

## ABSTRACT

Title of Thesis: THE SURVIVORS' MONUMENT: AN EMPOWERING AND HEALING LANDSCAPE FOR SURVIVORS OF SEXUAL VIOLENCE AND THEIR SUPPORTERS AT THE UNIVERSITY OF MARYLAND

Laura Katherine Robinson, Master of Landscape Architecture, 2018

Thesis Directed By: Dr. Byoung-Suk Kweon, Associate Professor Plant Science and Landscape Architecture

This design investigation explores the duality of landscape architecture to be both a tool for healing survivors of sexual violence and a mechanism for spreading awareness to the general population at the University of Maryland. To design the site, a literature review of healing gardens and case studies were undertaken to uncover the parameters for successfully designing with the restorative properties of nature and healing garden techniques. To understand how to apply this research to redesign the site, Morrill Quad was inventoried and analyzed. The result is a space where awareness and restorative elements are merged to promote the healing of individuals and the community. By utilizing the restorative qualities of nature with healing garden design techniques, the space creates opportunities for stress reduction and

mental restoration for all users. The concept of a monument is re-imagined from one object symbolizing an event or person to an entire space representing a movement and those that support it. This monument space serves as an educational piece, a place to embody survivors' voices, and a restorative environment for survivors and students.

THE SURVIVORS' MONUMENT: AN EMPOWERING AND HEALING  
LANDSCAPE FOR SURVIVORS OF SEXUAL VIOLENCE AND THEIR  
SUPPORTERS AT THE UNIVERSITY OF MARYLAND

by

Laura Katherine Robinson

Thesis submitted to the Faculty of the Graduate School of the  
University of Maryland, College Park, in partial fulfillment  
of the requirements for the degree of  
Master of Landscape  
Architecture  
2018

Advisory Committee:  
Dr. Byoung-Suk Kweon, Chair  
Dr. David Myers  
Ms. Fatima N. Taylor

© Copyright by  
Laura Katherine Robinson  
2018

## ACKNOWLEDGEMENTS

I will be forever grateful to Dr. Kweon for her guidance, expertise and encouragement throughout my thesis journey. I would also like to extend my gratitude to Dr. Myers for his thoughtful advice and to Fatima Taylor for offering her time and knowledge from the C.A.R.E team.

Most importantly, I want to thank my husband, Dean, for his unwavering love and support through the past three years.

# TABLE OF CONTENTS

<b>ACKNOWLEDGEMENTS</b> .....	ii
<b>TABLE OF CONTENTS</b> .....	iii
<b>LIST OF FIGURES</b> .....	vi
<b>CHAPTER 1: BACKGROUND</b> .....	1
1.1 Introduction.....	1
1.1 Sexual Violence on U.S. College Campuses .....	2
1.2 Sexual Violence at the University of Maryland.....	3
1.3 Laws, Regulations and Organizations Pertaining to Sexual Violence and Discrimination at the University of Maryland .....	4
1.3.1 Title IX.....	4
1.3.2 Violence Against Women Act .....	5
1.3.3 C.A.R.E. to Stop Violence .....	6
1.3.4 Awareness Events and Initiatives on Campus .....	7
1.4 Survivors’ Responses to Trauma .....	9
1.4.1 Common immediate actions or feelings to trauma .....	9
1.4.2 Common long-term actions or feelings to trauma .....	10
<b>CHAPTER 2: NATURE, STRESS REDUCTION, AND DESIGN</b> .....	11
2.1 Healing Benefits of Nature .....	11
2.1.1 Biophilia.....	11
2.1.2 Nature and Hospitals.....	11
2.1.3 Nature and Stress Reduction in a University Context .....	12
2.2 Design Theories .....	12
2.2.1 Healing Gardens and Reducing Stress.....	12
2.2.2 Prospect and Refuge Theory .....	14
2.2.3 Restorative Environments .....	15

<b>CHAPTER 3: SAFETY</b> .....	17
3.1 Crime Prevention Through Environmental Design (CPTED) .....	17
<b>CHAPTER 4: CASE STUDIES</b> .....	19
4.1 The Monument Quilt, Washington, DC.....	19
4.1.1 Techniques .....	20
4.1.2 Critique .....	21
4.2 National AIDS Memorial Grove, San Francisco .....	22
4.2.1 Techniques .....	22
4.2.2 Critique .....	23
4.3 Survivor’s Garden, University of Maryland.....	24
4.3.1 Techniques .....	25
4.3.2 Critique .....	25
<b>CHAPTER 5: METHODS</b> .....	27
5.1 Context.....	27
5.2 Site Selection .....	28
5.2.1 Proximity to Shoemaker .....	28
5.2.2 Underutilized Resource.....	28
5.2.3 Visibility on Campus .....	30
5.3 Site Inventory.....	28
5.3.1 Hydrology & Elevation.....	31
5.3.2 Watershed .....	32
5.3.3 Soil .....	32
5.3.4 Vegetation .....	33
5.3.5 History.....	35
5.3.6 Proximity to Relevant Campus Buildings.....	36
5.3.7 Steam Pipe .....	37
5.3.8 Circulation.....	38
5.4 Opportunities and Constraints.....	39

<b>CHAPTER 6: DESIGN CONCEPT AND PROGRAM</b> .....	41
6.1 Design Goals .....	41
6.2 Design Program .....	41
<b>CHAPTER 7: DESIGN</b> .....	43
7.1 Design Strategy & Process.....	43
7.2 Design Elements .....	45
7.2.1 The Healing Gateway .....	45
7.2.2 C.A.R.E. Dedication Area.....	45
7.2.3 Overlook Seating .....	46
7.2.4 Dry Stream .....	47
7.2.5 “Survivors’ Plaza” .....	47
7.2.6 Meandering Paths.....	50
7.2.7 Interpretive and Empowering Signage.....	50
<b>CHAPTER 8: CONCLUSION</b> .....	52
8.1 Evaluating the Design .....	52
8.1.1 Five Patterns for Restorative Environments .....	52
8.1.2 Four Means of Reducing Stress in Healing Gardens .....	53
8.1.3 Prospect-Refuge Theory .....	55
8.2 Future Considerations & Final Reflections.....	56
<b>BIBLIOGRAPHY</b> .....	58

## LIST OF FIGURES

Figure 1. “Reports, Complaints and Investigations based on data from the University of Maryland Student Sexual Misconduct Report 2016-2017” .....	4
Figure 2. “View of Clothesline Project shirts hanging in Hornbake Plaza for the Spring 2018 event” .....	8
Figure 3. “Prospect and Refuge” .....	15
Figure 4. “A stroll through quilts” .....	20
Figure 5. “A Sea of Quilts” .....	21
Figure 6. “National AIDS Memorial Grove in San Francisco's Golden Gate Park in March 2018” .....	23
Figure 7. “Students plant in garden outside of UMD Health Center in honor of domestic violence victims” .....	26
Figure 8. "Morrill Quad in the Historic Core" .....	27
Figure 9. “Early spring view of Morrill Quad facing southwest toward Morrill Hall” ....	29
Figure 10. “Early spring view of Morrill Quad facing east” .....	30
Figure 11. “Two-foot contours on Morrill Quad” .....	31
Figure 12. “Morrill Quad sub-watersheds” .....	32
Figure 13. “Morrill Quad Soil Map and Information” .....	33
Figure 14. “Map of Morrill Quad with Tree Inventory” .....	34
Figure 15. “Map in Morrill Quad of Historic Campus” .....	35
Figure 16. “Campus, 1941,” .....	36
Figure 17. “Proximity of Relevant Campus Resources” .....	37
Figure 18. “Steam-pipe location on Morrill Quad” .....	38
Figure 19. “Existing circulation in Morrill Quad” .....	39
Figure 20. "Site plan with new contours" .....	43
Figure 21. “Site Plan with Labels” .....	44
Figure 22. “Perspective of healing gateway arch” .....	45
Figure 23. “Blooming schedule of possible bulbs to be used in the dedication area” .....	46
Figure 24. “Perspective of overlook seating area with dry stream and healing gateway in background” .....	47

Figure 25. “Perspective of Survivors' Plaza” .....	48
Figure 26. "Section-Elevation of Morrill Hall and Survivors' Plaza Steps” .....	49
Figure 27. “Perspective of Take back the night event in Survivors' Plaza” .....	50
Figure 28. “Corten signage throughout site” .....	51
Figure 29. “Diagram of applicable elements of Kaplan, Kaplan, and Ryan's five patterns for restorative environments” .....	53
Figure 30. “Diagram of site with applicable means of reducing stress from Marcus and Sachs” .....	54
Figure 31. “Diagram of Prospect-Refuge areas on the site” .....	56

## CHAPTER 1: BACKGROUND

### 1.1 Introduction

Sexual violence on U.S. college campuses has become a mainstream media topic. In the last decade, media coverage of sexual misconduct and rape cases has not only been increasing but the coverage has been changing from episodic, when an incident occurs, to thematic, non-incident related (Baumgartner & McAdon, 2017). This change in media coverage shows that the amount of dialogue surrounding sexual violence and rape culture on campuses is increasing. Southern Connecticut University defines rape culture as: “an environment in which rape is prevalent and in which sexual violence is normalized and excused in the media and popular culture” (Southern Connecticut State University, n.d.). To create a positive and safe space for all students, rape culture must be combated on campuses by spreading awareness and education.

Survivors of sexual violence, relationship violence, and stalking are negatively affected by the incidents they have been involved in. Studies show that a history of nonconsensual sex is linked to high cholesterol, stroke and heart disease for both men and women (Smith & Breiding, 2011). Trauma from these experiences leads to anxiety, depression, and even posttraumatic stress disorder. College-aged women and men are often victims of sexual violence, relationship violence, and stalking. Many students do not use the judicial processes available or do not receive the outcome they had hoped for, and because of this some students must continue their education on the same campus as their perpetrator.

This information shows how important it is for survivors to have a space to heal, feel supported by their surrounding community, and to feel ownership of their own healing process. Time outdoors, specifically wooded areas, can reduce blood pressure, heart rates and lower the production of cortisol, a stress hormone (Park, Tsungetsugu, Kasetani, Kagawa, & Miyazaki, 2010). Nature's restorative abilities can be used to combat the adverse effects of sexual violence, relationship violence, and stalking to a survivor's well-being.

This design investigation uses landscape architecture as a catalyst for positive dialogue surrounding sexual violence, relationship violence, stalking and consent. By utilizing the restorative qualities of nature my goal is to redefine the concept of a monument so that it not only symbolizes an event or person, but instead represents a movement and those that support it. This monument space serves as an educational piece, a place to embody survivors' voices, and a restorative environment for survivors and students. The space itself becomes a part of the healing process and its users become the monument.

### **1.1 Sexual Violence on U.S. College Campuses**

In the United States, sexual assault and rape are a prevalent health concern for students on college campuses. In a 2009 study it was found that 19% of undergraduate women experienced attempted or completed sexual assault upon entering university (Krebs, Linquist, Warner, Fisher, & Martin, 2009). A study by the Department of Justice found that college students account for 70% of the victimized males between the ages of 18-24 (Department of Justice, 2014). The same study reported that only 16% of female

student victims of sexual assault and rape received assistance from a victim services agency (Department of Justice, 2014).

In a 2015 survey of over 150,000 students at 27 different American universities it was found that 11.2% of all student participants “reported experiencing nonconsensual sexual contact by physical force, threats of physical force, or incapacitation since they enrolled at their university” (Cantor, et al., 2015). Data from the Behavioral Risk Factor Surveillance System found links between a history of nonconsensual sex and high cholesterol, stroke and heart disease for both men and women (Smith & Breiding, 2011). These studies show that not only is a large percentage of the college student population victimized, but it continues to negatively impact the health of survivors after the fact.

## **1.2 Sexual Violence at the University of Maryland**

The University of Maryland, College Park, is not immune to sexual violence. The Office of Civil Rights & Sexual Misconduct (OCRSM) at the University of Maryland reported that in the 2016-2017 academic school year it received 208 reports of sexual misconduct, an 86% increase from the 2014-2015 academic school year (Figure 1) (The Office of Civil Rights and Sexual Misconduct, 2017). It is important to note that the cause of this increase has not been determined. A researcher from the U.S. Department of Education wrote in an email to the Daily Beast that research cannot discern whether the national increase in campus assaults “are a result of an increase in actual assaults, or as a result of more individuals coming forward to report assaults when they occur” (Crocker, 2017). The University of Maryland Police Department reported 30 acts of rape and 36 acts of fondling between 2014 to 2016 for the Clery Act statistics report (University of Maryland Police Department, 2017).



Figure 1. “Reports, Complaints and Investigations based on data from the University of Maryland Student Sexual Misconduct Report 2016-2017” by author

These statistics should not be viewed as complete as a study found that only 20% of female student victims aged 18-24 report sexual violence committed against them to authorities (Department of Justice, 2014).

### **1.3 Laws, Regulations and Organizations Pertaining to Sexual Violence and Discrimination at the University of Maryland**

#### 1.3.1 Title IX.

In 1972, the Title IX federal law was created to prohibit discrimination based on sex by any education program, organization or activity funded by the federal government.

(The United States Department of Justice, 2015). The main goal of the law is to prohibit federal money being used in support of sex discrimination in education, and to protect citizens against discriminatory practices (The United States Department of Justice, 2015). Because the University of Maryland is a public university that receives federal funds, it must comply with all Title IX regulations. The Office of Civil Rights and Sexual Misconduct was created in 2014 to aid the university in complying with Title IX (The Office of Civil Rights & Sexual Misconduct, n.d.). The office lists the following responsibilities on their website:

- “Grievance procedures for resolving Title IX (sexual misconduct and sex discrimination) complaints,
- Monitoring outcomes, identifying and addressing any patterns, and assessing effects on the campus climate,
- Collection and analysis of information from an annual climate survey, Assess, respond and investigate complaints of sexual misconduct and discrimination,
- Develop and conduct compliance, policy and prevention training for faculty, staff and students,
- Promote a UMD specific sexual misconduct awareness campaign, and Organize and facilitates campus wide awareness events” (The Office of Civil Rights & Sexual Misconduct, n.d.).

### 1.3.2 Violence Against Women Act

The Violence Against Women Act (VAWA) was created in 1994 and most recently reauthorized in 2013. The law was created to protect women from violence,

provide for victims of violence, and hold offenders accountable (VAWA Fact Sheet). The Annual Safety and Security Report published by the University of Maryland Police Department, contains a section pertaining to VAWA. In it the department offers resources for survivors, educational campaigns on campus, and means for filing a report or complaint (University of Maryland Police Department, 2017).

### 1.3.3 C.A.R.E. to Stop Violence

Campus Advocates Respond and Educate (C.A.R.E.) to Stop Violence is an organization on the University of Maryland campus, hosted in the Health Center. The C.A.R.E. team provides counseling sessions, advocacy services, short-term animal psychotherapy, and a 24-hour crisis hotline. The free services are available for those impacted by sexual assault, dating violence, domestic violence, stalking and sexual harassment, people who care about those impacted, and non-offending partners (Campus Advocates Respond and Educate to Stop Violence, 2009). The website states the organization's mission as:

1. "To respond to incidents of sexual assault, domestic violence, dating violence, stalking and sexual harassment effecting all genders of the University community,
2. "To educate the University community about sexual assault, domestic violence, dating violence, stalking, sexual harassment and bystander intervention; empowering members of the campus community to act to reduce such violence" (Campus Advocates Respond and Educate to Stop Violence, 2009, para 4-5).

Many campus organizations, including the greek community, work with C.A.R.E. staff and PEER Educators to create programs and educate the University of Maryland community.

#### 1.3.4 Awareness Events and Initiatives on Campus

The following events and/or initiatives occur on campus by various organizations:

1. *Rule of Thumb campaign*: The Office of Civil Rights and Sexual Misconduct implemented the Rule of Thumb campaign as a way to spread public awareness of sexual misconduct on a campus-wide level. Students can take the pledge on the OCRSM website (The Office of Civil Rights and Sexual Misconduct, n.d.).
2. *The Clothesline Project*: Every fall and spring, the C.A.R.E. team runs The Clothesline Project by allowing students to write messages on t-shirts and hang them in Hornbake Plaza on clotheslines with clothespins. The messages are not censored in anyway other than not allowing someone's full name to be used. In an article by the DiamondBack, LaVonne White, C.A.R.E.'s lead educator stated that it allows students "to see the impact of what sexual violence, relationship violence and stalking violence looks like" (Roscoe, 2017, para 4) According to White, the University of Maryland has been participating since the nineties. Because participants are not censored, the Clothesline Project is one of the more impactful and memorable events on campus related to spreading awareness of sexual violence and relationship violence (Roscoe, 2017).



Figure 2. “View of Clothesline Project shirts hanging in Hornbake Plaza for the Spring 2018 event” by author

3. *Purple Light Night*: The C.A.R.E. team hosts the Purple Light Night during Domestic Violence Awareness month to “honor victims and survivors of relationship violence” (Division of Student Affairs, n.d., para 1) The program incorporates speakers, artists, professionals, and performers to help raise awareness and raise money for the C.A.R.E. Victim Assistance Fund (Division of Student Affairs, n.d.).
4. *Walk a Mile in Her Shoes*: The OCRSM hosts the event Walk a Mile in Her Shoes® to create a way for men, and male-identifiers to help spread awareness about the sexual violence against women caused by men. (Division of Student Affairs, n.d.). At the event, men wear high-heeled

shoes and walk a mile-long course. The purpose of the event is to create a light-hearted atmosphere for talking about a difficult subject: men's violence toward women. The University of Maryland makes it clear that while the event is targeted at men, anyone can participate, no matter their gender-identification (Division of Student Affairs, n.d.).

5. *Take Back the Night*: The Take Back the Night event typically occurs in the spring and varies year to year. Events have included speakers, music, a candlelight vigil, a space for survivors to share their stories, and a march on campus.

#### **1.4 Survivors' Responses to Trauma**

According to C.A.R.E. to Stop Violence, sexual assault, relationship violence, and stalking are traumatic experiences for those that have experienced it. C.A.R.E. explains that there is no 'normal' way to react to trauma and many people will deal with traumatic experiences differently. Reactions to trauma can occur immediately as well as continue to affect the survivor long-term. The following sub-sections list common reactions to each.

##### 1.4.1 Common immediate actions or feelings to trauma

1. "Confused
2. Scared
3. Disoriented/Distracted
4. Angry
5. Numb
6. Hurt
7. As if the event never happened (denial)
8. Avoidant, choosing not to talk about what happened
9. Betrayed
10. Sad
11. Depressed

12. Anxious or panicked
13. Withdrawn
14. Hysterical
15. Hypersexual or hyposexual” (Campus Advocates Respond and Educate (C.A.R.E.) to Stop Violence Office, p. 1)

1.4.2 Common long-term actions or feelings to trauma

1. “Exacerbate challenges the victim-survivor had prior to the traumatic event, with mental health, physical problems, or drug or alcohol use.
2. Become increasingly anxious or develop an anxiety disorder.
3. Develop an eating disorder.
4. Develop a substance abuse problem.
5. Become depressed.
6. Self-injury.
7. Become hypersexual.
8. Consider suicide.” (Campus Advocates Respond and Educate (C.A.R.E.) to Stop Violence Office, p. 1).

## CHAPTER 2: NATURE, STRESS REDUCTION, AND DESIGN

### **2.1 Healing Benefits of Nature**

Research has been conducted to better understand the theories behind the positive relationship between humans and nature.

#### 2.1.1 Biophilia

Biophilia is the theory that humans are genetically inclined to feel positive effects from nature. It continues that humans have an innate attraction to connect with natural elements. Edward O. Wilson defines Biophilia as "the urge to affiliate with other forms of life" (Wilson, 1984). The theory of biophilia has resulted in many design practices in architecture and landscape architecture that focus on connecting humans with natural spaces, shapes and materials that remind people of nature (Beatley, 2016).

#### 2.1.2 Nature and Hospitals

Even views of nature from indoors can have a positive impact on the healing process. Roger Ulrich discovered a correlation between hospital patients recovery times and access to a window with a natural view (Ulrich, 1984). At a 200-person hospital in Pennsylvania, records of patients that had received cholecystectomies between 1972 and 1981 were analyzed for length of hospitalization and nurses' notes (Ulrich, 1984). Ulrich then discovered that patients in rooms with views of foliage had faster recovery times and received less negative health-related comments from nurses than those patients that had views of only a brick wall (Ulrich, 1984).

### 2.1.3 Nature and Stress Reduction in a University Context

University students experience elevated stress from the work-loads, deadlines and competitive nature of collegiate level education. The relationship between students' stress and nature as a tool to reduce stress has been researched multiple times. A study completed in the United States asked college students to identify places they seek out when they are stressed or depressed. The study found that 75% of those surveyed identified natural outdoor settings, including wooded parks and areas with water features, as places they seek out during high stress and depressive times (Francis & Marcus, 1991).

Ulrich (1979) also surveyed college students to understand the connection between nature and stress reduction. Students from the same geography class that had just completed an exam and were still feeling levels of stress and anxiety were shown either slides of urban, non-natural settings, or shown slides of natural, non-built, environments. The study found that students that had viewed the natural slides felt a statistically significant improvement in mental well-being, whereas the students that had viewed the urban slides felt worse or the same. The findings from this study suggest that individuals that are feeling stressed will feel better by being exposed to natural scenes rather than urban scenes that do not contain nature (Ulrich, 1979).

## **2.2 Design Theories**

### 2.2.1 Healing Gardens and Reducing Stress

Marcus and Sachs (2013) list four means of reducing stress that can all be achieved in a healing garden: sense of control, social support, physical movement and exercise, and positive natural distractions. The first element is sense of control. People

that feel more in control generally have less stress and are healthier than those that have had a loss of control (Evans & Cohen, 1987). Due to the nature of sexual violence, many survivors may have lost their sense of control, but a healing garden can provide an escape from that feeling. Knowing that the garden exists, having guaranteed easy access to the garden and being able to use the garden whenever the user wants all contribute to the restorative healing aspects of sense of control via the garden (Marcus & Sachs, 2013).

The second stress reducing element is social support. Those with a social support system are generally less stressed and healthier than those that do not have social interactions or support (Ulrich R. S., 1999). In the garden, opportunities for social support can be increased by adding diverse seating placement and quantities, large spaces for larger group gathering, and space for unplanned or unprogrammed activities (Marcus & Sachs, 2013).

Physical movement and exercise is the third element contributing to stress reduction. Ulrich explains that even if physical exercise is limited or mild it can still impact stress reduction (Ulrich R. S., 1999). In the garden, opportunities for movement could be looping paths with various destinations, and opportunities for interactivity and games (Marcus & Sachs, 2013).

The final stress reducer is positive natural distractions. Natural distractions are events that happen in the environment that replace or reduce worrisome thoughts in the user and subsequently reduce blood pressure and stress (Ulrich R. S., 1999). To gain the benefits of natural distractions in a garden, it must create a sense of escape, with as many natural interaction opportunities as possible (Marcus & Sachs, 2013). In addition to the

four elements, Ulrich makes the case that sense of security is an essential piece to work in conjunction with the other elements (Ulrich R. S., 1999).

### 2.2.2 Prospect and Refuge Theory

Jay Appleton proposed his “Prospect and Refuge Theory” to explain how humans perceive landscapes on an evolutionary level. Appleton postulates that human’s aesthetic satisfaction with an environment is rooted in survival needs. An unimpeded opportunity to view an environment and what it has to offer is considered a “prospect.” Any opportunity to hide is considered a “refuge.” It is possible that an element can provide both at the same time, where a person can feel both hidden and observe their surroundings (Appleton, 1996).

Using this theory in practice, particularly in a public space, creates a more welcoming space for users by reducing fears of the unknown (prospect) and by creating safe spaces for sanctuary (refuge). Figure three (next page) provides a visual example of prospect and refuge: the person on the right is hidden from view and can also view the rest of the surroundings.

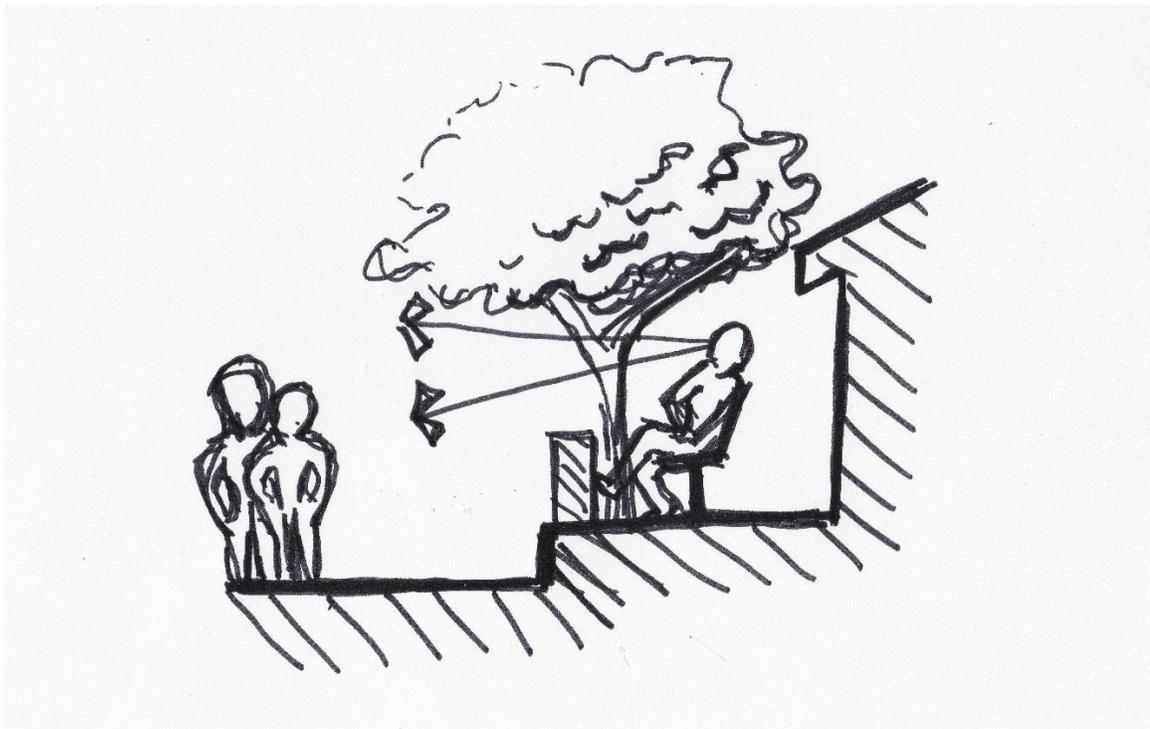


Figure 3. "Prospect and Refuge" by author adapted from Gary Austin's drawing on <https://webpages.uidaho.edu/larc453/pages/arcAndSpace.htm>

### 2.2.3 Restorative Environments

Kaplan, Kaplan, and Ryan (1998) explored the restorative qualities of nature in their book "With People in Mind: Design and Management of Everyday Nature." The authors stress the importance of nature's ability in restoration in regard to mental fatigue, decreased attention span, and irritability. They proposed five patterns for restorative environments:

1. *Quiet fascination*: Elements that provide quiet fascination are those that create opportunities for reflection. Examples are calmer, peaceful activities like fishing, hiking in the snow, viewing a stream, viewing birds on a bird feeder.

2. *Wandering in small spaces*: Small natural spaces can offer restorative qualities when they evoke depth and mystery and the idea that there is more than meets the eye. This sense of the ability to explore, even in a small space, allows the mind to wander. Japanese gardens are a good example of ‘wandering in small spaces’ because they provide a sense of mystery and depth in small spaces.
3. *Separation from distraction*: Natural areas can help create distractions from interruptions and interference of the built world. Enclosures work to minimize distractions and create an opportunity to escape. Parks in an urban environment can use canopy trees to create an oasis away from the distractions of the chaos of the city. Plantings can be used to block and direct the views of the user.
4. *Wood, stone and old*: Materials can enhance restoration by not detracting from the natural setting. Using stone and wood (natural materials) can enhance the qualities of separation, wandering, and quiet fascination.
5. *The view from the window*: One does not have to be outside to achieve the restorative qualities of nature. A window with a view of a natural environment can allow the mind to wander and focus on nature. (Kaplan, Kaplan, & Ryan, 1998).

## CHAPTER 3: SAFETY

### 3.1 Crime Prevention Through Environmental Design (CPTED)

Acts of sexual violence are deeply traumatic experiences for the victims. This trauma can greatly impact the feeling of safety a survivor feels moving forward. Therefore, it is vital that the monument space be designed so that survivors feel as safe as possible. Anxiety and fear due to feeling unsafe would negate the healing purpose of the monument space. CPTED principles will be considered to ensure the safety of users.

The basic principles of CPTED have not changed drastically since they were introduced separately by Oscar Newman and C. Ray Jeffery in the 1970s. The three principles are: Natural access control, natural surveillance, and territorial reinforcement (Fennelly & Crowe, 2013). Natural access control is used to decrease or impede access to a crime target by using spatial definition and circulation. A site design with good natural surveillance allows clear visibility of the space as well as creates a sense of surveillance in potential perpetrators. Territorial reinforcement creates a sense of ownership in the users that instills a protective mindset (Fennelly & Crowe, 2013).

Even though the success of these CPTED principles is unrefuted, Minnery and Lim created a method for measuring the success of CPTED by developing performance measures of the common principles. The results of the study showed a strong positive correlation between decreased victimization and increased CPTED principles. The study also found that there was no correlation between a decreased fear of crime and increased CPTED principles (Minnery & Lim, 2005).

Another study found that while men have a greater risk of being victims of burglary or robbery, they have a lower fear of those crimes, while women, who have a lower risk of being victims of burglary or robbery, actually have a higher fear of those crimes. The study also shows that women have a higher risk of sexual assault, and their fear of sexual assault is commensurate with that higher risk (Reid & Konrad, 2004).

Klodawsky and Lundy completed a study specific to women's fear on college campuses and found that 63% of undergraduate women changed their activities because they felt unsafe whereas only 18% of undergraduate men changed their activities (Klodawsky & Lundy, 1994). Continuing the exploration of women's fear on campus, Kristen Day conducted an investigation to see the physical and spatial context of how women fear sexual assault on college campuses (Day, 1999). Results showed that women's strongest fears were focused on assault by strangers, in open spaces, even though only 30% of cases occur in that manor. When asked to describe the areas they felt unsafe in or areas with the potential for victimization the women chose areas outdoors with limited visibility or exits, with high concealment and the possibility of being trapped (Day, 1999). The study also found that women with more context and information in relation to a building or space felt less fear than those that were unfamiliar (Day, 1999).

Continued research will be necessary to discover how it is possible to design a space so that users feel safe, especially those with traumatic histories.

## CHAPTER 4: CASE STUDIES

### 4.1 The Monument Quilt, Washington, DC

The Monument Quilt was started in 2014 (THE MONUMENT QUILT Timeline, 2017) by the organization FORCE: Upsetting Rape Culture as “a public healing space by and for survivors of rape and abuse” (FORCE, n.d.). The organization collects four foot by four foot red fabric squares that have messages or art sewn or painted on them. All of the quilt squares represent the diverse and shared stories of anyone affected by sexual violence. The intent is to create and demand a public space for survivors to heal. The quilt is also a tool to disseminate the idea that sexual violence occurs to many people not just one common narrative by the media. The quilt creates a community and culture of survivors to be publicly supported (FORCE, n.d.). For the past year, the organizers have travelled throughout the United States to display the quilt pieces in public spaces across twenty-two cities (FORCE, n.d.). The final result will be a quilt that spells out ‘Not Alone’ on the National Mall in spring 2018 with a projection of 6,000 quilt squares similar to those in Figure 5. A rendered image of the final quilt is available on The Monument Quilt’s and FORCE’s webpages.



Figure 4. “A stroll through quilts” by Staff Sgt. Alexandre Montes retrieved on May 27, 2018 from <http://www.25af.af.mil/News/Photos/igphoto/2001592273/>. Labelled for reuse.

#### 4.1.1 Techniques

The Monument quilt is a grass-roots, crowd-sourced temporary public art installation. There is no censorship of survivor’s and supporters’ messages and it is free to submit although donations are accepted to cover the organizations costs of creating the quilt. Submitted pieces can also be viewed online or at a travelling quilt event (Figure 5) (FORCE, n.d.).



*Figure 5. “A Sea of Quilts” by Staff Sgt. Alexandre Montes retrieved on May 27, 2018 from <http://www.25af.af.mil/News/Photos/igphoto/2001592267/>. Labelled for reuse.*

#### 4.1.2 Critique

The Monument Quilt is successful because it is created directly by the stakeholders it is intending to reach and support. Because it does not discriminate against any voices, it can share all stories equally. The interactive piece of the Monument Quilt creates ownership and community. The act of designing one's square and viewing it can be beneficial to the healing process. Because it travels, and is viewable online, the Monument Quilt's message can reach a large audience. Because of its scale, the piece has a large and immediate impact for a viewer. These factors make it a successful tool for cathartic release and spreading awareness and support.

Because it is not a permanent space, it may be difficult for visitors to view it in person more than once over an extended period. Because it is an installation piece, it does not have the restorative impact of a natural environment.

## **4.2 National AIDS Memorial Grove, San Francisco**

The National Aids Memorial Grove is located inside Golden Gate Park in San Francisco California. It was proposed in the late 1980s after the devastating numbers of deaths due to AIDS in the gay community in San Francisco (Shibley, Axelrod, Farbstein, & Wener, 2000). Members of the San Francisco community realized that there should be a space that would memorialize AIDS victims, increase awareness of the AIDS crisis, and serve as a public outdoor space for reflection. They wanted to create “something organic, something life-affirming to counteract the ravages of the epidemic” (Shibley, Axelrod, Farbstein, & Wener, 2000).

Initial concepts were drawn by Garrett Eckbo and William Peters with the final master plan ultimately being designed by Michael Boland, Ira Kurlander, Todd Cole, and Connie de Laveaga Stoops (Marcus & Sachs, 2013). In 1996 President Bill Clinton declared the AIDS Memorial Grove as the official AIDS memorial for the nation.

### 4.2.1 Techniques

A large, seven-ton sandstone engraved with “AIDS Memorial Grove” marks the entrance of the memorial. Winding paths, concrete and gravel, allow users to move from area to area. A particularly moving portion of the site is the ‘Circle of Friends’ (Figure 6). Near the east entrance there is a circular open space laid with Minnesota flagstone called the ‘Dogwood Crescent’. The names of those that have lost a battle with AIDS, lost a

loved one, or been affected by AIDS are engraved in a radial pattern. From the circle of friends, users can take a path through the ‘Redwood Grove’ and view a dry stream and ferns.



Figure 6. “National AIDS Memorial Grove in San Francisco's Golden Gate Park in March 2018” by Gregory Varnum retrieved on May 27, 2018 from: [https://upload.wikimedia.org/wikipedia/commons/4/47/Golden\\_Gate\\_Park\\_-\\_National\\_AIDS\\_Memorial\\_Grove\\_-\\_March\\_2018\\_%282260%29.jpg](https://upload.wikimedia.org/wikipedia/commons/4/47/Golden_Gate_Park_-_National_AIDS_Memorial_Grove_-_March_2018_%282260%29.jpg)

#### 4.2.2 Critique

One of the AIDS Memorial Grove’s most successful elements is the volunteer maintenance program. The community effort in keeping the memorial maintained and running is extremely high. This establishes ownership of the memorial for the community and fosters social relationships for users. The Circle of Friends and the dry stream allow

users to partake in a participatory experience, where they can leave stones or leave/find a name. The winding paths and natural settings allow for quiet fascination, so that users can let their mind wander to reduce mental fatigue.

Some of the founding members of the Grove noted at completion that they were disappointed in the lack of a central monument in the design (Shibley, Axelrod, Farbstein, & Wener, 2000). They also found the site to fall short in representing the enormity of those lost to AIDS. In the past, adding a name to the Circle of Friends was free and completed just by sending in a request. Unfortunately, the official website has now started charging \$1,000.00 for one name to be added to the circle of friends (National AIDS Memorial Grove in San Francisco, 2018). There are also more expensive options for name engraving on benches and boulders ranging from 10-15,000 dollars (National AIDS Memorial Grove in San Francisco, 2018). While the donations keep the organization running, it creates a monetary barrier for those that do not have thousands of dollars to donate that still wish to be a permanent part of the space.

#### **4.3 Survivor's Garden, University of Maryland**

Prior to 2010 the C.A.R.E to Stop Violence organization dedicated an area in front of the University of Maryland's Health Center as a "Survivor's Garden." Each fall after the initial dedication, volunteers would plant bulbs in the garden. In the spring there would be a dedication as the bulbs were blooming. Unfortunately, due to poor maintenance and the effects of high temperatures from an underground steam pipe, the Survivor's Garden plants would die.

#### 4.3.1 Techniques

The small bed was planted with bulbs by volunteers (Figure 7). Because it is part of the University of Maryland maintenance is the responsibility of the University's facilities management department.

#### 4.3.2 Critique

The garden works well to serve the University of Maryland stakeholders by being located on campus in a high traffic area. It is planted by the stakeholders, so it offers feelings of ownership, community, and the benefits of interacting with nature and natural materials. Unfortunately, the signage for the garden is very small and awareness of the garden is very low on campus. Because of the steam-pipe plants do not survive. It is also hard for users to interact with the garden, other than viewing it from the sidewalk, as there are no benches or paths for wandering and viewing. Once the garden is planted, there is little to no interaction by users.



*Figure 7. “Students plant in garden outside of UMD Health Center in honor of domestic violence victims” by Courtney Connley retrieved on May 27, 2018 from <https://umdmultimedia.files.wordpress.com/2010/10/assign-6-wide-shot1.jpg>.*

# CHAPTER 5: METHODS

## 5.1 Context

Morrill Quad, at the University of Maryland, was chosen as the design site. It is a 430 by 280 foot quadrangle in the historic core district of campus (Architectural Design Standards Board, 2004). Morrill Hall, located at the highest point of Morrill Quad on the west side, is the oldest academic building still in use on campus (University of Maryland, n.d.). In both the University of Maryland aesthetic guidelines and the updated Master plan, only landscape enhancements are mentioned for Morrill Quad in future plans.

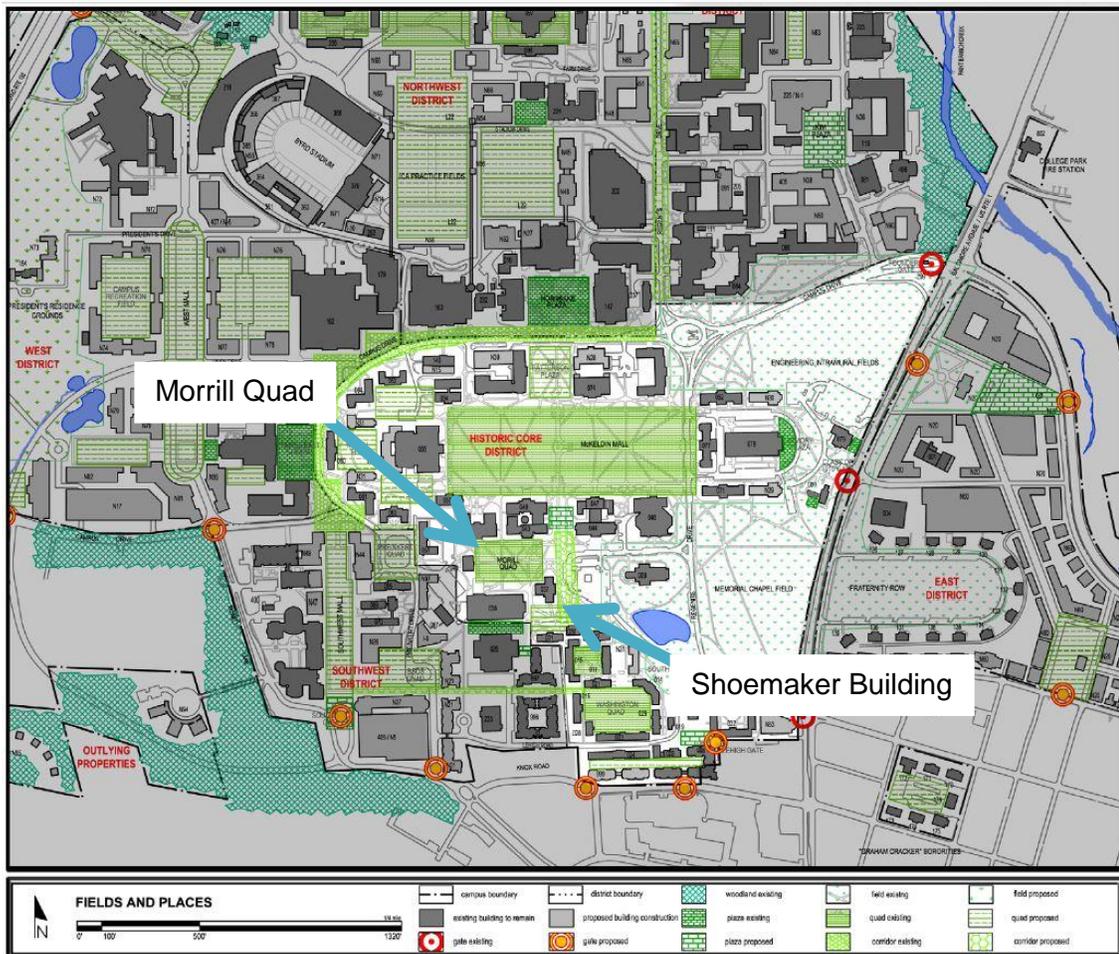


Figure 8. "Morrill Quad in the Historic Core" adapted from the Aesthetic Guidelines for Campus Development: via [https://www.facilities.umd.edu/documents/mmd/11x17\\_HC\\_Cover-and-Core\\_1mar04.pdf](https://www.facilities.umd.edu/documents/mmd/11x17_HC_Cover-and-Core_1mar04.pdf)

## **5.2 Site Selection**

Morrill Quad was chosen as the site of the Survivors' Monument for three key reasons: proximity to the Shoemaker building, its under-designed quality and its visible location on campus.

### 5.2.1 Proximity to Shoemaker

The Shoemaker building is home to the University Counseling center. The counseling center offers individual, group and couples counseling sessions to students. The Shoemaker building is located at the southeast corner of Morrill Quad (figure 8). Morrill Quad's proximity to students receiving counseling services in Shoemaker creates an opportunity to bring healing outside into the landscape.

### 5.2.2 Underutilized Resource

Morrill Quad is designed as a thoroughfare for students. There are no gathering spaces and all impervious surfaces are pedestrian paths. Impervious surfaces are un-designed grass spaces (Figures 9 and 10).



*Figure 9. "Early spring view of Morrill Quad facing southwest toward Morrill Hall" by author*



*Figure 10. "Early spring view of Morrill Quad facing east" by author*

### 5.2.3 Visibility on Campus

Proximity to numerous academic buildings, dining halls, and the McKeldin Library make Morrill Quad a frequently traversed area for students during the school day. Because this project focuses heavily on spreading awareness, a highly trafficked site is ideal.

## 5.3 Site Inventory

### 5.3.1 Hydrology & Elevation

Water flows off the site toward the northeast and southwest corners. The highest point on the site is approximately 170 feet above sea level and the lowest point is around 140 feet. There is a change in 30 feet from the west side of the quad, by Morrill Hall, to the lower point in the northeast corner. The large change in elevation creates an opportunity to catch, retain and treat stormwater.

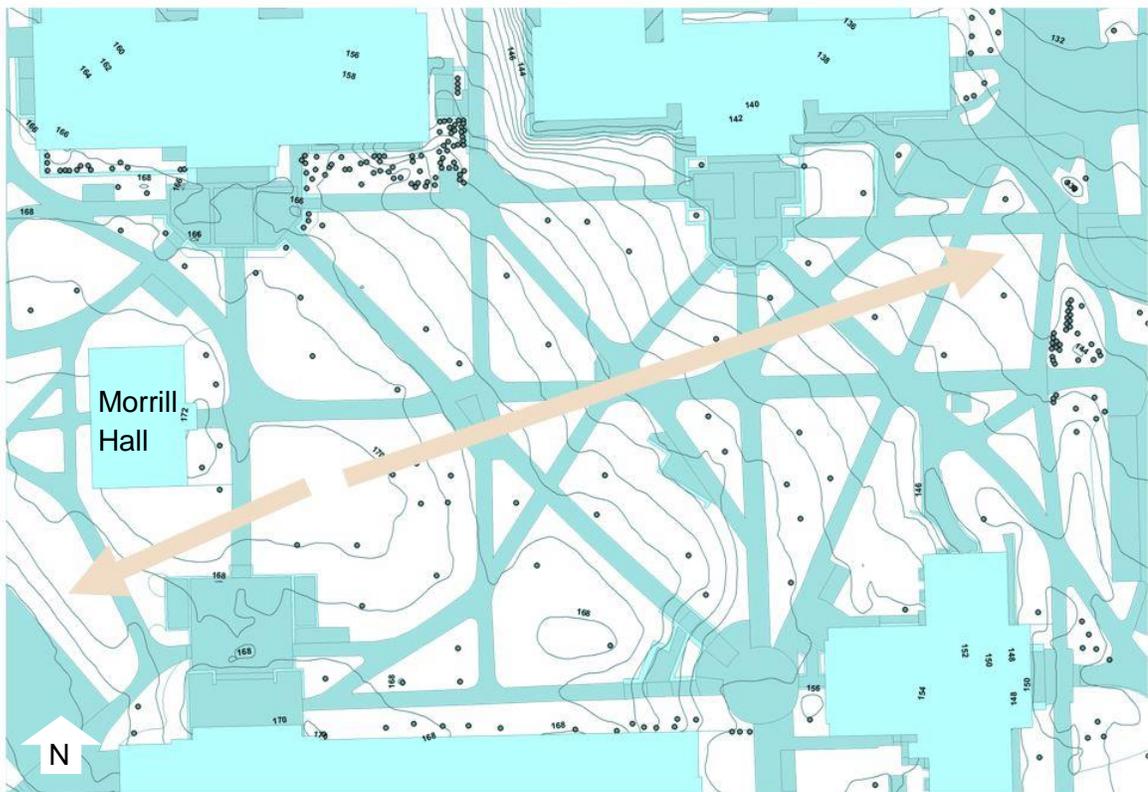


Figure 11. “Two-foot contours on Morrill Quad” by author

### 5.3.2 Watershed

Morrill Quad is part of the Chesapeake Bay watershed. Locally, it sheds water into two watersheds, the Paint Branch and the Northeast Branch (Figure 12).

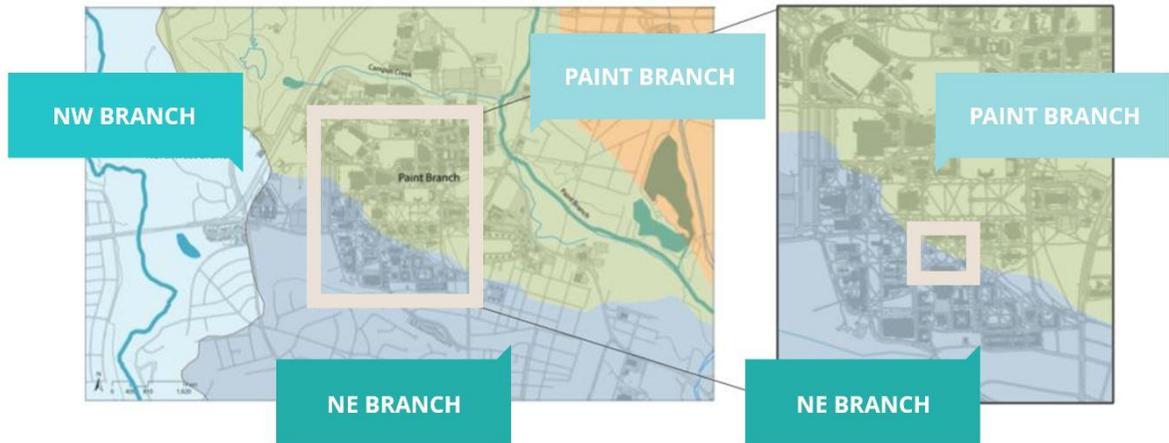


Figure 12. “Morrill Quad sub-watersheds” by author

### 5.3.3 Soil

The soil on the site has a hydrologic soil rating of D and is Urban land-Christiana-Downer complex with 5 to 15% slopes. Strategies for soil amendment and manipulating contours will need to take place in order to both retain and treat water on the site to prevent surface runoff that ultimately contributes to the Chesapeake Bay watershed.



Prince George's County, Maryland

Map symbol and soil name	Pct. of map unit	Surface Runoff	Hydrologic Soil Group
UrcD—Urban land-Christiana-Downer complex, 5 to 15 percent slopes			
Urban land	75	Very high	D
Christiana	15	High	D
Downer	10	Low	A

Figure 13. "Morrill Quad Soil Map and Information" by Author based on USGS retrieved from <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

#### 5.3.4 Vegetation

Morrill Quad is host to some of the older and more mature canopy trees on campus. It will be extremely important that these trees are not impacted by the proposed design in order to retain their healing benefits.



Figure 14. “Map of Morrill Quad with Tree Inventory” by UMD Facilities Management retrieved from <https://maps.umd.edu/map/>

Trees (Species, Common name) found on the site:

- *Acer saccharum*, Sugar Maple
- *Cercis canadensis*, Eastern Redbud
- *Cornus kousa*, Kousa Dogwood
- *Cornus mas*, Cornelian Cherry Dogwood
- *Magnolia stellata*, Star Magnolia
- *Prunus x yedoensis*, Yoshino Cherry
- *Quercus Alba*, White Oak
- *Quercus palustris*, Pin oak
- *Quercus phellos*, Willow oak
- *Quercus rubra*, Red oak

- *Ulmus parvifolia*, Lacebark Elm

### 5.3.5 History

Morrill Quad is named after Morrill Hall which bounds the site on the west side. Morrill Hall was built in 1898 and is considered the oldest academic building still in use at the University of Maryland. The “Great Fire” in 1912 burned down barracks buildings surrounding the area, but Morrill Hall remained untouched. Multiple buildings have been built and demolished on what is now known as Morrill Quad. It is possible that foundations and remnants of past buildings are present under the soil. Currently in Morrill Quad on the southeast circle, there are two metal pieces that depict the historic buildings in a map and a description of the fire. The placement of this historic description is out of place, since the remaining historic building, Morrill Hall, is on the western side of Morrill Quad.

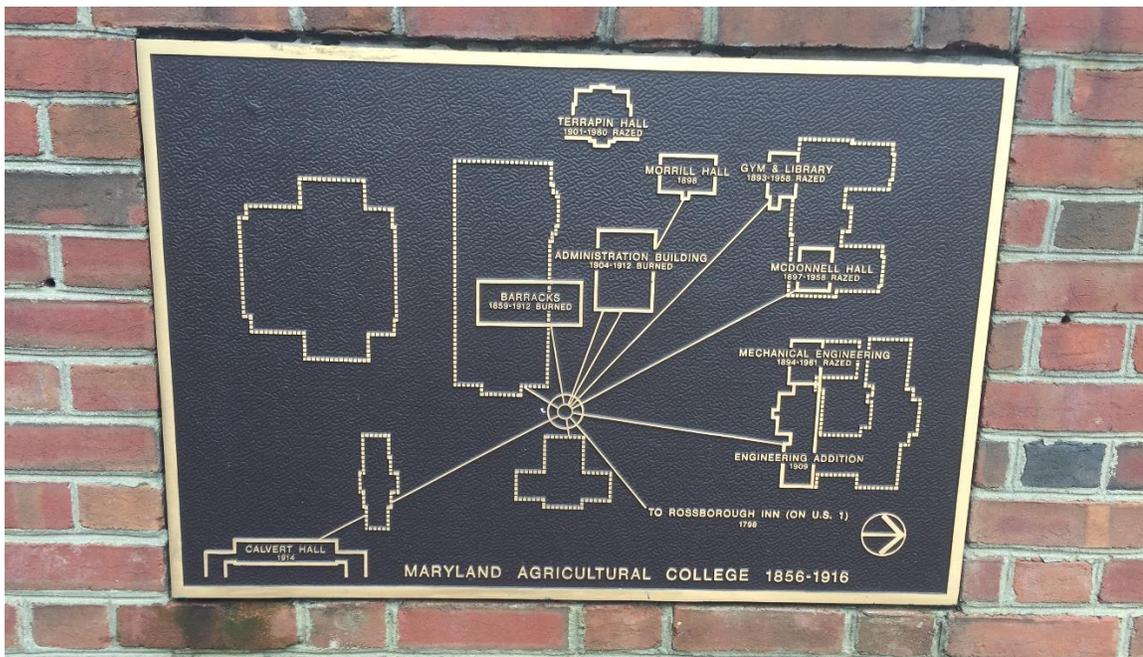


Figure 15. “Map in Morrill Quad of Historic Campus” by author



*Figure 16. "Campus, 1941," Image retrieved from the presentation "Development by Master Plan 150 years of Campus Growth Plans: Concepts and Analysis" by Dan Hayes on November 6, 2017*

### 5.3.6 Proximity to Relevant Campus Buildings

Morrill Quad is located next to important mental and physical health facilities; the counseling center in the Shoemaker building that shares a corner with Morrill Quad and the University Health Center which is home to the C.A.R.E. office and only a five-minute walk. The University Chapel and adjacent Garden of Remembrance are only a three-minute walk from the site. The Title IX office is located in the Susquehanna building and is also less than a quarter mile from Morrill Quad. The Police station is furthest from the site at .35 miles or a nine-minute walk (Figure 17).

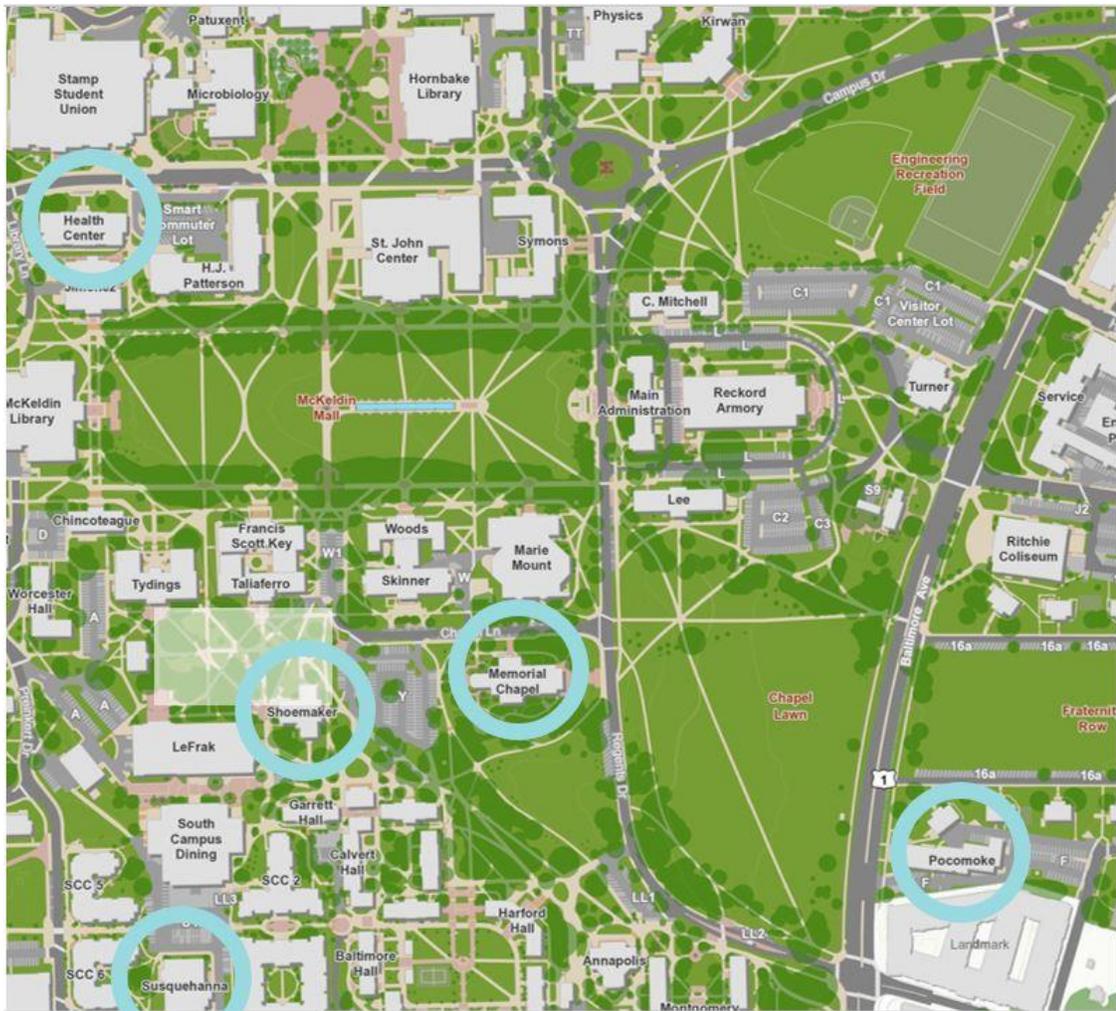


Figure 17. "Proximity of Relevant Campus Resources" by author

### 5.3.7 Steam Pipe

There is an underground steam pipe that runs through portions of the site. Because the steam pipe heats and dries out the surrounding soil, planting should be avoided in those areas. Instead, hardscape can be placed over the steam pipe.

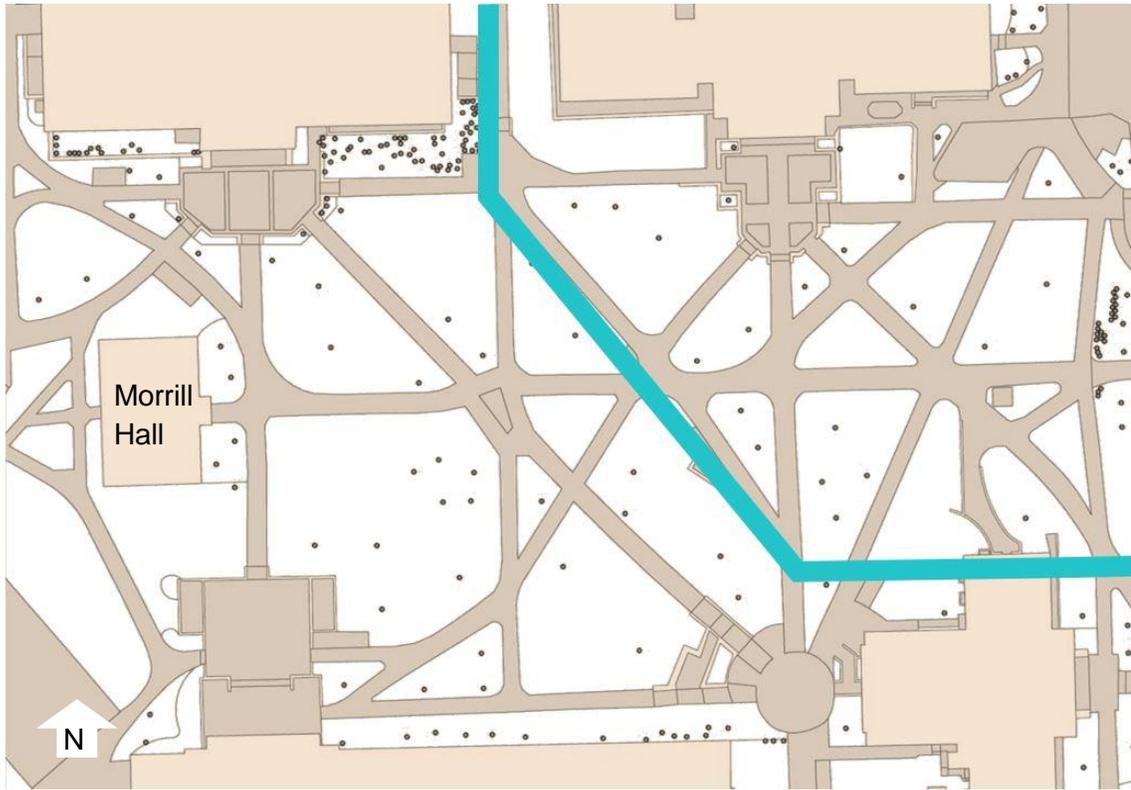


Figure 18. “Steam-pipe location on Morrill Quad” by author

### 5.3.8 Circulation

Existing circulation on the site is limited to concrete sidewalks. There are no opportunities on the site for internally focused pedestrian routes. There are direct paths only. To encourage users to stay within the site, new meandering circulation can be added, and excess major circulation can be reduced.



Figure 19. “Existing circulation in Morrill Quad” by author

## 5.4 Opportunities and Constraints

Findings from the site inventory and research have uncovered important opportunities and constraints to consider in the design process:

1. *Seasonality*: Heavy use of the site occurs during fall and spring academic semesters. August through May will be the most frequented months for students. The planting design must consider species that will be in bloom during these months or at least have persistent winter interest.

2. *Elevation*: The steep elevation change poses a problem for drainage and ADA accessibility. It will be important to factor in storm water catchment as well as considering slopes of main circulation.

3. *Mature trees*: The large existing trees on site will contribute to healing benefits but must be considered thoughtfully when designing new hardscape and circulation.

4. *Utility*: The steam pipe location poses a threat to plant-matter survival and must be considered when placing new vegetation.

## CHAPTER 6: DESIGN CONCEPT AND PROGRAM

### 6.1 Design Goals

Based on research, site inventory and site analysis findings, the following design goals were created:

1. Use design theories to create a healing and restorative space that reduces stress.
2. Increase group and individual usage of the space.
3. Create a dedication area for C.A.R.E. and survivors.
4. Increase educational and empowerment opportunities in the site.
5. Refine and diversify circulation.

### 6.2 Design Program

To be considerate of the design goals the following design program was created:

1. *Overlook Seating*: Seating located in high points throughout the space will allow for both prospect and refuge: students will feel safe and secure while also being able to visibly see the rest of the space.
2. *Meandering Paths*: A wandering path through the space allows for users to choose their own indirect routes through the space which creates opportunities for quiet fascination away from the main circulation and gathering areas.
3. *Direct Main Circulation*: Keeping a direct path through the space allows for students to utilize the area as a regular means for commuting and therefore increases the likelihood of new users entering and staying in the space.

4. *Healing Gateway*: The entrance to the site from the East at the lowest elevation of the site represents a user's choice to enter the space and choose their own healing journey.
5. *Large Gathering Space*: The large gathering space allows for groups and organizations to gather in the monument space.
6. *Dedication Bulb Garden*: C.A.R.E's survivors' garden can be reimaged in the monument space to continue the dedication tradition and create a much more impactful statement.
7. *Dry Stream*: The dry stream allows for quiet fascination even through the winter months when students will be on campus most. It also creates an interactive piece, where students can write supportive messages on rocks in the dry stream.
8. *Interpretive Signage*: There will be signage throughout the space to notify users of nearby resources, explain the space, empower users, and spread awareness.

## CHAPTER 7: DESIGN

### 7.1 Design Strategy & Process

Using elements of Jay Appleton's prospect and refuge theory, Marcus and Sachs' four means of reducing stress in a healing garden, and Kaplan, Kaplan, and Ryan's five patterns of restorative environments the space was designed to offer as many diverse healing opportunities as possible (Figure 21). The large hardscape gathering plaza was designed on the western side due to the flatter grade and higher elevation that allows for access from the nearby handicap parking spaces and visibility of the entire site. Bio retention was added at the lowest elevation points in the northeast corners to capture storm water from the site (Figure 20). Only ten trees will be displaced because of the new design, with two being small enough to be transplanted to new locations in the site. The wood from those to be removed can be used for seating and mulch throughout the site.



Figure 20. "Site plan with new contours" by author

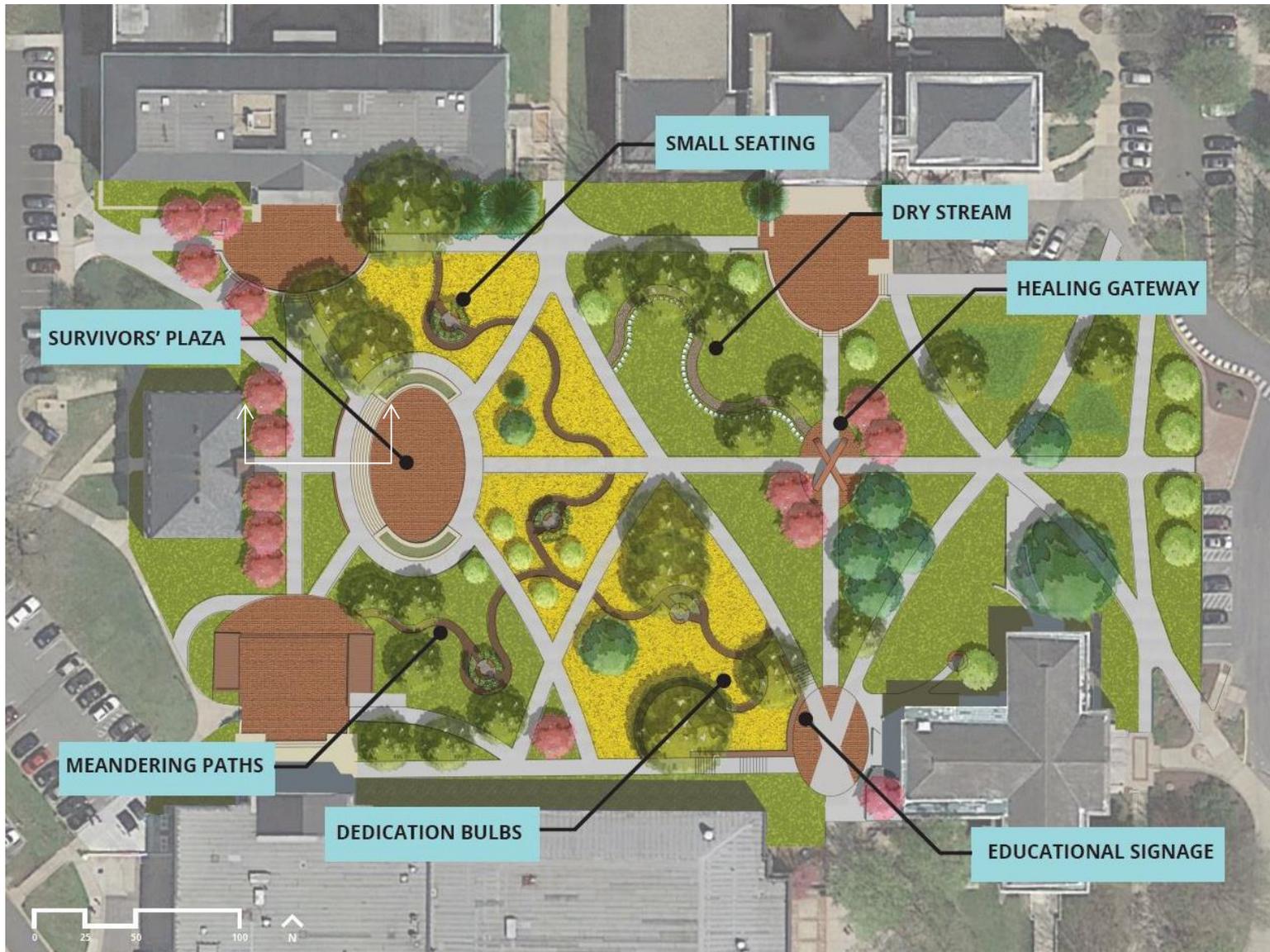


Figure 21. "Site Plan with Labels" by author

## 7.2 Design Elements

### 7.2.1 The Healing Gateway

The entrance to the site from the East at the lowest elevation of the site represents a user's choice to enter the space and choose their own healing journey. The 15-foot tall crossed arch constructed of Corten steel was designed to frame Morrill hall and the swath of bulbs in the C.A.R.E. dedication area higher up the hill.

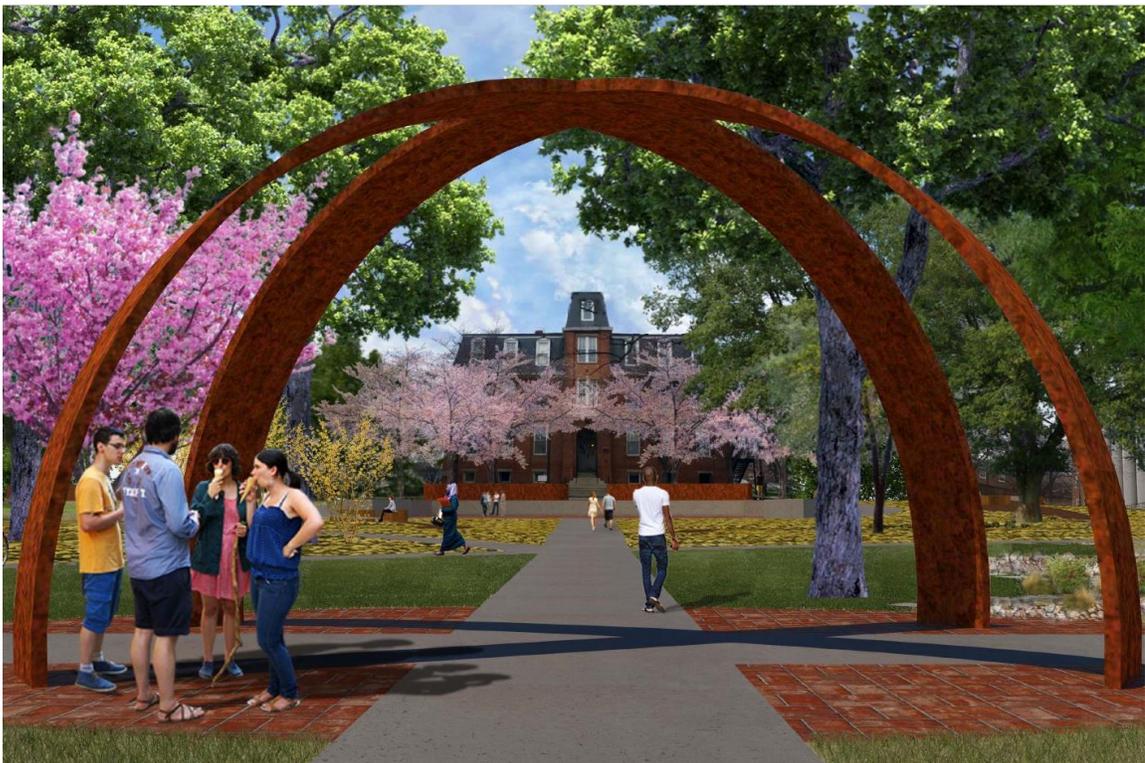


Figure 22. "Perspective of healing gateway arch" by author

### 7.2.2 C.A.R.E. Dedication Area

C.A.R.E.'s Survivors' garden has been reimagined as a large swath of blooming bulbs. By planting a variety of bulbs that bloom at different times throughout the year

(early spring, late spring, and fall) the dedication area will have visual interest through the spring and fall semesters (Figure 23). This larger and impactful dedication garden will allow the yearly dedication ceremony to receive more visibility as the scenic and photographic view of the bulbs will create a destination point on campus. This will allow for more traffic to the site and increase awareness of sexual violence.

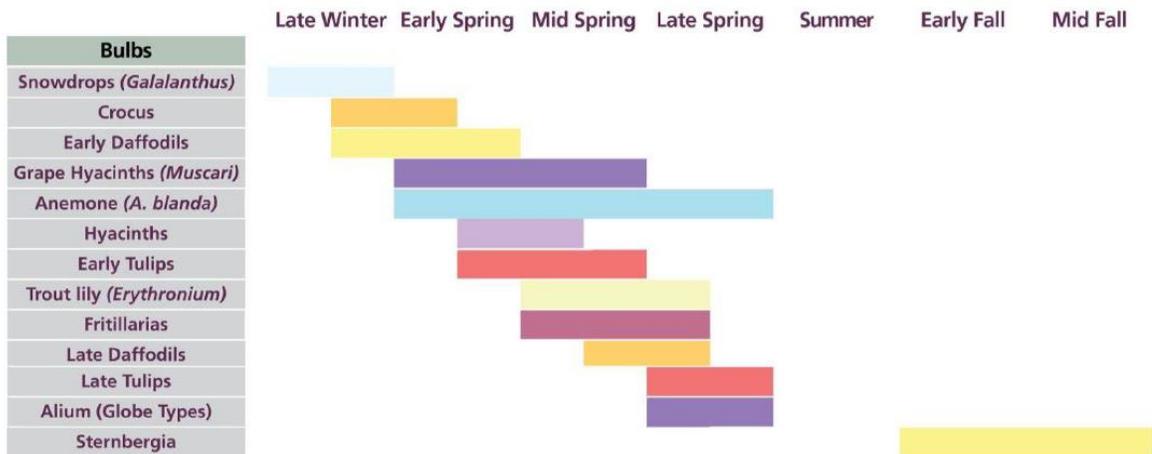


Figure 23. “Blooming schedule of possible bulbs to be used in the dedication area” by author

### 7.2.3 Overlook Seating

Ten-foot diameter seating areas have been located throughout the dedication area on the western side of the site. The wooden benches allow for quiet solo-time or small gathering away from the main circulation and plaza areas. Because of the proximity to the counseling center in the adjacent Shoemaker building, counseling sessions can be conducted in private in the outdoor seating areas (Figure 24).



*Figure 24. “Perspective of overlook seating area with dry stream and healing gateway in background” by author*

#### 7.2.4 Dry Stream

The dry stream located in the northern middle of the site offers a focal point for quiet fascination. By accenting the dry stream with Red-Twig Dogwood shrubs (*Cornus sericea 'Cardinal'*), large rocks, and persistent grasses, the dry stream will serve as visual interest even through the winter months when the canopy of deciduous trees are bare.

#### 7.2.5 “Survivors’ Plaza”

The Survivors’ Plaza serves as a large gathering space for students, organizations and visitors. The wide steps act as amphitheater style seating for presentations and speakers or as a unique spot for students to gather in small groups. The large planters

separate the accessible sidewalks on the left and right of the plaza. The planters will be filled with grasses or bulbs to allow for visual interest throughout the year (Figure 25).



*Figure 25. "Perspective of Survivors' Plaza" by author*

Two Corten steel walls are erected at the top of the plaza to frame the space and show the quote: "You are a survivor, setting the world on fire with your truth," from Alex Elle, a local writer and activist. By naming the space, "Survivors' Plaza," and loudly proclaiming Alex Elle's words, this space allows sexual violence and healing for survivors to enter conversation space in a positive and safe way. It creates ownership and representation for survivors in the campus community.

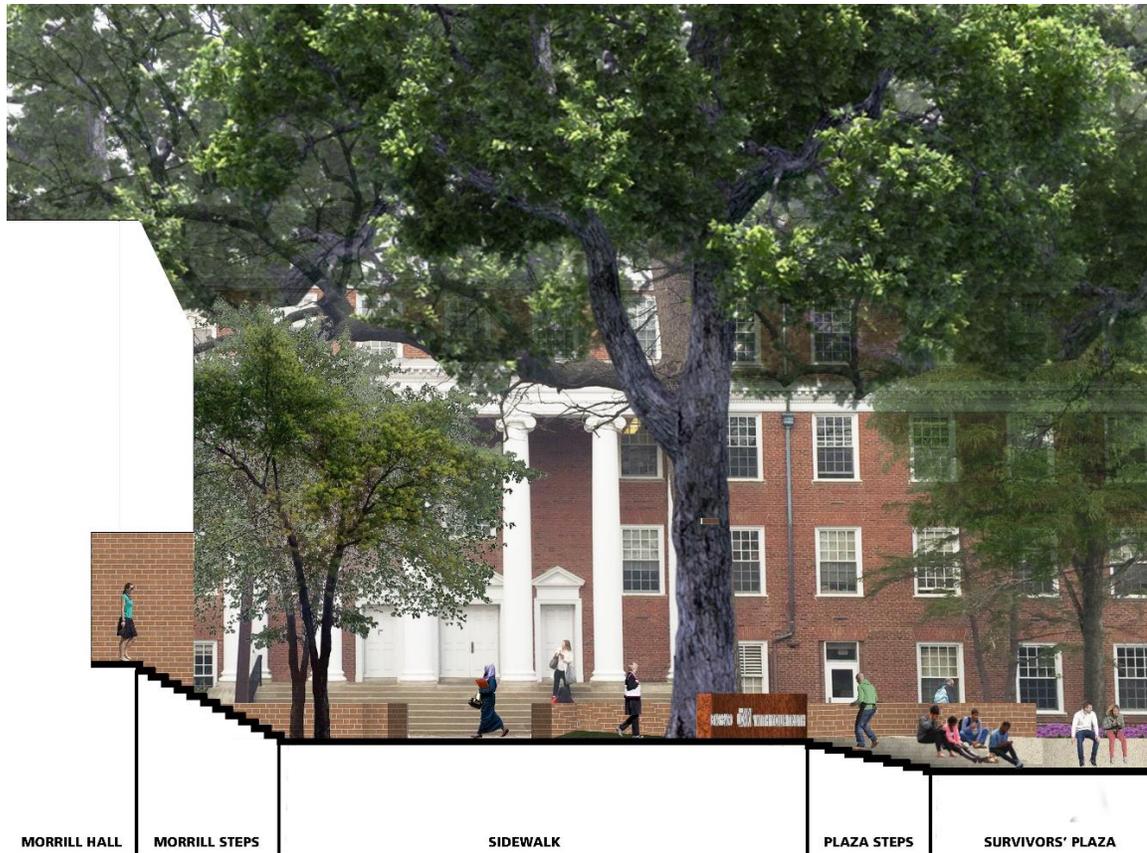


Figure 26. "Section-Elevation of Morrill Hall and Survivors' Plaza Steps" by author

The space becomes another location for activism and awareness events on campus. Currently, Hornbake Plaza is used for the Clothesline Project. With the addition of Survivors' Plaza, Take Back the Night (Figure 27), Purple Light Night, and the Clothesline Project can be conducted in the new dedicated space, or it can continue in both locations to increase awareness on campus.



Figure 27. “Perspective of Take back the night event in Survivors' Plaza” by author

### 7.2.6 Meandering Paths

The meandering paths throughout the bulb dedication area allow users to wander through the site and access the overlook seating areas. These paths give users the opportunity to experience the site with no destination and instead stroll through the space and admire the flora and fauna increasing opportunities to allow the mind to wander and reduce mental fatigue and stress.

### 7.2.7 Interpretive and Empowering Signage

Signs in entry points to the site will have information regarding ways to help a friend that may be suffering from trauma related to sexual violence, as well as maps and information for resources available on campus for survivors and their supporters. Also,

throughout the site Corten steel signs will offer words of encouragement and empowering quotes and poems. Users of the site can discover them as they meander through the blooming flowers and canopy trees. Rather than erase the history of the site, the historic maps found in the newly designed education area, can be moved to the Morrill Hall entry where it is more appropriate and accessible for those interested in the history of Morrill Hall.



Figure 28. "Corten signage throughout site" by author

## CHAPTER 8: CONCLUSION

### **8.1 Evaluating the Design**

The goal of the Survivors' Monument was to explore ways to empower, educate and heal survivors of sexual violence within a landscape. The design is compared to Appleton, Kaplan, Kaplan, Ryan, Marcus, and Sachs' separate works to evaluate the healing and restorative abilities of the site.

#### *8.1.1 Five Patterns for Restorative Environments*

Kaplan, Kaplan, and Ryan's "Five Patterns for Restorative Environments" are quiet fascination, wandering in small spaces, separation from distractions, wood, stone and old, and view from a window (Kaplan, Kaplan, & Ryan, 1998). All five of these patterns can be found in the Survivors' Monument (Figure 29). The Survivors' Monument offers many opportunities for quiet fascination by increasing flora in the bulb dedication area, adding the dry stream, and accentuating the existing trees with access via meandering paths. The meandering paths allow for wandering in small spaces and the empowering messages offer new mysteries to discover. The entire site is far from busy roads, and the meandering paths offer respite from large crowds and noises. The sitting areas are made of stone and are accented with wooden benches. Finally, any view overlooking the Survivors' Monument space has a view of trees and vegetation.

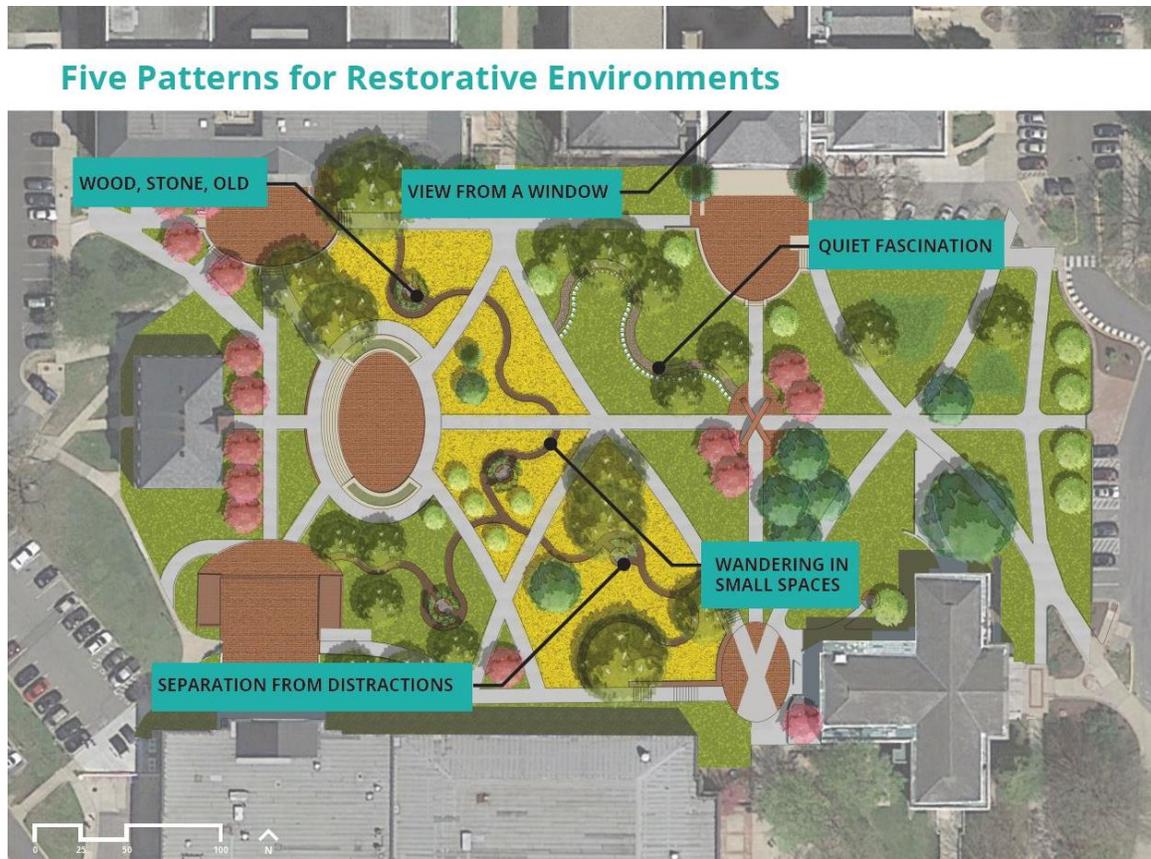


Figure 29. “Diagram of applicable elements of Kaplan, Kaplan, and Ryan’s five patterns for restorative environments” by author

### 8.1.2 Four Means of Reducing Stress in Healing Gardens

Marcus and Sachs’ “four means of reducing stress in a healing garden” are social support, positive natural distractions, sense of control, and physical movement (Marcus & Sachs, 2013). All four of these elements have been designed into the Survivors’ Monument (Figure 30). Opportunities for social support are available in the site by increasing diverse gathering and seating spaces. Large groups can make use of the large plaza and steps, while smaller groups can wander through the site together or gather in the small overlook seating areas. As stated previously, counseling sessions can be taken outside by use of the seating areas. Grass spaces allow for diverse unprogrammed

activities to take place. Positive natural distractions, similar to quiet fascination, can be found in the vegetation, archway, dry stream, and empowering signage.



Figure 30. "Diagram of site with applicable means of reducing stress from Marcus and Sachs'" by author

Sense of control is important in a healing garden, and especially for a survivor of sexual violence. Just knowing that the Survivors' Monument exists and that its accessible, can be important for a survivor feeling in control. The added accessibility of the stair and sidewalks to access the plaza give all users options to control how they access the site. Visibility from the higher elevation of the plaza also allows users to see the entire site and determine and control how they would like to access and experience it.

The final element, physical movement, can be achieved via the meandering walking paths and the unprogrammed grass areas that allow for other physical activities to take place.

### 8.1.3 Prospect-Refuge Theory

Jay Appleton's theory of prospect and refuge is the idea that humans' aesthetic appreciation of a landscape is based on feelings of survival: being able to visually access one's surroundings (prospect) and feeling hidden and safe (refuge) (Appleton, 1996). Throughout the Survivors' Monument five seating areas are placed to allow for visual access of the site above and below. Dense and thorny scarlet firethorn (*Pyracantha coccinea*) shrubs placed strategically around the seating areas deter people from loitering behind the benches and help users feel safer and protected. The densely planted bulb beds also deter people from walking off-path and increase the secureness of the seating areas. Figure 31 diagrams the different prospect and refuge points throughout the site.

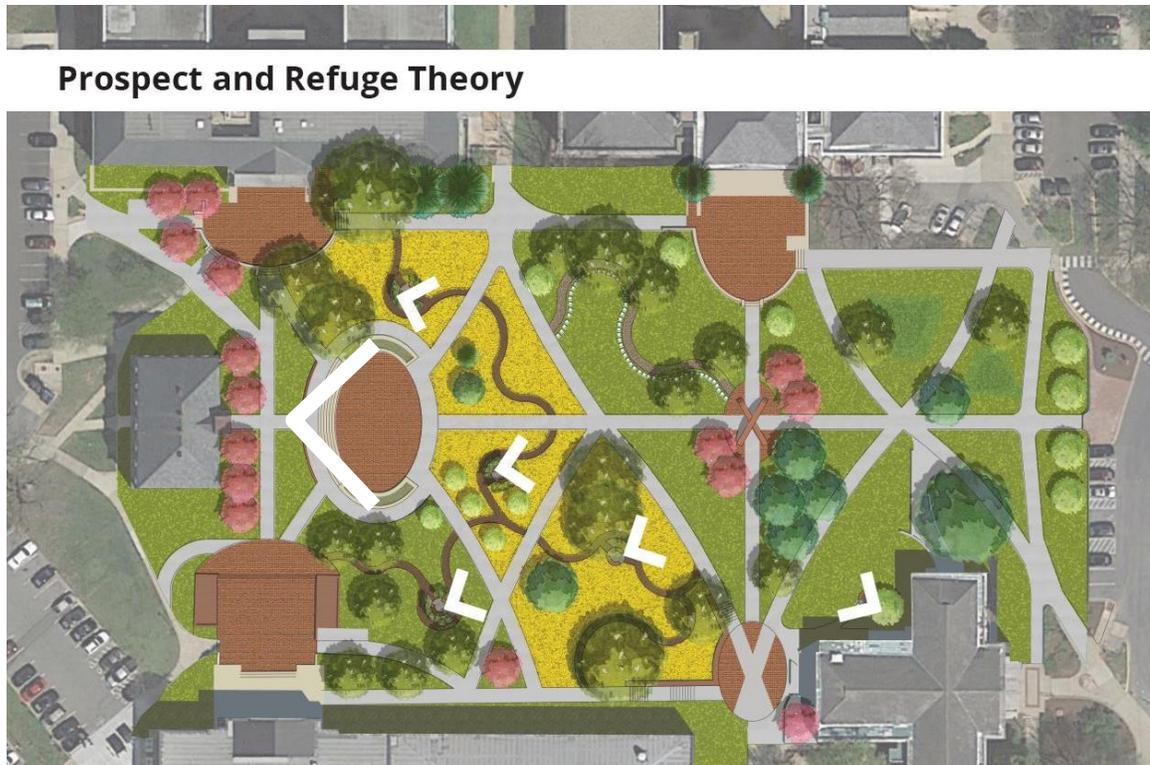


Figure 31. "Diagram of Prospect-Refuge areas on the site" by author

## 8.2 Future Considerations & Final Reflections

In the case of future implementation, a volunteer maintenance program could be employed to aide in the upkeep of the site and reduce the resource load to the facilities department. Survivors and supportive organizations would benefit from socially engaging with each other, physically engaging with nature, and instilling a sense of ownership of the space in the volunteers.

To incorporate the survivors of campus into the space, names could be engraved within Survivors' Plaza or throughout the site to represent oneself or a loved one. This adds to the feelings of ownership and community. To help with the cost of

implementation, donors and sponsors could purchase dedicated name spaces on the seating and planters.

The Survivors' Monument is an empowering and healing space for survivors of sexual violence but it is also an asset to the entire campus. The diverse space becomes a respite to ease anyone's mental fatigue and ailments. In this space, awareness and restorative elements are merged to promote the healing of survivors and the campus community.

The monument represents the changing landscape surrounding sexual violence on college campuses and creates an inclusive and loud voice for survivors. The monument sets a precedent for all university and institutional settings that have the opportunity and responsibility to address this critical social issue.

## BIBLIOGRAPHY

- Appleton, J. (1996). *The Experience of Landscape* (Revised Edition ed.). West Sussex, England: John Wiley & sons Ltd.
- Architectural Design Standards Board. (2004). *Aesthetic Guidelines for Campus Development: Historic Core District*. College Park: Office of Campus Development Department of Facilities Planning University of Maryland. From [https://www.facilities.umd.edu/documents/mmd/11x17\\_Campus\\_1\\_Cover-and-Intro\\_1mar04.pdf](https://www.facilities.umd.edu/documents/mmd/11x17_Campus_1_Cover-and-Intro_1mar04.pdf)
- Austin, G. (2016, August 15). *Exterior Space*. Retrieved February 19, 2018 from University of Idaho: <https://webpages.uidaho.edu/larc453/pages/arcAndSpace.htm>
- Baumgartner, F., & McAdon, S. (2017, May 11). There's been a big change in how the news media covers sexual assault. *The Washington Post*. Retrieved February 26, 2018 from [https://www.washingtonpost.com/news/monkey-cage/wp/2017/05/11/theres-been-a-big-change-in-how-the-news-media-cover-sexual-assault/?utm\\_term=.6e6657640cff](https://www.washingtonpost.com/news/monkey-cage/wp/2017/05/11/theres-been-a-big-change-in-how-the-news-media-cover-sexual-assault/?utm_term=.6e6657640cff)
- Beatley, Timothy. (2016). *Handbook of Biophilic City Planning & Design*. Washington, DC: Island Press.
- Campus Advocates Respond and Educate (C.A.R.E.) to Stop Violence Office. (n.d.). COMMON REACTIONS TO TRAUMA. College Park: University of Maryland University Health Center.
- Campus Advocates Respond and Educate to Stop Violence. (2009). *CARE to Stop Violence*. Retrieved February 16, 2018 from <http://www.health.umd.edu/care>
- Cantor, D., Fisher, B., Chibnall, S., Townsend, R., Lee, H., Bruce, C., & Thomas, G. (2015). *Report on the AAU Campus Climate Survey on Sexual Assault and Sexual Misconduct*. Rockville: Westat. Retrieved May 17, 2017 from [https://www.aau.edu/sites/default/files/%40%20Files/Climate%20Survey/AAU\\_Campus\\_Climate\\_Survey\\_12\\_14\\_15.pdf](https://www.aau.edu/sites/default/files/%40%20Files/Climate%20Survey/AAU_Campus_Climate_Survey_12_14_15.pdf).
- Crocker, L. (2017, May 16). There's Been a Huge Increase in Campus Sex Assaults. Why? *The Daily Beast*. From The Daily Beast: <https://www.thedailybeast.com/theres-been-a-huge-increase-in-campus-sex-assaults-why>

- Day, K. (1999). Strangers in the Night: Women's Fear of Sexual Assault on Urban College Campuses. *Journal of Architectural and Planning Research*, 16(4).
- Department of Justice. (2014). *Rape and Sexual Victimization Among College-Aged Females, 1995-2013. . , 2014. .* Office of Justice Programs, Bureau of Justice Statistics. Washington, DC: United States Department of Justice. Retrieved October 17, 2017 from <https://www.bjs.gov/content/pub/pdf/rsavcaf9513.pdf>
- Division of Student Affairs. (n.d.). *Purple Light Night*. Retrieved February 16, 2018 from Division of Student Affairs: <https://studentaffairs.umd.edu/events/purple-light-night>
- Division of Student Affairs. (n.d.). *Walk a Mile in Her Shoes*. Retrieved February 16, 2018 from Division of Student Affairs: <https://www.studentaffairs.umd.edu/events/walk-a-mile-in-her-shoes>
- Evans, G., & Cohen, S. (1987). Environmental Stress. (D. Stokols, & I. Altman, Eds.) *Handbook of Environmental Psychology*.
- Fennelly, L., & Crowe, T. (2013). *Crime Prevention Through Environmental Design*. Saint Louis: Elsevier Science.
- FORCE. (n.d.). *About*. Retrieved October 15, 2017 from The Monument Quilt: <https://themonumentquilt.org/about/>
- FORCE. (n.d.). *FORCE: UPSETTING RAPE CULTURE CREATES ART ACTIONS TO UPSET THE CULTURE OF RAPE AND PROMOTE A CULTURE OF CONSENT*. Retrieved October 15, 2017 from FORCE Upsettingrapeculture.com: <http://www.upsettingrapeculture.com/>
- FORCE. (n.d.). *View the Quilt*. Retrieved March 28, 2018 from The Monument Quilt: <https://themonumentquilt.org/view-the-quilt>
- Francis, C., & Marcus, C. (1991). Places people take their problems. In J. Urbina-Soria, P. Ortea-Andeane, & R. Bechtel (Ed.), *Proceedings of the 22nd Annual Conference of the Environmental Design Research Association* (pp. 178-184). Oklahoma City: Environmental Design Research Association.
- Kaplan, R., Kaplan, S., & Ryan, R. (1998). *With People in Mind: Design and Management with Everyday Nature*. Washington, D.C.: Island Press.

- Klodawsky, F., & Lundy, C. (1994). Women's Safety in the University Environment. *Journal of Architectural and Planning Research*, 11(2).
- Krebs, C., Linquist, C., Warner, T., Fisher, B., & Martin, S. (2009). College women's experiences with physically forced, alcohol- or other drug-enabled, and drug-facilitated sexual assault before and since entering college. *Journal of American College Health*, 57(6), 639-647.
- Marcus, C., & Sachs, N. (2013). *Therapeutic Landscapes : An Evidence-Based Approach to Designing Healing Gardens and Restorative Outdoor Spaces*. . Somerset: John Wiley & Sons, Incorporated. Retrieved May 18, 2017
- Minnery, J. R., & Lim, B. (2005). Measuring Crime Prevention Through Environmental Design. *Journal of Architectural and Planning Research*, 22(4).
- National AIDS Memorial Grove in San Francisco. (2018). *CIRCLE OF FRIENDS*. Retrieved May 27, 2018 from NATIONAL AIDS MEMORIAL GROVE: <https://www.aidsmemorial.org/namg-news/circle-of-friends/>
- National AIDS Memorial Grove in San Francisco. (2018). *Other Hardscape Memorial Opportunities*. Retrieved May 27, 2018 from NATIONAL AIDS MEMORIAL GROVE: <https://www.aidsmemorial.org/more-ways/>
- Park, B., Tsungetsugu, Y., Kasetani, T., Kagawa, T., & Miyazaki, Y. (2010). The physiological effects of Shinrin-yoku (taking in the forest atmosphere or forest bathing): evidence from field experiments in 24 forests across Japan. *Environmental Health and Preventive Medicine*, 15(1), 18-26.
- Reid, L., & Konrad, M. (2004). The Gender Gap in Fear: Assessing the Interactive Effects of Gender and Perceived Risk on Fear of Crime. *Sociological Spectrum*, 24(4).
- Roscoe, J. (2017, April 13). Clothesline Project helps UMD sexual assault survivors tell “stories that need to be told”. *The Diamondback*. Retrieved February 16, 2018 from <http://www.dbknews.com/2017/04/13/umd-clothesline-project-sexual-assault/>

Shibley, R., Axelrod, E., Farbstein, J., & Wener, R. (2000). NATIONAL AIDS MEMORIAL GROVE Silver Medal Winner. In I. Bruner Foundation, *Commitment to Place: Urban Excellence & Community. Rudy Bruner Award for Urban Excellence 1999* (pp. 68-97). Cambridge: Bruner Foundation. Retrieved May 26, 2018 from [http://www.rudybruneraward.org/wp-content/uploads/1999/01/1999\\_Committment-to-Place-1.pdf](http://www.rudybruneraward.org/wp-content/uploads/1999/01/1999_Committment-to-Place-1.pdf)

Smith, S., & Breiding, M. (2011). Chronic disease and health behaviours linked to experiences of non-consensual sex among women and men. *Public Health, 125*(9), 653-59. doi:10.1016/j.puhe.2011.06.006.

Southern Connecticut State University. (n.d.). *Rape Culture, Victim Blaming, and The Facts*. Retrieved May 18, 2017 from Southern Connecticut State University: <http://www.southernct.edu/sexual-misconduct/facts.html>

*THE MONUMENT QUILT Timeline*. (2017, July 27). Retrieved October 15, 2017 from The Monument Quilt: <https://themonumentquilt.org/wp-content/uploads/2017-7-27-timeline.pdf>

The Office of Civil Rights & Sexual Misconduct. (n.d.). *The Office of Civil Rights & Sexual Misconduct*. Retrieved May 25, 2018 from Office of Civil Rights & Sexual Misconduct: <https://www.ocrsm.umd.edu/about/index.html>

The Office of Civil Rights and Sexual Misconduct. (2017). *UNIVERSITY OF MARYLAND STUDENT SEXUAL MISCONDUCT REPORT 2016-2017*. The Office of Civil Rights and Sexual Misconduct. University of Maryland. Retrieved May 25, 2017 from [https://ocrsm.umd.edu/files/OCRSM\\_Annual\\_Student\\_SM\\_Report\\_20162017.pdf](https://ocrsm.umd.edu/files/OCRSM_Annual_Student_SM_Report_20162017.pdf)

The Office of Civil Rights and Sexual Misconduct. (n.d.). *Rule of Thumb Pledge*. Retrieved February 16, 2018 from Office of Civil Rights and Sexual Misconduct: <https://www.ocrsm.umd.edu/pledge/index.html>

The United States Department of Justice. (2015, August 7). *OVERVIEW OF TITLE IX OF THE EDUCATION AMENDMENTS OF 1972, 20 U.S.C. A§ 1681 ET. SEQ.* From The United States Department of Justice: <https://www.justice.gov/crt/overview-title-ix-education-amendments-1972-20-usc-1681-et-seq>

- Ulrich, R.S (1999). Effects of Gardens on Health Outcomes: Theory and Research. (C. Marcus, & M. Barnes, Eds.) *Healing Gardens: Therapeutic Benefits and Design Recommendations*.
- Ulrich, R. S. (1979). Visual landscape and psychological wellbeing. *Landscape Research*, 4(1), 17-23.
- Ulrich, R. S. (1984). View Through a Window May Influence Recovery From Surgery. *American Association for the Advancement of Science*, 224, 420-421.
- University of Maryland Police Department. (2017, October 1). *Annual Safety and Security Report of the University of Maryland College Park*. From University of Maryland Police Department:  
<http://www.umpd.umd.edu/stats/AnnualSecurityReport.pdf>
- University of Maryland Police Department. (2017). *Clery Act Statistics - University of Maryland, College Park, MD*. Retrieved May 25, 2018 from University of Maryland Police Department: [http://www.umpd.umd.edu/stats/clery\\_stats.cfm](http://www.umpd.umd.edu/stats/clery_stats.cfm)
- University of Maryland. (n.d.). *Timeline*. From University of Maryland:  
<https://www.umd.edu/history-and-mission/timeline>
- VAWA *Fact Sheet*. (n.d.). From Obama White House Archives:  
[https://obamawhitehouse.archives.gov/sites/default/files/docs/vawa\\_factsheet.pdf](https://obamawhitehouse.archives.gov/sites/default/files/docs/vawa_factsheet.pdf)
- Wilson, E. O. (1984). *Biophilia*. Cambridge: Harvard University Press.