moveable barriers and guards with integral safety mechanisms.10 | |  |
|  |  | Never use stairlift where the device encroaches into the recommended clear width of the stair or compromises the safety of other building users.10 | |  |
|  |  | Make sure the footway at each end contrasts visually and install a change in floor finish.10 | |  |
|  |  | Ensure moving handrails extend 12" minimum beyond the start and end of escalator.10 | |  |
|  |  | Ensure escalator steps are a minimum width of 22" and a maximum width of 43".10 | |  |
|  |  | Incorporate 2"-wide contrasting band to full width of each step edge.10 | |  |
|  |  | Employ vertical clearance of 90".10 | |  |
|  |  | Ensure clear approach at least 32'-10" long.10 | |  |
|  |  | Include level moving section of escalator of minimum 79" at top and 63" at bottom.10 | |  |
|  |  | Ensure emergency stop controls are visible and accessible to all users on escalators.10 | |  |
|  |  | Moving handrails to extend 28" minimum beyond the start and end of walkway of travelator.10 | |  |
|  |  | Other: | |  |
| **FURNISHING CONSIDERATIONS** | | | | |
| **1.1. How should or will the electrical hardware within the interior space exceed ADA requirements?** | | | | |
|  |  | Ensure all outlets, switches, sockets & controls are easy to reach and operate.7 | |  |
|  |  | Ensure all outlet, switches, and sockets contrast the wall color for easy visual identification - at least 70% Light Reflectance Value (LRV) contrast.7 | |  |
|  |  | Avoid switches that have to be turned or gripped.8 | |  |
|  |  | Implement large rocker switches.8 | |  |
|  |  | Ensure all switches require a force no greater than 22 Newtons to operate.8 | |  |
|  |  | Position switches and sockets no higher than 36" above floor level where a knee space is provided.7 | |  |
|  |  | Avoid placement of any outlet, switch, or control within 20" of the corners of any room.8 | |  |
|  |  | Position switches and sockets towards the front of the work surface or on a return wall where there is no knee space.7 | |  |
|  |  | Consider the use of automatic passive infrared operation to control lights.8 | |  |
|  |  | Other: | |  |
| **1.1. How should or will windows and window controls be accessible to a wide range of physical needs?** | | | | |
|  |  | Consider electrically-powered, remote-control devices for opening and closing windows that are out of reach.7 | |  |
|  |  | Install window controls that are accessible, useable, understandable, and positioned between 32" and 40" above floor level.7 | |  |
|  |  | Ensure windows that open are accessible and controllable by staff and building users. | |  |
|  |  | Other: | |  |
| **1.2. How should or will the interior space provide a variety of accessible seating to account for a wide range of physical needs?** | | | | |
|  |  | Seating to account for bariatric needs, wheelchair clearance, strollers, service animals, etc. (variety in seating, clearance provided around seating) .7 | |  |
|  |  | Provide seating in all reception and waiting areas.7 | |  |
|  |  | Locate seating close to toilet facilities and a reception or information point.7 | |  |
|  |  | In public transport facilities, provide seating in all waiting locations.7 | |  |
|  |  | Establish 4'-0" clear aisle widths and passing clearances between seats.7 | |  |
|  |  | Consider perching seats where space is limited.7 | |  |
|  |  | Include knee recess for people in seated position.7 | |  |
|  |  | Other: | |  |
| **CONSIDERATIONS FOR GOODS & SERVICES** | | | | |
| **1.1. How should or will the interior elements used for goods & services be accessible to a wide range of physical needs?** | | | | |
| **Counters, Shelves & Cabinets** | | | | |
|  |  | Include counters at different heights, always including an ADA accessible service counter.7 | |  |
|  |  | Provide 5' x 5' clear space for approach to desk.7 | |  |
|  |  | Ensure counter has visually-contrasting, upward-sloping leading edge.7 | |  |
|  |  | Make sure aisle width between shelves and cabinets is 55".7 | |  |
|  |  | Avoid angled shelves above 36".7 | |  |
|  |  | Arrange items on shelves vertically to maximize accessibility.7 | |  |
|  |  | Provide a clear and prominent reception desk with accessible counter heights and clearances built in seamlessly per ADA. | |  |
|  |  | Shelving storage unit with seated approach: 25"-40" tall, 9" deep, with 48"(with knee clearance)-55"(without knee clearance) between each unit.7 | |  |
|  |  | Shelving storage unit with side approach: 26"-42" tall, 9" deep, with 48"(with knee clearance)-55"(without knee clearance) between each unit.7 | |  |
|  |  | Shelving storage unit with standing approach: 30"-60" tall, any deep, with 48" clearance between each unit.7 | |  |
|  |  | Other: | |  |
| **Phones** | | | | |
|  |  | Position manual call points within reach of all building users and ensure they are operable with a simple hand or arm movement.7 | |  |
|  |  | Position payphones to suit people of different heights - including one at accessible height with operable parts mounted between 30" and 40".7 | |  |
|  |  | Provide a clear area for approach to payphones with a 5'-7" turnaround clear floor space.7 | |  |
|  |  | Adjust phone noise levels between 12 decibels and 18 decibels above the ambient noise level.7 | |  |
|  |  | Install payphones with push-button keypads with a tactile marking to the number five.7 | |  |
|  |  | Ensure coin and card slots are funnel type.7 | |  |
|  |  | Consider the provision of a fold-down or perch type seat beside payphone.7 | |  |
|  |  | Incorporate an adjacent shelf for portable textphones, recommended 10" wide x 14" deep with clear space of 10" above.7 | |  |
|  |  | All pay phones to include adjustable audio.7 | |  |
|  |  | Include fixed or folded bench seating for people to use for calls.7 | |  |
|  |  | Provide a desk or fixed shelf adjacent to the telephone to suit left- and right-hand use.7 | |  |
|  |  | Other: | |  |
| **Machines** | | | | |
|  |  | Ensure controls are easily operated with a single hand.7 | |  |
|  |  | Make sure buttons are at least 3/4" diameter and slightly raised above the mounting surface.7 | |  |
|  |  | Ensure a maximum 19.5 N force to operate any control.7 | |  |
|  |  | Ensure height of controls are mounted between 30" and 42" above floor level.7 | |  |
|  |  | Make sure apertures for retrieving goods enable the use of a whole hand.7 | |  |
|  |  | Make sure apertures for retrieving goods are mounted 15" above the floor level.7 | |  |
|  |  | Provide a clear area for approach, 5' x 5', and a level surface.7 | |  |
|  |  | Provide a clear knee space to facilitate frontal approach for wheelchair users.7 | |  |
|  |  | Ensure keypads are tilted upwards and comprise large keys with clear numbers.7 | |  |
|  |  | Employ screen change and scrolling controlled by user.7 | |  |
|  |  | Ensure the card-insertion point is wide.7 | |  |
|  |  | Make sure cards, cash, receipts and statements all project at least 1" to facilitate grasping.7 | |  |
|  |  | Ensure the force required to operate cash-deposit drawers and to retrieve card does not exceed 22.5 Newtons.7 | |  |
|  |  | Other: | |  |
| **1.1. How should or will accommodations for workers be accounted for based on a wide range of physical needs at the concessions?** | | | | |
|  |  | Consider an open-plan arrangement to facilitate easier circulation between kitchen and dining areas.7 | |  |
|  |  | Incorporate work surfaces and appliances at different levels - standing height vs seated/accessible.7 | |  |
|  |  | Ensure standing-height surfaces are 34" high and surfaces for seated approach are 27" high.7 | |  |
|  |  | Provide clear knee space to lower work surfaces and appliances for people in a seated position.7 | |  |
|  |  | Provide a clear area of 5'-7" diameter between units in L- or U-shaped arrangement.7 | |  |
|  |  | Provide a clear width of 4' between parallel work surfaces with access at both ends.7 | |  |
|  |  | Install an efficient kitchen layout that comprises a continuous work surface.7 | |  |
|  |  | Consider the use of pull-out boards to supplement work surfaces. | |  |
|  |  | Consider the use of pull-out units, swing-out shelves, carousels and trolleys to facilitate easy access.7 | |  |
|  |  | Install handles that are easy to use and contrast visually with the drawer or door front.7 | |  |
|  |  | Make sure cupboard doors are hinged to 180 degrees.7 | |  |
|  |  | Other: | |  |
| **2.1. How should or will all goods & services be well defined visually?** | | | | |
|  |  | Ensure all devices contrast visually and are easy to identify. | |  |
|  |  | Ensure the passenger lift signaling system is both visual and audible.14 | |  |
|  |  | Make sure switches, background, and mounting surface contrast visually.7 | |  |
|  |  | Incorporate handles that visually contrast with cabinet drawers. | |  |
|  |  | Provide seats that visually contrast with surrounding surfaces.7 | |  |
|  |  | Ensure that restroom fixtures visually contrast with the mounting surface. | |  |
|  |  | Ensure payphones with inductive couplers to be clearly signed.7 | |  |
|  |  | Illuminate payphones to at least 200 lux.7 | |  |
|  |  | Make sure textphone facilities are clearly indicated.7 | |  |
|  |  | Locate machines where they are readily apparent.7 | |  |
|  |  | Make sure ticket machines and ATMs are clearly signed.7 | |  |
|  |  | Ensure screen text is minimum 18 point and contrasts visually with the screen background.7 | |  |
|  |  | Make sure illumination at keypads and screens are between 200 and 300 lux.7 | |  |
|  |  | Ensure work surfaces to visually contrast with adjacent walls and floors.7 | |  |
|  |  | Other: | |  |
| **2.2. What should or will be accommodations included that will enhance the understanding of goods & services?** | | | | |
|  |  | Ensure a person’s face is well lit wherever communication is important.7 | |  |
|  |  | Use LED lighting - some fluorescent lights can interfere with hearing enhancement equipment.8 | |  |
|  |  | Locate electrical mains cables where they will not cause interference with hearing enhancement systems.7 | |  |
|  |  | Locate light switches logically along a route.8 | |  |
|  |  | Consider the acoustic requirement of rooms at the earliest planning stage.8 | |  |
|  |  | Use a buffer zone, such as a lobby or foyer, to separate quiet and noisy rooms.8 | |  |
|  |  | Select ventilation system with minimal noise impact.8 | |  |
|  |  | Limit excessive noise levels generated by multiple hot-air dryers in restroom facilities.8 | |  |
|  |  | Consider the likelihood of noise overspill into adjacent areas.8 | |  |
|  |  | Orientate ATMs to minimize the likelihood of glare on the screen.7 | |  |
|  |  | Include instructions that are simple and easy to understand.7 | |  |
|  |  | Include printed material with a large, bold typeface.8 | |  |
|  |  | Avoid positioning windows or lights at the end of corridors and behind a person at a reception desk.7 | |  |
|  |  | Other: | |  |
| **SANITARY FACILITIES CONSIDERATIONS** | | | | |
| **1.2 How should or will the restroom facilities & fixtures be accessible to a wide range of physical needs?** | | | | |
| **Restrooms** | | | | |
|  |  | Accommodate particular patterns of use and gender ratio in the design and position of facilities.9 | |  |
|  |  | Make sure toilets are easily accessed and centrally located.9 | |  |
|  |  | Locate sanitary facilities on accessible routes.9 | |  |
|  |  | Provide toilets at regular intervals throughout the building.9 | |  |
|  |  | Ensure temporary sanitary facilities are as accessible as permanent facilities.9 | |  |
|  |  | Ensure the unisex toilet is suitable for all building users, if only one is provided.9 | |  |
|  |  | Establish a large room suitable for small group access.9 | |  |
|  |  | Ensure the room is accessible to wheelchair users; parents with strollers / buggies; people with visual difficulties; and people using walking or mobility aids.9 | |  |
|  |  | Provide unisex accessible facilities for baby/adult-changing.7 | |  |
|  |  | Provide supplementary baby/adult-changing facilities in male and female toilets.9 | |  |
|  |  | Establish separate facility for breast-feeding.9 | |  |
|  |  | Provide well-drained, level, and slip-resistant floor surface.9 | |  |
|  |  | Ensure changing facilities are clearly identified.9 | |  |
|  |  | Locate changing areas on accessible routes.9 | |  |
|  |  | Consider areas for clothing changes - include a height adjustable fold down or fixed ADA benching with grab bars and accessible clothing hooks.9 | |  |
|  |  | Provide private areas for showering and changing in addition to communal facilities.9 | |  |
|  |  | Locate accessible shower and changing areas within single-sex facilities in addition to unisex facilities.9 | |  |
|  |  | Ensure bathroom incorporates 5'-7" clear floor turning space.9 | |  |
|  |  | Coat/clothing hooks to be located at 48" for a forward approach or 54" for a side approach.9 | |  |
|  |  | Ensure all accessories visually contrast with the mounting surface.9 | |  |
|  |  | Ensure clear door opening of 3'-0".9 | |  |
|  |  | Provide accessible toilet stall in multi stalled restrooms. | |  |
|  |  | Provide toilet stalls designed for people with mobility difficulties.9 | |  |
|  |  | Include enlarged toilet stalls for people who need extra space.9 | |  |
|  |  | Fit doors with lift-off hinges.9 | |  |
|  |  | Install sink at 34" maximum above floor level.9 | |  |
|  |  | Incorporate lever or automatic faucets.9 | |  |
|  |  | Ensure consistent faucet control style throughout facility.9 | |  |
|  |  | Select black toilet seat for visual contrast. | |  |
|  |  | Ensure one in six urinals are at accessible height and provide space for front approach by wheelchair users.9 | |  |
|  |  | Ensure restroom accessories meet ADA requirements and all operable parts are mounted with reach - automatic dispensers are best practice.9 | |  |
|  |  | Include accessible housing for wide, tear-off toilet paper roll.9 | |  |
|  |  | Provide ceiling track hoist (or mobile hoist).9 | |  |
|  |  | Install GFCI outlets that are easy to operate. | |  |
|  |  | Use lever faucet controls. | |  |
|  |  | Insulate all exposed pipes. | |  |
|  |  | Avoid full-height mirrors and mirrors that may appear to cause confusion.9 | |  |
|  |  | Ensure restrooms and change facilities can be identified by touch-legible pictograms. | |  |
|  |  | Position dispensers so as not to drip on floor.9 | |  |
|  |  | Ensure dispensers are easily operated by a pull/push lever.9 | |  |
|  |  | Avoid shiny surfaces. | |  |
|  |  | Provide sanitary vending machines equitably in all restrooms. | |  |
|  |  | Ensure sanitary disposal units are available in every restroom, easy to operate, and large enough for incontinence pads.9 | |  |
|  |  | Ensure bins for general waste are suitably positioned and easy to identify.9 | |  |
|  |  | Provide assistance alarms in all accessible toilets, bathrooms, shower rooms, and changing rooms designed for independent use.9 | |  |
|  |  | Position pull-cord so that the end is no more than 4” from the floor.9 | |  |
|  |  | Ensure use of correct cord length with two red bangles, with one at the end of the cord, and the other between 32” to 40” above the floor level.9 | |  |
|  |  | Locate reset button in appropriate location.9 | |  |
|  |  | Provide two clothes hooks in each location and 42” to 67” above the floor level.9 | |  |
|  |  | Provide outward-opening doors to accessible facilities.9 | |  |
|  |  | Fit inward-opening doors with emergency-release catches.9 | |  |
|  |  | Use lever-style door handles.9 | |  |
|  |  | Ensure locks are easy to operate.9 | |  |
|  |  | Ensure lock indicators are correctly fitted.9 | |  |
|  |  | Provide visible and audible indicator in all sanitary facilities.9 | |  |
|  |  | Use suitable surface to provide a good grip when wet.9 | |  |
|  |  | Ensure all grabrails are firmly fixed to wall.9 | |  |
|  |  | Provide seating outside the restroom facilities. | |  |
|  |  | In accessible water closets, shower rooms and bathrooms, position hand-drying facilities within reach of the wheelchair.9 | |  |
|  |  | Ensure room heaters are positioned away from transfer and maneuvering space.9 | |  |
|  |  | Ensure surface temperature of heaters does not to exceed 104 degrees F.9 | |  |
|  |  | Provide adequate lighting levels - 200 lux.9 | |  |
|  |  | Install back-up lighting source to supplement automatic lights.9 | |  |
|  |  | Incorporate motion sensor lighting. | |  |
|  |  | Avoid the use of ultraviolet light in accessible toilets.9 | |  |
|  |  | Other: | |  |
| **Shower Rooms** | | | | |
|  |  | Install zero-access shower tray9. | |  |
|  |  | Use adjustable-height, detachable shower head.9 | |  |
|  |  | Incorporate accessible fold-down shower bench in shower are.9 | |  |
|  |  | Consider additional fold-down or fixed seat for drying.9 | |  |
|  |  | Position grabrails and drop-down rails correctly.9 | |  |
|  |  | Use suitable accessories including towel rail, clothes hooks, and mirror.9 | |  |
|  |  | Consider the provision of a warm air body dryer.9 | |  |
|  |  | Install suitable bath with transfer seat that meets ADA requirements. | |  |
|  |  | Ensure all operable shower parts are within accessible reach as defined by ADA. | |  |
|  |  | Ensure changing facilities are clearly identified.9 | |  |
|  |  | Locate changing areas on accessible routes.9 | |  |
|  |  | Install inward opening doors designed for easy reversal.9 | |  |
|  |  | Consider reinforced wall construction for installation of grabrails.9 | |  |
|  |  | Make provision for future installation of level access shower.9 | |  |
|  |  | Use detachable shower heads in all showers.9 | |  |
|  |  | Other: | |  |
| **Lockers** | | | | |
|  |  | Position lockers in an accessible location.9 | |  |
|  |  | Install a range of locker sizes and heights - at least one accessible locker per type.9 | |  |
|  |  | Ensure locker doors are easy to use.9 | |  |
|  |  | Ensure locks and key fobs are easy to operate.9 | |  |
|  |  | Use a clearly identifiable numbering system.9 | |  |
|  |  | Other: | |  |

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