Art (that) works: design guidelines for equitable public art

by

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A REPORT

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Abstract

Public art within a public space should be experienced by all people (Hein 2006; Phillips 1989; Zebracki 2013). However, when attitudinal, organizational or systemic, and architectural or physical barriers exist, the experience of public art may exclude Persons with Disabilities (Council of Ontario Universities 2013; Schaffer 2020). When people are unable to equitably experience public art, they are also excluded from cultural communities and artistic interpretations of society. If artists and designers do not know how to purposefully accommodate the experiential needs of diverse audiences, including Persons with Disabilities, public art may not be equitably experienced by all people. While some guidelines exist for equitable art in private settings, such as museums, there is a lack of knowledge about how to create and site equitable public art in public spaces. Thus, to fill this knowledge gap, this project developed design guidelines for artists, designers, and creatives when creating and siting equitable public art in public space. The guidelines consider the needs of "all" people to include mobility (physical disabilities), cognition (intellectual disabilities and/or neurodiversity), hearing (D/deaf and Hard of Hearing), and vision (B/blind and Low Vision) disabilities. Notably, the graphic design of the guidelines adheres to established graphic design standards for accessibility. Methods used to inform the development of the guidelines included interviews with artists and site designers, and precedent analysis of multi-sensory art and universally-design sites. To demonstrate how the guidelines can be used, a projective art and site design was developed with site analysis and documented through memoing.

Findings reveal that for public art to be equitably experienced by all people, it must be both physically accessible and multi-sensory, to engage two or more senses (Barnes 2003; National Recreation and Parks Association 2015; Robinson 1998). Additionally, and most

importantly, findings indicate that the most essential component of equitable public art is social. Public art needs to foster social interaction, which can occur when the art is interactive and "comes alive" with engagement (Papalia 2022). By considering the needs of Persons with Disabilities, artists, designers, and creatives have an opportunity to make a more enriching art experience for all people- an experience that all people may not have had otherwise.

Art (that) Works

Design Guidelines for Equitable Public Art

Katherine Herrera
Kansas State University | Spring 2023

Abstract

Public art within a public space should be experienced by all people (Hein 2006; Phillips 1989; Zebracki 2013). However, when attitudinal, organizational or systemic, and architectural or physical barriers exist, the experience of public art may exclude Persons with Disabilities (Council of Ontario Universities 2013; Schaffer 2020). When people are unable to equitably experience public art, they are also excluded from cultural communities and artistic interpretations of society. If artists and designers do not know how to purposefully accommodate the experiential needs of diverse audiences, including Persons with Disabilities, public art may not be equitably experienced by all people. While some guidelines exist for equitable art in private settings, such as museums, there is a lack of knowledge about how to create and site equitable public art in public spaces. Thus, to fill this knowledge gap, this project developed design guidelines for artists, designers, and creatives when creating and siting equitable public art in public space. The guidelines consider the needs of “all” people to include mobility (physical disabilities), cognition (intellectual disabilities and/or neurodiversity), hearing (D/deaf and Hard of Hearing), and vision (B/blind and Low Vision) disabilities. Notably, the graphic design of the guidelines adheres to established graphic design standards for accessibility. Methods used to inform the development of the guidelines included interviews with artists and site designers, and precedent analysis of multi-sensory art and universally-design sites. To demonstrate how the guidelines can be used, a projective art and site design was developed with site analysis and documented through memoing.

Findings reveal that for public art to be equitably experienced by all people, it must be both physically accessible and multi-sensory, to engage two or more senses (Barnes 2003; National Recreation and Parks Association 2015; Robinson 1998). Additionally, and most importantly, findings indicate that the most essential component of equitable public art is social. Public art needs to foster social interaction, which can occur when the art is interactive and “comes alive” with engagement (Papalia 2022). By considering the needs of Persons with Disabilities, artists, designers, and creatives have an opportunity to make a more enriching art experience for all people- an experience that all people may not have had otherwise.

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96. Pandora's Box 8: Multiple Pieces by Rosalyn Driscoll (David Stansbury Photography 2006).

97. A Sense of Vesuvius by Aaron McPeake (Orrock 2023).

98. Yellow speaking tubes encourage site users to speak into the artwork (Alon Koppel Photography 2021).

99. Blue periscope tubes direct views to surrounding nature and encourage a greater appreciation of the landscape (Alon Koppel Photography 2021).

100. 'Sensory Journey' acts as a sun dial of sorts and is aligned in accordance with the movement of the sun on the site (Alon Koppel Photography 2021).

101. 'Sampan' provides a colorful respite from busy Chinatown in Boston, MA (Sasaki 2019).

102. Braille is placed intuitively on the benches, where a person would naturally place their hand (Sasaki 2019).

103. Text in multiple languages tells the stories of communities within Chinatown (Sasaki 2019).

104. Colorful planters with native plants attract pollinators (Prakkamakul 2021).

105. Braille lettering provides a poetic description of the artwork on the planters for people who are blind (Prakkamakul 2021).

106. Descriptions of the images painted on the planters were given to a consultant who is blind. The consultant identified a poem that the visual description made them think of and this poem was then included on the planter in Braille (Prakkamakul 2021).

107. 'Built and Maintained for Certain Bodies' uses the language of the institution to speak back to the institution (Lo 2021).

108. Much of the artist's energy was spent while trying to advocate for accessible artwork and public spaces (Lo 2021).

109. This sign highlights an inaccessible set of stairs in a powerful way (Lo 2021).

110. This temporary artwork exhibit encouraged a variety of people to come engage, relax, and play (WIP Collaborative and Hudson Square Properties 2021).

111. The artwork is flush with surrounding sidewalks for accessibility (WIP Collaborative and Hudson Square Properties 2021).

112. Bright colors were chosen to contrast surrounding buildings (WIP Collaborative and Hudson Square Properties 2021).

113. Reset Rooms provide space for people to mentally reset and find inner peace (Finnegan 2020).

114. Listening to music on a beanbag chair in the Reset Room (Finnegan 2020).

115. Moody playlists help people detach and "reset" (Finnegan 2020).

116. The form of 'Tactile Orchestra' varied based on the location it was installed within; in some cases it was curvilinear and in others it wasn't (Stjernegaard 2019).

117. People interacting with 'Tactile Orchestra' (Cooper Hewitt Design Museum 2018).

118. When people touch 'Tactile Orchestra,' a sound is emitted (Cooper Hewitt Design Museum 2018).

119. People can adjust sound levels in 'Bio Orchestra' by sliding a lever (Fillip Studios 2019).

120. 'Bio Orchestra' encourages people to gather and have a shared auditory visual experience (Fillip Studios 2019).

121. 'Bio Orchestra' was created in collaboration with professors at Wageningen University(Fillip Studios 2019).

122. The audience may sandwich themselves between vibrating forms in MEDIATE Space (Adapted from Gumtau et al. 2005).

123. Bright colors create a moody atmosphere in MEDIATE Space (Adapted from Gumtau et al. 2005).

124. A larger-than-life tuning fork mounted to the wall encourages people to bend and stretch as it vibrates (Adapted from Gumtau et al. 2005).

125. 'Blooming' was an artwork in 'Please Touch the Art' (Sasaki 2019).

126. Moss was chosen as a material in this artwork to create a unique textural experience when touched (Prakkamakul 2018).

127. A maintenance plan is sometimes necessary for an artwork if it contains vegetation (Prakkamakul 2018).

128. Memories of Bone (David Stansbury Photography 2010).

129. Pandora's Box 8 (David Stansbury Photography 2010).

130. Pandora's Box 6 (David Stansbury Photography 2010).

131. Bronze casting of ears which will hang and serve as a clapper inside a bell-like rock form (McPeake 2023).

132. A "two-part rubber mold of rock from which the wax positive will be made and then cast into bronze" (McPeake 2023).

133. Mt. Vesuvius Lava Rock (McPeake 2023).

134. Plaster copy of Mt. Vesuvius lava rock (McPeake 2023).

135. Watertown Braille Trail by Sasaki (Sasaki 2016).

136. Louise B. Miller Memorial and Freedom Garden by TEN x TEN and MASS Design Group (TEN x TEN 2022).

137. University of Kentucky by Sasaki (Sasaki 2022).

138. Virginia Polytechnic Institute by Sasaki (Sasaki 2021).

139. Boston City Hall Plaza by Sasaki.

140. A cable system through the Braille Trail guides park users (Sasaki 2016).

141. Tactile and informative blocks on a cable system inform park users who are blind about adjacent programming, such as benches (Sasaki 2016).

142. Designers worked with the Perkins School for the Blind to place Braille at a comfortable height and angle on plaques for reading (Sasaki 2016).

143. High-back benches provide a sense of security and a vibratory experience for persons who are D/deaf (TEN x TEN 2022).

144. Gathering spaces off a primary pathway encourage intimate gatherings (TEN x TEN 2022).

145. Native plantings in wild arrangements were preferred by Deaf-Black user groups because they differ from manicured, "white" landscapes (TEN x TEN 2022).

146. The University of Kentucky Facilities and Space Plan recognizes the variety of communities that people are a part of-beyond just their disability (Sasaki 2022).

147. The University of Kentucky campus has a lot of potential to connect to historic and indigenous communities that previously inhabited the area (Sasaki 2022).

148. A variety of stakeholders were engaged to determine the best plan forward for the University of Kentucky campus (Sasaki 2022).

149. A shared user experience is created by wide, flat paths that multiple modes of transportation can traverse (Sasaki 2021).

150. Stairs should always be secondary to flat, ADA accessible paths (Sasaki 2021).

151. Stakeholders expressed a desire to engage with the water on the site, so site designers created unique opportunities to do just that (Sasaki 2021).

152. Sub-spaces are defined with low-to-ground seat walls.

153. A play space engages the community and draws diverse populations onto the site.

154. A 20-foot-wide pathway is ideal for this busy, Boston Plaza (Sasaki 2022).

155. Sketching Icon.

156. Video Icon.

157. Photo Icon.

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166. 'Breakaway' concept that inspired 'Breakthrough.'

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169. Breakthrough SketchUp model.

170. Glass cube SketchUp model.

171. Different heights and sizes of the structure and metal chimes were considered.

172. I began brainstorming things that break and the work “foundation: stuck with me. The foundation we are raised upon contributes a lot to our quality of life and who we are as a person. I felt that I could work with this “foundation” for the project, so to speak.

173. Initial sketch of the door frame/entryway and kitchen table.

174. Initial sketch of the bedframe and the television. In the initial sketches, an audio recording of poetry would have played at each site or “room.”

175. A 5-foot x 15-foot hallway vs. a 10-foot x 12-foot room. I experimented with different scales for a primary “house-like” structure and observed how different scales evoked different feelings.

176. A more intimate experience is created by a 20-foot x 20-foot space compared to the other options.

177. A 50-foot x 25-foot space would be WAY too large for what I’m going for.

178. The site for the public art is situated adjacent to accessible parking and is 195-feet by 360-feet, or less than 0.020 miles by 0.037 miles; this distance is accessible according to the guidelines (see Chapter 5: Outcomes) which indicate an artwork should be no more than 0.25 miles away from parking (Google Maps 2022).

179. Looking northwest towards the Franklin Park Zoo and parking adjacent to the site.

180. Existing benches and trash receptacles are scattered throughout the site, with dappled shade cast over them by mature trees.

181. I experimented with different types of stairs in a 20-foot x 20-foot main structure.

182. I preferred this stairs option as it felt more natural to the space and could serve as a “amphitheater-like” setup if people were to gather in the space. However, the lack of railings, while aesthetically pleasing, was a safety hazard.

183. I also drafted a more abstracted form that does not directly resemble a house or room.

184. The structure is 10 feet x 12.5 feet and creates a more intimate experience, which supports the narrative more so than the 20-foot x 20-foot structure.

185. Each item represents different rooms in a house, arranged to be experienced in the same order as a person would move through a triple decker apartment; triple decker apartments are a common housing type surrounding Franklin Park.

186. The above diagram represents the spatial layout of the different “rooms” on the site, and the order that they are intended to be experienced.

187. A structural path, meant to look like pieces from the central structure, help guide people through the site to different “rooms.”

188. A roof structure, made with actual shingles could be thrown off the house-like structure to situated that there has been a great upheaval.

189. An initial table iteration. Each chair represents a member of my family, with the chair still at the table representing my dad, who has always held out hope for better days.

190. A cracked television says the words “happily ever after” on the screen; a family image can be seen partially through the crack on the front of the television and more through the back of the television.

191. Metal letters “You Are Not Alone” are attached to a bedframe that is charred, cracked, and broken.

192. This iteration features the table abstracted into a community playground, bringing people together. The play logs are representative of the form of a table and chairs.

193. Multiple iterations were created for an interactive TV made from cast concrete or granite blocks.

194. The bedframe became an abstracted set of metal letters spelling the phrase “You Are Not Alone.”

195. The structural “house-like” frame was transformed into a tornado-like structure. Possible iterations included a 15-foot tall, 20-foot tall, and 25-foot-tall structure. The opening size also differed, from 3 feet wide to 6 feet wide. The opening in all iterations is 10-feet wide. The scale figure is 5 feet and 10 inches.

196. The box television was entirely abstracted to become an actual box room. I went through several iterations to determine how to best rotate it so that it appeared as if was thrown out of the tornado. In each iteration, the box was 14 feet wide by 14 feet long and 10 feet tall. I ultimately chose the middle option because of its angles.

197. The above iterations show an abstracted table that appears as if it was thrown out of the tornado and into a tree. The table in both iterations is 9-feet wide and 16- feet long. In the top image, the table is 17 feet off the ground. In the bottom image, the table is 12 feet off the ground. The 12-foot iteration was chosen because of the intimacy created under the table, like the intimacy created while eating at a table.

198. The bed frame remained as metal letters ‘You Are Not Alone’, but the scale was slightly changed. The bed frame is 0 to 36 inches off the ground, laying flush with the ground in some spots and up in the air in others. This creates interesting artwork for people to climb, jump, and play on. The letters are approximately 60 inches wide since a queen bed frame is typically 60 inches wide. The abstracted bedframe is 20 feet long to appropriately fill the space within which it located.

199. The proposed location shifted from the spot that is seen in the image above to this spot. The reason for the change in location was to situate the bed frame in a space that feels sheltered and somewhat enclosed. The trees above the site provide the desired shelter.

200. 'You Are Not Alone' documents the experience trauma, and the healing process that a person might go through as a result.

201. The tornado-like structure at the center of 'You Are Not Alone' documents an interpretation of the experience of domestic abuse.

202. The box television in 'You Are Not Alone' represents the rumination and reflection that takes place after experiencing trauma.

203. The communal "dining room" represents growth after upheaval.

204. The abstracted bed frame in 'You Are Not Alone' represents eventual feelings of hope and growth- especially at the realization that a person is not alone in their struggles.

205. Interview, memoing, and precedent analysis findings influenced design guidelines for equitable public art, which in turn influenced a final design of a public artwork/the demonstration of the guidelines.

206. 'You Are Not Alone' Site Plan.

207. A descriptive sign at the entrance to the tornado-like structure.

208. The "Tornado" is at the center of the larger public artwork 'You Are Not Alone.'

209. Pipe structures throughout the inside of the tornado encourage people to speak or yell into them. Sound is then projected up into the sky and the upper parts of the artwork.

210. Signage description for the 'Glass Box Television.'

211. The Glass Box Television is a part of the larger public artwork 'You Are Not Alone.'

212. The Glass Box Television symbolizes the "American Family" and the "American Dream" on the outside, while inside the structure people are forced to reflect on their reality.

213. A wooden circle serves as a "sound dial" like that on a television and is especially beneficial for diverse user groups that are easily overstimulated; the sound dial allows park users to adjust sound to their liking.

214. Signage description for the Communal 'Dining Room' and 'Dining Table.'

215. The Community "Dining Room" is a part of the larger public artwork 'You Are Not Alone.'

216. An upside-down, re-interpreted table is thrown out of the tornado and into the trees 12 feet off the ground. Looking up at the table, the audience notices that its white plastic material appears fragile and that eating at an upside-down table is impossible. However, signs of growth in the community bowl and cup planters evoke feelings of hope.

217. People may picnic and play within larger-than-life abstracted plates that "fell" from the upside-down table. An opening ensures that people of all abilities can move into the plate. Furthermore, a painting of a picnic on the bottom of the plate communicates a possible use for it to park users.

218. Signage description for the abstracted 'Bed Frame.'

219. The 'You Are Not Alone' bedframe is a part of the larger public artwork 'You Are Not Alone.'

220. The un-defined, abstracted, and galvanized steel bed frame encourages multiple methods of engagement; people may gather, play, have informal photo shoots, eat lunch, and rest on the structure.

Acknowledgments

This project would not have been possible without the support and guidance of many.

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A special thank you to Jessica Canfield, Nicholas Geankoplis, Anne Beamish, Emily Siler, and Gloria Boehm for serving as a sounding board during the conceptual design process of my projective art and site design. I greatly appreciate your insight, wisdom, and creativity!

I would also like to thank my family and friends for providing moral support, guidance, and re-assurance throughout this project. It was a particularly tough year and I couldn't have done it without you.

Preface

Art (that) Works originated from my experience with my little brother, Benjamin, who has Kabuki Syndrome. Kabuki Syndrome is a rare genetic disorder that affects 1 out of 32,000 births; as a result of his genetic syndrome, Benjamin is physically and cognitively disabled. He is an amazing rock star who has changed my outlook on life.

Having a first-hand look at the injustice of inaccessible spaces and artwork, I decided to research how to remedy some of that inequity. As a landscape architecture major also working to obtain an art minor, I felt that this project combined everything that I am passionate about: public space, shared experiences for all people, art, and injustice.

Art (that) Works resulted in design guidelines for artists, designers, and creatives to use when creating and siting art in public spaces. The guidelines were informed by literature review, precedent analysis of multi-sensory art and universally-designed sites, and artist and designer interviews. The names of some interviewees are withheld by mutual agreement. I acknowledge that the guidelines are a starting point for this research and I hope others are able to expand upon them. The project also resulted in a final projective design of a hypothetical public art piece, to demonstrated the application of the guidelines. Franklin Park was chosen as the location of the hypothetical public art piece because it was concurrently studied in studio during the completion of this master's project. Enjoy!

1

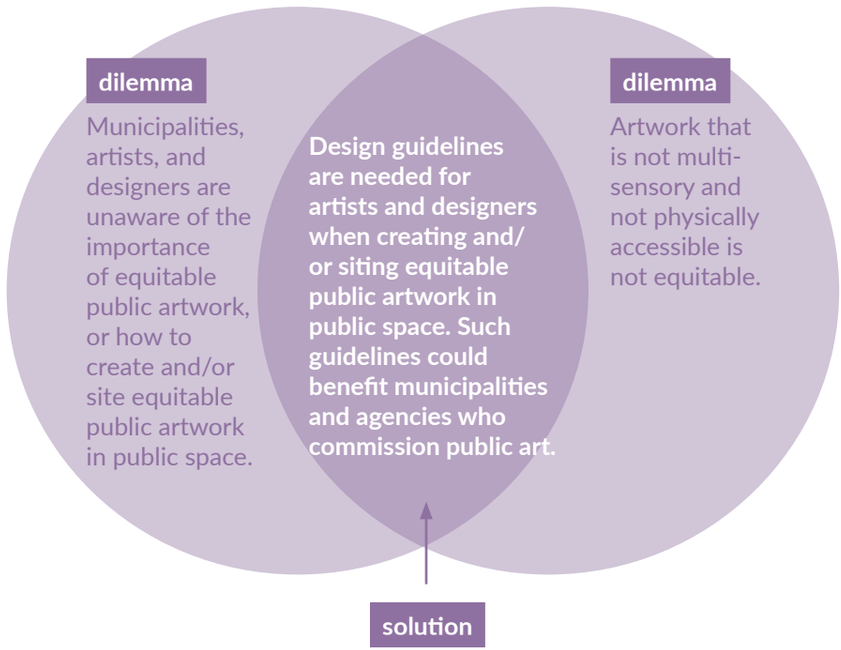
Introduction

Introduction

Public art within a public space is intended to be experienced by all people (Hein 2006; Phillips 1989; Zebracki 2013). However, sometimes attitudinal, organizational or systemic, and architectural or physical barriers exist, thus limiting the equitable experience of public art (Council of Ontario Universities 2013; Schaffer 2020). Many times, commissioning agencies may be unaware of the need for equitable public art, or do not prioritize this need, and artists may feel that creating equitable art is creatively constraining (Sullivan and Mauldin 2020). That said, it is important to acknowledge the meaning of modern-day public art, that is, art *for* the public; public art today is art that expresses current social happenings and shared narratives (Mitrache 2012; Redstone 1975; Miles 1989). If people within a public space, a space that is open to everyone, are unable to experience a public art, then they are being excluded from a cultural community and artistic interpretations of society. "According to Le Corbusier, the occupation of space is the first proof of existence. [If a person cannot access a space, they cannot exist within that space.] If I can't get to a place, if it's exclusive, then I don't belong and it's not for me" (Scherling 2023). For example, when public art lacks multi-sensory elements to engage two or more senses, or when it is not physically accessible, Persons with Disabilities may be excluded from experiencing it (Barnes 2003; National Recreation and Parks Association 2015; Robinson 1998).

Persons with Disabilities (singular: Person with Disability or PwD) are affected by one or more of the following disabilities: Low-Vision, B/blindness (no vision), D/deafness (no hearing), cognitive disabilities, physical disabilities, Hard of Hearing, and N/neurodiversity. The World Health Organization defines disability as a result of a reaction between a person with a health condition and personal or environmental factors (inaccessible spaces, limited social support, etc.) (2021). Due to the diverse needs of Persons with Disabilities, and the limited knowledge surrounding those needs- especially when it comes to creating and siting public art, it is not surprising that this user group is continuously aliened and excluded from experiencing some public art. As stated by Prime Access Consulting (PAC), an organization dedicated to increasing equitable experiences and spaces for all people, "[artwork and sites] following universal design principles can facilitate a powerful feeling of inspiration, awe, wonder, and excitement for all visitors, not just those who meet an idealized [type of person]. More importantly, following such best practices can help prevent many visitors from feeling excluded, unwelcome, or ignored – something that has been true for far too long" (2018).

Knowledge is needed to advance the equitability of public art in public spaces and this report aims to bridge that gap. To date, there are no published design guidelines that artists and designers can follow when creating and placing equitable public art in public spaces. Therefore, this Master's project is significant because it proposes a set of design guidelines that can be used by artists and designers who aim to create and/or site equitable public art in public space.



Research Question

What design considerations are necessary to ensure all people can equitably experience public artwork?

Secondary Questions

1. Why does equitable public artwork matter?
2. How can public artwork engage a variety of sensory needs and experiences?
3. How can public artwork in public space be designed to equitably include all people?
4. Why does equitable public space matter?
5. How can a site around a public artwork be designed to equitably include all people?
6. What are the limitations and opportunities to creating equitable public artwork and sites in public space?

Project Goals

- Determine what features public artwork should include to be equitably experienced by Persons with Disabilities
- Identify what Persons with Disabilities need in public space to have an equitable experience
- Develop guidelines for artists and designers to follow when creating and placing equitable public artwork in public space
- Create a final design and demonstration of the guidelines, that includes projective site and artwork design

Scope of Project

To answer the research question, this project created design guidelines for public art and the public space surrounding it. A final design and demonstration of the guidelines, which included projective art and site design, were also created. The projective art and site design was hypothetically located in Franklin Park in Boston, MA. Franklin Park was chosen as the location for a hypothetical artwork and site design because the park was studied in studio, concurrently to the development of this Master's project.

Overview of Report

This project investigates various design considerations needed for Persons with Disabilities to be able to equitably experience public art within public space. **Chapter 2, Background**, reviews the literature on the history of public art, types and mediums of public art, controversial, temporary, and permanent public art, the creative process and Calls for Art, maintenance and other considerations for public art, types of public art for all people, disability art movements, Persons with Disabilities, universal design, why equitable public art matters, and art in public space (including parks and Franklin Park). **Chapter 3, Methodology**, states how the research question will be answered using the methods of site analysis, semi-structured interviews of artists and designers, precedent analysis of artwork and sites, and memoing (the documentation of projective art and site design). **Chapter 4, Findings**, identifies the needs of Persons with Disabilities when experiencing public art and public space. This chapter also records the importance of equitable public art and public space, as stated by artists and designers in interviews. Memoing, or the projective design/creative process documentation, is also included in Chapter 4. **Chapter 5, Outcomes**, contains design guidelines for artists and designers to follow when creating equitable public artwork in public spaces that all people can equitably experience. This chapter also contains a projective art and site design hypothetically located in Franklin Park. **Chapter 6, Conclusion**, summarizes the findings of the report. **Chapter 7, End Matter**, contains a glossary, Appendix A-C, and a list of sources.

Project Design | Art (that) Works

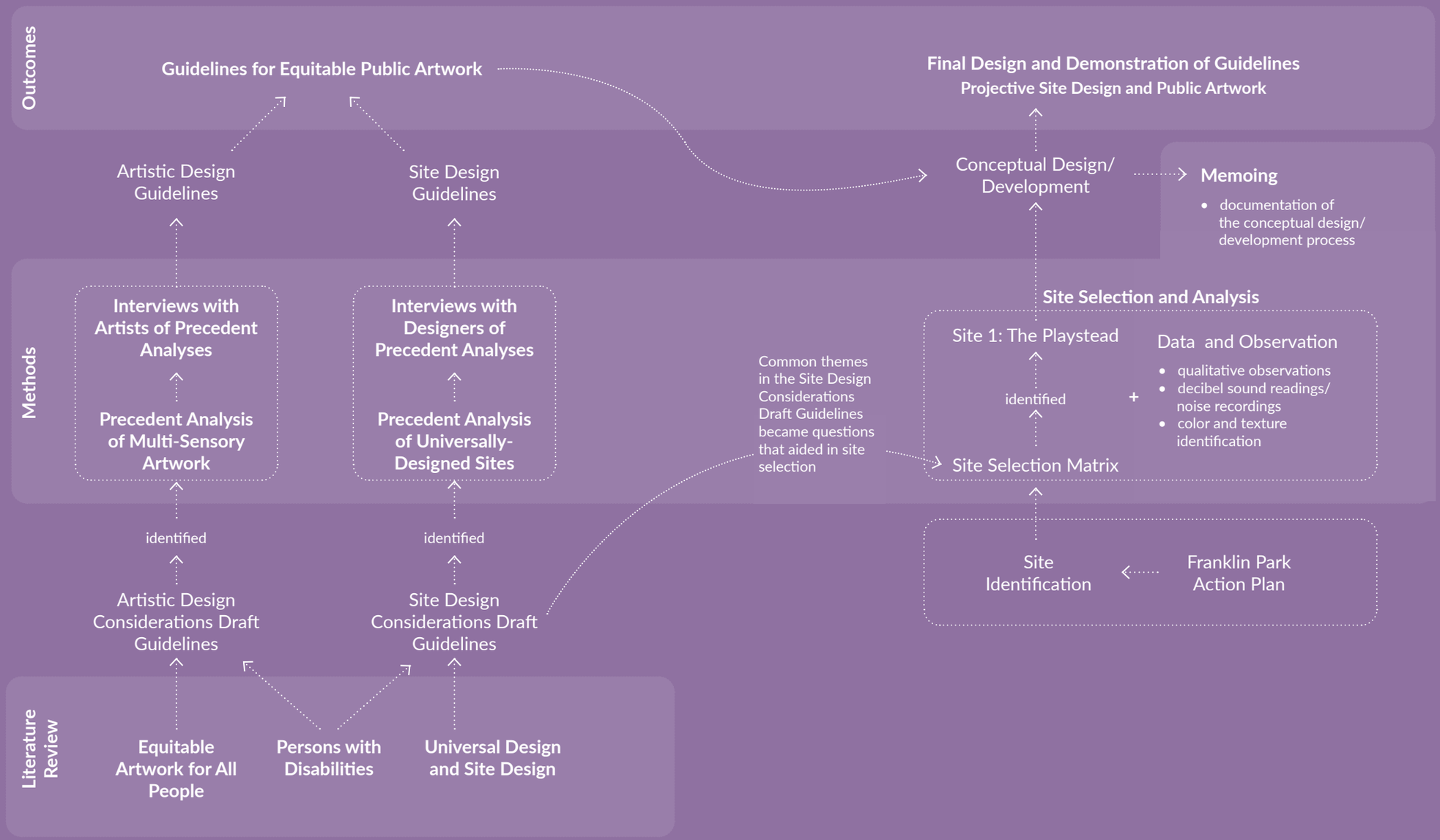


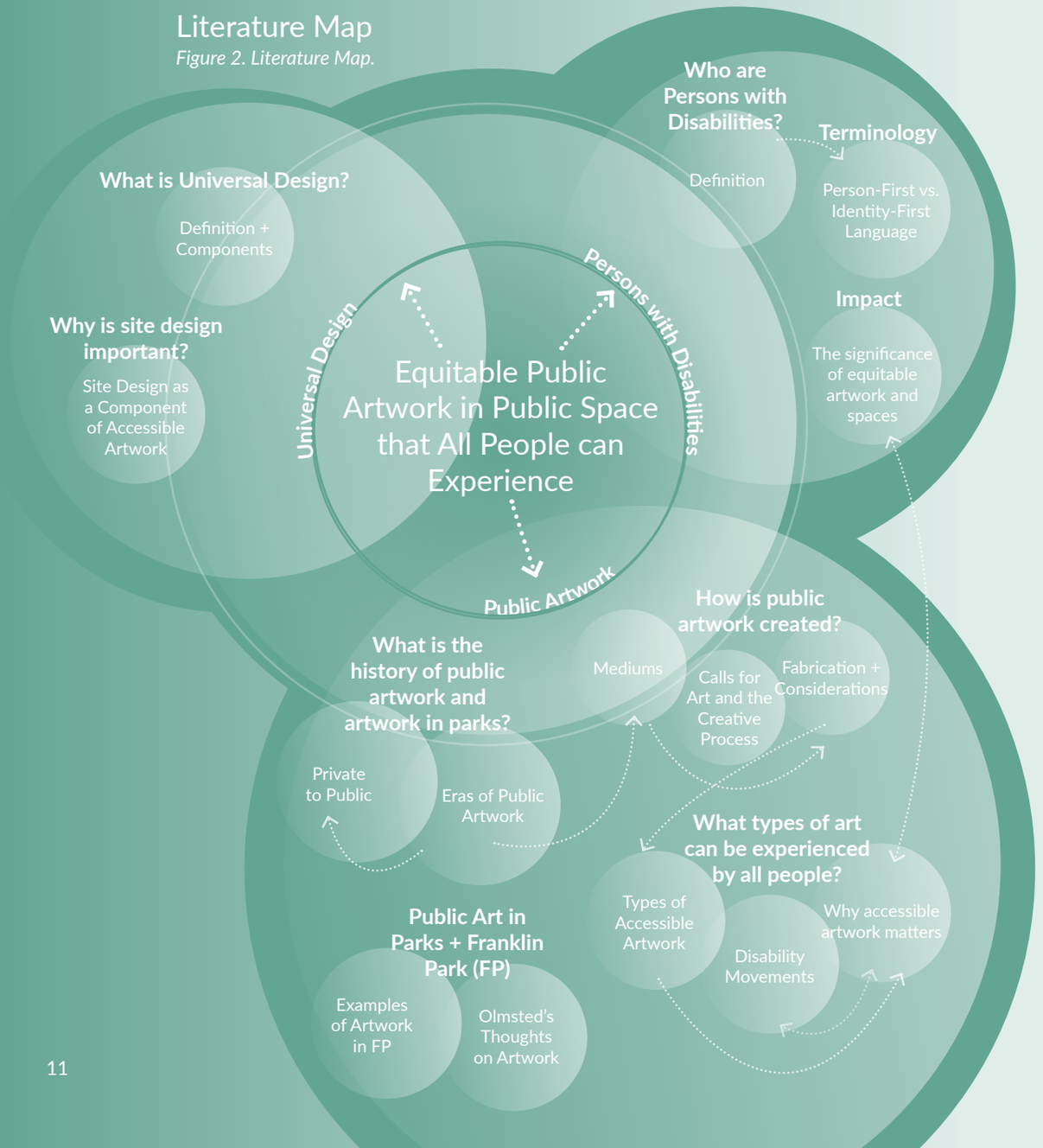
Figure 1. Project design diagram showing relationships between literature review, methods/findings and outcomes.

2

Background

Literature Map

Figure 2. Literature Map.



Background

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Public Art: Then and Now

Over time, artwork has been used to communicate ideas, inspire change, and interpret human existence on Earth. At one time, artwork was used by wealthy patrons and ruling factions to impose their will upon the public domain and popular culture (Smith 1996; Harvey 2000; Sharp, Pollack, and Paddison 2005; Gunn 2000). This type of public artwork is defined as "pre-modernist" and largely occurred in the 19th and first half of the 20th century; public artworks of this period were erected by those in power to commemorate "events, people, animals, or mythical figures" (Russell 2004; Raven 1993). Therefore, many historic artworks from the 16th to 18th centuries have a heavy focus on religious figures and events, ruling factions, and grandiose displays of wealth (Sharp, Pollack, and Paddison 2005; Crush 2014).



Figure 3. Historic Citadel Park sculptures and water features in Barcelona.

It was not until the late 1960s that artwork truly become "public"- for and by the public- instead of by those in power. This shift can largely be attributed to the 1967 Art-in-Public-Places Program by the National Endowment for the Arts (NEA) and the City Percent-For-Art Programs (Lacy 1995; Crush 2014). The goal of these programs was to increase public input in the content and placement of public artwork, and as public input began to be incorporated artists were given more freedom to express what they wanted. Artwork was no longer confined to commemorating "heroes" (Russell 2004).

Public artwork from the late 19th to early 20th century is referred to as "Modernist" artwork and can be separated into two sub-categories: insight-serves-art artwork and site-serves-insight artwork (Russell 2004, 20; Britannica 2022). Insight-serves-site artwork is typically abstract, does not discuss political, social, or moral issues, is not site-specific, and the meaning behind the artwork is specific to the vision of the artist. Meanwhile, site-serves-insight artwork relies on location to inform the meaning behind the artwork (Russel 2004). All Modernist artwork is characterized by a break from traditional forms of visual representation and a search for new "forms of expression" (Brittanica 2022; Tate n.d. (e)). In fact, much artwork from this era was motivated by the Industrial Revolution, urbanization, and detachment from the Victorian ideology of the time (often focused on optimism and convention) (Britannica 2022). Modernist artwork typically reflected artists' hopes for a future society and their values of modern industrial life (Tate n.d. (e)).

Today, public artwork is a physical manifestation of private lives, cultural ideas, and calls for change (Phillips 1989), and it is located in spaces accessible to all people—not in museums or galleries that require admission. In 2008, Cher Krause Knight defined public artwork as "...in the service of the people, rather than ruling factions" (2). The public, in the context of artwork, is now considered to be all people who "influence and contribute to public art[work] according to their needs and desires rather than the needs and desires of a ruling class" (Crush 2014, 5). In this way, public artwork has become much more accessible for all people to create, influence, and experience.

Public artwork today is considered "Postmodern" and is characterized not by interdependency with the site, but by the political and social ideas of the communities surrounding the artwork (Condee et al. 2009; Russel 2004). In this sense, postmodern artwork is more dependent on place—the physical and social properties of an area- as opposed to just a site (Lacy 1993). Artwork in this category is often informed and influenced by the needs, wants, and ideas of the communities that make or experience the artwork; it may even be a collaborative effort created with communities (Russel 2004; Salvatori 2015).

Types and Mediums of Public Art

Common types of artworks found in public spaces are sculptures, statues, site-specific installations, murals, graffiti, land and environmental art, performance art, and more (Duncan and Cooper 2021; Lamorinda Arts Council n.d.). Commissioned public artwork may commonly be found in parks, plazas, and gardens. Other types of public artwork such as illegal street artwork, or graffiti, may be found on building facades and other location within the public realm (Duncan and Cooper 2021).

A medium is a type of material that can be used to create artwork (Artst n.d.; Art in Context 2022; Wack 2017; Lefteri 2014). In a sense, "the medium, namely, the material, is the special language of artists for artistic thinking" (Wang and Yuan 1994). Mediums used to make public artwork differ from mediums used to make traditional, indoor artwork because they need to be able to withstand weather events and seasonal changes. Examples of mediums include paint, ink, and marker (fig. 4). The most common mediums of public artwork are wood, light plastics, textural fibers, transparent glass, ceramics, metal, concrete, and stone (Fundaburk and Davenport 1975, 6; Zi and Mingjian 2019).



Figure 4. Mediums of art.

Ideally, artists and designers should use materials found in the region they are placing the artwork (Fundaburk and Davenport 1975; Zi and Mingjian 2019; Zhan and Pi 1996). By using local materials, the environmental impact is reduced because less carbon is produced in the transport of these materials (Cho 2018; Pomponi and Moncaster 2016). Furthermore, the people experiencing the artwork will be more familiar and comfortable with the artwork because they recognize the materials used; known materials contribute to a sense of place and acceptance of artwork. In fact, "people's recognition of materials, especially [of] those familiar to them, is somewhat greater than the recognition of the artwork itself; [materials] familiar to viewers [are more] easily accepted by them" (Zi and Mingjian 2019, 62).

Prior to creating an artwork, the artist should consider the pros and cons of the material and how it will be used. For example, the artist should consider the softness or hardness of the material, the roughness or delicateness of the material's texture, and the color of the material (Zi and Mingjian 2019, 62). The artist should also consider the appropriateness of the medium to the topic of the public artwork (Dilworth 2003).

Stone is the most commonly used material for public artwork, while steel is one of the most important because of its "high strength, easy molding, low price, and recyclability" (Zi and Mingjian 2019, 63). More specifically, weathering steel is preferred to stainless steel because it is less likely to dent and be damaged (Zi and Mingjian 2019). Copper, divided into four categories based on color: red copper, brass, bronze, and copper alloy, is a common material used for cast statues because of its flexibility and ability to maintain details (Zi and Mingjian 2019; Canadian Copper & Brass Development Association n.d.). Novel materials, such as canvas, polypropylene fabric, and polypropylene rope, may be used in more unconventional ways. For example, novel materials might wrap found materials, or just make up parts of a sculpture. Waste materials, such as scrap wood, straw, mosaic, stone, and local soil turned to clay, are environmentally friendly material alternatives (Zi and Mingjian 2019; Lawton 2018). Aside from stone, metal, or clay, public artworks may be created with weather-resistant paint, spray paint, fabric, plastic, and other found materials. Other mediums that could potentially be used for public artwork include alternative cement, bamboo, bio plastic, smart glass, industrial hemp, and scrap wood (see glossary) to reduce environmental impacts and lower atmospheric carbon (Lawton 2018).



Figure 5. Limestone.



Figure 6. Bronze.



Figure 7. Concrete.



Figure 8. Stone A.

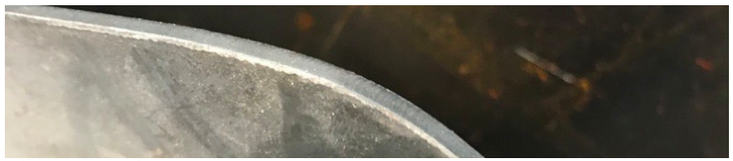


Figure 9. Steel.



Figure 10. Stone B.

Acceptance of Public Art: Controversy, Permanence, and Temporality

The materiality, or medium, of a public artwork may depend on the purpose of the piece—if it is intended to be permanent or temporary. It is possible for an artwork to be made of less durable materials if it will only be installed for several days, weeks, or months. The permanence of public artwork is also highly dependent on the desires and ideas of the public and the commissioning organization, such as local art committees and government bodies.



Figure 11. Temporary vs. Permanent Art possible mediums.

It is important to recognize that the public consists of a wide variety of people who have diverse perspectives. That said, it is never okay to promote racist, discriminatory, offensive, or otherwise inappropriate ideology through public artwork. While a harmonious consensus and universal appreciation for public artwork is unrealistic, it is always necessary to avoid commemorating racist, offensive, and inappropriate figures, events, or topics through public artwork (Sharp, Pollack, and Paddison 2005; Kelly 1996; Zembylas 2004).

During and after the Black Lives Matter Movement in 2020, which called international attention to the historic oppression and mistreatment of African-American and Black American communities, many racist, pre-modernist public artworks have been reconsidered (Duncan and Cooper 2021). "[The Black Lives Matter Movement, has] brought into question the validity and longevity of historic artworks that no longer resonate with contemporary thought" (Duncan and Cooper 2021). This is especially true for public artwork in the southern regions of the United States that commemorate individuals who perpetuated chattel slavery. After the Black Lives Matter Movement, many of these sculptures were completely disassembled, defaced, and/or torn down by an angry public.

Other countries and cities impacted by authoritarian control have also had adverse reactions to historic and commemorative artwork. For example, public artwork that reminds people of authoritarianism, such as Nazism in cities throughout Germany, is more likely to be defaced (Czaplicka and Ruble 2003; Lebow 2005).

While the permanence of artwork in public space is relative to the desires of the public (Duncan and Cooper 2021), there is a certain quality about "permanent" artwork that temporary artwork does not have. Permanent artwork may forever solidify and enforce narratives upon a site and define the space within which it is located. For example, the famous "Bean" or the Cloud Gate at Millennium Park in Chicago has become a part of the Chicago identity. Meanwhile, temporary artwork may be used to discuss issues of common concern at a moment in time.

Interestingly, "some of the most fruitful, provocative, temporary installations of public artwork have come from artists on their own initiative both with and without the support or restraints of official sponsors" (Phillips 1989, 335). One such example is the Black Lives Matter paintings located on major roadways throughout the United States. These paintings are likely to fade over time, but their impact is profound. Perhaps, temporal artwork has the courage to engage in more provocative narratives than "permanent" artwork (Phillips 1989).

Acceptance of public artwork is dependent on its content and location. While it is ultimately up to the artist and how they chose to create a work of art, research has found that the "public perceives identifiable artwork more positively than abstract artwork" (Zebracki 2013, 315). That is to say, identifiable people,

animals, or other items may be more well-received than an unrecognizable form. Furthermore, when public artwork is placed on sites that are more familiar to people, people view that work of art more favorably (Zebracki 2013). For example, a sculpture placed in a beloved community gathering spot might be viewed more positively, depending on content and meaning, than a sculpture added on a desolate street corner.

Ultimately, acceptance of public artwork is dependent on the appropriateness of its location, medium, and message behind the artwork itself. Artists should ask themselves, "what does the artwork, according to the beholder, want to say about the place for which it was planned, and what does the place convey about the artwork?" (Zebracki 2013, 315). If people see a deeper meaning behind artwork, especially a meaning that the audience can relate to, it is more likely to be appreciated.

Calls for Art and the Creative Process

Public artwork has to adhere to set criteria and discuss a particular topic or idea within a larger category. Today, Postmodernist Artwork often discusses issues of common concern relevant to a particular area or community. Present-day public artwork is typically the result of a "Call for Art" issued by governments or organizations seeking artistic interpretations of set criteria. Common criteria and information in a call for art include the artist's budget and compensation, the date the call was released, the location of the intended artwork, contact information for applicant questions and/or virtual question sessions, the date the call closes, and eligibility requirements (based on age, typically 18+, and residence location, usually local to the place of the artwork). Some calls for art are more specific, in that they list a theme for the artwork based on current events or historical happenings. Other calls for art may list a specific medium or material a work of art should be created with such as sculpture (ceramic, metal, found materials, etc.), paint (acrylic, spray paint, oil paint, watercolor), fabric, or other (Boston Redevelopment Authority 2021; Public Art Network 2009).

Upon winning a proposal for an art installation or being chosen as an artist to answer a call for art, the artist should determine: "where [the artwork] should occur, what issues or ideas [the artwork] can address, who the audience [of the artwork] is," and the permanence or temporality of the work (Phillips 1989, 335). Many of these questions are answered in the creative process.

The Creative Process

The creative process may be defined as the "succession of thoughts and actions that lead to original and adapted ideas" (Lubart et al. 2003, 85; Botella et al. 2013). The original model of creativity listed four steps in the creative process: preparation, incubation, illumination, and verification (Wallas 1926; Botella et al. 2011). Preparation, or the definition of a problem and acquisition of knowledge, is followed by incubation. Incubation, characterized by "subconscious activity," is followed by illumination (Botella et al. 2011, 162). Illumination is the "Aha! Moment" when the artist forms a creative solution (Botella et al. 2011, 162). Finally, verification, or the testing of the

creative solution, takes place. Despite this initial model, other perspectives and interpretations have been made regarding the steps of the creative process.

Other authors state that the first stage of the creative process is perception, followed by observation, thinking, and finally analytical building (Kreilick 1947). In the context of art making, perception is the tactile sensation created by working with a specific medium or material. This tactile sensation, called tactile reduction, is "the relationship of the mind and muscles" (Kreilick 1947, 10). In the perception phase, the artist processes the medium through sight, touch, smell, and sound (Valentiner 1946). In the observation phase, the artist establishes harmony in artwork by working around all sides and feeling or viewing the work (Dewey 1934). The third and fourth stages, thinking and building analytically, are intertwined, and are characterized by editing of an artwork based on the initial intention of the artwork and the form it has become (Kreilick 1947). However, it should be noted that "no artwork in one sense, is ever finished" (Balch 1918). Artwork can always be improved and evolved through time.

Despite the variety of definitions of the four steps of the creative process, most definitions have an exploratory phase, a thinking phase, a testing phase, and (perhaps) a reflection phase. A common theme throughout all creative processes is the mental activity that takes place. One of the most mentally significant aspects of the creative process is an association, or "making connections between disparate ideas" (Andersen and Milbrandt 2005; Heilman 2005; Koestler 1976; Rothenberg and Hausman 1976; Mednick,1962).

One artist and scholar, Rafael Julliard, has noted the distinct association between the artist's feelings and the work they create (2022). [This scholar], as stated by Rosalyn Driscoll, has found that "an artist makes choices on the basis of looking for a felt sense within.... It is something only I can feel. It is what drives my process. It is not so much a visual image, and it is not so much an idea, but an internal psychosomatic sensation" (2022).



Figure 12. Calls for Art in neighborhoods surrounding Franklin Park, such as the Mattapan neighborhood, incorporate themes such as unity, togetherness, community, Black Joy, youth, culture, future, and people (Boston Redevelopment Authority 2021). One Boston art initiative involves artists painting power boxes around the city. Several of these power boxes are located along the edges of Franklin Park, such as the one shown above.

Maintenance and Other Considerations for Public Art

Maintenance

To maintain the integrity and quality of public artwork, the artist should be responsible for a detailed, long-term maintenance and conservation plan (Diamond 1999). This plan should contain a schedule for maintenance, when it will be performed, how, and by whom (Diamond 1999). This maintenance and conservation plan will be given to the agency that receives the artwork since the maintenance of it is not usually performed by the artist themselves (Project for Public Spaces 2008; Diamond 1999).

To develop an effective maintenance plan, the artist should consider the financial ability of the agency to maintain and conserve the artwork over time. If an agency does not have the financial resources to follow the specified maintenance and conservation plan, the artwork is more susceptible to "damage, vandalism, dirt, and deterioration" (Diamond 1999, 6).

Potential damage and deterioration of public artwork can be prevented by carefully considering materials and placement prior to installation. For instance, the artist should consider how materials will behave and respond to safety concerns, local environmental conditions, water and condensation management, ground-level placement, graffiti and vandalism, skateboarding, theft prevention, accessibility for maintenance, and fragile and breakable components (Washington State Arts Commission 2014; Kim 2004).

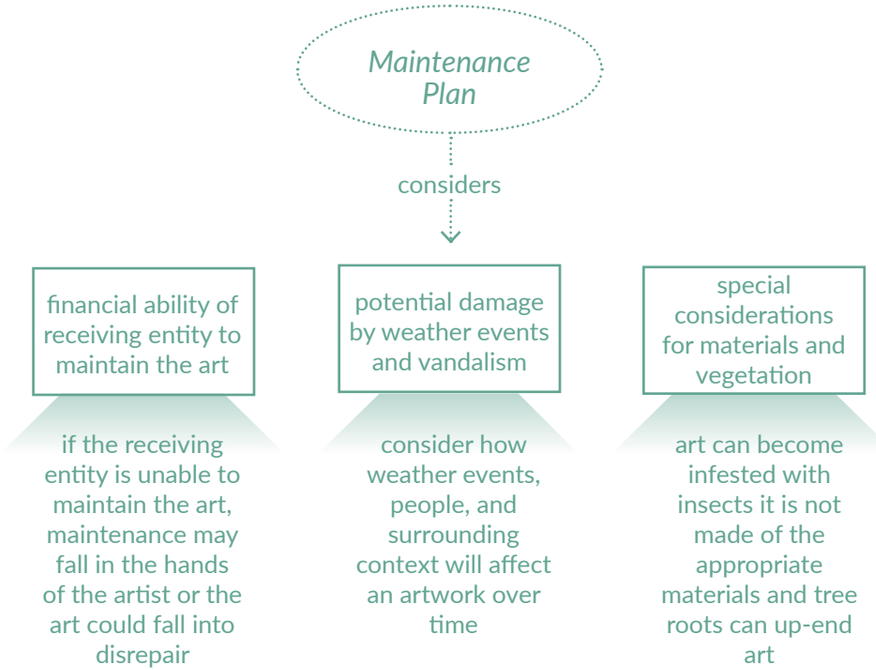


Figure 13. Maintenance Considerations for Public Art (Informed by Washington State Arts Commission 2014).

Safety

The artist should consider if the artwork can be climbed in any way, and whether to allow this. For tall artwork, the proper safety precautions need to be made to prevent injury. Any part of the sculpture that people may walk on should not be slick or slippery- especially in rain or snow conditions (ex: "polished or lightly textured metal and stone surfaces") (Washington State Arts Commission 2014, 8). In addition, materials that retain heat could potentially burn audiences. Artists should consider placing the sculpture in shade and using materials that do not pose a burn risk. Sharp points or edges should be eliminated or used sparingly to reduce safety risks. In addition, polished metal can cause glare and consequently pose a risk to passing motorists and pedestrians. Note: "all polished metal surfaces are required to be positioned in a manner that prevents heat transfer and glare that may pose a safety risk" (Washington State Arts Commission 2014).

Local Environmental Concerns and Vandalism

Vegetation planted adjacent to the artwork, and wildlife such as birds and squirrels, that finds its way into the artwork may damage it. If possible, artists should use materials that are not prone to insect infestations (i.e., stone or metal). Pest control might also be necessary. Artists should consider existing vegetation and how it will affect the artwork. For example, some trees weep sap and tree roots may uproot artwork if it is a permanent installation. Maintenance crews may also spray the artwork with damaging fertilizer and other chemicals if located too near vegetation (Washington State Arts Commission 2014).

If an artwork is located near a roadway, vandals may throw large rocks and other items at the artwork while driving by (Washington State Arts Commission 2014). Furthermore, "industrial and automotive pollution can create a dark layer of (difficult to remove) oily residue on the surface of materials" (Washington State Arts Commission 2014, 9).

Water and Condensation Management / Ground Level Placement

If water pools at the base of a public artwork, it may corrode the materials and shorten the lifespan of the piece. (Washington State Arts Commission 2014, 9). To avoid water pooling, on non-porous surfaces an artwork should be no less than 1" (one inch) off the ground. "Mow strips" must be installed around the sculpture if installed on a lawn. This way, mowers do not damage the artwork. If an artwork must be installed directly on the ground, or less than 4" (four inches) off the ground, consider a porous substrate (i.e., gravel), "at least 10" [(ten inches)] deep sub-grade" for drainage purposes (Washington State Arts Commission 2014, 9).

Types of Public Art for All People

Equitable Art is Multi-Sensory Art

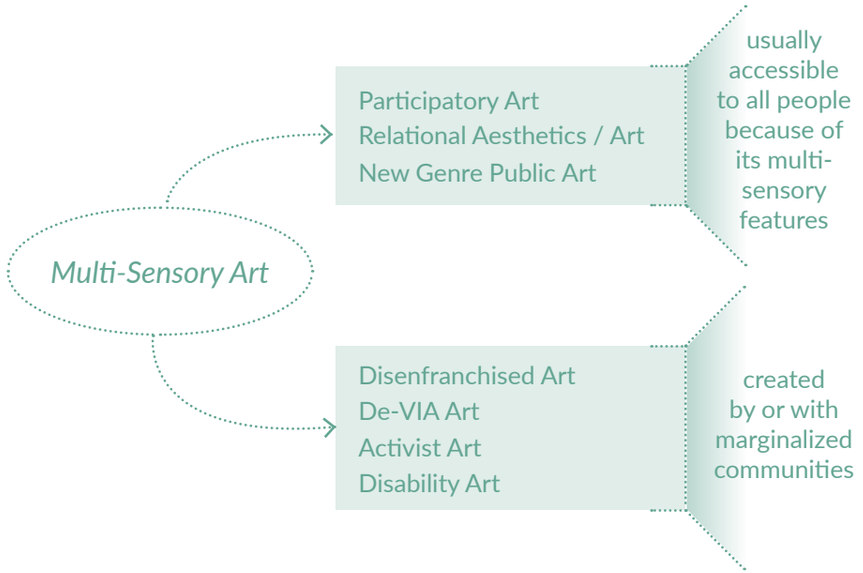


Figure 14. Artwork can be experienced by all people if it is multi-sensory.

Public artwork is ultimately for everyone, and everyone should, then, be able to experience it in the way that works best for them. Thus, a significant aspect of the design of public artwork should be about accessibility, equitability, and inclusion. "The idea is not that people who can do this go to the left and people can who do this go to the right, but rather that we all learn together and remain a community" (Joseph 2022).

Multi-sensory artwork is one of the most accessible types of public artwork because "there are as many ways to perceive as there are people," and limiting a work of art to be experienced only through sight significantly reduces the number of people who can experience it (Driscoll 2022; Cho 2021). Historical and institutional ideas, such as the idea of artwork as "pristine" and "untouchable", have led museums to enclose artwork behind glass cases (Kleege 2022). Multi-sensory artwork breaks from this tradition and encourages people to experience it in many different ways and with multiple senses.

Participatory Artwork, Relational Aesthetics / Artwork, and New Genre Public Artwork engage directly with audiences and are usually accessible to all people because of their multi-sensory features; however, these types of artworks are not always practiced by artists and designers who are a part of disenfranchised communities. Meanwhile, Disenfranchised Artwork, Deaf View/Image Artwork or De-VIA Artwork, Activist Artwork, and Disability Artwork were created by or with marginalized communities; these types of artworks have the intention of empowering disenfranchised voices and telling lesser-known narratives of Persons with Disabilities and others. **All of the above-listed types of artworks can be experienced by all people if they are multi-sensory, engaging two or more senses** (Fig. 14).

Multi-Sensory Art

Multi-sensory and interactive artwork "[activate] touch, sound, smell, taste, and the wisdom of the body" (Lupton and Lips 2018). Multi-sensory features, such as sound, smell, and touch, improve learning and add to the understanding of artwork by increasing the methods with which a body processes information (Cho 2021; Quero, Lee, and Cho 2021). As stated by Roz Driscoll, "there are as many ways to perceive as there are people" (2022); limiting a work of art to be experienced through sight only is simply not enough in the contemporary art world (Cho 2021; Lupton and Lips 2018; PAC 2018; Robinson 1998). "Art is arguably one of the most intriguing creations of humanity, and as such should be available to every person; accordingly, making visual art available to [all people] should be a priority. For [Persons with Disabilities], [artwork that is not multi-sensory] can feel alienating" (Cho 2021; PAC 2018).

Many studies have been conducted about increasing the equitability of artwork for all people through multi-sensory features, such as sound, color, and texture. Some examples include color-scent recognition, or the use of scents to convey colors to B/blind and Low Vision audiences (Cho 2021; Quero, Lee, and Cho 2021; Li et al. 2017; Kemp and Gilbert 1997). Certain colors, scents, and sounds have been proven to be associated. Examples include the scent of lily and white, or silence and the color black (Fig. 15) (Li et al. 2017; Cho 2021; Quero, Lee, and Cho 2021; Kemp and Gilbert 1997).

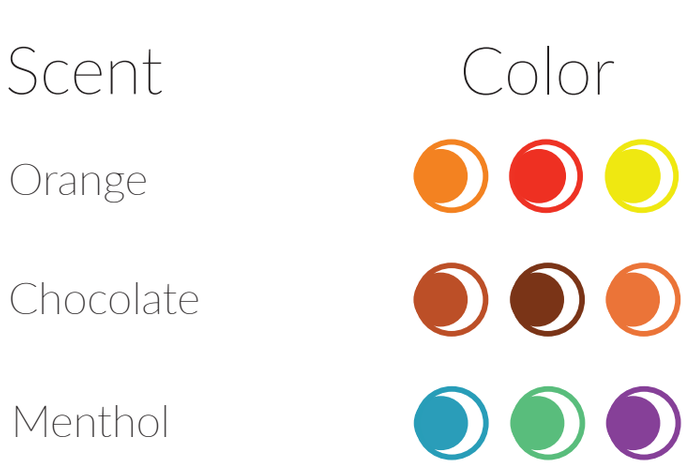


Figure 15. Scientists have found that some scents can be associated with certain colors (Adapted from Cho 2021).

Examples of artwork that artwork can be understood by associating colors with certain sounds include Soundview (Van de Doel 2003), Eyeborg (Else 2012), ColOr (Bologna et al. 2007), and many other technologies may be used to understand color through sound (Quero, Lee, and Cho 2021; Van de Doel 2003; Van de Doel et al. 2004; Else 2012; Bologna et al. 2007). Soundview lets a user select a specific color within an image using a stylus and tablet; the application then maps the "color hue, saturation, and brightness to a white noise sound" (Van de Doel 2003; Quero, Lee, and Cho 2021). Eyeborg is a "head-mounted webcam" that identifies color by hue and saturation, modulating sound based on color saturation (Else 2012). ColOr can be used to identify color in videos, sampling twenty-five pixels from each frame to determine hues (Bologna et al. 2007). The hues recognized by ColOR are then translated into different instruments and pitches of that instrument. For example, the flute represents the color green. A hue that is 0-24% is recognized by a C note, and so a green color with a hue of 0-24% would result in a flute playing a C pitch (Bologna et al. 2007). Research is needed to evaluate the most effective technology to represent color through sound. While the above examples refer to seeing a color, blind and low-vision users could also benefit from artwork that helps them identify or associate color with certain sounds.

Most notable, however, is the use of tactile elements, such as 3D or 2.5D textures or forms, to increase the equitable experience of artwork (Cho 2021; Quero, Lee, and Cho 2021). In some circumstances, such as at the Metropolitan Museum of Art in New York and at the Art Institute of Chicago, miniature replicas of artwork are 3D-printed for people to touch and experience (Hayhoe 2017; Ucar 2015). 2.5D printing, also known as a relief model, allows digital drawings to be printed on "swell" paper that communicates the texture and thickness of lines (Stephenson 2004).

Meanwhile, bas-relief painting is used by other artists to protrude specific shapes from a canvas or sculpture (Stephenson 2004). Artwork that incorporates braille and audio description also increases equitability. Consistently, multi-sensory artwork has been found to increase comprehension and equitability of artwork for all people (Cho 2021; Johnson 2018; Quero, Lee, and Cho 2021; Neves 2012).

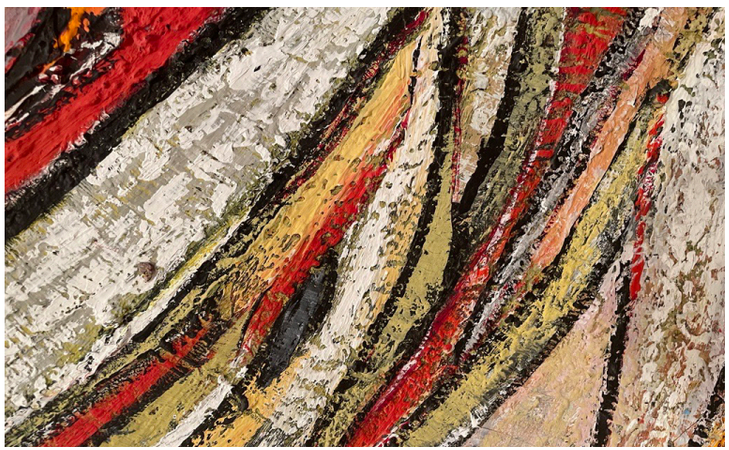


Figure 16. A textural painting at El Retiro Park in Madrid, Spain.



Figure 17. Braille increases the equitability of artwork (Prakkamakul 2021).



Figure 18. A textural planter creates smooth and rough textures that are interesting to touch.

Participatory Art

Participatory artwork is the creation of artwork with or by the community for which the artwork is intended to be experienced (Lockowandt 2013). In the case of Persons with Disabilities, participatory artwork is often created in collaboration with this group (Kallio-Tavin 2019; Atkinson n.d.). While some authors believes that participatory artwork can be used as a tool to pacify activist audiences into submission by making them feel heard and engaged (Francois Matarasso's 1997 Use or Ornament), most authors condemn this approach, stating that participatory artwork is a collaborative tool to build relationships and social inclusion (Bell 2017, 74; Kester 2004; Bishop 2012; Lockowandt 2013).



Figure 19. Participatory art with community members at the 'Lilac Lane Project' in Manhattan, KS (Gillespie 2021).

Relational Aesthetics / Art

Relational aesthetics, first defined by author Nicolas Bourriaud in 1998, is characterized by artwork that is meant to be experienced in public spaces instead of private institutions Duncan and Cooper 2020; Downey 2007; Artsy n.d.; Martin 2007; Tate n.d. (b)). While relational aesthetic artwork is often multi-sensory and interactive, it is not always so, which may limit the participatory audience of an artwork (Arsty n.d.). For example, some artists claim their work to be made within the relational aesthetics / artwork category, yet their artwork may lack multi-sensory elements and exclude some audiences with disabilities.

Relational aesthetics typically covers socio-political themes with the aim of broadening perspectives, uniting communities, and creating social change (Duncan and Cooper 2020; Downey 2007). This type of artwork is meant to engage audiences through chance encounters in public spaces and may even encourage interpersonal engagement of passersby through interactive features. Examples of relational aesthetics include "microtopias," or spaces within which audiences can form interpersonal connections due to the characteristics of a space, and engagements, where the audience becomes an active participant in the experience of the artwork (Duncan and Cooper 2020; Kohli 2021). For example, artist Felix Gonzalez-Torres's work, 'Untitled', engaged audiences' senses of sight and touch. "This work was meant to be an allegorical representation of Gonzalez-Torres's lover Ross Laycock who passed away due to AIDS-related complications" (Duncan and Cooper 2020). The artwork began as a 175-pound pile of wrapped candles, representative of Laycock's weight pre-illness. The audience of the work was encouraged to touch, and even take, the candles from the pile; the gradual dwindling of the pile represented Laycock's weight loss as the illness progressed. "Gonzalez-Torres stipulated that the future owner of the work had to occasionally replenish the pile, thereby granting symbolic eternal life to Laycock" (Duncan and Cooper 2020).

New Genre Art

Coined by American artist Suzanne Lacy in 1991, New Genre Public Artwork is based on engagement between audience and artwork (Tate n.d. (c); Lacy 1995; Cartiere 2003). This type of artwork often discusses issues of common concern and is experienced in public spaces. More specifically, Lacy wanted to create a type of artwork that "was not a sculpture situated in a park or a square [but rather experienced in a museum, or unusual spaces such as hostels or bridges]" (Tate n.d. (c)); this type of artwork is activist-oriented and aims to be more of an experience, such as a performance, as opposed to just a viewing of a sculptural or architectural element. Furthermore, this type of artwork uses traditional and non-traditional media, such as performance art or 'behavior art', to communicate with and engage diverse audiences, such as Persons with Disabilities (Cartiere 2003; Lacy 1995; Tate n.d. (c)). 'Behavior Art' is a term coined by artist Tania Bruguera, who works within the field of New Genre Art; Bruguera defines 'Behavior Art' as the act of 'doing' (Tate n.d. (c)). For example, Tania Bruguera's work, 'Tatlin's Whisper #5', involves two London Metropolitan Policemen on horseback corralling and splitting unsuspecting people on the Turbine Hall bridge into smaller groups. The work depended on not being immediately recognized as art, due to a lack of notice, description, or sign indicating a performance, and aimed at making the audience realize "how easily a safe space can become threatening when power announces itself" (Tate n.d. (d)). This work was part of a series by Bruguera on immigration and "what it means to be a citizen of the world" (Tate n.d. (c)).

New Genre Public Artwork is unique in that it encourages the artist to be an analyst, activist, and reporter of the artwork itself (Lacy, Roth, and May 2010). This type of artwork "view[s] the artist in a role outside of the more traditional creator of experience as represented by a visual object and instead places the artist in the role of 'the experiencing being'" (Cartiere 2003, 126). For example, Bruguera's work heavily thought of the experience of the person in the artwork, as opposed to the visual expression of the work; New Genre Public Artwork sees the artist placing an emotional experience over a visual experience.

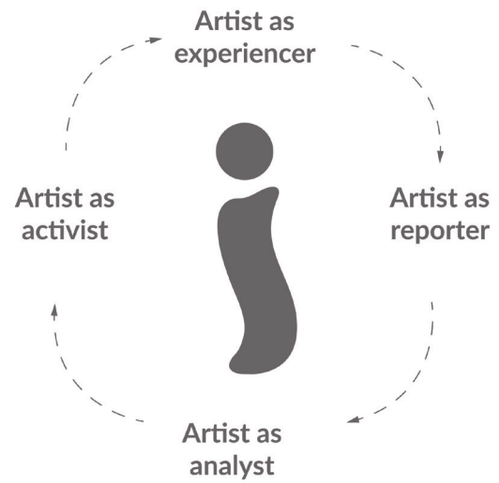


Figure 20. An artist has many roles in New Genre Art (Adapted from Cartiere 2003, 125).

Disenfranchised Art

Disenfranchised Artwork is "created by groups of people who are deprived of rights and privilege," whether that be Persons with Disabilities, racial minorities, people who identify with the LGBTQ+ community, or others (Deaf-Art n.d.; Ingalls 2006; Durr 1999). Disenfranchised Artwork may be divided into two categories: affirmation artwork and resistance artwork (Durr 1999). Many works are a combination of both affirmation and resistance artwork and could show the evolution of a disenfranchised community from metaphorical or literal "chains" to liberation (Deaf-Art n.d.).



Figure 21. 'Built and Maintained for Certain Bodies' highlights inaccessible spaces in a park setting, despite recent updates that tried to address these issues (Lo 2021).

An example of disenfranchised artwork is 'Built and Maintained for Certain Bodies' by Jillian Crochet; this artwork uses institutional language and graphic signage standards to communicate back to the institution with a sign next to inaccessible stairs (Fig. 21).

Affirmation artwork often celebrates and validates the experiences, culture, traditions, and/or possessions of the artist and the communities they belong to (Deaf-Art n.d.; Museum of Deaf History, Arts, & Culture n.d.). Meanwhile, resistance artwork outwardly protests the condition, oppression, or struggles of a person or community (Durr 1999). "This work tends to look at the dominant culture's role in "defining" the disenfranchised group's rights and identity" (Deaf-Art n.d.).

Note: While disenfranchised artwork may not always be multi-sensory, or equitably experienced by Persons with Disabilities, artists who are disabled and others are certainly creating artwork within this category that is accessible to all people.

Deaf View/Image Art or De-VIA Art

De-VIA artwork stands for "**(De)**af [and] Deaf-Blind Expression of Affirmation, Resistance, and Liberation," "**(V)**iew of how Deaf & Deaf-Blind experience the world," "**(I)**mages/motifs/symbols of the Deaf experience," and "**(A)**rt, activism, aesthetics, and authentic expressions of the Deaf Experience" (Museum of Deaf History, Arts, & Culture n.d.). In this way, De-VIA artwork is a type of Disenfranchised Artwork. The concept of De-VIA artwork was created by Betty G. Miller, who expressed her Deaf Experiences through her artwork (Deaf-Art n.d.; Sonnenstrahl 1996). In 1989, Miller held a 4-day workshop at Gallaudet University with the goal of developing a "visual and written manifesto" of the Deaf Art experience (Deaf-Art n.d.; Museum of Deaf History, Arts, & Culture n.d.; Durr 1999). From this, De-VIA artwork emerged.

Activist Art

Activist artwork is characterized by content and/or form that discusses socio-political issues (Tate n.d. (a)). In this way, Disenfranchised Artwork and Disability Artwork are forms of Activist Artwork. Activist artwork is often created by people and artists who see themselves as activists; often this type of artwork is created in public spaces in collaboration with communities. This type of artwork aims to empower and strengthen communities that are dis-empowered by society and/or the government (Tate n.d. (a); Rice, Dion, and Chandler 2021).

According to some sources, in the context of Persons with Disabilities, activist artwork can be equated with disability artwork (Rice et al. 2017). Artists with disabilities create artwork that represents themselves and often discusses the exclusion of Persons with Disabilities from spaces and experiences (Rice et al. 2017; Rice, Dion, and Chandler 2021). Activist artwork is a way for people to form new understandings and perspectives about their reality.



Figure 22. Painting the Black Lives Matter Murals in Kansas City, Missouri (Boehm 2020).

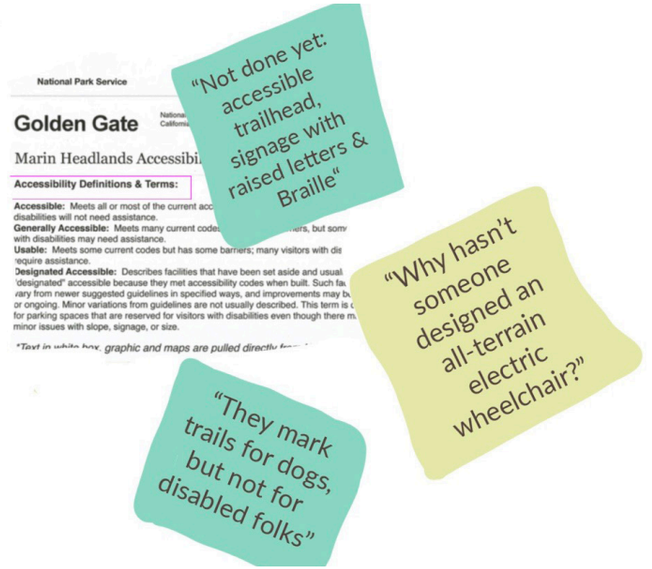


Figure 23. 'Built and Maintained for Certain Bodies' highlights inaccessible spaces in a park setting, despite recent updates that tried to address these issues. All quotes from Jillian Crochet. (Adapted from Crochet n.d.).

Disability Art

Disability artwork is not just about Persons with Disabilities creating artwork; it is also about shifting the narrative on disabilities and increasing the inclusivity and equitability of all spaces and experiences for all people (Barnes 2003). Disability artwork is a type of artwork created by Persons with Disabilities, often for Persons with Disabilities, and often discusses popular political and social issues affecting their communities (Barnes 2003; Vasey 1991). Disability artwork is more than the creation of something for aesthetic purposes; disability artwork is about creating change. One such issue is that all Persons with Disabilities should have access to artwork (Robinson 1998; Braverman 2013). Disability artwork hopes to bring this issue to light through topics discussed in the artwork, as well as through policy change directed by the artists that create this type of artwork (fig. 23) (Robinson 1998). Other themes of Disability Artwork include feeling invisible and excluded from society or spaces (Braverman 2013).

Disability, Art, and Space: Movements

Part of the shift in the societal view of disability has resulted from art; "Dada artists and designers began questioning the notion that art and design could bring any tangible, objective value to the world" (National Endowment for the Arts 2021, 13). Since then, the Modernism and Bauhaus Movements have questioned the relationship between design and humans; these movements concluded that design should benefit its users. In this way, the history of art and Universal Design for all people is intertwined. Ironically, however, art itself has historically been created for an idealized person; much art in public space can be only experienced through sight. However, other senses are often ignored.

To counteract this blatant exclusion, Disenfranchised Artwork, Disability Artwork, and the Disability Rights Movement and Disability Justice Movement were developed to provide Persons with Disabilities a voice and a platform to equitably experience and produce art (National Endowment for the Arts 2021). The Disability Rights Movement is intended to increase equitable experiences and spaces that include Persons with Disabilities (Disability & Philanthropy Forum 2022; Sandell and Dodd 2010). This movement is not characterized by a singular event; examples of activism date back to the 1800s (Meldon 2019). The Americans with Disabilities Act of 1990 and the ADA Amendments Act of 2008 are some of the Disability Rights Movement's greatest legal accomplishments to date (Meldon 2019). The Disability Justice Movement expands upon the Disability Rights Movement by "[centralizing] the needs and experiences of folks experiencing intersectional oppression" (Project LETS n.d.).

Trailblazing Artists and Organizations

Open dialogue in recent years about disability, through the lens of Persons with Disabilities, has broadened awareness of the needs of all people. Historically, the World Health Organization (WHO) used to singularly recognize the Medical Model of Disability, "[which viewed] disability as a feature of a person" (Manchester Disabled People's Access Group (MDPAG) n.d.; Berkley Disability Lab n.d.). However, the enactment of the Americans with Disabilities Act (ADA) in 1990 and the Universal Design Principles in 1997, resulted in the World Health Organization adopting the social model classification system and the reduction of "social barriers" for Persons with Disabilities (WHO 2022; Centers for Disease Control and Prevention (CDC) 2020). The social model "sees disability resulting from an interaction of people with the environment" and a "social construct" (People with Disability Australia (PWDA) 2021, 5; WHO 2002). In other words, disability is a product of an environment designed for an idealized person; disability is a restriction placed upon people who do not meet the "status quo" of society.

Most recently, the Human Rights Model of Disability and the UN Convention on the Rights of Persons with Disabilities (CRPD) have been introduced to further reduce the exclusion of Persons with Disabilities in society. The Human Rights Model of Disability views disability as "a natural part of human diversity that must be respected and supported in all its forms" (Disability Advocacy Resource Unit (DARU) 2022). "This model states that People with Disabilities have the same rights as everyone else and society," and disability "must not be used as an excuse to deny or restrict people's rights" (DARU 2022; PWDA 2021; Rice 2021). This model acknowledges the need for all people to be supported in the way that is best for them, even after the removal of social barriers so that all people can have equitable experiences (PWDA 2021). By viewing disability as a part of everyday life and everyday persons, it takes the stigmatization off of Persons with Disabilities and better incorporates these communities into society.

Meanwhile, the UN Convention on the Rights of Persons with Disabilities (CRPD), adopted in 2006, attempts to change attitudes surrounding disability by creating a set of rules or guidelines of basic human rights that all Persons with Disabilities are entitled to (United Nations n.d. (b)). While the Human Rights Model of Disability and the CRPD working in conjunction will likely reduce social barriers for Persons with Disabilities, it will take many people recognizing these concepts and incorporating them into everyday life choices to make a change.

Other leading-edge conversations have been by people and organizations in the world of arts and culture. In 2012, Emergency Exit Arts and Shape held "The Secret's OUT!: About

Deaf and disabled artists" in London; this event provided Deaf and artists with disabilities with a platform to discuss the barriers they have had to overcome to produce their work as well as showcase art of various mediums. Mediums ranged from "visual art to dance to the circus to the carnival to participatory work, with many artists breaking the confines of art form definition" (Braverman 2013, 2).

The unconventional approaches of several artists that are not disabled, such as Chris Burden, Karen Finlay, Stefan Gec, Alistair McLennan, and Mona Hatoum, were identified as significant influences on the Deaf and artists with Disabilities at the festival (Braverman 2013, 2). These artists pushed the boundaries of what could be considered art and their work focused significantly on the critique of the human experience and social problems in society. Welfare State International, an experimental theater group, also influenced the artists at the festival with their multi-sensory art (n.d).

In addition, groups such as Zinc, Mind the Gap, and Heart n Soul were mentioned for their contributions to Deaf and disabled artists- particularly in outdoor spaces (Braverman 2013). These groups aim to increase the participation of Persons with Disabilities in theater, education, and musical settings.

Who are Persons with Disabilities?

Persons with Disabilities (singular: Person with Disability or PwD) are affected by one or more of the following physical and/or cognitive disabilities: Low-Vision, B/blindness (no vision), D/deafness (no hearing), Hard of Hearing, and N/neurodiversity. People are considered disabled when they require assistance with daily activities, such as walking, learning, breathing, and communicating (Robinson 1998; National Center on Disability and Journalism (NCDJ) 2021; World Health Organization 2020; World Health Organization 2022). The World Health Organization defines disability as a result of a reaction between a person with a health condition and personal or environmental factors (inaccessible spaces, limited social support, etc.) (2022). This definition is more in line with a recent shift in the view of disability as a consequence of personal or environmental factors rather than a feature of a person.

Terminology

Identity-first language, such as "disabled people" or "an autistic boy" is typically not preferred by people in these communities (Botha, Hanlon, and Williams 2021; NCDJ 2021). However, in some cases, specifically in the Deaf community and among autistic people, identity-first language may be preferred (NCDJ 2021). This is because people in these communities may see their disability as a strong part of who they are, and do not wish to be separated from that identity (Haelle 2019; Special Olympics 2021). However, other research suggests that using identity-first language is "stigmatizing [and] dehumanizing" to persons that are autistic (Botha, Hanlon, and Williams 2021). According to the National Center on Disability and Journalism (NCDJ) and Persons with Disability Australia (PWDA), people should be asked about their preferred terminology (2021; 2021). If preferred terminology cannot be determined, "use person-first language" or refer to a person by their name (NCDJ 2021; PWDA 2021).

Person-first language (singular) or people-first language (plural) is the preferred terminology for Persons with Disabilities because it "avoids defining people in terms of their disability" (NCDJ 2021). Common terminology in person-first language are phrases such as "a person with a disability," a "person living with a disability," or Persons with Disabilities. The terminology "handicapped," and "special needs" should be avoided when discussing Persons with Disabilities (NCDJ 2021). See figure 24 for what to say and what not to say when referring to Persons with Disabilities.

What Not to Say	What to Say
People living with disability, the disabled	People/women/children with disability
Suffers from, victom of, afflicted by, crippled by, incapacitated by	Zhang has a chronic health condition
Paraplegic (which describes the person as their impairment)	Vanessa has paraplegia/quadriplegia
Confined to a wheelchair, wheelchair-bound*, wheelchair person	Aya uses a wheelchair or mobility device

***Wheelchairs are liberating to a person who can't walk. 'Bedbound' and 'housebound' are acceptable because they describe limitations.**

Figure 24. What to say and what not to say about or to Persons with Disabilities (Adapted from PWDA 2021).

Universal Design

Site Design as a Component of Accessible Artwork

Another component of accessible artwork is the space around the artwork. If people cannot physically access the space around the artwork, they cannot experience the artwork equitably. Considerations for equitable space include landmark wayfinding (posts, artwork, buildings) to help orient people, micro-retreats (smaller spaces within public space), accessible public toilets + sanitation, collective space for diverse groups, well-designed lighting (regularly spaced, to increase feelings of safety), visual cue signage (signs for instructions, maps, etc.), ramp infrastructure, bike safety, bike shares, bus stops with shelters and seating, public space amenities (drinking fountains, charging stations, seating), subdivisions of park/public space, and safe intersections with timed crossings, good lighting, and curb cuts (Roe and McCay 2021). Furthermore, slope, or the degree to which a landscape is flat or hilly, significantly affects accessibility. Universal Design and Human-Centered Design make specific considerations for the above-listed topics.

In 1985 Ronald Mace, a Person with Disability (PwD), coined the term Universal Design, which is a tool designers use to "communicate a design approach that could be utilized by a wide range of users" (Preiser and Smith 2010, 1.5). The Seven Principles of Universal Design were not developed until 1997 by the Center for Universal Design; since then, Universal Design has become a globally recognized term to promote equitable use of spaces and products by ALL people. The Seven Principles of Universal Design are as follows:

1. **Equitable use**
   People of all abilities can use a design

2. **Flexibility in use**
   The design accommodates a wide variety of interactions, abilities, and preferences

3. **Simple and intuitive use**
   The design is easy to understand, regardless of user ability or knowledge, skills, or concentration level

4. **Perceptible information**
   The design communicates necessary information to the user, regardless of sensory ability

5. **Tolerance for error**
   The design minimizes hazards of accidental use

6. **Low physical effort**
   Low physical effort is required to interact with or use the design

7. **Size and space for approach and use**
   Appropriate size and space are provided to use and interact with the design

(National Disability Authority n.d.; Center for Universal Design 2006; Preiser and Smith 2010, 1.5)

Though Universal Design exists as a framework for creating equitable spaces, minimal to no research exists about guidelines for creating and placing equitable public artwork in parks. Therefore, to make public artwork and the space surrounding it equitable, universal design approaches need to be identified and tailored to fit park settings and public artwork.

Why Equitable Public Art Matters

Another component of creating public artwork is understanding the audience; the artist or designer must understand who they are designing for (all people), and why this is important. As stated by Prime Access Consulting (PAC), an organization dedicated to increasing equitable experiences and spaces for all people, "[artwork and sites] following universal design principles can facilitate a powerful feeling of inspiration, awe, wonder, and excitement for all visitors, not just those who meet an idealized [type of person]. More importantly, following such best practices can help prevent many visitors from feeling excluded, unwelcome, or ignored – something that has been true for far too long" (2018). To fully understand the audience of an artwork, it is important to understand the impact of equitable art. That said, both artists and arts professionals have expressed concern that keeping access in mind during the creative process could impose limitations on the artist's creative autonomy. Most non-disabled artists said accessibility is a challenge that could be overcome with creative solutions, however (Sullivan and Mauldin 2020).

Impact

As of 2021, 15% of the world's population, over one billion people, had some level of disability (WHO 2023). Up to 190 million Persons with Disabilities are 15 years of age or older (WHO 2023). In the United States, one in four U.S. adults reported a disability, equaling about 26% of the total population (CDC 2023; Okoro et al. 2018). With the number of Persons with Disabilities expected to rise due to chronic health conditions and population aging, it is increasingly important to create equitable experiences for all people (WHO 2021; United Nations n.d. (a)). As stated by researcher Stella Robinson, "[Persons with Disabilities] are human beings and citizens, the same as everyone else in the country, and we are entitled to the same access [to public artwork]. Ultimately, society loses out every bit as much as Persons with Disabilities" (1998, 122-123).

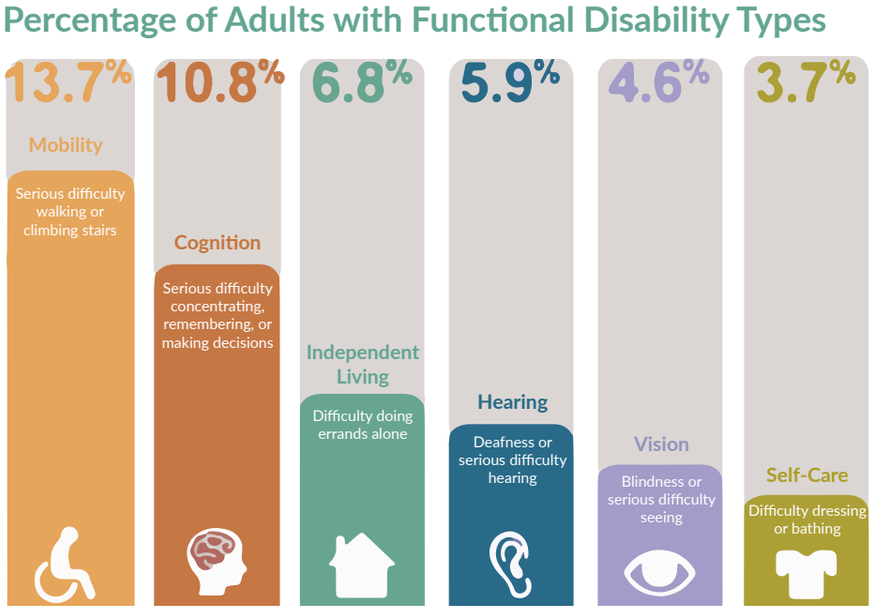


Figure 25. Mobility and cognition disabilities are the most common in the United States (Adapted from CDC 2023).

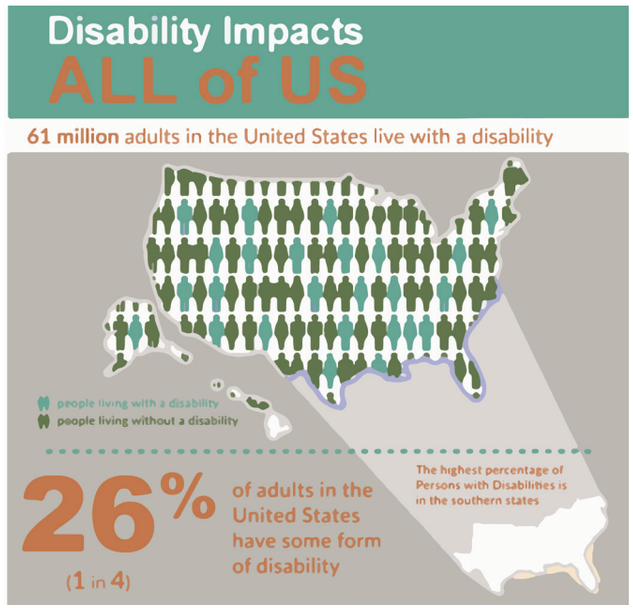


Figure 26. 1 in 4 people in the United States have a disability (Adapted from CDC 2023).

Artwork in Public Space

Historically, artwork originated from the need to express human thought and has been used to bring life to public spaces, spaces that all people (ideally) can interact with and experience. Without art, landscapes and plazas may be barren spaces that people move through but do not fully see themselves represented within (Mitrache 2012; Redstone 1975; Miles 1989).

Before artwork existed within public spaces, there was a feeling that "ordinary people [had] no claim to the spaces of daily public living... [people were] lepers in [their] own cities, scurrying across deserted plazas [that had no sense of identity]" (Miles 1989, 2-4). A goal of public art is to turn an anonymous space into a meaningful and relatable place (Miles 1989). However, post-modernist art was typically commemorative in nature and did not always reflect public sentiments.

Post-modernist art was typically used as a tool by people in power to impose a narrative on the public. Artwork of this time period, in the 19th Century and before, often "fail[ed] to arouse public feeling" and the ability to relate to the public. This artwork is now typically a visual interest, and a historical monument, but does not relate to modern sentiments in any way (Gopnik 2005). For example, consider a bronze or stone sculpture commemorating a historic figure (fig. 27).

As time progressed, plans such as the President's Directive of May 23, 1962 and the Percent-For-Art Program in 1983 (see pg. 22 for more information) began and encouraged the expression of common sentiments through public art (Bloomberg 2005). The President's Directive of May 23, 1962 encouraged architects and developers to dedicate "up to 1% of the construction cost of a new building project to the fine arts" and the implementation of artwork in public space (Redstone 1975, 5). While the President's Directive of May 23, 1962 encouraged the incorporation of public artwork in public spaces, budget constraints served as a limiting factor.

Today, public artwork in public space is largely used by municipalities to create identity, visual interest, learning opportunities, and a platform to discuss new ideas (if appropriate, of course) (University of Arkansas 2010; Madison Arts Commission n.d.). However, some municipalities list economic gain as a purpose for funding public art in public space; some municipalities have listed public art as a way to support fundraising efforts, attract business, positively impact tourism, "transform community eyesores into community assets," and increase developer investment in public space (McBride n.d.; University of Arkansas 2010). None of the municipal guides for public artwork that were reviewed as a part of this literature review listed equitability as a key consideration for public art. This is concerning for the future of equitable public art because, if municipalities are unaware of, or uninterested in, the strategies to make artwork equitable, they will likely not commission equitable public artwork. Wider public perception and attitudes toward disability and people with physical and mental impairments mean that accessibility continues to be a secondary concern or even an after-thought in much of the arts and culture sector (Schaffer 2020).

Artwork in Parks



Figure 27. Historic sculpture and water element in El Retiro Park, Madrid, Spain.

Public parks are public spaces within communities; they offer space to gather, protest, exercise, socialize, relax, reap the mental benefits of nature, and sometimes experience public artwork (Buckley and Brough 2017; Crush 2014; The Trust for Public

Land 2006). However, parks or green spaces were not always public and they did not always include artwork. In the 16th century, wealthy patrons commissioned private gardens at their residences. Depending on the owner's wealth, private gardens typically had three elements: a Bosco (densely wooded area), water, and a designed visual experience through perspective (fig. 27) (Crush 2014). Perspective was generally created with artwork and architectural elements. However, the incorporation of these three elements evolved over time.

In early 16th-century Italy, sculptures were purposefully excluded from private gardens so as not to "detract" from the experience of nature and the design of the space (Crush 2014). By the 18th century, perspective created with sculpture and architectural elements began to be incorporated into private gardens. In the 19th century, when public parks began emerging across the United States, public artwork was not part of the original plan (Hoffman 1988). However, as time progressed, artwork began to be seen as a necessary component in parks (Crush 2014). The transition from private to public, of both green space and art, signifies an important shift in the equitable experiences of all people. What once was enjoyed by a select few people in power, i.e., green space and art, has become accessible to most people in the public realm.

Artwork in Franklin Park

This project focuses on public artwork in parks, specifically in Franklin Park in Boston, MA, and thus requires consideration of the features that ensure a park may be equitably experienced by all people. Franklin Park was designed in the late 1800s by Frederick Law Olmsted, referred to as the Father of Landscape Architecture in the United States (American Society of Landscape Architecture 2012). Franklin Park is a part of a system of public parks and green spaces in Boston, MA, referred to as the Emerald Necklace. Franklin Park would rank among Olmsted's greatest achievements (Hoffman 1988, 339). Franklin Park, the largest park in the Emerald Necklace, offers respite from the city into 527 acres of woodland and meadow (Beveridge 2021). Ironically, Olmsted is infamous for being against public artwork in parks; he viewed public artwork and built structures as "clutter" and unnecessary "decoration" (Hoffman 1988; Scheper

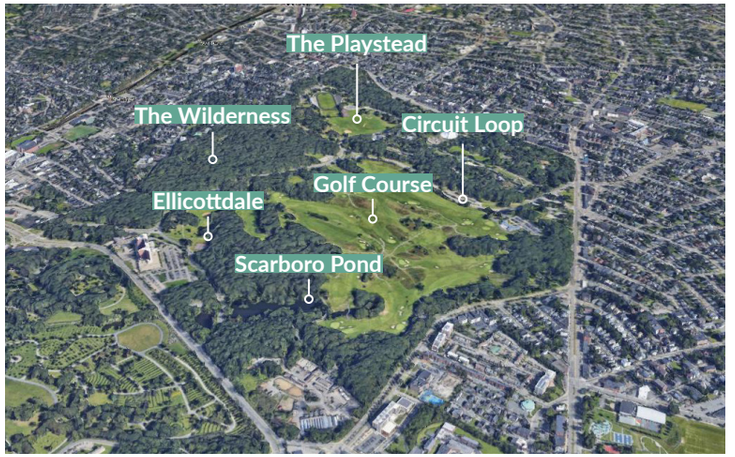


Figure 28. Franklin Park in Boston, MA is loved by adjacent communities (Google Earth Images 2023).

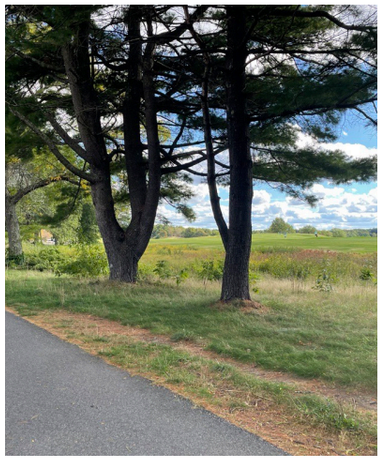


Figure 29. Walking along Circuit Loop.

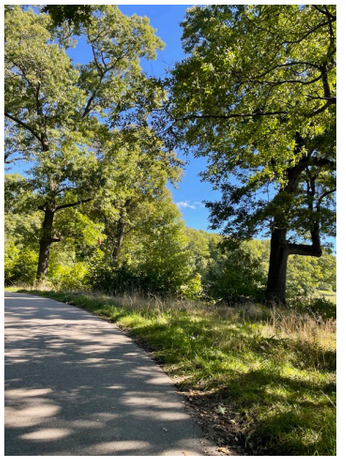


Figure 30. Hilly paths in Ellicottdale.

1989). Olmsted was so against public artwork in the landscape, he "broke with the tradition of landscape design that utilized architectural features as a center of visual interest" (Hoffman 1988, 345). Olmsted believed, instead, that "only rolling lawns, clusters of trees, and dense borders of shrubbery fashioned in the tradition of English landscape gardeners Lancelot "Capability" Brown, Humphrey Repton, and others could bring about moral and psychic regeneration" (Hoffman 1988, 342; Eisenman 2013).

Within Franklin Park is an area called the Playstead, which is a large gathering lawn with a stadium, football fields, soccer fields, and walking paths (fig. 32). The Playstead in Franklin Park is characterized by boulder outcroppings, terraced to overlook this section of the park, large playing fields, and the Overlook Shelter on the terrace. The idea behind the Overlook Shelter was to "camouflage" itself into the park, accomplished primarily through an absence of architectural decoration (Beveridge 2021, 25). In addition, the colors of the shelter were "quiet and gray in tone like a huge rock, with gentle convex curves" (Frederick Law Olmsted 1896). In this way, Olmsted avoids architectural "decoration" by blending any built structures into the landscape.

The Playstead hosts the most social events in Franklin Park and is located directly adjacent to ten (10) accessible parking spots, thus the Playstead is the most accessible space to all people; no other locations in Franklin Park have as many events or accessible parking spaces as the Playstead (fig. 31). One such event is the BAMS Festival, or the Boston Arts, Music, and Soul Festival, which occurs annually in June (Bamsfest n.d.). In addition, the Children's Summer Festival takes place in August, the Boston Symphony performs annually, and multiple concerts occur at the Elma Lewis Playhouse on the Playstead Field (Bamsfest n.d.; Boston Symphony Orchestra n.d.; City of Boston 2022 (b); Emerald Necklace Conservancy n.d.; New England Foundation for the Arts 2015).

Over the years, temporary public artwork installations have inhabited Franklin Park; one such installation was the Franklin Park Art Grove. The Art Grove was an initiative that occurred in Franklin Park's Wilderness and Playstead lawn, providing a space for local artists to express the identity of the neighborhoods around the park. Mediums for artwork included: "puppetry, performance art, contemporary movement, hip-hop dance, rapping, DJs, sculptural installations, participatory smell data gathering to design a Franklin Park perfume, and a walk-in camera obscura" (Lewenberg 2015).



Figure 31. There are many accessible parking spots adjacent to the Playstead.



Figure 32. A popular sports field at the Playstead.

One example of an installation in the Franklin Park Art Grove, designed by artists Barbara Zeles and Kathleen Driscoll, emphasizes the spirit of play as they danced around trees in the wilderness, creating a network of yarn (fig. 33) (Lewenberg 2015).

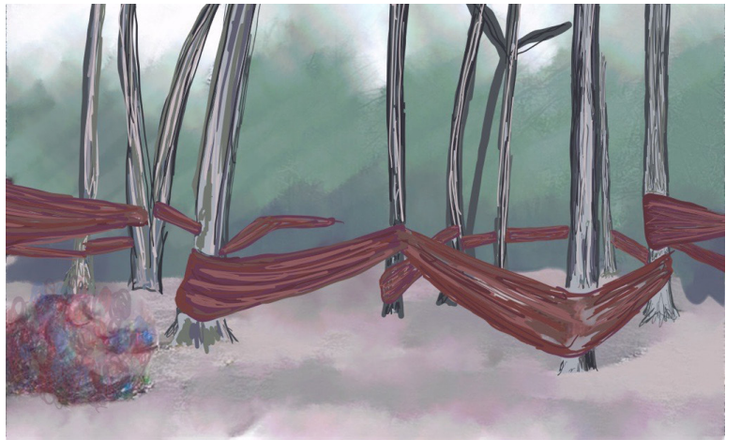


Figure 33. The Spirit of Play in the Franklin Park Art Grove featured fabrics wrapped around trees by dancing artists (Adapted from Cook 2015).

As stated by Carolyn Lewenberg, a member of the New England Foundation for the Arts, "one of the main goals of Franklin Park Art Grove was to demonstrate the connection between [the neighborhoods bordering Franklin Park] by bringing people together in the park" (2015). Lewenberg goes on to state that the neighborhoods bordering the park, Roxbury, Dorchester, Mattapan, and Jamaica Plain, are "diverse communities with rich cultural traditions that have historically been marginalized by race, ethnicity, and social class" (2015).

According to a survey of Franklin Park users, most are between the ages of 19-39 (42%) and 40-59 (37%). These visitors are primarily Black and/or African American (46%), followed by white (32%), and Hispanic or Latino (22%) (Fig. 34) (City of Boston 2020). In addition, there are high numbers of Persons with Disabilities to the north and east of Franklin Park (Fig. 35) (City of Boston 2022 (a)).

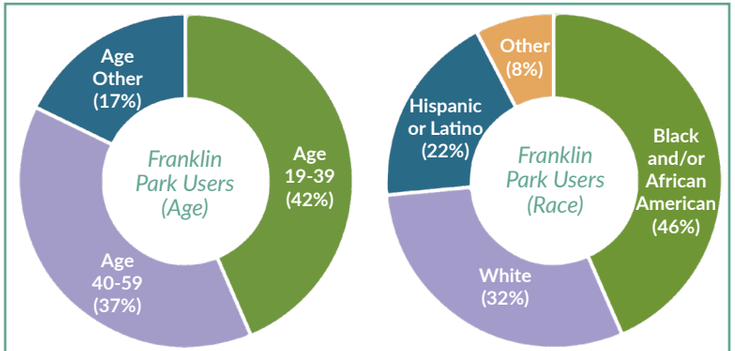


Figure 34. According to a survey of Franklin Park users, the most park users are Black and/or African American and between the ages of 19-39 (Informed by City of Boston 2020).



Figure 35. Many Persons with Disabilities in Boston, MA live adjacent to Franklin Park. The purple indicates where the "concentration of vulnerable populations falls in the top quartile (25 percent)" (Climate Ready Boston Map n.d.) (Figure adapted from Climate Ready Boston Map Explorer n.d.).

With the audience considered, many of these installations were not spatially accessible to all people; they were in difficult-to-navigate, hilly portions of Franklin Park. Despite the initiative to tell local stories through artwork in Franklin Park, many of these installations mention little to no discussion about inclusivity for ALL people, including Persons with Disabilities. While studies have been conducted about making parks universally accessible for all people, little knowledge is known about the art and site design requirements to make artwork equitable for all people to experience in park settings. An artwork installation should consider not only the physical artwork itself but also the site around it; to make an artwork and a site equitable for all people, artists and designers can employ Universal Design Principles and the guidelines presented in this report (see Chapter 5).

3

Methods

Methodology Framework

Approach

A mixed-methods approach was used to determine design considerations for public artwork to ensure that Persons with Disabilities can equitably experience public artwork in a public space. This included a site analysis of selected areas within Franklin Park, semi-structured interviews with artists knowledgeable about multi-sensory public artwork, semi-structured interviews with designers knowledgeable about universally-designed public spaces, precedent analysis of multi-sensory public artwork, precedent analysis of universally-designed spaces, and memoing to document the final design (projective site design and public artwork) that demonstrates the application of the guidelines developed in this project.

The goals of this mixed-methods approach were to understand:

- The intentions of equitable public artwork and universally-designed sites. Were they designed with specific communities with disabilities in mind?
- The limitations and opportunities when creating and siting equitable public artwork in public spaces
- The significance of equitable public artwork and universally-designed sites and why they matter
- The site design needs of Persons with Disabilities in order to have an equitable experience of public spaces
- The artistic design needs of Persons with Disabilities in order to have an equitable experience of public artwork
- How to condense findings into guidelines for artists and designers to follow when creating and siting equitable public artwork in public spaces
- How to design a public artwork and public space by following the guidelines created as a part of this project

Research Question

What design considerations are necessary to ensure all people can equitably experience public artwork?

Secondary Questions

1. Why does equitable public artwork matter?
2. How can public artwork engage a variety of sensory needs and experiences?
3. How can public artwork in public space be designed to equitably include all people?
4. Why do equitable public spaces matter?
5. How can a site around a public artwork be designed to equitably include all people?
6. What are the limitations and opportunities to creating equitable public artwork and sites in public space?

Project Design | Art (that) Works

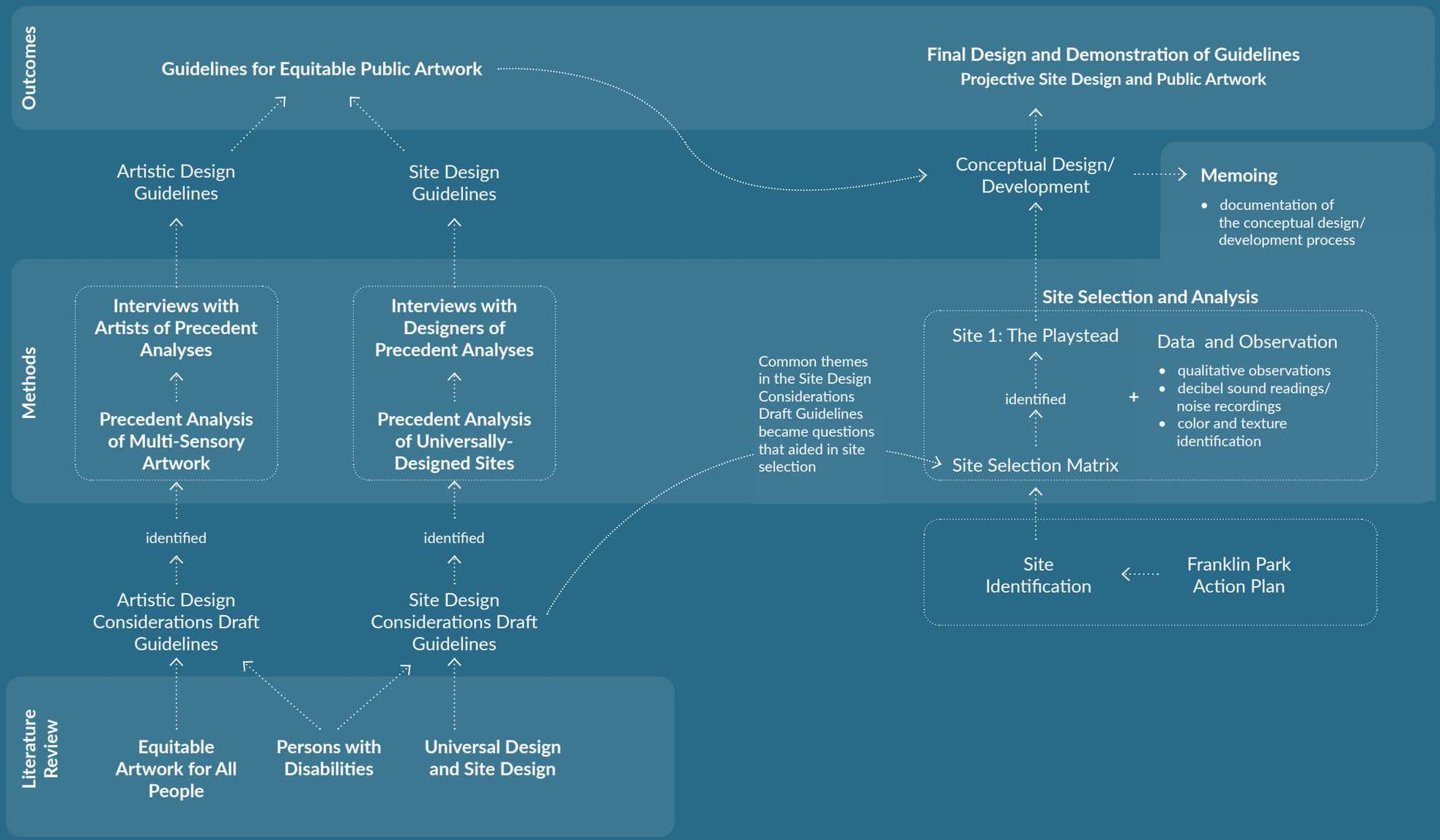


Figure 36. Project design diagram showing relationships between literature review, methods/findings and outcomes.

3.1 Site Analysis

Site Design Considerations Draft Guidelines
Literature Review



Site Selection Matrix
Part of Site Analysis



Site Analysis
Method

3.2 Semi-Structured Interviews

Semi-Structured Interviews
Method



Precedent Analysis
Method

Design Guidelines
Outcome

Final Design + Demonstration of the Guidelines
Outcome

3.3 Precedent Analysis

Precedent Analysis
Method



Design Guidelines
Outcome

Final Design + Demonstration of the Guidelines
Outcome

3.4 Memoing

Memoing
Method

documented

Final Design + Demonstration of the Guidelines
Outcome

Methods

3.1 Site Analysis

3.2 Semi-Structured Interviews

3.3 Precedent Analysis

3.4 Memoing

3.1
Methods
Site Analysis

Site Analysis

Purpose

Site analysis was chosen as a method to understand the current conditions of Franklin Park, what is proposed in the park by the Franklin Park Action Plan, and to identify the best site for projective artwork and site design. Sites were evaluated for spatial equitability- meaning how accessible each site is to Persons with Disabilities. In this report, site analysis considers noise levels(dB), the proximity of potential sites to accessible parking, the width and form of adjacent trails (straight or curvilinear), degrees of enclosure (are there 360-degree views?), presence of adjacent and active areas, frequency of use of adjacent spaces, current site topography, consistency of light posts through the site, existing seating, proposed conditions by the Franklin Park Action Plan, and qualitative observations of how each site felt (safety, wind, noise, etc.).

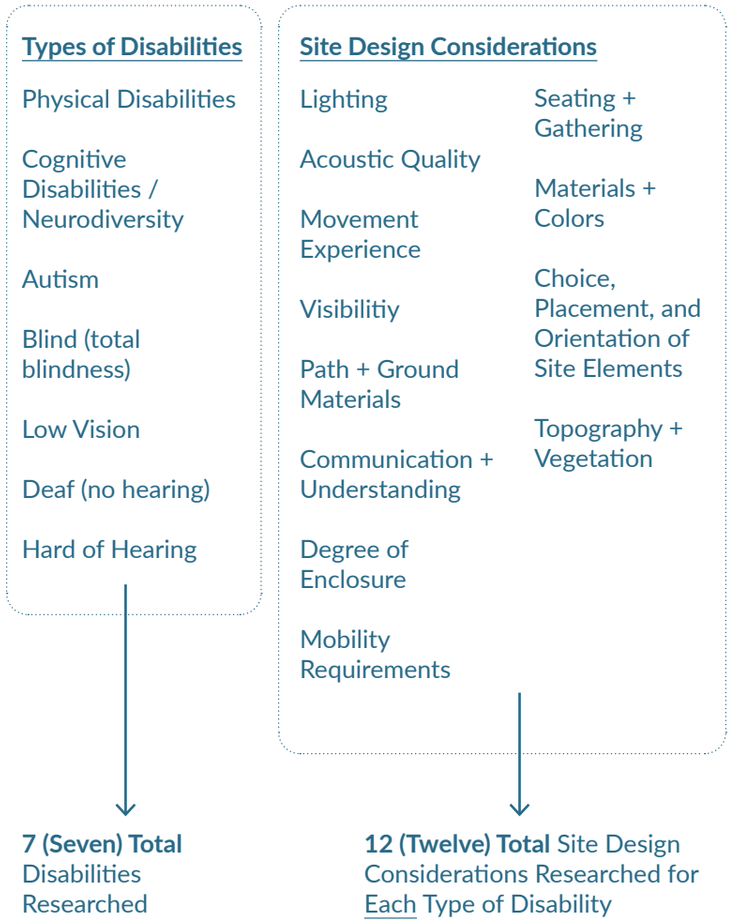
Procedure

Step One: The Site Design Considerations Draft Guidelines

Prior to conducting site analysis, Site Design Considerations Draft Guidelines were created to identify the site design needs of Persons with Disabilities in public space. Disabilities researched were based on CDC findings that indicate the most common types of disabilities are mobility (physical disabilities), cognition (intellectual disabilities and/or N/neurodiversity), hearing (D/deaf and Hard of Hearing), vision (B/blind and Low Vision), independent living, and self-care (2018). Research was not conducted for independent living and self care disabilities because these disabilities are more related to care and less related to site design needs in public space. Research was conducted for a specific community, autism, within the category of N/neurodiversity due to its commonality and the amount of existing design research for this user group (CDC 2022). As of 2018, "1 in 44 8-year-old children were reported to have autism spectrum disorder" (CDC 2022). If time permitted, research would have been conducted about the needs of more communities with disabilities.

Through the process of creating the Site Design Considerations Draft Guidelines, literature was selected that informed about the site design needs of the above listed communities with disabilities. For example, "site design needs of persons who are blind" was researched and the related articles were reviewed to identify specific information from a variety of categories. Categories of information were developed through recurring themes in the literature reviewed. For instance, if multiple literature sources listed "lighting" when discussing the needs of a particular community with disabilities, then "lighting" was added as a category. Below is an overview of the categories and communities with disabilities researched.

The Site Design Considerations Draft Guidelines: An Overview



Below is a visual graphic of the Site Design Considerations Draft Guidelines (fig. 37).



Figure 37. The Site Design Considerations Draft Guidelines identify the site design needs of 7 (seven) specific types of communities with disabilities.

Types of Disabilities

1 Physical Disability

2 Autistic

3 Cognitive Disability / Neurodiverse

4 Low Vision (some vision)

5 Blind (no vision)

6 Hard of Hearing (some hearing)

7 Deaf (no hearing)

Site Design Considerations

1 Lighting

2 Acoustic Quality

3 Movement Experience

4 Visibility

5 Path + Space Materials

6 Communication + Understanding

7 Degree of Enclosure

8 Mobility Requirements

9 Seating + Gathering

10 Materials + Colors

11 Choice, Placement, and Orientation of Site Elements

12 Topography + Vegetation

[1] *See pages 350-554 for Design Guidelines and sources on the artistic and site design needs of People with Disabilities.*

Step Two: Transcribing the Site Design Considerations Draft Guidelines into a Tool for Site Analysis, the Site Selection Matrix

After creating the Site Design Considerations Draft Guidelines, common findings for researched communities with disabilities were compiled into a set of 13 (thirteen) questions. For example, findings indicate that multiple types of communities with disabilities appreciate non-reflective materials, flat sites, and a variety of seating choices. **Listed below are the thirteen questions that aided in site analysis:**

1. Is there minimal visual obstruction and are there 360-degree views in the space?

Answered with Google Earth Pro and Confirmed by Onsite Observation.

2. Is the site located alongside a parking lot or parallel parking for ease of access? How far (in miles/feet) is it from parking?

Answered by measuring distances with Google Earth Pro.

3. Is the site located off of a 10' trail and/or a primary trail? (Ease of access, signing, space to rest)

Answered with Onsite Observation.

4. Are the paths along the space straight AND curvilinear?

Answered with Onsite Observation.

5. Is there a degree of enclosure in the space off the trail? (Tree coverage)

Answered with Google Earth Pro and Confirmed with Onsite Observation.

6. Are other programmatic elements, such as play fields or gathering spaces, located adjacent to the space?

Answered with Google Earth Pro and Confirmed with Onsite Observation.

7. Are the adjacent spaces frequently used, or have a proposed program that will encourage frequent use?

Answered with the Franklin Park Action Plan and google search research.

8. Is the Franklin Park Action Plan clear as to what is happening in the space?

Answered with the Franklin Park Action Plan.

9. Is consistent lighting located adjacent to the space to avoid light pooling or dark spots on paths? (Light posts)

Answered with Google Earth Pro and Confirmed with Onsite Observation.

10. Is the slope less than 2% to meet ADA ramping requirements and prevent tipping? If not, is there sufficient space to add a ramp?

Answered with Topography CAD file and Google Earth Pro.

11. Is there existing seating within the selected site? Will the seating remain in the action plan or is new seating proposed?

Answered with Google Earth Pro and Confirmed with Onsite Observation.

12. Record the dB level for one minute at each site. What is the dB level? (Ideal level is 60 dB or lower)

Answered with the "Decibel Meter" app, used on an Iphone.

13. How did it feel on the site? Did it feel safe, why so? Was there wind? What other activities were happening?

Answered with qualitative onsite observation

To identify the best locations for a projective artwork and site design within Franklin Park, the Franklin Park Action Plan was referenced. Though the action plan is just that, a plan, the author of this report acted as if it was identifying the future conditions of Franklin Park.

A particular finding indicated Persons with Disabilities should travel no more than .25 miles from an entrance to a destination (Prieser and Smith 2010). Since research conducted by the City of Boston found that the majority of Franklin Park users arrive to the park via car, it made sense to locate a projective design within .25 miles of a parking lot within Franklin Park (2020). To determine specific locations within Franklin Park for a projective design, future parking lots identified in the Franklin Park Action Plan were referenced. From there, the site selection matrix was created.

Along the top of the Site Selection Matrix are the five sites that were identified adjacent to proposed parking lots in Franklin Park. The left side of the matrix contains the thirteen questions discussed on the previous pages (see pages 73-74).

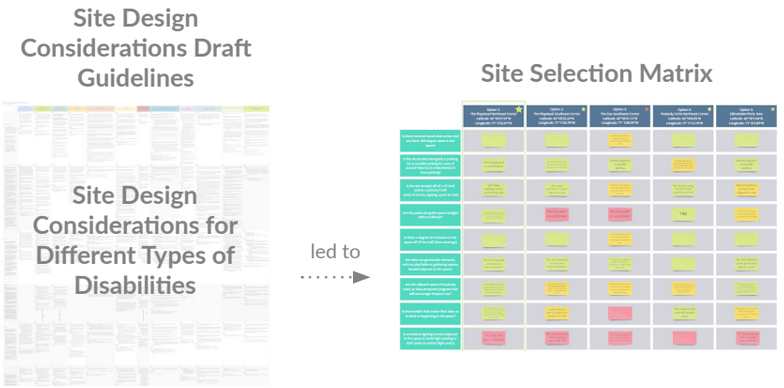


Figure 38. The Site Design Considerations Draft Guidelines and the Franklin Park Action Plan informed a Site Selection Matrix.

Step Three: Applying the Site Selection Matrix- How Sites were Analyzed

Prior to conducting site analysis, the Site Selection Matrix was filled out using Google Earth Street View. During site analysis, each question in the Site Selection Matrix was re-visited and previous findings were substantiated or revised. If a site met requirements, it was given a green sticky note. If a site met partial requirements, it was given a yellow sticky note. If a site did not meet requirements, it was given a pink sticky note. The site with the most green sticky notes was identified as the best location for projective design.

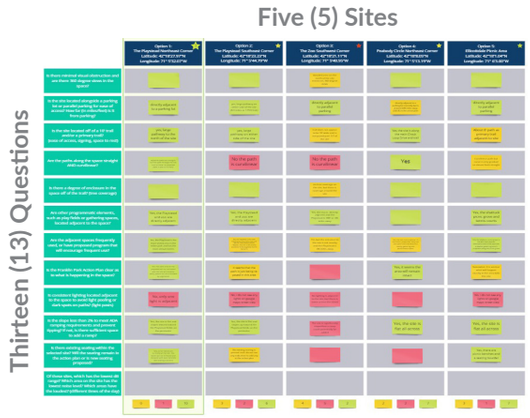


Figure 39. The Site Selection Matrix is a tool used to identify the most ideal site for projective design.

- Green- the site meets design requirements
- Yellow- the site meets partial design requirements
- Pink- the site does not meet design requirements

Site analysis also consisted of photographs, sound recordings with the “voice memo” iPhone app, the gathering of textural samples on the site (photographs and the physical collection of items), decibel noise recordings with the “Decibel Meter” app, colors identified through the “What Color?” app, and qualitative observations taken while in Franklin Park (did the site feel safe, was it windy, was it too hot or too cold, etc.). This additional information was compiled into a graphic organizer to store findings (fig. 40).

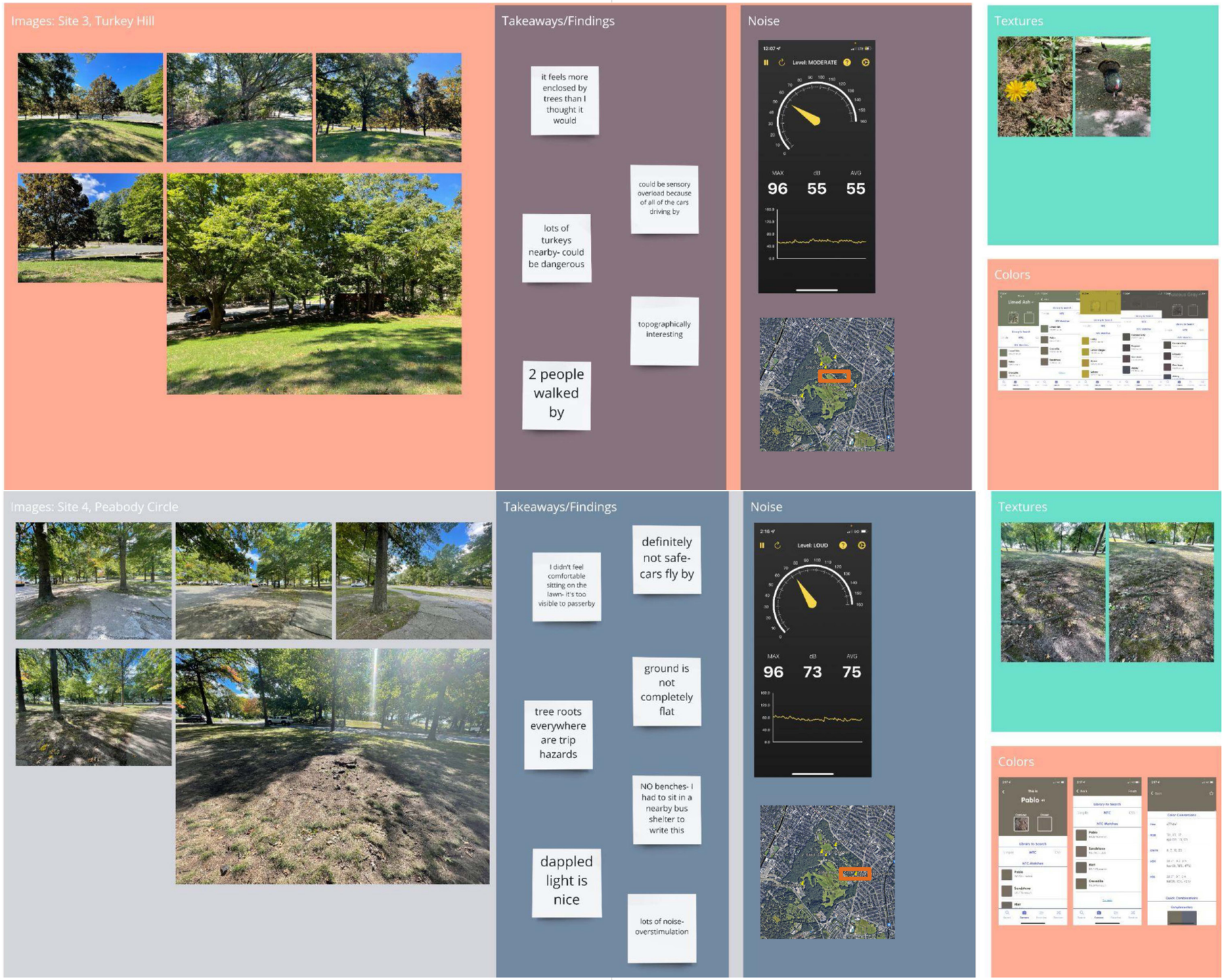


Figure 40. Site analysis findings compiled into a graphic organizer.

3.2 Methods

Interviews

Semi-Structured Interviews | Artists + Site Designers

Purpose

Semi-structured interview findings informed precedent analysis, design guidelines for equitable public artwork, and projective design. Furthermore, snowball sampling led to the discovery of additional artists and precedents to learn from.

Semi-Structured Artist Interviews

Semi-structured interviews were conducted with artists (see pages 136-172) about their public artwork that Persons with Disabilities can equitably experience.

Artist interviews were chosen as a method to gain a better understanding of:

1. The creative process, from concept and design through fabrication and installation, of equitable artwork that includes Persons with Disabilities
2. The design considerations for equitable artwork that experientially includes all people (ex: materiality, lighting, color, sound, scale, site placement, pattern, rhythm, and proportion)
3. How the five senses are engaged by equitable artwork that experientially includes all people
4. How artists can use or rely on specialists and the intended audience of artwork to enhance the equitability of an artwork
5. The opportunities and challenges that exist within the interviewee's field of work, when it comes to creating public artwork that all people can equitably experience
6. What further research is needed to make equitable public artwork that includes all people
7. Why equitable public artwork matters

Questions asked were categorized into the following categories:

(1) The Intention of Equitable Artwork
(2) Strategies for Equitable Artwork
(3) Creative Process and Fabrication
(4) The Significance of Equitable Artwork/Why Equitable Public Artwork Matters

Semi-Structured Interviews | Artist Questions

Artist questions were tailored to each participant, but consisted of the following:

1. The Intention of Equitable Public Art

1a. When thinking about the potential audience for your artwork, did you take into consideration the needs of Persons with Disabilities? Please explain.

Anticipated Findings
Was the artwork designed with equitability at the forefront of the artist's mind, or was it an afterthought? How did the artist approach designing for all people?

2. Strategies for Equitable Public Art

2a. What strategies did you use to make your artwork accessible to all people? What senses were engaged and how?

Anticipated Findings
How did the artist approach designing for all people? Did they intentionally make a multi-sensory artwork and how so?

2b. To make the experience of your artwork more equitable and inclusive, did you make any special considerations for: materials, color, lighting, sound, and site placement?

Anticipated Findings
What specific considerations did the artist/designer make for the following categories (site design considerations matrix categories)?

3. Creative Process and Fabrication

3a. Can you describe your creative process for your artwork, from concept through fabrication and installation?

Anticipated Findings
How did the artist approach designing for all people? What was their creative process like and how can this help me as an artist

3b. As a part of that creative process, did you engage with the intended audience of your artwork in any way? Please explain.

Anticipated Findings
Did audience/community engagement help improve the equitability of the artwork? How so?

Continued

3c. Was research a part of your creative process? If yes, how so?

Anticipated Findings
How do artists/designers incorporate research into their practice and how does this improve their work?

3d. Did you work with special consultants to further the design and/or construction of your artwork? How so?

Anticipated Findings
How do artists/designers work with special consultants and how does this improve their work?

4. Why Equitable Public Art Matters

4a. What opportunities and challenges exist within your field, when it comes to making public artwork and spaces equitable and inclusive for all people? How can this type of work be advanced?

Anticipated Findings
Why does public art that experientially includes all people matter? Why do equitable public spaces matter? Why is more public art not multi-sensory and equitable for all people?

4b. Do you think other disciplines, such as architects, landscape architects, engineers, sociologists, and others should be involved in the creation of equitable and inclusive public artwork? Please explain.

Anticipated Findings
Why does involvement of other disciplines matter when creating equitable public artwork?

Procedures | Artist Interviews

Interview Procedures and Participant Identification

Interviews were conducted via Zoom during the fall semester of 2022 and the spring semester of 2023. Interview subjects were selected based on literature review and snowball sampling to reach local subject experts on the topics of equitable public artwork that experientially includes all people. Interviews were semi-structured, allowing for follow-up questions, and lasted between 30-60 minutes.

Artists Interviewed

1. **Wendy Evans Joseph**, architect and co-founder of architecture and art firm Studio Joseph, on Sensory Journey, a public art installation

2. **Georgina Kleege**, educator at UC Berkeley, on their role and considerations made for Persons with Disabilities as exhibit curator for 'Please Touch the Art'

3. **Rosalyn Driscoll**, artist, on their artwork in 'Please Touch the Art'

4. **Participant A**, artist, interviewed about their equitable artwork

5. **Jillian Crochet**, artist, interviewed about their art 'Built and Maintained for Certain Bodies'

6. **Carmen Papalia**, artist and activist, interviewed about their thoughts on accessibility, equitable artwork, and their Open Access program

7. **Tom Kortbeek**, artist and co-founder of art firm Fillip Studios, interviewed about their multi-sensory and equitable artwork 'Bio Orchestra' and 'Tactile Orchestra'

8. **Aaron McPeake**, artist, interviewed about their multi-sensory and equitable artwork 'Sensing Naples'

9. **Sonya Gimon**, landscape architect and member of WIP Collaborative, interviewed about their multi-sensory artwork

Interview Question Selection by Interviewee

Question Selection Matrix

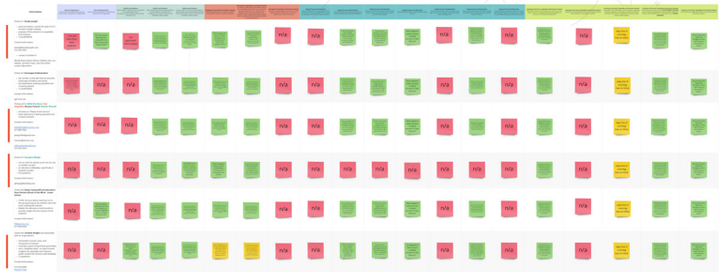


Figure 41. Questions were determined for each interviewee based on applicability and questions were asked (or not) based on the total time allocated for each interview.

Artist interview questions are listed along the top of the above matrix (fig. 41), with the interviewees along the side.

The colors in this matrix are as follows:

- Pink: Do not ask the interviewee this question
- Yellow: Maybe ask the interviewee this question if time permits
- Green: Ask the interviewee this question

Semi-Structured Site Designer Interviews

Semi-structured interviews were conducted with site designers (see pages 173-190) about their universally-designed sites that Persons with Disabilities can equitably experience.

Site designer interviews were chosen as a method to gain a better understanding of:

1. How the site designer considered the needs of specific communities with disabilities
2. The design considerations for universally-designed sites that experientially include all people (ex: materiality, lighting, color, sound, scale, site placement, vegetation)
3. What opportunities and challenges exist when designing spaces for all people
4. How site designers can use or rely on specialists, community groups, and future site users to enhance the equitability of public spaces
5. Why equitable public space matters

Questions asked were categorized into the following categories:

(1) The Intention of Equitable Public Spaces

(2) Strategies for Equitable Public Space

(3) The Significance of Equitable Public Space/ Why Equitable Public Space Matters

Semi-Structured Interviews | Site Designer Questions

Questions to interviewed site designers consisted of the following:

1. The Intention of Equitable Public Spaces

1a. When thinking about the potential user groups for the site, did you take into consideration the needs of Persons with Disabilities? Please explain.

Anticipated Findings
Was the space designed with equitability at the forefront of the designer's mind, or was it an afterthought? How did the designer approach designing for all people?

2. Strategies for Equitable Public Space

2a. To make the experience of the site more equitable and inclusive, what considerations did you make for:

i. Lighting
- How is artificial lighting used on the site, if at all?

ii. Acoustic quality
- Were sound buffers used? What are the sound qualities on the site?

iii. Movement experience
- How do people move through the site?

iv. Visibility
- Were views strategic? Ex: a bench placed to direct views to a garden with flowers

v. Communication + Understanding
- How do people understand where to go throughout the site? Ex: is there signage? What type of signage is used? (ex: braille map)

vi. Degrees of enclosure
- How are spaces enclosed and what materials are used to enclose them? Why are some spaces enclosed while others are open?

Continued

vii. Mobility Requirements
- **i.** How does the site adhere to, or exceed, ADA requirements?

viii. Seating + Gathering
- **i.** How is seating used throughout the site? What type of seating was chosen and why? What materials were used for seating and why? How are spaces designed to encourage gathering or different types of interaction?

ix. Material, Color Choices, and Rhythm
- **i.** What materials and colors are used throughout the site and why?
- **ii.** How was rhythm incorporated in the site? What purpose did it serve? (for example, pavement patterns in a particular pattern might help a person orient themselves in an unknown space)

x. Choice, Placement, and Orientation of Site Elements
- **i.** Why were site elements, such as tables, benches, and/or art,placed where they were?
- **ii.** What experiences does the placement of these elements encourage? (ex: small group gatherings vs. large gatherings)

xi. Vegetation and Topography
- How was vegetation used throughout the site? How did you choose the plants used and why were they chosen?
- How is topography used to create space and experiences throughout the site?

Anticipated Findings
1. How did the designer approach designing for all people? Did they intentionally make an equitable site and how so? Findings from this section directly informed precedent analysis of sites.

Semi-Structured Interviews | Site Designer Questions

Questions to interviewed site designers consisted of the following:

3. Why Equitable Public Space Matters

3a. What opportunities and challenges exist within your field, when it comes to making spaces equitable and inclusive for all people? How can this type of work be advanced?

Anticipated Findings
Why do equitable public spaces matter?

3b. Do you have any additional thoughts you would like to share?

Procedures | Site Designer Interviews

Interview Procedures and Participant Identification

Interviews were conducted via Zoom during the fall semester of 2022 and the spring semester of 2023. Interview subjects were selected based on literature review and snowball sampling to reach local subject experts on the topics of equitable public spaces that experientially includes all people. Interviews were semi-structured, allowing for follow-up questions, and lasted between 30-60 minutes.

Site Designers Interviewed

1. **Travis Mazerall**, landscape architect at Sasaki, interviewed on accessible site design strategies used at the Braille Trail in Watertown, MA

2. **Mauricio Gomez**, landscape architect at Sasaki, interviewed on accessible site design strategies used at the Boston City Hall Plaza

3. **Ian Scherling**, landscape architect at Sasaki, interviewed on accessible site design strategies used at the Virginia Polytechnic University

4. **Mary Anne Ocampo**, landscape architect at Sasaki, interviewed on accessible site design strategies used at the University of Kentucky Campus

5. **Rachel Salmela**, landscape architect at TEN x TEN, interviewed on accessible strategies used at the Louise B. Miller Memorial and Freedom Garden

Note: A question selection matrix was only used for artist interviews due to the varied artworks artists were interviewed about (ex: artwork indoors vs. artwork outdoors, small scale artwork vs. large scale artwork). All of the sites that designers were interviewed about were more consistent and thus the same set of questions were asked to each site designer.

3.3
Methods
Precedent Analysis

Precedent Analysis | Artwork Precedents

Purpose

By learning the strategies used in multi-sensory artwork, more informed creative decisions can be made when designing equitable public artwork that experientially includes all people. Precedent analysis was also used to inform design guidelines for equitable public artwork in public space.

Procedure

Step One: The Artistic Design Considerations Draft Guidelines

Prior to analyzing artwork precedents, it was necessary to transcribe findings from the Site Design Considerations Draft Guidelines into Artistic Design Considerations Draft Guidelines. See pages 69-78 in 3.1: Site Analysis for a more thorough explanation of the Site Design Considerations Draft Guidelines.

Information in the Site Design Considerations Draft Guidelines that could be re-worded or found applicable to artwork was transferred to the Artistic Design Considerations Draft Guidelines. Additional research was also conducted into the needs of Persons with Disabilities when experiencing artwork.

Categories of information in the Artistic Design Considerations Draft Guidelines originated from the Site Design Considerations Draft Guidelines. However, not all categories were applicable to both sites and artwork, so some categories were removed (fig. 42).

Note: Since the Artistic Design Considerations Draft Guidelines originated from the Site Design Considerations Draft Guidelines, the same communities with disabilities were researched: mobility (physical disabilities), cognition (intellectual disabilities and/or N/neurodiversity), Autism, and hearing (D/deaf and Hard of Hearing), vision (B/blind and Low Vision).

See figure 43 on page 97 for a visual graphic of the Artistic Design Considerations Draft Guidelines.

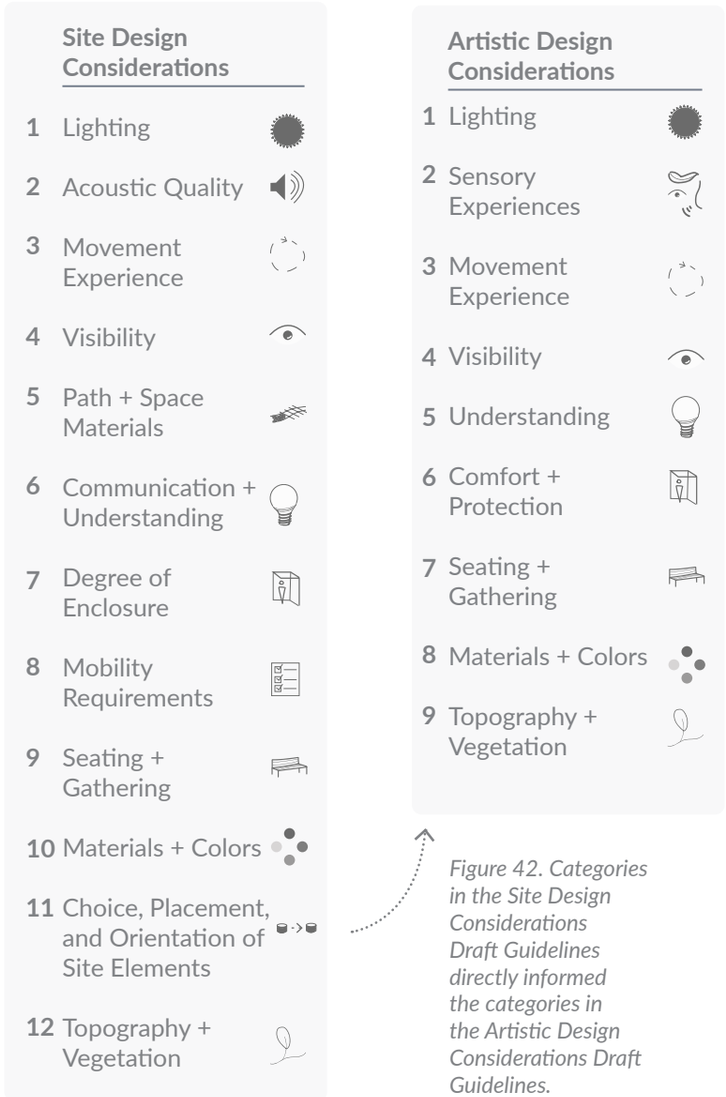


Figure 42. Categories in the Site Design Considerations Draft Guidelines directly informed the categories in the Artistic Design Considerations Draft Guidelines.

Step Two: Identification of Precedent Evaluation Criteria

The identification of artwork precedent evaluation criteria was based entirely on the Artistic Design Considerations Draft Guidelines. Each category of analysis for artwork precedents was taken directly from the Artistic Design Considerations Draft Guidelines (fig. 43).

Questions were developed within each category to understand the design strategies used to make artwork equitable. See the following pages for the complete list of questions within each category of analysis.

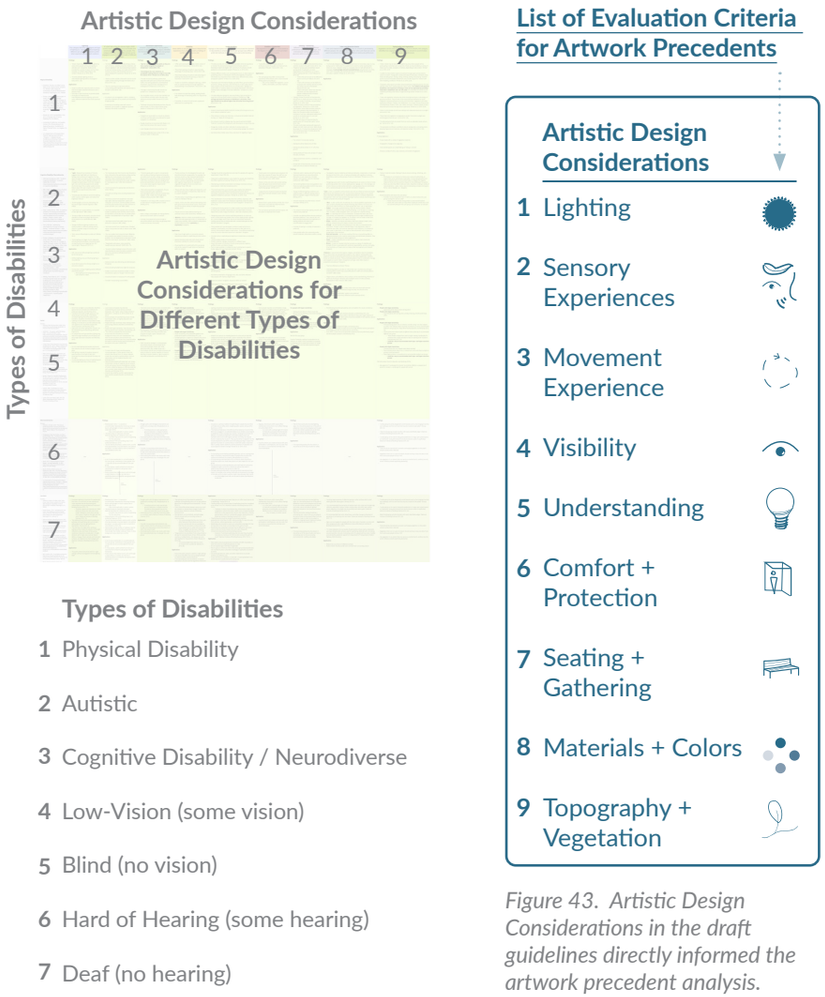


Figure 43. Artistic Design Considerations in the draft guidelines directly informed the artwork precedent analysis.

Artistic Design Considerations: Analysis Categories



Lighting

How does the artwork incorporate lighting within it, if at all? How does the artwork take advantage of site lighting? How does site lighting affect the experience of the artwork?



Sensory Experiences

How does the artwork engage two or more senses?



Movement Experience

Can the artwork be moved and how so? How do people move through or around the artwork? How does movement affect the experience of the artwork?



Visibility

What can people see within the artwork or around the artwork? How does that influence feelings of comfort/ safety? (for example, people may feel unsafe if they are unable to see around a public artwork in a public space)



Understanding

How do people understand the artwork? Are there text or braille descriptions nearby the artwork? Is sound a component of the communication? How so?



Comfort + Protection

Does the artwork provide overhead protection from the elements? Is the artwork on a wall or can the audience move within the artwork? How does enclosure affect the experience of the artwork?



Seating + Gathering

Can people sit on or around the artwork? How do people interact with the artwork and does it encourage social interaction?



Materials + Colors

What materials were used and how? What considerations were made for color? Why were materials and colors chosen?



Topography + Vegetation

Is the site flat or hilly? Are plants used at all? If yes, how so?

Step Two: Identification and Categorization of Artwork Precedents

Artwork precedents were selected to analyze through literature review and snowball sampling from artists during semi-structured interviews. Artwork precedents were categorized by scale (large or small) and location (indoors and outdoors). Categorization of precedents helped to identify recurring themes (if any) used by artists who create equitable artwork. See below for a list and images of the artwork precedents.

Artwork Precedents Analyzed

Large-Scale Outdoor Installations



Figure 44.
Sensory Journey
by Studio Joseph
(Alon Koppel Photography 2021)



Figure 45.
Sampan
by Ponnapa Prakkamakul
(Sasaki 2019)



Figure 46.
All About Us
by Ponnapa Prakkamakul
(Prakkamakul 2021)

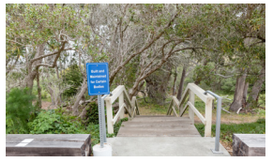


Figure 47.
Built and Maintained for Certain Bodies
by Jillian Crochet
(Lo 2021)



Figure 48.
Restorative Ground
by WIP Collaborative
(WIP Collaborative and Hudson Square Properties 2021)

Large-Scale Indoor Installations



Figure 49.
Reset Rooms
by Shannon Finnegan
(Finnegan 2020)



Figure 50.
Tactile Orchestra
by Fillip Studios
(Stjernegaard 2019)



Figure 51.
Bio Orchestra
by Fillip Studios
(Fillip Studios 2019)



Figure 52.
MEDIATE Space
by Simone Gumtau, Paul Newland, Chris Creed, and Simon Kunath
(Adapted from Gumtau et al. 2005)

Large-Scale Indoor Installations



Figure 53.
Blooming
by Ponnapa Prakkamakul
(Sasaki 2019)



Figure 54. Pandora's Box 8
Multiple Pieces
by Rosalyn Driscoll
(David Stansbury Photography 2006)



Figure 55.
A Sense of Vesuvius
by Aaron McPeake
(McPeake 2023)

Step Three: Completing Artwork Precedent Analysis

Interviews with artists knowledgeable about each artwork precedent directly informed analysis.

Precedent Analysis | Site Design Precedents

Purpose

By learning the design strategies of universally-designed sites, more informed creative decisions can be made when creating and siting equitable public artwork that experientially includes all people. Precedent analysis was also used to inform design guidelines for the site design considerations of equitable public artwork in public spaces.

Procedures | Site Design Precedents

Step One: Identification of Precedent Evaluation Criteria

The identification of site design precedent evaluation criteria was based entirely on the Site Design Considerations Draft Guidelines. See pages 69-78 in 3.1: Site Analysis for a more thorough explanation of the Site Design Considerations Draft Guidelines. Each category of analysis for site design precedents was taken directly from the Site Design Considerations Draft Guidelines (fig. 56).

Questions were developed within each category to gather an idea of the general character of each site and the design strategies used to make the sites universally accessible to all people. See the following pages for the complete list of questions within each category of analysis.



Figure 56. Site Design Considerations in the draft guidelines directly informed the site design precedent analysis categories.

Site Design Considerations: Analysis Categories



Lighting

How is lighting used throughout the site to accommodate multiple user groups in both day and night settings? How is shade created, where is it created, and why?



Acoustic Quality

Were sound buffers used? What are the sound qualities on the site?



Movement Experience

How do people move through the site? What is the width of paths and how does that affect accessibility and user comfort? Do all people have a shared path experience?



Visibility

How are views framed or directed on the site? Were views strategic in any way to draw attention to, or detract from, site elements?



Path + Space Materials

What path and space materials are on the site and what is their purpose?



Communication + Understanding

How does site signage, or wayfinding elements, communicate directions, identify spaces, and provide points of reference for a variety of people? How do people understand where to go throughout a site? Are multiple methods of communication used on the site, such as Braille and auditory descriptions?



Degree of Enclosure

How does the space accommodate a variety of users with fully-enclosed, semi-enclosed, or fully open spaces? How are spaces enclosed and what materials are used to enclose them? Why are some spaces enclosed while others are open?



Mobility Requirements

How does the site adhere to, or exceed, ADA and other mobility requirements?



Seating + Gathering

How is seating used throughout the site? What type of seating was chosen and why? What materials were used for seating and why? How are spaces designed to encourage gathering or different types of interaction?



Materials + Colors

What materials and colors are used throughout the site and why? How was rhythm incorporated in the site? What purpose did it serve?



Choice, Placement, and Orientation of Site Elements

Why are site elements, such as tables, benches, and/or artwork, placed were they are? What experiences does the placement of these elements encourage? How are benches and other site elements orientated and why?



Topography + Vegetation

How was vegetation used throughout the site? What plants were chosen and why? How is topography used to create space and experiences throughout the site?

Step Two: Identification and Categorization of Site Design Precedents

Precedents were selected to analyze through literature review and snowball sampling from site designers during semi-structured interviews. Site design precedents were categorized by site type (parks, college campuses, and plazas) for clarity and understanding. See below for a list and images of the site design precedents.

Site Design Precedents Analyzed

Parks and Gardens



Figure 57.
Watertown Braille Trail
by Sasaki

(Sasaki 2016)



Figure 58.
Louise B. Miller Memorial and Freedom Garden
by TEN x TEN & MASS Design Group
(TEN x TEN 2022)

College Campuses



Figure 59.
University of Kentucky
by Sasaki

(Sasaki 2022)



Figure 60.
Virginia Polytechnic Institute
by Sasaki

(Sasaki 2021)

Plazas

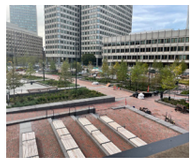


Figure 61.
Boston City Hall Plaza
by Sasaki

Step Three: Completing Site Design Precedent Analysis

Interviews with site designers knowledgeable about each site design precedent directly informed analysis.

3.4 Methods

Memoing

Memoing

Purpose

Memoing was used as a tool to document a projective art and site design process. Findings from memoing were used to explain the creative process, from start to finish, and reflect upon the application of design guidelines created as a part of this project.

Procedure

What Memoing Included

Memoing is the documentation of a design process through photography, sketching, videos, voice memos, and diagramming (Birks, Chapman, and Francis 2008). Memoing was performed through the design process in the form of concept sketches, diagrams of narratives and possible features to include in a public artwork, screenshots of SketchUp models, and images of Photoshop iterations. Notes were also taken to document the process of landing on a narrative, sticking with it, and designing in accordance with the design guidelines.



Figure 62.
Sketching Icon.



Figure 63.
Video Icon.



Figure 64.
Photo Icon.

Frequency of Memoing and Final Portrayal of Memoing

Memoing was used any time the conceptual design was revised, drawings were created, and feedback was heard. Memoing sketches, screenshots, diagrams, notes, and other written text were compiled into an InDesign document and revised every one to two weeks for clarity, simplicity, and accuracy. Findings from memoing were portrayed chronologically, from the start of the projective design process to the finished renderings.

4

Findings

4.1 Site Analysis

Site Design Considerations Draft Guidelines
Literature Review



Site Selection Matrix
Part of Site Analysis



Site Analysis
Method

4.2 Semi-Structured Interviews

Semi-Structured Interviews
Method



Precedent Analysis
Method

Design Guidelines
Outcome

Final Design + Demonstration of the Guidelines
Outcome

4.3 Precedent Analysis

Precedent Analysis
Method



Design Guidelines
Outcome

Final Design + Demonstration of the Guidelines
Outcome

4.4 Memoing

Memoing
Method

documented

Final Design + Demonstration of the Guidelines
Outcome

Findings

Methods Overview

The findings documented in this chapter were the result of a mixed-methods approach to understanding strategies for creating and siting equitable public artwork that all people can experience and the documentation of a design process that applies these findings.

Site analysis identified which site within Franklin Park is ideal for a hypothetical public artwork installation.

Semi-structured interviews with artists informed precedent analysis of multi-sensory artworks, the intention of equitable artwork, strategies for making artwork equitable, creative processes and fabrication, and the significance of creating artwork that all people can experience. Semi-structured interviews with designers were conducted to learn about the intention of equitable spaces, strategies designers have used to make spaces equitable for all people, and the importance of equitable spaces.

Precedent analysis determined strategies artists and designers have used to make the experience of artwork and spaces equitable for all people.

Memoing documented the design process of a multi-sensory public artwork and the space surrounding it that all people can equitably experience.

4.1
Findings
Site Analysis

4.1 Site Analysis

Site Design Considerations Matrix ⟷ **Site Selection Matrix** ⟷ **Site Analysis**

Finding — Part of Site Analysis — Method

Site analysis was conducted for one day on September 28th, 2022 from 9 AM to 4 PM in Franklin Park, Boston, MA, to determine the best site for a projective artwork and site design. The items analyzed included: noise levels (decibel meter Iphone app), proximity and frequency of nearby activities to the site, how close the site was to accessible parking, width and form (straight or curvilinear) of paths, overhead or wall coverage at the site, consistency of site lighting, topography/ slope of the site (flat or hilly), and qualitative observations while on the site. Colors were also collected using the "What Color?" App and photos of textures (bark, grass, etc.) were taken on an Iphone. All site photos were taken on an Iphone.

The final site, the Playstead, was selected using the Site Selection Matrix, which was filled out prior to visiting Franklin Park using Google Maps and confirmed after visiting the park. After visiting each site, data was entered to determine which site has the highest number of green rectangles, from the key where green indicates the site meets design requirements, and thus is the most appropriate site for a projective artwork and site design.



Figure 65. The Site Selection Matrix aided in the identification of the best site for projective artwork and site design.



Key Map

- Proposed Parking Lots in the Franklin Park Action Plan
- Proposed Vehicular Roads
- Existing Vehicular Roads
- Franklin Park Site Boundary
- Potential Sites

Figure 66. Location of sites for site analysis in Franklin Park.

Site 1 | The Playstead

Qualitative Observations + Notes

Some tree roots are trip hazards

The site feels like a wind tunnel due to mature trees and no intermediate wind buffers

There is some ground level change, but it is manageable

The current path through the site is 5' wide

There are 10 accessible spots adjacent to the site

Most of the sound on the site comes from the wind and sports fields



Coordinates:
Latitude: 42°18'27.97"N
Longitude: 71° 5'32.07"W

Colors

C: 47
M: 28
Y: 40
K: 7

C: 43
M: 34
Y: 33
K: 7

C: 36
M: 28
Y: 40
K: 5

C: 44
M: 43
Y: 32
K: 9

colors and textures may be used in a public artwork

Textures



Noise Levels

MAX Level: 96
Average: 65 dB

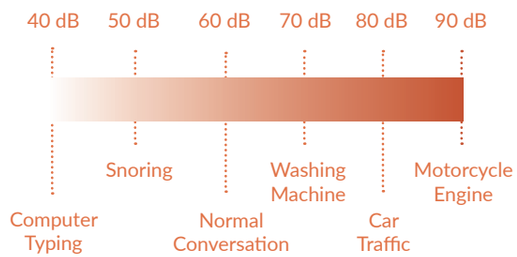


Figure 67. Colors, textures, and noise levels in the Playstead (informed by DecibelPro n.d.).



Figure 68. The Playstead in Franklin Park is active year-round (Google Earth Pro 2022).

Why Site #1: The Playstead was chosen for a public art installation

The site at the Playstead is adjacent to ten (10) accessible parking spots and lots of activities happen on or around the site. People are more likely to happen upon a public artwork in this area because it is accessible (flat) and very often used by the surrounding community.

Events at the Playstead

BAMS Festival (Boston Art and Music Soul)
Children's Summer Festival
Elma Lewis Playhouse
BSO (Boston Symphonic Orchestra) Concert Series

Challenges

- Feels like a wind tunnel
- It is loud because of nearby activities- this loudness could cause overstimulation.

Strengths

- Many activities take place nearby
- Persons with Disabilities may need a place for respite from the Playstead; an artwork in this location could serve as that respite

Opportunities

- A public art could address the noise and wind concerns by serving a sound and wind buffer
- A public art installation can serve as a place of rest, reflection, and calm amidst the activity of the Playstead



Figure 69. Looking northeast at benches in the Playstead.



Figure 70. Looking east at the Franklin Park Zoo entrance from the Playstead.



Figure 71. Looking northeast at hills along the outskirts of the Playstead.



Figure 72. Looking southwest at the Playstead Playing Fields.

Site 2 | The Maple Lawn

Qualitative Observations + Notes

I named the site after the big Maple Tree in the middle of grassy lawn

There are some exposed root trip hazards

The site is quiet and close to parking, but not close to accessible spots

Paths are large (15 feet wide)

One person walked by when I was on the site



Coordinates
Latitude: 42°18’23.23”N
Longitude: 71° 5’44.79”W

Colors



Textures



Noise Levels

MAX Level: 96
Average: 55 dB

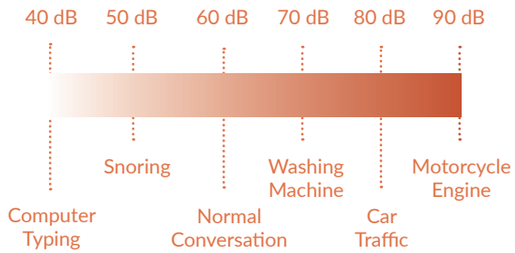


Figure 73. Colors, textures, and noise levels at the Maple Tree and lawn (informed by DecibelPro n.d.).



Figure 74. Looking northwest at the big Maple Tree and lawn.



Figure 75. Looking southeast at the Maple Lawn, green grass, and pathways.

Site 3 | Turkey Hill

Qualitative Observations + Notes

The site feels more enclosed by trees than Google Earth lets on

There are lots of turkeys on the site, which could be dangerous

The site is steep which is not equitable for all people to navigate

Two people walked by the site when I was there

It is very loud on the site because of cars passing by- sensory overload



Coordinates

Latitude: 42°18’23.23”N
Longitude: 71° 5’44.79”W

Colors

C: 53
M: 36
Y: 58
K: 19

C: 33
M: 27
Y: 88
K: 7

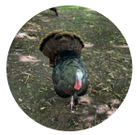
C: 59
M: 51
Y: 57
K: 41

C: 47
M: 45
Y: 51
K: 26

colors and textures may be used in a public artwork

Textures





Noise Levels

MAX Level: 96
Average: 55 dB

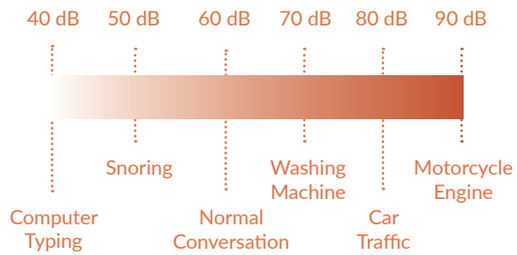


Figure 76. Colors, textures, and noise levels at Turkey Hill (informed by DecibelPro n.d.).



Figure 77. Looking southwest on top of Turkey Hill.



Figure 78. Looking southeast on top of Turkey Hill.

Site 4 | Peabody Circle

Qualitative Observations + Notes

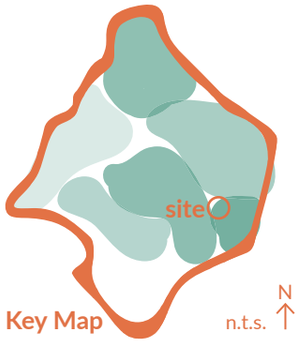
I didn't feel comfortable on the site; it is too visible to passerby with no sound buffers

Cars fly by without looking for pedestrians in this area- dangerous

The ground is rocky with tree roots and is not flat; it is easy to trip

Dappled sunlight through the trees is visually interesting

There are NO benches on the site



Coordinates
Latitude: 42°18'23.23"N
Longitude: 71° 5'44.79"W

Colors

C: 49
M: 44
Y: 54
K: 26

C: 47
M: 45
Y: 51
K: 26

C: 52
M: 45
Y: 52
K: 27

C: 50
M: 42
Y: 59
K: 27

colors and textures may be used in a public artwork

Textures





Noise Levels

MAX Level: 96
Average: 75 dB

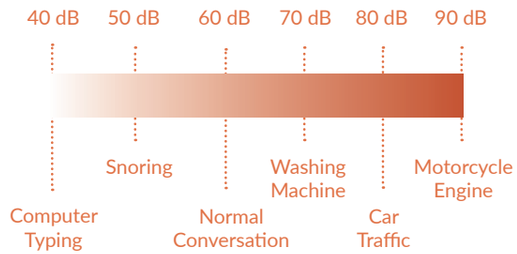


Figure 79. Colors, textures, and noise levels at Peabody Circle (informed by DecibelPro n.d.).



Figure 80. Looking south at passing cars from Peabody Circle.



Figure 81. Looking southwest at passing cars from Peabody Circle.

Site 5 | Ellicottdale Picnic Grove

Qualitative Observations + Notes

Shade under the trees is nice, but the wind is a bit chilly

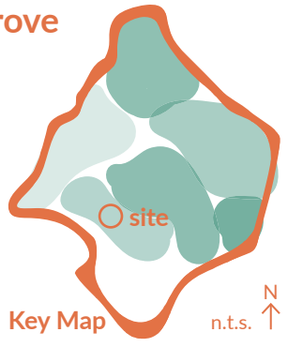
The site is quiet overall

Pathways are nine feet wide

There is a little bit of a slope from accessible parking to the site

At least ten (10) people walked by when I was on the site

The branches hang low on the site; I am 5'2" and I could touch them



Coordinates
Latitude: 42°18'1.04"N
Longitude: 71° 6'3.00"W

Colors

C: 50
M: 42
Y: 59
K: 27

C: 51
M: 28
Y: 47
K: 8

C: 46
M: 37
Y: 51
K: 17

C: 45
M: 39
Y: 42
K: 14

colors and textures may be used in a public artwork

Textures



Noise Levels

MAX Level: 87
Average: 64 dB

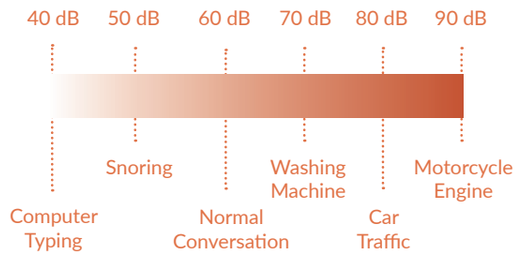


Figure 82. Colors, textures, and noise levels at the Ellicottdale Picnic Grove (informed by DecibelPro n.d.).

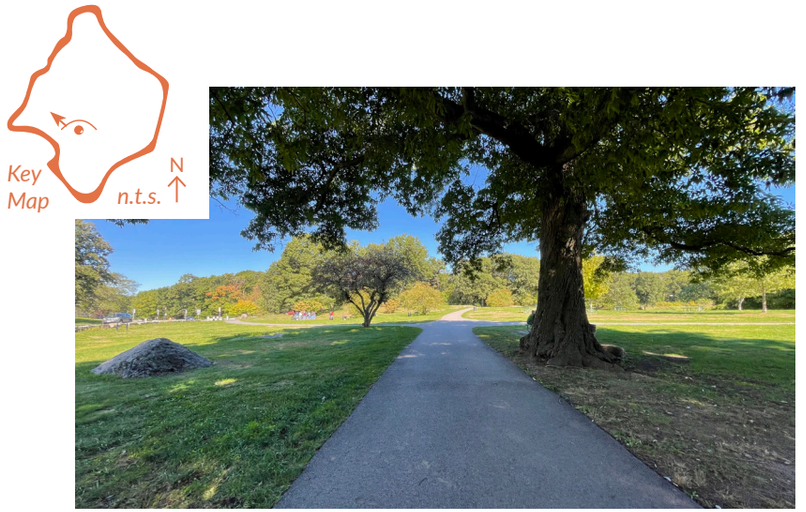


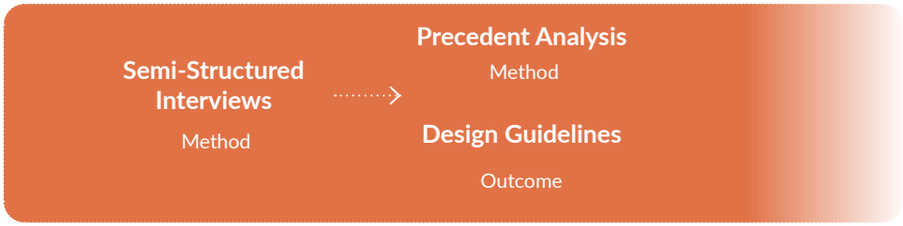
Figure 83. Looking west at the Ellicottdale Picnic Grove.



Figure 84. Looking west at the gently ascending path through Ellicottdale.

4.2
Findings
Interviews

4.2 Semi-Structured Interviews



Semi-structured interviews are loosely structured and contain questions that may or may not be asked based on time constraints and other limitations, with room for follow-up questions that arise during the interview. Semi-structured interviews were conducted to inform precedent analysis, often completed in conjunction with the interviews and recommended strategies for making artwork and spaces accessible to all people.

The goal of the following interviews was to understand the intention of equitable artwork, strategies for making artwork and spaces equitable, creative processes and fabrication, and the significance of creating artwork and spaces that all people can experience.

Interviews in this chapter are separated into two sections: **interviews with artists** and **interviews with designers**. Interviews are split into two sections to better analyze the data collected due to variations in the interview questions. Artists were generally asked the same questions, while designers were asked a slightly different set of questions.

Note: Interview findings contain paraphrased statements by the author and direct quotes from artists and designers.

09 artist interviews

05 designer interviews

Semi-Structured Interviews | Artists

Wendy Evans Joseph
Architect & Artist

November 3rd, 2022
35-Minute Interview

Interviewed about her public artwork, 'Sensory Journey,' with Studio Joseph.

Georgina Kleege
Teacher & Artist

November 7th, 2022
30-Minute Interview

Interviewed about her experience as exhibit curator for 'Please Touch the Art.' *

Rosalyn (Roz) Driscoll
Artist

November 7th, 2022
45-Minute Interview

Interviewed about her multi-sensory artworks in 'Please Touch the Art'. *

Participant A
Artist

November 21st, 2022
45-Minute Interview

Interviewed about their inclusive artwork.

Jillian Crochet
Artist

December 9th, 2022
60-Minute Interview

Interviewed about their artwork 'Built and Maintained for Certain Bodies.'

Carmen Papalia
Artist

December 12th, 2022
40-Minute Interview

Interviewed about their multi-sensory artwork and work with Open Access.

** 'Please Touch the Art' was a multi-sensory museum exhibition at The Dorothy and Charles Mosesian Center for the Arts in Watertown, MA that features artwork intended to be experienced by all people.*

Semi-Structured Interviews | Artists

Tom Kortbeek
Artist

December 14th, 2022
30-Minute Interview

Interviewed about their multi-sensory artworks 'Tactile & Bio Orchestra' with Fillip Studios.

Aaron McPeake
Artist

December 15th, 2022
45-Minute Interview

Interviewed about their multi-sensory work 'A Sense of Vesuvius'.

Sonya Gimon *
Landscape Architect

January 13th, 2023
45-Minute Interview

Interviewed about their artwork 'Restorative Ground,' with WIP Collaborative.

** While Sonya is a landscape architect, her work as a part of WIP Collaborative is being analyzed under the category of art. Thus, Sonya's interview is under the 'artist interviews category.'*

Semi-Structured Interviews | Artist Questions

Artist questions were tailored to each participant, but generally consisted of the following:

1. The Intention of Equitable Public Art

1a. When thinking about the potential audience for your artwork, did you take into consideration the needs of Persons with Disabilities? Please explain.

Anticipated Findings
Was the artwork designed with equitability at the forefront of the artist's mind, or was it an afterthought? How did the artist approach designing for all people?

2. Strategies for Equitable Public Art

2a. What strategies did you use to make your artwork accessible to all people? What senses were engaged and how?

Anticipated Findings
How did the artist approach designing for all people? Did they intentionally make a multi-sensory artwork and how so?

2b. To make the experience of your artwork more equitable and inclusive, did you make any special considerations for: materials, color, lighting, sound, and site placement?

Anticipated Findings
What specific considerations did the artist/designer make for the following categories (site design considerations matrix categories)?

3. Creative Process and Fabrication

3a. Can you describe your creative process for your artwork, from concept through fabrication and installation?

Anticipated Findings
How did the artist approach designing for all people? What was their creative process like and how can this help me as an artist

3b. As a part of that creative process, did you engage with the intended audience of your artwork in any way? Please explain.

Anticipated Findings
Did audience/community engagement help improve the equitability of the artwork? How so?

Continued

3c. Was research a part of your creative process? If yes, how so?

Anticipated Findings
How do artists/designers incorporate research into their practice and how does this improve their work?

3d. Did you work with special consultants to further the design and/or construction of your artwork? How so?

Anticipated Findings
How do artists/designers work with special consultants and how does this improve their work?

4. Why Equitable Public Art Matters

4a. What opportunities and challenges exist within your field, when it comes to making public artwork and spaces equitable and inclusive for all people? How can this type of work be advanced?

Anticipated Findings
Why does public art that experientially includes all people matter? Why do equitable public spaces matter? Why is more public art not multi-sensory and equitable for all people?

4b. Do you think other disciplines, such as architects, landscape architects, engineers, sociologists, and others should be involved in the creation of equitable and inclusive public artwork? Please explain.

Anticipated Findings
Why does involvement of other disciplines matter when creating equitable public artwork?

Wendy Evans Joseph

Interviewed about Sensory Journey

"Wendy Evans Joseph is the founder of Studio Joseph, an architecture and exhibition design studio specializing in public, institutional, and cultural projects. Wendy's passion for art and education has led to the firm creating many temporary and permanent art installments. She is intimately involved in all projects, from concept through fabrication and installation" (Studio Joseph n.d.).

1. The Intention of Equitable Public Art

1a. When thinking about the potential audience for your artwork, did you take into consideration the needs of Persons with Disabilities? Please explain.

Yes, "the entire idea [of Sensory Journey] was to think about a multi-sensory piece that would work for everyone. People learn in different ways; people experience the world in different ways. I wanted to explore that with this piece" (Joseph 2022).

2. Strategies for Equitable Public Art

2a. What strategies did you use to make your artwork accessible to all people? What senses were engaged and how?

All of the senses, except taste, were engaged by Sensory Journey! "The idea is not that people who do this go to the left, and people who do this go to the right. But rather that we all learn together, and remain a community. In doing things together, we learn from each other" (Joseph 2022). "Sensory Journey is a piece in the outdoors. What makes the outdoors so great is simply that it is a multi-sensory experience in which the world unveils itself to you in light, shade, shadow, temperature..." (Joseph 2022). In this way, the outdoors is a truly equitable location for art because of its multi-sensory nature.

2b. To make the experience of your artwork more equitable and inclusive, did you make any special considerations for: materials, color, lighting, sound, scale, and site placement?

Detailed answers to this question are provided on pages 199 through 202. These pages consist of the precedent analysis for 'Sensory Journey.'

3. Creative Process and Fabrication

3a. Can you describe your creative process for your artwork from concept through fabrication and installation?

"It is very important to me to have renderings that have a certain kind of look and feel to them, until you know what it would be like to be there [experiencing the art]" (Joseph 2022). For Wendy, it is very important to have realistic renderings that give a sense of what it is like to experience the artwork. These renderings, along with other information, were then presented to a client.

3b. As a part of that creative process, did you engage with the intended audience of your artwork in any way? Please explain.

This question was not asked for time purposes.

3c. Was research a part of your creative process? If yes, how so?

This question was not asked for time purposes.

3d. Did you work with special consultants to further the design and/or construction of your artwork? How so?

Wendy and her team would have used people to fabricate the artwork. However, given that it was being fabricated and installed during COVID, they could not find anyone to work with them so they had to do it themselves (Joseph 2022).

4. Why Equitable Public Art Matters

4a. What opportunities and challenges exist within your field, when it comes to making public artwork equitable and inclusive for all people? How can this type of work be advanced?

This question was not asked for time purposes.

4b. Do you think other disciplines, such as architects, landscape architects, engineers, sociologists, and others should be involved in the creation of equitable and inclusive public artwork? Please explain.

This question was not asked for time purposes.

Georgina Kleege

Interviewed about her curatorial experience with 'Please Touch the Art'

Georgina Kleege is an English professor at the University of California, Berkeley, an author, and has experience as a co-curator of 'Please Touch the Art'. Some of Georgina's essays and books include *Sight Unseen* (1999), *Blind Rage: Letters to Hellen Keller* (2006), and *More than Meets the Eye: What Blindness Brings to Art* (2018). "She has lectured and served as consultant to art institutions such as the Metropolitan Museum of Art in New York and the Tate Modern in London" (Berkeley n.d.).

1. The Intention of Equitable Public Art

1a. When thinking about the potential audience for your artwork, did you take into consideration the needs of Persons with Disabilities? Please explain.

Yes, Please Touch the Art especially considered the needs of People that are Blind and physically disabled. "'Please Touch the Art' was not an exhibit for blind people, but it was an exhibit that did not exclude blind people" (Kleege 2022).

2. Strategies for Equitable Public Art

2a. What strategies did you use to make your artwork accessible to all people? What senses were engaged and how?

The artwork had to be tactile and able to be touched in order for it to be selected as a part of the exhibit. For Georgina Kleege, who helped select the artwork in the exhibit, "anything that made [her] eager to get her hands on, she gave a high score" (Kleege 2022).

2b. To make the experience of your artwork more equitable and inclusive, did you make any special considerations for: materials, color, lighting, sound, scale, and site placement?

An attendant at the door helped people navigate through the space, a tactile map was a part of the exhibit, audio devices with descriptions of the art were available for people to use, large print and Braille descriptions were used, sometimes the descriptions of the artwork itself gave descriptions about how to touch it, and 100 small rubber balls were cut in half and glued to the floor about 4 inches away from artworks to indicate to people with canes that an artwork is nearby.

3. Creative Process and Fabrication

3a. Can you describe your creative process for your artwork from concept through fabrication and installation?

This question was not asked.

3b. As a part of that creative process, did you engage with the intended audience of your artwork in any way? Please explain.

This question was not asked.

3c. Was research a part of your creative process? If yes, how so?

This question was not asked.

3d. Did you work with special consultants to further the design and/or construction of your artwork? How so?

This question was not asked.

4. Why Equitable Public Art Matters

4a. What opportunities and challenges exist within your field, when it comes to making public artwork equitable and inclusive for all people? How can this type of work be advanced?

There is this idea that an artwork that has only been touched by the artist is more pure or valuable than, say, the worn steps of an Italian village or the Blarney Kissing Stone in Ireland (Kleege 2022). However, the more an object is able to be touched, the more character it gets and the more storied it becomes. "There are also issues of conservation. It's like you have this idea that a museum exists primarily to conserve historical artifacts and... there have been decades and decades of science about how to display art to be experienced visually so that it doesn't damage the art" (Kleege 2022). All of these constraints on artwork make it inaccessible to all people. "Everybody wants to get their hands on art!" (Kleege 2022).

4b. Do you think other disciplines, such as architects, landscape architects, engineers, sociologists, and others should be involved in the creation of equitable and inclusive public artwork? Please explain.

"Yeah, yeah I think all of the above need to be involved" (Kleege 2022). Equitable artwork has different spatial requirements than visual only artwork. Therefore, equitable art affects architecture and many other disciplines too (Kleege 2022).

Rosalyn (Roz) Driscoll

Interviewed about Multiple Pieces in 'Please Touch the Art'

Roz Driscoll is an artist specializing in tactile artwork. She has an interest in research and believes that analysis and evaluation of art is essential to understanding how art can be more inclusive to all people. Her research is compiled in her book, "The Sensing Body in the Visual Arts: Making and Experiencing Sculpture." She is also a member of Sensory Sites, "an international collective that generates site-specific installations to explore multi-sensory perception" (Driscoll n.d.).

1. The Intention of Equitable Public Art

1a. When thinking about the potential audience for your artwork, did you take into consideration the needs of Persons with Disabilities? Please explain.

The artist's sculptures are designed to be touched; therefore, they are accessible to Persons with Disabilities. Before Roz even started making art, she listened and learned from the experience of an artist who is blind. This way, she could better meet the needs of ALL of the people who would later experience her artwork.

2. Strategies for Equitable Public Art

2a. What strategies did you use to make your artwork accessible to all people? What senses were engaged and how?

"I was thinking of hands and fingers and how they move naturally; what would be a natural way to explore [the art]? I was constantly aware of not making parts that were isolated from [one another]. [I tried] to make [the components of the art] flow together" (Driscoll 2022). Rosalyn considered "whether a surface is appealing or repulsive or irritating," and if all people would interpret those textures in a similar way (Driscoll 2022). "Looking through touch is a different way of perceiving. It has more intimacy, more immediacy, more concreteness, more feedback. So it gives you as a viewer a sort of feedback about who you are, what you are made up of, and whether you are smooth or soft or strong or weak" (Driscoll 2022).

2b. To make the experience of your artwork more equitable and inclusive, did you make any special considerations for: materials, color, lighting, sound, scale, and site placement?

Detailed answers to this question are provided on pages 239 through 242. These pages consist of the precedent analysis for multiple pieces, 'Memories of Bone,' 'Pandora's Box 6,' and 'Pandora's Box 8.'

3. Creative Process and Fabrication

3a. Can you describe your creative process for your artwork from concept through fabrication and installation?

"The conception tends to be ... a vague image in my mind, or perhaps like an internal sensation, and that has to brew for a few years. At some point, I might address it" (Driscoll 2022). "I do not [think I made prototypes]. I think I just launched. Each [artwork] was in a sense a prototype and a final work" (Driscoll 2022). Rosalyn knew that she wanted contrasting textures, such as rough, hairy rope and real, smooth animal hide. "The making is really a dialogue between me and the materials" (Driscoll 2022). Meanwhile, "the installation, in a sense, happens from the very start. Where is this place? What's here already that I can amplify or bring attention to?" (Driscoll 2022).

3b. As a part of that creative process, did you engage with the intended audience of your artwork in any way? Please explain.

"A year before I even made anything, I worked with a person who was blind. For about a year we went around to museums, and I watched her, and sometimes I was allowed to touch. We were very much engaged in inquiry together. She had trained as an artist, so she knew the language... but she thought the visual world was closed to her, so it was very exciting for her to do this" (Driscoll 2022). Rosalyn really took the time to get to know the people who experience art, and all of the ways they want and need to interact with it.

3c. Was research a part of your creative process? If yes, how so?

The artist consults a Person who is Blind to see how her artwork can become more equitable and inclusive for all people.

3d. Did you work with special consultants to further the design and/or construction of your artwork? How so?

Same answer as 3c.

4. Why Equitable Public Art Matters

4a. What opportunities and challenges exist within your field, when it comes to making public artwork equitable and inclusive for all people? How can this type of work be advanced?

"The cross-model [and multi-sensory] experience is really crucial to recognize and then to integrate... The timing is perfect in terms of everybody [wanting] inclusive [art and spaces]" (Driscoll 2022).

4b. Do you think other disciplines, such as architects, landscape architects, engineers, sociologists, and others should be involved in the creation of equitable and inclusive public artwork? Please explain.

The more people involved, the better! We can all learn from one another.

Participant A

1. The Intention of Equitable Public Art

1a. When thinking about the potential audience for your artwork, did you take into consideration the needs of Persons with Disabilities? Please explain.

Yes, the artist aimed to engage touch and sight- especially to enhance the experience of the artwork for People with Low Vision or who are B/blind.

2. Strategies for Equitable Public Art

2a. What strategies did you use to make your artwork accessible to all people? What senses were engaged and how?

The artist used Braille dots in a lot of their work to make a more equitable experience for all people. Furthermore, the artwork was installed at an accessible height so that people with mobility devices or wheelchairs could have also touched the artwork. Texturally different materials were used in their artwork to create an interesting tactile experience.

2b. To make the experience of your artwork more equitable and inclusive, did you make any special considerations for: materials, color, lighting, sound, scale, and site placement?

Providing answers to this question would identify the interviewee, as they were interviewed about specific artworks. Answers are withheld to maintain the anonymity of the artist.

3. Creative Process and Fabrication

3a. Can you describe your creative process for your artwork from concept through fabrication and installation?

The artist considers their skills to still be developing, especially when it comes to incorporating sound or technology into their pieces. Therefore, the artist has been focusing mainly on engaging the senses of sight and touch to provide a lower-tech, multi-sensory experience for all people.

3b. As a part of that creative process, did you engage with the intended audience of your artwork in any way? Please explain.

For some of the artworks discussed, the community was engaged to determine what the community wanted and needed from an artwork. The resulting artwork was more personal to the community in which it was placed and better met the needs of the people that would experience it.

3c. Was research a part of your creative process? If yes, how so?

Some artworks discussed were created by working with special consultants and communities. In this way, research was conducted and benefited the projects by making the artwork more equitable for all people.

3d. Did you work with special consultants to further the design and/or construction of your artwork? How so?

Special consultant(s) were utilized- especially regarding the selection and use of Braille lettering- as well as for the selection of the content in the artwork itself. Community engagement, or consulting the people that the artwork aims to engage, strengthened the end result.

4. Why Equitable Public Art Matters

4a. What opportunities and challenges exist within your field, when it comes to making public artwork equitable and inclusive for all people? How can this type of work be advanced?

The biggest constraints to creating equitable artwork are time and money. If an artist does not have those fundamental resources, it is really challenging to create equitable artwork. For example, community engagement takes time. On a tight timeline, it can be difficult to achieve.

4b. Do you think other disciplines, such as architects, landscape architects, engineers, sociologists, and others should be involved in the creation of equitable and inclusive public artwork? Please explain.

Yes, it takes many different expertise to create a unified space and/or experience that is equitable to all people.

Jillian Crochet

Interviewed about Built and Maintained for Certain Bodies

"Jillian Crochet is a Bay Area artist from the Gulf Coast working in sculpture, video, and performance. Her sculptures use haptic and embodied aesthetics to challenge the hierarchy of the senses. Her practice questions the medical model [of disability], desire for control, and the complex ethics of genetics and experimentation... Her practice seeks to liberate the disabled body from normalized marginalization and oppression" (Crochet n.d.).

1. The Intention of Equitable Public Art

1a. When thinking about the potential audience for your artwork, did you take into consideration the needs of Persons with Disabilities? Please explain.

"I would have taken [more needs] into consideration if I had the time, money, and support" (Crochet 2022). This was a quick, first iteration. In the future, the artist aspires to create more accessible and equitable artwork.

2. Strategies for Equitable Public Art

2a. What strategies did you use to make your artwork accessible to all people? What senses were engaged and how?

As of now, the artwork is primarily accessible to people with physical disabilities because of its height off of the ground. However, if the artist had more time, money, and support, they would like to incorporate auditory descriptions, Braille, and auditory push buttons.

2b. To make the experience of your artwork more equitable and inclusive, did you make any special considerations for: materials, color, lighting, sound, scale, and site placement?

Detailed answers to this question are provided on pages 211 through 214. These pages consist of the precedent analysis for 'Built and Maintained for Certain Bodies.'

3. Creative Process and Fabrication

3a. Can you describe your creative process for your artwork from concept through fabrication and installation?

The artist channeled their frustration with the institution into a sign that speaks back to the institution (Crochet 2022). More specifically, their frustration was with a lack of access to nature. After a lawsuit that aimed to make a park in California more accessible, only a few miles out of many were made to be accessible to all people.

3b. As a part of that creative process, did you engage with the intended audience of your artwork in any way? Please explain.

Jillian engaged with the art institution that is displaying the artwork. They would also like to engage the National Parks Service.

3c. Was research a part of your creative process? If yes, how so?

The artist read through all of the legal documents that were associated with the park lawsuit, which led to the creation of 'Built and Maintained for Certain Bodies.' The artist noted that, according to the legal documents, lawsuit participants, and a GGNRA access worker, two trails were supposed to be made accessible. However, there were no clear markings indicating which trails were adapted. Therefore, there is no way people can find them!

3d. Did you work with special consultants to further the design and/or construction of your artwork? How so?

This question was not asked for time purposes.

4. Why Equitable Public Art Matters

4a. What opportunities and challenges exist within your field, when it comes to making public artwork equitable and inclusive for all people? How can this type of work be advanced?

"Money, time, and support are constraints to [creating] equitable public artwork" (Crochet 2022). It is especially challenging to create equitable artwork when municipalities or receiving entities just see the monetary constraints and not the positives of equitable public art.

4b. Do you think other disciplines, such as architects, landscape architects, engineers, sociologists, and others should be involved in the creation of equitable and inclusive public artwork? Please explain.

This question was not asked for time purposes.

Carmen Papalia

Interviewed about Open Access

"Born in Vancouver, unceded Coast Salish territory in 1981, Carmen Papalia is an artist who uses organizing strategies and improvisation to address his access to public space, the art institution, and visual culture. His socially engaged practice is an effort to unlearn visual primacy and resist support options that promote ableist concepts of normalcy. His current work includes an advocacy platform based on the principles of Open Access (2015) and an accessible mobile work-space and archive that provides a context for programming about accessibility at the institutions that he visits" (Papalia n.d.).

1. The Intention of Equitable Public Art

1a. When thinking about the potential audience for your artwork, did you take into consideration the needs of Persons with Disabilities? Please explain.

N/A. The artist was interviewed primarily about their work with Open Access, a framework to make artwork accessible and more open to Persons with Disabilities in museum settings.

2. Strategies for Equitable Public Art

2a. What strategies did you use to make your artwork accessible to all people? What senses were engaged and how?

Carmen Papalia feels limited by the "standard ADA options" to experience art, such as audio tours, touch tours, or learning aids (2022). "I felt that [these options] were very limiting" (Papalia 2022). To counteract this feeling, Carmen started writing 'Open Access,' which is a manifesto of sorts about how museums can move beyond compliance to create truly accessible spaces and experiences. For example, people should consider things like "safe spaces" and community-building opportunities- things beyond what artists typically consider. "[Part of accessibility] is social, cultural, and political capability" (Papalia 2022).

2b. To make the experience of your artwork more equitable and inclusive, did you make any special considerations for: materials, color, lighting, sound, scale, and site placement?

'Open Access' is not a firm set of guidelines for specific considerations; Carmen wants people to "make sense [of Open Access] for themselves" and contradict the rigidness of ADA guidelines (Papalia 2022).

3. Creative Process and Fabrication

3a. Can you describe your creative process for your artwork from concept through fabrication and installation?

This question was not asked because it did not fit with the interview.

3b. As a part of that creative process, did you engage with the intended audience of your artwork in any way? Please explain.

This question was not asked because it did not fit with the interview.

3c. Was research a part of your creative process? If yes, how so?

This question was not asked because it did not fit with the interview.

3d. Did you work with special consultants to further the design and/or construction of your artwork? How so?

This question was not asked because it did not fit with the interview.

4. Why Equitable Public Art Matters

4a. What opportunities and challenges exist within your field, when it comes to making public artwork equitable and inclusive for all people? How can this type of work be advanced?

There is an opportunity to add a cultural dimension to public art, such as the ability for people to make decisions about how to interact with an artwork or build community together by interacting with an artwork. "People should be able to show up and feel comfortable [in an artwork] (Papalia 2022). However, for a person that is disabled in the cultural sector, such as Carmen, it is easier to burn out because "my access [in the art wold] is based on productivity and a hierarchy of privilege" (Papalia 2022). The art world, and space in general, is a system that wasn't often built with Persons with Disabilities at the table (Papalia 2022). One of the greatest challenges for Persons with Disabilities is social isolation, so an artwork that brings people together and creates a sense of community is one of the greatest opportunities for equitable public artwork. Carmen also has "always wanted there to be more places outdoors where we [can] touch art" (Papalia 2022). However, public art is not held to the same standard as art in institutions (Papalia 2022).

4b. Do you think other disciplines, such as architects, landscape architects, engineers, sociologists, and others should be involved in the creation of equitable and inclusive public artwork? Please explain.

This question was not asked for time purposes.

Tom Kortbeek

Interviewed about Tactile Orchestra and Bio Orchestra

Tom Kortbeek is a co-founder of Fillip Studios, located in the Netherlands. “Fillip Studios is an art & design studio with the mission to create impact through wonder. [Many of their works involve interactive and multi-sensory experiences, thus making them equitable for all people to enjoy and experience.] The studio is founded by artists Roos Meerman and Tom Kortbeek and develops artistic concepts and conducts design research. The studio uses [its] innovative creativity to [transform] wonder into impact — because all progress starts with wonder” (Fillip Studios n.d. (a)).

1. The Intention of Equitable Public Art

1a. When thinking about the potential audience for your artwork, did you take into consideration the needs of Persons with Disabilities? Please explain.

The artwork had rather “ego-centric” beginnings, according to artist Tom Kortbeek, because it was not designed with equitability as a priority (2022). At the time that the artwork was designed (pre-2020), equitability and inclusivity were less common themes in the art and design worlds.

2. Strategies for Equitable Public Art

2a. What strategies did you use to make your artwork accessible to all people? What senses were engaged and how?

Both ‘Tactile Orchestra’ and ‘Bio Orchestra’ engage the senses of sound, touch, and sight. The artwork does not “come alive” until activated by people and promotes community bonding in this way. Particularly with Tactile Orchestra, when one person touches a black furry wall, a singular orchestral instrument plays; when more people join, it becomes an orchestra.

2b. To make the experience of your artwork more equitable and inclusive, did you make any special considerations for: materials, color, lighting, sound, scale, and site placement?

Detailed answers to this question are provided on pages 223 through 230. These pages consist of the precedent analysis for ‘Tactile Orchestra’ and ‘Bio Orchestra.’

3. Creative Process and Fabrication

3a. Can you describe your creative process for your artwork from concept through fabrication and installation?

Since ‘Tactile Orchestra’ was such a success, installed world-wide at institutions and events, different versions were created and were designed based on the space they were meant to be installed. “The shape was determined by the space and [its requirements as well as] by the people using or interacting with it” (Kortbeek 2022).

3b. As a part of that creative process, did you engage with the intended audience of your artwork in any way? Please explain.

In the case of ‘Bio Orchestra,’ the artist worked with a professor to create an installation for the university that would communicate a love of plants and biology to the people that experienced it. The artists wanted the people that experienced the artwork to have the same feeling as the professor that they worked with- when the professor works with plants.

3c. Was research a part of your creative process? If yes, how so?

The artist experimented with the artworks themselves prior to exposing them to the public and found that a certain learning curve was required. People are not used to touching art, so when they can touch art they might not know what to do at first.

3d. Did you work with special consultants to further the design and/or construction of your artwork? How so?

While the start of the project stemmed from the artists’ own interests, after connecting with partners new demands and needs were brought to light. The combination of artistic thinking and satisfying the needs of the project partners led to the development of equitable art.

4. Why Equitable Public Art Matters

4a. What opportunities and challenges exist within your field, when it comes to making public artwork equitable and inclusive for all people? How can this type of work be advanced?

The world is opening up and becoming more inclusive and equitable. If we want art to stay relevant, it has to open up and grow too (Kortbeek 2022). The artist also believes that guidelines will help a lot in the design and development of equitable public art.

4b. Do you think other disciplines, such as architects, landscape architects, engineers, sociologists, and others should be involved in the creation of equitable and inclusive public artwork? Please explain.

This question was not asked for time purposes.

Aaron McPeake

Interviewed about A Sense of Vesuvius

"In 2002, McPeake had to abandon a long career in stage lighting design due to the loss of most of his eyesight and returned to arts education and practice on a full time basis. McPeake works with numerous media from wood, metal and ceramics to film, photography and sound sculpture and recording. His work places emphasis on the possibility for many types of readings and he views the process of making artwork as akin to writing poetry – where physical encounters and visual imagination is integral to both its making and reception. Another important aspect of his work, particularly his sculptural and installation practice, relates to beholders' relationship to the work and the agency it can afford them. Most of his work can be physically interacted with – touched and rung providing unique experiences" (McPeake 2020a; McPeake 2020b).

1. The Intention of Equitable Public Art

1a. When thinking about the potential audience for your artwork, did you take into consideration the needs of Persons with Disabilities? Please explain.

The artist thought carefully about the height of the artwork, since it is interactive and all people should be able to experience it. Furthermore, the artist has personal experience, as a person that has lost most of his eyesight, and designs based on what he feels would enrich the experience of art.

2. Strategies for Equitable Public Art

2a. What strategies did you use to make your artwork accessible to all people? What senses were engaged and how?

Aaron thought carefully about the five senses and how they could be engaged by an artwork. For example, he considered the temperature and smell of metal, what textures feel interesting to touch, the loudness of a metal bell, and if adding essential oils to the piece would be beneficial.

2b. To make the experience of your artwork more equitable and inclusive, did you make any special considerations for: materials, color, lighting, sound, scale, and site placement?

Detailed answers to this question are provided on pages 243-246. These pages consist of the precedent analysis for 'A Sense of Vesuvius.'

3. Creative Process and Fabrication

3a. Can you describe your creative process for your artwork from concept through fabrication and installation?

Aaron is inspired by the possibilities of multi+sensory artwork since he has lost most of his eyesight, the oxidation of metal, and natural processes such as volcanology. As a child, the artist was in an Icelandic eruption and ever since he has been fascinated by lava and lava fields. In fact, he has even cast rocks and lava from Iceland to make molds.

3b. As a part of that creative process, did you engage with the intended audience of your artwork in any way? Please explain.

While Aaron did not engage the possible audience of this artwork, in a way he is the audience he is designing for. By providing more than just a visual experience of artwork, Aaron is opening the door for all people to have a more colorful and rich, multi-sensory experience of his art.

3c. Was research a part of your creative process? If yes, how so?

Years of experience casting molds of lava as well as considering the world in a different way- in a multi-sensory way, greatly helped the creative process for this artwork. Furthermore, Aaron's experience with artwork that is not equitable, does not provide enough audio descriptions, or sensory experiences, motivates him to do things differently.

3d. Did you work with special consultants to further the design and/or construction of your artwork? How so?

Aaron worked with special consultants to pour metal into bell molds. Other than that, he completed the rest of the work himself.

4. Why Equitable Public Art Matters

4a. What opportunities and challenges exist within your field, when it comes to making public artwork equitable and inclusive for all people? How can this type of work be advanced?

Public art is often answering a brief- if that brief does not call for equitable artwork, then it is likely that an artwork will not be equitable. Furthermore, there is a lack of funding in comparison to the funding other disciplines receive, when it comes to making things equitable.

4b. Do you think other disciplines, such as architects, landscape architects, engineers, sociologists, and others should be involved in the creation of equitable and inclusive public artwork? Please explain.

This question was not asked for time purposes.

Sonya Gimon

Interviewed about Restorative Ground

"Sonya Gimon is a landscape and urban designer with a focus on sustainable environmental systems, environmental conservation, human/wildlife relations and community engagement" (Gimon n.d.). She is also a part of WIP Collaborative, "a shared feminist practice of independent design professionals working together on projects that engage community and the public realm" (WIP Collaborative n.d.). The founding members of WIP (Women in Practice | Women in Progress) Collaborative are Abby Coover Bryony Roberts, Elsa Ponce, Lindsey Harkema, Ryan Brooke Thomas, Sera Ghadaki, and Sonya Gimon.

1. The Intention of Equitable Public Art

1a. When thinking about the potential audience for your artwork, did you take into consideration the needs of Persons with Disabilities? Please explain.

Prior to the interview, I was under the false impression that Restorative Ground was designed for people that are neurodiverse. "['Restorative Ground'] was our first exploration of inclusive design, but we were not necessarily [designing] for a neurodiverse population" (Gimon 2023). The needs of populations that are neurodiverse were not as well known amongst designers then (in 2020) as they are now (in 2023).

2. Strategies for Equitable Public Art

2a. What strategies did you use to make your artwork accessible to all people? What senses were engaged and how?

The artist interviewed locals and activists about the materials and other characteristics that appeal to them most. What she found was that everyone has different preferences and needs. There is not one perfect material that will satisfy everyone. Therefore, 'Restorative Ground' was designed to provide the freedom to choose your own experience, based on the texture and level of activity you need at a particular moment in time. This strategy makes Restorative Ground particularly inclusive to populations that are neurodiverse.

2b. To make the experience of your artwork more equitable and inclusive, did you make any special considerations for: materials, color, lighting, sound, scale, and site placement?

Detailed answers to this question are provided on pages 215- 218. These pages consist of the precedent analysis for 'Restorative Ground.'

3. Creative Process and Fabrication

3a. Can you describe your creative process for your artwork from concept through fabrication and installation?

"I think we very much take all of our work at this point as exploration... so that's how we approach a [design]" (Gimon 2023). The creative process and end result of the project, 'Restorative Ground,' was based very much on the findings from community engagement.

3b. As a part of that creative process, did you engage with the intended audience of your artwork in any way? Please explain.

Yes, Sonya spoke to people in different age groups and with different expertise to determine their preferences and needs. For example, she spoke with a person from an organization that works with children with autism and a self-advocate. "[Sonya] tried to tap into different groups of people who have already created ways to make their spaces serve them better, whether interior or exterior" (Gimon 2023).

3c. Was research a part of your creative process? If yes, how so?

While interviews were conducted with people that would later experience the art, to determine their preferences and needs, the artist does not consider them to be exhaustive. However, this project and others like it have inspired her (and her team) to embark on a research project that more clearly identifies the needs of people that are neurodiverse.

3d. Did you work with special consultants to further the design and/or construction of your artwork? How so?

The engaged community members were the "special consultants."

4. Why Equitable Public Art Matters

4a. What opportunities and challenges exist within your field, when it comes to making public artwork equitable and inclusive for all people? How can this type of work be advanced?

While guidelines exist for people that are physically disabled, less is known about the needs of people that are neurodiverse- especially in public spaces. Therefore, it's harder to design for all people if you don't know what to design for or what people need. Also, how do you go beyond ADA guidelines and design in an exciting way?

4b. Do you think other disciplines, such as architects, landscape architects, engineers, sociologists, and others should be involved in the creation of equitable and inclusive public artwork? Please explain.

This question was not asked for time purposes.

Interview Findings

1. The Intention of Equitable Artwork

Main Takeaways

The intention of equitable artwork is to provide an experience for all people to learn together and to have a shared, inclusive experience

Sometimes artists do not consider the needs of others when creating artwork, and their artwork may thus have an 'ego-centric' beginning. As more people are engaged, diverse needs are learned, and an artwork may evolve to become more equitable for all people

The inclusivity of projects may be dependent on the awareness and global conversation around inclusivity. Some projects were created to be inclusive, but at the time terms like "neurodiversity" were yet to be a focus of inclusive artwork

Equitable and multi-sensory artwork is for all people, stops the exclusion of Persons with Disabilities from experiencing artwork, and creates a shared experience for all people through multiple modes of sensory perception

Equitable artwork creates an opportunity for community building by engaging people and bringing strangers together in a shared artwork experience

Equitable and multi-sensory artwork is not "for" Persons with Disabilities, it is for everyone. An enriched, multi-sensory artwork experience will ultimately enhance the experience of an artwork for all people, not just Persons with Disabilities

Significant Quotes

"[Please Touch the Art] was not an exhibit *for* blind people, but it was an exhibit that didn't *exclude* blind people"
- Georgina Kleege 2022

"The entire idea [of Sensory Journey] was to think about a multi-sensory piece that would work for everyone. People learn in different ways; people experience the world in different ways. I wanted to explore that with this piece"
- Wendy Evans Joseph 2022

"['Restorative Ground'] was our first exploration of inclusive design, but we were not necessarily [designing] for a neurodiverse population" -Sonya Gimon 2023

"['Tactile orchestra' was not designed for a particular user group]. We really started this concept as artists, so really thinking of ourselves. We wanted to create ... the experience of music in a more spatial way, instead of just listening from A to Z to a song"
-Tom Kortbeek 2022

Interview Findings

2. Strategies for Equitable Public Art

Main Takeaways

Multi-sensory artwork can be a way to combat the over-regulation of artwork, because it allows people to experience it in many different ways

Textures evoke different feelings; think about the meaning of the artwork and how texture can be incorporated

Equitable public artwork should have social components; it should be living and come “alive” when people interact with it. For example, could the artwork be constructed by the communities that experience it, instead of already being complete upon installation? (Ex: Tactile Orchestra, see precedent analysis, is a wall that emits a singular musical instrument sound when one person touches it; this singular instrument becomes an orchestra when more people touch the artwork)

Multi-sensory artwork is not for People with Disabilities, it is for everyone and can ultimately enrich the experience of artwork for all people

Guidelines for equitable and inclusive public artwork are very helpful to artists and designers because they provide a clear set of rules for them to follow

Artwork is truly equitable if other people can engage with it in the way that works best for them. The best way to determine the needs of others- especially those that will interact with the artwork- is to TALK to them and ask them what they need

The most successful artists and designers work with the audience of their artwork and special consultants to learn diverse needs and make art truly equitable to all people

Interview Findings

2. Strategies for Equitable Public Art

Significant Quotes

Part of the challenge of making guidelines for equitable public art is that we do not "over-regulate our public art [so much so that] it becomes the same as boring plazas" -Sonya Gimon 2023

Interviews with a community using boards that have different textures and materials on them can be a way to determine the needs and preferences of people -Sonya Gimon 2023

"I want eight, ten, or twelve different people to describe my work. [I find singular auditory descriptions to be limiting]"
-Aaron McPeake 2022

"Audio tours and touch tours... felt very limiting. What [does] accessibility need to be like if it were to depart from a traditional model?" -Carmen Papalia 2022

"I think if we consider access in the way that we have been doing for the last few decades, it is still "othering" [Persons with Disabilities]. [Instead], take the approach... here's everything for everybody. It stops that [othering]" -Aaron McPeake 2022

"We can really make something inclusive by providing a possibility of choice" and a variety of experiences for people
-Sonya Gimon 2023

"I want public art to be living [or have a social component]; not just a design element or a sculpture" -Carmen Papalia 2022

"A code [for equitable and inclusive art] gives very direct guidelines... all things helping this kind of process, I'm really cheering for that" -Tom Kortbeek 2022

"Our [art]work exists only when someone interacts with it"
- Tom Kortbeek 2022

"The texture is the surface [of the sculpture] and the materiality is the substance [of the sculpture]... To be able to touch something is to engage in its materiality" -Rosalyn Driscoll 2022

"When sound is amplified, so too is texture" - Rosalyn Driscoll 2022

"I've come to realize that people don't necessarily know what they're supposed to be doing if they can touch the art... [they need] guidance or docent-led tours to give some... choreographies... about how to touch the art"
-Georgina Kleege 2022

"What makes the outdoors great is simply that it is a multi-sensory experience, in which the world unveils itself to you in light, shade, shadow, temperature, sound, etc...."
-Wendy Evans Joseph 2022

"If you want to do something that responds to physical senses, you have to be there, [on the site], to experience that physicality"
-Wendy Evans Joseph 2022

"By doing things together [such as engaging the audience of an artwork or experiencing an art alongside other people] we all learn from each other" -Wendy Evans Joseph 2022

We interviewed people to determine the best texture and material... what we found is that everyone has different needs and preferences. There is not one solution - Sonya Gimon 2023

Interview Findings

3. Creative Process and Fabrication

Main Takeaways

The artist should come up with a detailed maintenance plan prior to installation and ensure the receiving entity is willing and able to maintain the artwork

Try to think of the emotive qualities of textures, colors, and materials. What do you want the audience to feel when they experience the piece?

The equitability of public artwork may be limited by the constraints set by a commissioning entity that does not have equitability at the forefront of their brief or Call for Art

Money, time, knowledge or awareness, and institutional support are some of the greatest constraints when creating equitable public artwork

Sometimes available materials may determine the colors and sizes of an artwork

Interview Findings

3. Creative Process and Fabrication

Significant Quotes

"There's no point in a project if there's no community engagement. If it is to be used by the public, the role of a designer is to provide technical assistance to realize the vision of a community" -Sonya Gimon 2023

"To me, the role of designers is to provide... technical assistance to a community. To realize their vision and to form their vision" -Sonya Gimon 2023

Even if an artwork is multi-sensory and accessible to all people, the narrative doesn't have to be about accessibility -Participant A 2022

Brad nails are about the same size as braille dots, and could be used on a tight budget -Participant A 2022

Volunteer with locals and find other opportunities to engage with the audience of the artwork -Participant A 2022

Skill builds with each artwork-especially when designing equitably. Don't force it all at once -Participant A 2022

If incorporating vegetation into an artwork, consider the amount of time it will take for it to reach the desired scale and factor that into the art-making time -Participant A 2022

Consider a maintenance plan for a public artwork and discuss with the receiving entity how much they are willing and able to do PRIOR to installation -Participant A 2022

"The making is very much a dialogue between me and the materials" -Rosalyn Driscoll 2022

"I had a revelation [and recognized] that we actually create what we perceive through our perception. I mean it. It does exist in this physical form, but how we perceive that and what we make of that is really a function of [who we are]" -Rosalyn Driscoll 2022

"I have to be constantly responsive to what materials can and can't do" -Rosalyn Driscoll 2022

"An artist makes choices on the basis of looking for a felt sense within" -Rosalyn Driscoll 2022

"The installation, in a sense, happens from the very start. Where is this place? What's here already that I can amplify or bring attention to?" -Rosalyn Driscoll 2022

"Evaluation and feedback and analysis are so profoundly helpful in any kind of learning process" -Rosalyn Driscoll 2022

"The simplicity of the gestures [in Sensory Journey] are what give [the artwork] strength" -Wendy Evans Joseph 2022

"We are not very conscious of our sensory experiences," but if we design for a multi-sensory experience, we open up a world of possibilities -Aaron McPeake 2022

"We consider all projects as concepts or ideas and we try to materialize them always according to the specific needs [of the people that will experience the art]" -Tom Kortbeek 2022

In response to the question, "What kind of materials do you think are able to withstand tactile and haptic exploration?", Georgina replied, "Metal, certain kinds of stones... There is a lot of science about this" -Georgina Kleege 2022

Interview Findings

4. Why Equitable Public Art Matters

Main Takeaways

Even if not asked directly about the significance of multi-sensory artwork for all people, all interviewees emphasized the importance of this type of artwork

All people want to touch art!

There are as many ways to perceive as there are people

Institutions have historically made public artwork exclusive to those who can experience artwork visually. Many artworks are seen as “pristine” and are thus kept behind glass

Social isolation is one of the greatest challenges for Persons with Disabilities. Artwork with a social or interactive component can bring these communities together and solve a problem

Some Persons with Disabilities feel frustrated about a continuous lack of accessibility when trying to experience public space and public artwork

Public artwork is, perhaps, less developed or not held to the same standards as institutional entities displaying private artwork; when, in fact, public artwork is more accessible to all people and should thus be even more considerate of all people’s needs

An artist shouldn’t have to fight to make their work accessible and equitable for all people; equitable artwork should be a commonly accepted and monetarily/institutionally accepted type of artwork

Monetary and institutional support are some of the greatest challenges to equitable public artwork. Time is also a significant challenge to creating equitable public artwork

Interview Findings

4. Why Equitable Public Art Matters

Significant Quotes

"The challenge [to creating equitable public art] is the comparative lack of funding... in comparison to the funding architecture receives" -Aaron McPeake 2022

"Public artwork... is very often answering a brief [or a call for art], so in many ways you're kind of stuck with what [a commissioning agency wants to see]" -Aaron McPeake 2022

Multi-sensory artwork is not for people who are blind or deaf, it is for everyone and can ultimately enrich the experience of art for all people -Aaron McPeake 2022

"This isn't a system that was built with people like me [Persons with Disabilities] at the table" -Carmen Papalia 2022

Social isolation is one of the greatest challenges Persons with Disabilities face. Public art with a social component can bring these communities together and solve a problem
-Carmen Papalia 2022

"[Institutions using money or perceived risk] as a reason to not make places accessible, [or not support equitable artwork], is not good enough for me" -Jillian Crochet 2022

"When there's just one person coming up against an institutional body, it makes it really hard to create equitable artwork"
-Jillian Crochet 2022

"We have to create things that are open [and understandable] to everyone... and provide value to everyone. That can be a challenge, [but] it's a necessity" -Tom Kortbeek 2022

"[Society is made up of] people with abilities in all different levels so it's more like a gray scale than black or white... if we want to keep art [relevant], especially art in the public environment, we have to move [towards equitable and inclusive practices]"
-Tom Kortbeek 2022

"If you want to [make relevant] art [and] if you want to be a part of [a moving] society, you also have to move"
-Tom Kortbeek 2022

"There are as many ways to perceive as there are people"
-Rosalyn Driscoll 2022

"We don't experience in isolated sensory modes. That cross-modal [experience] is really crucial to recognize and then integrate" -Rosalyn Driscoll 2022

"Everybody wants to get their hands on art!" - Georgina Kleege 2022

"Institutions have existed for hundreds of years, [and still] think of artwork as something that is experienced visually... It is very hard to change that mindset" -Georgina Kleege 2022

"We have this idea that an art object is in a museum because it's pristine, it's never been touched by anyone but the artist. And yet, there are all sorts of cultural artifacts around the world where the traces of people touching is a part of the value or sacredness of the work or artifact" -Georgina Kleege 2022

"The idea is not that "people who can do this go to the left and people who can do this go to the right," but rather that we all learn together and remain a community" -Wendy Evans Joseph 2022

Semi-Structured Interviews | Designers

Travis Mazerall
Landscape Architect

January 16th, 2023
45-Minute Interview

Interviewed on accessible strategies used at the Braille Trail in Watertown, MA.

Mauricio Gomez
Landscape Architect

January 18th, 2023
50-Minute Interview

Interviewed about accessible strategies used at the Boston City Hall Plaza.

Ian Scherling
Landscape Architect

January 27th, 2023
60-Minute Interview

Interviewed about the Virginia Polytechnic Institute Campus Plan.

Rachel Salmela
Landscape Architect

February 8th, 2023
60-Minute Interview

Interviewed about accessible strategies used at the Louise B. Miller Memorial and Freedom Garden.

Mary Anne Ocampo
Landscape Architect

February 14th, 2023
60-Minute Interview

Interviewed about the University of Kentucky DEI Campus Plan.

Semi-Structured Interviews | Designer Questions

Questions to interviewed designers consisted of the following:

1. The Intention of Equitable Public Spaces

1a. When thinking about the potential user groups for the site, did you take into consideration the needs of Persons with Disabilities? Please explain.

Anticipated Findings
Was the space designed with equitability at the forefront of the designer's mind, or was it an afterthought? How did the designer approach designing for all people?

2. Strategies for Equitable Public Space

2a. To make the experience of the site more equitable and inclusive, what considerations did you make for:

i. Lighting
- How is artificial lighting used on the site, if at all?

ii. Acoustic quality
- Were sound buffers used? What are the sound qualities on the site?

iii. Movement experience
- How do people move through the site?

iv. Visibility
- Were views strategic? Ex: a bench placed to direct views to a garden with flowers

v. Communication + Understanding
- How do people understand where to go throughout the site? Ex: is there signage? What type of signage is used? (ex: braille map)

vi. Degrees of enclosure
- How are spaces enclosed and what materials are used to enclose them? Why are some spaces enclosed while others are open?

Continued

vii. Mobility Requirements
- **i.** How does the site adhere to, or exceed, ADA requirements?

viii. Seating + Gathering
- **i.** How is seating used throughout the site? What type of seating was chosen and why? What materials were used for seating and why? How are spaces designed to encourage gathering or different types of interaction?

ix. Material, Color Choices, and Rhythm
- **i.** What materials and colors are used throughout the site and why?
- **ii.** How was rhythm incorporated in the site? What purpose did it serve? (for example, pavement patterns in a particular pattern might help a person orient themselves in an unknown space)

x. Choice, Placement, and Orientation of Site Elements
- **i.** Why were site elements, such as tables, benches, and/or art,placed where they were?
- **ii.** What experiences does the placement of these elements encourage? (Ex: small group gatherings vs. large gatherings)

xi. Vegetation and Topography
- How was vegetation used throughout the site? How did you choose the plants used and why were they chosen?
- How is topography used to create space and experiences throughout the site?

Anticipated Findings
1. How did the designer approach designing for all people? Did they intentionally make an equitable site and how so? Findings from this section directly informed precedent analysis of sites.

Semi-Structured Interviews | Designer Questions

Questions to interviewed designers consisted of the following:

3. Why Equitable Public Space Matters

3a. What opportunities and challenges exist within your field, when it comes to making spaces equitable and inclusive for all people? How can this type of work be advanced?

Anticipated Findings
Why do equitable public spaces matter?

3b. Do you have any additional thoughts you would like to share?

Travis Mazerall

Interviewed about the Watertown Braille Trail

"Travis is a landscape architect who has worked on a variety of complex public and private projects ranging in size from large master plan design to site construction implementation. With nearly 10 years of experience, his passion lies within the built environment. His broad range of experience with both institutional and urban public realm projects and understanding of the design process enables him to work effectively with diverse client groups, stakeholders and consultants across a variety of disciplines" (Sasaki n.d. (e)). Travis was interviewed about their work on the Watertown Braille Trail.

1. The Intention of Equitable Public Art

1a. When thinking about the potential user groups for the site, did you take into consideration the needs of Persons with Disabilities? Please explain.

The Braille Trail is located adjacent to, and was designed with assistance from, Perkins School for the Blind. Therefore, the needs of Persons that have Low Vision or are Blind were especially considered during this project. Physical accessibility to most spaces was also considered.

2. Strategies for Equitable Public Art

See precedent analysis of the Watertown Braille Trail (pages 261-265) for a summary of answers in this category.

3. Why Equitable Public Space Matters

3a. What opportunities and challenges exist within your field, when it comes to making spaces equitable and inclusive for all people? How can this type of work be advanced?

"Tough topography is not your friend" and is certainly a challenge to creating equitable spaces (Mazerall 2023). Permitting and client support can also be challenges when creating equitable spaces. However, opportunities exist to engage artists and communities for equitability.

3b. Do you have any additional thoughts you would like to share?

"Seek out people who can enrich your design," such as people in diverse user groups and with different perspectives (Mazerall 2023). Furthermore, enlisting local artists and the community will increase site equitability because it will address the needs of the people who will experience the site.

Mauricio Gomez

Interviewed about the Boston City Hall Plaza

"Mauricio (Mo) is a landscape architect who specializes in urban landscape projects and has over 20 years of related professional experience. Mo has participated in the design and construction of a variety of project types, ranging from large-scale urban parks and waterfronts, to municipal landscape spaces, to corporate site design projects. Mo has strong commitment to quality, excels at working in collaborative environments, and has significant experience in working on challenging and demanding urban sites" (Sasaki n.d. (d)).

1. The Intention of Equitable Public Art

1a. When thinking about the potential user groups for the site, did you take into consideration the needs of Persons with Disabilities? Please explain.

One of the main goals when designing the Boston City Hall Plaza was to make sure that people have "equitable access in all areas of the plaza... in additional to all the main entrances to [City Hall], all program areas on [the] site" (Gomez 2023).

2. Strategies for Equitable Public Art

See precedent analysis of the Boston City Hall Plaza (pages 285-289) for a summary of answers in this category.

3. Why Equitable Public Space Matters

3a. What opportunities and challenges exist within your field, when it comes to making spaces equitable and inclusive for all people? How can this type of work be advanced?

Municipal support is key to creating equitable spaces and executing a vision; depending on the municipality, it can be difficult to gain their support when creating equitable spaces and experiences for all people.

3b. Do you have any additional thoughts you would like to share?

"Equitable access means never having to change your route based on your ability"; equitability should be incorporated into site design without it being considered an "extra" goal to achieve (Gomez 2023). Public space is for all people and thus all people should be able to experience it.

Ian Scherling

Interviewed about the Virgina Polytechnic Institute Campus

"Ian believes that good ideas can come from anyone at any time. This is why, as a landscape architect, he subscribes to an inclusive, collaborative, and patient design process. He believes in the power of the analog in a digital world—that sketches, models, and tactile materials can unlock innovative approaches to placemaking. Ian's projects have won numerous awards at both the built and planning levels, domestic and abroad. Ian's work considers themes of social justice and human-centered design. As a design leader and project manager, he makes sure these issues are brought to the foreground and designed for in the landscape" (Sasaki n.d. (b)).

1. The Intention of Equitable Public Art

1a. When thinking about the potential user groups for the site, did you take into consideration the needs of Persons with Disabilities? Please explain.

Yes, the design team hosted user group engagement sessions with a disability caucus active on the Virginia Tech. Campus. These user groups and activists helped designers identify the primary needs of people on the campus.

2. Strategies for Equitable Public Art

See precedent analysis of the Virginia Tech. Campus Plan (pages 279-282) for a summary of answers in this category.

3. Why Equitable Public Space Matters

3a. What opportunities and challenges exist within your field, when it comes to making spaces equitable and inclusive for all people? How can this type of work be advanced?

It can be challenging to get all people on board with the idea of designing universally. That said, on every project at every scale, there an opportunity for more "human-centered" designed spaces (Scherling 2023).

3b. Do you have any additional thoughts you would like to share?

Landscape Architects have an obligation to create equitable spaces; we shouldn't just continue with the status quo because as we get older we are likely to experience some type of disability. Though we may not be a part of this user group now, we likely will be. It's important we design for our future, for ALL people, and integrate universal design into all spaces.

Rachel Salmela

Interviewed about the Louise B. Miller Memorial and Freedom Garden

"Rachel is a landscape designer and Associate at TEN x TEN. Her experiences reflect a trans-disciplinary approach and a commitment to collaborative design processes across scales. From large scale public projects and master planning efforts for the City of Toronto to interactive art installations, Rachel appreciates the potential of all projects to engage ecology and culture in productive ways. Her interests in design embrace ideas of indeterminacy, hybrid landscapes, and dynamic planning frameworks" (TEN x TEN n.d. (b)).

1. The Intention of Equitable Public Art

1a. When thinking about the potential user groups for the site, did you take into consideration the needs of Persons with Disabilities? Please explain.

The site was designed with and for Deaf Black users, specifically. The design team also worked with disability commissioners and other agencies that made them aware of the needs of users that are Deaf Blind. The needs of Persons with Physical Disabilities were also incorporated.

2. Strategies for Equitable Public Art

See precedent analysis of the Louise B. Memorial and Freedom Garden (pages 267-271) for a summary of answers in this category.

3. Why Equitable Public Space Matters

3a. What opportunities and challenges exist within your field, when it comes to making spaces equitable and inclusive for all people? How can this type of work be advanced?

There is not a clear, singular precedent for designers to reference when designing for all people. More people, especially in the United States, need to be doing this type of work. Furthermore, designers should look to Europe more for their strategies when designing for all people.

3b. Do you have any additional thoughts you would like to share?

The designer is grateful to have worked on the Louise B. Miller Memorial and Freedom Garden because it required that they learn more about the needs of all people. The designer also felt that they learned more about community engagement and how to talk to different groups of people.

Mary Anne Ocampo

Interviewed about the University of Kentucky DEI Facilities and Spaces Plan

"Mary Anne is an urban designer and principal whose multidisciplinary training and experience allow her to work across contexts and scales. Mary Anne's collaborative approach integrates planning, landscape, and architecture. Her philosophy centers on achieving design excellence through a critical understanding of the academic vision and community contexts. In all of her work, Mary Anne places particular emphasis on understanding and building upon the complex interrelationships of institutions and cities" (Sasaki n.d. (c)).

1. The Intention of Equitable Public Art

1a. When thinking about the potential user groups for the site, did you take into consideration the needs of Persons with Disabilities? Please explain.

The University of Kentucky (UK) DEI (Diversity, Equity, and Inclusion) Facilities and Spaces Plan not only considers the needs of Persons with Disabilities, but it highlights the needs of different racial, ethnic, and sexual identity communities.

2. Strategies for Equitable Public Art

See precedent analysis of the University of Kentucky DEI Facilities and Spaces Plan (pages 273-277) for a summary of answers in this category.

3. Why Equitable Public Space Matters

3a. What opportunities and challenges exist within your field, when it comes to making spaces equitable and inclusive for all people? How can this type of work be advanced?

There is an opportunity to understand why people are excluded from spaces, or what spatial barriers exist, and how barriers can be modified to become more inclusive for all people. However, resources (such as time and money) are the top constraints to designing for all people.

3b. Do you have any additional thoughts you would like to share?

Designing with disabilities is important, but it's even more beneficial when sexual, racial, and ethnic identities are considered and incorporated into the conversation. A disability is a part of a person, but people are a part of other communities too, such as racial, ethnic, and sexual identity communities.

Interview Findings

1. The Intention of Equitable Public Space

Main Takeaways

If community engagement is conducted, the people that use a site ultimately influence the site design needs that designers cater to when creating spaces

People adjacent to a site and other stakeholders can provide valuable information to assist designers in creating equitable spaces

Engagement sessions are essential to creating equitable public spaces; it's hard to know what to consider for a design if you don't understand the needs of the people you are designing for

Equitable access to all spaces is ideal

It is important to have an intention of who will be using a public space and how their needs can best be accommodated

Disabilities are just one part of person; people are a part of different racial, ethnic, sexual orientation, and sexual identity communities too, among others. It is important to not just focus on the needs of a person based on their ability, but also consider how needs can best be accommodated in conjunction with their other identities and communities that they are a part of (ex: Deaf Black communities, Deaf Blind communities, etc.)

Significant Quotes

"One of the core tenants and goals of the project was to make sure that we had equitable access in all areas of the plaza"
-Mo Gomez 2023

"Equitability was at the forefront of what we were doing. It required a lot of time and money, but without municipal support we wouldn't [have been able to see the vision through]"
-Mo Gomez 2023

"The goal was to go beyond accessibility requirements to create a park that caters to all abilities" -Travis Mazerall 2023

"Persons with Disabilities were one of the many stakeholders that we met with... [we had to consider] who we were designing for and who is being excluded from the built environment."
-Mary Anne Ocampo 2023

Interview Findings

2. Strategies for Equitable Public Space

Main Takeaways

The best way to design for all people is to talk to them and determine what their needs are

It is impossible to consider every design need as one person. The more people that are engaged, the better

Consult artists and special consultants who may have specialized knowledge and can enrich the experience of a space for all people

Sometimes it is necessary to break out of the (metaphorical or literal) box we live within and seek out what other countries are doing to create equitable public spaces. For example, Ireland has done a lot of work on creating guidelines for universally-designed spaces (Scherling 2023).

Community engagement, consulting disability commissioners, and speaking to local experts is the best way to determine how to design for all people

If a designer is willing to broaden their project scope and step into unknown (or known) territory, by designing for user groups such as Deaf Blind or Deaf Black communities, they can take that knowledge into future projects. The more a designer learns on one project, the more they can transfer that knowledge to the next project.

It is so important to engage as many stakeholders as possible from as many different communities as possible; only then can a designer begin to comprehend the needs of the people that will be using a public space

Significant Quotes

The more diverse a design team, or a community interaction, the better the project will be -Travis Mazerall 2023

Enlist local artists and the community to increase site equitability -Travis Mazerall 2023

“Seek out people who can enrich your design [and make it more equitable]” -Travis Mazerall 2023

“How do you measure success [or the equitability of a space]? How do you measure barriers? It is all part of the post-occupancy assessment” -Mary Anne Ocampo 2023

“There is tremendous opportunity to go beyond ADA [when designing for all people]” -Mary Anne Ocampo 2023

“Understanding the diversity of users should always be a part of the way we design our environment- from the ecological to the social- to anticipate needs and [create flexible environments that respond well to a changing world]” -Mary Anne Ocampo 2023

“Until you design with [Persons with Disabilities], it is really hard to understand [their needs]” -Ian Scherling, 2023

Interview Findings

3. Why Equitable Public Space Matters

Main Takeaways

Client and/or municipal support is essential to creating equitable public spaces

Intense, hilly topography is difficult to work with- especially if trying to create equitable spaces for all people

Truly equitable spaces can be accessed by all people in the way that works best for them. People should not have to change their route based on their ability

There is always an opportunity for more universally-designed spaces

As people age they are likely to experience some type of disability, whether that be low vision, hard of hearing, or physical disability. Therefore, it is especially important that we design not only for our ability now, but for what we will be able to do 30 or 50 years from now

Access to public space is a human right, or it should be. Let us stop designing for an idealized type of person and start integrating all abilities into our every day design considerations

Public space is for all people and thus all people should be able to experience it

Designers should take designing for all people as an opportunity to learn more about different user groups and how to engage with them

Designing *with* as opposed to *for* people is crucial

It is very important to understand *why* barriers exist for people, in order to create equitable public spaces

The resources of money and time are the biggest constraints to designing equitable public spaces for all people

Significant Quotes

"Maintenance is super important. Public spaces get use and misuse. If you're not constantly checking in on it, any project can fall into disrepair [and no longer be accessible and equitable]" -Travis Mazerall 2023

"From Edward Hall, "People from different cultures not only speak different languages, but inhabit different sensory worlds"" -Ian Scherling 2023

"From Corbusier, "the occupation of space is the first proof of existence." [If a Person with Disabilities cannot access a space, they cannot exist within that space.] If I can't get to a place, if it's exclusive, then I don't belong and it's not for me; in terms of the public realm and open space... there should be no exclusive landscapes like that in my opinion" -Ian Scherling 2023

"If we're thinking about human-centered spaces, it's important to know that our opinions are our own, and that someone may experience a place completely differently" -Ian Scherling 2023

"There are times in your life when you have to put yourself aside and listen to the needs of others" -Ian Scherling 2023

"We are social creatures; we are not meant to be isolated. As a landscape architect, it's my duty to make sure that we're not isolating people" -Ian Scherling 2023

"Research shows that there's more aging Americans than ever... and as we age, the number [of Persons with Disabilities] will only increase" -Ian Scherling 2023

"What kind of future do we want for ourselves and for our kids?" -Ian Scherling 2023

4.3
Findings
Precedent Analysis

4.3 Precedent Analysis | Artwork

Precedent Analysis
Method

Design Guidelines
Outcome

Final Design + Demonstration of the Guidelines
Outcome

Public artwork outdoors must be able to withstand and/or embrace the elements. Setting is largely uncontrolled, meaning that weather and other variables may affect the appearance of the artwork over time. Views and experience may be controlled, but the experience of the artwork over time may change due to uncontrollable variables.

Artwork indoors is not affected by the weather and its appearance/experience may be monitored and controlled. The location, lighting, and other variables of indoor artwork are selected to create a specific user experience.

Precedents were selected to analyze through literature review and word-of-mouth from artists during semi-structured interviews. Categories used to analyze the artwork precedents were based directly off of an artistic design considerations matrix (see Figure 85 below).

Artistic Design Considerations

Types of Disabilities



Figure 85. Artistic Design Considerations Matrix.

Artwork Precedent Analysis Categories

Lighting

How does the artwork incorporate lighting within it, if at all? How does the artwork take advantage of site lighting? How does site lighting affect the experience of the artwork?

Sensory Experiences

How does the artwork engage two or more senses?

Movement Experience

Can the artwork be moved and how so? How do people move through or around the artwork? How does movement affect the experience of the artwork?

Visibility

What can people see within the artwork or around the artwork? How does that influence feelings of comfort/safety? (for example, people may feel unsafe if they are unable to see around a public artwork in a public space)

Understanding

How do people understand the artwork? Are there text or braille descriptions nearby the artwork? Is sound a component of the communication? How so?

Comfort + Protection

Does the artwork provide overhead protection from the elements? Is the artwork on a wall or can the audience move within the artwork? How does enclosure affect the experience of the artwork?

Seating + Gathering

Can people sit on or around the artwork? How do people interact with the artwork and does it encourage social interaction?

Color and Material Choice

What materials were used and how? What considerations were made for color? Why were materials and colors chosen?

Topography and Vegetation

Is the site flat or hilly? Are plants used at all? If yes, how so?

Artwork Precedents Studied

Large-Scale Outdoor Installations



Figure 86.
Sensory Journey
by Studio Joseph

(Alon Koppel Photography 2021)



Figure 87.
Sampan
by Ponnapa Prakkamakul

(Sasaki 2019)



Figure 88.
All About Us
by Ponnapa Prakkamakul

(Prakkamakul 2021)



Figure 89.
Built and Maintained for Certain Bodies
by Jillian Crochet

(Lo 2021)



Figure 90.
Restorative Ground
by WIP Collaborative

(WIP Collaborative and Hudson Square Properties 2021)

Large-Scale Indoor Installations

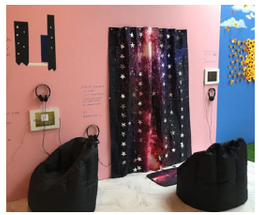


Figure 91.
Reset Rooms
by Shannon Finnegan

(Finnegan 2020)



Figure 92.
Tactile Orchestra
by Fillip Studios

(Stjernegaard 2019)



Figure 93.
Bio Orchestra
by Fillip Studios

(Fillip Studios 2019)



Figure 94.
MEDIATE Space
by Simone Gumtau, Paul Newland, Chris Creed, and Simon Kunath

(Adapted from Gumtau et al. 2005)

Artwork Precedents Studied

Small-Scale Indoor Installations



Figure 95.
Blooming
by Ponnapa Prakkamakul

(Sasaki 2019)



Figure 96. Pandora's Box 8
Multiple Pieces
by Rosalyn Driscoll

(David Stansbury Photography 2006)



Figure 97.
A Sense of Vesuvius
by Aaron McPeake

(Orrock 2023)

Large-Scale Outdoor Installation | Sensory Journey



Figure 98. Yellow speaking tubes encourage site users to speak into the artwork (Alon Koppel Photography 2021).

Location	Omi Sculpture Park in Ghent, New York
Design Team + Fabricators	Studio Joseph
Client	Art Omi, Inc.
Description	"Sensory Journey embodies truly equitable placemaking inviting all people, irrespective of ability, to come together for shared learning, enjoyment, and social bonding. The architects' guide throughout the project was the enhanced awareness and respect for the beauty of nature. Inspiring visitors to think carefully about their carbon footprint and their use of natural resources was the focus of the architects' journey" (Msensory 2022).



Figure 99. Blue periscope tubes direct views to surrounding nature and encourage a greater appreciation of the landscape (Alon Koppel Photography 2021).



Figure 100. 'Sensory Journey' acts as a sun dial of sorts and is aligned in accordance with the movement of the sun on the site (Alon Koppel Photography 2021).

Large-Scale Outdoor Installation | Sensory Journey

Summary of Artistic Design Considerations

Lighting

Sunlight during the day casts shadows across the ground around and through 'Sensory Journey', "creating a sense of depth a playfulness" (Joseph 2022). It is located due East-West on the site, so it becomes its own kind of sundial.

Sensory Experiences

Colors indicate different sensory experiences:

- Green: Please smell! Two clusters of pipes hover over herbs
- Blue: Please look! Periscopes aim at the trees and the sky, focusing on the details of flora seasonally
- Coral: Please listen! Wind chimes swing from the joists above, ringing in the breezes.
- Yellow: Please talk! 30-foot lengths of pipe with horns at either end, one above, hung from the beams and one below ground.

Movement Experience

People may move through the sculpture in the way that works best for them. The positioning of the sculpture is to encourage people to walk through nature, and go off of the main path.

Visibility

The pavilion frames views surrounding the sculpture and blue periscopes provide views of the trees and sky, encouraging awareness of nature and wildlife.

Understanding

People understand 'Sensory Journey' through exploration-looking through the colored pipes, smelling, and listening.

Comfort + Protection

There is minimal protection from the elements, but the openness of the sculpture allows for a more comfortable user-experience (not claustrophobic and no place for people to hide)

Seating + Gathering

People may gather and sit along one portion of 'Sensory Journey.'

Materials + Colors

Sensory Journey is painted black with metal pipes painted in high-contrast yellow, blue, and coral to make the site more accessible to people with low-vision.

Colors were also chosen to contrast the scenery around the sculpture throughout the year- snow conditions, sun conditions, etc.

For sustainability purposes, the pavilion boards were purchased and constructed as-is with no additional cuts or wasted material. Standard wood lumber and metal piping was used. Concrete foundations hold the posts in place for durability over seasonal changes.

Topography + Vegetation

The site is purposefully flat so that all people can move through it. Views and smells of nature are framed throughout 'Sensory Journey'

Large-Scale Outdoor Installation | Sampan



Figure 101. 'Sampan' provides a colorful respite from busy Chinatown in Boston, MA (Sasaki 2019).

Location	China Town, Boston, MA
Artist + Fabricators	Ponnapa Prakkamakul and the Sasaki Fabrication Studio
Client	Collaboration with Boston Chinatown Neighborhood Center (BCNC) Residence Lab
Description	This project was designed in collaboration with BCNC and the Chinatown community. The purpose of this project was to encourage residents to take ownership of their space through sculptural installations with writings and colors representative of their communities. In Thai, "sampan" means a connection or relationship. In Chinese, it describes a flat-bottomed Chinese boat (Sasaki 2019 (b)).



Figure 102. Braille is placed intuitively on the benches, where a person would naturally place their hand (Sasaki 2019).



Figure 103. Text in multiple languages tells the stories of communities within Chinatown (Sasaki 2019).

Large-Scale Outdoor Installation | Sampan

Summary of Artistic Design Considerations

Lighting

Natural lighting in outdoor space.

Sensory Experiences

Colors and quotes engage sight and make people feel more at home in the space, while touch is involved in reading the braille along the half-moon forms.

Movement Experience

People may move through or sit on the artwork. The positioning of the artwork off of a pathway provides space for people to rest and get ready to head to the next destination.

Visibility

The red half-moon seats contrast with the surrounding architecture and vegetation, making them easy to see amongst surrounding context.

Understanding

The braille is positioned on the benches where someone would naturally place their hand if they were sitting on a bench. The text on the benches is also communicated in several languages- English, Cantonese, and Mandarin- for optimal understanding. The quotes on the benches come from conversations with community members; quotes are about the residents' experiences in Chinatown, challenges of immigrating to the United States, and the effects of gentrification in their neighborhoods (Sasaki 2019 (b)).

Comfort + Protection

There is minimal protection from the elements, but the openness of the forms and the space allows for a more comfortable user-experience (not claustrophobic and no place for people to hide)

Seating + Gathering

The half-moon red forms serve multiple uses, as benches and sculptural monuments, and signage. The forms are meant to encourage rest and recuperation before moving on to the next destination (Sasaki 2019 (b)).

Materials + Colors

The color red was chosen due to its cultural significance in Chinatown, with white letters to provide high contrast. The material of the red benches is plywood and the braille dots are made from brad nails.

Topography + Vegetation

The site is purposefully flat so that all people can move through it. Trees provide some overhead protection above the artwork.

Large-Scale Outdoor Installation | All About Us



Figure 104. Colorful planters with native plants attract pollinators (Prakkamakul 2021).

Location	Monmouth Park in Boston, MA
Artist + Fabricators	Ponnapa Prakkamakul
Client	Brookline Art Center, part of their Public Art program
Description	All About Us was a collaborative art project, in which the artist engaged local subject experts about appropriate poems or songs that correspond with the colorful landscapes depicted (wetland, flowing water, etc.). The selected poem or song was then engraved into the benches with braille.



Figure 105. Braille lettering provides a poetic description of the artwork on the planters for people who are blind (Prakkamakul 2021).



Figure 106. Descriptions of the images painted on the planters were given to a consultant who is blind; the consultant identified a poem that the visual description made them think of and this poem was then included on the planter in Braille (Prakkamakul 2021).

Large-Scale Outdoor Installation | All About Us

Summary of Artistic Design Considerations

Lighting

Natural lighting in outdoor space with some adjacent light posts

Sensory Experiences

People can experience the artwork visually and also through touching the braille poems and/or songs inscribed along the artwork. The vegetation growing from the center of the sculptures adds a scent-component to the artwork.

Movement Experience

People may move through the sculpture in the way that works best for them. The positioning of the sculpture is to encourage people to walk through nature, and go off of the main path.

Visibility

All About Us is located within a site and does not direct views in any particular way. The sculptures appear to encourage people to travel off of the beaten path and into the landscape to experience them.

Understanding

Audiences that are blind or low-vision may experience the vivacity of the murals painted by reading poems or songs in braille along the edges of them. These poems and/or songs correspond to the landscapes depicted, and were selected by Persons that are Blind.

Comfort + Protection

There is minimal protection from the elements, but the openness of the sculpture allows for a more comfortable user-experience (not claustrophobic and no place for people to hide)

Seating + Gathering

People may gather and sit on the sculpture to experience the braille songs, poems, and mural, and vegetation.

Materials + Colors

Vibrant colors were chosen to stand out from the landscape. The bench is made out of painted plywood with brass nails for the braille dots.

Topography + Vegetation

The site is purposefully flat so that all people can move through it. Plant species were selected to attract and create a habitat for pollinators.

Large-Scale Outdoor Installation | Built and Maintained for Certain Bodies



Figure 107. 'Built and Maintained for Certain Bodies' uses the language of the institution to speak back to the institution (Lo 2021).

Location	Headlands Center for the Arts, Sausalito, CA
Artist + Fabricators	Jillian Crochet
Client	The receiving entity was Headlands Center for the Arts.
Description	'Built and Maintained for Certain Bodies' uses institutional language to boldly and clearly speak back to the institution. "Who is nature made accessible for?" and "Why are we [Persons with Disabilities] not involved in the process?" (Crochet 2022). 'Built and Maintained for Certain Bodies' is an attempt to call out inaccessible spaces, despite a recent lawsuit that aimed to make Golden Gate Park, surrounding the arts center, more accessible.



Figure 108. Much of the artist's energy was spent while trying to advocate for accessible artwork and public spaces (Lo 2021).



Figure 109. This sign highlights an inaccessible set of stairs in a powerful way (Lo 2021).

Large-Scale Outdoor Installation | Built and Maintained for Certain Bodies

Summary of Artistic Design Considerations

Lighting

Natural lighting in outdoor space

Sensory Experiences

The artist recognizes that currently, 'Built and Maintained for Certain Bodies', is primarily a visual experience, accessible to persons with physical disabilities and who can experience artwork visually. Moving forward, the artist would like to add a button to the sign that provides an auditory description of the artwork for audiences who are blind and have low vision. For example, "this is a blue sign with a white outline, and one line that says, built and maintained for certain bodies..." (Crochet 2022). The artist would also like to add a braille description.

Movement Experience

People may move around the artwork while experiencing it. They may not move through or underneath it. The artwork is placed in an accessible location so that all people may physically access it.

Visibility

'Built and Maintained for Certain Bodies' is visible to those moving alongside it. The board seen on the adjacent page, with sticky notes on a map, is visible along a path in Golden Gate Park.

Understanding

The audience understands the artwork visually through text and/or descriptions.

Comfort + Protection

There is minimal protection from the elements, but the openness of the artwork allows for a more comfortable user-experience (not claustrophobic and no place for people to hide)

Seating + Gathering

Some wooden block seating is located adjacent to the artwork for people to sit and gather on.

Materials + Colors

Vibrant colors were chosen to stand out from the landscape and provide an easier reading experience, with the sign 'Built and Maintained for Certain Bodies'. The color choices in 'Built and Maintained for Certain Bodies' are one of the ways this artwork communicates the language of the institution, back to the institution, since it appears like other institutional signs before closer inspection.

Topography + Vegetation

The site is purposefully flat so that all people can move through it. However, the sign 'Built and Maintained for Certain Bodies' is purposely located next to an inaccessible stairway to call attention to this lack of accessibility.

Large-Scale Outdoor Installation | Restorative Ground

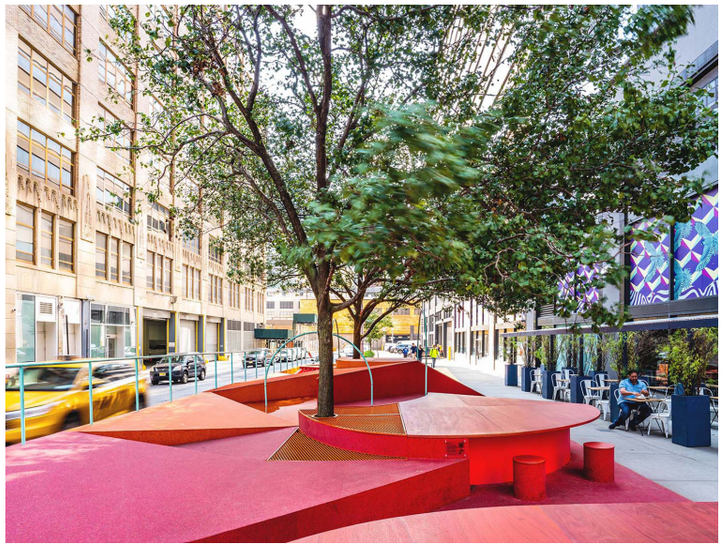


Figure 110. This temporary artwork exhibit encouraged a variety of people to come engage, relax, and play (WIP Collaborative and Hudson Square Properties 2021).

Location	Hudson Square, NYC, NY
Artist + Fabricators	WIP Collaborative & fabricators
Client	Care for Hudson Square, a recovery initiative aimed at bringing new life to Hudson Square
Description	Restorative Ground was a vision by artists and designers at WIP Collaborative to create more inclusive public space for neurodiverse populations of all ages. This exhibit provides both high and low stimulation environments, with various textures and materials throughout. The sculpture is divided into three experimental zones: focused, active, and calm.



Figure 111. The artwork is flush with surrounding sidewalks for accessibility (WIP Collaborative and Hudson Square Properties 2021).



Figure 112. Bright colors were chosen to contrast surrounding buildings (WIP Collaborative and Hudson Square Properties 2021).

Large-Scale Outdoor Installation | Restorative Ground

Summary of Artistic Design Considerations

Lighting

Natural lighting in outdoor space

Sensory Experiences

People may touch a variety of textures throughout the space and see variations in color and material that differentiate spaces from one another. The leaves on trees rustle in the wind and moving on different materials throughout the space creates a variety of experiences.

Movement Experience

People may move through the piece in the way that works best for them. The positioning of the artwork, flush with the adjacent sidewalk, encourages people to interact with the space. Tables in the piece leave space for wheelchair users to slide in and interact with the space.

Visibility

Color and shapes create a visually interesting experience and direct views throughout the piece.

Understanding

The site is loosely organized into three zones of activity: focused activity, active play, and calm relaxation. People may differentiate between zones by the material changes between them (Studio Elsa Ponce n.d.). Varying forms encourage a variety of activities, such as jumping, swinging, and laying down, which are open to the interpretation of the people using the site.

Comfort + Protection

There is minimal protection from the elements, with only three trees providing overhead protection, but the openness of the forms and the space allows for a more comfortable user-experience (not claustrophobic and no place for people to hide)

Seating + Gathering

The various forms throughout the piece encourage a variety of activities such as sitting, swinging, gathering, laying, resting, eating, reflecting, playing, running, and exploring.

Materials + Colors

For ease of construction, the site is composed of 33, 8 foot x 8 foot modules pieced together. Marine plywood was used as a structural material due to its ability to withstand weather events and its affordability. The entire piece is 24’ (feet) wide by 80’ (feet) long (Budds 2021). Netting is also incorporated to encourage people to relax, and take in the surrounding atmosphere. Curved metal railings encourage leaning and swinging throughout all three zones. A bright red and orange color palatte was chosen partly to stand out from surrounding buildings and also due to limited color availability of artificial (red) turf (Gimon 2023). Furthermore, the monochromatic color pallet keeps the three site zones (focused, active, and calm), unified.

Topography + Vegetation

The site incorporates existing trees to preserve vegetation and uses a variety of ramps and platforms to encourage climbing and exploration throughout the site. Designers worked with the city park and recreation department to ensure the trees got enough water and air in the space (Studio Elsa Ponce n.d.). The structure is level with the sidewalk to encourage all people to interact with the space.

Large-Scale Indoor Installation | Reset Rooms



Figure 113. Reset Rooms provide space for people to mentally reset and find inner peace (Finnegan 2020).

Location	Denver, Colorado
Artist + Fabricators	Shannon Finnegan, MCA Denver, & GALS High School
Client	MCA Denver
Description	"[The project started through discussion] about how ableist systems influence the way people experience physical spaces and who gets to decide what is "appropriate" behavior for public spaces. [Collaborators] brought up the "Reset Room" — a space that [people can] visit when they are feeling overwhelmed by emotions. [Collaborators] then created their own redesign of the reset room at MCA Denver. Each is a multi-sensory space tailored to a specific feeling or mood" (Finnegan 2020).

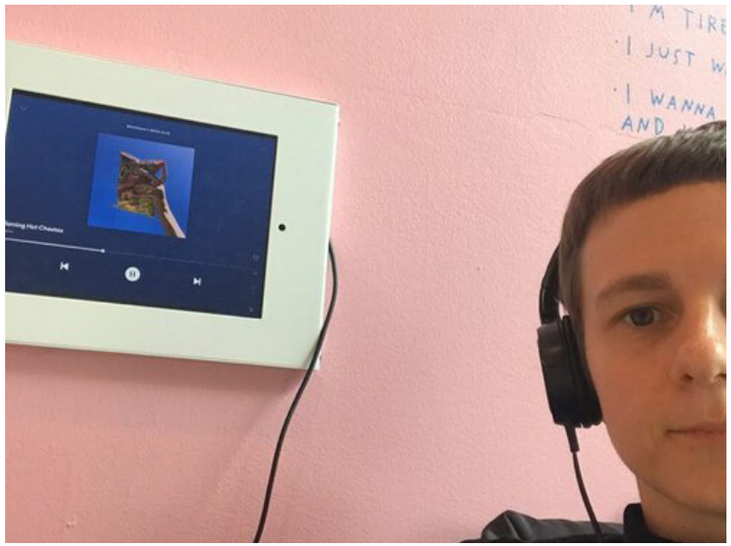


Figure 114. Listening to music on a beanbag chair in the Reset Room (Finnegan 2020).



Figure 115. Moody playlists help people detach and reset (Finnegan 2020).

Large-Scale Indoor Installation | Reset Rooms

Summary of Artistic Design Considerations

Lighting

Natural lighting from windows, soft lighting from string lights, and some overhead artificial lighting illuminate the space

Sensory Experiences

Sight: Soft, bubblegum pink is the dominant color in the room, with text directions and descriptions throughout
Sound: Music playlists are available to listen to with the goal of improving the mood of the audience
Touch: Many different textures are present throughout the room, with different textural rugs used and textural butterfly wall

Movement Experience

People may sit on bean bags to emotionally “reset”, reach down to pick up items on the floor, stretch their bodies to touch butterflies on the wall, and move through the space.

Visibility

The focus of the space depends on how the user interacts with it. If sitting on a beanbag, people have the option to turn away from activity and focus on listening to a music playlist and viewing drawings and text on the wall. If moving through the space, people can look in mirrors to reflect or view butterflies on the wall.

Understanding

The room is understood at the pace and preference of the people that use it; playlist topics on the wall indicate which playlists are available to listen to. Some items have written directions on them, such as “write your heart out” or “take one”. Other items are more intuitively understood, like looking in the mirror on the wall, associating the headset with the playlist topic written next to it, or touching the textural butterflies on the wall.

Comfort + Protection

The room is enclosed on at least four sides (including a ceiling), with windows that shield from the elements. There is a sense of detachment in the room from surrounding areas.

Seating + Gathering

People may sit on bean bags and listen to music. The space does not elicit gathering or conversation- it is more of an independent, individual experience of “reseting” emotions.

Materials + Colors

The dominant color of the room is bubblegum pink, with wall-mounted ipads, headsets, pillows, rugs, beanbags, plastic butterflies, mirrors, string lights, lava lamps, books, and encouraging paper notes for people to use and interact with.

Topography + Vegetation

The site was flat (indoors) and the artwork did not include vegetation.

Large-Scale Indoor Installation | Tactile Orchestra



Figure 116. The form of 'Tactile Orchestra' varied based on the location it was installed within; in some cases it was curvilinear and in others it wasn't (Stjernegaard 2019).

Location	Invisible Cities Festival, Italy The Smithsonian in NYC, NY + many other locations world-wide
Artist + Fabricators	Fillip Studios
Client	Dependant on installation location
Description	"Tactile Orchestra consists of a soft, furry surface that reacts to touch. When the fabric of Tactile Orchestra is stroked, the interaction causes a range of sounds that can be explored throughout the surface. Through collaboration, multiple participants together create a symphony, treating the fabric as their orchestra" (Fillip Studios n.d. (c)).



Figure 117. People Interacting with 'Tactile Orchestra' (Cooper Hewitt Design Museum 2018).



Figure 118. When people touch 'Tactile Orchestra,' a sound is emitted (Cooper Hewitt Design Museum 2018).

Large-Scale Indoor Installation | Tactile Orchestra

Summary of Artistic Design Considerations

Lighting

Natural lighting from windows and artificial lighting above the artwork.

Sensory Experiences

Touch: Soft fur was used to improve comfort when touching Tactile Orchestra
Sight: Black vegan fur is used to emphasize other sensory experiences
Sound: When a person touches Tactile Orchestra, technology behind the fur senses the electromagnetic field of humans, and activates the sound of a musical instrument. When multiple people touch the fur, a singular musical instrument becomes an orchestra with multiple instruments.

Movement Experience

People may move their arms all around the fur, stretching out their body, as they attempt to hear new sounds and instruments around the wall. People may also walk alongside the artwork, or rub their body against it.

Visibility

Visually, the artwork is just a black furry wall. The artwork is understood more with other senses, such as hearing sound and touch.

Understanding

People understand the artwork through touch and sound primarily. Visually, it is just a black, furry wall but it “comes alive” upon human physical touch.

Comfort + Protection

This artwork is often located in an open indoor room, away from harsh outdoor elements. Ultimately, however, due to the amount of iterations of the artwork made for different exhibitions and events, in some instances it was positioned under a roof outdoors.

Seating + Gathering

People may not sit on this artwork, but it encourages gathering and community building, since the more people that gather around and touch the sculpture, the more interesting the sounds that are produced.

Materials + Colors

Vegan black fur was chosen so as not to distract from the sound emitted from the artwork. The fur is attached with glue to a wooden frame.

Topography + Vegetation

The site was flat (indoors) and the artwork did not include vegetation.

Large-Scale Indoor Installation | Bio Orchestra



Figure 119. People can adjust sound levels in 'Bio Orchestra' by sliding a lever (Fillip Studios 2019).

Location	Wageningen University, The Netherlands
Artist + Fabricators	Fillip Studios
Client	Wageningen University
Description	"By translating growth data into sound, Bio Orchestra explores the ability of plants to produce music. Bio Orchestra is an interactive sound installation that translates the hidden life of plants into an ever-changing symphony. By manually adjusting the growth conditions of actual plants, visitors can influence the musical output" (Fillip Studios n.d.(b)).



Figure 120. 'Bio Orchestra' encourages people to gather and have a shared auditory and visual experience (Fillip Studios 2019).



Figure 121. 'Bio Orchestra' was created in collaboration with professors at Wageningen University (Fillip Studios 2019).

Large-Scale Indoor Installation | Bio Orchestra

Summary of Artistic Design Considerations

Lighting

Natural lighting from windows and artificial lighting above and around the artwork

Sensory Experiences

People may hear sounds by pressing buttons on the artwork, view the plants and buttons, smell the plants, and touch the plant leaves and interactive artwork elements (buttons, sliders).

Movement Experience

People may move around the artwork, extend their arms by moving sliders to control sound output, and/or lean against it to hear sounds from different speakers.

Visibility

Plants are the forefront of the artwork, closely followed by buttons, sliders, and speakers. The form of the artwork directs views to the plants and encourages interaction.

Understanding

The appearance and positioning of the buttons and speakers indicate visually to people that there is an interactive element to the artwork. There is also a text description to the right of the artwork that explains the piece and how to use it.

Comfort + Protection

The artwork is located indoors away from the elements. The form of the artwork creates a sense of enclosure and an “interactive” room for people to press buttons and hear sounds.

Seating + Gathering

The piece does not offer the opportunity to sit, but it does encourage people to gather and experience the sounds it produces.

Materials + Colors

Wooden frames with speakers, sliders, buttons, and small planters for plants were chosen for this artwork.

Topography + Vegetation

The site is purposefully flat (indoors) and located on a platform. Plants are incorporated into the piece in small planters on a wooden frame.

Large-Scale Indoor Installation | MEDIATE Space

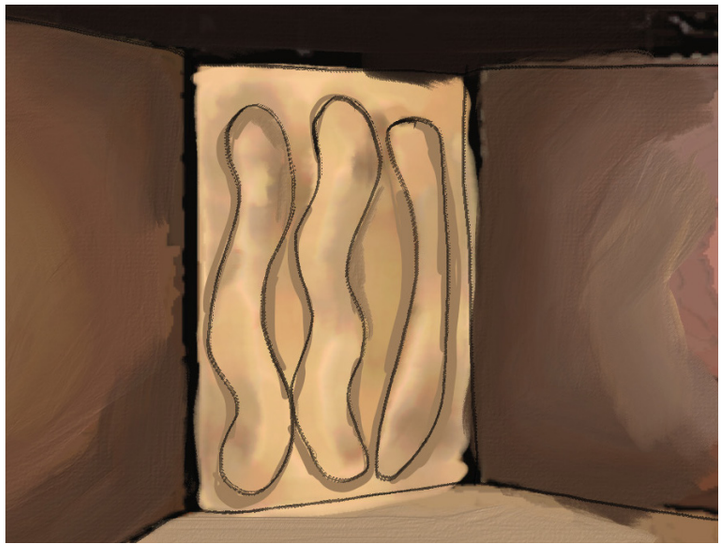


Figure 122. The audience may sandwich themselves between vibrating forms in MEDIATE Space (Adapted from Gumtau et al. 2005).

Location	University of Portsmouth, Portsmouth, UK
Artist + Fabricators	Simone Gumtau, Paul Newland, Chris Creed, Simon Kunath
Client	This project was a collaborative effort at the Centre for Responsive Environments, School of Art, Design & Media, University of Portsmouth, UK
Description	"MEDIATE is a multi-sensory environment design [as] an interface between autistic and typical expression. It was designed as a space for [creativity] and exploration via three sensory interfaces: visual, aural and tactile. The interaction with this digitally augmented world is under the child's control allowing them a sensory dialogue" (Gumtau et al. 2005, 1).

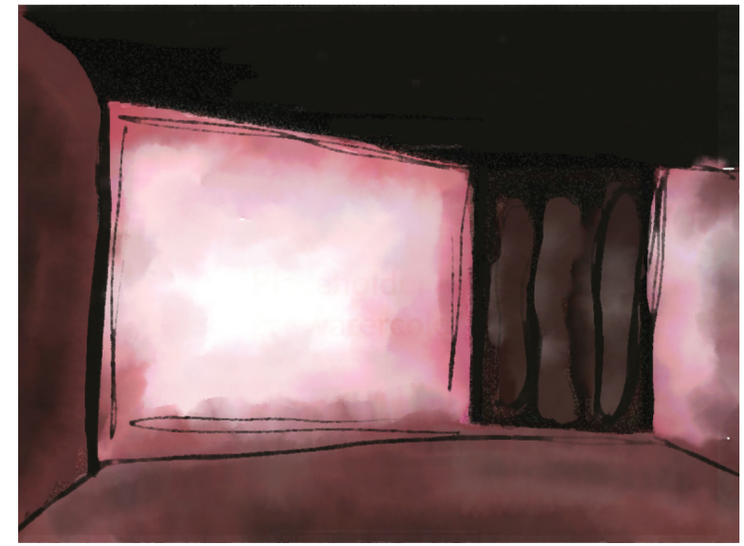


Figure 123. Bright colors create a moody atmosphere in MEDIATE Space (Adapted from Gumtau et al. 2005).

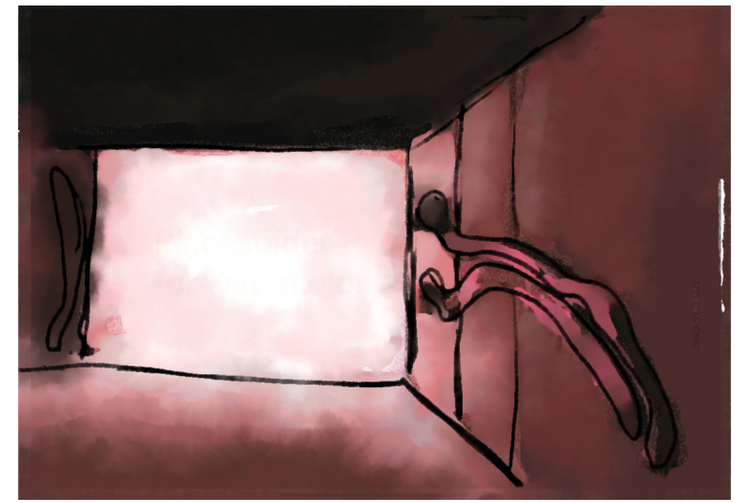


Figure 124. A larger-than-life tuning fork mounted to the wall encourages people to bend and stretch as it vibrates (Adapted from Gumtau et al. 2005).

Large-Scale Indoor Installation | MEDIATE Space

Summary of Artistic Design Considerations

Lighting

Lighting originates from a “network of lighting tracks” located along the ceiling of the space and from behind two pink screens. The light was produced by high brightness projectors to achieve the desired color and intensity. To keep lighting and color consistent, the area behind MEDIATE space had to be pitch black.

Sensory Experiences

Sound: the floor amplifies footsteps with “crunchy feedback’, the space reacts to other sounds (such as clapping and singing) by echoing the sound back (2). When touching the tuning fork, any sound created is captured by microphones behind the fork and transmitted throughout the space.

Touch: A bas relief tuning fork encourages users to run their hands along it and to “physically stretch themselves out” as they reach from one end of the fork to the other (2). A vibrating “Impression Wall” consists of three foam-padded shapes that allow people to position themselves along or in between them. The pink screen walls are also interactive, and use infrared cameras to detect touch.

Sight: Pink light is projected throughout MEDIATE space by projectors behind two walls.

Movement Experience

People may move through the space in the way that works best for them, and in any order that they want. Some elements, such as the “Tuning Fork” and the “Impression Wall” may encourage more interaction than others.

Visibility

The space is completely open with no walls blocking views, which encourages self-directed exploration of the piece.

Understanding

MEDIATE Space and the people inside of it understand each other symbiotically. As a person moves through the space, touching different materials and feeling vibrations from the “Impression Wall”, their movements are echoed back to them.

Comfort + Protection

There is no space to “hide” in the space, though it is enclosed on all six sides (there are six walls in MEDIATE space) and has a ceiling.

Seating + Gathering

MEDIATE space does not provide benches, but the person interacting with the space may choose to sit on the interactive floor tiles. Gathering is not afforded by MEDIATE space since only one participant was allowed to enter at a time.

Materials + Colors

The floor is made up of one meter square electronic panels that capture sound while still feeling “springy” while walking on it (3). Foam pads were used on the walls, and a tuning fork was made of bark, wood, suede, cork, fur, suede, metal, plastic, felt, and studded rubber. The above listed materials were found to be desirable textures (3).

Topography + Vegetation

The site is purposefully flat so that all people can move through it. No vegetation was used in this project.

Small-Scale Indoor Installation | Blooming



Figure 125. 'Blooming' was an artwork in 'Please Touch the Art' (Sasaki 2019).

Location	'Please Touch the Art' exhibit, Boston, MA
Artist + Fabricators	Ponnapa Prakkamakul
Client	'Please Touch the Art' and potential buyers who visited the exhibit
Description	'Blooming' is a tactile artwork exhibit that was displayed in 'Please Touch the Art,' a multi-sensory and equitable exhibit encouraging all people to experience artwork in the way that works best for them.



Figure 126. Moss was chosen as a material in this artwork to create a unique textural experience when touched (Prakkamakul 2018).



Figure 127. A maintenance plan is sometimes necessary for an artwork if it contains vegetation (Prakkamakul 2018).

Small-Scale Indoor Installation | Blooming

Summary of Artistic Design Considerations

Lighting

Soft lighting from ceiling in exhibition space

Sensory Experiences

This artwork is primarily geared towards touch and sight, with moss and wood creating a contrasting and interesting texture to feel- both visually and through touch.

Movement Experience

People may move their arms and hands around the moss and wood surface, to feel a variety of textures.

Visibility

The more the artwork is studied, the more detail is revealed. Multiple types of moss are used which creates visual contrast and a more interesting piece.

Understanding

People understand 'Blooming' by touching the artwork and viewing the vibrant green moss.

Comfort + Protection

This artwork is located in an open indoor hallway, away from harsh outdoor elements.

Seating + Gathering

The artwork is located in a hallway outside of a auditorium, so people primarily experience the artwork while moving from one space to another, or while gathering and waiting for a show to begin.

Materials + Colors

Moss was chosen as a medium to create a 'living artwork' of sorts, and texturally contrast the wood. Furthermore, the bright greens of various moss contrast the light wood and help convey the narrative of an artwork that is 'Blooming.'

Topography + Vegetation

Moss is embedded into soil with small nails and held in place by a wood frame. Due to its location indoors, the moss was not self-sustaining and required regular watering by the artist.

Small-Scale Indoor Installation | Multiple Pieces



Figure 128. Memories of Bone (David Stansbury Photography 2010).

Location	'Please Touch the Art' exhibit, Boston, MA
Artist + Fabricators	Rosalyn Driscoll
Client	'Please Touch the Art' and potential buyers who visited the exhibit
Description	Memories of Bone, Pandora's Box 8, and Pandora's Box 6 were designed to be exhibited in Please Touch the Art as multi-sensory and equitable artworks.



Figure 129. Pandora's Box 8 (David Stansbury Photography 2006).



Figure 130. Pandora's Box 6 (David Stansbury Photography 2004).

Small-Scale Indoor Installation | Multiple Pieces

Summary of Artistic Design Considerations

Lighting

Soft lighting from ceiling in exhibition space. Furthermore, the artworks themselves catch and reflect light (rawhide and metal).

Sensory Experiences

The artist wanted the sensory experiences to be integrated instead of separate. Contrasting textures, such as the rawhide and rope, create an interesting touch experience for people. The rough rope and rawhide add a smell component. Visually, the artwork captures and reflects light, bending and twisting in space.

Movement Experience

Roz carefully considered the movement experience of hands and fingers, “how they move naturally, and what would be a natural sort of way to explore the pieces” (Driscoll 2022). People could not move through the pieces, as they were relatively small. Instead the artworks were experienced by moving alongside and around them.

Visibility

The textural qualities of the artwork encourage exploration through touch, smell, and sight.

Understanding

People understand and interpret the artworks through touch, smell, and sight.

Comfort + Protection

This artwork is located in an open indoor hallway, away from harsh outdoor elements.

Seating + Gathering

The artwork is located in a hallway outside of an auditorium, so people primarily experience the artwork while moving from one space to another, or while gathering and waiting for a show to begin.

Materials + Colors

Materials were considered when choosing emotive qualities the artist wanted to convey; for example, Roz considered whether she wanted the materials to be “appealing, irritating, or repulsive” (Driscoll 2022). For these pieces, she used rawhide, rope, and metal frame. Natural materials and colors appeal to the artist so she chose to work with a more neutral color pallet.

Topography + Vegetation

The site was flat (indoors) and the artwork did not include vegetation.

Small-Scale Indoor Installation | A Sense of Vesuvius



Figure 131. Bronze casting of ears which will hang and serve as a clapper inside a bell like rock form (McPeake 2023).

Location	Compton Verney, England
Artist + Fabricators	Aaron McPeake
Client	Naples Collection at the Compton Verney
Description	'A Sense of Vesuvius' is part of a larger exhibit at the Compton Verney in England that sees a historic collection reimagined. This multi-sensory artwork engages smell, touch, and sound while responding to "nineteenth century paintings of the Mt. Vesuvius eruption in Naples" (McPeake 2022).

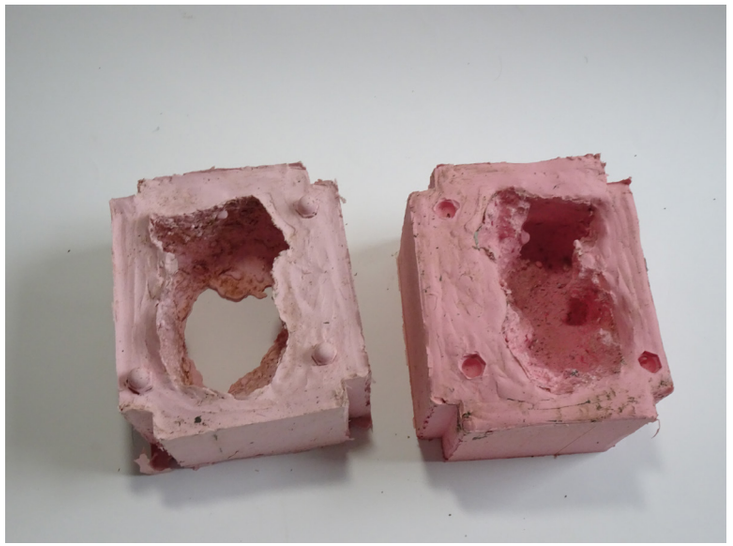


Figure 132. A "two-part rubber mold of rock from which the wax positive will be made and then cast into bronze" (McPeake 2023).



Figure 133. Mt. Vesuvius Lava Rock (McPeake 2023).



Figure 134. Plaster copy of Mt. Vesuvius lava rock (McPeake 2023).

Small-Scale Indoor Installation | A Sense of Vesuvius

Summary of Artistic Design Considerations



Lighting

Soft lighting from exhibition space.



Sensory Experiences

Sight: Contrasting textures, such as black lava rock and a metal bell, provide a visually interesting experience.

Smell: The artist encourages viewers to smell their hands after touching the bell and a wood plinth upon which the art will sit; McPeake chose materials that leave distinct smells behind for this reason (such as zinc and possibly rosemary oil)

Hear: A bell creates gentle movement and rings throughout the room when lightly pushed

Touch: The bell retains heat when touched, so its temperature will change depending on when it was last interacted with. This will change the experience of interacting with the bell. The lava rock is also a rough texture that creates an interesting touch experience.



Movement Experience

People may move around the artwork; they may not move through it. The artist wanted there to be gentle engagement with the artwork, where people could lift two claps (as cast bronze ears, ironically), to ring a bell



Visibility

The artist wanted the artwork to be at a height (less than 54”) that allowed audiences in wheelchairs to be able to fully experience the artwork



Understanding

Audiences that are blind or low-vision may experience the artwork through its multi-sensory components, such as scented wood and ringing a bell. The artwork is meant to symbolize a volcanic eruption and lets people experience this by feeling lava rock and ringing a bell at a symbolic “mountain peak”.



Comfort + Protection

This artwork is located in an open indoor room, away from harsh outdoor elements.



Seating + Gathering

People may gather while viewing the artwork and listen to the bell as it rings if they are willing and able to.



Materials + Colors

Colors and materials were chosen to best convey the narrative of the artwork- which was about volcanic eruptions in Naples, Italy. Therefore, actual lava rock from Naples was used, in addition to a bell that is the same color of the lava rock.



Topography + Vegetation

The site was flat (indoors) and the artwork did not include vegetation.

Artwork Precedent Takeaways

Lighting

Lighting can cast interesting shadows that engage the audience and make artwork more comfortable for most people (not too bright or sunny)

Certain materials interact differently in lighting- consider if translucent or opaque materials are preferred to convey a narrative

Consider how a public artwork can be illuminated at night for safety purposes

Different types of lighting can be used to convey different narratives and create different ambiances- for example recessed lighting that casts bright spots on or near the artwork is more dramatic than a fully illuminated or fully-lit artwork/space

Different colored lighting can be used to create atmosphere and feelings in an artwork and/or space

Sensory Experiences

The opportunities to engage the senses are endless with public artwork.

The five (5) senses don't have to be engaged individually, but could be engaged simultaneously.

Consider incorporating smell in the following ways:

1. Use materials that leave a distinct scent on the hands after touching

2. Different vegetation can have distinct smells that an artwork can use or emphasize

3. Wood and other materials can be covered with essential oils- if appropriately protected from weather events- that can add a smell component to an artwork

Touch and Sound:

1. Touch and sound pair well together- consider interactive components that create sound when touched

2. Use a variety of materials to evoke different emotions

3. Ensure that sounds are not too loud or startling

4. When sound is enhanced, so too is texture (Driscoll 2022).

Sight:

1. Colors and materials can communicate different emotions, thoughts, and transitions between spaces

Artwork Precedent Takeaways



Movement Experiences

Think of how different forms can encourage different types of movement. For example, a recessed circular space with chair-height stools might encourage seating or gathering.

Interactive artwork is preferable.

Consider how an artwork can:

1. Cause people to bend, stretch, and move to activate the artwork
2. Create opportunity for gathering, community building, sitting, and laying down
3. Create space for people to move through or around. How do you want people to interact with a space and the artwork?
4. Encourage movement through a variety of materials and textures
5. Encourage people to travel off the “beaten path” and have new experiences
6. Create different atmospheres or moods based on the type of movement experiences provided- for example, a hammock is going to create a calm atmosphere while a jungle gym is more energetic
7. Create space for people to move through or around. How do you want people to interact with a space and the artwork?



Visibility

Artwork can direct and/or frame views strategically to emphasize different environmental elements or experiences

Consider how colors can contrast surrounding context, such as buildings or vegetation, to help people notice the artwork and encourage interaction with the artwork

Ensure that artwork is placed at the appropriate height (ideally 36 inches if interactive or 54 inches if not interactive) off the ground, for optimal visibility

Color and shapes can be used to direct views and create interest throughout a space and/or artwork

Encourage different experiences in different parts of the artwork- for example, a calm feeling can be created when sitting and facing a blank wall and listening to calming music, and an active, exciting atmosphere can be created by bright shapes and colors that are interactive

The artwork doesn’t have to be visually perfect, what maters more is how the artwork “comes alive” when people interact with it

Think of the focus or main components of the artwork that should be visually emphasized. What do you want people to see first and how does that view encourage interaction with the artwork?

Artwork Precedent Takeaways



Understanding

It is best to have multi-sensory methods of explanation to help people understand an artwork. For example, audio descriptions, braille, and written descriptions are ideal.

Consider how smells, sounds, touch and sight can be engaged to help people understand an artwork.

Do you want the artwork to be immediately understood or should it become clear through exploration and at the pace of the audience?

Braille should be placed intuitively where people will place their hands or want to read a description

Use multiple local languages in descriptions to increase equitability and understanding of the artwork

Engage the audience of the artwork to determine how they will best understand an artwork (braille, audio description, etc.)

Different forms and shapes can communicate non-verbally different activities that should take place in a space. For example, a net hammock will encourage relaxation while a playground will encourage activity.

Consider how the placement of interactive elements will encourage people to touch and engage with them



Comfort + Protection

Trees can provide some overhead protection and create a sense of enclosure for people within an artwork

It is ideal to have 360-degree visibility while experiencing an artwork- for comfort and safety purposes

Consider how a fully open, semi-enclosed, or fully enclosed will create different feelings of protection

How will the site shelter people from the elements? It doesn't have to shelter people, but this is something to consider

An overhead element doesn't have to be solid- it could be more of a frame that creates some shade and a sense of enclosure but still provide 360-degree visibility

Think of how people move through the space. Is the artwork located in a busy area and how does that influence the comfort of the people experiencing the artwork?

Artwork Precedent Takeaways



Seating + Gathering

What level of activity do you require from the audience when interacting with the artwork?

Think of how an artwork can encourage community-building. Multi-sensory elements- especially ones that encourage gathering and collaboration- are ideal.

Seating may serve multiple functions, such as for lunch breaks, an outdoor classroom for students, and other purposes. How can the artwork accommodate such uses?

An artwork can be a seat as well as a sculpture; it doesn't have to look like a traditional seat but can still be leaned against and used for gathering

Ensure that the artwork is structurally sound so that if people sit on it or gather on/around it, it will hold up

Think of how different forms can encourage different types of movement, such as sitting, swinging, gathering, laying, resting, eating, reflecting, playing, running, and exploring.

Even if an artwork doesn't incorporate seating, people can still sit or gather on the ground. How can the ground be more interesting, comfortable, and interactive for all people. For example, vibratory floor tiles can create an interesting sensory experience for people that sit or move across them.



Materials + Colors

Materials can be used to differentiate spaces, instead of using physical walls

Consider how color contrast can help audiences with low vision understand an artwork; vibrant colors stand out from vegetation and surrounding buildings and are ideal to help people notice an artwork in space.

For sustainability purposes, materials can be used in a way that minimizes waste

Think of the cultural and historical significance of using certain colors for an artwork and the location the artwork is intended to be placed

How can the colors of an artwork help convey the narrative or story of the artwork?

Materials can be used strategically to convey a narrative. For example, if stone or metal has a certain significance that the artist would like to draw upon, they may use these certain materials.

A large artwork may be best made of smaller modules and pieced together on site

Materials don't have to be expensive to make a great artwork

Consider what textures are desirable and what textures are appalling. How can the textures create a desired experience and convey a narrative to people?

If using vegetation as a material, consider doing several tests prior to the final installation.

Artwork Precedent Takeaways



Topography + Vegetation

It is best to preserve existing vegetation when possible- find ways to work around it and to optimize its existence for the benefit of all people

Flat- as opposed to hilly- sites are preferred for optimal accessibility

Consider how an artwork can celebrate the site it is located within and how it can incorporate local environmental factors, such as wind, sun, rain, and vegetation

Trees above an artwork create a sense of protection and enclosure when experiencing an artwork

Local/native plants are preferred- especially when located outdoors- as they are more likely to thrive than a non-native plant.

If necessary, consult the local Parks + Recreation Department if there are questions about how to preserve existing on-site vegetation.

If using vegetation in artwork, consider how much maintenance is required to achieve the desired “look” and if the receiving entity will be able to perform this maintenance (otherwise the artist may have to maintain it themselves)

4.3 Precedent Analysis | Site Design

Precedent Analysis
Method

→

Design Guidelines
Outcome

Final Design + Demonstration of the Guidelines
Outcome

Precedents were selected to analyze through literature review and word-of-mouth from artists during semi-structured interviews. Categories used to analyze the site design precedents were based directly off of the Site Design Considerations Draft Guidelines.

Site Design Precedent Analysis Categories

Lighting

How is lighting used throughout the site to accommodate multiple user groups in both day and night settings? How is shade created, where is it created, and why?

Acoustic Quality

Were sound buffers used? What are the sound qualities on the site?

Movement Experience

How do people move through the site? What is the width of paths and how does that affect accessibility and user comfort? Do all people have a shared path experience?

Visibility

How are views framed or directed on the site? Were views strategic in any way to draw attention to, or detract from, site elements?

Path + Space Materials

What path and space materials are on the site and what is their purpose?

Communication + Understanding

How does site signage, or wayfinding elements, communicate directions, identify spaces, and provide points of reference for a variety of people? How do people understand where to go throughout a site? Are multiple methods of communication used on the site, such as Braille and auditory descriptions?

Degree of Enclosure

How does the space accommodate a variety of users with fully-enclosed, semi-enclosed, or fully open spaces? How are spaces enclosed and what materials are used to enclose them? Why are some spaces enclosed while others are open?

Mobility Requirements

How does the site adhere to, or exceed, ADA and other mobility requirements?

Seating + Gathering

How is seating used throughout the site? What type of seating was chosen and why? What materials were used for seating and why? How are spaces designed to encourage gathering or different types of interaction?

Color and Material Choice

What materials and colors are used throughout the site and why? How was rhythm incorporated in the site? What purpose did it serve?

Choice, Placement, and Orientation of Site Elements

Why are site elements, such as tables, benches, and/or artwork, placed were they are? What experiences does the placement of these elements encourage? How are benches and other site elements orientated and why?

Topography + Vegetation

How was vegetation used throughout the site? What plants were chosen and why? How is topography used to create space and experiences throughout the site?

Site Design Precedents Studied

Parks and Gardens



Figure 135.
Watertown Braille Trail
by Sasaki

(Sasaki 2016)



Figure 136.
Louise B. Miller Memorial and Freedom Garden
by TEN x TEN & MASS Design Group

(TEN x TEN 2022)

College Campuses



Figure 137.
University of Kentucky
by Sasaki

(Sasaki 2022)



Figure 138.
Virginia Polytechnic Institute
by Sasaki

(Sasaki 2021)

Plazas



Figure 139.
Boston City Hall Plaza
by Sasaki

Parks and Gardens | Watertown Braille Trail



Figure 140. A cable system through the Braille Trail guides park users (Sasaki 2016).

Location	Watertown, MA
Design Team	Sasaki
Client	Department of Conservation & Recreation, Boston
Size	1/3 mi (mile) stretch around a 2.5-acre area
Description	The Braille Trail is a "short, self-guided trail that gives unsighted people the chance to discover an indigenous forest, unassisted, and encourages everyone to explore the forest with all their senses. The trail starts and ends at the [Sensory] Garden. The entire trail is outlined by a guide rope, [which takes people] on a circular, winding route through natural forest and over wetland" (SANBI n.d.). The project was designed in collaboration with Perkins School for the Blind.



Figure 141. Tactile and informative blocks on a cable system inform park users who are blind about adjacent programming, such as benches (Sasaki 2016).



Figure 142. Designers worked with the Perkins School for the Blind to place Braille at a comfortable height and angle on plaques for reading (Sasaki 2016).

Parks and Gardens | Watertown Braille Trail

Summary of Site Design Considerations

Lighting

There is no lighting on the site, but there is lighting that runs along the street, adjacent to the site. Since the Braille Trail is located along the Charles River, with diverse habitats and species on its banks, lighting could possibility disrupt the wildlife in the space.

Acoustic Quality

There is some sound of flowing water from the Charles River, car noises from a secondary commuter road located adjacent to the site as well as sounds of animals moving and vegetation rustling in the wind.

Movement Experience

Main paths are 10' wide, "with an understanding that due to the nature of the path material, [stabilized aggregate], the path will narrow over time" (Mazerall 2023). A Sensory Garden path is 5' wide. Both path widths were chosen to allow enough space for wheelchair movements, while the main path is wide enough for both bikers, walkers, and joggers.

Visibility

Vegetation is used to block views of cars adjacent to the site. Furthermore, trees and other vegetation are used to highlight entrances and frame views of surrounding areas and along the Charles River.

Path + Space Materials

Changes in surface ground materiality indicate transitions between spaces and are made of natural materials to blend and harmonize with surrounding nature and encourage a connection between nature and site users.

Communication + Understanding

10 informative stations are situated along the Braille Trail, highlighting the site history and the nature in the space. Braille text is located along the back of the stations, while written text is located along the front. There is a "cable guide system with indicator beads [(see Figure 141)] of different shapes that identify where park features and seating opportunities are located" for people that are B/blind (Mazerall 2023).

Degree of Enclosure

The site utilizes existing vegetation to create a "cathedral-like" experience along the Braille Trail and a sense of enclosure around the Sensory Garden (Mazerall).

Mobility Requirements

The site is mostly flat and physically accessible for all people.

Seating + Gathering

Seating type and location depends on the surrounding site program. Cast concrete seating with a wooden black locust back is located along trails, placed incrementally for consistency and to provide space for people to rest. S-shaped seating was located in more open spaces to provide a variety of views for site users and to create space for gathering and teaching.

Parks and Gardens | Watertown Braille Trail

Summary of Site Design Considerations, Continued

Materials + Colors

Community collaborators on the project, Perkins School for the Blind, wanted their students to have a nature-centered experience on the site. Therefore, local materials, such as black locust, fieldstone, granite, and river stone were used on the site. Furthermore, stainless steel wire handrails were chosen for durability and as many existing boulders and site elements as possible were re-used.

Choice, Placement, and Orientation of Site Elements

The Braille Trail is a loop that surrounds a Sensory Garden. Entrances to the Sensory Garden were placed at even increments so that persons that have low vision or are B/blind can anticipate openings in a guide railing along the trail. Benches are also placed at even increments for Persons with Physical Disabilities and the Elderly.

Topography + Vegetation

Topography work was limited because changing the site grade would disrupt tree root systems. Fragrant native vegetation was chosen for a Sensory Garden on the site to attract birds, pollinators, and other wildlife (Mazerall 2023). Furthermore, trees with interesting bark textures, such as River Birch, were planted to highlight entrances and frame views.

Parks and Gardens | Louise B. Miller Memorial & Freedom Garden



Figure 143. High-back benches provide a sense of security and a vibratory experience for persons who are D/deaf (TEN x TEN 2022).

Location	Washington, D.C.
Design Team	TEN x TEN, MASS Design Group, Tillett Lighting, Fluidity, AMT Engineering, Mueller Engineering, IDEA Center, SiteWorks
Client	Gallaudet University
Size	23,400 SF or 0.54 acres
Description	"The mission of the Louise B. Miller Memorial and Freedom Garden is to create an abundant, Black Deaf centric space. In 1952, Louise B. Miller, the mother of a deaf child, and other parents filed a class action suit against the Washington, D.C. Board of Education of for the right of Black Deaf children including Mrs. Miller's son, Kenneth, to attend the Kendall School for the Deaf on the campus of Gallaudet College. The resulting victory in Miller v. Board, which pierced the Plessy v. Ferguson doctrine of "separate but equal," was a watershed moment in Black Deaf history as well as the American civil rights movement" (TEN X TEN n.d. (a)).



Figure 144. Gathering spaces off a primary pathway encourage intimate gatherings (TEN x TEN 2022).



Figure 145. Native plantings in wild arrangements were preferred by Deaf-Black user groups because they differ from manicured, "white" landscapes (TEN x TEN 2022).

Parks and Gardens | Louise B. Miller Memorial & Freedom Garden

Summary of Site Design Considerations

Lighting

Designers learned that overhead lighting is preferred by multiple user groups, such as people that are deaf, but light poles can create visual clutter. Overhead lighting and other lighting that mimics the sun is preferred. Mid-level lighting and some ground plane lighting for art pieces is also used. Designers were conscious to not over-saturate spaces with light, while still providing enough light for safety.

Acoustic Quality

Since the primary user group for the site is deaf, designers considered how materials could create different vibratory sensations. For example, wood is more likely to create a vibratory experience than stone. Therefore, wood benches are used in many spaces. A water feature is also used; designers were conscious not to make the feature too distracting.

Movement Experience

Interpretive features, such as signage, were incorporated along a primary straight path through the site. The messaging along the path encourages people to slow down. Meanwhile, more free-form and circular paths are located in more private areas off the main path.

Visibility

High-back benches in semi-circular forms allow for maximum viability when having a conversation in ASL. Furthermore, sight lines were maintained in private spaces with breaks in foliage and vegetation.

Path + Space Materials

Tight-bond granite paving was chosen for paths because it differs from traditional (white) design choices for pavement in Washington, D.C.; designers found that some black communities in D.C. associated brick as a white person's material (Salmela 2023).

Communication + Understanding

A primary pathway serves as a chronological timeline of sorts, with signage located alongside it that tells the story of Louise B. Miller and her son Kenneth. On winding paths alongside the primary path are the narratives and stories of people in the Black Deaf community. At either entrance to the space is instructional signage that tells about the space. Designers are still determining if Braille, multiple languages, or QR code on signage will be used (Salmela 2023).

Degree of Enclosure

Degrees of enclosure are created with different heights and densities of planting. Furthermore, more public spaces are situated directly of the main path through the site, while private or intimate spaces for rest and relaxation require a secondary path to access them.

Mobility Requirements

The sizing (width) of paths, how people move into the different "rooms" within the site, and how people move within the rooms was especially considered for people that use wheelchairs or other mobility devices. Designers wanted there to be enough space for everyone to move comfortably.

Seating + Gathering

Circular spaces with semi-circular seating create an ideal opportunity and visibility for conversations in ASL. High-back semi-circular seating also creates a feeling of safety because People that are Deaf may feel that their back is protected and they don't have to worry about looking behind themselves. Meanwhile, linear seating is located along the primary path for people- a choice made especially with Persons with Physical Disabilities in mind.

Parks and Gardens | Louise B. Miller Memorial & Freedom Garden

Summary of Site Design Considerations, Continued

Materials + Colors

Designers found that people in the Black Deaf community, particularly in Washington, D.C., were opposed to brick because it was reminiscent of white design choices in the area. Therefore, they preferred different textures and colors of granite for paths. The struggle of the Black experience is represented by different colors and textures. Local materials were selected if possible; all materials originated from the United States.

Choice, Placement, and Orientation of Site Elements

People understand spaces based on their proximity to a primary path that runs through the space; active and public spaces are directly accessible from the primary pathway while private and intimate spaces are more offset from the primary path. Level changes, vegetation height, and vegetation density also create different sensory experiences and feelings of enclosure on the site. Furthermore, more private spaces have just one entrance/exit, while more active, public spaces have two entrances/exits.

Topography + Vegetation

Designers found that some people in the Black Deaf community in Washington, D.C. find manicured lawns alienating; this is primarily because manicured lawns are a sign of privilege, specifically white privilege. Therefore, wild and woodland-feeling landscapes were used. Essentially, the people that were engaged wanted the antithesis of white-centric spaces. Furthermore, designers found that Louise B. Miller, whom the site memorializes, had a strong tie to a local park and violets. Therefore, designers used plants with violet color and plants that were representative of the varieties used in the park Louise B. Miller felt a connection with. Designers also considered the different sensory experiences- such as smell and sight- when selecting plants.

Campuses | University of Kentucky DEI Facilities and Spaces Plan



Figure 146. The University of Kentucky Facilities and Spaces Plan recognizes the variety of communities that people are a part of- beyond just their disability (Sasaki 2022).

Location	Lexington, Kentucky
Design Team	Sasaki
Client	University of Kentucky
Size	785 acres
Description	"The university's diversity, equity and inclusion (DEI) implementation plan is a collaborative, systemic response to a systemic challenge. Over the years, faculty members, staff, students and community champions have dedicated their time to advancing diversity and equity at UK. This implementation plan is designed to empower those agents of change, embolden existing DEI efforts and introduce additional initiatives to engage more of our community in this work" (UK n.d).

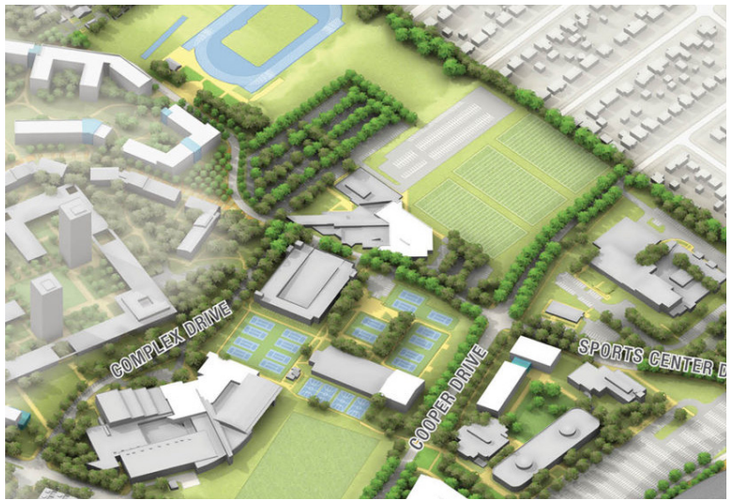


Figure 147. The University of Kentucky campus has a lot of potential to connect to historic and indigenous communities that previously inhabited the area (Sasaki 2022).

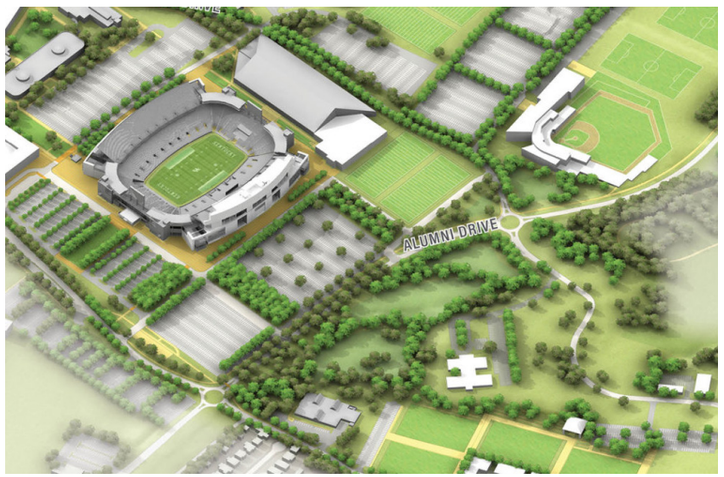


Figure of 148. A variety of stakeholders were engaged to determine the best plan forward for the University of Kentucky campus (Sasaki 2022).

Campuses | University of Kentucky DEI Facilities and Spaces Plan

Summary of Site Design Considerations

Lighting

The University of Kentucky DEI Facilities and Spaces Plan does not get into detail with this category. However, designers heard from stakeholders that environments that are too bright or too dark are not desirable; consistent site lighting is preferred.

Acoustic Quality

The University of Kentucky DEI Facilities and Spaces Plan does not get into detail with this category. However, designers heard from stakeholders that spaces that echo loudly, especially with repetitive music, are very uncomfortable to be in. Recommendations to create pleasant auditory experiences include using plants as sound buffers and using materials that absorb sound (ex: wood).

Movement Experience

The plan proposes a movement experience that allows as many modes of transportation as possible to have a shared experience (ex: pedestrian, bikes, scooters, transit, vehicular, parking, etc.). Major pathways accessible to everyone were prioritized in the plan and non-slip path materials were recommended for these pathways. Designers wanted to ensure that there was a seamless and accessible transition between outdoors and indoors on campus.

Visibility

Designers wanted to heighten the experience of proposed and/or existing art and monuments on campus with a clear axis across campus and view corridors.

Path + Space Materials

Designers learned that concrete with an aggregate application on top of it is not an ideal material for paths because it is slippery. The plan does not specify specific materials to use to replace those that do not work.

Communication + Understanding

Proposed signage incorporates local materials, such as limestone. A significant part of the project included cultural reckoning and inclusion; the creation of spaces that all people could see themselves within. Therefore, many artworks and monuments are proposed to communicate the history of the campus with indigenous peoples and other communities. Consideration was given to alternative methods of understanding; for example, the locations of buttons on the ground vs. on a wall. Unfortunately, due to a lack of resources, braille or other methods of communication were unable to be proposed.

Degree of Enclosure

Enclosure was primarily formed by the buildings, seating walls, topography, and vegetation on the campus.

Mobility Requirements

Designers went beyond ADA requirements by proposing paths on campus that may not currently exist, but would be accessible to all people. Stairs were thought of as secondary to ramps that all people can access. Furthermore, building entrances and the spaces inside buildings should be as accessible as the spaces outside of them.

Campuses | University of Kentucky DEI Facilities and Spaces Plan

Summary of Site Design Considerations, Continued

Seating + Gathering

Stakeholders expressed that they needed a variety of seating on campus, both fixed and movable. Some seating is too low to the ground or too high off of the ground for people; variety is key. Outside of historic buildings, more fixed seating was recommended. In more active spaces where people might gather for lunch, movable seating was proposed.

Materials + Colors

The University of Kentucky DEI Facilities and Spaces Plan proposes that local materials and native plantings are used, to honor and celebrate the indigenous past of the area. Designers also listened to stakeholders to learn what path materials don't work; one such path material was concrete with stone aggregate adhered to it. This material deteriorated over time and became very slippery and unsafe to walk across.

Choice, Placement, and Orientation of Site Elements

Designers proposed the extension of active spaces, both indoors and outdoors, into underutilized spaces on campus. Most importantly, the choice and placement of site elements was to create a landscape that "synchronized [the] cultural calenders" of the various communities on campus (Ocampo 2023).

Topography + Vegetation

The campus is affected by the heat island effect. Therefore, trees were proposed in spaces that are affected by the heat island effect to lower temperatures, create shade, and provide respite to people during rain events. Furthermore, limestone caves surround the campus. leading to significant runoff; plants were proposed to mitigate excess runoff in some spaces. Native plants were recommended in the plan.

Campuses |
Virginia Polytechnic Institute Campus Plan



Figure 149. A shared user experience is created by wide, flat paths that multiple modes of transportation can traverse (Sasaki 2021).

Location	Blacksburg, Virginia
Design Team	Sasaki
Client	Virginia Polytechnic Institute and State University
Size	120+ acres with 5+ miles of pathways
Description	"The Infinite Loop and Green Links [at Virginia Tech] are a response to the Virginia Tech's location in the Appalachian Mountains. These projects catalogue Virginia Tech's vast network of non-compliant pathways, stairs, and missing links that have not been upgraded since the Americans with Disabilities Act (ADA) was ratified over 30 years ago. To successfully address the needs of campus conditions, the design team worked closely with the university to assemble four multi-disciplinary advisory groups composed of a diverse range of campus representatives" (Sasaki n.d. (f)).



Figure 150. Stairs should always be secondary to flat, ADA accessible paths (Sasaki 2021).



Figure 151. Stakeholders expressed a desire to engage with the water on the site, so site designers created unique opportunities to do just that (Sasaki 2021).

Campuses |
Virginia Polytechnic Institute Campus Plan

Summary of Site Design Considerations

Lighting

Green Links: Utilized the campus standard lighting with a typical post top fixture

Infinite Loop: A new light was identified to fit the theme of innovation and technology in this space

Lighting in both spaces aimed to illuminate pathways instead of spaces, as path illumination was identified as more important. Lighting was placed at a steady rhythm along paths.

Seating is placed strategically in the shade under trees due to the hot and humid climate on the site.

Acoustic Quality

The campus is not a loud place so sound overstimulation was generally not an issue. At one location along the site paths weave along a naturalized area, where people can hear vegetation blowing in the wind and wildlife.

Movement Experience

Paths are designed to maintain desire lines, or desired ways of movement through a space, in the most direct and barrier-free way.

Visibility

Views of the military drill field are visible from most areas on the site; the site design aims to frame and emphasize those views.

Path + Space Materials

A tactile paver with ridges runs along the outer path edges of the Infinite Loop with. For the most part, path materials were chosen based on a set of campus standard materials. Asphalt and concrete paths were used in most areas.

Communication + Understanding

The site adheres to the “simple and intuitive use” universal design guidelines- especially when it came to communicating site information. High contrast materials were used for surface ground materiality along paths so that people with low vision could easily find their way. Furthermore, tactile strips along the outer edges of paths helps people that have low vision or are blind find their way through and between spaces. The design team took the approach that signs not be needed if the site was designed simply and intuitively enough. In some spaces, maps with symbols are provided.

Degree of Enclosure

More enclosed, intimate, and private spaces are provided in naturalized areas to encourage mental regeneration and intimate gathering. Meanwhile, more open spaces are typically more active and public. Trees are provided above benches to provide a sense of enclosure and shade from the sun.

Mobility Requirements

The site is situated on a mountain, making accessible pathways challenging. Paths were implemented at a 5% slope, less than 1:20, because it is comfortable and you don’t need handrails. Switchback paths and ramps with slopes from 1:20 to 1:12 slope were used in more steep areas. Stairs were only maintained to non-accessible building entrances; in this case, the entrance lead to a non-accessible interior space.

Campuses |
Virginia Polytechnic Institute Campus Plan

Summary of Site Design Considerations, Continued

Seating + Gathering

Seating is placed every 30 meters, or 150 feet, according to Irish Standards for Universal Design. Along more public spaces, such as along streets, long linear benches with backs and armrests are provided. Meanwhile, alongside active buildings on campus, replaceable benches, tables with chairs are used. It was important to use non-customized seating so that they could be replaced if necessary. Seat walls made of local stone were also used.

Plazas are generally provided in transitional spaces, such as outside building doors and stopping points, where people may gather before heading to their next class.

Materials + Colors

Pops of color are provided with seating and site furnishings in key, active spaces. The rest of the site is fairly neutral, color-wise to blend in with existing site conditions. Materials were chosen based on campus standard guidelines for paving materials, lighting, and other elements. However, granite was introduced in some areas such as along seat walls to create visual contrast, and because of its durability and ability to be sourced nearby the site. Other pathways are made from standard concrete and asphalt.

Choice, Placement, and Orientation of Site Elements

Desire paths, or desired movement between campus buildings, was maintained as much as possible. People wanted to look at water, especially in naturalized areas, so pathways and lookout spaces are provided in those areas. The choice, placement, and orientation of site elements was largely determined by community needs and desires.

Topography + Vegetation

The “topography of open spaces responds directly to the topography of pathways; they go hand in hand” (Scherling 2023). The site aims to take advantage of views and to emphasize views with topography.

The design team consulted a landscape architect that is familiar with plant ecosystems around the Virginia Tech Campus to identify species that would thrive in three ecosystems: highland, midland, and lowland. Vegetation, such as woody shrubs and trees, was used to restrict movement in some spaces and keep people from taking shortcuts between paths. All vegetation is native to the area.

Plazas | Boston City Hall Plaza



Figure 152. Sub-spaces are defined with low-to-ground seat walls.

Location	Boston, Massachusetts
Design Team	Sasaki
Client	City of Boston
Size	7 acres
Description	"Led by Sasaki, [the] main [project] goal is to make the plaza more accessible for all while delivering updated programming capabilities, adding infrastructure, and improving sustainability. The new design aims to connect [adjacent areas] with an accessible sloped promenade activated by shady seating and gathering areas, a destination play space, a public art space, and an iconic water feature. The main plaza will accommodate events of up to 20,000 people in a wide variety of potential configurations" (Sasaki n.d. (a)).



Figure 153. A play space engages the community and draws diverse populations onto the site.



Figure 154. A 20-foot-wide pathway is ideal for this busy, Boston Plaza (Sasaki 2022).

Plazas |
Boston City Hall Plaza

Summary of Site Design Considerations

Lighting

Plantings were strategically placed to reduce solar exposure- especially in heavily-used areas. All lighting used points down towards the site, as opposed to up into the sky. Flood lights are used to highlight Boston City Hall, posts and poles are inset with lighting, and posts and poles are located alongside primary paths. The project aims to save energy on lighting, without over-saturating spaces with light, while still providing enough light for safety. Most of the lighting is dark sky compliant, meaning that it reduces light pollution at night as well as glare.

Acoustic Quality

Boston City Hall serves as a major sound buffer on the site, while a vertical grade change of 20 (twenty) to 25 (twenty-five) feet also buffers sound. Sight lines are maintained throughout the site, so tall sound buffers are not used. Vegetation, shorter walls, and wood elements on the site do provide some level of sound buffering as well.

Movement Experience

Hannover Walk, the primary pathway through the site, is heavily used as a connection point between surrounding areas. The primary pathway is, at a minimum, 20 (twenty) feet wide and grows to 30 (thirty) feet wide. This pathway defines access to all areas of the site.

Visibility

Sight lines throughout the plaza are maintained for safety purposes and to highlight multiple angles of Boston City Hall. Clear sight lines also define access points and entrances throughout the site and create a visual connection to surrounding areas.

Path + Space Materials

Tight-joint brick pathways are an accessible solution to the previous uneven, mortar-joint brick pathways used in the historic Boston City Hall Plaza. Tight-joint brick pathways reduce the risk of pathway upheaval and ensure there is a flat, accessible surface for all people to move across.

Communication + Understanding

Signage is used throughout the site to provide directions and information about site happenings and program. An artwork on the site provides braille descriptions, along with text descriptions as well as text written in twenty (20) different languages.

Degree of Enclosure

Maximum visibility throughout the site is desired, so it is not fully enclosed. Sub-spaces are defined by low-to-ground seat walls and plantings no more than three (3) to four (4) feet high. Trees provide some overhead enclosure above pathways and heavily used gathering spaces.

Mobility Requirements

The site exceeds ADA requirements by incorporating equitability and inclusive design into all spaces.

Seating + Gathering

A variety of seating types are provided, such as informal and formal seating. Informal seating (granite walls), less than two (2) feet high, create space for informal rest and gathering. Meanwhile, formal seating, ipe wood benches, are designed to accommodate all kinds of needs. The wood benches are almost four (4) feet wide and provide armrests and backs for people with a variety of mobility needs.

Plazas |
Boston City Hall Plaza

Summary of Site Design Considerations, Continued

Materials + Colors

Tight-joint brick was used to draw upon the historic brick plaza, and complimentary warm-tone granite and ipe wood were chosen to go with the brick. Materials were selected primarily based on their durability over time and limited maintenance requirements. Some materials were locally sourced, such as granite blocks and bronze railings.

Choice, Placement, and Orientation of Site Elements

Program was chosen to bring a variety of groups of people to the site. For example, a play space encourages parents and children of all abilities to engage with the site. Other spaces are defined for more formal or informal gathering and accommodate a variety of events.

Topography + Vegetation

Vegetation was chosen to serve as a wind buffer in the plaza and to create shade in heavily-used areas. Planter beds are used to create a sense of enclosure and define sub-spaces and clusters of tree species are used throughout the site (maples, oaks, elms, etc). Lowland plant species are used on the lower portion of the site while upland species are used on the upper portion of the site, to conceptually correspond to the site topography.

Site Design Precedent Takeaways

Lighting

Consider the natural systems and wildlife on the site. Could lighting potentially disturb wildlife? Is lighting necessary, based on the times of day that people will use the space?

Think of how lighting can be incorporated for safety but not disturb natural systems

Lighting may be selected based on a material or site furniture palette provided by the client

Placing lighting at a steady rhythm along paths keeps spaces and paths from being over-saturated with light; some people do not like lighting that creates overly dark or overly dark spaces

Seating is best placed under trees that will provide shade on sunny days

Consider if it is more important to illuminate the path or the space and why so

Vegetation can be placed to strategically reduce solar exposure- especially on heavily traversed pathways

Consider using dark sky compliant lighting to reduce night sky pollution and reduce glare

Many people like lighting that mimics the sun- that is, overhead lighting

Try not to provide too much back lighting; overhead lighting is more desirable to many people (ex: People that are Deaf) (Salmela 2023)

Acoustic Quality

Are there sounds that the site can emphasize or draw upon, such as from a water source, vegetation, and wildlife?

Topography can serve as a sound buffer- especially in busy areas

Using topography instead of walls or tall vegetation, can maintain sight lines and create some sort of sound buffer

Shorter vegetation, seat walls, and wood elements can create acoustic buffers

Consider how materials of benches can provide different vibratory experiences for people- especially for People that are Deaf. For example, wood benches provide a more vibratory experience than a stone bench

Spaces that echo- especially active spaces that have music and other events within them- can be uncomfortable and overstimulating to some people. It is best to use materials and site elements that reduce echoes in space- such as vegetation, topography, and wood

Site Design Precedent Takeaways



Movement Experiences

Think of the path material and if it will narrow over time; perhaps a path should be wider to begin with if it will narrow over time

A 10-foot pathway is ideal for multiple modes of movement, such as biking, walking, and running. However, in highly populated spaces, path widths of 20 to 30 feet are preferred for primary pathway widths

Movement paths are best suited to be located in desire lines, or in the direction of desired movement through space, in the most direct and barrier-free way

Think of how a pathway can define access to all areas on a site

Vegetation can be used to keep people from cutting through landscapes and off of paths. This way, everyone has a more equitable path experience because everyone is moving alongside one another

Think of stairs as secondary to ramps and accessible pathways; accessibility and a shared experience for all or most forms of transportation/movement is ideal



Visibility

Vegetation can block unsightly views such as cars or roadways

Trees can be used as a tool to frame views and to visually draw attention to entrances

Think of the desirable views on the site and find a way to frame them in as many spaces as possible

Consider if sight lines need to be maintained for safety and comfort

Clear sight lines can define access points and entrance throughout the site as well as create a visual connection to surrounding areas

Consider how view corridors and axis can be used to connect spaces to their larger context (ex: connecting a campus to a larger city environment with views)

Site Design Precedent Takeaways



Path + Space Materials

Changes in path materials can indicate transitions between spaces

Consider if the path material should stand out or blend in with existing or adjacent surface ground materiality

For people with low vision, a tactile strip along the outer edges of pathways in a high contrast color to the inner pathway can help a lot. Furthermore, this tactile strip can help people that are blind identify a textural difference in the ground and indicate that they are approaching the edge of a path or transitioning to another space

If brick pathways are desired, use tight-joints to limit the amount of upheaval brick pathways usually experience. This way, the pathway will remain mostly flat over time and will not create uneven surfaces that could be hazardous for people to cross

Consider the cultural and historical connotations of a material; certain materials can be alienating to different user groups, especially in racial groups sytemically impacted by white supremacy, including indigenous people

Use materials that will not deteriorate and become potentially dangerous over time (ex: concrete with aggregate atop it)



Communication + Understanding

Sometimes it is helpful to have informative signs, especially in both Braille and English (and other languages), that explain the different areas of the site and how a site can best be experienced

Consider how Braille text can be situated along plaques and the most comfortable way to read Braille. For example, what might be the most comfortable angle to rest your hand while reading Braille?

Using a cable guide system with different shapes attached to it to indicate different program elements nearby (such as “bench straight ahead” or “gathering space to the right”) is a great way to make a site more friendly to people that are blind or have low vision

High-contrast materials are especially helpful to low-sighted users when reading signage or walking along paths (high-contrast strip along the edges of paths can help guide people)

Signs may not be necessary if a space is designed simply and intuitively enough

Signage can be used to inform about park happenings, in addition to guiding people to different spaces

The more languages a sign uses, the more equitable it is

Consider how artwork can communicate cultural histories of a place and help people feel like they are seen within a space and/or community

Think of placing buttons, signage, and other methods of communication in unconventional ways (ex: on the ground as opposed to on the floor and vice versa)

Site Design Precedent Takeaways



Degree of Enclosure

Sub-spaces within larger spaces can be defined, or enclosed, while still maintaining sight lines with low-to-ground seat walls and plantings no more than three to four feet tall

Trees can provide some sense of overhead enclosure and provide protection from the sun, which is especially desirable above benches

Consider providing more enclosed, intimate spaces in naturalized/ wooded areas to encourage mental refreshment

Vegetation can create different experiences. For example, a pathway under trees can feel “cathedral-like.” How can vegetation be used on the site to create a desired experience or feeling?

Degrees of enclosure can be created with level changes, density of planting, the location of points of entry, and different heights of planting

Enclosure can be created with vegetation, topography, seat walls, and architecture (buildings, etc.)



Mobility Requirements

Paths at a 5% slope, less than 1:20, are ideal because they are comfortable to move across and don’t require a handrail. It should be noted, though, that for people that are blind or have low vision a handrail can be very helpful in navigating pathways

If a terrain is very hilly, it may be necessary to use slopes from 1:20 to 1:12 with ramps and/or switchback paths

Stairs should ideally only be maintained, at least on a campus setting, if they are leading to an inaccessible building. It doesn’t make sense to provide an accessible entrance to an inaccessible building

Try to incorporate optimal space for movement on paths, entryways, and outside “rooms” or spaces; special consideration for people with mobility devices, such as wheelchairs and canes, should be given

Fully-bonded or tight-bond pavement patterns on paths are preferred if using bricks or other stones; tight-bond pavement patterns reduce the likelihood for stones or bricks to come uprooted over time and reduce trip hazards on paths.

Space for people with wheelchairs should always be provided in any outdoor space, path, or entryway

Prioritize movement pathways that all people can have a shared experience on- including pedestrians, bikers, scooter-users, vehicular users, and other modes of transit; stairs should be secondary to ramps

How can spaces be re-configured to be more accessible for all people? If a space is currently a parking lot, could it become an accessible entrance?

Site Design Precedent Takeaways



Seating + Gathering

Seating type, such as s-shaped seating, seat walls, or benches, should depend on the surrounding program. For example, do you want people to be able to sit in multiple directions if there are interesting sounds, activities, or views nearby? Should a singular bench be placed at a scenic outlook for a more intimate experience?

Seating should ideally be placed at a steady rhythm along paths for predictability, consistency, and accessibility

A good practice is to place seating AT MOST every 30 meters (or 150) feet along a path to create space for people to stop and rest (Scherling 2023)

Seating with backs and arm rests are ideal for diverse needs, but having a variety of seating with multiple options is ideal

Consider using local materials for seating, if possible, such as granite slabs or local wood for benches or seat backs

The placement of seating can create opportunities for gathering, teaching, and/or silent contemplation

In areas that are heavily trafficked, consider using off-the-shelf seating as opposed to custom seating so that it is easily replaced

Consider if seating should be formal or informal. An example of informal seating is a seat wall, less than 2 feet tall, that people could rest or gather on if they pleased. An example of formal seating is a typical bench that screams “sit on me!”

High-back chairs in circular forms are ideal for people that are deaf and for conversations in ASL



Materials + Colors

Consider using the most durable materials possible for seating, such as ipe wood, granite, and concrete. BUT also weigh the pros and cons of using those materials based on the carbon it will take to transport them, harvest them, and get them installed on a site

Use colors from a complimentary palette or that have similar tones throughout a site. For example, if a site is using brick that naturally has warm tones, consider using warm-toned wood or stone

Locally-sourced materials are ideal

Material selection might be limited based on the requirements of the client. Regardless, try to use materials that mesh well with surrounding landscapes and architecture so that the space doesn’t look out of place

Pops of color can be used on seating, tables, and other program elements in active spaces to help them stand out. Meanwhile, more neutral colors can be used in other, more neutral spaces

Consider how different cultural communities feel about materials. Are certain materials associated with different racial groups? What materials are most welcoming and inclusive to the user group(s) that will use a site?

Think of the cultural connotations of certain materials and how they relate to the historic landscapes of an area; how can the site design become more integrated with the past communities that used to exist in a space, through material choice?

Site Design Precedent Takeaways

Choice, Placement, and Orientation of Site Elements

The spaces outside of buildings, between buildings, or between main spaces are generally more transitional spaces, where people might stop or gather, and should thus become plazas with the appropriate program (seating, trash receptacles, etc.)

Placing site elements, such as entrances or exits along a path or benches, at even increments creates consistency and helps people that are blind or have low vision orient themselves in space

Try to place paths in areas that people naturally want to move. That way desire paths through the grass are reduced and everyone walks on the same path together

Listen to people and what they want and need. If people want to get closer to water and engage with water on a site, if possible, provide a lookout deck or fishing deck for them to do so

Provide many varieties of seating, tables, and other site elements to allow for as much freedom of choice as possible. Variety on site program is also more likely to meet the needs of a more diverse population of people

Consider how certain programming, such as a play space or an amphitheater, can bring different groups of people to a site. If you want more children and families to come to the site, add a play space!

What types of events will occur on the site and how can different spaces accommodate those events?

Consider how level changes, the location of points of entry, differing heights of plants and density of planting can help direct people through space and create different experiences

Topography + Vegetation

Does the site have a lot of wind, unpleasant views to surrounding spaces, and/or is it too noisy? Consider using vegetation as a wind, visual, and/or noise buffer! Not only is vegetation a natural barrier, but it also sequesters carbon out of the air and creates a habitat for many species

Planter beds can be used to create a sense of enclosure and define sub-spaces within larger ones

Plants should always be placed in the soil, sun, water, and topographical conditions that best suite them. Otherwise, it is unlikely that they will thrive or even survive

The “topography of open spaces responds directly to the topography of pathways; they go hand in hand” (Scherling 2023). Consider how a site can take advantage of views and emphasize those views with lookout spots, winding hills, and/or rest areas.

It is always best to recognize when you are not the expert-especially when it comes to plant systems. If designing in a geographical region that you are unfamiliar with, it is best to consult a landscape architect familiar with that region so that the correct plants are selected and appropriately placed.

Native vegetation has longer root systems, meaning they will last longer and are more able to withstand weather events, and typically have more environmental benefits that non-native vegetation

If a site has a lot of existing vegetation that is being preserved, it is best not to change the topography of the site. Changing the topography of a heavily-wooded site can disrupt root systems and existing on-site ecosystems

Site Design Precedent Takeaways



Topography + Vegetation

Consider using fragrant vegetation in sensory gardens or for sensory wayfinding (navigating) through space

Use trees with interesting bark textures that are fun to feel and interesting to experience

Use vegetation to highlight views and entrances

Shrubs and trees can keep people from creating “cow paths” or desire paths through grass

A manicured lawn and neat flower beds can be associated with white privilege, or privilege in general, in the United States. Consider the primary user groups for a site and if the landscaping will be welcoming or alienating for them.

Talking to local communities and future user groups for a space is the best way to determine preferences related to planting

Try to relate the plant selection on a site to the people or places that the site is inspired by. For example, if a site is a memorial to a person, try to determine their favorite plants or parks and incorporate vegetation that relates to your findings.

Consider the different sensory experiences of plants- such as smell and sight. How can plants be used to provide different sensory experiences on a site or aid in olfactory wayfinding?

Think of how specific plant species can celebrate and honor indigenous and other communities

Plants can be used to buffer sound in loud, overstimulating spaces

4.4 Findings

Memoing

4.4 Memoing

Memoing
Method

documents

Final Design + Demonstration of the Guidelines
Outcome

Memoing is the documentation of a design process through photography, sketching, videos, voice memos, and diagramming (Birks, Chapman, and Francis 2008).



Figure 155. Sketching Icon.



Figure 156. Video Icon.



Figure 157. Photo Icon.

Memoing was used as a tool to document the projective design process of an public artwork and public space in Franklin Park. Memoing consisted of concept sketches, scans of process work, notes from committee members, written text about the artwork and/or site, diagrams of narratives and possible features to include in a public artwork, screenshots of SketchUp models, and images of Photoshop iterations.

Memoing Timeline

September 2022
collected site information

October-December 2022
brainstormed narratives

December 2022
presented three strongest concepts to committee

December 2022 - January 2023
created a new concept, presented to committee member

January 2023
life happened and a closer-to-home narrative was created

January 2023
presented new narrative to committee for feedback

January 2023
revised artwork based on committee feedback

February - March 2023
continued revising artwork and applied guidelines to artwork

March 2023
made final renderings for 'You Are Not Alone'

September 2022

collected site information

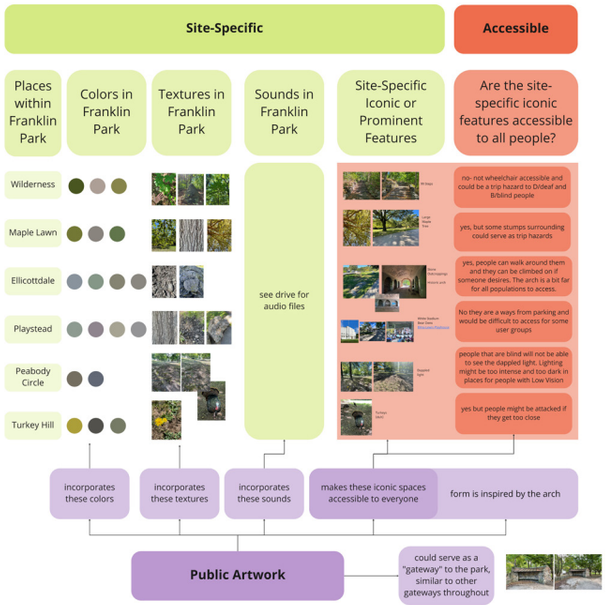


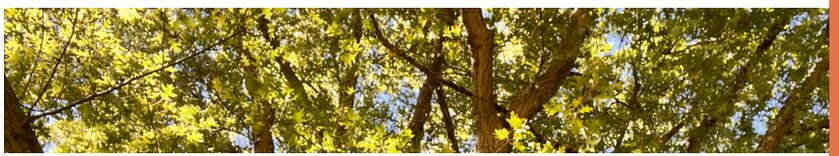
Figure 158. Site-specific public artwork considerations.

After a site visit in September 2022, textures, colors, and materials were identified throughout Franklin Park. The intention of gathering this data was to use the colors and textures found in the park, in an artwork, to make it site-specific and more familiar to locals that are used to specific material pallets and colors. The idea was to make the artwork not seems like a foreign object placed in the park.

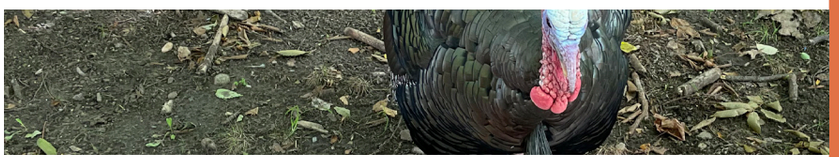












October - December 2022

brainstormed narratives



Figure 159. Narrative brainstorming.

Research was conducted into the character, hardships, and current events facing the residents surrounding Franklin Park, Persons with Disabilities, and myself. The purpose of this research was to identify a common thread that could inspire possible artworks.

Narrative Brainstorming

The Evolution of Franklin Park

Wasn't used how Frederick Law Olmsted intended

New programming introduced

Became more accessible to all people

Honoring the Beauty of Franklin Park

Connectedness between people and the park

Multi-Sensory Franklin Park

interactive artwork that builds community and highlights textures, colors, and sounds throughout the park

Historic Events of Franklin Park

Positives: Festivals, fairs, music, sports

Negatives: Crime / lives lost

Oppression to Empowerment

Artwork that speaks to the oppression faced by the communities surrounding the park and Persons with Disabilities. A component of the artwork will represent empowerment.

Oppressed by Society, Family, Circumstance, and/or Design

Oppression to Empowerment →

Empowerment through Art and Design (making art, being experientially included, processing trauma through art)

The neighborhoods bordering the park, Roxbury, Dorchester, Mattapan, and Jamaica Plain, are "diverse communities with rich cultural traditions that have historically been marginalized by race, ethnicity, and social class" (Lewenberg 2015). Many art initiatives both in Franklin Park and in surrounding neighborhoods have focused on empowering historically marginalized peoples and honoring their story.

For [Persons with Disabilities], [artwork that is not multi-sensory] can feel alienating" (Cho 2021; PAC 2018). To counteract this exclusion, Disability Artwork was created. Disability artwork is not just about Persons with Disabilities creating artwork; it is also about shifting the narrative on disabilities and increasing the inclusivity and equitability of all spaces and experiences for all people (Barnes 2003).

December 2022

presented three strongest concepts to committee based on the oppression to empowerment narrative

The oppression to empowerment narrative was chosen due to its relevance to the user groups that would (hypothetically) experience an artwork in Franklin Park.

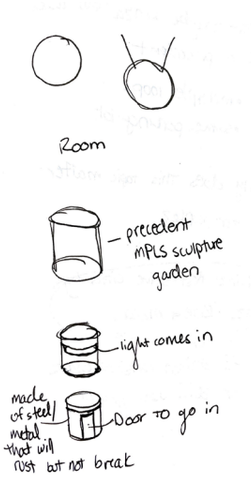


Figure 160. Concept 1.



Figure 161. MPLS Sculpture Garden.

Concept 1

Concept One (1) is inspired by a sculpture in the Minneapolis Sculpture Garden. Using the landscape to symbolically convey the narrative, the audience descends down to the sculpture and then ascends back up to a main pathway. This descent and ascent symbolically represents the journey from oppression to empowerment. On both the descent and the ascent, benches are positioned to allow for reflection while on the journey and after the fact.

Left Side of Main Pathway

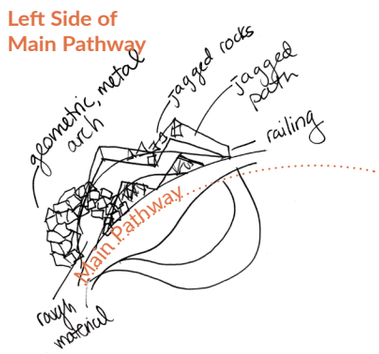


Figure 162. Concept 2.

Right Side of Main Pathway

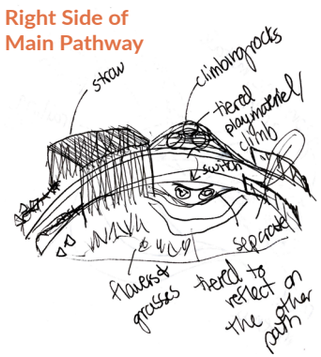


Figure 163. Concept 2.

Concept 2

Concept Two (2) considers the site as the artwork, or land art. Topography symbolizes oppression and triumph as people descend and rise through the landscape. Furthermore, materials play a key role in the narrative, as jagged rocks, brown native grasses, and rough rope transitions to smooth rocks and colorful vegetation. This narrative does not directly go against Olmsted's desire to eliminate decoration from a landscape by incorporating the land itself into the artwork. On either side of a main pathway, the landscape rises and falls, symbolizing the journey of people from oppression to empowerment.

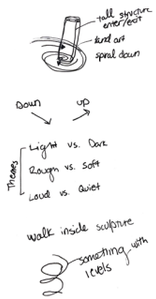


Figure 164. Concept 3.

Concept 3

Concept Three (3) considers the land itself as the medium for expression, and leads the audience down and up a gentle spiral of earth. The spiral will be similar to a labyrinth, in that the environment will encourage reflection and realization of the hardships of life.

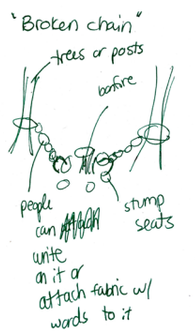
Committee Feedback

The community is already bringing oppression to the artwork; they probably don't want to feel more oppressed. Future narratives should focus more on empowerment.

December 2022 - January 2023

created a new concept,
presented to committee members

Based on feedback received from committee members at the December 2022 committee meeting, a narrative focused more on empowerment was created. More specifically, a conceptual idea based on the action of "breaking through" something, both symbolically and metaphorically was created.



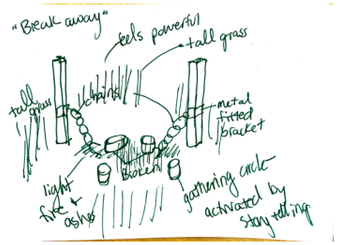


Figure 166. 'Breakaway' concept that inspired 'Breakthrough.'

Figure 165. Initial idea that inspired 'Breakthrough.'

Concept 4

'Breakaway' is inspired by the idea of chains, tied to trees, and broken at the center. The idea behind the chains was to draw upon breaking free from the oppression of slavery and the systematic effects of unfair and unjust judicial practices. Where the chains are broken could be a campfire space for people to tell stories and build community. However, since I am not Black, I felt that this narrative would not be well received from someone like myself (who is White). Therefore, I pivoted to the idea of 'Breakthrough' (see Figures 165-171).

Committee Feedback

Metal "chimes" have been done before. How can this idea be turned on its head to become something original? Consider the work of artists such as Richard Sera and Dia Beacon.

Concept 5

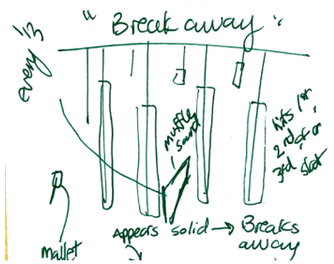


Figure 167. Breakthrough Concept Sketch.

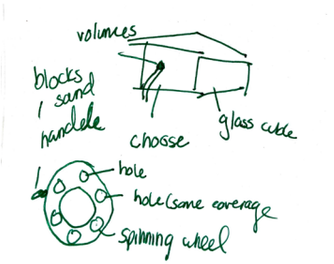


Figure 168. Glass Cube Concept Sketch.

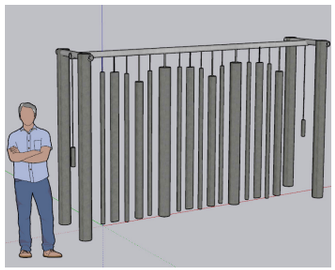


Figure 169. Breakthrough SketchUp Model.

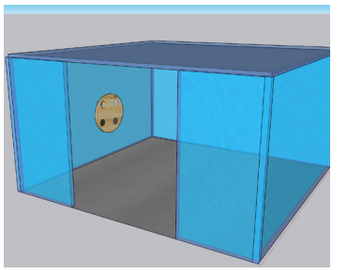


Figure 170. Glass Cube SketchUp Model.

The idea of "Breakthrough" was to have something that appeared solid, such as a metal wall, suddenly brake away after being hit with a mallet. Several different heights of the chimes and the structure itself were considered (fig. 166). This narrative symbolizes breaking through oppression and moving into a space of empowerment.

Part of the concept features a glass cube that lets neurodiverse and over-stimulated populations choose their own experience. By escaping into a glass cube, people may spin a wooden wheel that lets different amounts of sound through. The wheel has a speaker that attaches to the louder part of the installation- the metal chimes.

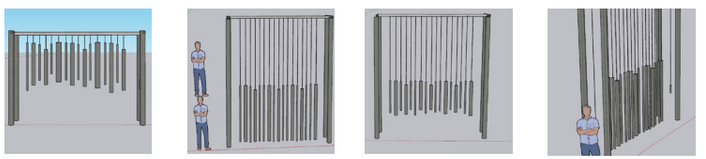


Figure 171. Different heights and sizes of the structure and metal chimes were considered.

January 2023

life happened and a closer-to-home narrative was created

presented new narrative to committee for feedback

Due to certain life events, the previous concepts no long felt right. In just a few minutes, I sketched exactly how I was feeling. Raw emotions. Pain. No hiding from it. The following concept is the result.



maybe

something beautiful
can come of

the darkest times

Committee Feedback

They were excited about this new direction! Consider triple decker housing, common housing surrounding the park, and incorporating common home items that people surrounding the park will recognize.

Concept 6

'You Are Not Alone'

Due to the focus on equitability and universality of this master's project, the artist felt that the narrative for the public art created as a part of this project should also be universal.

At one point or another in a person's life, they are likely to experience some type of domestic or familial challenges. This is a universal situation.

In the artist's case, their childhood home was torn apart by the deteriorating mental health of a parent who is the full-time caretaker for the artist's little brother, who is physically and cognitively disabled. The artwork metaphorically walks through the home, with a TV, bed frame, kitchen table, and hollow structural frame representing a home, disassembled and torn apart. The artist channels their frustration, sadness, and anger at not having a "normal childhood" into the piece, 'You Are Not Alone.'

The narrative is particularly relevant to the people that live adjacent to Franklin Park, the hypothetical location of the public art installation. Due to the high quantity of Persons with Disabilities and marginalized communities that live adjacent the park, it is likely that these communities have experienced similar or some type of familial challenges. The artist feels that they have an "inside look" at the behind-the-scenes of life caring for a Person with Disabilities, as this was their childhood and continues to be their life. Questions such as: What happens after my parents pass away? Who will care for my brother? Who should care for my brother, other than his current caretaker who needs their own assistance, on a limited budget? Should I try to get guardianship of my brother, as a college student? How would I care for him?

In this way, the artist hopes that the people who experience familial challenges, including but not limited to those mentioned above, feel less alone in this world.

Yes, it is frustrating, angering, and can feel hopeless sometimes. But this is a struggle everyone is likely to experience in some way. You Are Not Alone.

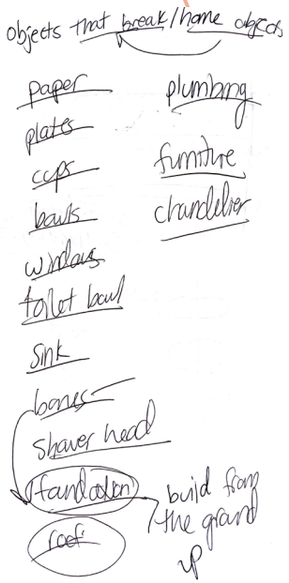


Figure 172. I began brainstorming things that break and the word "foundation" stuck with me. The foundation we are raised upon contributes a lot to our quality of life and who we are as a person. I felt that I could work with this "foundation" for the project, so to speak.

Committee Feedback

Consider how auditory components can be incorporated into the artwork WITHOUT technology such as speakers, which are easily broken, expensive, and hard to maintain.

The word "foundation" made me think of a house, and the rooms within a house. How can the art represent the different rooms of the house, and more so what those rooms represent (ex: the kitchen table is where the family gathers and shares stories; the bed represents shelter, or the mere existence of a roof over your head).

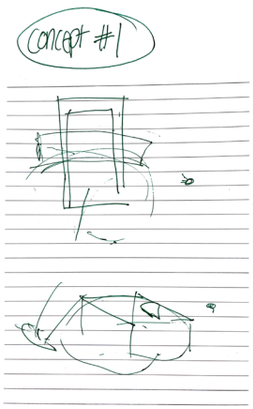


Figure 173. Initial sketch of the door frame/entryway and kitchen table.

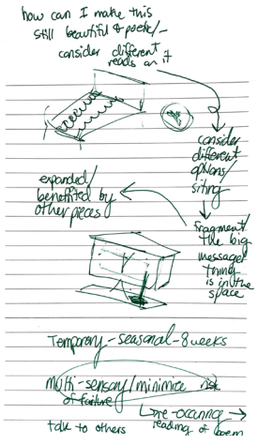


Figure 174. Initial sketch of the bed frame and the T.V.. In the initial sketches, an audio recording of poetry would have played at each site or "room."

'You Are Not Alone'

You Are Not Alone is a multi-sensory, accessible, and immersive public art experience located in the Playstead in Franklin Park (Boston, MA). The art exhibit aims to connect with people who visit the park by conveying the message You Are Not Alone- particularly regarding domestic or familial challenges. The public art exhibit conveys a narrative of domestic or familial challenges with an interactive, crumbling structure symbolizing a triple decker like those surrounding the park. Engraved in the stone of the structure is poetry about familial challenges in Braille, English, Spanish, Mandarin, and other common languages spoken by the people that live around the park. The engravings create a tactile experience for people to feel and experience the space. A roof blown off the structure rests nearby. Gaps and windows in the structure direct views to surrounding furniture items; each furniture item symbolizes a "room" in the house: the kitchen (table), the bedroom (bed frame), and the family room (box TV). Furniture is placed in accordance with the layout of a triple decker, a three-level apartment type that is common in the neighborhoods surrounding Franklin Park. First is the entryway, then the family room (box TV), then the kitchen (table), and then the bedroom (bed frame). Domestic and familial challenges are not unique; therefore, this art installation aims to remind people that they are not alone in their struggles with relatable and recognizable items. The art does not mean to transcend into superiority or abstractness- this is a narrative that people of any ability, age, race, and sexual identity can relate to. The piece should be relatable and understandable too.

A pipe railing serves as a visual and auditory thread, connecting each furniture item/ "room" to one another and to the structure. In each "room" there is an opening in the railing that encourages people to speak into it; sound will be transferred from that room to the other rooms and the main structure. In this way, the pipe railing, like a pipe system in a triple decker, connects the spaces and serves as a visual and auditory thread. The artist intends for the audience to feel curiosity, pulling them into the exhibit, sadness reading the poems and experiencing the rooms, and then finally hope and recognition that they are not alone in their struggles.

January 2023

began creating and documenting design process

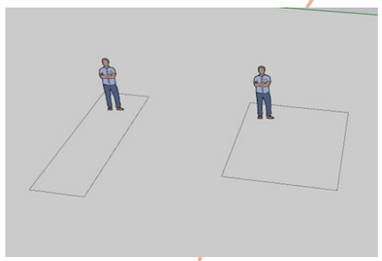


Figure 175. A 5-foot x 15-foot hallway vs. a 10-foot x 12-foot room. I experimented with different scales for a primary "house-like" structure and observed how different scales evoked different feelings.

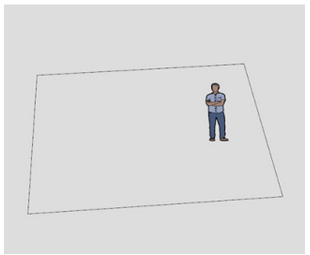


Figure 176. A more intimate experience is created by a 20-foot x 20-foot space compared to the other options.

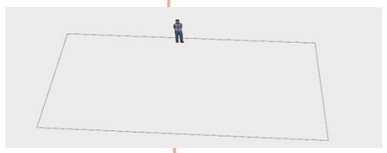


Figure 177. A 50-foot x 25-foot space would be WAY too large for what I'm going for.



Figure 178. The site for the public art is situated adjacent to accessible parking and is 195-feet by 360-feet, or less than 0.020 miles by 0.037 miles; this distance is accessible according to the guidelines (see Chapter 5: Outcomes) which indicate an artwork should be no more than 0.25 miles away from parking (Google Maps 2022).



Figure 179. Looking northwest towards the Franklin Park Zoo and parking adjacent to the site.



Figure 180. Existing benches and trash receptacles are scattered throughout the site, with dappled shade cast over them by mature trees.

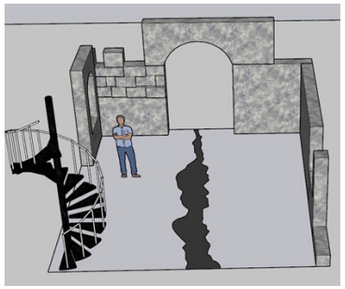


Figure 181. I experimented with different types of stairs in a 20-foot x 20-foot main structure.

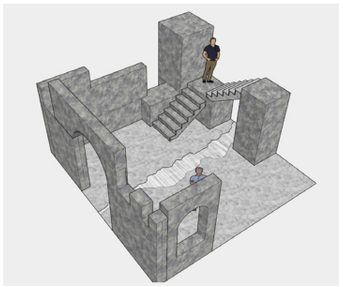


Figure 182. I preferred this stairs option as it felt more natural to the space and could serve as a "amphitheater-like" setup if people were to gather in the space. However, the lack of railings, while aesthetically pleasing, was as a safety hazard.

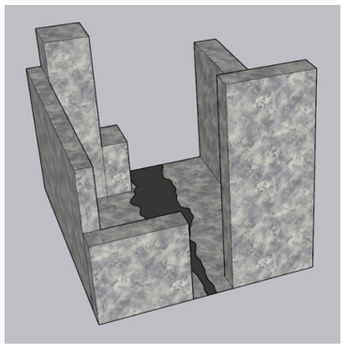


Figure 183. I also drafted a more abstracted form that does not directly resemble a house or room.

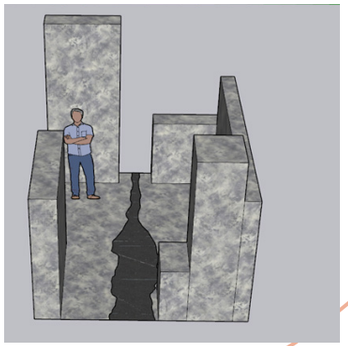


Figure 184. The structure is 10 feet x 12.5 feet and creates a more intimate experience, which supports the narrative more so than the 20-foot x 20-foot structure.

Committee Feedback

A more abstracted form (fig. 179) for the main structure that is smaller provides a more intimate experience, which aligns with the narrative more so than the other structures.

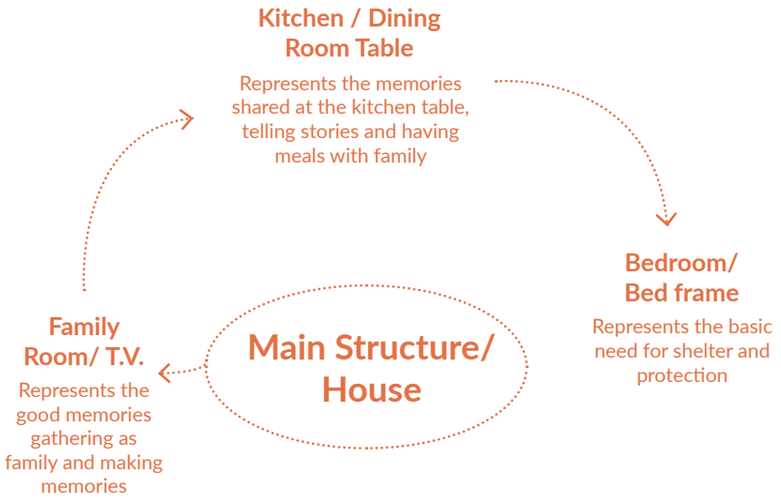


Figure 185. Each item represents different rooms in a house, arranged to be experienced in the same order as a person would move through a triple decker apartment; triple decker apartments are a common housing type surrounding Franklin Park.

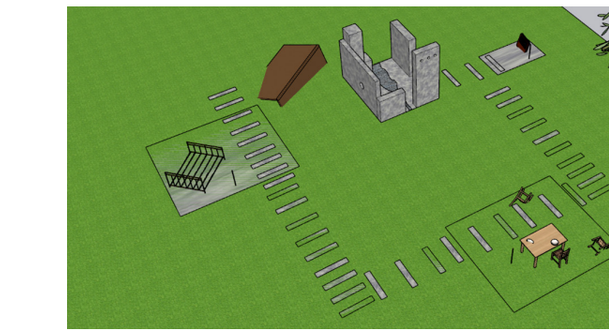


Figure 186. The above diagram represents the spatial layout of the different "rooms" on the site, and the order that they are intended to be experienced.

Committee Feedback

Abstracted forms, rather than a literal bed frame and a literal table and T.V., can help the items feel more intentional and like they are meant to be in the space.

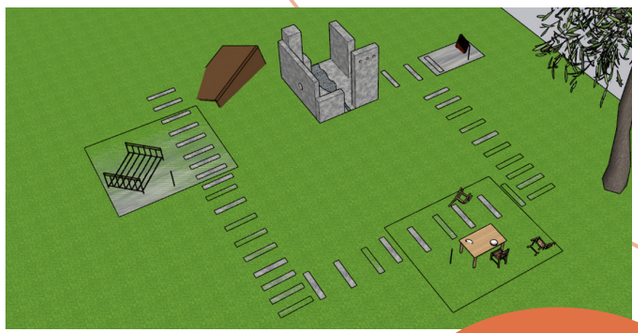


Figure 187. A structural path, meant to look like pieces from the central structure, help guide people through the site to different "rooms."

Committee Feedback

How can the site not use railings or paths to help guide People who are Blind to the different sites?

To answer this question, I consulted:

The design guidelines for equitable public art (See Chapter 5: Outcomes):

1. Using different textures of ground plane materials helps people differentiate between spaces and improves safety. Examples include textured pavers and bump strips.

2. Walking surfaces should generate noise louder than chatter to aid in wayfinding and navigation through space

3. Handles, fences, or railing help people navigate through space

4. Avoid placing drains in walking paths

5. People can associate certain smells with certain areas (plants)

6. Sound or music-producing elements help people navigate through space

8. Place site elements outside of paths, not within paths, to prevent accidents

9. Avoid level changes as much as possible

The art and site precedent analysis (pages 192-304):

1. Used railings and shapes attached to the railings to help guide people to spaces, shapes represented different things (ex: bench ahead)

2. Provide a map at the entrance to the space that understands how to use/experience the site

3. Incorporate different smells, sounds, and textures into the artwork

Semi-Structured Interviews, what artists and designers have done (pages 134-190):

1. Use half-moon shape balls do indicate on the ground that art is approximately 1' behind them

Reflection:

The guidelines were actually pretty helpful when I was stuck! I will consult them again if I get stuck.

I also plan to consult my committee about this issue.

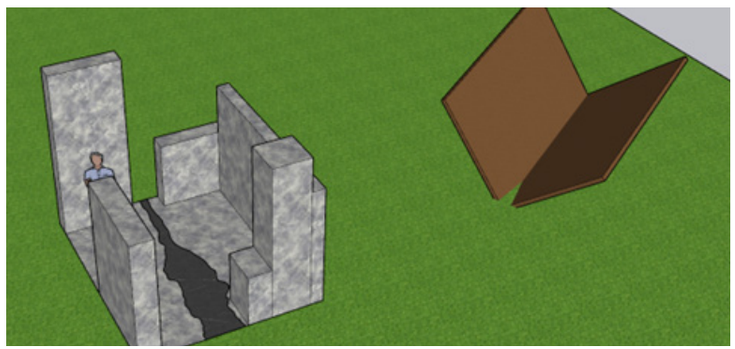


Figure 188. A roof structure, made with actual shingles could be thrown off of the house-like structure to situated that the there has been a great upheaval.

February - March 2023

continued revising artwork and applied guidelines to artwork

After modeling the design concepts in SketchUp, I felt that people might mistake torn up, destroyed home items not as artwork but as trash. I was worried that people would consider the spot to be a dumping site. Therefore, I pivoted and started abstracting the narrative items.

Committee Feedback

Why are the forms being chosen? There needs to be a reasoning for everything

Committee Feedback

Anticipate that a public artwork will be abused and damaged. How can it be constructed to reduce this?

Committee Feedback

Consider different forms for an abstracted table, other than a nature playground



Figure 189. An initial table iteration. Each chair represents a member of my family, with the chair still at the table representing my dad, who has always held out hope for better days.

became

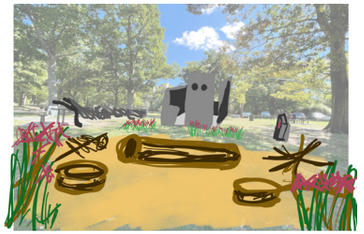


Figure 192. This iteration features the table abstracted into a community playground, bringing people together. The play logs are representative of the form of a table and chairs.



Figure 190. A cracked television says the words "happily ever after" on the screen; a family image can be seen partially through the crack on the front of the television and more through the back of the television.

became

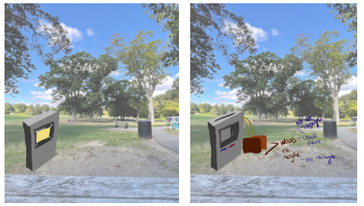


Figure 193. Multiple iterations were created for an interactive TV made from cast concrete or granite blocks.

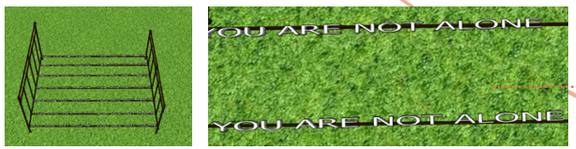


Figure 191. Metal letters "You Are Not Alone" are attached to a bed frame that is charred, cracked, and broken.

became



Figure 194. The bed frame became an abstracted set of metal letters spelling the phrase "You Are Not Alone."

The primary issue with the previous iterations was that I did not have a clear set of goals. Developing goals for the projective artwork and site design helped to shape the project. Goals were informed and inspired by committee comments and the design guidelines.

Projective Design Artwork Goals

1. The artwork must follow the guidelines as much as possible
   - must be multi-sensory
   - must be physically accessible

2. Break down the sensory experience of each home item
   - ex: at a table you might hear (people talking) and
   - ex: you might hear sounds and see images on a t.v.
   - ex: on a bed you might feel different textures

3. Research materiality of different items (ex: typical material of a table and how traditional vs. unconventional materials can be used to convey the narrative)
   - ex: a plastic table vs. a solid wood table

4. Identify cultural connotations of each item (ex: I consider a t.v. to be symbolic of the American home; what role do other people in America consider the t.v. to take?)

Projective Design Site Goals

1. The site must follow the guidelines as much as possible
   - must be physically accessible

2. Integrate site as much as possible with the artwork

3. Incorporate native plant materials that are found in other areas of Franklin Park and Boston

4. If possible, use path materials, bench materials, etc. that are not alienating to surrounding communities (if I can determine this information)

The Next Steps

1. Determine the size/scale of each abstracted item

2. Look more closely at the guidelines and determine how the site and artwork is currently applying them/if changes should be made

3. Determine specific materials for each home item, based on sustainability and accessibility

4. Choose specific plant species and determine where and how they will be incorporated

5. Make more final, high-quality drawings with site design and the public artwork
   - Perspectives to illustrate the space(s)
   - Plan View to show where items are located

6. Write a narrative that describes the deeper meaning behind, and visual qualities of, the artwork

The Next Steps

1. Determine the size/scale of each abstracted item

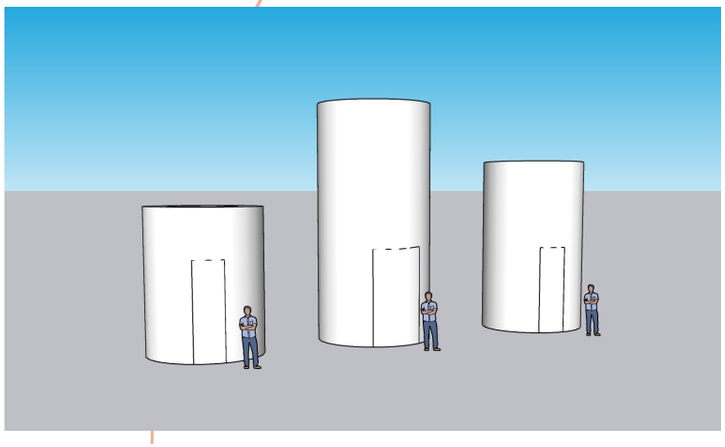


Figure 195. The structural "house-like" frame was transformed into a tornado-like structure. Possible iterations included a 15-foot tall, 20-foot tall, and 25-foot-tall structure. The opening size also differed, from 3 feet wide to 6 feet wide. The opening in all iterations is 10-feet wide. The scale figure is 5 feet and 10 inches.

Committee Feedback

Maybe the artwork should follow the path of healing through trauma or the experience of trauma

The above committee feedback resulted in a complete transformation of the structural, house-like form that previously was proposed in the center of the site. In addition, since the other home items were being abstracted, I thought it would be appropriate to abstract the central form too. The tornado-like structure aims to portray the experience of being in a domestically-abusive environment; because of this, I chose the largest cylindrical form at 25 feet tall so that it would appear all-consuming and dramatic.

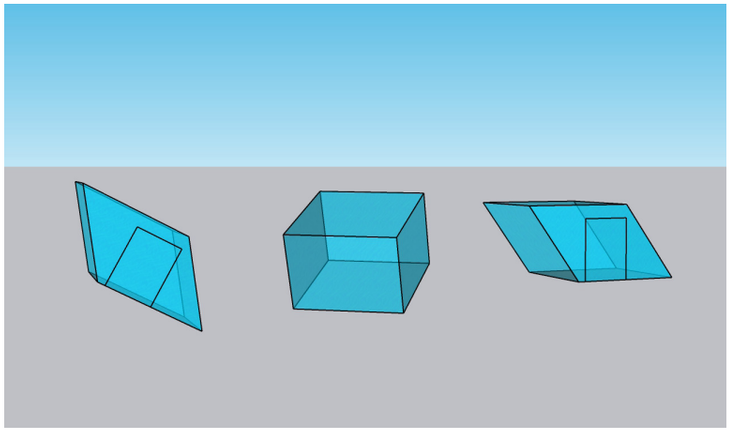


Figure 196. The box television was entirely abstracted to become an actual box room. I went through several iterations to determine how to best rotate it so that it appeared as if was thrown out of the tornado. In each iteration, the box was 14 feet wide by 14 feet long and 10 feet tall. I ultimately chose the middle option because of its angles.

Changing the box television into an actual room allowed park users to have a more immersive and interactive experience with the artwork. The idea behind the abstracted television was to allow people within it to become "actors on a screen" with one-way glass. The glass box television represented the next phase of healing which is rumination and/or reflection. By using one-way glass, park users are forced to reflect on their reality.

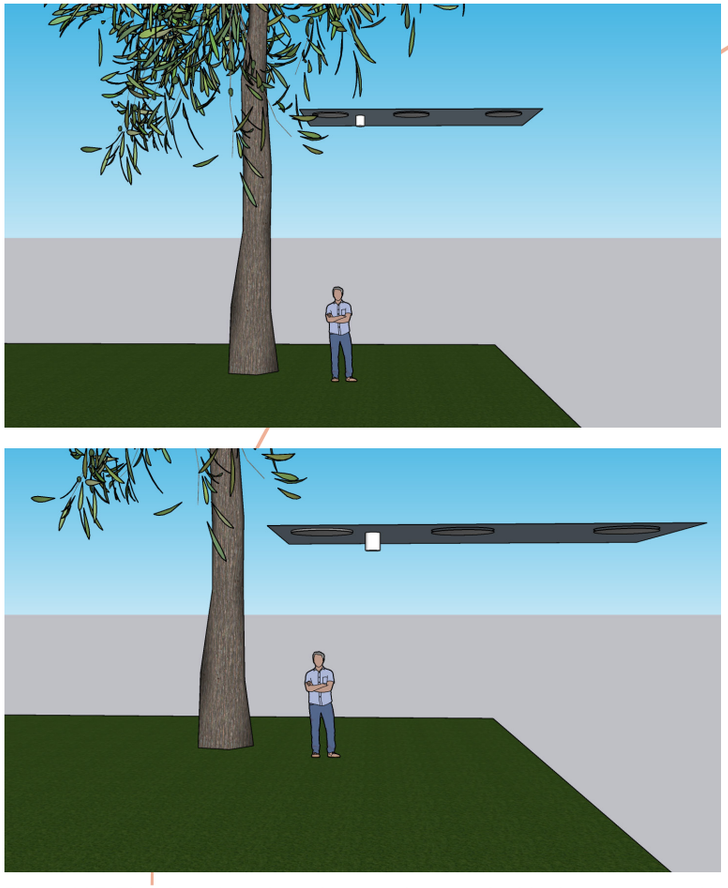


Figure 197. The above iterations show an abstracted table that appears as if it was thrown out of the tornado and into a tree. The table in both iterations is 9-feet wide and 16- feet long. In the top image, the table is 17 feet off the ground. In the bottom image, the table is 12 feet off the ground. The 12-foot iteration was chosen because of the intimacy created under the table, like the intimacy created while eating at a table.

The table, or the abstracted communal “dining room,” represents healing and growth. 3 foot by 3 foot planters made from cracked bowls, cups, and plates that fell from the table show signs of (literal) growth with herbs.



Figure 198. The bed frame remained as metal letters ‘You Are Not Alone’, but the scale was slightly changed. The bed frame is 0 to 36 inches off the ground, laying flush with the ground in some spots and up in the air in others. This creates interesting artwork for people to climb, jump, and play on. The letters are approximately 60 inches wide since a queen bed frame is typically 60 inches wide. The abstracted bed frame is 20 feet long to appropriately fill the space within which it located.

The bed frame represents realization and acceptance of familial challenges. The phrase ‘You Are Not Alone’ evokes feelings of hope, strength, and relief.



Figure 199. The proposed location shifted from the spot that is seen in the image above to this spot. The reason for the change in location was to situate the bed frame in a space that feels sheltered and somewhat enclosed. The trees above the site provide the desired shelter.

The Next Steps

2. Look more closely at the guidelines and determine how the site and artwork is currently applying them/if changes should be made

3. Determine specific materials for each home item, based on sustainability and accessibility

4. Choose specific plant species and determine where and how they will be incorporated

I went through the guidelines fully for each artwork, one by one. As I went through the guidelines, I was inspired to make changes that resulted in a more equitable outcome. A complete breakdown of the sensory experiences, materials chosen (and why they were chosen), and plant species for each artwork may be found in Chapter 5: Outcomes, on pages 350-554.

I also conducted research into the symbolic meaning of each home item. Listed below are my findings.

The Bed | Symbolism in American culture

"One's bed is also often a symbol of home, and security, of deep personal connection and retreat from the world. It is where we retreat to when feeling unwell, where we outside of the public gaze, and also the place where our physical and sexual desires are met"[1]

"We are born, die, and have most of our pleasures and pains in the bed; the bed is inseparable from the most intense of human experiences" (Sullivan 2003, 4) [2]

1 Jackson, Kitty. 2018. "Symbolism in Art: Tracy Emin's Beds." Art Dependence Magazine. https://artdependence.com/articles/symbolism-in-art-tracey-emin-s-beds/.

2 Sullivan, Lorrel Lynn. 2003. "Getting into bed with Les misérables : a study of the symbolism(s) of the bed." Master's Thesis, University of Tennessee, Knoxville.

The Television | Symbolism in American culture

The Television is an important aspect of American life and a trendsetter of popular culture; the television tells people what to believe, what is right versus wrong [3]

"Though often studied within popular culture, television has been transformed by and has touched nearly every aspect of American life and institutions. As the articles in this issue attest, TV encompasses public and private spheres, individual identity and public policy, the arts and politics, and the constellation of race, ethnic, gender, sexual, class, regional, family, community, and religious issues through which we often view the United States" (Katzman 1998, 5) [4]

"Television has emerged as the truly dominant mass medium in American society. The numbers are staggering. Ninety-eight percent of American homes have sets and those sets are turned on for an average of about seven hours a day. The average adult takes in an incredible four hours of television a day, which over the average lifetime adds up to the equivalent of eight straight years (at 24 hours a day) of television viewing" (Neuman 1982, 471) [5]

3 Newcomb, Horace. 1979. "Appalachia on Television: Region as Symbol in American Popular Culture." Appalachian Journal 7, no. 1-2 (Autumn-Winter): 155-164. https://www.jstor.org/stable/40932731.

4 Katzman, David M. 1998. "TV and American Culture." American Studies 39, no. 2 (Summer): 5-12. https://journals.ku.edu/amsj/article/view/2706.

5 Russel, Neuman W. 1982. "Television and American Culture: The Mass Medium and the Pluralist Audience." The Public Opinion Quarterly 46, no. 4 (December): 471-487. http://www.jstor.org/stable/2748768.

The Kitchen Table | Symbolism in American culture

"Kitchens are where we cook, clean, cry, talk, laugh, break things. Hugely symbolic - as well as practical - kitchens evoke thoughts of hearth and home, family and domesticity" (Freeman 2004) [6]

"At home the family spent much time together around the large kitchen table" (Deguara and Nutbrown 2018) [7]

6 Freeman, June. 2004. The Making of the Modern Kitchen: A Cultural History. Oxford: Bloomsbury Publishers.

7 Deguara, Jo and Cathy Nutbrown. 2018. "Signs, symbols and schemas: understanding meaning in a child's drawings." *International Journal of Early Years Education* 26, no. 1 (January): 4-23. Doi: 10.1080/09669760.2017.1369398.

March 2023

made final renderings for
'You Are Not Alone'

The Next Steps

5. Make more final, high-quality drawings with site design and the public artwork
- Perspectives to illustrate the space(s)
- Plan View to show where items are located

6. Write a narrative that describes the deeper meaning behind, and visual qualities of, the artwork

After going through the guidelines for each home item, I was able to develop a clear image in my mind of what each site would look like. From there, I started rendering. Below are the results.

Additionally, throughout this process, I developed several narratives. Committee feedback helped me revise my narrative to a more succinct and descriptive text. However, the developed narrative is only listed in this memoing section. The final text descriptions for the artwork were shorter in length to fit on a descriptive sign at 24 pt. font.



Figure 200. 'You Are Not Alone' documents the experience trauma, and the healing process that a person might go through as a result.

'You Are Not Alone' is a multi-sensory, accessible, and immersive public art piece in the Playstead in Franklin Park (Boston, MA). The art piece connects with park users by conveying the message 'You Are Not Alone'- particularly regarding domestic abuse and familial challenges. Three larger-than-life items are thrown out of a Corten steel tornado to convey this narrative. Each item symbolizes a room in a house or apartment as well as the multi-sensory and household experience had at, on, or around the item. The abstracted and larger-than-life domestic items follow the chronological experience of rooms in a triple-decker, a three-level apartment typical in the neighborhoods surrounding Franklin Park. First is the tornado at the eye of the storm, then the tv (family room), then the table (kitchen), and finally, the bed frame (bedroom).



Figure 201. The tornado-like structure at the center of 'You Are Not Alone' documents an interpretation of the experience of domestic abuse.

Upon entering a 6-foot-wide porous concrete path in the Playstead, park users meander 100 feet among native grasses, wildflowers, and mature trees until reaching a 25-foot-tall x 7-foot wide Corten steel tornado. Confronted with the scale of the tornado and home items (i.e., televisions, table legs, tabletops, chairs, and bed frame pieces) attached to its inner and outer walls, occupants are torn out of the serene park environment into one of uncertainty and chaos. After walking into the tornado, through a 10-foot-tall x 6-foot wide opening, occupants look up and see the chaos of the tornado structure while experiencing the gentle calm of the park surrounding it. Feelings of turmoil are contrasted by the eerie calm in the eye of the storm, similar to the eerie quiet in domestic abuse situations when you know something isn't right. A household situation can be an all-consuming experience.

1 Katzman, David M. 1998. "TV and American Culture." American Studies 39, no. 2 (Summer): 5-12. https://journals.ku.edu/amsj/article/view/2706.

2 Newcomb, Horace. 1979. "Appalachia on Television: Region as Symbol in American Popular Culture." Appalachian Journal 7, no. 1-2 (Autumn-Winter): 155-164. https://www.jstor.org/stable/40932731.

3 Russel, Neuman W. 1982. "Television and American Culture: The Mass Medium and the Pluralist Audience." The Public Opinion Quarterly 46, no. 4 (December): 471-487. http://www.jstor.org/stable/2748768.

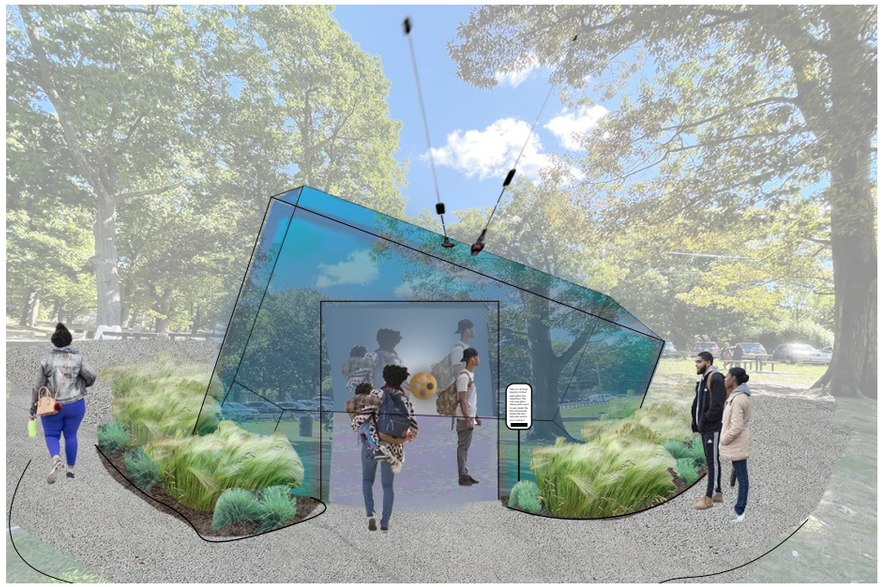


Figure 202. The box television in 'You Are Not Alone' represents the rumination and reflection that takes place after experiencing trauma.

Following the path through the tornado, the audience turns left and is shortly confronted by a 14-foot-wide x 14-foot long and 10-foot tall one-way glass box television. When outside of the box television, people within it are turned into actors on a "screen" by the one-way glass. Meanwhile, within the television, park users are confronted with their reality, unable to see their surroundings. Sitting at an angle, the television was thrown out of the tornado, abstracted, and enlarged to represent the American family, American culture, and familial memories created around the television[1,2,3]; many times, the television can show us what the perfect life looks like "on screen," but a person's reality may be entirely different. Not only is the glass box television representative of media vs. reality, but it also serves as a sensory room for neurodiverse populations when they are overstimulated. Within the box television is a 2-foot x 2-foot wooden plate attached to the wall opposite the entrance. The plate can be turned to let more or less sound in, similar to the volume control on television. The ability to turn sound up or down and control an environment is a positive feature for diverse user groups.



Figure 203. The communal "dining room" represents growth after upheaval.

After experiencing the box television, the audience is directed north along the porous concrete path to an upside-down, re-interpreted table, thrown out of the tornado and into the trees 12 feet off the ground. Looking up at the table, the audience notices that its white plastic material appears fragile and that eating at an upside-down table is impossible. While some cups and plates remain attached to the 13-foot-wide x 23-foot long table, others lie on the ground beneath it. Within and around the roughly 3-foot x 3-foot ceramic cups and plates on the ground, serving as re-imagined planters, park users are drawn in by the smell of herbs. The herbs provide a sensory component to the piece and serve as a social component by bringing the community together, similar to how people are brought together at a table. Other plates lie bare on the ground, waiting for people to picnic and play within them. While togetherness and unity may be sparse with domestic abuse, the sign of herbs growing and community gathering symbolically represents hope and growth after upheaval[4,5].

4 Freeman, June. 2004. *The Making of the Modern Kitchen: A Cultural History*. Oxford: Bloomsbury Publishers.

5 Deguara, Jo and Cathy Nutbrown. 2018. "Signs, symbols and schemas: understanding meaning in a child's drawings." *International Journal of Early Years Education* 26, no. 1 (January): 4-23. Doi: 10.1080/09669760.2017.1369398.



Figure 204. The abstracted bed frame in 'You Are Not Alone' represents eventual feelings of hope and growth- especially at the realization that a person is not alone in their struggles.

After gathering at the upside-down table, picnic plates, and herb garden, the audience moves to the right 50 feet to see a 60-inch-wide by 20-foot long Corten steel bed frame made from the letters 'You Are Not Alone.' The re-envisioned bed frame evokes feelings of hope and playfulness, encouraging climbing activities, sitting, and laying on the metal frame. Many times, a bed can be symbolic of home and security[6,7]. It can be challenging to find a secure environment in domestic abuse or familial situations. In this way, the message 'You Are Not Alone' speaks to park users and evokes feelings of hope.

6 Sullivan, Lorrel Lynn. 2003. "Getting into bed with Les misérables : a study of the symbolism(s) of the bed." Master's Thesis, University of Tennessee, Knoxville.

7 Jackson, Kitty. 2018. "Symbolism in Art: Tracy Emin's Beds." Art Dependence Magazine. https://artdependence.com/articles/symbolism-in-art-tracey-emin-s-beds/.

Narrative Significance

This narrative is important because often, it can be easier to process trauma when moving or doing an activity. Furthermore, some cultures or families may view trauma as taboo or do not have the space to process trauma as needed. However, it is essential to process hardship to move forward and have a productive life. 'You Are Not Alone' provides a reflective space, a public place, that gives people the time and room to process difficult emotions. With individual and community components, the art piece encourages interaction amongst all people and a moment of pause, before continuing to the rest of Franklin Park. Trauma and familial challenges are universal for all people, especially for the historically marginalized and segregated communities surrounding the park[8]. If this public art can make just one person feel less alone, it has done its job.

8 Cook, Greg. 2015. "'Franklin Park Art Grove': A Guide to the Installations and Performances." WBUR. https://www.wbur.org/news/2015/08/07/franklin-park-art-grove.

5

Outcomes

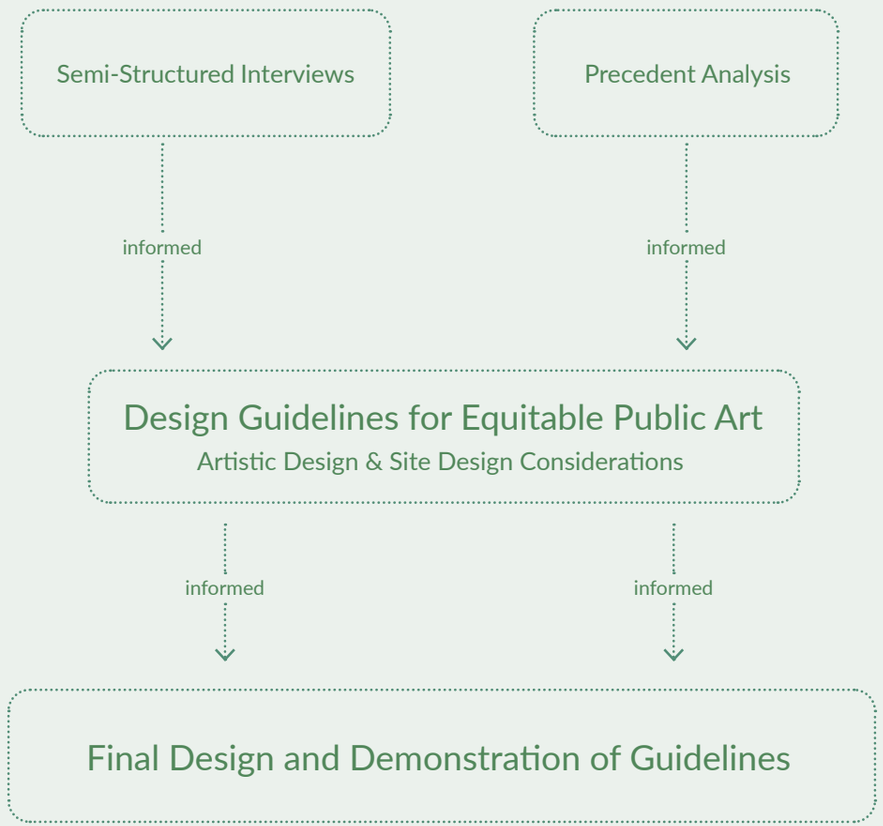


Figure 205. Interview, memoing, and precedent analysis findings influenced design guidelines for equitable public art, which in turn influenced a final design of a public artwork/the demonstration of the guidelines.

Outcomes

Overview

The collective findings from the literature review, site analysis, semi-structured interviews, precedent analysis, and memoing resulted in two outcomes:

1. Guidelines for the design of equitable public art in public space

2. A final design and demonstration of the guidelines (projective public art and site design)

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Art (that) Works

Design Guidelines for Equitable Public Art

by Katherine Herrera

Spring 2023 | Kansas State University

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Overview of the Guidelines

- Statement of Intent
- Why the Guidelines Matter
- Understanding the Guidelines
- Navigating and Applying the Guidelines
- Types of Disabilities Defined



Scan to Listen

Statement of Intent

The following guidelines are for artists and designers who aim to create and site equitable public artwork in public spaces. The guidelines serve as a starting point and inspiration for making multi-sensory artwork that is physically accessible. Considering the needs of a particular user group ultimately makes a more enriching experience for ALL people- an experience that ALL people may not have had otherwise.

It is important to remember that skill grows with experience. The more experience an artist or designer has in creating equitable artwork, the easier the process will likely be in the future.

The guidelines consider the needs of "all" people to include mobility (physical disabilities), cognition (intellectual disabilities and/or neurodiversity), hearing (D/deaf and Hard of Hearing), and vision (B/blind and Low Vision) disabilities. The above disabilities were researched because they have been identified as the most prevalent disabilities in the United States by the Centers for Disease Control and Prevention (CDC) (2018).

Note: The graphic design of the guidelines adheres to established graphic design standards for accessibility that indicate font sizes should be 16 pt. or larger and sans serif; black and white was selected for text and page backgrounds for contrast and readability.

Why the Guidelines Matter

1 in 4

people have a disability in the United States[1]

As of 2021, 15% of the world's population, over one billion people, had some level of disability[2]. Up to 190 million Persons with Disabilities are 15 years of age or older[1]. In the United States, one in four U.S. adults reported a disability, equaling about 26% of the total population[3,4].

1 Centers for Disease Control and Prevention (CDC). 2023. "Disability Impacts All of Us." Last reviewed January 5, 2023. https://www.cdc.gov/ncbddd/disabilityandhealth/infographic-disability-impacts-all.html.

2 World Health Organization (WHO). 2023. "Disability." https://www.who.int/en/news-room/fact-sheets/detail/disability-and-health.

3 Centers for Disease Control and Prevention (CDC). 2023. "Disability Impacts All of Us." Last reviewed January 5, 2023. https://www.cdc.gov/ncbddd/disabilityandhealth/infographic-disability-impacts-all.html.

4 Okoro, Catherine A., NaTasha D. Hollis, Allisa, C. Cyrus, and Shannon Griffin-Blake. 2018. "Prevalence of Disabilities and Health Care Access by Disability Statues and Type Among Adults - United States, 2016." Morbidity and Mortality Weekly Report 67, no. 32 (August): 882-887. Doi: 10.15585/mmwr.mm6732a3.

15%

of the world's population has some level of disability[2]

With the number of Persons with Disabilities expected to rise due to chronic health conditions and population aging, it is increasingly important to create equitable experiences for all people[1,5]. As stated by researcher Stella Robinson, "[Persons with Disabilities] are human beings and citizens, the same as everyone else in the country, and we are entitled to the same access [to public artwork]. Ultimately, society loses out every bit as much as Persons with Disabilities" (1998, 122-123) [6].

5 United Nations (UN). n.d. (b). "Convention on the Rights of Persons with Disabilities." Accessed November 5, 2022. https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html.

6 Robinson, Stella. 1998. "A Liberating Vision; 'Access Is a State of Mind.'" RSA Journal 145, no. 5484: 119–123. doi: http://www.jstor.org/stable/41377337.

“If I can’t get to a place, if it’s exclusive, then I don’t belong and it’s not for me; in terms of the public realm and open space... there should be no exclusive landscapes like that in my opinion.”

- Ian Scherling, Landscape Architect, 2023

“[Society is made up of] people with abilities in all different levels so it’s more like a gray scale than black or white... if we want to keep art [relevant], especially art in the public environment, we have to move [towards equitable and inclusive practices].”

- Tom Kortbeek, Artist, 2022

Understanding the Guidelines

Gain Clarity

The guidelines are structured into fourteen (14) sections, which are divided into five (5) categories:

(1) Guidelines Related to the Senses

(2) Guideline Related to Communication

(3) Guidelines Related to Movement

(4) Guidelines Related to Site Elements

(5) Guideline Related to Engagement

See the following three pages for a broad overview of the sections within each category. For a more thorough overview of the guidelines, see the Table of Contents on page 353.

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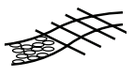
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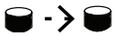

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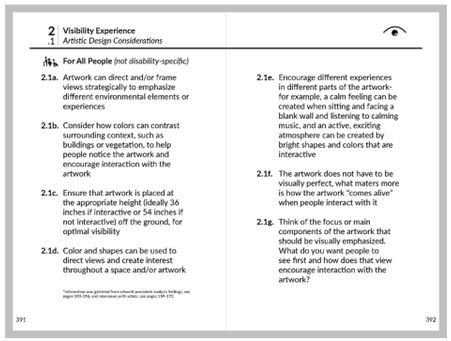

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Understanding the Guidelines

Gain Clarity

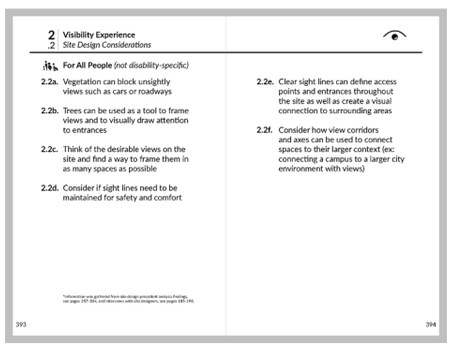
Within each section, there are two (2) to three (3) subsections:

(1) For All People - Artistic Design Considerations



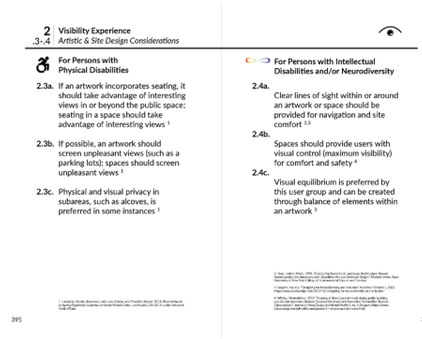
(Left) Example spread of "For All People - Artistic Design Considerations"

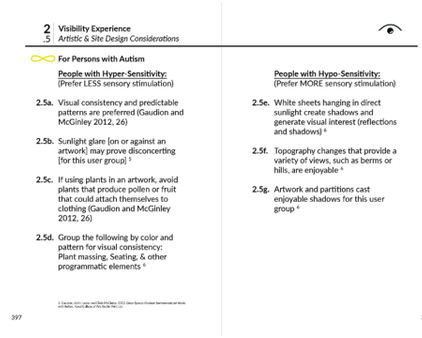
(2) For All People - Site Design Considerations



(Left) Example spread of "For All People - Site Design Considerations"

(3) Disability-Specific - Artistic & Site Design Considerations





(Left) Example spreads of "Disability-Specific - Artistic & Site Design Considerations"

Understanding the Guidelines

Gain Clarity



The “For All People” Subsections are marked with the above icon and provide a broad overview on the subsection topic. These subsections were informed by interviews with artists and site designers as well as precedent analysis. The “For All People” sections are marked with a grey border around the page.

The “Disability-Specific” subsections are marked with icons that represent each disability considered in the guidelines.

The specific disabilities researched as a part of the design guidelines are as follows:

 Physical Disabilities

 Cognitive Disabilities and/or Neurodiversity

 Autism

 Blind

 Low-Vision

 Deaf & Hard of Hearing

Each disability is represented visually with words and an icon. The disability-specific subsections were informed by literature review. Definitions of each disability may be found on pages 377-381.

Navigating and Applying the Guidelines

Become an Expert

To navigate the guidelines:

(1) For quick reference, each section and subsection are hyperlinked within the Table of Contents

(2) Read through the guidelines to get inspired!

(3) Footnotes containing additional information and references are included at the bottom of each page

To apply the guidelines:

(1) The design guidelines can be used throughout the design process, to inform initial concept ideation through design development

(2) The design guidelines can be used to inspire original ideas and equitable outcomes

(3) If stuck or lost in the design process, the design guidelines can provide clarity. The guidelines are meant to inspire creativity, not constrict it

(4) The guidelines are like a hand to hold, guiding the artist and/or designer through their creative process

(5) **Consider reviewing the guidelines over a period of multiple days. Reviewing the guidelines all at once can be overwhelming

Types of Disabilities
Defined



Physical Disabilities

Physical disabilities affect the physical functioning of a person when interacting with their environment (Robinson 1998).

*Accessible Icon (The Accessible Icon Project n.d.)



Intellectual Disabilities and/or Neurodiversity

Intellectual disability is used interchangeably with *cognitive disability* by some sources and refers to "significant limitations both in intellectual functioning (reasoning, learning, problem solving) and in adaptive behavior, which covers a range of everyday social and practical skills" (NCDJ n.d.).

Neurodiversity is "the range of differences in individual brain function and behavioral traits, regarded as part of the normal variation in the human population; esp. (of a group) including persons on the autism spectrum" (Oxford English Dictionary 2019; NCDJ n.d.).

*Neurodiversity Icon

Types of Disabilities
Defined

Autism

Autism, also called *Autism Spectrum Disorder or A/autistic*, is a condition characterized by three impairments: difficulty with social interaction, difficulty with social communication, and difficulty with imagination (Dautenhahn 2000; National Autistic Society 2000).

"Some people with autism prefer to be referred to as "autistic", "autistic person", or "person with autism"" (NCDJ n.d.).

*Autism Acceptance Icon



Blind

Blind "may be used for people who have complete or almost complete loss of sight" (National Center on Disability and Journalism (NCDJ) 2021).

This is different from people who have some level of vision (see *low vision*).

*Blind Icon



Low Vision

Low-Vision and *Limited Vision* are "acceptable [terms] when a person is not legally or completely blind" (NCDJ n.d.)

*Low Vision Icon

Types of Disabilities
Defined



Deaf and Hard of Hearing

Deaf “describes a person with profound or complete hearing loss. Deafness is often considered a culture, not a disability” (NCDJ n.d.).

People with hearing loss may prefer to be called *D/deaf* OR *Hard of Hearing* depending on preference. For this project, “Deaf” refers to a person with complete hearing loss.

*Deaf/Hard of Hearing Icon

Design Guidelines

Artistic & Site Design Considerations



Scan to Listen

1 Sensory Experience

Scan to Listen

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Sensory Experience: Multi-Sensory artwork, or artwork that engages *at least* two of the five senses (sight, smell, sound, touch, taste), is the most accessible and universal type of artwork for *all* people.

This category provides a broad overview of how an artwork can engage the five senses. *Disability-Specific* information about the senses can be found in the following sections:

Sight: Sections 2 and 3 | Visibility and Lighting Exp.
Sound: Section 4 | Acoustic Experience
Touch: Section 5 | Colors + Tactile Materials

For All People *(not disability-specific)*

1.1a. The five (5) senses do not have to be engaged individually; they could be engaged simultaneously.

Consider incorporating smell in the following ways:

1.1b. Use materials that leave a distinct scent on the hands after touching

1.1c. Different vegetation can have distinct smells that an artwork can use or emphasize

1.1d. Wood and other materials can be covered with essential oils- if appropriately protected from weather events- that can add a smell component to an artwork

*Information was gathered from artistic and site design precedent analysis findings, see pages 193-304 and interviews with artists and site designers, see pages 135-190.

Consider incorporating touch and sound in the following ways:

1.1e. Touch and sound pair well together- consider interactive components that create sound when touched

1.1f. Use a variety of materials to evoke different emotions

1.1g. Ensure that sounds are not too loud or startling

1.1h. When sound is enhanced, so too is texture

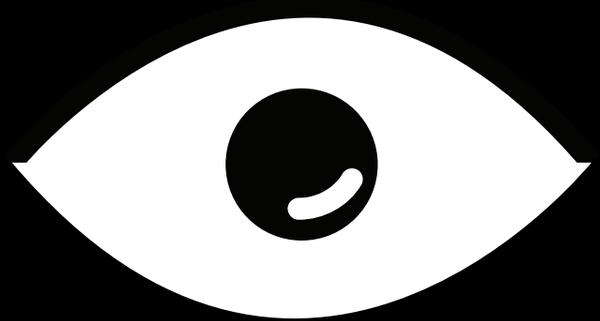
Consider incorporating sight in the following way:

1.1i. Colors and materials can communicate different emotions, thoughts, and transitions between spaces

2 Visibility Experience

Scan to Listen

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Visibility within or around an artwork or space influences the experience of an artwork as well as feelings of comfort and safety.

For example, some people might feel unsafe if they are not able to see fully around an artwork due to vegetation or walls.

Some user groups also have preferences for text size and font type.

For All People *(not disability-specific)*

2.1a. Artwork can direct and/or frame views strategically to emphasize different environmental elements or experiences

2.1b. Consider how colors can contrast surrounding context, such as buildings or vegetation, to help people notice the artwork and encourage interaction with the artwork

2.1c. Ensure that artwork is placed at the appropriate height (ideally 36 inches if interactive or 54 inches if not interactive) off the ground, for optimal visibility

2.1d. Color and shapes can be used to direct views and create interest throughout a space and/or artwork

*Information was gathered from artwork precedent analysis findings, see pages 193-256, and interviews with artists, see pages 159-172.

2.1e. Encourage different experiences in different parts of the artwork- for example, a calm feeling can be created when sitting and facing a blank wall and listening to calming music, and an active, exciting atmosphere can be created by bright shapes and colors that are interactive

2.1f. The artwork does not have to be visually perfect, what maters more is how the artwork “comes alive” when people interact with it

2.1g. Think of the focus or main components of the artwork that should be visually emphasized. What do you want people to see first and how does that view encourage interaction with the artwork?

For All People *(not disability-specific)*

2.2a. Vegetation can block unsightly views such as cars or roadways

2.2b. Trees can be used as a tool to frame views and to visually draw attention to entrances

2.2c. Think of the desirable views on the site and find a way to frame them in as many spaces as possible

2.2d. Consider if sight lines need to be maintained for safety and comfort

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

2.2e. Clear sight lines can define access points and entrances throughout the site as well as create a visual connection to surrounding areas

2.2f. Consider how view corridors and axes can be used to connect spaces to their larger context (ex: connecting a campus to a larger city environment with views)

For Persons with Physical Disabilities

2.3a. If an artwork incorporates seating, it should take advantage of interesting views in or beyond the public space; seating in a space should take advantage of interesting views [1]

2.3b. If possible, an artwork should screen unpleasant views (such as a parking lots); spaces should screen unpleasant views [1]

2.3c. Physical and visual privacy in subareas, such as alcoves, is preferred in some instances [1]

1 Loukaitou-Sideris, Anastasia, Lené Levy-Storms, and Madeline Brozen. 2014. *Placemaking for an Ageing Population: Guidelines for Senior-Friendly Parks*. Los Angeles, CA: UCLA Luskin School of Public Affairs.

For Persons with Intellectual Disabilities and/or Neurodiversity

2.4a. Clear lines of sight within or around an artwork or space should be provided for navigation and site comfort [2,3]

2.4b. Spaces should provide users with visual control (maximum visibility) for comfort and safety [4]

2.4c. Visual equilibrium is preferred by this user group and can be created through balance of elements within an artwork [3]

2 Hoyt, Lorlene Marie. 1993. "A Guide for Students of Landscape Architecture: Toward Understanding the Americans with Disabilities Act and Universal Design." Master's thesis, State University of New York College of Environmental Science and Forestry.

3 Sargent, Kay. n.d. "Designing for Neurodiversity and Inclusion." Accessed October 1, 2022. https://www.workdesign.com/2019/12/designing-for-neurodiversity-and-inclusion/

4 Whitby, Maximilienne. 2017. "Scoping of shared spatial needs during public building use: Autism Spectrum Disorder (Sensory Overload) and Borderline Personality Disorder (Dissociation)." *Journal of Urban Design and Mental Health* 3, no. 9 (August). https://www.urbandesignmentalhealth.com/journal-3---shared-spatial-needs.html.

For Persons with Autism

People with Hyper-Sensitivity:
(Prefer LESS sensory stimulation)

2.5a. Visual consistency and predictable patterns are preferred (Gaudion and McGinley 2012, 26)

2.5b. Sunlight glare [on or against an artwork] may prove disconcerting [for this user group] [5]

2.5c. If using plants in an artwork, avoid plants that produce pollen or fruit that could attach themselves to clothing (Gaudion and McGinley 2012, 26)

2.5d. Group the following by color and pattern for visual consistency: Plant massing, seating, and other programmatic elements [6]

5 Gaudion, Katie Louise and Chris McGinley. 2012. *Green Spaces: Outdoor Environments for Adults with Autism.* Royal College of Art: Redlin Print Ltd.

People with Hypo-Sensitivity:
(Prefer MORE sensory stimulation)

2.5e. White sheets hanging in direct sunlight create shadows and generate visual interest (reflections and shadows) [6]

2.5f. Topography changes that provide a variety of views, such as berms or hills, are enjoyable [6]

2.5g. Artwork and partitions cast enjoyable shadows for this user group [6]



For Persons that have Low Vision

2.6a. Ensure the public artwork is well-lit in night settings [6]

2.6b. Use colors that differ from surrounding landscape to make the public artwork stand out [7]

2.6c. If incorporating text into the artwork, or artwork description, use sans serif for big blocks of text and 16-18 point font for better visibility [8]

2.6d. 24 pt font size is preferred if reading from afar [7]

6 Knoop, Stuart L. "Architecture for Low Vision: Site, Building and Interior Design." National Institute of Building Sciences Low Vision Design Committee Symposium, Washington, D.C., January 10, 2013.

7 National Institute of Building Sciences. *Design Guidelines for the Visual Environment*. National Institute of Building Sciences, 2015. https://www.nibs.org/files/pdfs/NIBS_LVDP_Guidelines_2015.pdf.

8 Lazard, Carolyn. *Accessibility in the Arts: A Promise and a Practice*. Reading, PA: First Edition, 2019. https://www.recessart.org/wp-content/uploads/Accessibility_in_the_Arts_A_Promise_and_a_Practice_Carolyn_Lazard_CommonField.pdf.





For Persons that are Deaf and Hard of Hearing

2.7a. Improve visibility by creating an artwork that people can easily see around or through- for safety and comfort purposes [9,10]

2.7b. If applicable, rounded corners are preferred to 90 degree corners [11]

9 Vaughn, Alexa. 2018. "Applying DeafScape to Landscape." *Ground Up Journal*, no. 7 (May): 100-103. https://issuu.com/alexavaughn/docs/deafscape_groundupjournal_avb.

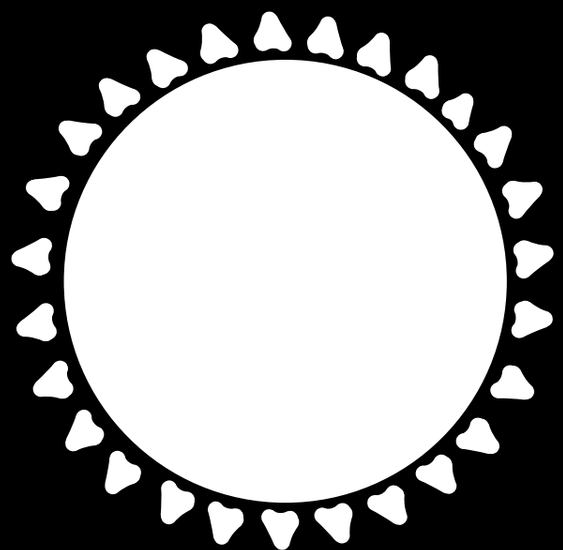
10 Ryhl, Camilla. 2010. "Accessibility and Sensory Experiences: Designing Dwellings for the Visually and Hearing Impaired." *Nordic Journal of Architectural Research* 22, no. 1/2: 109-122.

11 Johnson, Charlene A. 2010. "Articulation of Deaf and Hearing Spaces Using Deaf Space Design Guidelines: A Community Based Participatory Research with the Albuquerque Sign Language Academy." Master's Thesis, University of New Mexico.

3 Lighting Experience

Scan to Listen

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Lighting can be startling or helpful depending on ability.

For example, some people might find flashing lights in an artwork or on a site uncomfortable or triggering.

This category identifies how artwork and sites can incorporate lighting to satisfy the needs of different user groups.

For All People *(not disability-specific)*

3.1a. Lighting can cast interesting shadows that engage the audience and make artwork more comfortable for most people (not too bright or sunny)

3.1b. Certain materials interact differently in lighting- consider if translucent or opaque materials are preferred to convey a narrative

3.1c. Consider how a public artwork can be illuminated at night for safety purposes

*Information was gathered from artwork precedent analysis findings, see pages 193-256, and interviews with artists, see pages 159-172.

3.1d. Different types of lighting can be used to convey different narratives and create different ambiances- for example recessed lighting that casts bright spots on or near the artwork is more dramatic than a fully illuminated or fully-lit artwork/space

3.1e. Different colored lighting can be used to create atmosphere and feelings in an artwork and/or space

For All People *(not disability-specific)*

3.2a. Consider the natural systems and wildlife on the site. Could lighting potentially disturb wildlife? Is lighting necessary, based on the times of day that people will use the space?

3.2b. Think of how lighting can be incorporated for safety but not disturb natural systems

3.2c. Lighting may be selected based on a material or site furniture palette provided by the client

3.2d. Placing lighting at a steady rhythm along paths keeps spaces and paths from being over-saturated with light; some people do not like lighting that creates overly dark or overly light spaces

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

3.2e. Seating is best placed under trees that will provide shade from sun

3.2f. Consider if it is more important to illuminate the path or the space and why so

3.2g. Vegetation can be placed to strategically reduce solar exposure- especially on major pathways

3.2h. Consider using dark sky compliant lighting to reduce night sky pollution and reduce glare

3.2i. Many people like lighting that mimics the sun- that is, overhead lighting

3.2j. Try not to provide too much back lighting; overhead lighting is more desirable to many people (ex: People that are Deaf)

For Persons with Physical Disabilities

3.3a. Shade is preferable for this user group, especially in gathering areas or with an artwork that encourages sustained interaction over a period of time [1]

3.3b. Use trees or built structures to provide shade [1]

3.3c. Avoid glare on materials, signs, and screens with intermediate or transitional lighting [2]

3.3d. Avoid overly reflective materials that could cause eye strain [2]

1 Preiser, Wolfgang, and Korydon H. Smith. 2010. *Universal Design Handbook, 2E*. United States: McGraw Hill.

2 Loukaitou-Sideris, Anastasia, Lené Levy-Storms, and Madeline Brozen. 2014. *Placemaking for an Ageing Population: Guidelines for Senior-Friendly Parks*. Los Angeles, CA: UCLA Luskin School of Public Affairs.

For Persons with Intellectual Disabilities and/or Neurodiversity

3.4a. Soft, natural, and diffused lighting is preferred by some people in this user group [3,4,6]

3.4b. Artificial lighting strips and flickering lights are not preferred [4,5,6]

3.4c. Avoid direct exposure to strong sunlight on or around the artwork [5]

3.4d. Incorporate a variety of lighting options in a space and/or around/ within an artwork [6]

3.4e. Allow lighting to be manipulated by site users based on needs [5,6,7]

3 Sargent, Kay. "Designing for Neurodiversity and Inclusion." Accessed October 1, 2022. https://www.workdesign.com/2019/12/designing-for-neurodiversity-and-inclusion/

4 Lazard, Carolyn. *Accessibility in the Arts: A Promise and a Practice*. Reading, PA: First Edition, 2019. https://www.recessart.org/wp-content/uploads/Accessibility_in_the_Arts_A_Promise_and_a_Practice_Carolyn_Lazard_CommonField.pdf.

5 BBC UX&D. n.d. (b). "Scape: Creating a Positive Environment." Accessed October 5, 2022. https://bbc.github.io/uxd-cognitive/environmental-checklist-form-visual.html.

6 Whitby, Maximilienne. 2017. "Scoping of shared spatial needs during public building use: Autism Spectrum Disorder (Sensory Overload) and Borderline Personality Disorder (Dissociation)." *Journal of Urban Design and Mental Health* 3, no. 9 (August). https://www.urbandesignmentalhealth.com/journal-3---shared-spatial-needs.html.

7 Perry, Michael. 2021. "Addressing Neurodiversity Through Universal Design." Progressive | ae. https://www.progressiveae.com/addressing-neurodiversity-through-universal-design/.

For Persons with Autism

3.5a. Shade is preferable, especially with an artwork that encourages sustained interaction over a period of time [8]

3.5b. Avoid glare of materials with intermediate/transitional lighting, and avoid overly reflective materials that could cause eye strain [9]

3.5c. Add lighting creatively throughout spaces to ease transitions from light to dark and illuminate the artwork/ space during both the day and the night [10]

8 Filipe, Carlos Nunes. 2017. "Psychiatric and Neurological Problems in Adults with Autism Spectrum Disorders." Autism Spectrum Disorders in Adults, edited by Bernardo Barahona Corrêa and Rutger-Jan van der Gaag: 203-218. Doi: 10.1007/978-3-319-42713-3_8.

9 Ezell, Kyle, Galyna Korniyenko, and Richard Stein. 2018. Autism Planning and Design Guidelines 1.0. American Planning Association.

10 Gaudion, Katie Louise and Chris McGinley. 2012. Green Spaces: Outdoor Environments for Adults with Autism. Royal College of Art: Redlin Print Ltd.

3.5d. Do not install lighting that buzzes and spaces that are out of direct sunlight are ideal (to avoid glare) [8, 9,10,11]

3.5e. Incorporate lighting as a form of wayfinding and to encourage exploration of spaces [10]

People with Hyper-Sensitivity:
(prefer LESS sensory stimulation)

3.5f. Provide space for relief from direct sunlight with tree canopies, gazebos, and other shade structures [10]

11 Ezell, Kyle, Galyna Korniyenko, and Richard Stein. 2018. *Autism Planning and Design Guidelines 1.0.* American Planning Association.

For Persons that have Low Vision

3.6a. The public artwork should be well-lit in night settings, without having glare from the lighting itself or reflections from materials that could cause eye strain [12,13]

3.6b. Use consistent lighting around an artwork and space, as areas that are over-exposed or under-exposed may be disorienting and unfavorable to this group (National Institute of Building Sciences 2015, 7) [13]

12 Knoop, Stuart L. "Architecture for Low Vision: Site, Building and Interior Design." National Institute of Building Sciences Low Vision Design Committee Symposium, Washington, D.C., January 10, 2013.

13 National Institute of Building Sciences. *Design Guidelines for the Visual Environment*. National Institute of Building Sciences, 2015. https://www.nibs.org/files/pdfs/NIBS_LVDP_Guidelines_2015.pdf.

3.6c. In day AND night settings: Consistent functioning light posts along paths in public spaces as well as in covered areas (with tree canopy or overhead structures) can improve comfort while navigating public space [13]

For Persons that are Deaf and Hard of Hearing

3.7a. Artwork should incorporate a variety of lighting to prevent eye strain and improve safety in outdoor spaces (i.e. natural lighting and light posts, etc.) [14]

3.7b. Planting trees above artwork can reduce glare on screens or shiny materials (i.e. metal) [14]

3.7c. Appropriate lighting in or around artwork is an important safety component for this user group [15]

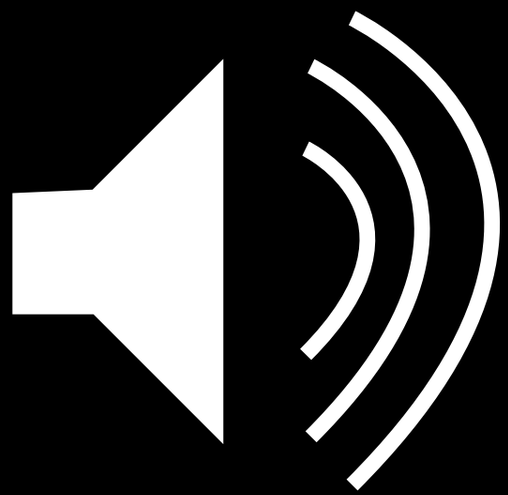
14 Vaughn, Alexa. 2018. "Applying DeafScape to Landscape." *Ground Up Journal*, no. 7 (May): 100-103. https://issuu.com/alexavaughn/docs/deafscape_groundupjournal_avb.

15 Johnson, Charlene A. 2010. "Articulation of Deaf and Hearing Spaces Using Deaf Space Design Guidelines: A Community Based Participatory Research with the Albuquerque Sign Language Academy." Master's Thesis, University of New Mexico.

4 Acoustic Experience

Scan to Listen

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Acoustic considerations refer to the loudness or quietness that a user group prefers.

Loudness within a space can influence the comfort levels of a variety of people.

For All People *(not disability-specific)*

4.1a. Consider how path and space materials or an artwork can amplify the sound of a person moving

4.1b. Can sound be adjusted in any way by the artwork? (ex: sound could be turned up or turned down)

4.1c. Is it possible to incorporate microphones or forms that echo sound and create an auditory experience for people?

*Information was gathered from artwork precedent analysis findings, see pages 193-256, and interviews with artists, see pages 159-172.

4.1d. How can the artwork become interactive and produce sound when touched?

4.1e. Can the experience of creating sound with an artwork bring people together in any way?

4.1f. Think of how vegetation and water elements in or around an artwork can evoke different emotions (ex: a calm feeling)

For All People *(not disability-specific)*

4.2a. Are there sounds that the site can emphasize or draw upon, such as from a water source, vegetation, and wildlife?

4.2b. Topography can serve as a sound buffer- especially in busy areas

4.2c. Using topography instead of walls or tall vegetation, can maintain sight lines and buffer sound

4.2d. Shorter vegetation, seat walls, and wood elements can create acoustic buffers

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

4.2e. Consider how materials of benches can provide different vibratory experiences for people- especially for People that are Deaf. For example, wood benches provide a more vibratory experience than a stone bench

4.2f. Spaces that echo- especially active spaces that have music and other events within them- can be uncomfortable and overstimulating to some people. It is best to use materials and site elements that reduce echoes in space- such as vegetation, topography, and wood

For Persons with Physical Disabilities

4.3a. An artwork can use vegetation, fabrics, carpeting, and other materials can to prevent sound pollution (if appropriate) [1]

4.3b. Screening surrounding noises with natural elements, such as water or vegetation (grasses swaying in the wind), is preferred [1,2]

1 Preiser, Wolfgang, and Korydon H. Smith. 2010. *Universal Design Handbook, 2E*. United States: McGraw Hill.

2 Loukaitou-Sideris, Anastasia, Lené Levy-Storms, and Madeline Brozen. 2014. *Placemaking for an Ageing Population: Guidelines for Senior-Friendly Parks*. Los Angeles, CA: UCLA Luskin School of Public Affairs.

3 BBC UX&D. n.d. (b). "Scape: Creating a Positive Environment." Accessed October 5, 2022. https://bbc.github.io/uxd-cognitive/environmental-checklist-form-visual.html.

4 ADA Site Compliance. 2021. "Guide to Cognitive Disabilities." https://adasitecompliance.com/guide-to-cognitive-disabilities/.

5 Perry, Michael. 2021. "Addressing Neurodiversity Through Universal Design." Progressive | ae. https://www.progressiveae.com/addressing-neurodiversity-through-universal-design/.

6 Discover Autism Research and Employment (DARE). 2020. *DARE Report on Adjustments*. London, UK: Institute of Education.

7 Whitby, Maximilienne. 2017. "Scoping of shared spatial needs during public building use: Autism Spectrum Disorder (Sensory Overload) and Borderline Personality Disorder (Dissociation)." *Journal of Urban Design and Mental Health* 3, no. 9 (August). https://www.urbandesignmentalhealth.com/journal-3---shared-spatial-needs.html.

For Persons with Intellectual Disabilities and/or Neurodiversity

4.4a. Noise can been very distracting and distressing to this group [3,4,5]

4.4b. Noise-canceling headphones might be necessary [6]

4.4c. Sudden, loud noises should be avoided- or there should be an option to "escape" from the noise or a warning should be provided [3,5,6]

4.4d. Acoustical isolation is necessary for some people [7]

4.4e. Consider incorporating sound buffers [4,6]

For Persons with Autism

People with Hyper-Sensitivity:
(Prefer LESS sensory stimulation)

4.5a. To mask noise for hyper-sensitive people, incorporate water, vegetation that creates "whooshing" sounds, or other gentle sounds into artwork and spaces that distract from, or reduce, adjacent noises that can lead to overstimulation, such as lawnmowers and car engines [8,9,10,11,12]

4.5b. Ground cover that creates loud noises should be avoided, such as gravel. Cork, bark, or sand are sound-absorbent materials that are preferred [8]

8 Gaudion, Katie Louise and Chris McGinley. 2012. *Green Spaces: Outdoor Environments for Adults with Autism.* Royal College of Art: Redlin Print Ltd.

9 ASPECTSS*. n.d. "The Autism ASPECTSS Design Index." Accessed October 4, 2022. https://www.autism.archi/aspectss#:~:text=The%20Autism%20ASPECTSS%E2%84%A2%20Design%20Index%20is%20the%20first,criteria%20proposed%20to%20be%20facilitative%20for%20ASD%20design.

10 Ezell, Kyle, Galyna Korniyenko, and Richard Stein. 2018. *Autism Planning and Design Guidelines 1.0.* American Planning Association.

11 Cortesi, Flavia, Flavia Giannotti, Anna Ivanenko, and Kyle Johnson. 2010. "Sleep in Children with Autistic Spectrum Disorder." *Sleep Medicine* 11(7): 659–64. Doi: 10.1016/j.sleep.2010.01.010.

12 Kanakri, Shireen M., Mardelle Shepley, James W. Varni, and Louis G. Tassinary. 2017. "Noise and Autism Spectrum Disorder in Children: An Exploratory Survey." *Research in Developmental Disabilities* 63: 85–94. Accessed September 22, 2022. doi: 10.1016/j.ridd.2017.02.004.

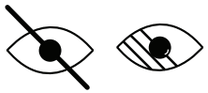
4.5c. Quiet spaces should be added along noisy spaces to provide room to get away and prevent sensory overload [8]

People with Hypo-Sensitivity:
(Prefer MORE sensory stimulation)

4.5d. People with hypo-sensitivity will make their own noises [8]

4.5e. Incorporate a variety of materials in an artwork or space for hypo-sensitive people; this user group may be stimulated by a variety of noises created by tapping on differing materials such as wood, metal, plastic and other materials [8,9]

4.5e. Artwork that amplifies sound is appreciated by hypo-sensitive people [8]



For Persons that are Blind and that have Low Vision

4.6a. A lot of noise reverberation is uncomfortable for this user group (avoid reverberation times greater than 1.2 seconds if possible) [13]

4.6b. Tree coverage or an overhead built-structure with a height less than 12' (feet) tall will reduce noise reverberation and improve comfort in outdoor spaces

4.6c. In noisy spaces, a public artwork can serve as a sound barrier to help this user group orient themselves and reduce noise pollution [14]

4.6d. Public artwork or site elements that make sound (for example, with water or chimes) can serve as a wayfinding device and help this user group orient themselves in space [14]

13 Ryhl, Camilla. 2010. "Accessibility and Sensory Experiences: Designing Dwellings for the Visually and Hearing Impaired." *Nordic Journal of Architectural Research* 22, no. 1/2: 109-122.

14 Pederson, Christian. 2013. "The Sensory Garden Experience: A Sensory Enrichment Design for the Arizona School for the Deaf and Blind." Master's Report, The University of Arizona.



For Persons that are Deaf and Hard of Hearing

4.7a. If possible, artwork should serve as a sound barrier to reduce noise pollution (i.e. a wall between loud and quiet spaces) [15]

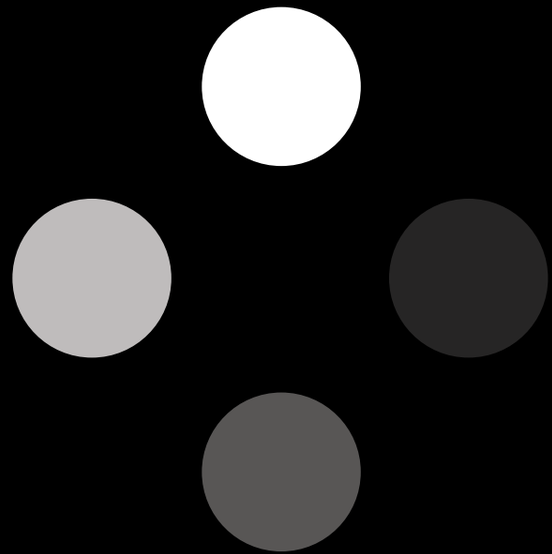
4.7b. Artwork and other site elements should create vibrations that serve as an orienting and wayfinding element for this user group. That said, loud vibrations are not desirable. Vibrations should be "strategic and useful" (Johnson 2010, 24)

15 Johnson, Charlene A. 2010. "Articulation of Deaf and Hearing Spaces Using Deaf Space Design Guidelines: A Community Based Participatory Research with the Albuquerque Sign Language Academy." Master's Thesis, University of New Mexico.

5 Colors + Tactile Materials

Scan to Listen

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Colors and tactile materials influence how an artwork and spaces are perceived.

For example, some people might find certain textures and materials uncomfortable.

This category identifies how colors and materials can be used in art and spaces to accommodate different needs and preferences.

For All People *(not disability-specific)*

5.1a. Materials can be used to differentiate spaces, instead of using physical walls

5.1b. Consider how color contrast can help audiences with low vision understand an artwork; vibrant colors stand out from vegetation and surrounding buildings and are ideal to help people notice an artwork in space

*Information was gathered from artwork precedent analysis findings, see pages 193-256, and interviews with artists, see pages 159-172.

5.1c. For sustainability purposes, materials can be used in a way that minimizes waste

5.1d. Think of the cultural and historical significance of using certain colors for an artwork and the location the artwork is intended to be placed

5.1e. How can the colors and materials of an artwork convey the narrative or story of the artwork?

For All People *(not disability-specific)*

5.1f. Materials can be used strategically to convey a narrative due to historical or contextual significance

5.1g. A large artwork may be best made of smaller modules and pieced together on site

5.1h. Materials do not have to be expensive to make a great artwork

5.1i. Consider what textures are desirable and what textures are appalling. How can the textures create a desired experience and convey a narrative to people?

*Information was gathered from artwork precedent analysis findings, see pages 193-256, and interviews with artists, see pages 159-172.

5.1j. If using vegetation as a material, consider doing several tests prior to the final installation

5.1k. “When sound is amplified, so too is texture [and materiality]” (Driscoll 2022)

For All People *(not disability-specific)*

5.2a. Consider using the most durable materials possible for seating, such as ipe wood, granite, and concrete. BUT also weigh the pros and cons of using those materials based on the carbon it will take to transport them, harvest them, and get them installed on a site

5.2b. Use colors from a complimentary palette or that have similar tones throughout a site. For example, if a site is using brick that naturally has warm tones, consider using warm-toned wood or stone

5.2c. Locally-sourced materials are ideal

5.2d. Material selection might be limited based on the requirements of the client. Regardless, try to use materials that mesh well with surrounding landscapes and architecture so that the space does not look out of place

5.2e. Pops of color can be used on seating, tables, and other program elements in active spaces to help them stand out. Meanwhile, more neutral colors can be used in other, more passive spaces

5.2f. Consider how different cultural communities feel about materials. Are certain materials associated with different racial groups? What materials are most welcoming and inclusive to the user group(s) that will use a site?

5.2g. Think of the cultural connotations of certain materials and how they relate to the historic landscapes of an area; how can the site design become more integrated with the past communities that used to exist in a space, through material choice?

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

For Persons with Physical Disabilities

5.3a. Artwork should use colors that contrast the surrounding environment [1]

5.3b. Color and texture can be used to signify spatial transitions between spaces [1]

Ex: Yellow paint along the back of a curb & textured crosswalks [1]

1 Preiser, Wolfgang, and Korydon H. Smith. 2010. *Universal Design Handbook, 2E*. United States: McGraw Hill.

For Persons with Intellectual Disabilities and/or Neurodiversity

5.4a. Color and texture of ground plane materials and landmarks can aid in wayfinding [1]

5.4b. Green, Yellow, Pink/lavender, violet, brown colors are most well-received by people in this user group [2]

5.4c. Some small amounts of red/blue/orange are okay, but should not be overdone/too bright [2]

5.4d. Symmetrical and "predictable" patterns are preferred [2]

5.4e. Surfaces should not be overly reflective (could cause eye strain) [3,4]

2 Sargent, Kay. n.d. "Designing for Neurodiversity and Inclusion." Accessed October 1, 2022. https://www.workdesign.com/2019/12/designing-for-neurodiversity-and-inclusion/

3 Perry, Michael. 2021. "Addressing Neurodiversity Through Universal Design." Progressive | ae. https://www.progressiveae.com/addressing-neurodiversity-through-universal-design/.

4 BBC UX&D. n.d. (b). "Scape: Creating a Positive Environment." Accessed October 5, 2022. https://bbc.github.io/uxd-cognitive/environmental-checklist-form-visual.html.

For Persons with Autism

5.5a. Use simple colors instead of bright, contrasting colors [5]

5.5b. Provide mosaic paths with repeating patterns to create rhythm and help users regain their balance if necessary [6]

5.5c. Consider using a variety of materials to encourage different sensory perception and engagement with an artwork (touch, sound, etc.) [6,7]

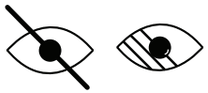
5.5d. Cork, bark, or sand are sound-absorbent materials that are preferred by hyper-sensitive people [7]

5.5e. Some people in this user group appreciate plants and seating organized by color and pattern [7]

5 Lupton, Ellen and Andrea Lipps. 2018. *The Senses: Design Beyond Vision*. Hudson, NY: Princeton Architectural Press.

6 Linehan. 2008. "Landscapes for Autism: Guidelines and Design of Outdoor Spaces for Children with Autism Spectrum Disorder." Bachelor of Landscape Architecture, University of California, Davis.

7 Gaudion, Katie Louise and Chris McGinley. 2012. *Green Spaces: Outdoor Environments for Adults with Autism*. Royal College of Art: Redlin Print Ltd.



For Persons that are Blind and that have Low Vision

5.6a. Textures can enhance the experience of an artwork for this user group [8]

5.6b. Consider using materials that provide a variety of textures to add interest and a tactile element to the artwork [8]

5.6c. For Persons that have Low Vision: Reduce the occurrence of reflective surfaces [9]

5.6d. For Persons that have Low Vision: Use high-contrast color combinations if possible (i.e. black + green, black + white, black + yellow, etc.) for signage and site elements such as artwork and bollards [10]

8 U.S. Department of Transportation Federal Highway Administration. 2017. "Chapter 4 - Sidewalk Design Guidelines and Existing Practices." Last updated September 25, 2017. https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/sidewalks/chap4a.cfm.

9 Knoop, Stuart L. "Architecture for Low Vision: Site, Building and Interior Design." National Institute of Building Sciences Low Vision Design Committee Symposium, Washington, D.C., January 10, 2013.

10 Lewis, Veronica. n.d. "Choosing high contrast color schemes for low vision." Perkins School for the Blind. Accessed January 3, 2023. https://www.perkins.org/resource/choosing-high-contrast-color-schemes-for-low-vision/.



For Persons that are Deaf and Hard of Hearing

5.7a. Use a variety of materials that are not overly reflective (i.e. could cause eye strain) [11]

5.7b. Use planting placement and paving patterns to provide rhythm/help people orient themselves [11]

5.7c. Choose colors that do not cause eye fatigue (i.e. neutral colors are ideal) [12]

5.7d. Use colors that are not very dark or very bright- more neutral, natural, or muted colors are preferred by this user group [12]

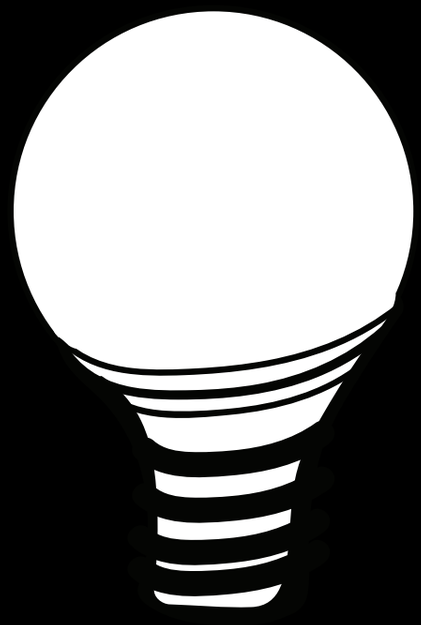
11 Vaughn, Alexa. 2018. "Applying DeafScape to Landscape." *Ground Up Journal*, no. 7 (May): 100-103. https://issuu.com/alexavaughn/docs/deafscape_groundupjournal_avb.

12 Johnson, Charlene A. 2010. "Articulation of Deaf and Hearing Spaces Using Deaf Space Design Guidelines: A Community Based Participatory Research with the Albuquerque Sign Language Academy." Master's Thesis, University of New Mexico.

6 Understanding

Scan to Listen

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Understanding: Signage or descriptive messaging can communicate the intention or idea behind an artwork.

People have different preferred methods of understanding artwork and spaces.

For All People *(not disability-specific)*

6.1a. It is best to have multi-sensory methods of explanation to help people understand an artwork. "There are as many ways to perceive as there are people," so the importance of multi-sensory elements cannot be understated (Driscoll 2022). For example, audio descriptions, braille, and written descriptions are ideal

6.1b. Consider how smells, sounds, touch and sight can be engaged to help people understand an artwork

6.1c. Do you want the artwork to be immediately understood or should it become clear through exploration and at the pace of the audience?

*Information was gathered from artwork precedent analysis findings, see pages 193-256, and interviews with artists, see pages 159-172.

6.1d. Use multiple local languages in descriptions to increase equitability and understanding of the artwork

6.1e. Engage the audience of the artwork to determine how they will best understand an artwork (braille, audio description, etc.)

6.1f. Different forms and shapes can communicate non-verbally different activities that should take place in a space. For example, a net hammock will encourage relaxation while a playground will encourage activity

6.1g. Consider how the placement of interactive elements will encourage people to touch and engage with them

For All People *(not disability-specific)*

6.2a. Sometimes it is helpful to have informative signs, especially in both Braille and English (and other languages), that explain the different areas of the site and how a site can be best experienced

6.2b. Consider how Braille text can be situated along plaques and the most comfortable way to read Braille. For example, what might be the most comfortable angle to rest your hand while reading Braille?

6.2c. Using a cable guide system with different shapes attached to it to indicate different program elements nearby (such as “bench straight ahead” or “gathering space to the right”) is a great way to make a site more friendly to people that are blind or have low vision

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

6.2d. Signs may not be necessary if a space is designed simply and intuitively

6.2e. Signage can be used to inform about public space happenings, in addition to guiding people to spaces

6.2f. The more languages a sign uses, the more equitable it is

6.2g. Consider how artwork can communicate cultural histories of a place and help people feel like they are seen within a space/community

6.2h. Think of placing buttons, signage, and other methods of communication in unconventional ways (ex: on the ground as opposed to on a wall and vice versa)

For Persons with Physical Disabilities

6.3a. If the artwork is tactile and interactive, it should be *no more than* 36 inches, or 3 feet, off of the ground [1]

6.3b. If an artwork is within a display case, the case should be *no more than* 36 inches off of the ground, with the artwork on top of the case [1]

6.3c. Use hierarchies of letter sizes, fonts, and colors for legibility of signs [2]

1 Goldman, Charles, Ann-Ellen Lesser, Mary Lincer, Sharon Parks, and John P.S. Salmen. *Design for Accessibility: A Cultural Administrator's Handbook*. Washington, D.C.: National Assembly of the State Arts Agencies (NASAA), 2003.

6.3d. Pictograms, braille, and other methods of communication are encouraged (tactile, auditory, etc.) if incorporating signage into artwork or site [2]

6.3e. Artwork and signs should be *no more than* 54 inches off of the ground so as to be visible to wheelchair users [2,3]

2 Preiser, Wolfgang, and Korydon H. Smith. 2010. *Universal Design Handbook, 2E*. United States: McGraw Hill.

3 Loukaitou-Sideris, Anastasia, Lené Levy-Storms, and Madeline Brozen. 2014. *Placemaking for an Ageing Population: Guidelines for Senior-Friendly Parks*. Los Angeles, CA: UCLA Luskin School of Public Affairs.

For Persons with Intellectual Disabilities and/or Neurodiversity

6.4a. Repetitive audio communication is an effective communication strategy with this group [2,4]

6.4b. Consistent presentation of signage color, text, and other elements helps people with memory impairments [4, 7]

6.4c. Sound can assist in navigation around or within an artwork or site [3, 4]

4 ADA Site Compliance. 2021. "Guide to Cognitive Disabilities." https://adasitecompliance.com/guide-to-cognitive-disabilities/.

6.4d. Talking or moving videos are preferred to static images or signs [4]

6.4e. Signage should be simple, clear, repetitive, and visual (ex: Color code) OR Add symbols/moving graphics for clarity [5, 6, 7, 8]

5 Sargent, Kay. n.d. "Designing for Neurodiversity and Inclusion." Accessed October 1, 2022. https://www.workdesign.com/2019/12/designing-for-neurodiversity-and-inclusion/

6 BBC UX&D. n.d. (b). "Scape: Creating a Positive Environment." Accessed October 5, 2022. https://bbc.github.io/uxd-cognitive/environmental-checklist-form-visual.html.

7 Hoyt, Lorlene Marie. 1993. "A Guide for Students of Landscape Architecture: Toward Understanding the Americans with Disabilities Act and Universal Design." Master's thesis, State University of New York College of Environmental Science and Forestry.

8 Perry, Michael. 2021. "Addressing Neurodiversity Through Universal Design." Progressive | ae. https://www.progressiveae.com/addressing-neurodiversity-through-universal-design/.

For Persons with Autism

6.5a. Artwork can serve as an orienting device on a site and can help this user group find their way through a space- especially if the artwork considers other senses, such as olfactory memory, by incorporating smell and touch that people will associate with a certain place [9]

6.5b. Write in plain language instead of using figures of speech and idioms (ex: “do this” or “please sit down” is simple language; “when pigs fly” is not simple language) [9]

6.5c. Bullets and simple sentences are preferred to walls of text, if applicable [9]

6.5d. Incorporate wayfinding devices such as signposts, obelisks, visually-orienting maps, sculptures, and other elements to enhance site safety and direct movement [9]

6.5e. Make self-explanatory, descriptive buttons (ex: attach file vs. click here) [9]

6.5f. Signage should have a simple and consistent layout; varied layouts with a variety of colors, fonts, and font sizes are not preferred by this user group [9]

9 Gaudion, Katie Louise and Chris McGinley. 2012. *Green Spaces: Outdoor Environments for Adults with Autism.* Royal College of Art: Redlin Print Ltd.



For Persons that are Blind

6.6a. Incorporating sounds and smells into an artwork will enhance the understanding and experience of an artwork for this user group [10,11]

6.6b. Using sounds, such as music, and smells in an artwork will help this user group navigate through and around the artwork [12]

6.6c. If incorporating a text description into or around an artwork, there should be a braille description and audio description too [12]

10 Knoop, Stuart L. "Architecture for Low Vision: Site, Building and Interior Design." National Institute of Building Sciences Low Vision Design Committee Symposium, Washington, D.C., January 10, 2013.

11 Secchi, Simone, Antonio Lauria, and Gianfranco Cellai. 2017. "Acoustic Wayfinding: A Method to Measure the Acoustic Contrast of Different Paving Materials for Blind People." *Applied Ergonomics* 58, (January): 435-445. Doi: 10.1016/J.APERGO.2016.08.004.

12 National Institute of Building Sciences. *Design Guidelines for the Visual Environment*. National Institute of Building Sciences, 2015. https://www.nibs.org/files/pdfs/NIBS_LVDP_Guidelines_2015.pdf.



6.6d. Consider placing braille where a user group would naturally put their hands. For example, braille can be placed on the edge of a seat, where a person might naturally place their hand [13]

6.6e. On a low budget, brad nails can be used in place of professional braille dots (if permitted by the receiving entity) [13]

13 Informed by Precedent Analysis of the artwork 'Sampan', see page 203 for more information.

For Persons that have Low Vision

6.7a. Place public artwork and other wayfinding elements perpendicular to the flow of traffic if possible, so that it can serve as a wayfinding device on a site [14]

6.7b. Do not suspend signs overhead, if possible and/or applicable [12]

6.7c. Mount signs at a minimum of 84 inches above ground level (preferably not mounted to posts vulnerable to damage), if applicable, to prevent accidents [12]

6.7d. Other helpful elements include audio descriptions, sound, and music producing elements [10,11]

6.7e. A sans serif font (i.e. helvetica or arial) with 1.5 spacing between lines and 24 size font is preferred by this user group [12]

6.7f. Use vegetation, water, and other materials to provide auditory and olfactory cues when navigating space and artworks; plants can serve as a form of wayfinding by allowing people to associate distinct smells with certain areas (olfactory wayfinding) [10]

14 Poedjioetami, Etsy, Risa Ferdani, and Moch. Junaidi Hidayat. 2021. "Architecture Behavior of Outdoor Space Design for Visually Impaired People." *Asian Journal of Management Sciences & Education* 10, no. 1 (January): 41-49. Retrieved from: https://www.semanticscholar.org/paper/ARCHITECTURE-BEHAVIOUR-OF-OUTDOOR-SPACE-DESIGN-FOR-Poedjioetami-Ferdani/87cf21d745ba088550d1ed2b9670680ab4d08ca5.



For Persons that are Deaf and Hard of Hearing

6.8a. Artwork can help this user group orient themselves and find their way through space [15]

6.8b. Vibratory indicators can help this user group understand an artwork [16]

6.8c. Write in plain language instead of using figures of speech (ex: “do this” vs. “when pigs fly”) [17]

6.8d. If incorporating a video into the artwork, use subtitles at size 16 pt font OR LARGER in a sans serif font [17]

15 Vaughn, Alexa. 2018. “Applying DeafScape to Landscape.” *Ground Up Journal*, no. 7 (May): 100-103. https://issuu.com/alexavaughn/docs/deafscape_groundupjournal_avb.

16 Johnson, Charlene A. 2010. “Articulation of Deaf and Hearing Spaces Using Deaf Space Design Guidelines: A Community Based Participatory Research with the Albuquerque Sign Language Academy.” Master’s Thesis, University of New Mexico.

17 Lupton, Ellen and Andrea Lipps. 2018. *The Senses: Design Beyond Vision*. Hudson, NY: Princeton Architectural Press.



6.8e. Do not only put content in video or audio format; it is helpful to engage multiple senses, by having text to read alongside audio to listen to (if possible) [16]

6.8f. A linear, logical layout of text is preferred to a complex layout [17]

6.8g. Content should be broken up with headings, sub-headings, images, and videos (if applicable) [17]

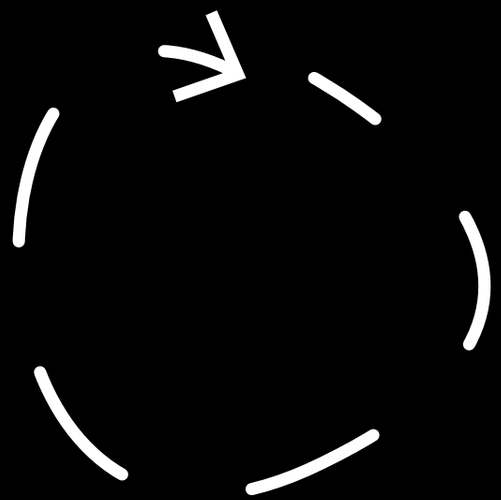
6.8h. Make appropriate color choices for wayfinding signage-do not choose too dark or too bright colors [15,16]

6.8i. Pictures can supplement or accompany text (if applicable) for improved comprehension [15]

7 Movement Experience

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Movement Experience: Artwork is experienced by moving within, around, or alongside it; this category identifies the movement needs of different user groups when experiencing an artwork and the site surrounding/within an artwork.

For All People *(not disability-specific)*

7.1a. Think of how different forms can encourage different types of movement. For example, a recessed circular space with chair-height stools might encourage seating or gathering

7.1b. Interactive artwork is preferable. Consider how an artwork can:

7.1c. Cause people to bend, stretch, and move to activate the artwork

7.1d. Create opportunity for gathering, community building, sitting, and laying down

7.1e. Create space for people to move through or around. How do you want people to interact with a space and the artwork?

*Information was gathered from artwork precedent analysis findings, see pages 193-256, and interviews with artists, see pages 159-172.

7.1f. Encourage movement through a variety of materials and textures

7.1g. Encourage people to travel off the “beaten path” and have new experiences

7.1h. Create different atmospheres or moods based on the type of movement experiences provided- for example, a hammock is going to create a calm atmosphere while jungle gym is more active

7.1i. Create space for people to move through and/or around an artwork. How do you want people to interact with a space and the artwork?

For All People *(not disability-specific)*

7.2a. Think of the path material and if it will narrow over time; perhaps a path should be wider to begin with if it will narrow over time

7.2b. A 10-foot pathway is ideal for multiple modes of movement, such as biking, walking, and running. However, in highly populated spaces, path widths of 20 to 30 feet are preferred for primary pathway widths

7.2c. Movement paths are best suited to be located in desire lines, or in the direction of desired movement through space, in the most direct and barrier-free way

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

7.2d. Think of how a pathway can define access to all areas on a site

7.2e. Vegetation can be used to keep people from cutting through landscapes and off of paths. This way, everyone has a more equitable path experience because everyone is moving alongside one another

7.2f. Think of stairs as secondary to ramps and accessible pathways; accessibility and a shared experience for all or most forms of transportation/movement is ideal

For Persons with Physical Disabilities

7.3a. If people can move within or around an artwork, curvilinear and flat paths are preferred for easier navigation in a wheelchair [1]

7.3b. People should be no more than 600 feet or .25 miles from the artwork (for ease of access) [1]

7.3c. Level changes should not be more than 1/2" [1]

7.3d. Pathways preferably have a slope of 2% or less, and be *at least* 7 feet wide [2]

7.3e. Curvilinear and flat paths are preferred by some people in this user group in public space [2]

7.3f. Crosswalks should be elevated from vehicular roads for safety [1]

7.3g. Site programs (benches, restrooms, etc.) must be accessible to all people [1]

7.3h. ¼ mi markers should be used to mark progress and location along pathways for safety and wayfinding [2]

1 Preiser, Wolfgang, and Korydon H. Smith. 2010. *Universal Design Handbook, 2E*. United States: McGraw Hill.

2 Loukaitou-Sideris, Anastasia, Lené Levy-Storms, and Madeline Brozen. 2014. *Placemaking for an Ageing Population: Guidelines for Senior-Friendly Parks*. Los Angeles, CA: UCLA Luskin School of Public Affairs.

For Persons with Intellectual Disabilities and/or Neurodiversity

7.4a. Walls, railings, and parapets can help guide this group around and/or within an artwork or paths [2,3]

7.4b. Consider how people will move through or around the artwork and if they can get away from crowds and excess noise easily [3,4]

3 Whitby, Maximilienne. 2017. "Scoping of shared spatial needs during public building use: Autism Spectrum Disorder (Sensory Overload) and Borderline Personality Disorder (Dissociation)." *Journal of Urban Design and Mental Health* 3, no. 9 (August). https://www.urbandesignmentalhealth.com/journal-3---shared-spatial-needs.html.

4 BBC UX&D. n.d. (b). "Scape: Creating a Positive Environment." Accessed October 5, 2022. https://bbc.github.io/uxd-cognitive/environmental-checklist-form-visual.html.

For Persons with Autism

7.5a. Paths should be strategic in routing people around the artwork, and minimize risk of encountering danger (drains with holes, electricity poles, pits, sudden drops, etc.) [5]

7.5b. Social spaces should have multiple entrances and exists to allow for optimal freedom of choice in deciding circulation patterns; rigid circulation is not preferred [5,6]

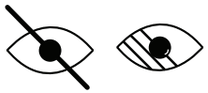
7.5c. Plantings that release smells, balance beams, and other interactive elements along paths are desirable by some people in this user group [5]

7.5d. Stepping stones through tall grasses and other vegetation creates a textural experience that may be desirable to this user group [5]

7.5e. Winding paths are “known to bring a sense of calm and create a flow that promotes calm progress through a space” (Gaudion and McGinley 2012, 42)

5 Gaudion, Katie Louise and Chris McGinley. 2012. *Green Spaces: Outdoor Environments for Adults with Autism.* Royal College of Art: Redlin Print Ltd.

6 Linehan. 2008. “Landscapes for Autism: Guidelines and Design of Outdoor Spaces for Children with Autism Spectrum Disorder.” Bachelor of Landscape Architecture, University of California, Davis.



For Persons that are Blind and that have Low Vision

7.6a. Handles, fences, or railings that people that are blind can hold onto help inform of sudden twists, turns, or gradual curvatures along pathways [7]

7.6b. Consider incorporating tactile elements into a public artwork that this user group can hold onto to help orient themselves around the artwork, or within the artwork itself [1]

7.6c. Avoid placing the artwork near drains with holes that could potentially trip or endanger this user group [8]

7 Poedjioetami, Etsy, Risa Ferdani, and Moch. Junaidi Hidayat. 2021. "Architecture Behavior of Outdoor Space Design for Visually Impaired People." *Asian Journal of Management Sciences & Education* 10, no. 1 (January): 41-49. Retrieved from: https://www.semanticscholar.org/paper/ARCHITECTURE-BEHAVIOUR-OF-OUTDOOR-SPACE-DESIGN-FOR-Poedjioetami-Ferdani/87cf21d745ba088550d1ed2b9670680ab4d08ca5.

8 National Institute of Building Sciences. *Design Guidelines for the Visual Environment*. National Institute of Building Sciences, 2015. https://www.nibs.org/files/pdfs/NIBS_LVDP_Guidelines_2015.pdf.





For Persons that are Deaf and Hard of Hearing

7.7a. If people can move within an artwork, pathways should be *at least* 7-8 feet, but 10 feet of path is ideal [9]

7.7b. In spaces, main pathways should be at least 10 feet wide; secondary paths should be at least 7 to 8 feet [9]

7.7c. 'Shoulder Zones' or alcoves should be incorporated along main paths to increase accessibility and ensure people can pass one another. Artwork could be placed in a 'Shoulder Zone' [9]

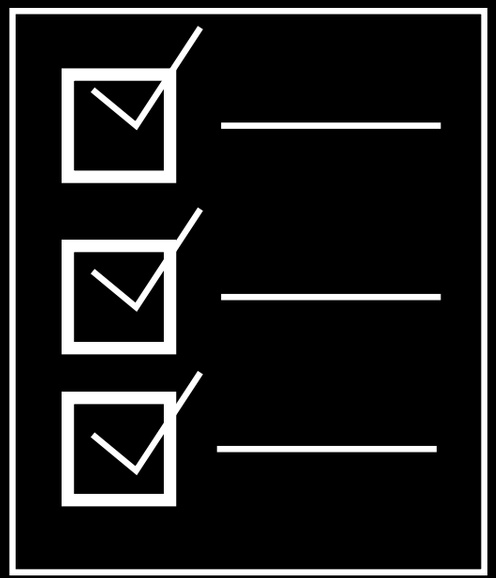
7.7d. If applicable, 'Shoulder Zones' should have wayfinding devices (signage), lighting, and vegetation [9]

9 Vaughn, Alexa. 2018. "Applying DeafScape to Landscape." *Ground Up Journal*, no. 7 (May): 100-103. https://issuu.com/alexavaughn/docs/deafscape_groundupjournal_avb.

8 Mobility Requirements

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Mobility Requirements include Americans with Disabilities Act (ADA) requirements and ways to go beyond ADA when designing for all people.

For All People *(not disability-specific)*

8.1a. Paths at a 5% slope, less than 1:20, are ideal because they are comfortable to move across and do not require a handrail. It should be noted, though, that for people that are blind or have low vision a handrail can be very helpful in navigating pathways

8.1b. If a terrain is very hilly, it may be necessary to use slopes from 1:20 to 1:12 with ramps and/or switchback paths

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

8.1c. Stairs should ideally only be maintained, at least on a campus setting, if they are leading to an inaccessible building. It does not make sense to provide an accessible entrance to an inaccessible building

8.1d. Try to incorporate optimal space for movement on paths, entryways, and outside “rooms” or spaces; special consideration for people with mobility devices, such as wheelchairs and canes, should be given

For All People *(not disability-specific)*

8.1e. Fully-bonded or tight-bond pavement patterns on paths are preferred if using bricks or other stones; tight-bond pavement patterns reduce the likelihood for stones or bricks to come uprooted over time and reduce trip hazards on paths

8.1f. Space for people with wheelchairs should always be provided in any outdoor space, path, or entryway

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

8.1g. Prioritize movement pathways that all people can have a shared experience on- including pedestrians, bikers, scooter-users, vehicular users, and other modes of transit; stairs should be secondary to ramps

8.1h. How can spaces be re-configured to be more accessible for all people? If a space is currently a parking lot, could it become an accessible entrance?

For Persons with Physical Disabilities

8.2a. Parking should be no more than .25 mi from destination [1]

8.2b. Handrails along paths are preferred [2]

8.2c. Bump-outs and narrow streets that prioritize pedestrian circulation are preferred [1]

8.2d. Sidewalks should be free of obstructions, cracks, and other elements that interfere with circulation [1,3]

8.2e. An ideal pathway is at least 6 feet wide [1]

8.2f. Pathways should have a maximum of 1:20 slope and 1:50 cross slope, a 1:12 slope meets requirements [1,4]

For Persons with Intellectual Disabilities and/or Neurodiversity

8.3a. Handrails, walls, and/or parapets alongside paths are preferred [1,5]

8.3b. Stairs may present mobility and/or mental obstacles to this user group [5]

1 Preiser, Wolfgang, and Korydon H. Smith. 2010. *Universal Design Handbook, 2E*. United States: McGraw Hill.

2 Loukaitou-Sideris, Anastasia, Lené Levy-Storms, and Madeline Brozen. 2014. *Placemaking for an Ageing Population: Guidelines for Senior-Friendly Parks*. Los Angeles, CA: UCLA Luskin School of Public Affairs.

3 U.S. Department of Transportation Federal Highway Administration. 2017. "Chapter 4 - Sidewalk Design Guidelines and Existing Practices." Last updated September 25, 2017. https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/sidewalks/chap4a.cfm.

4 Lazard, Carolyn. *Accessibility in the Arts: A Promise and a Practice*. Reading, PA: First Edition, 2019. https://www.recessart.org/wp-content/uploads/Accessibility_in_the_Arts_A_Promise_and_a_Practice_Carolyn_Lazard_CommonField.pdf.

5 Whitby, Maximilienne. 2017. "Scoping of shared spatial needs during public building use: Autism Spectrum Disorder (Sensory Overload) and Borderline Personality Disorder (Dissociation)." *Journal of Urban Design and Mental Health* 3, no. 9 (August). https://www.urbandesignmentalhealth.com/journal-3---shared-spatial-needs.html.

For Persons with Autism

People that are Hyper-Sensitive:
(Prefer LESS sensory stimulation)

8.4a. Incorporate less intense topography changes and create spaces for more quiet reflection and solitary movement [6]

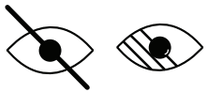
8.4b. Program elements such as raised planters and clutch sticks (if applicable) should be incorporated to reduce excessive head movements [6]

People that are Hypo-Sensitive:
(Prefer MORE sensory stimulation)

8.4c. Topography changes providing a variety of views are preferred for exploration and play [6]

8.4d. Spinning plates and/or balance beams offer opportunities to practice balance and coordination, but could distract from other site elements [6]

6 Gaudion, Katie Louise and Chris McGinley. 2012. *Green Spaces: Outdoor Environments for Adults with Autism.* Royal College of Art: Redlin Print Ltd.



For Persons that are Blind and that have Low Vision

8.5a. Avoid placing drains on mobility paths [7]

8.5b. Try to keep paths relatively flat and minimize sudden drop-offs adjacent to paths [7]

8.5c. Stairs and steps should have nosings and handrails for safety reasons [7]

8.5d. Avoid level changes through maintenance and material choice (ex: buckling brick sidewalk) [7,8]

8.5e. For People with Low Vision: Bollards and other site elements should be visible with bright colors so as to prevent accidents [9]

7 National Institute of Building Sciences. *Design Guidelines for the Visual Environment*. National Institute of Building Sciences, 2015. https://www.nibs.org/files/pdfs/NIBS_LVDP_Guidelines_2015.pdf.

8 U.S. Department of Transportation Federal Highway Administration. 2017. "Chapter 4 - Sidewalk Design Guidelines and Existing Practices." Last updated September 25, 2017. https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/sidewalks/chap4a.cfm.

9 Knoop, Stuart L. "Architecture for Low Vision: Site, Building and Interior Design." National Institute of Building Sciences Low Vision Design Committee Symposium, Washington, D.C., January 10, 2013.



For Persons that are Deaf and Hard of Hearing

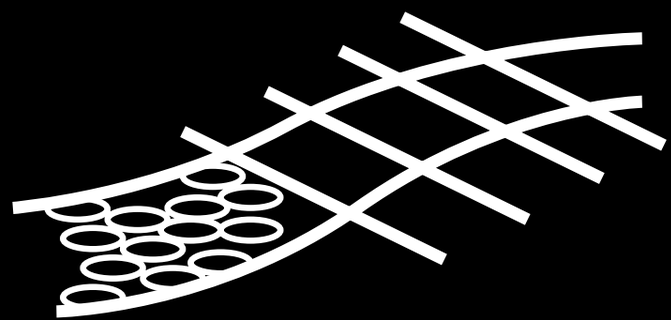
8.6a. Use ramps where possible instead of curbs [10]

10 Vaughn, Alexa. 2018. "Applying DeafScape to Landscape." *Ground Up Journal*, no. 7 (May): 100-103. https://issuu.com/alexavaughn/docs/deafscape_groundupjournal_avb.

9 Path + Space Materials

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Path and space materials, such as concrete or brick, influence accessibility and can communicate spatial transitions.

For example, one space may use concrete, while the path alongside it is brick. This communicates that there are two different spaces.

Path and space materials that deteriorate over time can become safety hazards and influence the accessibility of spaces.

For All People *(not disability-specific)*

9.1a. Changes in path materials can indicate transitions between spaces

9.1b. Consider if the path material should stand out or blend in with existing or adjacent surface ground materiality

9.1c. For people that have low vision, a tactile strip along the outer edges of pathways that is a high contrast color to the inner pathway can help a lot. Furthermore, this tactile strip can help people that are blind identify a textural difference in the ground and indicate that they are approaching the edge of a path or transitioning to another space

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

9.1d. If brick pathways are desired, use tight joints to limit the amount of upheaval brick pathways usually experience. This way, the pathway will remain mostly flat over time and will not create uneven surfaces that could be hazardous for people to cross

9.1e. Consider the cultural and historical connotations of a material; certain materials can be alienating to different user groups, especially in different racial groups

9.1f. Use materials that will not deteriorate and become potentially dangerous over time (ex: concrete with aggregate atop it)

For Persons with Physical Disabilities

9.2a. Stamped concrete to look like brick, broom finish concrete, bricks lining the edges of concrete paths, and asphalt are preferable ground plane materials [1]

9.2b. Brick and cobblestone paths are not preferred as they may be difficult for this user group to navigate [1]

9.2c. Tree grates on the ground plane should not have gaps greater than ½ inch to prevent mobility aids from getting stuck in them [2]

9.2d. Paths should have a beveled edge slope of no more than 30% when adjacent to loose fill material [2]

9.2e. Non-slippery and rubbery materials are preferable for pathways [2]

9.2f. Loose fill material, such as gravel, should not cause injury through puncturing, splintering, etc. the skin [2]

For Persons with Intellectual Disabilities and/or Neurodiversity

9.3a. Color and texture of ground plane materials can aid in wayfinding [2]

9.3b. Provide a variety of textures to satisfy the needs of multiple user groups [3]

1 U.S. Department of Transportation Federal Highway Administration. 2017. "Chapter 4 - Sidewalk Design Guidelines and Existing Practices." Last updated September 25, 2017. https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/sidewalks/chap4a.cfm.

2 Preiser, Wolfgang, and Korydon H. Smith. 2010. *Universal Design Handbook, 2E*. United States: McGraw Hill.

3 Whitby, Maximilienne. 2017. "Scoping of shared spatial needs during public building use: Autism Spectrum Disorder (Sensory Overload) and Borderline Personality Disorder (Dissociation)." *Journal of Urban Design and Mental Health* 3, no. 9 (August). https://www.urbandesignmentalhealth.com/journal-3---shared-spatial-needs.html.

For Persons with Autism

9.4a. Regardless of whether a person is hypo- or hyper-sensitive, it is preferable for both user groups to have sturdy and continuous paths (i.e. not gravel or pebble walkways) [4,5]

9.4b. Mosaic paths can help this user group gain balance, but should be secondary trails so that overstimulated users can avoid them [5]

9.4c. Example material patterns are: "Decomposed gravel (DG), stamped concrete, DG, exposed aggregate (1.5 inch), DG, ADA bumps, DG, etc." (Linehan 2008, 49)

9.4d. Path and space materials should be soft enough for jumping and spinning [5]

4 Gaudion, Katie Louise and Chris McGinley. 2012. *Green Spaces: Outdoor Environments for Adults with Autism.* Royal College of Art: Redlin Print Ltd.

5 Linehan. 2008. "Landscapes for Autism: Guidelines and Design of Outdoor Spaces for Children with Autism Spectrum Disorder." Bachelor of Landscape Architecture, University of California, Davis.

For Persons that are Blind and that have Low Vision

9.5a. Using different textures of ground plane materials helps people differentiate between spaces and improves safety. Examples include textured pavers and bump strips [6,7]

9.5b. Walking surfaces should generate noise louder than chatter to aid in wayfinding and navigation through space [7]

9.5c. Varying tones and textures also help people with low vision differentiate between materials [7,8]

6 Knoop, Stuart L. "Architecture for Low Vision: Site, Building and Interior Design." National Institute of Building Sciences Low Vision Design Committee Symposium, Washington, D.C., January 10, 2013.

7 Secchi, Simone, Antonio Lauria, and Gianfranco Cellai. 2017. "Acoustic Wayfinding: A Method to Measure the Acoustic Contrast of Different Paving Materials for Blind People." *Applied Ergonomics* 58, (January): 435-445. Doi: 10.1016/J.APERGO.2016.08.004.

8 See precedent analysis of 'Virginia Polytechnic Institute' page 279-284.



For Persons that are Deaf and Hard of Hearing

9.6a. Textured ground plane material is preferred in transition zones [9]

9.6b. Use ramps instead of curbs for accessibility [9]

9 Vaughn, Alexa. 2018. "Applying DeafScape to Landscape." *Ground Up Journal*, no. 7 (May): 100-103. https://issuu.com/alexavaughn/docs/deafscape_groundupjournal_avb.

10 Seating + Gathering

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Seating + Gathering: Different user groups have different preferences for the placement, type, and orientation of seating and gathering elements within or around an artwork or space.

For All People *(not disability-specific)*

10.1a. What level of activity do you require from the audience when interacting with the artwork?

10.1b. Think of how an artwork can encourage community-building. Multi-sensory elements- especially ones that encourage gathering and collaboration- are ideal

10.1c. Seating may serve multiple functions, such as for lunch breaks, an outdoor classroom for students, and other purposes. How can the artwork accommodate such uses?

10.1d. An artwork can be a seat as well as a sculpture; it does not have to look like a traditional seat but can still be leaned against and used for gathering

*Information was gathered from artwork precedent analysis findings, see pages 193-256, and interviews with artists, see pages 159-172.

10.1e. Ensure that the artwork is structurally sound so that if people sit on it or gather on/around it, it will hold up

10.1f. Think of how different forms can encourage different types of movement, such as sitting, swinging, gathering, laying, resting, eating, reflecting, playing, running, and exploring

10.1g. Even if an artwork does not incorporate seating, people can still sit or gather on the ground. How can the ground be more interesting, comfortable, and interactive for all people? For example, vibratory floor tiles can create an interesting sensory experience for people that sit or move across them

For All People *(not disability-specific)*

10.2a. Seating type, such as s-shaped seating, seat walls, or benches, should depend on the surrounding program. For example, do you want people to be able to sit in multiple directions if there are interesting sounds, activities, or views nearby?

10.2b. Should a singular bench be placed at a scenic outlook for a more intimate experience?

10.2c. Seating should ideally be placed at a steady rhythm along paths for predictability, consistency, and accessibility

10.2d. A good practice is to place seating AT MOST every 30 meters (or 150) feet along a path to create space for people to stop and rest

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

10.2e. Seating with backs and arm rests are ideal for diverse needs, but having a variety of seating with multiple options is ideal

10.2f. Consider using local materials for seating, if possible, such as granite slabs or local wood

10.2g. The placement of seating can create opportunities for gathering, teaching, and/or silent contemplation

10.2h. In busy spaces, consider using off-the-shelf seating as opposed to custom seating for easy replacement

10.2i. Consider if seating should be formal or informal. An example of informal seating is a seat wall, less than 2 feet tall, that people could rest or gather on if they pleased. An example of formal seating is a typical bench that screams “sit on me!”

For Persons with Physical Disabilities

10.3a. Seating should be placed every 25 feet to 150 feet along main paths [1,2]

10.3b. Seating should be at least 16 to 17 inches off of the ground [1]

10.3c. Seating ideally will have arms at least 10 inches above the seat and backs [1]

10.3d. Tables should have room for a wheelchair user to slide in [3]

10.3e. At least 50% of fixed benches should not have backs and arms to allow for flexible use [3,4]

1 Loukaitou-Sideris, Anastasia, Lené Levy-Storms, and Madeline Brozen. 2014. *Placemaking for an Ageing Population: Guidelines for Senior-Friendly Parks*. Los Angeles, CA: UCLA Luskin School of Public Affairs.

2 Scherling, Ian. Interview by Author. Personal Interview. January 27, 2023.

3 Preiser, Wolfgang, and Korydon H. Smith. 2010. *Universal Design Handbook, 2E*. United States: McGraw Hill.

4 Lazard, Carolyn. *Accessibility in the Arts: A Promise and a Practice*. Reading, PA: First Edition, 2019. https://www.recessart.org/wp-content/uploads/Accessibility_in_the_Arts_A_Promise_and_a_Practice_Carolyn_Lazard_CommonField.pdf.

For Persons with Intellectual Disabilities and/or Neurodiversity

10.4a. If an artwork or space incorporates seating, smooth, soft materials are preferred (ex: smooth concrete) [5]

10.4b. Consider how lighting affects the way seating is perceived (reflection, color, texture, etc.). Ex: Does low-light emphasize the roughness of a seating material and make it look uncomfortable to engage with? [6]

10.4c. A variety of seating in different materials is preferred; some people within this community prefer smooth materials, while others prefer different options [5,6]

10.4d. Use seating made of different materials (both smooth and rough) to increase user choice [5,6]

5 BBC UX&D. n.d. (b). "Scape: Creating a Positive Environment." Accessed October 5, 2022. https://bbc.github.io/uxd-cognitive/environmental-checklist-form-visual.html.

6 Whitby, Maximilienne. 2017. "Scoping of shared spatial needs during public building use: Autism Spectrum Disorder (Sensory Overload) and Borderline Personality Disorder (Dissociation)." *Journal of Urban Design and Mental Health* 3, no. 9 (August). https://www.urbandesignmentalhealth.com/journal-3---shared-spatial-needs.html.

For Persons with Autism

People with Hyper-Sensitivity:
(Prefer LESS sensory stimulation)

10.5a. Ensure that seating is sturdy and all users can touch their feet to the ground when sitting (if possible, considering height and age correlation)

People with Hypo-Sensitivity:
(Prefer MORE sensory stimulation)

10.5b. Locate seating alongside plants in some areas for olfactory memory and wayfinding [7]

7 Gaudion, Katie Louise and Chris McGinley. 2012. *Green Spaces: Outdoor Environments for Adults with Autism*. Royal College of Art: Redlin Print Ltd.



For Persons that are Blind and that have Low Vision

10.6a. If incorporating seating into an artwork or space, it should be placed out of the way of paths for safety [8]

10.6b. For People with Low Vision: Seating elements should have a contrasting color to surrounding context for safety and visibility purposes [8]

8 National Institute of Building Sciences. *Design Guidelines for the Visual Environment*. National Institute of Building Sciences, 2015. https://www.nibs.org/files/pdfs/NIBS_LVDP_Guidelines_2015.pdf.



For Persons that are Deaf and Hard of Hearing

10.7a. If the artwork incorporates seating, provide a variety of fixed and movable seating for different occasions [9]

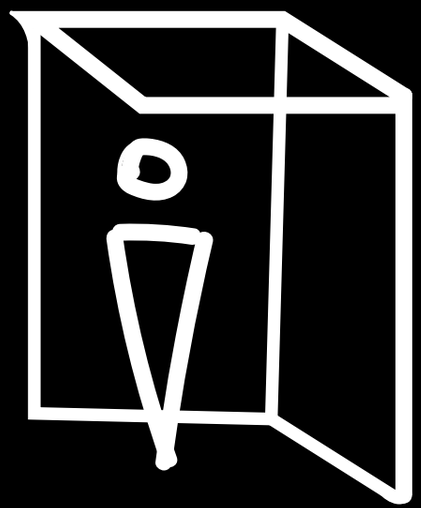
10.7b. Seating should not obstruct views; avoid seating and other elements that obstruct views [9]

9 Vaughn, Alexa. 2018. "Applying DeafScape to Landscape." *Ground Up Journal*, no. 7 (May): 100-103. https://issuu.com/alexavaughn/docs/deafscape_groundupjournal_avb.

11 Comfort + Protection

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Comfort + Protection: The experience of an artwork varies based on the degree of safety and comfort provided above and around it.

For example, some people might prefer to have overhead protection from the elements while experiencing an artwork, while others might find walls and ceilings confining.

For All People *(not disability-specific)*

11.1a. Trees can provide some overhead protection and create a sense of enclosure for people within an artwork

11.1b. It is ideal to have 360-degree visibility while experiencing an artwork- for comfort and safety purposes

11.1c. Consider how a fully open, semi-enclosed, or fully enclosed artwork will create different feelings of protection

11.1d. How will the site shelter people from the elements? It does not have to shelter people, but this is something to consider

*Information was gathered from artwork precedent analysis findings, see pages 193-256, and interviews with artists, see pages 159-172.

11.1e. An overhead element does not have to be solid- it could be more of a frame that creates some shade, a sense of enclosure, and 360-degree visibility

11.1f. Think of how people move through the space. Is the artwork located in a busy area and how does that influence the comfort of the people experiencing the artwork?

For All People *(not disability-specific)*

11.2a. Sub-spaces within larger spaces can be defined, or enclosed, while still maintaining sight lines with low-to-ground seat walls and plantings no more than three to four feet tall

11.2b. Trees can provide some sense of overhead enclosure and protection from the sun, which is especially desirable above benches

11.2c. Consider providing more enclosed, intimate spaces in naturalized/ wooded areas to encourage mental refresh

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

11.2d. Vegetation can create different experiences. For example, a pathway under trees can feel "cathedral-like." How can vegetation be used on the site to create a desired experience or feeling?

11.2e. Degrees of enclosure can be created with level changes, density of planting, the location of points of entry, and different heights of planting

For Persons with Physical Disabilities

11.3a. Semi-enclosed private spaces are preferred, in addition to active, public spaces [1]

11.3b. This user group may prefer a more private experience of the artwork, with a more enclosed feeling space surrounding it; this can be created with vegetation, sound buffers, wind buffers, and other methods [1]

1 Loukaitou-Sideris, Anastasia, Lené Levy-Storms, and Madeline Brozen. 2014. *Placemaking for an Ageing Population: Guidelines for Senior-Friendly Parks*. Los Angeles, CA: UCLA Luskin School of Public Affairs.

For Persons with Intellectual Disabilities and/or Neurodiversity

11.4a. Artwork and spaces that are quiet and that provide clear visual information are preferred; walls that block visibility are not preferred [2,3]

11.4b. This user group appreciates personal space and the option to separate from crowds [2,3]

2 Whitby, Maximilienne. 2017. "Scoping of shared spatial needs during public building use: Autism Spectrum Disorder (Sensory Overload) and Borderline Personality Disorder (Dissociation)." *Journal of Urban Design and Mental Health* 3, no. 9 (August). https://www.urbandesignmentalhealth.com/journal-3---shared-spatial-needs.html.

3 BBC UX&D. n.d. (b). "Scape: Creating a Positive Environment." Accessed October 5, 2022. https://bbc.github.io/uxd-cognitive/environmental-checklist-form-visual.html.

For Persons with Autism

11.5a. If possible, the space the artwork is situated within, or the artwork itself, should provide a variety of open and enclosed spaces to suit both hyper- and hypo-sensitive users [4,5]

11.5b. Examples of enclosed spaces include: eddies/alcoves and the 'Over-Under'. The 'Over-Under' is a hill with a tunnel underneath that provides both open and enclosed spaces for a variety of user needs [4]

4 Gaudion, Katie Louise and Chris McGinley. 2012. *Green Spaces: Outdoor Environments for Adults with Autism.* Royal College of Art: Redlin Print Ltd.

5 ASPECTSS*. n.d. "The Autism ASPECTSS Design Index." Accessed October 4, 2022. https://www.autism.archi/aspectss#:~:text=The%20Autism%20ASPECTSS%E2%84%A2%20Design%20Index%20is%20the%20first,criteria%20proposed%20to%20be%20facilitative%20for%20ASD%20design.

For Persons that are Blind and that have Low Vision

11.6a. Feelings of comfort are enhanced for this user group in enclosed spaces with a ceiling height of less than 12 feet [6]

11.6b. Use sound barriers to prevent noise bleeding, enclose spaces, and improve user comfort [6]

11.6c. A public artwork can create enclosure with semi-permeable (somewhat see through) or solid features, such as a wall, that can serve as a sound barrier and help this user group orient themselves [6]

6 Ryhl, Camilla. 2010. "Accessibility and Sensory Experiences: Designing Dwellings for the Visually and Hearing Impaired." *Nordic Journal of Architectural Research* 22, no. 1/2: 109-122.

For Persons that are Deaf and Hard of Hearing

11.7a. High-back chairs in circular forms are ideal for people that are deaf and for conversations in ASL; these types of chairs are more enclosed than typical chairs, so people that are deaf may feel more safe (i.e. people can not sneak up behind them) [7]

11.7b. Areas should be enclosed but still allow visibility to see and be seen [8]

11.7c. Artwork should allow people to see through and around it for safety and comfort- ideally there is some sense of overhead protection around or above the artwork (or created by the artwork) [8]

11.7d. If people can move within the artwork, adequate space (*at least* 6-7 feet) is preferred [8]

11.7e. Space for signing and gathering off of primary paths is preferred, if people can move through the artwork [8]

11.7f. Spaces for gathering and connection located alongside high-activity areas "form visual and physical connections and activate space" (Vaughn 2018, 101). Therefore, when siting an artwork, areas along main paths are preferred by this user group [8]

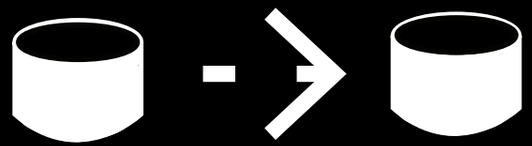
7 Salmela, Rachel. Interview by author. Personal interview. Zoom, February 8, 2023.

8 Vaughn, Alexa. 2018. "Applying DeafScape to Landscape." *Ground Up Journal*, no. 7 (May): 100-103. https://issuu.com/alexavaughn/docs/deafscape_groundupjournal_avb.

12 Choice, Placement + Orientation of Site Elements

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Choice, Placement, and Orientation of Site Elements influences the accessibility of spaces and the user groups that feel comfortable within a variety of spaces.

For example, if seating or tables are placed within a space without adequate space around them, the space may be less accessible to people that use mobility devices.

For All People *(not disability-specific)*

12.1a. The spaces outside of buildings, between buildings, or between main spaces are generally more transitional spaces, where people might stop or gather, and should thus become plazas with the appropriate program (seating, trash receptacles, etc.)

12.1b. Try to place paths in areas that people naturally want to move through. That way “cow paths” or paths through the grass are reduced and everyone walks on the same path together

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

12.1c. What types of events will occur on the site and how can different spaces accommodate those events?

12.1d. Listen to people and what they want and need. If people want to get closer to water and engage with water on a site, provide a lookout deck or fishing deck for them to do so if possible

For All People *(not disability-specific)*

12.1e. Provide many varieties of seating, tables, and other site elements to allow for as much freedom of choice as possible. Diverse site program is more likely to meet the needs of a more diverse population of people

12.1f. Consider how certain programming, such as artwork, a play space, or an amphitheater, can bring different groups of people to a site. If you want more children and families to come to the site, add a play space!

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

12.1g. Consider how level changes, locations of points of entry, differing heights of plants and density of planting can help direct people through space and create different experiences

For Persons with Physical Disabilities

12.2a. Seating should be placed away from vehicular traffic [1]

12.2b. Flexible/movable seating is preferable to accommodate a variety of events. Fixed seating is also necessary [2]

12.2c. Water and dirt are universal play materials and could encourage use throughout a site [3]

1 Loukaitou-Sideris, Anastasia, Lené Levy-Storms, and Madeline Brozen. 2014. *Placemaking for an Ageing Population: Guidelines for Senior-Friendly Parks*. Los Angeles, CA: UCLA Luskin School of Public Affairs.

2 Lazard, Carolyn. *Accessibility in the Arts: A Promise and a Practice*. Reading, PA: First Edition, 2019. https://www.recessart.org/wp-content/uploads/Accessibility_in_the_Arts_A_Promise_and_a_Practice_Carolyn_Lazard_CommonField.pdf.

3 Preiser, Wolfgang, and Korydon H. Smith. 2010. *Universal Design Handbook, 2E*. United States: McGraw Hill.

12.2d. Destination spaces and artwork placed at the end of paths encourage circulation through a site; this is not to say that destinations placed along the path are not preferred [1]

For Persons with Intellectual Disabilities and/or Neurodiversity

12.3a. Sensory rooms for calming are desired [2]

12.3b. Seating arrangements facing each other are preferred in some spaces; in other spaces they should be separated to allow for users to "get away" when overstimulated [1,4]

12.3c. Flexible and movable furniture is desired [4,5]

12.3d. Food should not be near the sensory rooms and/or alcoves [5,6]

4 Perry, Michael. 2021. "Addressing Neurodiversity Through Universal Design." Progressive | ae. https://www.progressiveae.com/addressing-neurodiversity-through-universal-design/.

5 Discover Autism Research and Employment (DARE). 2020. *DARE Report on Adjustments*. London, UK: Institute of Education.

6 BBC UX&D. n.d. (b). "Scape: Creating a Positive Environment." Accessed October 5, 2022. https://bbc.github.io/uxd-cognitive/environmental-checklist-form-visual.html.

12.3e. Art should be located away from loud or smelly areas (ex: food/ events) to avoid over-stimulation [5]

12.3f. Rhythm with the placement of site elements (ex: artwork or signage) aids in comfort and orientation [7]

12.3g. Ensure site items are of an appropriate proportion [7]

7 Sargent, Kay. "Designing for Neurodiversity and Inclusion." Accessed October 1, 2022. https://www.workdesign.com/2019/12/designing-for-neurodiversity-and-inclusion/

For Persons with Autism

12.4a. A radial layout is preferred to allow for a central space with other spaces branching off of it; this prevents overstimulation and encourages exploration of a variety of spaces [8]

12.4b. Sensory spaces and solitary spaces should exist separately; there should be transition zones between these spaces (ex: transition from high-stimulus to low-stimulus spaces) [9]

8 Linehan. 2008. "Landscapes for Autism: Guidelines and Design of Outdoor Spaces for Children with Autism Spectrum Disorder." Bachelor of Landscape Architecture, University of California, Davis.

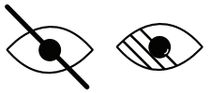
9 ASPECTSS®. n.d. "The Autism ASPECTSS Design Index." Accessed October 4, 2022. https://www.autism.archi/aspectss#:~:text=The%20Autism%20ASPECTSS%E2%84%A2%20Design%20Index%20is%20the%20first,criteria%20proposed%20to%20be%20facilitative%20for%20ASD%20design.

12.4c. Spaces should be compartmentalized by sensory output (ex: smelling zone, hearing zone, etc.) [10]

12.4d. Interactive elements can be located alongside paths for increased enjoyment and olfactory memory [10]

12.4e. "Avoid choking hazards, high platforms, and sharp corners" (Linehan 2008, 40)

10 Gaudion, Katie Louise and Chris McGinley. 2012. *Green Spaces: Outdoor Environments for Adults with Autism.* Royal College of Art: Redlin Print Ltd.



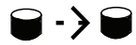
For Persons that are Blind and that have Low Vision

12.5a. Placing site elements, such as artwork, benches, and entrances or exits along a path at even increments creates consistency and helps this user group orient themselves in space [11]

12.5b. Place site elements, such as artwork, bollards, and low fences or walls, outside of paths and away from unexpected locations (i.e. drop offs, etc.) to prevent incidents [11,12]

11 Knoop, Stuart L. "Architecture for Low Vision: Site, Building and Interior Design." National Institute of Building Sciences Low Vision Design Committee Symposium, Washington, D.C., January 10, 2013.

12 National Institute of Building Sciences. *Design Guidelines for the Visual Environment*. National Institute of Building Sciences, 2015. https://www.nibs.org/files/pdfs/NIBS_LVDP_Guidelines_2015.pdf.





For Persons that are Deaf and Hard of Hearing

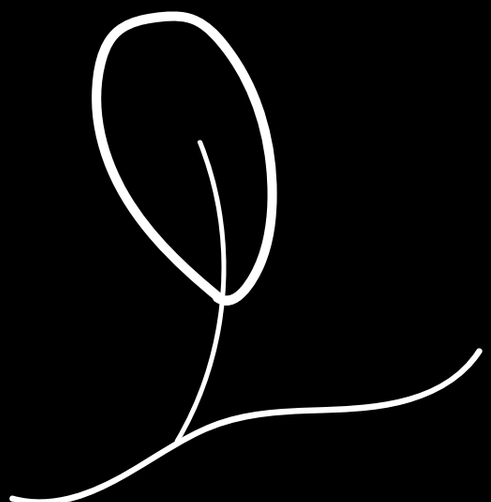
12.6a. Circular seating arrangements are preferred for this user group so that many people can see and communicate with one another [13]

13 Vaughn, Alexa. 2018. "Applying DeafScape to Landscape." *Ground Up Journal*, no. 7 (May): 100-103. https://issuu.com/alexavaughn/docs/deafscape_groundupjournal_avb.

13 Topography + Vegetation

Scan to Listen

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Topography and vegetation can be used on, within, or around an artwork.

This category identifies how vegetation can be used in an artwork and/or space to accommodate different user needs and preferences.

For All People *(not disability-specific)*

13.1a. It is best to preserve existing vegetation when possible- find ways to work around it and optimize its existence for the benefit of all people

13.1b. Flat- as opposed to hilly- sites are preferred for optimal accessibility

13.1c. Consider how an artwork can celebrate the site it is located within and how it can incorporate local environmental factors, such as wind, sun, rain, and vegetation

13.1d. Trees above an artwork create a sense of protection and enclosure when experiencing an artwork

*Information was gathered from artwork precedent analysis findings, see pages 193-256, and interviews with artists, see pages 159-172.

13.1e. Local/native plants are preferred- especially when located outdoors- as they are more likely to thrive than a non-native plant. If necessary, consult the local Parks + Recreation Department if there are questions about how to preserve existing on-site vegetation.

13.1f. If using vegetation in artwork, consider how much maintenance is required to achieve the desired "look" and if the receiving entity will be able to perform this maintenance (otherwise the artist may have the maintain it themselves)

13.1g. Consider a maintenance plan for public artwork- especially if it includes vegetation- and ensure that the receiving entity will be able to follow the plan

For All People *(not disability-specific)*

13.2a. Does the site have a lot of wind, unpleasant views to surrounding spaces, and/or is it too noisy? Consider using vegetation as a wind, visual, and/or noise buffer! Not only is vegetation a natural barrier, but it also sequesters carbon out of the air and creates a habitat for many species

13.2b. Planter beds can be used to create a sense of enclosure and define sub-spaces within larger ones

13.2c. Plants should always be placed in the soil, sun, water, and topographical conditions that best suit them. Otherwise, it is unlikely that they will thrive or even survive

13.2d. Shrubs and trees can keep people from creating "cow paths" or desire paths through grass

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

13.2e. The "topography of open spaces responds directly to the topography of pathways; they go hand in hand" (Scherling 2023). Consider how a site can take advantage of views and emphasize those views with lookout spots, winding hills, and/or rest areas

13.2f. It is always best to recognize when you are not the expert- especially when it comes to plant systems. If designing in a geographical region that you are unfamiliar with, it is best to consult a landscape architect familiar with that region so that the correct plants are selected and appropriately placed

13.2g. Native vegetation has longer root systems, meaning they will last longer, are more able to withstand weather events, and typically have more environmental benefits than non-native vegetation

For All People *(not disability-specific)*

13.2h. If a site has a lot of existing vegetation that is being preserved, it is best not to change the topography of the site. Changing the topography of a heavily-wooded site can disrupt root systems and existing on-site ecosystems

13.2i. Consider using fragrant vegetation in sensory gardens or for sensory wayfinding (navigating) through space

13.2j. Use trees with interesting bark textures that are fun to feel and interesting to experience

13.2k. Use vegetation to highlight views and entrances

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

13.2l. A manicured lawn and neat flower beds can be associated with white privilege, or privilege in general, in the United States. Consider the primary user groups for a site and if the landscaping will be welcoming or alienating for them

13.2m. Talking to local communities and future user groups for a space is the best way to determine preferences related to planting

For All People *(not disability-specific)*

13.2n. Try to relate the plant selection on a site to the people or places that the site is inspired by. For example, if a site is a memorial to a person, try to determine their favorite plants or public spaces and incorporate vegetation that relates to your findings

13.2o. Consider the different sensory experiences of plants- such as smell and sight. How can plants be used to provide different sensory experiences on a site or aid in olfactory wayfinding?

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

13.2p. Think of how specific plant species can be inspired by indigenous and other communities

13.2q. Plants can be used to buffer sound in loud, overstimulating spaces

For Persons with Physical Disabilities

If using vegetation in an artwork or on a site:

13.3a. Create shade with a variety of vegetative materials [1,2]

13.3b. Topographic changes encourage play [1]

13.3c. Tree-covered spaces can create feelings of "being in a forest" [1]

13.3d. Choose a variety of colors, sizes, textures, and smells of vegetation [2]

1 Preiser, Wolfgang, and Korydon H. Smith. 2010. *Universal Design Handbook, 2E*. United States: McGraw Hill.

2 Loukaitou-Sideris, Anastasia, Lené Levy-Storms, and Madeline Brozen. 2014. *Placemaking for an Ageing Population: Guidelines for Senior-Friendly Parks*. Los Angeles, CA: UCLA Luskin School of Public Affairs.

For Persons with Intellectual Disabilities and/or Neurodiversity

13.4a. Wood and plants calm down this user group [3]

13.4b. Consider incorporating vegetation near or within an artwork where this user group could go for sensory relief [3]

13.4c. Plants should not have strong smells to avoid overstimulation [3]

13.4d. Plants with some smell can help offset unpleasant smells that could be overstimulating for this user group, such as food or car exhaust [3]

3 Sargent, Kay. n.d. "Designing for Neurodiversity and Inclusion." Accessed October 1, 2022. https://www.workdesign.com/2019/12/designing-for-neurodiversity-and-inclusion/

For Persons with Autism

13.5a. Landscapes should ideally not be open to the street; there should be a buffer between these spaces [4]

13.5b. Avoid plants with thorns, spikes, stickers, and toxic elements [4]

13.5c. Avoid plants that produce pollen or fruit that could attach itself to clothing [4]

People with Hyper-Sensitivity:
(Prefer LESS sensory stimulation)

13.5d. Choose plants that only release scent when touched; if incorporating plants into an artwork, consider using "non-slip creepers or herbs" that release smells only when touched so as not to overstimulate different user groups (ex: Royal Mint/Thyme) (Gaudion and McGinley 2012, 25)

4 Linehan. 2008. "Landscapes for Autism: Guidelines and Design of Outdoor Spaces for Children with Autism Spectrum Disorder." Bachelor of Landscape Architecture, University of California, Davis.

13.5e. Place scented plants away from, or shield from, wind and direct sunlight to prevent smell permeation [5]

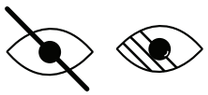
13.5f. Place fragrant plants in movable pots to accommodate multiple user groups [5]

People with Hypo-Sensitivity:
(Prefer MORE sensory stimulation)

13.5g. Choose plants that release smells at different times of the day to accommodate different user groups. "Many flowers release their scent at night, making it preferable for someone that is hypo-sensitive to take an evening stroll" (Gaudion and McGinley 2012, 25)

13.5h. Incorporate plants that produce strong odors

5 Gaudion, Katie Louise and Chris McGinley. 2012. *Green Spaces: Outdoor Environments for Adults with Autism.* Royal College of Art: Redlin Print Ltd.



For Persons that are Blind and that have Low Vision

13.6a. Trees should be maintained to prevent overhanging vegetation on the public artwork (unless that is desired) [6]

13.6b. Vegetation that is on or a part of artwork should not drop cones and other fruits that could cause people to trip or fall [6]

13.6c. Use vegetation in an artwork that can serve as a tactile (touch), auditory (sound), and/or olfactory (smell) orienting device within or around the artwork [7]

6 Knoop, Stuart L. "Architecture for Low Vision: Site, Building and Interior Design." National Institute of Building Sciences Low Vision Design Committee Symposium, Washington, D.C., January 10, 2013.

7 National Institute of Building Sciences. *Design Guidelines for the Visual Environment*. National Institute of Building Sciences, 2015. https://www.nibs.org/files/pdfs/NIBS_LVDP_Guidelines_2015.pdf.



For Persons that are Deaf and Hard of Hearing

13.7a. Ensure that vegetation does not restrict views of the space and/or artwork [8]

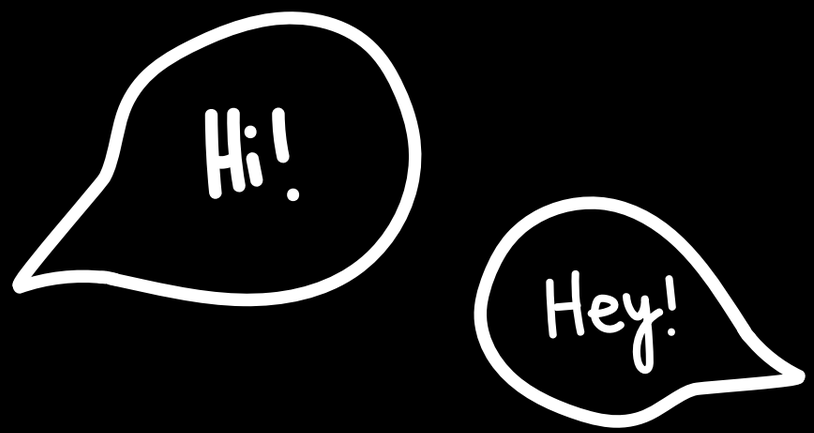
13.7b. If an artwork or space incorporates vegetation, place the vegetation in patterns that provide rhythm and help this user group orient themselves within space [8]

8 Vaughn, Alexa. 2018. "Applying DeafScape to Landscape." *Ground Up Journal*, no. 7 (May): 100-103. https://issuu.com/alexavaughn/docs/deafscape_groundupjournal_avb.

14 The Social Component

Scan to Listen

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The Social Component discusses the importance of artwork and sites that encourage interaction between community members; this section also discusses the importance of engaging with people to determine what they need when experiencing an artwork or site.

For All People *(not disability-specific)*

14.1a. A public artwork should incorporate community-building and interactive elements that bring people together and create a sense of belonging. For example, could the artwork be constructed by the communities that experience it, instead of already being complete upon installation?

14.1b. The best public artwork is not "finished" upon installation, but rather "comes alive" when activated by the audience

*Information was gathered from artwork precedent analysis findings, see pages 193-256, and interviews with artists, see pages 159-172.

14.1c. Public artwork is often for and by the people that experience it- ask the people what they want in a public artwork

14.1d. Artwork is equitable if people can engage with it in the way that works best for them; the best way to determine the needs of others is to *talk* to as many people as possible

For All People *(not disability-specific)*

14.2a. Engagement sessions are essential to creating equitable public spaces; it is hard to know what to consider for a design if you do not understand the needs of the people you are designing for

14.2b. If community engagement is conducted, the people that use a site ultimately influence the site design needs that designers cater to when creating spaces

*Information was gathered from site design precedent analysis findings, see pages 257-304, and interviews with site designers, see pages 185-190.

14.2c. People adjacent to a site and other stakeholders can provide valuable information to assist designers in creating equitable spaces

14.2d. Disabilities are just one part of person; people are a part of different racial, ethnic, sexual orientation, and sexual identity communities too, among others. It is important to not just focus on the needs of a person based on their ability, but also consider how needs can best be accommodated in conjunction with their other identities and communities that they are a part of (ex: Deaf Black communities, Deaf Blind communities, etc.)

5.2
Outcomes
Final Design and Demonstration of Guidelines

Public Art

'You Are Not Alone'

You Are Not Alone is a multi-sensory, accessible, and immersive public art piece located in the Playstead area of Franklin Park (Boston, MA). The public artwork seeks to connect to audiences who are familiar with domestic abuse and familial challenges by conveying the message 'You Are Not Alone.' The artwork is a series of four pieces that are, both metaphorically and physically, connected across a 1.61 acre site. At the center is a corten steel tornado-like feature, surrounded by three larger-than-life domestic objects, which appear to have been thrown from the tornado. Each larger-than-life domestic item symbolizes a multi-sensory experience (i.e. seeing or hearing, etc.), domestic experience (i.e. gathering together with family), and the experience of going through, and healing from, trauma.

This narrative is important because often it can be easier to process trauma when feeling supported. 'You Are Not Alone' aims to help people who have experienced or been impacted by domestic abuse and/or familial challenges, feel supported and recognize their experience is shared by others. Some cultures or families may view trauma as taboo or do not have the space to process trauma as needed. However, it is essential to process hardship in order to move forward and have a productive life. 'You Are Not Alone' provides a reflective space, set within a public place, to allow visitors an opportunity to process difficult memories and emotions. The art piece encourages interaction amongst all people, but also offers moments for individual pause and reflection before continuing to the rest of Franklin Park. If this public art can make just one person feel less alone, it has done its job.

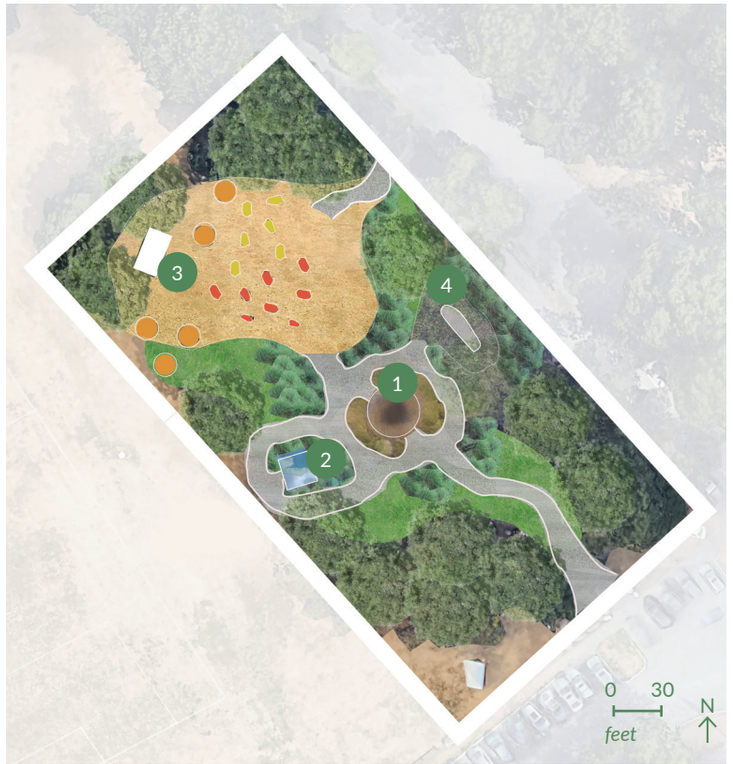


Figure 206. 'You Are Not Alone' Site Plan.

1. **A tornado-like structure** at the center of the site represents the experience of being in an actively traumatic environment
2. **Glass Box Television.** After going through a traumatic experience, rumination may be the next phase of recovery. The glass box television provides exactly that- opportunity for literal and metaphorical reflection on reality
3. **The Communal "Dining Room" and Dining Table.** The communal "dining room" marks a turning point with signs of upheaval but also growth, with a community herb garden growing out of larger-than-life cracked cup and bowl planters
4. **The Bed frame.** The 'You Are Not Alone' abstracted bed frame provides space for reflection and feelings of hope, with the goal of helping park users accept their reality and realize they are not alone in their challenges

This is a 25 foot tall by 7 feet wide cylindrical, tornado-like structure, made from corten steel, symbolizes domestic challenges. Household objects, including box televisions, chair legs, table tops, and bed frames, protrude from the structure's exterior. Move through a 7-foot wide pathway to the tornado's center to get swept up in the eye of the storm, hear wind whistle, and speak into metal tubes. Larger-than-life home objects are thrown out of the tornado and onto the site.

Figure 207. A descriptive sign at the entrance to the tornado-like structure.



Figure 208. The "Tornado" is at the center of the larger public artwork 'You Are Not Alone.'

1. Native Sporobolus heterolepis, or prairie dropseed, creates soft whooshing sounds around the artwork
2. White, native Houstonia caerulea, or bluelets/Quaker ladies, thrive in a variety of soils and sun conditions and add a pop of color
3. Red, native Lilium philadelphicum, or wood lily, adds a pop of color and contrast against the bluelets and prairie dropseed
4. A textural strip indicating a spatial transition from the path to the artwork
5. Yellow, native Heliopsis helianthoides, or the oxeye plant, complements the wood lilies
6. An English description of the artwork for people that are blind or low vision and instructions of how to use it (see fig. 207)
7. A Braille description of, and instructions about how to interact with, the artwork
8. A corten steel tornado-like structure with household objects, such as chair legs and box t.v's, attached to it

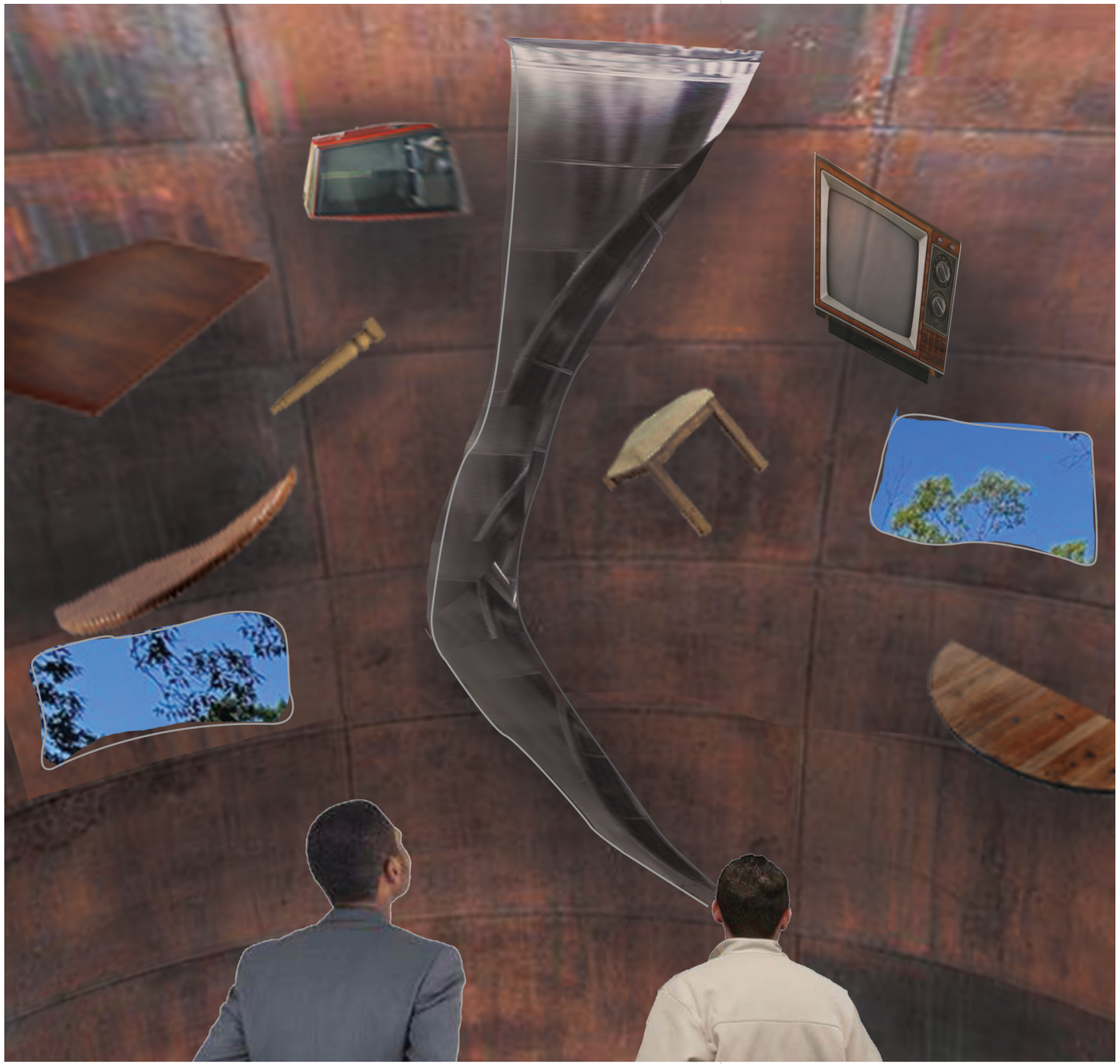


Figure 209. Pipe structures throughout the inside of the tornado encourage people to speak or yell into them. Sound is then projected up into the sky and the upper parts of the artwork.

Guidelines Applied



1. Multi-Sensory Experience

Visually, the tornado-like structure is overwhelming, with household objects swept up within it. Holes through the corten steel structure take advantage of intense winds on the site by creating a low hum or whistle sound as they blow through the structure. Vegetation with distinct and aromatic fragrances are used around the tornado-like structure to further emphasize the overwhelming feeling of being swept up in the eye of the storm.

1.1c, 1.1f, 1.1h, 1.1i



2. Visibility Experience

The scale of the artwork and its corten steel frame immediately draws attention to it, since it stands out from the natural vegetation in the Playstead. People can walk through the artwork, in one side and out the other, primarily for safety purposes; there are at least 180-degree views when within the artwork, making it difficult for people to hide within it. Due to the size of the openings in the artwork, at 7 feet wide, there are increased feelings of safety and optimal visibility. The opening within the artwork faces the parking lot and entrance to the Playstead for increased visibility as people arrive on the site.

2.1b, 2.2d, 2.4a, 2.5b, 2.5c, 2.5g, 2.6a, 2.6b, 2.6d, 2.7a



3. Lighting Experience

Glare is reduced on the artwork with large tree canopies that provide shade and shelter overhead. Uplighting from the ground and vegetated areas up onto the tornado-like structure creates a feeling of “drama” at night and improves safety. Furthermore, the night uplighting inspires feelings of mystery and intrigue, encouraging people to interact with and explore the structure at night.

3.1a, 3.1b, 3.1c, 3.1d, 3.2f, 3.3a, 3.3b, 3.3d, 3.5b, 3.5e, 3.6a, 3.7b



4. Acoustic Experience

Water pipes, like those of a house, twist up and around the artwork. Large funnels project from the top of the pipes to amplify sound and encourage people to speak into them. Furthermore, openings in the tornado-like structure take advantage of intense winds on the side and create an auditory experience of actually being swept up in a tornado. Hypo-sensitive users (or users that appreciate more sensory stimulation) are likely to find this artwork enjoyable and fun to interact with. This artwork can also serve as an auditory wayfinding device, helping persons that are blind and low vision find their way through space.

4.1c, 4.2a, 4.5e, 4.5b, 4.6d



5. Colors + Tactile Materials

The scale of the tornado-like structure helps people navigate through space and draws attention to the artwork. The artwork intends to create a feeling of sensory overload, or amplify as many senses as possible. One of the ways that it does this is with sound, which is enhanced by the corten steel frame and metal piping. The steel amplifies sound, which in turn amplifies the variety of textures on the objects attached to it (bed frames, chair legs, etc.). Many plants with red and orange foliage are chosen to further enhance overwhelming feelings- since red, blue, and orange colors have been found to be more overwhelming to people (5.4c). To communicate a spatial transition between the path and the entrance to the tornado-like structure, a steel textural strip is used. A black and white description and instructional sign is used at the entrance to the artwork for legibility and an easier read- especially by audiences that have low vision.

5.1b, 5.1f, 5.1k, 5.3a, 5.3b, 5.4c, 5.4e, 5.6c, 5.6d, 5.7a

Guidelines Applied



6. Understanding

A descriptive and instructional sign with sans serif 24 pt. Font located outside of the tornado-like structure in both English and Braille provides choreographies about how to use the space and a visual description of the piece. The Braille is no more than 36 inches off of the ground and the sign is in black and white for optimal visual contrast and legibility. Braille is located along the pipes in locations that a person would intuitively place their hand. The Braille encourages people to "speak" or "yell" into them. English is also written along the pipes to encourage people to "speak" or "yell" into them. The artwork itself also serves as a wayfinding device, with its height of 25 feet making it easily identifiable throughout adjacent areas in the Playstead.

6.1a, 6.1b, 6.1c, 6.2a, 6.2b, 6.3a, 6.3c, 6.3d, 6.4c, 6.4e, 6.5a, 6.5b, 6.6b, 6.6d, 6.7e, 6.8a



7. Movement Experience

The position of the sound pipes in the tornado-like structure, at various heights and angles, encourages people of all ages and abilities to bend and move to interact with them. Vegetation is used around the artwork not only to enhance overwhelming feelings, but also to direct movement and keep people on the paths and within the artwork. Desire lines are maintained by keeping paths where people would want to move through the artwork naturally; this also preserves the vegetation (by not having people walk over the plants). By having both an entrance and an exit to the tornado-like structure, Persons with Autism and/or Neurodiversity have more freedom of choice to move and are thus likely to be more comfortable. Pathways leading to the artwork are 7 feet wide for comfort and accessibility.

7.1a, 7.1c, 7.1e, 7.1g, 7.1i, 7.2c, 7.2e, 7.3a, 7.3b, 7.3d, 7.4a, 7.5b, 7.6a, 7.6b, 7.7b



8. Mobility Requirements

The artwork is no more than .25 miles from parking, ensuring optimal accessibility for all people. Furthermore, a path width of 7 feet with a 2% or less slope ensures all people can physically access the site.

8.1a, 8.1f, 8.1g, 8.2a, 8.2e, 8.5b, 8.5d



9. Path + Space Materials

A steel textural strip indicates a spatial transition between the path and the interior of the artwork- this is especially helpful for user groups that are blind, low vision, deaf, hard of hearing, intellectually disabled, and/or neurodiverse.

9.1a, 9.1b, 9.1f, 9.2e, 9.3a, 9.3b, 9.4a, 9.5a, 9.5c, 9.6a



10. Seating + Gathering

The tornado-like structure does not have seating within it. The audio components of the artwork, however, may encourage gathering.

10.1e, 10.1g



11. Comfort + Protection

By having large entrance and exit openings (7 feet wide by 10 feet tall) in the tornado-like structure, feelings of exposure, vulnerability, and also chaos are created. The artwork does not have a ceiling, though it does have walls; trees create feelings of overhead enclosure.

11.1a, 11.1c, 11.1f, 11.2b, 11.5a, 11.6c, 11.7b, 11.7e

Guidelines Applied

12. Choice, Placement + Orientation of Site Elements

The artwork is placed in at the end of a path that begins alongside parking and a Playstead entrance. The placement of the artwork at the end of the path encourages circulation through the site as well as reduces the likelihood of “cow path” or “desire path” formation in unwanted areas. With the tornado-like structure located at the center of the site, or the eye of the storm, a radial layout is created. This radial layout allows park users maximum choice to decide which artwork they want to experience next.

12.1b, 12.2d, 12.4a, 12.4d, 12.4e

13. Topography + Vegetation

All existing trees and topography on the site are preserved. Large and historic trees provide a sense of enclosure around and above the artwork.
One of the reasons why the site at the Playstead was chosen was because of its flat topography- it is easily accessible to all people. Keeping the topography as-is reduces the likelihood of damaging existing tree roots. Native plants are incorporated around the artwork to reduce the likelihood of cow-paths around the artwork and to match the current vegetative character of Franklin Park.

13.1a, 13.1b, 13.1d, 13.1e, 13.2c, 13.2d, 13.2g, 13.2h, 13.2n, 13.2o, 13.3a, 13.4d, 13.5b, 13.5c, 13.5h, 13.6c, 13.7a

14. The Social Component

The tornado-like structure encourages interaction and community-building with its sound pipes that encourage one or more people to speak or yell into them.

14.1a, 14.1b, 14.1d

This 14-foot long by 14-foot wide sculptural feature, made of transparent glass panels, resembles a box television. While in the feature, you will be metaphorically transformed into an actor on a screen. Opposite to the pathway entrance is a wooden sound dial, which can be spun to meet your sensory needs.

Braille description here

Figure 210. Signage description for the 'Glass Box Television.'

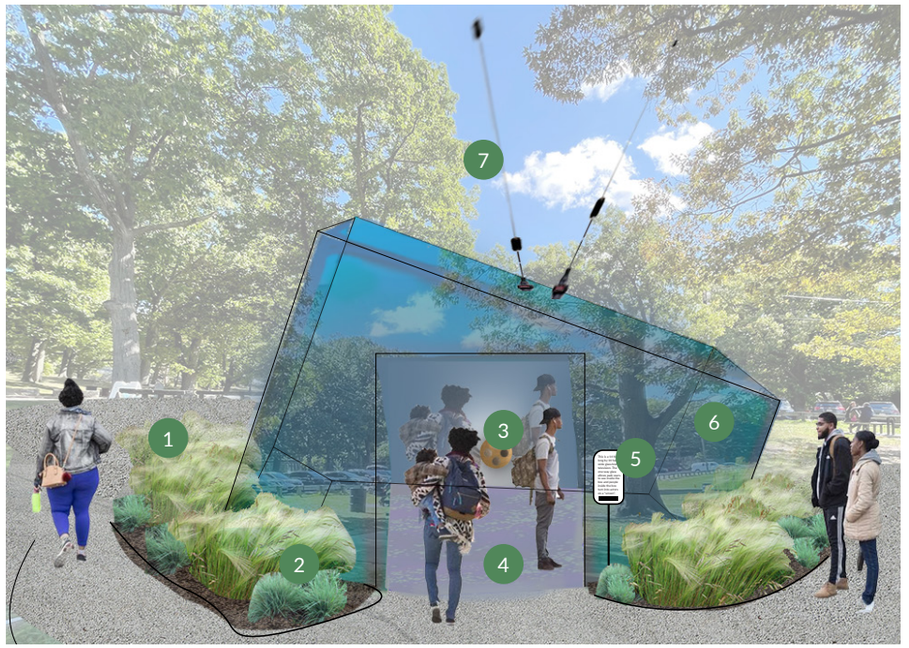


Figure 211. The Glass Box Television is a part of the larger public artwork 'You Are Not Alone.'

1. Native Hordeum jubatum also know as foxtail barley keeps people from running into the glass and provides seasonal interest
2. Native Schizachyrium scoparium, or little bluestem, provides winter interest and gentle whooshing sounds around the artwork
3. A rotating wooden sound dial may be adjusted by park users
4. Glow-in-the-dark solar-powered stones provide night lighting within the television
5. A description of the artwork for people that are blind or low vision and instructions of how to use it (see fig. 210)
6. One-way glass turns people within the television into actors "on a screen" and its interior into a reflection space
7. Antenna's help aid in people's understanding of the artwork as a larger-than-life box television

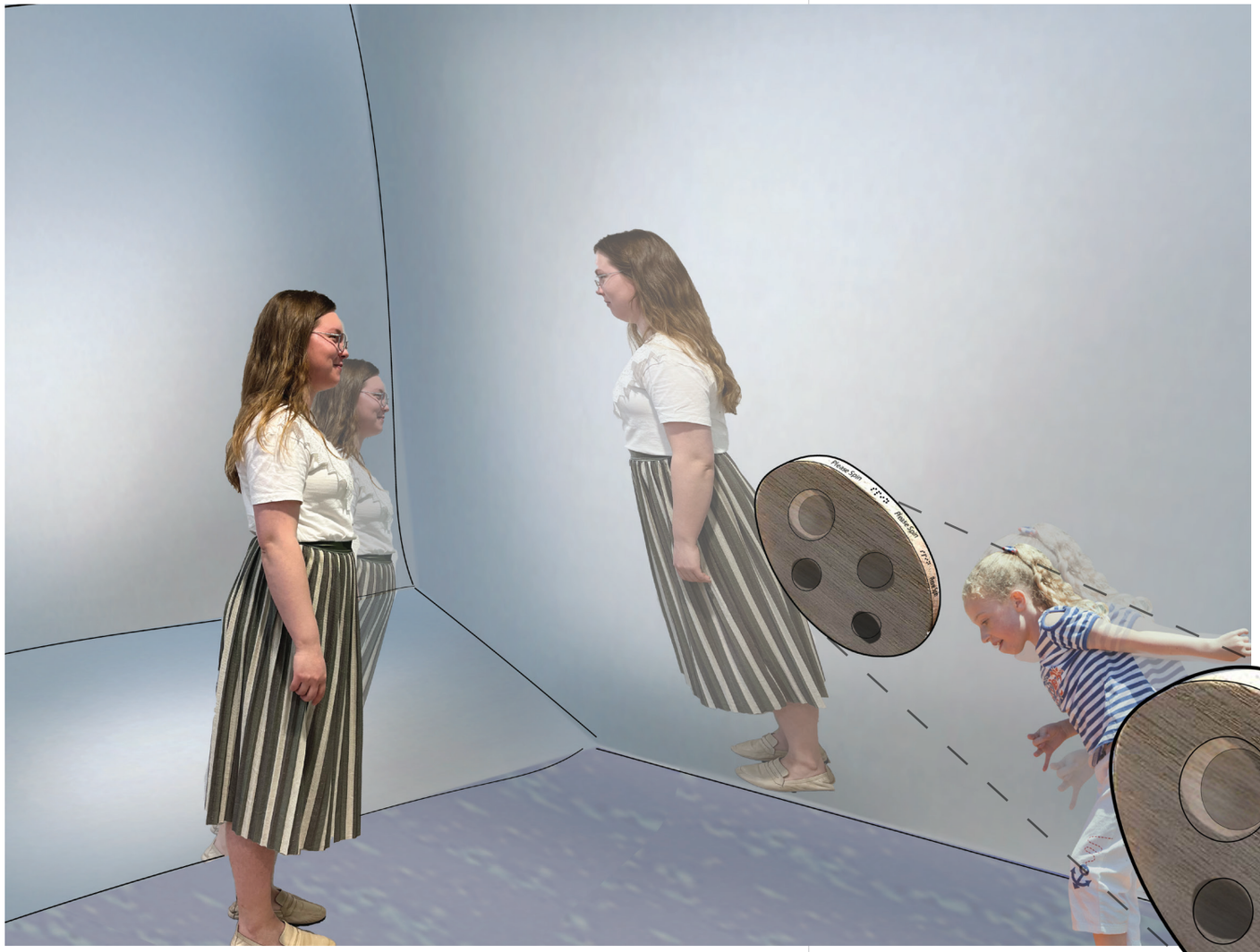


Figure 212. The Glass Box Television symbolizes the "American Family" and the "American Dream" on the outside, while inside the structure people are forced to reflect on their reality.

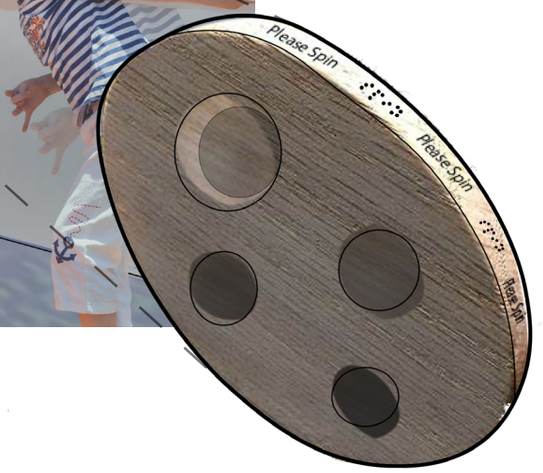


Figure 213. A wooden circle serves as a "sound dial" similar to that on a television and is especially beneficial for diverse user groups that are easily overstimulated; the sound dial allows park users to adjust sound to their liking.

Guidelines Applied



1. Multi-Sensory Experience

Touch and sound are paired together with a rotating wooden plate that can adjust sound by spinning. The texture of the rotating wooden plate may be enhanced when sound is enhanced. Furthermore, one way glass evokes pensive feelings when inside the glass television box.

1.1e, 1.1f, 1.1g



2. Visibility Experience

Visually the one way glass and rotating wooden plate attract people to the glass box television; trees on either side of the piece frame the view and further draw visual attention to the piece. Furthermore, the one way glass is positioned so that people are able to see inside of the one way glass box television (instead of vice versa) for safety. People activate the glass box television by becoming actors on a “screen” and adjusting the sound within the television. In terms of accessibility, the wooden rotating plate is 36 inches off of the ground for optimal visibility and 24 pt font will be used for a descriptive sign at the entrance to the piece.

2.1c, 2.1e, 2.1f, 2.2b, 2.2c, 2.2f, 2.3c, 2.5g, 2.6a, 2.7a



3. Lighting Experience

The glass box television accommodates multiple user groups by reducing glare with tree coverage overhead. Furthermore, lighting within the television box serves as a wayfinding device to help orient people throughout the site. Glow-in-the-dark stones that gather energy from the sun are used within the box television to illuminate the space at night.

3.1a, 3.1b, 3.1c, 3.1d, 3.2f, 3.3a, 3.3b, 3.5a, 3.5e, 3.5f, 3.7b



4. Acoustic Experience

A common and recurring theme within the acoustic experience section is the need for acoustic isolation and sound barriers to reduce overstimulation. The glass box television accommodates multiple user groups with a rotating wooden plate the can let more or less sound into the space. In this way, it serves as a sensory room or a room for sensory isolation, because when inside people can only see themselves and can adjust the sound level to their liking.

4.1b, 4.1d, 4.1e, 4.2f, 4.4c, 4.4e, 4.5a, 4.5d, 4.6c, 4.7a



5. Colors + Tactile Materials

Green, lavender, and brown native vegetation is used around the glass box television to create a visual and textural barrier between the glass and surrounding spaces for safety. Vegetation will be in naturalistic, “wild-looking” patterns to deviate from the traditional manicured “white landscape” and match planting patterns throughout Franklin Park. One-sided glass was chosen to portray a narrative of the “American Dream” versus reality, while a wooden spinning plate was chosen to visually and texturally contrast the glass.

5.1b, 5.1d, 5.1e, 5.2d, 5.3b, 5.4b, 5.5c

Guidelines Applied



6. Understanding

A descriptive and instructional sign with sans serif 24 pt. font located outside of the glass box television in both English and Braille provides choreographies about how to use the space and a visual description of the piece. The Braille on the sign will be no more than 36 inches off of the ground and the sign will be in black and white for optimal visual contrast and legibility. The wooden spinning plate will be no more than 36 inches off of the ground so that people with mobility devices can fully interact with it. Furthermore, braille is located on the edges of the wooden spinning plate, where a person would intuitively place their hand. The words “spin me” are also provided on the wooden plate. The placement of the wooden spinning plate across from the entrance draws attention to it and signifies that there is some importance to it.

6.1a, 6.1b, 6.1c, 6.1d, 6.1g, 6.2a, 6.2b, 6.3a, 6.3c, 6.4c, 6.4e, 6.5a, 6.5b, 6.6b, 6.6c, 6.6d, 6.7e, 6.8e



7. Movement Experience

Interactive components of the glass television box encourage people to twist and bend as well as gather while interacting with the piece. Furthermore, the visual interest and audio component generated by the artwork encourage people to travel off of the “beaten path” and interact with the piece. Curvilinear, flat, and 7 foot wide paths leading to the artwork at a slope of 2% or less ensure all people are able to physically access the space. A textural barrier along the path edges helps persons who are blind or low vision stay on track and safe on the path.

7.1b, 7.1c, 7.1d, 7.1f, 7.1g, 7.3a, 7.3b, 7.3d, 7.6b



8. Mobility Requirements

The artwork is no more than .25 miles from parking, ensuring optimal accessibility for all people. Furthermore, a path width of 7 feet with a 2% or less slope ensures all people can physically access the site. Tight-joint stones are used within the artwork to ensure that there is not upheaval of the stones over time.

8.1a, 8.1e, 8.1f, 8.1g, 8.2a, 8.5b, 8.5d



9. Path + Space Materials

A change in path material, from porous concrete to glow-in-the-dark stones in the glass box television texturally indicate a transition between spaces. Glow-in-the-dark stones were chosen for the ground material of the glass box television to mimic the light emitted from a television. Furthermore, this solar-powered technology reduces the likelihood of it getting damaged in the public space, since there are no power boxes associated with it. The stones are positioned closely together with tight joints and on top of a poured concrete base to reduce shifting and possible trip hazards over time.

9.1a, 9.1b, 9.1d, 9.1f, 9.3a, 9.3b, 9.4a, 9.5a, 9.5c, 9.6a

Guidelines Applied



10. Seating + Gathering

Even though the glass box television does not have seating within it, interesting glow-in-the-dark stones enhance the experience of the space and may encourage gathering.

10.1e, 10.1g



11. Comfort + Protection

The glass box television serves as a sound and wind buffer on the site, while still providing 360 degree views of surrounding areas (from outside of the box). Adequate space for signing is provided with a 14 foot x 14 foot interior space. Furthermore, the ceiling height of the glass box is less than 12 feet, reducing sound reverberation and improving comfort for users that are blind and low vision.

11.1a, 11.1b, 11.1c, 11.1d, 11.2b, 11.3a, 11.3b, 11.5a, 11.5b, 11.6b, 11.7d, 11.7e



12. Choice, Placement + Orientation of Site Elements

The glass box television serves as a sensory room, by providing isolation overstimulating visuals, noises, and smells. To ensure this, a sound dial is provided in the space so people can adjust sound levels to their liking. Furthermore, vegetation that is not aromatic is located adjacent to the glass box television. Areas to gather and eat are situated away from this artwork.

12.3a, 12.3d, 12.3e, 12.3g, 12.4e



13. Topography + Vegetation

All existing trees and topography on the site are preserved. Large and historic trees provide a sense of enclosure around and above the artwork. One of the reasons why the site at the Playstead was chosen was because of its flat topography- it is easily accessible to all people. Keeping the topography as-is reduces the likelihood of damaging existing tree roots. Native plants are incorporated around the glass box television to reduce maintenance needs and match the current vegetative character of Franklin Park.

13.1a, 13.1b, 13.1d, 13.1e, 13.2c, 13.2g, 13.2h, 13.2k, 13.2n, 13.3c, 13.4b, 13.4c, 13.5b



14. The Social Component

The glass box television encourages gathering with its one-way glass and wooden plate sound dial. It is not complete upon installation, but rather comes alive when people turn the sound “up or down” and look into the one-way glass.

14.1a, 14.1b

This is a 23-foot long by 13-foot wide upside-down, white plastic kitchen table suspended 12 feet off the ground. Some plates and cups are attached to the table, while others have fallen off and become 3-foot by 3-foot planters full of herbs. The planters symbolize healing and growth after familial upheaval and the community garden space creates sense of unity and togetherness. Picnic in the larger-than-life plates. Play and garden together here.

Figure 214. Signage description for the Communal 'Dining Room' and 'Dining Table.'



Figure 215. The Community "Dining Room" is a part of the larger public artwork 'You Are Not Alone.'

1. Fork, knife, and spoon lights illuminate the site
2. Descriptive and instructional signage in both English and Braille (see fig. 214)
3. Picnic plates are located in both active and more intimate areas for a variety of picnicking experiences
4. Community cup and bowl planters encourage gathering and add a social component to the artwork
5. Mint, thyme, oregano, sage, and chives are cold weather herbs that become perennials, growing back each year
6. Dark colored plates and cups attached to the upside-down picnic table contrast the ombré dark to light community planters
7. Native Schizachyrium scoparium, or little bluestem, keeps people from walking through the grass and encourages a shared path experience



Figure 216. An upside-down, re-interpreted table, is thrown out of the tornado and into the trees 12 feet off the ground. Looking up at the table, the audience notices that its white plastic material appears fragile and that eating at an upside-down table is impossible. However, signs of growth in the community bowl and cup planters evoke feelings of hope.



Figure 217. People may picnic and play within larger-than-life abstracted plates that "fell" from the upside-down table. An opening ensures that people of all abilities can move into the plate. Furthermore, a painting of a picnic in the bottom of the plate communicates a possible use for it to park users.

Guidelines Applied



1. Multi-Sensory Experience

Herbs growing out of 3 foot by 3 foot larger-than-life bowls and cups add a smell component to this artwork. Coupled with community gathering around the artwork to maintain the herbs, a sound component is added as well.

1.1b, 1.1c, 1.1f, 1.1h, 1.1i



2. Visibility Experience

Visually the table appears as if it was thrown out of the tornado-like structure and into the trees; it is not situated perfectly in the trees, but rather at an angle. The 3 foot by 3 foot planters are 3 feet (or 36 inches) off of the ground for optimal visibility by all people. Furthermore, larger-than-life picnic plates in unique shapes and colors draw attention to this artwork. Different feelings are inspired by different parts of the artwork. For example, when looking at the upside-down table thrown into the trees, feelings of chaos or confusion are evoked. When picnicking in a picnic plate or gardening with a community, a person may have feelings of happiness and hope.

2.1a, 2.1c, 2.1d, 2.1e, 2.2a, 2.2d, 2.3a, 2.4a, 2.5c, 2.6d, 2.7a



3. Lighting Experience

The artwork is illuminated by light posts along an adjacent primary path through the playstead. Furthermore, larger-than-life spoons and forks surrounding the picnic plates serve as light posts and create an enjoyable experience for evening picnics and movie nights. Lighting is placed at a steady rhythm through the space to avoid an over-saturation of light. Lighting in the space is powered by the sun and has an on/off button that people can use to get more or less light in the space.

3.1c, 3.2b, 3.2c, 3.2f, 3.2i, 3.4e, 3.5c, 3.5e, 3.6a, 3.6b



4. Acoustic Experience

Sound is primarily created with this artwork when people come together to picnic, play, and tend to the herbs growing within larger-than-life bowl and cup planters. The purpose of this is to mimic the acoustic experience at a typical table. Often, it is quiet at the table until other people join. The artwork will remain a quiet space until other people come and gather together.

4.1e, 4.5d, 4.5e



5. Colors + Tactile Materials

While the other artwork on the site (the tornado-like structure and the glass box television) have a type of man-made ground material that helps differentiate it from paths, this artwork is more integrated into the landscape with grass and compacted gravel used as ground materials. An ombré color effect, moving from dark to bright colors on the picnic plates and the planter cups and bowls help them stand out to people with low vision and signify the transition from upheaval to hope with familial challenges. Colors used include red, orange, and yellow (or "happy" colors). Objects are grouped by color to satisfy guideline 5.5e, which indicates persons with autism appreciate grouped colors. These planters and picnic plates are made from concrete for stability and durability. The table thrown into the trees is made of plastic to symbolize the fragility of domestic abuse; for example, a person may not associate the same quality or permanence with a plastic table that they wood with a wooden table.

5.1a, 5.1b, 5.1c, 5.1e, 5.1h, 5.2c, 5.2e, 5.3a, 5.3b, 5.4a, 5.4e, 5.5d, 5.5e, 5.6a, 5.6d, 5.7a

Guidelines Applied



6. Understanding

A descriptive and instructional sign and plaque with sans serif 24 pt. Font located at an entrance to the communal “dining room” in both English and Braille provides choreographies about how to use the space and a visual description of the piece. The Braille on a plaque adjacent to the sign is no more than 36 inches off of the ground and the sign will be in black and white for optimal visual contrast and legibility. People may also understand the artwork visually by looking at the upside-down table and noticing that larger-than-life plates, bowls, and cups “fell off” the table onto the ground, cracked, and then began growing herbs through the cracks. The ombré colors of the picnic plates, bowls, and cups, also indicate a transition from dark to light (literally). The placement of the herbs and the height of the cup and bowl planters, at 36 inches off of the ground, allows for all people to touch and engage with them. The smell of the herbs also serves as a wayfinding element on the site, helping persons that are low vision and blind with navigation. Braille text “garden” on the cup and bowl planters and “picnic” on the plates is placed where a person would intuitively place their hand.

6.1a, 6.1b, 6.1c, 6.1f, 6.1g, 6.2a, 6.2b, 6.3a, 6.3c, 6.4e, 6.5a, 6.5b, 6.6a, 6.6b, 6.6c, 6.6d, 6.7e, 6.8e



7. Movement Experience

Interactive components of the communal “dining room” encourage bending (the cup and bowl planters), sitting (the picnic plates), and play. Not only do the forms in the “dining room” encourage movement, but their bright colors attract people off of the “beaten path” and inspire new experiences. 10-foot wide compacted gravel pathways are provided between the cup and bowl planters to provide optimal space for signing, playing, and gathering. Movement paths are direct and reduce the likelihood of “cow paths” through the grass to access different parts of the artwork.

7.1a, 7.1c, 7.1d,7.1e, 7.1g, 7.2b, 7.2c, 7.2e, 7.3a, 7.3b, 7.3d, 7.5b, 7.5c, 7.5e, 7.6b, 7.7b



8. Mobility Requirements

The artwork is less than .25 miles from parking, ensuring optimal accessibility for all people. Furthermore, a path width of 10 feet with a 2% or less slope ensures all people can physically access the site. Compacted gravel pathways allow water permeation but also easy movement with mobility devices. Raised planters reduce head movements- a beneficial feature for persons with autism (8.4b).

8.1a, 8.1f, 8.1g, 8.2a, 8.4b, 8.5b, 8.5d



9. Path + Space Materials

A change in path material, from porous concrete to compacted gravel texturally indicates a transition between path and space. Furthermore, the compacted gravel material reduces slip hazards and provides traction. Grass on either side of the compacted gravel pathway serves as a textural indicator to persons with low vision that they are nearing the edge of the path.

9.1a, 9.1b, 9.1c, 9.1f, 9.2e, 9.2f, 9.3a, 9.3b, 9.5a, 9.5b, 9.6a



10. Seating + Gathering

The opportunity for gathering is created both with the picnic plates and community cup and bowl planters; it’s like everyone is eating at the same table and sharing the mutual fruits of labor (herbs) from the same cups and bowls. For more intimate seating experiences, some of the picnic plates are farther away from the community cup and bowl planters. Additionally, to accommodate a variety of needs, some picnic plates have deeper space for sitting, or a surface that is more flush with the ground. No two picnic plates are the same. All picnic plates are made from smooth concrete. The placement of some of the picnic plates alongside the community cup and bowl planters aids in olfactory wayfinding.

10.1b, 10.1d, 10.1e, 10.1f, 10.1g, 10.2e, 10.2g, 10.4a, 10.5a, 10.5b, 10.6a, 10.6b, 10.7b

Guidelines Applied



11. Comfort + Protection

Sub-spaces, such as picnicking areas are defined by low-two-ground edges on the plates that stick 12 inches to 24 inches off of the ground. More wooded areas that still provide 360-degree sight lines have picnic plates that have a bit more enclosure and will encourage a more intimate picnic experience. This mixture of active and semi-enclosed spaces is especially preferred by persons with physical disabilities and persons with autism.

11.1b, 11.1c, 11.1f, 11.2a, 11.2c, 11.3a, 11.4b, 11.5a, 11.7b, 11.7c, 11.7d, 11.7e, 11.7f



12. Choice, Placement + Orientation of Site Elements

Paths and vegetation throughout the communal dining room are placed to reduce the likelihood of "cow-paths" through unwanted areas within the artwork/site. Multiple events, such as picnicking and community gardening, are encouraged through the site signage that has choreographies about how to use the site as well as braille. Furthermore, this programming encourages diverse groups of people to come together and create memories- such as children, community members, and other park users.

12.1b, 12.1c, 12.1e, 12.1f, 12.3f, 12.4d, 12.4e, 12.5a, 12.6c



13. Topography + Vegetation

All existing trees and topography on the site are preserved. Large and historic trees provide a sense of enclosure around and above the artwork. One of the reasons why the site at the Playstead was chosen was because of its flat topography- it is easily accessible to all people. Keeping the topography as-is reduces the likelihood of damaging existing tree roots. Cold weather herbs are incorporated in cup and bowl planters to add a sensory component to the site, encourage gathering, and survive the cold Boston winters.

13.1a, 13.1d, 13.1e, 13.2c, 13.2d, 13.2g, 13.2h, 13.2i, 13.2o, 13.5a, 13.5c, 13.5h, 13.6b, 13.6c, 13.7a



14. The Social Component

The communal "dining room" encourages gathering with a variety of activities, like picnicking and community gardening.

14.1a, 14.1b

This is a 25-foot long by 5-foot wide abstracted galvanized steel queen-bed frame. The frame has been twisted into undulating letters, spelling ‘You Are Not Alone.’

During familial challenges, it can be difficult to find a secure environment. This sculptural bed symbolizes security, comfort, and the realization that you are not alone. ‘You Are Not Alone’ means to say exactly that- we are in this together.

Climb, play, and rest on this abstracted structure.

Figure 218. Signage description for the abstracted ‘Bed Frame.’

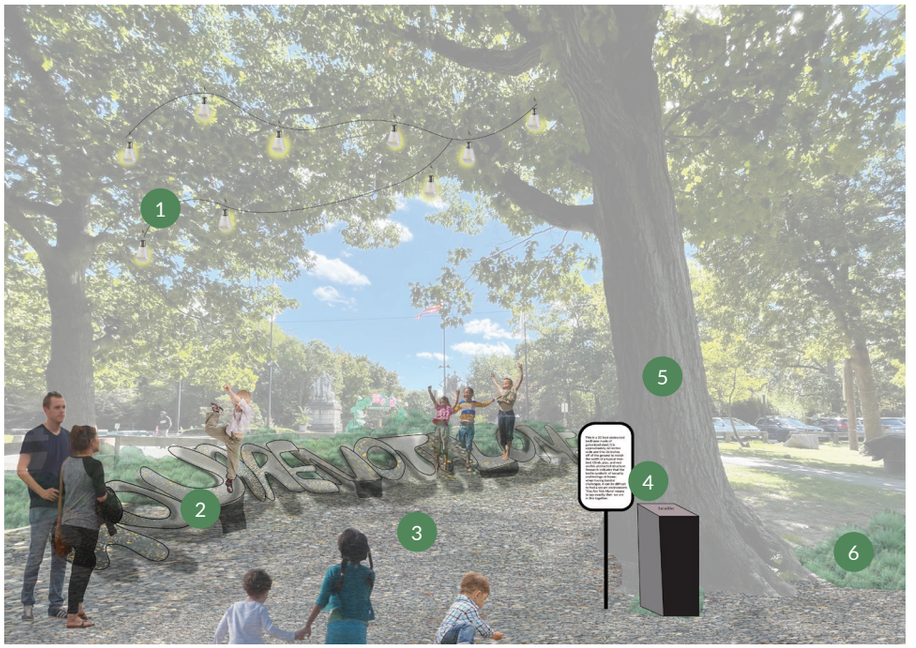


Figure 219. The Community “Dining Room” is a part of the larger public artwork ‘You Are Not Alone.’

1. Solar-powered LED light bulbs illuminate the site and hang from the trees above the artwork
2. Galvanized steel letters spell out the phrase ‘You Are Not Alone’ to communicate the narrative
3. A compacted gravel gathering space contrasts porous concrete paths leading to the artwork to communicate a spatial transition
4. Descriptive and instructional signage in both English and Braille (see fig. 218)
5. Historic trees above the artwork create shade and a sense of enclosure for park users
6. Native Schizachyrium scoparium, or little bluestem, keeps people from moving through the grass and creates feelings of calm in the space with gentle “whooshing” sounds



Figure 220. The un-defined, abstracted, and galvanized steel bed frame encourages multiple methods of engagement; people may gather, play, have informal photo shoots, eat lunch, and rest on the structure.

Guidelines Applied

1. Multi-Sensory Experience

The design of the bed frame is fairly minimal, with more emphasis on the textural experience of galvanized steel than any of the other senses.

1.1e

2. Visibility Experience

Galvanized steel visually contrasts the surrounding site, thus making it stand out from surrounding landscape. The artwork is no more than 36 inches off of the ground for optimal visibility. Furthermore, the interesting form of the bed frame- with the letters 'You Are Not Alone' is visually unique and unexpected, attracting attention to the artwork. Trees on either side of the abstracted bed frame create a "room-like" and protected-feeling experience when on or around the artwork. 360-degree views are maintained around the artwork for safety and comfort.

2.1b, 2.1c, 2.1d, 2.2b, 2.2d, 2.4a, 2.5g, 2.6a, 2.6b, 2.6d, 2.7a

3. Lighting Experience

The artwork is illuminated by LED solar-powered string light bulbs that hang from the trees. Not only do the light bulbs illuminate the artwork in night settings, but they symbolically represent a "light bulb" moment of understanding. While laying down on the larger-than-life, abstracted bed frame, the artist hopes that people have a "light bulb" realization that they are not alone in their struggles. The placement of the artwork under the trees also creates shade and shelter from the sun.

3.1c, 3.1d, 3.2e, 3.2g, 3.2i, 3.2j, 3.3a, 3.3b, 3.4a, 3.5a, 3.5f, 3.6a, 3.7b, 3.7c

4. Acoustic Experience

Sound is primarily created with this artwork when people come together to play and by the gentle whooshing sounds of native grasses blowing in the wind. This artwork is meant to be a peaceful place where people realize they are not alone in their struggles. Therefore, the gentle sounds of grass blowing are incorporated. Furthermore, the artwork creates a vibratory experience that creates a more interesting and engaging experience for all people.

4.1f, 4.2a, 4.5a, 4.7b

5. Colors + Tactile Materials

Crushed gravel is used around the bed frame to communicate a spatial transition from porous concrete path to the artwork experience. Galvanized steel is used for the bed frame because of its weather resistance and also because of its reflective qualities. This material is a mirror of sorts that encourages further reflection; as people read the message "You Are Not Alone" they can see glimpses of themselves reflected back like a mirror. This reflection aims to encourage further contemplation and realization that a person is not alone in their struggles.

5.1a, 5.1e, 5.1f, 5.3a, 5.3b, 5.4a, 5.7a

Guidelines Applied



6. Understanding

A descriptive and instructional sign and plaque with sans serif 24 pt. Font located at an entrance to the “bedroom” in both English and Braille provides choreographies about how to use the space and a visual description of the piece. The Braille on a plaque adjacent to the sign is no more than 36 inches off of the ground and the sign will be in black and white for optimal visual contrast and legibility. People may also understand the artwork visually by reading or feeling the large, galvanized steel letters, seeing their reflection in the letters, and looking at the light bulbs hanging above the artwork. Additionally, using a crushed gravel that is slightly different than the crushed gravel in the communal “dining room”, creates a different auditory experience and aids in wayfinding.

6.1a, 6.1c, 6.1f, 6.1g, 6.2a, 6.2b, 6.2h, 6.3a, 6.3d, 6.4e, 6.5a, 6.5d, 6.6b, 6.6c, 6.6d, 6.7d, 6.7e, 6.7f, 6.8a, 6.8h



7. Movement Experience

The form of the artwork encourages people to bend, stretch, jump, play, and rest, depending on what they feel like doing. When laying on the abstracted bed frame, park users can relax, listen to gentle native grasses blow in the wind, and look up at gently-lit light bulbs hanging from the trees above. A more active, exciting atmosphere is created if park users decide to jump and play on the bed frame. Compacted gravel and a flat site ensures that people of all abilities can access the artwork. Furthermore, an open gathering area, as opposed to a designated pathway, is provided around the artwork because of the movement experiences and gathering that it encourages.

7.1a, 7.1b, 7.1c, 7.1d, 7.1e, 7.1g, 7.1h, 7.3b, 7.3c, 7.3d, 7.7a, 7.7b



8. Mobility Requirements

The artwork is less than .25 miles from parking, ensuring optimal accessibility for all people. Furthermore, a path width of 10 feet with a 2% or less slope ensures all people can physically access the site. Compacted gravel pathways allow water permeation but also easy movement with mobility devices.

8.1a, 8.1f, 8.1g, 8.2a, 8.4b, 8.5b, 8.5d



9. Path + Space Materials

A change in path material, from porous concrete to compacted gravel texturally indicates a transition between path and space. Furthermore, the compacted gravel material reduces slip hazards and provides traction. Native grass on either side of the compacted gravel pathway serves as a textural indicator to persons with low vision that they are nearing the edge of the path.

9.1a, 9.1b, 9.1c, 9.1f, 9.2e, 9.2f, 9.3a, 9.3b, 9.5a, 9.5b, 9.6a



10. Seating + Gathering

The abstracted bed frame not only serves as a climbing and play structure for children, but it may also be used as a hangout space for teens and adults. Informal photo shoots could take place at the site and people could also eat lunch on the structure. The abstracted bed frame encourages both active and passive movement by providing space to gather, play, and rest. Supports on the underside of the bed frame ensure that it remains structurally sound during and after use. The artwork also accommodates multiple park user needs with its various heights off of the ground. In some areas, for example, it is 16 to 17 inches (and higher) off of the ground, which is ideal for Persons with Physical Disabilities.

10.1b, 10.1c, 10.1d, 10.1e, 10.1f, 10.2g, 10.3b, 10.5b, 10.6b, 10.7b

Guidelines Applied



11. Comfort + Protection

Trees above the artwork and other vegetation that allows 360-degree views, creates a sense of enclosure, protection, and comfort while experiencing the artwork.

11.1a, 11.1b, 11.1d, 11.1e, 11.2b, 11.2e, 11.7b, 11.7c, 11.7d



12. Choice, Placement + Orientation of Site Elements

The form of the abstracted bed frame encourages a diversity of interactions, which in turn attracts multiple different user groups to the site. Since the bed is symbolic of shelter, it makes sense to have it in a “protective” environment with trees overhead.

12.1b, 12.1f



13. Topography + Vegetation

All existing trees and topography on the site are preserved. Large and historic trees provide a sense of enclosure around and above the artwork.
One of the reasons why the site at the Playstead was chosen was because of its flat topography- it is easily accessible to all people. Keeping the topography as-is reduces the likelihood of damaging existing tree roots. Native grass is incorporated around the artwork to create gentle “whooshing” sounds and keep people on paths (as opposed to cutting through unwanted areas).

13.1a, 13.1d, 13.1e, 13.2c, 13.2d, 13.2g, 13.2h, 13.2i, 13.2o, 13.5a, 13.5c, 13.5h, 13.6b, 13.6c, 13.7a



14. The Social Component

Functioning similar to a playground, the abstracted bed frame encourages interaction through play and gathering.

14.1a, 14.1b

6

Conclusion

Conclusion

Project Summary

Findings indicate that when public art lacks multi-sensory elements to engage two or more senses, or when it is not physically accessible, Persons with Disabilities may be excluded from experiencing it (Barnes 2003; National Recreation and Parks Association 2015; Robinson 1998). If people within public space are unable to experience public art, then they are excluded from a cultural community and artistic interpretations of society. Furthermore, considering the needs of a particular user group ultimately makes a more enriching experience for all people- an experience that all people may not have had otherwise. Additionally, public art has the capacity to create social change. As stated by Carmen Papalia, activist, "one of the greatest challenges facing Persons with Disabilities is social isolation" (2022). Interactive public art that "comes alive," encouraging social interaction, may be a solution to this issue. Finally, findings indicate that the most essential component of equitable public art is community engagement. To fully understand the needs of an audience, it is necessary to engage with them and ask them what they need. Only then can an artwork be truly equitable.

The design guidelines are a step forward towards increasing awareness about how to create and site equitable public art in public space. However, it will take more conversation about this topic as well as the application of the guidelines and similar frameworks, to truly make a difference. More municipalities, artists, and designers need to be aware of what equitable public art is, why it matters, and how to create it. Therefore, it is essential for artists, designers, and municipalities to utilize the design guidelines created as a part of this project.

Takeaways Upon Applying the Design Guidelines

To provide an example demonstration of the guidelines, projective site and artwork designs were created. The takeaways from applying the guidelines are as follows:

- Before looking at the guidelines, some design decisions had yet to be determined. The guidelines aided in decision-making and inspired clear, original design solutions

- The design guidelines substantiated design choices and questioned others, ultimately resulting in a more equitable and informed artwork

- It was very helpful and comforting, even, to have a set of guidelines in which many different considerations were compiled together- it was like having someone hold your hand through the design process

- Looking through the guidelines in one sitting was a bit overwhelming at times- it may be best to look through them over a period of days

Limitations

There were some limitations to the research methods chosen. **Site analysis** was conducted for one day due to budget and time constraints; a more comprehensive site analysis during various times of the day, week, and season would have benefited the project. The design outcome was purposefully hypothetical to fit within academic project constraints, however an understanding of how the guidelines could lead to an actual built public art would add a level of understanding to their applicability across the design process. Consequently, the project is based more on the **design and demonstration of the design guidelines for a hypothetical public artwork**. Time for conceptual design was also a limitation; since the master's project had to be completed in one academic year, the design process was less iterative than would be possible for a longer project. In addition, the final design, 'You Are Not Alone,' would have been strengthened by interviews with people who frequently use Franklin Park and who live around the park.

Interviews were conducted via snowball sampling with artists designers. While incredibly helpful, the 14 interviews conducted

represent only a small sample of perspectives and experience with equitable artwork and sites. More interviews with artists and designers could have further informed the design guidelines.

Precedent analysis offered information about the strategies for equitable public artwork and universally-designed sites that all people can experience. The 17 precedents analyzed, while helpful in understanding the design and access considerations for public artwork, only offer a small snapshot into the possibilities of equitable public artwork and site design. If time allowed, more precedent analysis would have bolstered the findings and outcomes.

In addition, sending the **design guidelines for equitable public artwork** to artists and designers for feedback would have been helpful. Finally, having others test the guidelines and provide feedback for further refinements would have further strengthened the guidelines.

Future Research

Future research could expand to include the needs of additional Persons with Disabilities (beyond the types of disabilities researched) and other racial, ethnic, and sexual identity communities when experiencing public artwork in public space. While this project considers the needs of Persons with Disabilities when experiencing sites and public artwork, it does not take into account those needs in conjunction with other communities user groups are a part of. In addition, upcoming research could further advance the design guidelines created as a part of this project, by conducting more precedent analyses, interviews with designers and artists, and literature review about the needs of all people when experiencing public artwork.

Additional Resources

To learn more about the organizations working with artists with disabilities and empowering all people, reference these resources:

1. *https://www.heartnsoul.co.uk/*

2. *https://www.artscouncil.org.uk/our-organisation/our-history*

3. *https://www.mindthegap-project.org/*

4. *https://www.zincarts.org.uk/about-us*

5. *https://www.london.gov.uk/programmes-strategies/arts-and-culture/liberty-festival-2022*

6. *https://www.btpcarnival.co.uk/?location_id=221*

For site and art accessibility checklists, frameworks, and organizations:

1. *Neurodiversity and Buildings: Site Accessibility Checklist https://bbc.github.io/uxd-cognitive/*

2. *Autism Design Considerations: https://www.autism.archi/aspectss#:~:text=The%20Autism%20ASPECTSS%E2%84%A2%20Design%20Index%20is%20the%20first,criteria%20proposed%20to%20be%20facilitative%20for%20ASD%20design.*

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7

End Matter

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Glossary

A

Accessibility defines who can experience a place or thing, based on whether the needs of a user are met (Lazard 2019; Center for Universal Design 2006).

Activist Artwork is characterized by content and/or form that discusses socio-political issues (Tate n.d. (a)). This type of artwork aims to empower and strengthen communities that are disempowered by society and/or the government (Tate n.d. (a); Rice, Dion, and Chandler 2021).

Affirmation Artwork is a form of Disenfranchised Art. Affirmation Art typically celebrates and validates the culture the artist participates in (Deaf-Art n.d.).

Alternative Cement is made from fly ash, slag, natural pozzolans, calcined clays, and other materials (Project Drawdown n.d. (a)); this type of cement reduces carbon dioxide emissions by millions of metric tons each year (Project Drawdown n.d. (b)).

Americans with Disabilities Act (ADA) is a "federal civil rights law that prohibits discrimination against people with disabilities in everyday activities" (U.S. Department of Justice Civil Rights Division n.d.).

Art is used interchangeably with "artwork" and is a physical and/or graphic representation of a person's existence, experience, or ideas (Hilde 1996).

Autism, also called autism spectrum disorder or A/autistic, is a condition characterized by three impairments: difficulty with social interaction, difficulty with social communication, and difficulty with imagination (Dautenhahn 1999). "Some people with autism prefer to be referred to as "autistic", "autistic person", or "person with autism"" (NCDJ 2021).

B

Bamboo is "any of various woody or arborescent grasses of tropical and temperate regions having hollow stems, thick rhizomes, and shoots that are used for food" (Merriam-Webster 2023a).

Behavioral Art is a term coined by artist Tania Bruguera, who works within the field of New Genre Art; Bruguera defines 'Behavior Art' as the act of 'doing' (Tate n.d. (c)).

Bioplastic, also known as biodegradable plastic, is "made or derived from biological materials' ' (Merriam-Webster 2022a). "Bioplastics could be really good for the environment – the manufacturing process produces fewer greenhouse-gas emissions than that for petroleum-based plastics' ' (Dell 2022).

Blind "may be used for people who have complete or almost complete loss of sight" (NCDJ 2021). This is different from people who have some level of vision (see *Low Vision*).

Braille is a "system of writing for the blind that uses characters made up of raised dots" (Merriam-Webster 2023b).

Brightness, also known as lightness, is the emission of light ordered "continuously from light to dark in correlation with its intensity" (Merriam-Webster 2023c).

C

Calcined clay, also called Metakaolin or Chamotte, "is a white powdered non-plastic material; it is produced when raw kaolin (clay) is fired enough to reduce its water content" (Ashok Minerals n.d.).

Intellectual disability is used interchangeably with *cognitive disability* by some sources and refers to "significant limitations both in intellectual functioning (reasoning, learning, problem solving) and in adaptive behavior, which covers a range of everyday social and practical skills" (NCDJ 2021).

D

Deaf "describes a person with profound or complete hearing loss. Deafness is often considered a culture, not a disability" (NCDJ 2021). People with hearing loss may prefer to be called D/deaf OR Hard of Hearing depending on preference. For this project, "Deaf" refers to a person with complete hearing loss.

DeafSpace is a space in which the "unique cognitive, cultural, and creative dimensions of the Deaf experience are encouraged" (Vaughn 2018).

Deaf View/Image Artwork or De-VIA Artwork is a platform for the Deaf Art experience; De-VIA stands for "(De)af and Deaf-Blind Expression of Affirmation, Resistance, and Liberation," "(V)iew of how Deaf & Deaf-Blind experience the world," "(I)mages/motifs/symbols of the Deaf experience," and (A)rt, activism, aesthetics, and authentic expressions of the Deaf Experience (Museum of Deaf History, Arts, & Culture n.d.).

Disability affects the physical and/or cognitive functioning of a person when interacting with their environment (Robinson 1998).

Disability Artwork provides a space for Persons with Disabilities to experience art equitably and discuss topics of common concern. Disability Art is about revealing the exclusionary tactics and oppression of Persons with Disabilities in art and society (Barnes 2003).

Disability Justice expands upon The Social Model of Disability by considering disability as an "economic, cultural, and/or social exclusion based on a physical, psychological, sensory, or cognitive difference" (Lazard 2019, 6). Disability Justice lists accessibility as the primary tool for counteracting exclusion (Lazard 2019, 7).

Disenfranchise is the deprivation of a franchise, a legal right, or of some privilege or immunity (Merriam-Webster 2023d).

Disenfranchised Artwork is "created by groups of people who are deprived of rights and privilege. Often these groups will choose to express their history, voice, and experiences via visual art" (Deaf-Art n.d.). Disenfranchised artwork may be divided into two categories: affirmation artwork and resistance artwork.

E

Equitable, in the context of this report, refers to the ability of all people to experience artwork in a way that is best for them.

F

Fly Ash are “fine solid particles of ashes, dust, and soot carried out from burning fuel (such as coal or oil)” (Merriam-Webster 2023e).

Franchise is “a constitutional or statutory right or privilege; a special privilege granted to an individual or group; the right of membership” (Merriam-Webster 2023f).

G

Gradation is “a series forming successive stages; a gradual passing from one tint or shade to another” (Merriam-Webster 2023g).

H

Hard of Hearing “refers to any hearing condition that can be helped by an auditory device. However, some people in this community refer to themselves as D/deaf, despite having some hearing ability” (NCDJ 2021). For the purposes of this project, hard of hearing refers to people with some hearing ability that can be helped by an auditory device.

Harmony is “a pleasing arrangement of parts; the combination of simultaneous musical notes” (Merriam-Webster 2023h).

Hue is the “gradation of a [single] color” (Merriam-Webster 2023i).

I

Identity-First Language “puts a person’s disability identity before the person – for example, ‘disabled person, blind person, etc.” (Victorian Government 2022). Ask a person about their preference prior to using identity-first language.

Inclusive, in the context of this report, refers to artwork that does not limit the experience of user groups based on physical or cognitive ability.

Inclusive Design may be defined as a product or space that is intended for all people, with special consideration given to “extreme” user groups, such as Persons with Disabilities. By adhering to the needs of “extreme” user groups, this approach believes that a design will be accessible to all people (National Endowment for the Arts 2021).

Industrial Hemp is “high in fiber and low in THC; it has been used for a variety of industrial and consumer products” (U.S. Department of Agriculture (USDA) 2023).

L

Land Art is “the name given to an art movement which emerged in America in the late 1960s in which landscape and the world of art are inextricably linked. Sculptures are not placed in the landscape, rather the landscape is the very means of their creation” (Marzona, Weisner, and Wessing 1990, 264).

Local means “of, relating to, or characteristic of a particular place: not general or widespread; characterized by or relating to position in space” (Merriam-Webster 2023j).

Low-Vision and Limited Vision are “acceptable [terms] when a person is not legally or completely blind” (NCDJ 2021)

M

Multi-Sensory Artwork engages at least one of the five senses: sight, smell, sound, touch, and taste (NRPA n.d.).

N

Natural pozzolan "is a raw or calcined pozzolan that is found in natural deposits. A material is referred to as "calcined when it has been heated below the temperature of fusion to alter its composition or physical state" (American Concrete Institute n.d.). *See "pozzolan".*

Neurodiversity is "the range of differences in individual brain function and behavioral traits, regarded as part of the normal variation in the human population; esp. (of a group) including persons on the autism spectrum" (Oxford English Dictionary 2019; NCDJ 2021).

New Genre Public Artwork is based on engagement between audience and artwork (Tate n.d. (c); Lacy 1995; Cartiere 2003).

Non-disabled or 'people without disabilities' refers to people that are not disabled. Avoid using the term able-bodied unless it is in a quote (NCDJ 2021).

P

Parapet, also called a parapet wall, is a "low wall or railing to protect the edge of platform, roof, or bridge" (Merriam-Webster 2023k).

Participatory Artwork is the creation of artwork with or by the community for which the artwork is intended to be experienced (Lockowandt 2013).

Person-First Language "is a way of communicating that reflects knowledge and respect for people with disabilities by choosing words that recognize the person first and foremost as the primary reference and not [their] disability" (Georgia Council on Developmental Disabilities (GCCA) n.d.). Person-First language is typically used when a person does not know the preference of the person with disability; identity-first language is not preferred if the preference of a person is unknown (NCDJ 2021). However, it is always best to ask a person about their preference of using identity-first or person-first language.

Pictograph, *also called pictogram*, is an "ancient drawing or painting on a rock wall [OR] a symbol belonging to a pictorial graphic system" (Merriam-Webster 2023l).

Pictorial means "of, relating to, or consisting of pictures [OR] illustrated by pictures" (Merriam-Webster 2023m).

Pitch is "the highness or lowness of sound" (Merriam-Webster n.d.).

Place is a "meaningful experience of a given site" (Visconti et al. 2010).

Pozzolan is a class of materials that is produced by fly ash and other materials. It can be used to make cement and is a more sustainable alternative to traditional cement. (Global Cement and Concrete Association (GCCA) n.d.).

Private means “withdrawn or separated from the public body,” “not holding public office or official position,” “not within the cognizance of the people generally” (Steyn 1989, 51). “A sense of exclusion from things general, official and powerful; the association of secrecy, exclusiveness, personal property, individuality, and intimacy” (Steyn 1989, 51).

Private Art “has come to mean the art of the bourgeoisie [, or the art of the privileged, rich, or middle-class]” (Steyn 1989, 51).

Psychosomatic is used to “describe genuine physical symptoms that are caused or influenced by the mind and emotions rather than an underlying organic cause” (Smith 2021).

Public means “pertaining to the people of a country or locality; further, ‘done or made by or on behalf of the community as a whole, and ‘open to general observation’... the word ‘public’ suggests a wide audience” (Doezema and Hargrove 1977, 5-9; Zebracki 2013). “Public” constitutes the people of a particular area or region, may be seen or experienced by all people, and “may be done or made by or on behalf of the community as a whole” (Doezema and Hargrove 1977, 5-9; Zebracki 2013, 304).

Public Art is “art in the service of the people, rather than the ruling factions” (Crush 2014). It includes “permanent and temporary artworks, which are commissioned for openly accessible locations, that is, outside conventional settings such as museums and galleries (Miles 1989). Public art integrates the site as part of the content (Hein 1996; Zebracki 2013, 303).

Public Space refers to any space all people are welcome to interact with and experience.

R

Region is an administrative area, division, or district; an indefinite area of the world or universe” (Merriam-Webster 2023n).

Relational Aesthetics / Artwork is characterized by artwork that is created for all people (ideally) and is meant to be experienced in public spaces instead of private institutions (Duncan and Cooper 2020; Artsy n.d.; Martin 2007; Tate n.d. (b)).

Resistance Artwork is a form of Disenfranchised Art. Resistance Art often “explores issues of oppression and struggles. This work tends to look at the dominant culture’s role in “defining” the disenfranchised group’s rights and identity” (Deaf-Art n.d.).

S

Saturation is how “vivid, rich, or intense a color is” (Scott 2019).

Scrap Wood is wood left over from a fabrication, construction, or other creative project.

Sculpture is a “three-dimensional work of art, such as a statue” (Merriam-Webster 2023o).

Sensory Accessibility “accommodates aspects of a sensory disability and describes architectural design requirements needed to ensure access to sensory experiences and architectural quality of a given space” (Ryhl 2010, 109).

Shade is a “color produced by a pigment or dye mixture having some black in it; a color slightly different from the one under consideration” (Merriam-Webster 2023p).

Signage is a “sign (as of identification, warning, or direction) or a system of such signs” (Merriam-Webster 2023q).

Smart Glass is also called a smart window or switchable window; this type of class can change from transparent to translucent and vice versa (Gauzy n.d.).

Space is “something anonymous” (Visconti et al. 2010, 512); space is “a boundless three-dimensional extent in which objects and events occur and have relative position and direction” (Merriam-Webster 2023r).

Spatial means “relating to, occupying, or having the character of space” (Merriam-Webster 2023s).

Statue is a “three-dimensional representation usually of a person, animal, or mythical being that is produced by sculpturing [or other methods of artmaking]” (Merriam-Webster 2023t).

T

The Medical Model of Disability regards Persons with Disabilities as “sufferers, ill, or [inflicted with] an incurable or an incurable condition” (Robinson 1998, 120). This model typically sees the person without a disability as pitying or sympathizing with Persons with Disabilities.

The Social Model of Disability recognizes the humanity of Persons with Disabilities and does not pity or look down upon them. This model sees people without a disability incorporating adaptations for Persons with Disabilities into everyday life, so adaptations become normal practice (Robinson 1998).

The Americans with Disabilities Act (1990) provides legislation to “protect against disability discrimination in the built environment” (National Endowment for the Arts 2021, 21).

Tint is “a variation of a color produced by adding white to it and characterized by a low saturation with relatively high lightness” (Merriam-Webster 2022u).

U

Universal Design is a “design concept that as an ideal vision rises above the differences between functionality and experiences as well as physical and sensory impairments, as it recognizes human impairment as a universal condition that all human beings will experience at one point in their lifetime” (Steinfeld and Maisel 2012, 111-112; Rhyl 2010; Center for Universal Design 2006).

Urban Park is defined as being “often confined to small places (as compared to rural landscapes). An urban park is a place that is both an enclosure with borders and a place connected to some type of garden presenting “an image of paradise in the collective imagination” (Crush 2014, 22).

W

Wayfinding is a type of design that is clear, intuitive, and nonverbal; it helps users find their way through space, "reducing stress and increasing efficiency" (Craig Gaulden Davis n.d.).

Wayfinding Device is the use of colors, long sight lines, and landmarks (such as art) to help people find their way through space, create visual interest, and draw people through a space (Craig Gaulden Davis n.d.).

Appendix A

IRB Approval Letter

KANSAS STATE UNIVERSITY | University Research Compliance Office

TO: Jessica Canfield
Landscape Archit & Comm Plan
Manhattan, KS 66506

Proposal Number: IRB-11368

FROM: Lisa Rubin, Chair
Committee on Research Involving Human Subjects

DATE: 10/20/2022

RE: Proposal Entitled, "Making Public Artwork Equitable and Inclusive for Persons with Disabilities."

The Committee on Research Involving Human Subjects / Institutional Review Board (IRB) for Kansas State University has reviewed the proposal identified above and has determined that it is EXEMPT from further IRB review. This exemption applies only to the proposal - as written – and currently on file with the IRB. Any change potentially affecting human subjects must be approved by the IRB prior to implementation and may disqualify the proposal from exemption.

Based upon information provided to the IRB, this activity is exempt under the criteria set forth in the Federal Policy for the Protection of Human Subjects, **45 CFR §104(d), category:Exempt Category 2 Subsection ii.**

Certain research is exempt from the requirements of HHS/OHRP regulations. A determination that research is exempt does not imply that investigators have no ethical responsibilities to subjects in such research; it means only that the regulatory requirements related to IRB review, informed consent, and assurance of compliance do not apply to the research.

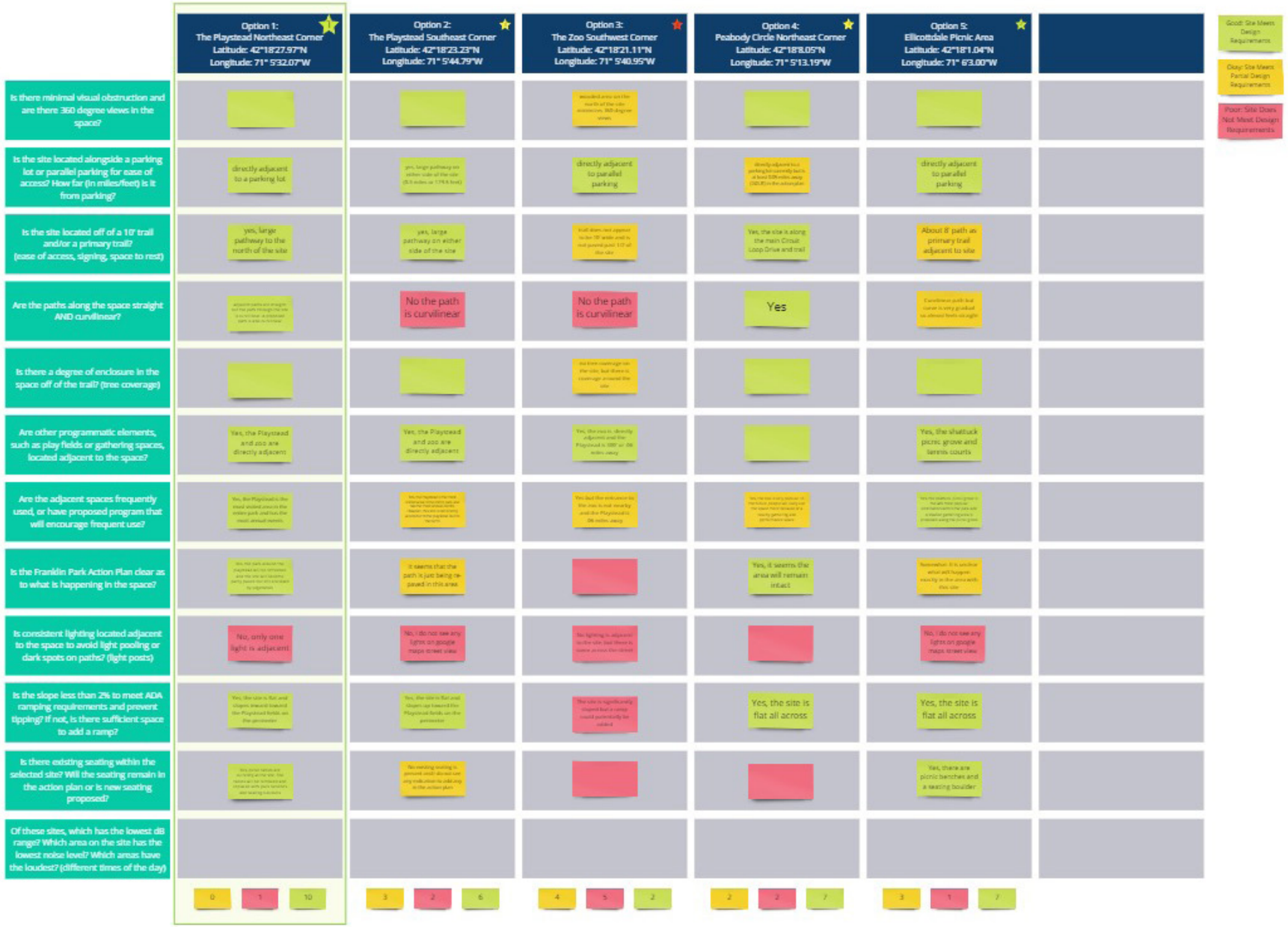
Any unanticipated problems involving risk to subjects or to others must be reported immediately to the Chair of the Committee on Research Involving Human Subjects, the University Research Compliance Office, and if the subjects are KSU students, to the Director of the Student Health Center.

Electronically signed by Phill Vardiman on 10/21/2022 11:57 AM ET
On Behalf of IRB Chair

203 Fairchild Hall, Manhattan, KS 66502 | (785) 532-3224 | fax: (785) 532-3278

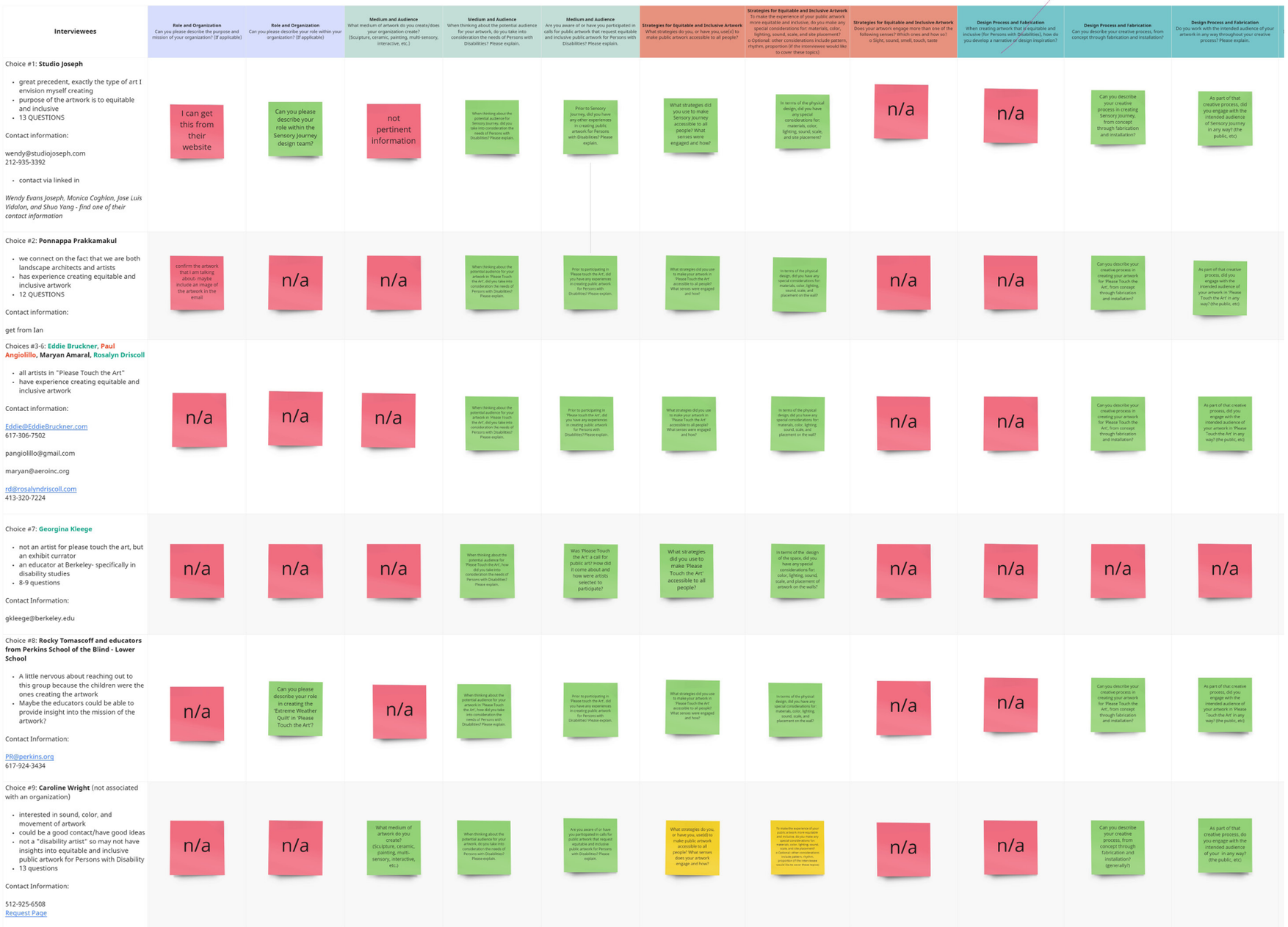
Appendix B

The Site Selection Matrix



Appendix C

Interview Question Selection Matrix



Interviewees	Role and Organization Can you please describe the purpose and mission of your organization? (If applicable)	Role and Organization Can you please describe your role within your organization? (If applicable)	Medium and Audience What medium of artwork do you create/does your organization create? (Sculpture, ceramic, painting, multi-sensory, interactive, etc.)	Medium and Audience When thinking about the potential audience for your artwork, do you take into consideration the needs of Persons with Disabilities? Please explain.	Medium and Audience Are you aware of or have you participated in calls for public artwork that request equitable and inclusive public artwork for Persons with Disabilities? Please explain.	Strategies for Equitable and Inclusive Artwork What strategies do you, or have you, used(-d) to make public artwork accessible to all people?	Strategies for Equitable and Inclusive Artwork To make the experience of your public artwork more equitable and inclusive, do you make any special considerations for: materials, color, lighting, sound, scale, and site placement? o Optional: other considerations include pattern, rhythm, proportion (if the interviewee would like to cover these topics)	Strategies for Equitable and Inclusive Artwork Does your artwork engage more than one of the following senses? Which ones and how so? o Sight, sound, smell, touch, taste	Design Process and Fabrication When creating artwork that is equitable and inclusive (for Persons with Disabilities), how do you develop a narrative or design inspiration?	Design Process and Fabrication Can you describe your creative process, from concept through fabrication and installation?	Design Process and Fabrication Do you work with the intended audience of your artwork in any way throughout your creative process? Please explain.
Choice #1: **Studio Joseph** • great precedent, exactly the type of art I envision myself creating • purpose of the artwork is to equitable and inclusive • 13 QUESTIONS Contact information: wendy@studiojoseph.com 212-935-3392 • contact via linked in *Wendy Evans Joseph, Monica Coghlan, Jose Luis Vidalon, and Shuo Yang - find one of their contact information*	I can get this from their website	Can you please describe your role within the Sensory Journey design team?	not pertinent information	When thinking about the potential audience for Sensory Journey, did you take into consideration the needs of Persons with Disabilities? Please explain.	Prior to Sensory Journey, did you have any other experiences in creating public artwork for Persons with Disabilities? Please explain.	What strategies did you use to make Sensory Journey accessible to all people? What senses were engaged and how?	In terms of the physical design, did you have any special considerations for: materials, color, lighting, sound, scale, and site placement?	n/a	n/a	Can you describe your creative process in creating Sensory Journey, from concept through fabrication and installation?	As part of that creative process, did you engage with the intended audience of Sensory Journey in any way? (the public, etc)
Choice #2: **Ponnappa Prakkamakul** • we connect on the fact that we are both landscape architects and artists • has experience creating equitable and inclusive artwork • 12 QUESTIONS Contact information: get from Ian	confirm the artwork that I am talking about- maybe include an image of the artwork in the email	n/a	n/a	When thinking about the potential audience for your artwork in 'Please Touch the Art', did you take into consideration the needs of Persons with Disabilities? Please explain.	Prior to participating in 'Please touch the Art', did you have any experiences in creating public artwork for Persons with Disabilities? Please explain.	What strategies did you use to make your artwork in 'Please Touch the Art' accessible to all people? What senses were engaged and how?	In terms of the physical design, did you have any special considerations for: materials, color, lighting, sound, scale, and placement on the wall?	n/a	n/a	Can you describe your creative process in creating your artwork for 'Please Touch the Art', from concept through fabrication and installation?	As part of that creative process, did you engage with the intended audience of your artwork in 'Please Touch the Art' in any way? (the public, etc)
Choices #3-6: **Eddie Bruckner, Paul Angiolillo, Maryan Amaral, Rosalyn Driscoll** • all artists in "Please Touch the Art" • have experience creating equitable and inclusive artwork Contact information: Eddie@EddieBruckner.com 617-306-7502 pangiolillo@gmail.com maryan@aeroinc.org rd@rosalyndriscoll.com 413-320-7224	n/a	n/a	n/a	When thinking about the potential audience for your artwork in 'Please Touch the Art', did you take into consideration the needs of Persons with Disabilities? Please explain.	Prior to participating in 'Please touch the Art', did you have any experiences in creating public artwork for Persons with Disabilities? Please explain.	What strategies did you use to make your artwork in 'Please Touch the Art' accessible to all people? What senses were engaged and how?	In terms of the physical design, did you have any special considerations for: materials, color, lighting, sound, scale, and placement on the wall?	n/a	n/a	Can you describe your creative process in creating your artwork for 'Please Touch the Art', from concept through fabrication and installation?	As part of that creative process, did you engage with the intended audience of your artwork in 'Please Touch the Art' in any way? (the public, etc)
Choice #7: **Georgina Kleege** • not an artist for please touch the art, but an exhibit currator • an educator at Berkeley- specifically in disability studies • 8-9 questions Contact Information: gkleege@berkeley.edu	n/a	n/a	n/a	When thinking about the potential audience for 'Please Touch the Art', how did you take into consideration the needs of Persons with Disabilities? Please explain.	Was 'Please Touch the Art' a call for public art? How did it come about and how were artists selected to participate?	What strategies did you use to make 'Please Touch the Art' accessible to all people?	In terms of the design of the space, did you have any special considerations for: color, lighting, sound, scale, and placement of artwork on the walls?	n/a	n/a	n/a	n/a
Choice #8: **Rocky Tomascoff and educators from Perkins School of the Blind - Lower School** • A little nervous about reaching out to this group because the children were the ones creating the artwork • Maybe the educators could be able to provide insight into the mission of the artwork? Contact Information: PR@perkins.org 617-924-3434	n/a	Can you please describe your role in creating the 'Extreme Weather Quilt' in 'Please Touch the Art'?	n/a	When thinking about the potential audience for your artwork in 'Please Touch the Art', how did you take into consideration the needs of Persons with Disabilities? Please explain.	Prior to participating in 'Please touch the Art', did you have any experiences in creating public artwork for Persons with Disabilities? Please explain.	What strategies did you use to make your artwork in 'Please Touch the Art' accessible to all people? What senses were engaged and how?	In terms of the physical design, did you have any special considerations for: materials, color, lighting, sound, scale, and placement on the wall?	n/a	n/a	Can you describe your creative process in creating your artwork for 'Please Touch the Art', from concept through fabrication and installation?	As part of that creative process, did you engage with the intended audience of your artwork in 'Please Touch the Art' in any way? (the public, etc)
Choice #9: **Caroline Wright** (not associated with an organization) • interested in sound, color, and movement of artwork • could be a good contact/have good ideas • not a "disability artist" so may not have insights into equitable and inclusive public artwork for Persons with Disability • 13 questions Contact Information: 512-925-6508 Request Page	n/a	n/a	What medium of artwork do you create? (Sculpture, ceramic, painting, multi-sensory, interactive, etc.)	When thinking about the potential audience for your artwork, do you take into consideration the needs of Persons with Disabilities? Please explain.	Are you aware of or have you participated in calls for public artwork that request equitable and inclusive public artwork for Persons with Disabilities? Please explain.	What strategies do you, or have you, used(-d) to make public artwork accessible to all people? What senses does your artwork engage and how?	To make the experience of your public artwork more equitable and inclusive, do you make any special considerations for: materials, color, lighting, sound, scale, and site placement? o Optional: other considerations include pattern, rhythm, proportion (if the interviewee would like to cover these topics)	n/a	n/a	Can you describe your creative process, from concept through fabrication and installation? (generally?)	As part of that creative process, do you engage with the intended audience of your 'in any way? (the public, etc)

Appendix C

Interview Question Selection Matrix, Continued

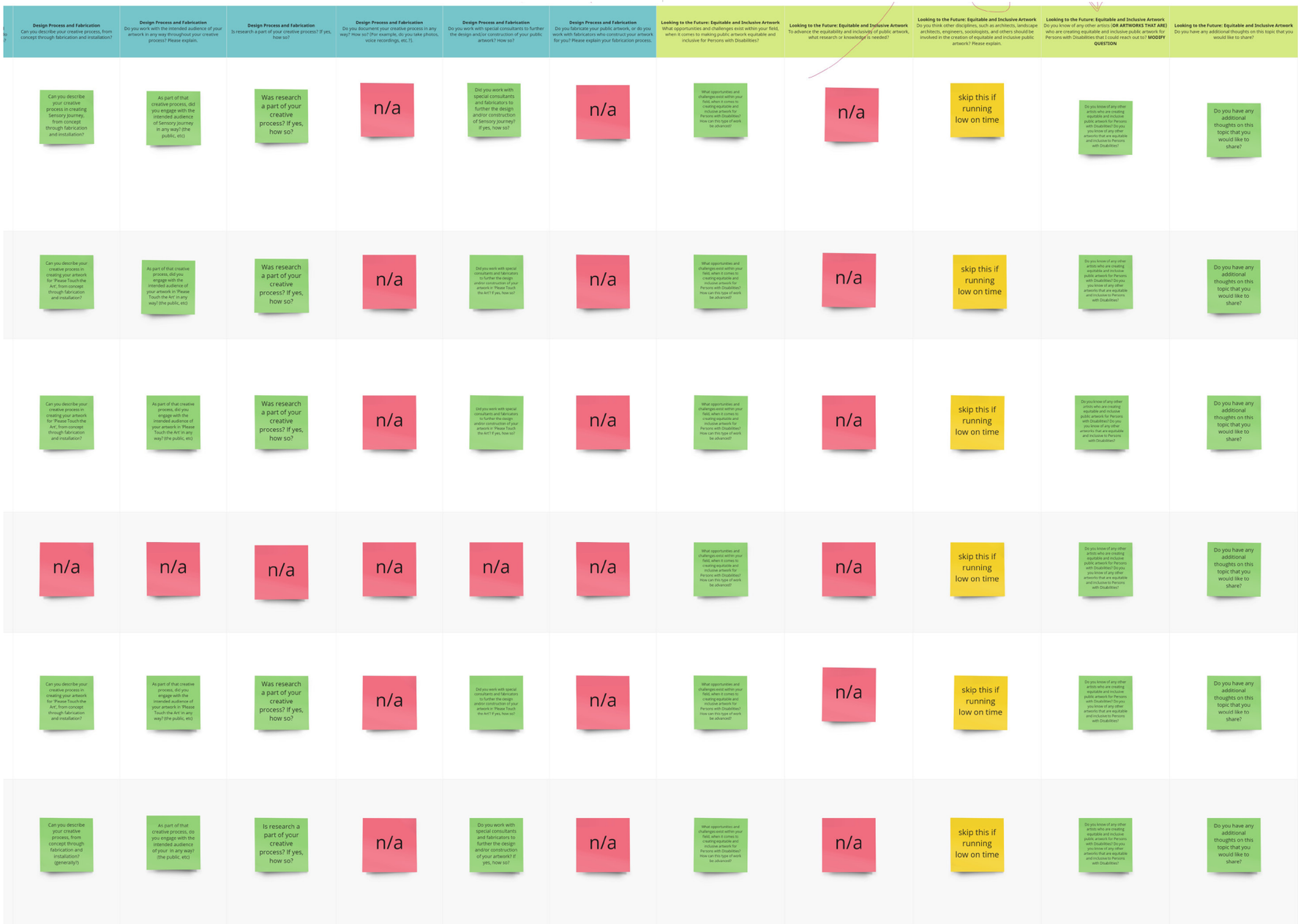


Image Permissions

For Precedent Analyses

HI Katherine,
Please credit Alon Koppel Photography.

Although the report isn't a publication per se, reports like these are often held in a data base, so best to follow good practice.

I would love to see your work when you finish. Let me know if it would also be possible to share with the folks at Art Omi.
Again, it was lovely to meet you and thanks so much for your interest in this project.

Best,
Wendy

Permission to use 'Sensory Journey' images from Wendy Evans Joseph.

'All About Us'





These images were screenshot from your Instagram page. **Do I have your permission to use these images in my book? (yes)**

Permission to use 'All About Us' images from Ponnapa Prakkamakul.

'Blooming'




These images were screenshot from your Instagram page. **Do I have your permission to use these images in my book? (yes)**

Permission to use 'Blooming' images from Ponnapa Prakkamakul.

Hi Katherine,

Here are three pictures. Please refer to Fillip Studios when you use them in your project.
Good luck!

Schermafbeelding 2019-01-31 om 14.00.10.png

Schermafbeelding 2019-01-31 om 13.59.56.png

Schermafbeelding 2019-01-31 om 13.59.55.png

Kind regards,

Tom Kortbeek
Designer & Co-founder

Fillip Studios

Permission to use 'Bio Orchestra' images from Tom Kortbeek.

Hello Katherine,

The first picture was taken in 2019.
For the second one, you can mention Cooper Hewitt Design Museum. JPEG in attachment :).
Good luck!

Permission to use 'Tactile Orchestra' images from Tom Kortbeek.

Yes, you have my permission to use images of Memories of Bone, Pandora's Box 6 and Pandora's Box 8 in your masters thesis.

I'll have to send you the university for Raphael this weekend since I'm not at my computer until then.
Cheers,
Roz

Permission to use 'Memories of Bone,' 'Pandora's Box 6,' and 'Pandora's Box 8' images from Rosalyn Driscoll.

Hi Katherine,

Yes, you are welcome to use those images. All three were taken by me in 2020.

Very best,
Shannon

Permission to use 'Reset Rooms' images from Shannon Finnegan.

00:47:03.000 --> 00:47:13.000
Yeah, do you have any photos of restorative ground that you would be willing to share with me and let me use

00:47:13.000 --> 00:47:17.000
Yeah, of course, I mean, I'm a team. And you've seen maybe the ones on the website

Permission to use 'Restorative Ground' images from Sonya Gimon.

Hi Katherine,

Attached are images of:

The Vesuvius Lava rock

A plaster copy of the rock

The two part rubber mould of the rock from which the wax positives will be made then cast into bronze

The bronze castings of my ears which will hang inside the bronze of the rock and act as the clapper when the bell is touched/moved by beholders.

I think it will be a few weeks before the piece is cast into bronze so, apologies but that is as far as I have got at the moment.

All images are by Aaron McPeake (2023)

Do let me know if there is anything further I can clarify.

Best wishes with your work.

Aaron

Permission to use 'A Sense of Vesuvius' images from Aaron McPeake.

Hi Katherine,
I'm so sorry, this got stuck at the bottom of my todo list!

Let me know if the pdf comments I added didn't show up.
The photog name is: Andria Lo
They were both made in 2021
The PDF is a scan actually, so mine.
They were both made just b/c I wanted to, they were shown in the graduat

Good luck on your defense!
-Jillian

Permission to use 'Built and Maintained for Certain Bodies' images from Jillian Crochet. -add after I hear back

Hi Katherine,

You are clear to use Sasaki images. Please cite Sasaki.

Thanks and apologies for the tardiness in getting back to you.

Best,

[redacted]

Ian Scherling
Senior Associate

Permission to use 'Boston City Hall Plaza,' 'Sampan,' 'Virginia Polytechnic Institute,' 'University of Kentucky,' and 'Braille Trail' images from Sasaki.

Hi Katherine,

Apologies for the delay – I just heard back from MASS last week. Below is a link to a Dropbox folder with some of our renderings for your use.
https://www.dropbox.com/scl/fo/eannvrla8dp3o539tb7dt/h?dl=0&rlkey=fkoju4i63xus0pe5tp4is5v68

Please let me know if there is anything else you are looking for.

Best,

Rachel Salmela, PLA

Permission to use 'Louise B. Memorial and Freedom Garden' images from Rachel Samela at TEN x TEN.



Hi Katherine,

Yes, you have my permission to use the photos I took of the Lilac Lane Project. I have attached the images to this email.

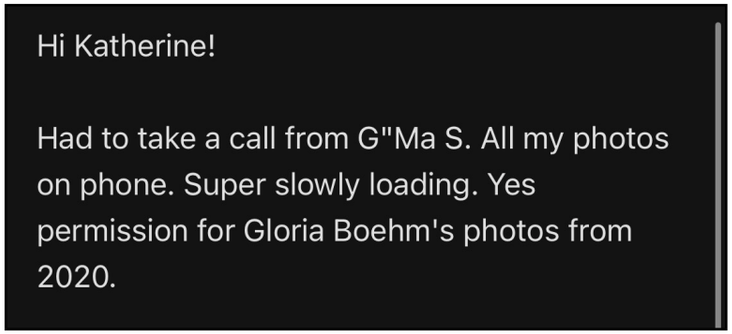
All of the attached photos were taken by Chloe Gillespie in April 2021.

Please let me know if you need anything else.

Thanks,
Chloe

Chloe Gillespie
5th Year Landscape Architecture | College of Architecture, Planning, and Design | Kansas State University

Permission to use 'Powerline Pole' images from Chloe Gillespie.



Hi Katherine!

Had to take a call from G"Ma S. All my photos on phone. Super slowly loading. Yes permission for Gloria Boehm's photos from 2020.

Permission to use 'Black Lives Matter Mural Painting' images from Gloria Boehm.

