

# **ADJUSTING THE NORTH AMERICAN SUBURB**

Combatting Internalization and Loneliness Through Design

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# ABSTRACT

This thesis explores the loneliness and isolation of suburban life and proposes adjustments to the suburban landscape through design. For suburban dwellings, acts of consumption that take place in one's home rather than in shared environments. The internalization of the 'modern comforts of home' have resulted in a residential typology that facilitates an individualistic and isolating lifestyle. In response, this thesis seeks to design spaces for social interaction and connectedness on neighborhood sites that are otherwise unused or underutilized. The suburban neighborhood of Cachet Woods, located in the Greater Toronto Area serves as a testing ground. These sites in Cachet Woods; a cul-de-sac, an open field, and a utility corridor offer experimental grounds for the implementation of socially-based infrastructure that promotes interaction, participation, and belonging.

# ACKNOWLEDGMENTS

Firstly, I would like to thank my advisor, Jerry Hacker. His patience, knowledge, guidance, and assistance has been instrumental to the development of my thesis. On the same note, I also extend my gratitude to all the professors, coordinators, and specialists I had the pleasure of working with while at The Azrieli School of Architecture and Urbanism as you have played a role in shaping my experience and education.

Thank you to my friends, peers, and colleagues for the myriad of memories while navigating our path through architecture school together. We will always have the long days and late nights in studio, countless (and seemingly endless) Zoom calls, as well as all the amazing times we can look back on and cherish.

To my parents Cindy and Angelo, brother Nicholas, grandparents Peter and Gia: words cannot describe how grateful I am for your immeasurable amount of love, support, advice, and care. You always encouraged me to follow my dreams, taught me to approach situations with a positive and playful outlook, and to push myself to be my best when met with a challenge; architecture school was certainly one of them!

Finally, to my life partner Monica: thank you for being my open set of ears, my lead cheerleader, my inspiration, my muse, as well as my constant voice of motivation and aspiration. You have been by my side through the many peaks and valleys that architecture school has presented me from first year undergrad to Thesis. I really could have not done any of this without your immense love and support. I am going to miss this stage of our lives, but also extremely thrilled to see what the next chapter has in store for us. We did it!

# PREFACE

I have been fortunate enough to have grown up with neighbors who never installed fences that separated our backyards. On either side of our yard, we used shared landscaping beds that extended just shy of the depth of the backyard; this added some privacy without hardlining our property boundaries. As far back as I can remember, those landscaping beds created enough privacy to keep the backyard as 'sacred' as suburbia intended, but porous enough to invite interaction between our families, in addition to creating shared side yards due to the positioning of our garages. This condition stretched across four or five properties along our street allowing for seamless play with neighborhood children, backyard barbeques, as well as long impromptu afternoon conversations over coffee and cookies. This condition opened the door to birthday parties, holidays, and life celebrations inside each other's homes. I never realized the effect this condition had on my family's relationship with our neighbors, or even my personal growth and development as it was all I have ever known. As much as we loved our backyard(s), the interaction also made its way to our driveways, front lawns, streets, and Cul-de-Sacs; bike rides, street hockey, walks with neighbors (their K-9

counterparts in tow), as well as neighbors helping each other, filled the public and semi-private spaces of our street. Ash trees which were planted just after the first homes started being completed lined the boulevards in 1992-1993; they canopied over the street and sidewalk, making for an extremely pleasant and comfortable streetscape to interact in and with during the hot and humid summer months.

Around 2013, everything started to change; The Greater Toronto Area experienced an ice storm in mid-December of that year, toppling over many of the 20-year-old Ash trees along our street; in conjunction with an invasive insect that was also weakening the trees from the inside out, the trees that still stood were removed and replaced with maple saplings. The street looked stripped and had a similar feel to when the subdivision was new in '92 (according to my parents, being the first residents in the first home on the street). In the years to come, the face of the neighborhood transformed as neighbors became 'Empty Nesters' and no longer had the need for such large homes, or took advantage of the rising housing prices in the area and relocated elsewhere. Not that the ice storm and neighbors moving out are directly related, but the two conditions created a new environment that changed the neighborhood; a more privatized scene started to

occur. There was a visible decline in residents using the public spaces as they used to, it was almost as if residents would rather stay in their private spaces than interact with their community.

In 2015, I moved out of my childhood home to commence my undergraduate degree, coming back often and over the summers to be with my family, but every time I did, the neighborhood seemed to get lonelier; I summed it up to when I was arriving and leaving my parent's house and the (sometimes) short durations of time I would be home where I would see minimal community interaction. At the time, I was living in downtown Toronto where there seemed to be no shortage of people hustling and bustling around, and I often found myself comparing community life in the city to my home suburb of Cachet Woods. What life in the city and in the suburbs has showed me was that your surrounding environment has an influence on ones daily routine, social interactions, and sense of community.

In the summer of 2019 after graduating from the Daniels Faculty of Architecture, my partner and I decided to get a puppy; and my perspective of the neighborhood completely changed. After the adorable puppy stages, our full sized Goldendoodle *Kauai* needed three walks a day. By the end of the summer,

my family, my partner, and I would take him around the neighborhood (45 minutes in the morning, 20 minutes in the afternoon, and 45 minutes - 1 hour in the evenings). Regardless of timing, the neighborhood held the same lonely demeanor. Every so often we would run into friends, friendly dog lovers, and other dog owners whose refreshingly neighborly conversations would briefly relieve the loneliness before going our separate ways.

Is dog ownership the key to curing a socially empty suburban landscape? Probably not, but what has emerged from walking the dog were many questions about the operations of our beloved neighborhood framed around the relationships we have with(in) our private and public spaces. This curiosity stuck in the back of my mind when I started my M.Arch degree at the Azrieli School of Architecture and Urbanism in the Fall of 2019, and followed me back after being sent home in March 2020 due to the emerging COVID-19 pandemic. Throughout the pandemic however, the social scape of the public spaces remained similar to pre-pandemic conditions. Our family daily dog walking routine stayed the same, along with the many questions of privatization and individuality in our subdivision. Coronavirus mandates never kept residents from leaving their homes to go outside for a walk or exercise,

yet the neighborhood remained relatively silent in terms of seeing other residents out for walks, or even in their front yards. There are bigger problems that lay under the manicured façade of our suburb, and COVID-19 not only unearthed it, but had the potential to aggravate conditions of individualization, isolation, and loneliness.

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SECTION 1  
CURIOSITIES OF SUBURBIA:  
Connectedness & the Affects of Loneliness

# INTRODUCTION

The term 'suburb' is often seen to be synonymous with the term's 'community' and 'neighborhood' simply because they are viewed as physical places where people reside; but they are not the same. A suburb is an urban typology located in an outlying part of the city where, traditionally, homes are carpeted across a developed piece of land, whereas a community is a group of close knit residents that are socially connected with one another. The result is a cohesive environment where a community can experience "a feeling of fellowship with others, as a result of sharing common attitudes, interests, and goals."<sup>1</sup> This sense of belonging is part of the recipe to transform a suburb into a neighborhood and community.

Community and connectedness are terms and conditions that simply cannot exist without one another. Factors brought forth by consumerism such as internalized leisure, working and studying more from home, in addition to the lack of public spaces that create opportunity to gather outside of private means, suburbia will become a typology of isolation, and the idea of 'Community' will cease to flourish. In most contexts within the Greater Toronto Area, suburbia struggles to facilitate moments of 'community' through mass privatization of property and the shift of group activities to indoor spaces such as private homes, or places of commercial gathering and entertainment outside of the neighborhood where one distances themselves from their immediate community. Such hyper individualization of the resident has created social deserts in the suburban public sphere by facilitating consumerist habits that disincentivize individuals from connecting with their neighborhood. This trend has been observed since the dawn of the suburb and the idea of auto-centrism in mid-century North America and continues to be a typology

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<sup>1</sup> "The Importance of Community." Gateway to Prevention & Recovery. Accessed March 3, 2022. <https://gatewaytoprevention.org/community/the-importance-of-community/#:~:text=Community%3A%20noun%2C%20a%20group%20of,common%20attitudes%2C%20interests%20and%20goals>.

perpetuated by consumerist values. As suburbia befalls to internalization from residents gradually abandon the public spaces in their neighborhood because they do not adapt to changing community activities and facilitate meaningful prolonged connectedness, the lack of physical interaction can increase the possibility of residents developing chronic loneliness.

The curiosities for this thesis began with how individuals foster physical interactions throughout their day-to-day lives and how these activities evolved as suburbia became a dominant settlement form in North America. The thesis examines how the privatization of spaces within the suburban realm and its related consumer culture have created moments of social isolation and loneliness from the macro to the micro scale, each scale showcasing how such habits and internalization affect suburban resident’s daily lives (fig. 1).

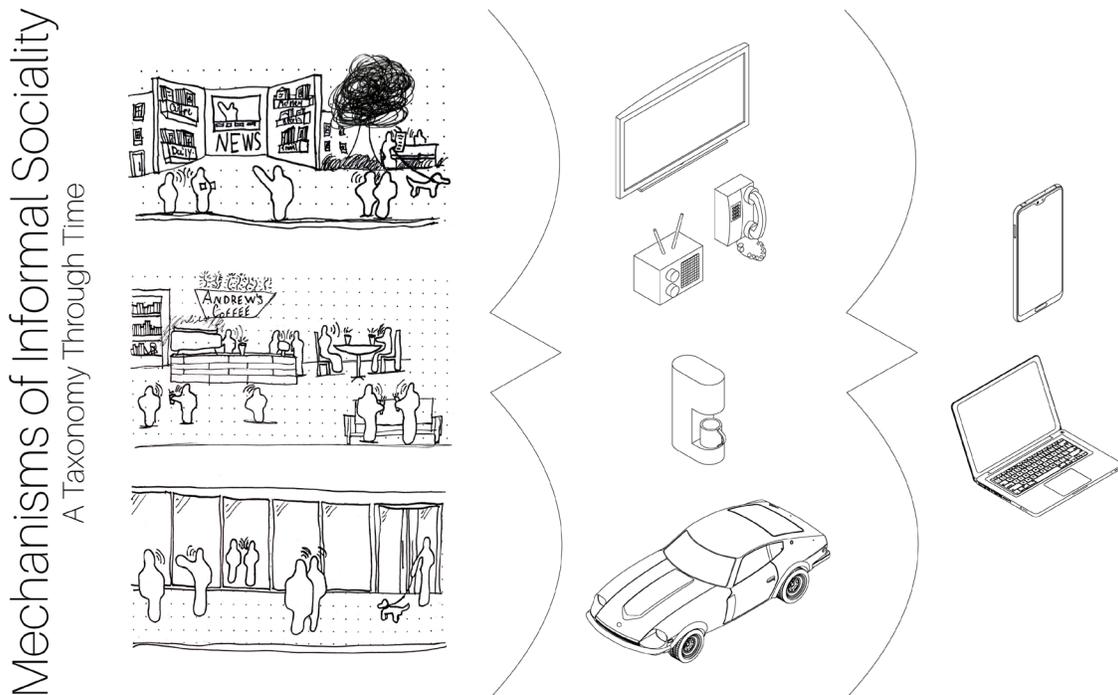


fig. 1: Mechanisms of Informal Sociality

<sup>2</sup> The Loneliness Lab. "Using Design to Connect Us." Pg. 14. Accessed March 6, 2022. <https://www.lonelinesslab.org/>

<sup>3</sup> Jane Jacobs. *The Death and Life of Great American Cities* (New York, NY: Vintage Books, 1992), Pg. 112

Upon further research, suburbia is a condition that is generally stagnant in its built form. The *Loneliness Lab (TLL)* is a UK-based collective co-founded in 2018 by Lendlease Corp. and Collectively. The lab brings together a diverse and growing global network of 800+ Policymakers, Architects, Designers, Developers, Artists, Community Organizations, as well as residents who aim to tackle loneliness through design and placemaking in London’s built environment. Since their start, *TLL*’s research and methodologies have extended globally outside of the United Kingdom.<sup>4</sup> *TLL* frames community-based place as containing three key conditions of connectedness which foster higher chances of public use. These conditions include: ‘Hardware’ (physical environment), ‘Software’ (programming), and ‘Code’ (policy).<sup>5</sup> These three conditions then assist the community in creating participative, iterative, flexible and diverse spaces that promote connectedness (fig. 2).<sup>6</sup> Changing the ‘Hardware’ and ‘Software’ of a neighborhood to foster these types of spaces, communities have the potential to create spaces and activities that foster interaction and combat loneliness within a suburban context.

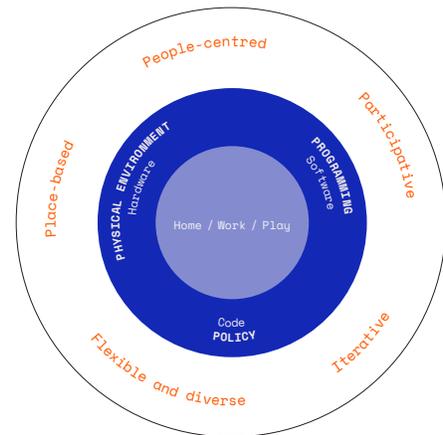


fig. 2: Conditions for Connection by The Loneliness Lab

*“Neighborhood leads to attempts at warping city life into imitations of town or suburban life. Sentimentality plays with sweet intentions in place of good sense.” - Jane Jacobs<sup>6</sup>*

<sup>4</sup> The Loneliness Lab. “About The Loneliness Lab.”

<sup>5</sup> “Using Design to Connect Us,” 14

<sup>6</sup> Ibid.

<sup>7</sup> Jacobs. *The Death and Life of Great American Cities*, 112.

# FRAMEWORK

# THE LONELINESS EPIDEMIC

Feeling lonely is a human condition that most experience to some degree in their lifetime; however, the global attention to loneliness has risen as researchers have discovered that feeling alone does not only sadden an individual but causes adverse health effects that are detrimental to one's overall well-being. *The Loneliness Lab* reports that: "Loneliness is a significant and growing public health issue. Even before the Covid-19 pandemic, the British Red Cross estimated that 9 million people in the UK often experience loneliness. Since the pandemic, estimates now show that a third of UK adults often feel alone. Sadly, this trend is repeated across many advanced economies."<sup>8</sup> National Statistics institutions from The United States of America, Australia, Canada, Japan, The United Kingdom, amongst many others are also reporting similar data from their country's residents. In 2018, The United Kingdom went so far as to appoint the world's first Minister of Loneliness to assist in combating the country's ever growing loneliness epidemic.<sup>9</sup>

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<sup>8</sup> "Using Design to Connect Us." Pg. 4

<sup>9</sup> John, Tara. "Meet Tracey Crouch, Britain's Minister of Loneliness." Accessed March 3, 2022. <https://time.com/5248016/tracey-crouch-uk-loneliness-minister/>.

There are multitudes of factors that contribute to loneliness in each context; cultural, social, environmental, economic, and political which have existed prior to the Covid-19 pandemic. What has emerged from the Coronavirus is an amplification of the previously listed factors by mandatory lockdowns, physical distancing mandates, alongside the limiting of gathering and closures of public social spaces.

Although this thesis is not focused on creating social spaces that respond to the pandemic, it is echoing the importance of physical and social interaction. Covid-19 restrictions previously revealed to many were that these had been taken for granted. When the effects of the pandemic become more manageable for health professionals and individuals alike, as well as when restrictions start to be lifted, the social conditions of pre-pandemic life may not be fully carried over. The post-pandemic world may be filled with concerns of health and safety, social anxieties, and new requirements pertaining to personal comfort levels. It is likely that some forms of social caution will be introduced into existing public gathering spaces and that social interactions within a community setting will decline. It is also conceivable that with time, comforts associated with social gathering will return.

The effects of loneliness can affect one's health and overall well-being; *Statistics Canada* reports that 49% of those surveyed who disclosed being always or often lonely also experience fair or poor mental health (fig 3).<sup>10</sup> In addition to these statistics, the *Angus Reid Institute* gathered data from 2055 Canadians and differentiates their social circumstances into five groups: The Desolate, Lonely but not isolated, Isolated but not lonely, The Moderately Connected, and The Cherished (fig. 4).<sup>11</sup> Both studies have taken a general consensus of the Canadian population from many different environmental contexts (i.e. cities, suburbs, rural towns), but do not disclose where the candidates of their studies derive from. As a general overlook of loneliness in Canada however, the data reflects similar circumstances from other countries across the globe, with predictions of the declining social wellbeing to affect many more Canadians if actions are not taken to combat the increasing trend of loneliness in Canada.

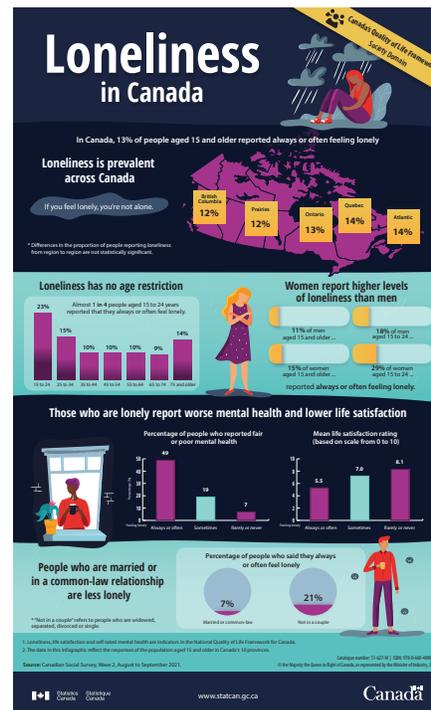


fig. 3: Loneliness in Canada info-graphic by Statistics Canada

**Index on Loneliness and Social Isolation (ILSI)**

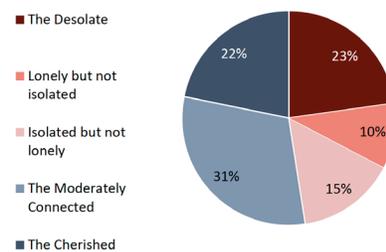


fig. 4: Index on Loneliness and Social Isolation from A Portrait of social isolation and loneliness in Canada today by The Angus Reid Institute

<sup>10</sup> Government of Canada, Statistics Canada. "Canadian Social Survey: Loneliness in Canada." Accessed February 2, 2022. <https://www150.statcan.gc.ca/n1/daily-quotidien/211124/dq211124e-eng.htm>.

<sup>11</sup> Angus Reid Institute. "A Portrait of Social Isolation and Loneliness in Canada Today." Accessed February 1, 2022. <https://angusreid.org/social-isolation-loneliness-canada/>.

Louise C. Hawkley, Ph.D. & John T. Cacioppo, Ph.D. express that loneliness has been found to make one more susceptible to "...personality disorders and psychoses, suicide, impaired cognitive performance and cognitive decline over time, increased risk of Alzheimer's Disease, diminished executive control, and increases in depressive symptoms." In addition to the negative effects loneliness has on one's mental health, prolonged loneliness can also have devastating effects on one's physical health and overall mortality. "In sum, feelings of loneliness mark increased risk for morbidity and mortality, a phenomenon that arguably reflects the social essence of our species."<sup>12</sup>

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<sup>12</sup>Hawkley, Louise C, and John T Cacioppo. "Loneliness Matters: A Theoretical and Empirical Review of Consequences and Mechanisms." *Annals of Behavioral Medicine*. 40, no. 2 (2010): Pgs. 2-3 doi:10.1007/s12160-010-9210-8.

# THE DECLINE OF COMMUNITY INTERACTION

Historically, families were attracted to suburban living because there was separation from city centers, the value of owning property, and the space to raise a family in a safe community environment. As suburbs are peripheries to major cities, mass automobile projects such as freeways, and vast systems of roadways connected municipalities to one another; eventually bleeding into each other as populations grew throughout the second half of the Twentieth Century - much like Norman Bel Geddes' design for the General Motors Exhibition at the 1939 World's Fair titled "Futurama" (fig. 5)<sup>13</sup> With an increasing amount of space available for purchase, residents started indulging in the many technological advancements and new comforts of home that seemingly made life easier - multiple cars, televisions, microwaves, powered lawn mowers, along with many other luxuries that are taken granted for today. Such a privatized context begins to command a private way of living coupled with the desire for 'more.' Suburban environments perpetuate a culture of consumerism and individualism throughout North

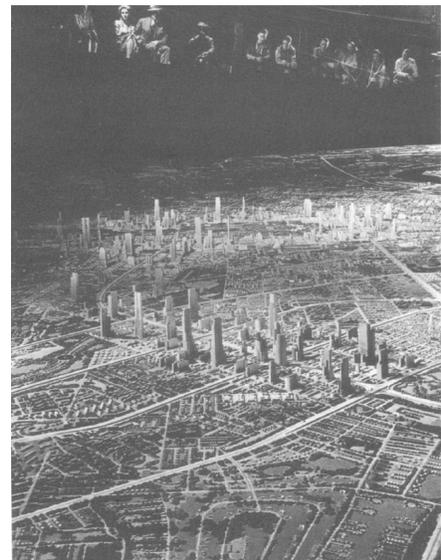


fig. 5: The Futurama model, with spectators on conveyor belt seating above. Photograph by Margaret Bourke-White in *The Aesthetics of Ascension in Norman Bel Geddes's Futurama* by Adnan Morshed. Pg. 76

<sup>13</sup> Morshed, Adnan. "The Aesthetics of Ascension in Norman Bel Geddes's Futurama." *Journal of the Society of Architectural Historians* 63, no. 1. (2004), 75; Ibid. Pg. 76

America. Further, consumer demand, financial models, and the desire to maximize return on investment, provides a disincentive for developers to integrate robust public spaces of gathering for residents as the suburban typology evolves. This in turn disincentivizes residents to interact with others in the community because there simply are not enough meaningful spaces that facilitate communal physical interaction and gathering in most suburban neighborhoods.

According to Robert D. Putnam, from 1950-1996, the Suburbanization of America has grown more than 30%, only for the trend to continue upward as non-metro populations decrease by the same 30%. Relatedly, large land masses have been consumed to allow for subdivision developments to attract families away from socially dense cities towards sprawling suburbs. In Canada specifically, 53.6% of housing is provided by the single family home model.<sup>14</sup> Furthermore, underutilized and private land that are owned by corporations, as well as vacant land perpetuate disincentivizing conditions to implement social public space due to the monetary value they may hold.<sup>15</sup> To transition monofunctional or empty plots into public space for the neighborhood

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<sup>14</sup> Putnam, Robert D. "Bowling Alone: The Collapse and Revival of American Community" (New York :; Simon & Schuster, 2000) ,208

<sup>15</sup> Government of Canada, Statistics Canada. "Census in Brief: Dwellings in Canada, Census Year 2016." Accessed February 2, 2022. <https://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016005/98-200-x2016005-eng.cfm>

that host these vestiges of land would benefit the community on a social level populating empty lots with shared public spaces would help combat inherent loneliness, internalization, individualization, and isolation amongst residents.

Privatized space in suburbia can be considered sacred to some homeowners; their idea of a utopic backyard bordered by a fence that blocks out neighbors and increases a sense of security, and (most) front yards that are pruned to the homeowner's idea of perfection instill a proud feeling of homeownership. In the public sphere of suburbia, roads dominate the tree-lined landscape accompanied by parallel boulevards and sidewalks for the pedestrian which may or may not direct you to a park or greenspace, but one can view the sidewalk as a 'road for pedestrians.' It is a transitory means of activity where gathering rarely occurs; one may stop and say hello to a neighbor walking in the opposite direction for small talk, or nod at a stranger passing by, but such interaction most likely does not occur frequently enough or long enough to foster enough interaction to make one feel less lonely. (figs. 6-7)



*fig. 6: Study of Suburban Hardlines - Stouffville, ON*



*fig. 7: Study of Frontal Private & Public Spaces - Stouffville, ON*

According to “A Portrait of social isolation and loneliness in Canada today” by the *Angus Reid Institute*, individuals who live in a household such as a suburban home with one or more people show to be less lonely, but of the 1711 individuals who participated, 51% of their monthly interactions were comprised of household interaction. When added to the entire group of 2055 respondents, 45% reported not interacting with their neighbors at all, and 33% only interacting once or twice with their neighbors over the course of the month (fig. 8). Although those who live alone are generally more physically isolated due to their private living conditions, those who do not live alone are receiving a majority of their social interaction from within their immediate household and not expanding their interaction towards communal engagement to supplement the interaction they receive at home.<sup>16</sup>

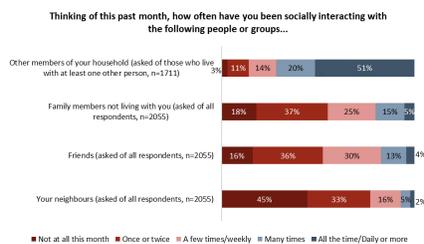


fig. 8: Types of Interactions over a Month from *A Portrait of Social Isolation and Loneliness in Canada today* by the *Angus Reid Institute*

As Robert Putnam describes in *Bowling Alone: The Collapse and Revival of American Community*; “The average American in recent decades has been far from isolated civically or socially, but we see more engaged with one another as friends (or schmoozers) than citizens (or machers).”<sup>17</sup> Private interaction is not on the decline, but informal and public interaction in the

<sup>16</sup> “A Portrait of Social Isolation and Loneliness in Canada Today.”

<sup>17</sup> Putnam, *Bowling Alone: The Collapse and Revival of American Community*, 97.

community has taken an extreme dive where Putnam's data showcases favoring entertaining at home, visiting friend's homes, and going out to dinner or for entertainment over engaging in community initiatives, participating in community events, and not joining community groups (figs 9-13).<sup>18</sup> With developers and cities providing less meaningful communal space and less public infrastructure capable of supporting interaction, it is reasonable to assume that part of the reason for this decline in community interaction is a spatial one; retreating gathering inside the home instead of out in the community.

Building upon Putnam's observations of declining communal interaction (pre-2000), the COVID-19 Pandemic has severely decreased (and eliminated for a short period of time) both private and communal gathering through the safety precautions by global and local governing powers, as well as medical specialists around the world - ultimately inhibiting physical interaction on all levels, creating even more isolation within suburbia. Ironically perhaps, the saving grace in suburbia was the private yard which offered a certain degree of relief from interior isolation, but still didn't address a way to interact with others.

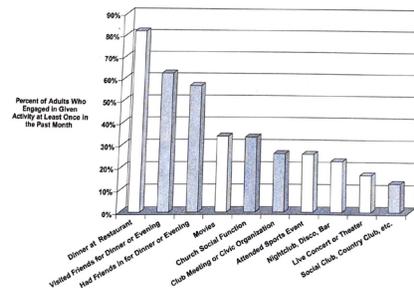


fig 9: Social and Leisure Activities of American Adults (1966-1990) from *Bowling Alone* by Robert D. Putnam

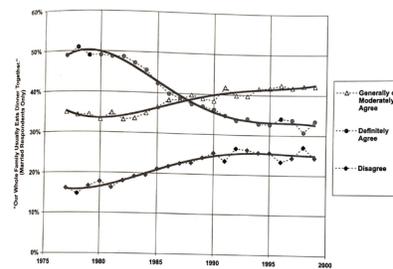


fig 10: Family Dinners Becoming Less Common (1977-1999) from *Bowling Alone* by Robert D. Putnam

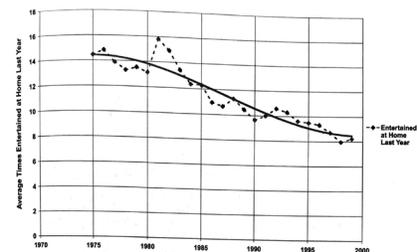
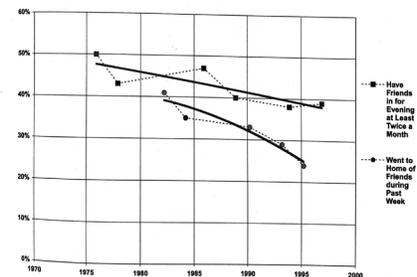


fig 11: Social Visiting Declines, 1975-1999 from *Bowling Alone* by Robert D. Putnam



<sup>18</sup> Putnam, *Bowling Alone: The Collapse and Revival of American Community*, 93-115

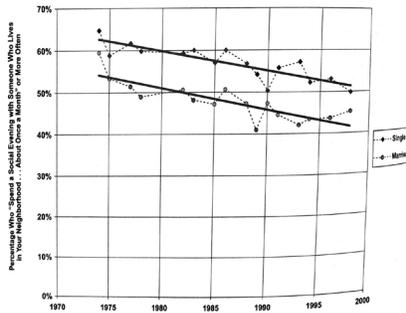


fig 12: *The Decline of Neighboring, 1974-1998 from Bowling Alone by Robert D. Putnam*

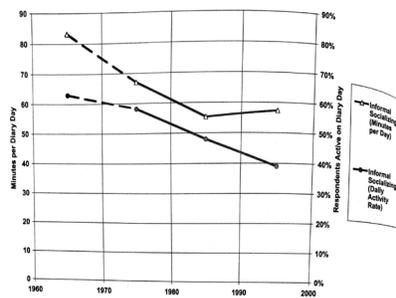


fig 13: *Informal Socializing as Measured in Time Diary Studies, 1965-1995 from Bowling Alone by Robert D. Putnam*

As mentioned previously, this thesis is not based on the effects of COVID-19 on suburbia, but the pandemic is worth mentioning as it highlighted many isolative features of modern living that have been overlooked or unforeseen since the mid-nineteen forties when suburbs became a mass housing typology in North America. If there was an approach of granting a greater accessibility to the social infrastructure and spaces needed for more frequent and prolonged interaction- recovering from isolative conditions and preventing loneliness could become more combatable when there are localized solutions based on community input to meet their needs rather than centralized conditions that are only accessible by car, or longer than a short walk away. Neighboring according to Putnam, in tandem with the lack of neighborly interaction identified by the Angus Reid Institute, evidence suggests that interaction outside of the home is dwindling, and privatized interaction is increasing.<sup>19</sup> As there is a decline in neighboring according to Putnam, in tandem with the lack of neighborly interaction identified by the Angus Reid Institute, evidence suggests that interaction outside of the home is dwindling, and privatized interaction is increasing.<sup>20</sup>

<sup>19</sup> Putnam, *Bowling Alone: The Collapse and Revival of American Community*, 106; "A Portrait of Social Isolation and Loneliness in Canada Today."

<sup>20</sup> Putnam, *Bowling Alone: The Collapse and Revival of American Community*, 106

# THE PILLARS OF CONNECTEDNESS

*The Loneliness Lab* identifies four 'Drivers of Connection': "Structural, Cultural, Relational, and Attitudinal."<sup>21</sup> In that order of presentation, Structural is the base in which all social connectedness can occur; it is the physical environment that facilitates and supports how a community interacts with one another, as well as forms the framework for activity, the frequency and quality of social interaction, in addition to personal experience in loneliness and connection (fig 14).<sup>22</sup> The 'Cultural, Relational, and Attitudinal' experiences one identifies with are mostly personal beliefs, relationships, and attitudes an individual or family hold that create unique values in what they see as meaningful engagement with others and how they proceed in creating those moments and opportunities. The 'Structural' pillar represents the infrastructures in which these instances can take place. What *The Loneliness Lab* is also identifying is that designing a physical environment designed for community interaction cannot ultimately alter one's Cultural, Relational, and Attitudinal views and habits. These types of spaces allow the opportunity to foster

**Drivers of connection.** The structural drivers of loneliness have often been overlooked in the search for solutions, but the physical environment is vital to our health and wellbeing.

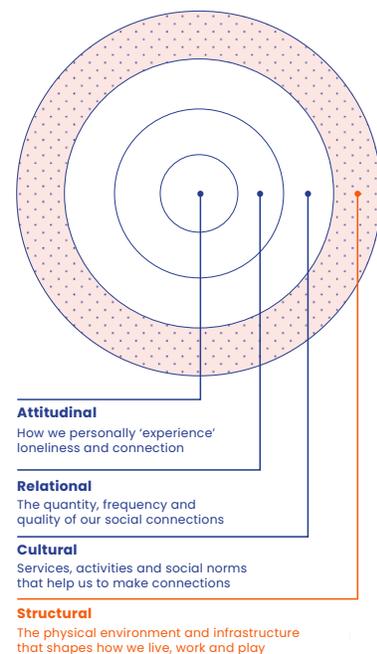


fig. 14: Drivers of Connection by *The Loneliness Lab*

<sup>21</sup> *The Loneliness Labs*. "Using Design to Connect Us." Accessed March 6, 2022. <https://www.lonelinesslab.org/>. Pg. 9. Free PDF download from *TLL* website.

<sup>22</sup> *Ibid.*

prolonged and meaningful social connection in a physical space within the setting such as a neighborhood for those who are seeking to interact with others, in addition to being a member of their greater community.

**SECTION 2**  
**STUDIES OF ISOLATION:**  
Community Life in Cachet Woods

# THE SITE

The Greater Toronto Area (GTA) is a collection of peripheral cities and towns which are the most populous in Canada. Wrapping around the Northern and Western shores of Lake Ontario, as well as Toronto, the GTA has a population of 5.92 million as recorded by the 2016 Census which includes twenty-four different municipalities.<sup>23</sup> Most of the cities in the GTA are suburbs which have gained “city” status due to rapid population growth as well as hosting commercial offices and industry. Markham is one of these cities. Being the fourth largest population in the GTA (behind Toronto, Mississauga, and Brampton), Markham’s suburban makeup consists of a blanket of subdivisions that host swaths of single-family homes of different ages, with the introduction of some higher density modes of living in more recent years. This condition is similar to many of the suburban sections found in the GTA’s other cities.<sup>24</sup>



fig. 15: Site Location; Markham, ON & Cachet Woods/Estates

<sup>23</sup> “Focus on Geography Series, 2016 Census,” Census Metropolitan Area of Toronto, Accessed February 2, 2022, <https://www12.statcan.gc.ca/census-recensement/2016/as-sa/fogs-spg/Facts-cma-eng.cfm?GC=535&GK=CMA&LANG=Eng>; “Markham to Change from Town to City,” Accessed February 28, 2022, <https://www.cbc.ca/news/canada/toronto/markham-to-change-from-town-to-city-1.1179129#:~:text=Canada's%20largest%20town%20is%20about,Last%20month%20Coun.>

<sup>24</sup> Government of Canada, Statistics Canada. “Focus on Geography Series, 2016 Census.” (2016)

Markham is located approximately 30km north of Downtown Toronto. Markham has been deemed a city since July 1st, 2012, with a population of about 350,000.<sup>25</sup> Like many suburbs, the land was first used for agriculture, then bought by developers to monetize on the need for housing. What historically was so attractive about suburban living was the amount of land you were able to buy at attractive prices, in addition to larger home sizes, and separation from downtown; the same is marketed to potential home buyers to this day.

The Cachet Woods neighborhood is the case study neighborhood for this thesis. Sitting at the far west end of Markham, Cachet Woods' location allows for easy access to Downtown Toronto via the Don Valley Parkway and Ontario Highway 404, as well as nearby Greater Toronto Area cities such as Richmond Hill and Vaughn. The Cachet Woods neighborhood was chosen as the case study site because of its comparability to other GTA suburbs, their suburban elements, as well as the lack of Place-Based approaches to neighborhood design (fig. 16). The area is also my childhood neighborhood where I have been living my entire life. I have been also informally interrogating the neighborhood since I began my Undergraduate studies in Architecture.

<sup>25</sup>"Focus on Geography Series, 2016 Census."

Such interrogation and study of the private and public elements of the Cachet Woods neighborhood are based upon neighborhood layout, which includes conditions of walkability, access to public spaces, and the types of public spaces that attempt to cater to community needs. Cachet Woods will also be compared to nearby neighborhoods such as Stouffville, Old Markham, Cathedral Town, and a post-war suburb in Scarborough.

fig. 16: Land use map and Callouts of Cachet Woods & Estates



As a subdivision of varying densities, Cachet Woods and adjoining Cachet Estates can be analyzed at both the macro and micro scales. At an urban (macro) scale: the implementation of large private lots, peripheral public parks, and empty land owned by larger private organizations are all factors that can further push notions of individualization, isolation, and loneliness for residents of the neighborhood (figs. 17-22). Conditions such as front facing garages, rear oriented living spaces (oriented towards the backyard), as well as barriers such as fencing or dense landscaping make the human (micro) conditions of suburban living even more isolating. There are many daily activities where private spaces are necessary at the micro level, but the architecture that has emerged from the suburbs has strayed from the idea of a safe, family-oriented community into neighborhoods of personal isolation on the macro level; promoting individualization and loneliness.

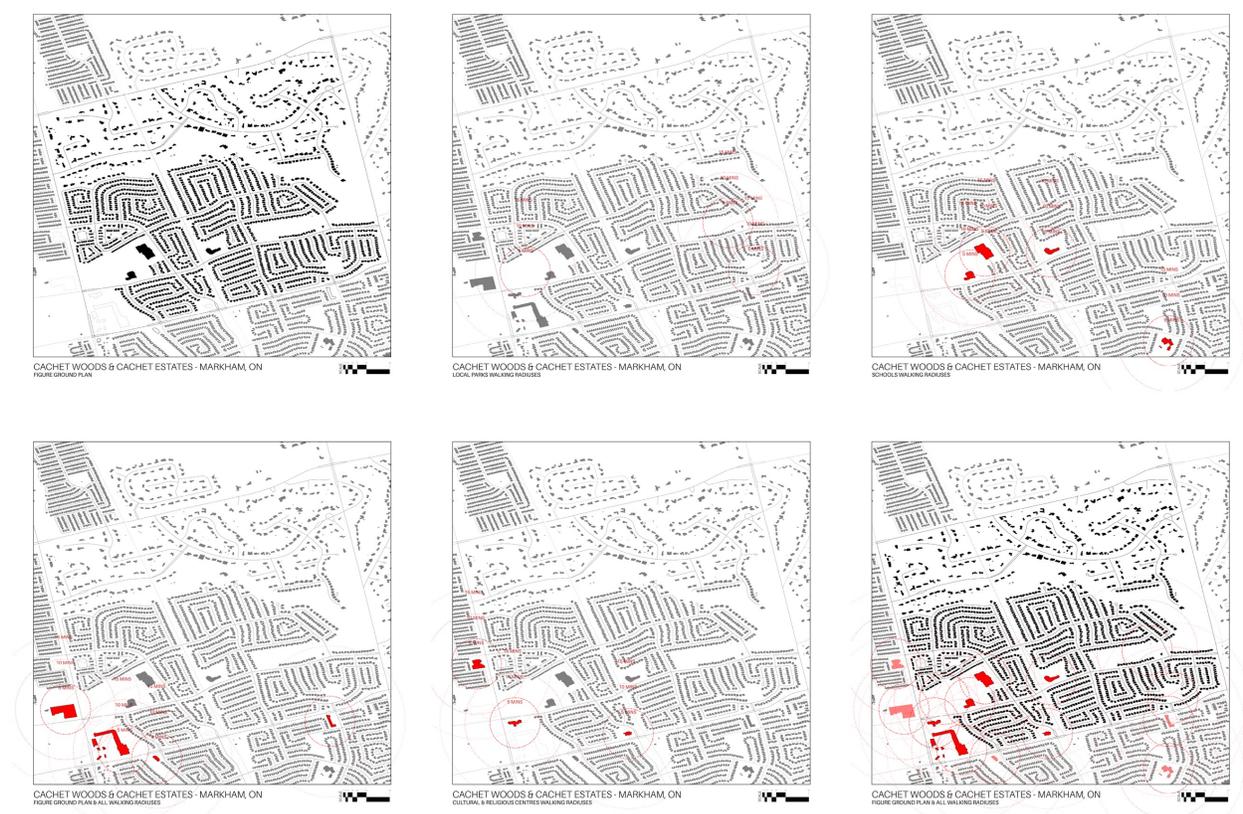


fig. 17-22: Walking Radius Maps of Community Landmarks in Cachet Woods & Estates

# DEVICES OF ISOLATION

Evolving from the post-war typology of a home, current single-family housing models carry many similar characteristics that individualize their residents and do not incentivize them to leave for localized activities; ultimately complimenting the empty social conditions of the suburban streetscape. As homes become filled with items that further ease an already comfortable home life and suburban public spaces become increasingly underutilized, the once celebrated pillar of community and social status shines a constantly intensifying light on a characteristic that antitheses the utopic view of how the suburbs were marketed to the public, physical and social division.

Devices of Isolation can be divided into two categories that have their role in creating social isolation within the home. The first is the design of the home itself to facilitate individualistic consumer-based activities, and the other are the devices that fill the home. As subdivisions were parceled out to new homeowners by developers, the suburbs create an uneven division of land utilization on an urban scale, as well as the division of programmed spaces within the home create a clear line of what is private and what is public. The disproportionate ownership of private property and

lack of activated public space within a suburban neighborhood creates an imbalance of social cohesion, an eventual disregard of public space, and an internalizing of the population due to the simple fact that there is nowhere immediate to travel to and no one see in the public realm as a pedestrian. This social specialization of an empty public sphere creates opportunity for contemporary comforts within the home to further canonize the individualization of suburban society. The spatial organization of most typological suburban homes are oriented around social status through size, aesthetic, location, as well as what the owners buy and fill it with; all consumable entities are then spatially organized by the consumer (residents) of the home.

### ***Isolation Within the Home***

Spatial use within the home has become increasingly blurred by the user through the organization of programming within the home; parents working in the home office and children remote learning from the kitchen table are a couple of examples of activities that had social components outside of the home that have been internalized and individualized pre-pandemic, then amplified by COVID-19. The individualization of interaction also appropriates personal spaces for mixed-use programming that

removes the process of being in public spaces to experience such as streaming movies in your bedroom instead of meeting friends at a movie theatre. These examples are some of many that remove physical interaction from the public realm and into the privacy of one's home. This cycle of personal consumption within the home, and lack of activated public space in the suburban sphere creates a dialogue of individualization, as well as further isolating of the population within their own homes.

### ***Isolation Within Suburbia***

The historic suburban context is comprised by patches of subdivisions woven with the long, sweeping streets lined with single-family homes. What the suburban home also promised was a disconnect; a disconnect from the city, a disconnect from neighbors when wished, and a disconnect from the day-to-day working life of the middle and upper class. Such vast social disconnection was accepted by suburban residents because they were also promised a life of comforts through consumption which begins with the land that the developer markets, along with the multitude of floorplans, elevations, and lot sizes offered for suburban homes.<sup>26</sup>

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<sup>26</sup>Clark, S. D. "Urbanism and the Changing Canadian Society," (Toronto, Ontario: University of Toronto Press), 20-23.

Comparing Cachet Woods to other near-reaching neighborhoods in the GTA of varying ages, the homes get less socially porous; garages and parking pads move from side yards to the forefront, social family spaces move from the front of the home to the back, front entryways become slivers in the façade with narrowly paved walkways branching from the driveway guiding you there, large front porches and patios disappear to make way for a wall of landscaped cover to hide whatever is not garage on the front façade eventually internalizing family life into the home rather than towards the community (figs. 23-24).

This lack of suburban porosity is only amplified by the lack of exterior social space within the streetscape. The street itself being the forefront of the suburban landscape dominates the public realm to allow for automobile transportation in and out of the subdivision, while a sliver of sidewalk and boulevard is left for the pedestrian. Although the sidewalk appears to be a public space, and technically is in the public realm of the community, more often it is occupied with aimless strolls, dogs relieving themselves, isolated walks to school, and as a connector to other outdoor spaces like parks. There really is not anywhere to go that is of interest within these neighborhoods that warrant so much allotted space for private transportation; only to

come and go from the subdivision to work and play. If one decides to stay on their property, they are deciding to fortify themselves from the outside world with an internalizing force created by one's own consumption through the disconnect and lack of place typological suburbs hold for their inhabitants.

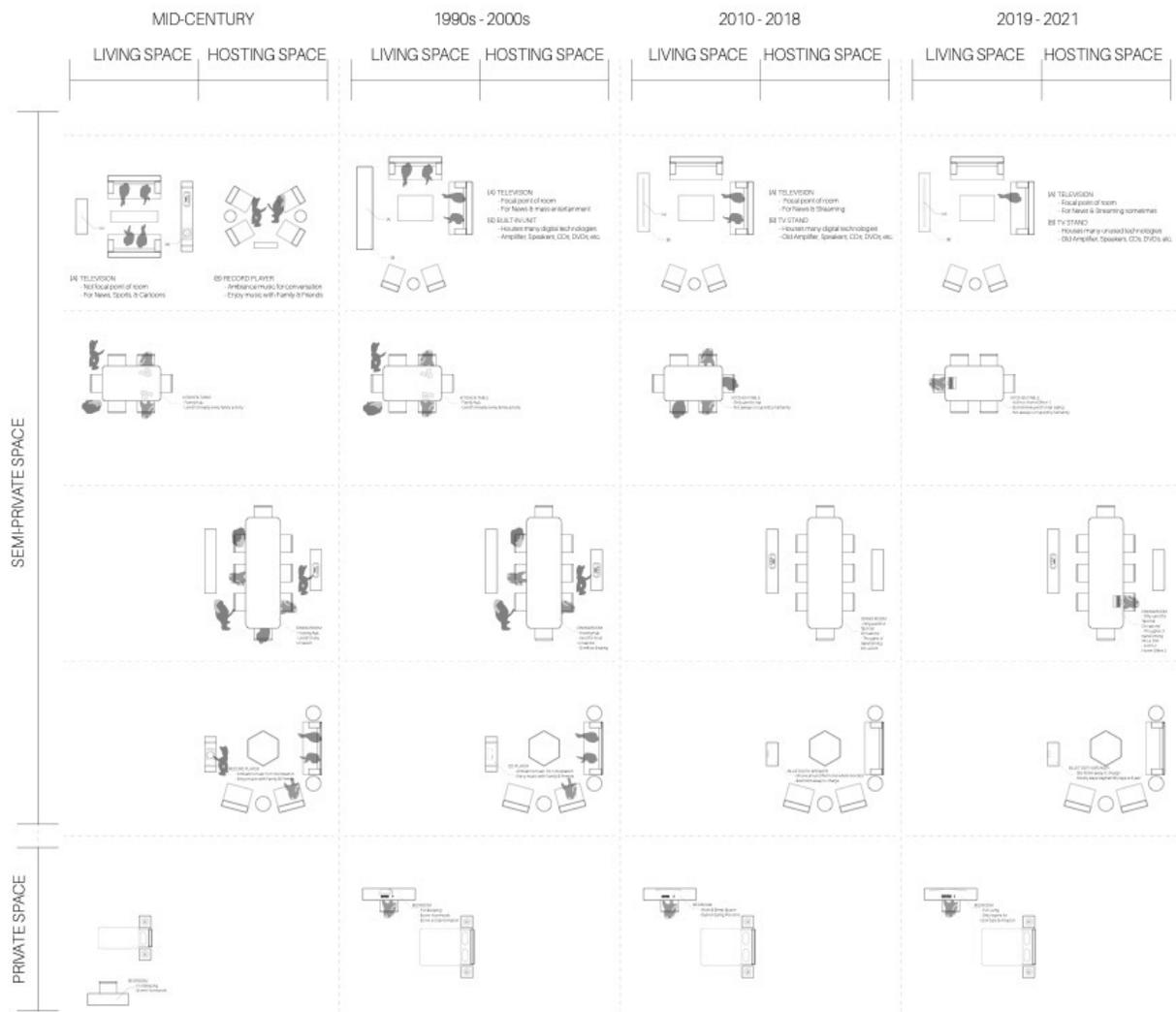


fig. 23: The Internalization of Interaction

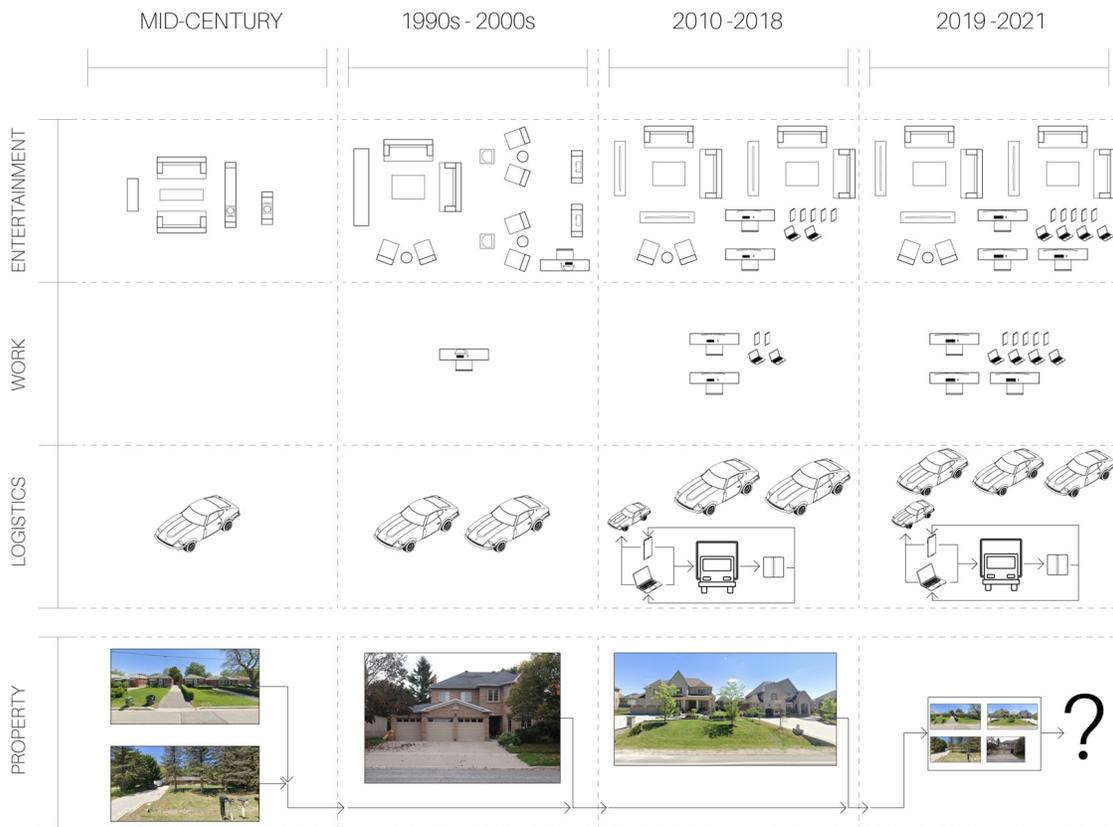


fig. 24: Devices of Loneliness Taxonomy

### ***Analyzing Isolation Within Cachet Woods***

Cachet Woods, Stouffville, and Old Markham are all streetscapes hardline with garages that fill a majority of a home's facade - these neighborhoods were constructed between 1980 - 2010. In the example of the post-war homes of Scarborough however, long narrow parking pads and large front yards create a more porous streetscape (figs. 25-28). Although the elements being compared do not make a neighborhood more or less connected, they do however portray a disconnection of the household to the public sphere by eliminating views to the street and prioritizing internalized activity. Moreover, focusing on the use of private elements such as backyards draw activity from the public sphere because of monofunctionally, safety, as well as lack of civic trust and appreciation between neighbors.<sup>27</sup>

As historic peripheral town planning principals have been present since the mid 19th Century, travel between city centers and surrounding residential townships has always been difficult. With the introduction of the automobile in the early 20th Century, reaching decentralized locations from North American cities became easier and much more accessible economically to the everyday consumer.

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<sup>27</sup>Castinson, Jennifer. "Combating Social Isolation With Design," Multifamily Executive, Accessed March 19, 2022. [https://www.multifamilyexecutive.com/concept-community/combating-social-isolation-with-design\\_o](https://www.multifamilyexecutive.com/concept-community/combating-social-isolation-with-design_o).



fig. 25: Suburban Porosities - Cachet Woods  
 Constructed: 1993



fig. 26: Suburban Porosities - Stouffville, ON  
 Constructed: 2005



fig. 27: Suburban Porosities - Scarborough, ON  
 Constructed: 1940s



fig. 28: Suburban Porosities - Old Markham, ON  
 Constructed: 1970s

Auto-centrism became such a strong factor in town and city planning that most public space was handed over to road infrastructure that dismissed the pedestrian as a primary user of the streetscape. One can simply look out their window in any urban or suburban area and see the space allotted for the car in comparison to the space allotted for public social interaction. Like a double loaded corridor in a condominium or apartment complex, the street is a means of getting out and going to wherever one needs to go; there is minimal space for stopping, gathering, or socializing, only briefly in passing.

The general width of a residential street in Cachet Woods is 28 feet, which accommodates two lanes of traffic and street parking measured between the curb sidewalks on each side of the street, while the general width of a sidewalk is 4 feet (1/7th of the usable width). Although the scale of interaction and use differ, the suburban street is a device of individualized transportation where one drives their car from their personal property onto the road and does not interact with anyone in the process. The sidewalk has potential to be a space of social interaction amongst neighbors but lacks the proportion to facilitate moderate social instances of gathering or activity. Furthermore, most neighborhoods only squeeze a strip of sidewalk

between the street and private residences on one side of the street, which ultimately reduces the pedestrian social scene, as well as allowing developers to plan for the minimum amount of public space possible through boulevards on only one side of the street rather than both (fig. 29).

How individuals interact with one another partially depends on spatial assessment and facilitation; having space to accommodate gathering and neighborhood involvement is only half of the issue, the other half is activating that space for the community in a useful and thoughtful way. For example, sidewalks are key to pedestrian movement within a neighborhood for short distance travel, exercise, and some forms of activity. If the sidewalk does not frequently pass through, connect, or terminate at a location where one can gather, rest, or participate in community activity, the sidewalk becomes a pedestrian roadway where one walks a route that both begins and ends at their home.

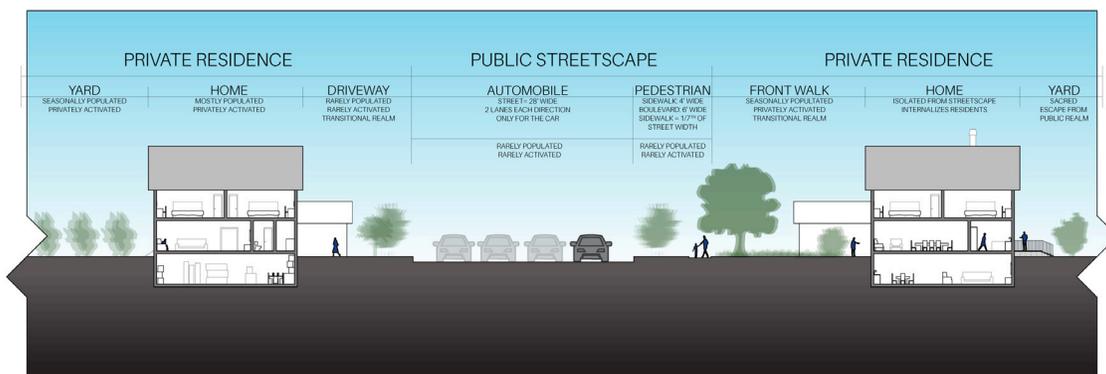


fig. 29: Street Section of Eyer Drive, Cachet Woods, Markham, ON

There are two scales to this solution: the scale of the home, and the scale of the urban landscape at the street level.

This is where social cohesion becomes evident as an understanding of individualization and deteriorations of community due to the division of privatized ownership of land and goods per family. Such privatization, along with the scarcity of public spaces facilitate an understanding of individuality, not a cohesive socially active community; walkability, provision of social environments, living arrangements, as well as one's general surrounding environment are what curates a cohesive communal attitude towards their social interaction with their immediate milieu. Of course, introversion and extroversion are dependent on one's personality in the sense of choosing to stay home or go out, but if the public is not given accessible spaces to be a community, people will go elsewhere to be social and decentralize the suburb even further, or simply leave their home out of necessity and become further individualized from their surroundings. Nevertheless, the option to be able to access activated local public spaces facilitates social gathering and combats isolation, individualization, and loneliness within the home by creating a reason to enjoy one's community through social activation rather than further

succumbing to the already vast instances of isolation that most suburbs have and continue to facilitate. A reference from popular culture which echo the notions spatially describing individualistic consumptive daily habits both in the community, and in the home are the lyrics to Another “Pleasant Valley Sunday” by The Monkees (fig. 30). The song was written by Gerry Goffin and Carol King after visiting their producer who lived in a New Jersey suburb, on a street named Pleasant Valley, which was given to The Monkees to record and perform.<sup>28</sup> The song was released in July of 1967 and recorded in Los Angeles, California. Without the connection of geographic location and inspiration, the lyrics to the song could be interpretively implemented into any suburban landscape in North America. The experiential and spatial descriptions of individual activities, as well as possessions in and around the home for passers-by in the urban space observes a sense of non-place-based conditions which create internalized and individualistic behaviors amongst residents of the neighborhood.

*Your local rock group down the street  
Is trying hard to learn this song  
To serenade the weekend squire  
Just came out to mow his lawn*

*(Chorus 1) Another Pleasant Valley Sunday  
Charcoal burnin' everywhere  
Rows of houses that are all the same  
And no one seems to care*

*See Mrs. Gray she's proud today  
Because her roses are in bloom  
And Mr. Green he's so serene  
He's got a TV in every room*

*(Chorus 2) Another Pleasant Valley Sunday  
Here in status symbol land  
Rows of houses that are all the same  
And no one seems to care*

*Creature comfort goals they only numb my soul  
And make it hard for me to see  
My thoughts all seem to stray to places far away  
I need a change of scenery*

(Chorus 1)

Another Pleasant Valley Sunday (x5)

*fig. 30: Another Pleasant Valley Sunday  
Performed by The Monkees  
Written by Gerry Goffin and Carol King*

<sup>28</sup>“The Story behind Pleasant Valley Sunday Sung by The Monkees,” ABC Radio, Accessed November 5, 2021. <https://www.abc.net.au/radio/melbourne/programs/thefridayrevue/backstory-monkees/11191676>

# SOCIAL DESERTS IN THE SUBURBAN LANDSCAPE

A desert is a barren geographic landscape of extreme conditions which only allow some life forms to flourish. A Social Desert reflects such characteristics on a level of physical connection and social prosperity by promoting internalization within a community. This social condition is brought forth (or removed) by physical elements that can be found within suburban contexts. Suburban elements such as driveways, garages, sidewalks, boulevards, and streets are spaces which generally demand large amounts of space but provide minimal-to-no opportunity for physical and social interaction to residents of the community. How the previously listed elements pull such opportunities from the community is by creating processes of individuality in daily life. For example; due to the mono-functional use structure of suburbia and lack of neighborhood-scale economies such as corner stores or local business within walking distance, residents must go from their private garage entrance, into their car, and, in most cases, drive to a mall or commercial center (the typical suburban power center) to purchase daily items, then conduct this process in reverse to get home. This entire process can be conducted without

the resident setting foot into the public realm, the sequence leaves no opportunity for physical interaction with neighbors. In this scenario, the garage, driveway, and street are the main protagonists in a story of suburban living, from fulfilling basic daily needs to indulging in consumerist habits (fig. 31).

Deserts are not completely void of life however, and suburban streets are not fully absent of physical interaction either. The challenge is waving at neighbors while unloading groceries from your car, passing neighbors on the sidewalk as they maintain their front lawns and gardens, and crossing paths with neighborhood acquaintances while taking a walk are a start but they don't generally last long enough to constitute meaningful chances of encounter. These chance interstitial moments of interaction are small gaps between private and public space which create a window of contact that resemble the small amount of life in a desert. Similar to spotting an oasis in a desert, public spaces such as parks, cultural centers, and plazas (oasis) are sparse or non-existent in suburbia (desert). Community and interaction of programmed public spaces exist but cater to pedestrian transit rather than communal gathering. In keeping with the desert oasis analogy, such spaces dehydrate the public of

spaces that foster prolonged and meaningful physical interaction, which create conditions that encourage isolation and loneliness at the scale of the community (fig. 32).

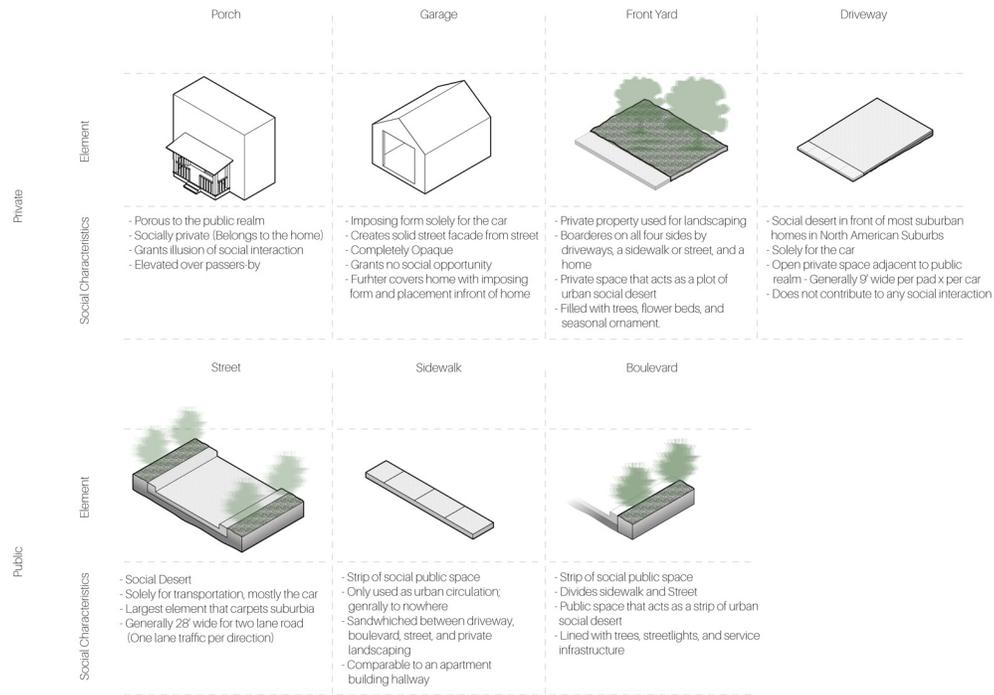


fig. 31: Suburban Private & Public Space Social Characteristics

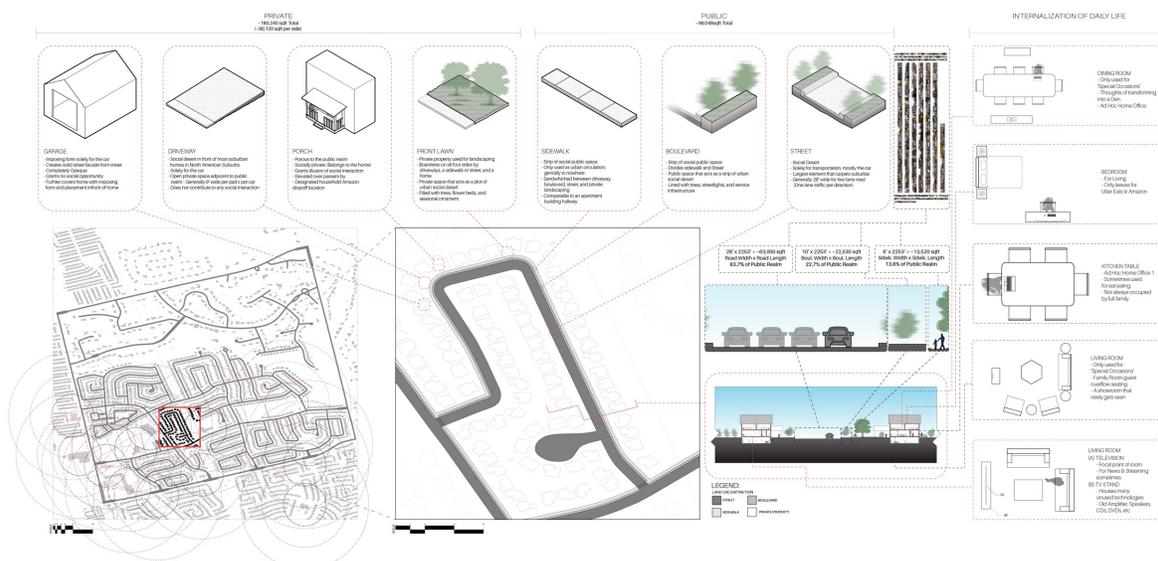


fig. 32: Quantification of Suburban Space & it's Elements - From Cachet to Eyer Dr.

SECTION 3  
COMMUNITY INTERVENTION  
Adjusting Cachet Woods

# THE RE-INTEGRATION OF GATHERING IN SUBURBIA

As services and places of gathering are consistently being pushed to the peripheries or away from subdivisions, further centralizing parks, religious centers, power centers such as malls and strip plazas would assist in promoting physical interaction amongst residents. Victor Gruen wrote in his book *Shopping Towns USA* that: "Planning which follows [the principles outlined in Part II] creates not only stores and the buildings in which they are located but also public areas in the spaces between and around these buildings. It also brings into being community facilities, such as auditoriums and meeting rooms. This is done with the express intention of creating an environment which, if properly utilized, will establish the shopping center as the focal point for the life of a community or a number of communities."<sup>29</sup> Malls and shopping centers did facilitate community gatherings, but as suburbs continued to sprawl, consumerism took precedent over interaction. This condition slowly phased out community events in shopping centers to fulfill the

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<sup>29</sup>Gruen, Victor, Larry Smith, *Shopping Towns USA: the Planning of Shopping Centers*, (New York: Van Nostrand Reinhold Co., 1960), 257.

evolving social constructs of North American consumerist society as suburbs grew farther away from these centralized nodes of gathering and commerce.

Given that shopping centers are primarily places for consuming goods and are not centralized community gathering places, current conditions have internalized residents of suburbia by not creating suitable and usable centralized public spaces to facilitate meaningful gathering for the community, one opportunity is to transform underutilized public and private spaces, into social infrastructures for the community stimulate public gathering. Ideally, this would be done in consultation with the community so that their needs can be implemented to create a more socially vibrant suburban landscape that entices residents to spend more time outside of their homes to promote gathering and physical interaction with one another. Instead, emphasis has been placed on The Loneliness Lab's "Drivers of Connectedness" of which there are five main tenets: Place based, People-centered, Participative, Flexible and Diverse design that is iterative. Under this guidance, the community of Cachet Woods can undergo a theoretical re-planning of underutilized and informally appropriated spaces that can facilitate social infrastructure interventions to spark community interaction. However, for these spaces to

have the most impactful effect on the community, the proposed places and interventions need to be chosen and implemented by the community rather than being planned by an individual such as an Architect, Urban Designer, or City Planner; the Community needs to express their visions of how the future sites will cater to the activities they will be conducting on the sites; which will ultimately affect how the community takes ownership of these spaces, in addition to how effective the interventions are instilling a sense of place for the neighborhood, and the Community.

***Three Underused Sites in Cachet Woods:  
Opportunities for Shared Spaces***

As previously shown, within suburbia, there are some plots of land that are underutilized or unused but have the potential to be transformed in pursuit of enhancing social interaction and connectedness. In the case of Cachet Woods, there are three such ubiquitous suburban conditions for this to occur; The Utility Corridor, The Open Field, and The Cul-de-Sac (fig. 33). These vestiges of land are all open, flat, and are currently performing a minimal amount of formal functions that can all be expanded upon. The Utility Corridor stretches for many kilometers in addition to hosting small transmission towers that have not carried electricity for decades and are left as relics to remind passersby on who owns the land they stand on.



fig. 33: Site locations of the Utility Corridor, the Open Field, and Cul-de-Sac

The Open Field is an empty piece of land spared from home development, and the Cul-de-Sac is a repeated condition around many neighborhoods that act as a dead-end to traffic and only serves traffic destined to the homes that circle it's curves- mostly when the residents leave and return from work or recreation. The three elements being proposed for community intervention were not randomly chosen, they all have been appropriated by the community for multitudes of actives that the planned public spaces in the neighborhood do not offer or not designed to facilitate.<sup>30</sup>



fig. 34: Evidence of use in the Utility Corridor- Gardening



fig. 35: Evidence of use in the Utility Corridor- Chairs & Fire Pit

### ***The Hydro One Utility Corridor***

The Utility Corridor was once a functioning power line owned by Hydro One. The transformer towers are now decommissioned but still stand on the site; because of this, Hydro One allows homeowners whose properties are adjacent to the corridor up to thirty feet past their property to have a small garden. Others use that allowance for other personal uses such as additional social space (figs 34-37). Outside of the allowance, some residents of the neighborhood use the corridor as a 'shortcut' to avoid the winding network of sidewalks to get from one part of the neighborhood to the next, in addition to an informal off-leash dog park, and a host of other activities.

<sup>30</sup>Taylor, Zachary Todd, and John Van Nostrand. *Shaping the Toronto Region Past, Present, and Future* (The Neptis Foundation, 2008), 19.

As mentioned previously, the transmission towers have not held an electrical current for decades; this was the outcome of an initiative of 500 community members who called themselves 'STOP' (Stop Transmission Lines Over People) as a reaction on Hydro One's (utility supplier) plan to increase the service from the Buttonville Transmission Station (found about half a kilometer south of the site) to the Armitage Transformer Station (22km north of the site) in Newmarket, ON in their 2003 10 Year Outlook report with the transmission lines that stand in the corridor.<sup>31</sup> After a lengthy battle, STOP, along with other municipalities and individual parties collectively swayed the Ontario Energy Board to terminate electrical transmission service from Buttonville to Armitage after Health and Safety concerns over the proposed increase of electricity that would have been traveling through the lines.<sup>32</sup> Thereafter, the Utility Corridor has been left as stagnant as the suburb that it runs through with the exception of routine field mowing in the spring, summer, and fall months. If only in 2005 the community understood the effects of loneliness to one's health, they could have possibly pushed even further to have the towers removed and had public spaces created.

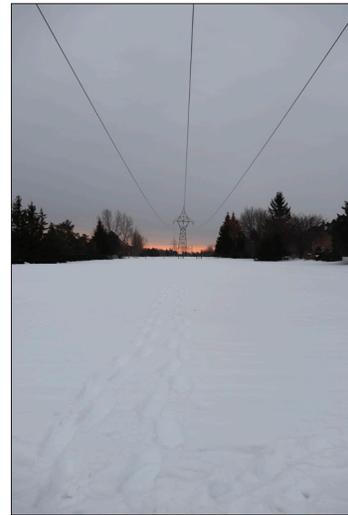


fig. 36: Evidence of use in the Utility Corridor- Walking



fig. 37: Evidence of use in the Utility Corridor- Walking

<sup>31</sup> Ontario Energy Board. *Case EB-2005: Decision 221105*. Accessed March 4, 2022, <https://www.rds.oeb.ca/CMWebDrawer/Record/42612/File/document, 1-14>.

<sup>32</sup> City of Markham. *City of Markham Pathways and Trails Master Plan Final (2009)*. Pg. 13

The story of the Utility Corridor does not end there; in 2009, the (then) Town of Markham posted their final iteration of the Pathways and Trails Master Plan which proposes to incorporate new multi-use pathways and trails, connecting proposed pathway to existing ones to create a network that citizens could use for recreation or a means of transportation as a response to increasing concerns around cardiovascular health. This city wide project had a timeline of 10 years, slated to be completed in 2019, but even in 2022, there is no plan or evidence that the extensive multi-use pathway will be implemented in the Cachet Woods Utility Corridor (fig. 38).<sup>33</sup> Although the proposed trail would not have facilitated prolonged gathering through the nature of activities that occur on a trail, the implementation could have increased accessibility to certain activities, and been built upon to create gathering spaces alongside the path.



*fig. 38: Detail taken from Map 8 of multi-use path running through Cachet Woods from the Town of Markham's Pathways and Trails Master Plan.  
Site noted with dashed black box.*

<sup>33</sup>"City of Markham Pathways and Trails Master Plan Final," Appendix A: Map 8, Accessed February 2, 2022. <https://www.markham.ca/wps/portal/home/business/planning/planning-documents-and-studies/studies/pathways-trails-masterplan>.

### ***The Open Field***

Surrounded on three sides by fencing, and abutting Calvert Park to the East, the Open Field has not received the same treatment of development that the surrounding subdivision has, which reflects that the land has remained unaltered since the 1990s when Cachet Woods was being constructed. It is unclear what institution or individual owns the land, but similarly to the Utility Corridor, the vast landscape acts as a through-way by pedestrians to avoid walking the network of perimeter sidewalks, planned community dog-owner gatherings to allow off-leash play, as well as use the open space for any other activity one sees fit (figs. 39-40).

### ***The Cul-de-Sac***

Many Cul-de-Sacs can be found within most suburban neighborhoods, including those around the Greater Toronto Area, in addition to countless suburbs across North America. This condition, along with most roadways in the suburban context are not shared spaces; the car is seen as the sole 'user' of the street, but because Cul-de-Sacs are dead ends, they are sometimes appropriated for activity due to their illusion of increased safety compared to a traditional street. In the warmer months, residents can be observed performing Tai Chi, playing road hockey, as well as riding their bikes, scooters, and skateboards in the court.



*fig. 39: The Open Field looking North-East towards Calvert Park.*



*fig. 40: Evidence of use in the Open Field- Daily local dog-owners meet. Image by Eddie Tong - "Untitled." - 2/6/21*



fig. 41: Mound of cleared snow in the Cul-de-Sac

In the winter months when there is cleared snow occupying the center of the Cul-de-Sac, children can be observed climbing up, and sliding down the mound of snow created by snow removal services (fig. 40).

### *Mapping Use Activity in the Three Sites of Intervention*

In each of the chosen sites, residents have found multiple personal uses for the flat, open spaces that leave patches of unprogrammed spaces in their neighborhood; filling the voids with a certain degree of informal activity and gathering where they see fit rather than diverting to the preplanned park spaces that were formed in the design of the subdivision (figs. 42-44).

What was formulated through these studies is that in the case of the Utility Corridor and the Open Field, residents use these spaces as shortcuts to avoid walking the perimeter networks of sidewalks and pathways, in addition to using them as informal spaces of activity that are not present, inaccessible, or overused in the neighborhood such as for field sports or as dog parks. In the Cul-de-Sac, the same can be observed with the exclusion of the space being a means of circulation through the community, but ultimately, all three typologies are an extension of the residents' usable space within the neighborhood.

As the Utility Corridor, Open Field, and Cul-de-Sac have existed since the dawn of the Cachet neighborhood, they have become familiar to new and long-term residents alike. Those who feel comfortable utilizing the highlighted spaces as their own have appropriated uses that cater to their personal and communal needs. Some may feel the planned park spaces do not cater to communal and personal needs, using the appropriated spaces as a substitute. Each of the three sites share elements of openness and flexibility through their contextually vast, flat, and unadorned features. Furthermore in their current state, these sites' monofunctional purposes and lack of programmed use, and allow the community to implement their own adaptations. Vague suburban planning is why the community has appropriated these spaces for their own activities. The implementation of design elements promises to further facilitate both existing and newly introduced activities onto the sites, solidifying a sense of place. The community will be able to use, fill, and modify newly-designed gathering spaces. These could be woven into the current network of public circulation and parks in the neighborhood. Not only would community gathering spaces offset the amount of area the currently exist in Cachet Woods, but by integrating public infrastructures that can be altered and cater to

culture, activity, social interaction, as well as natural elements to foster community gathering. These augmented spaces could help combat loneliness and the detrimental effects it can have on one's overall health.

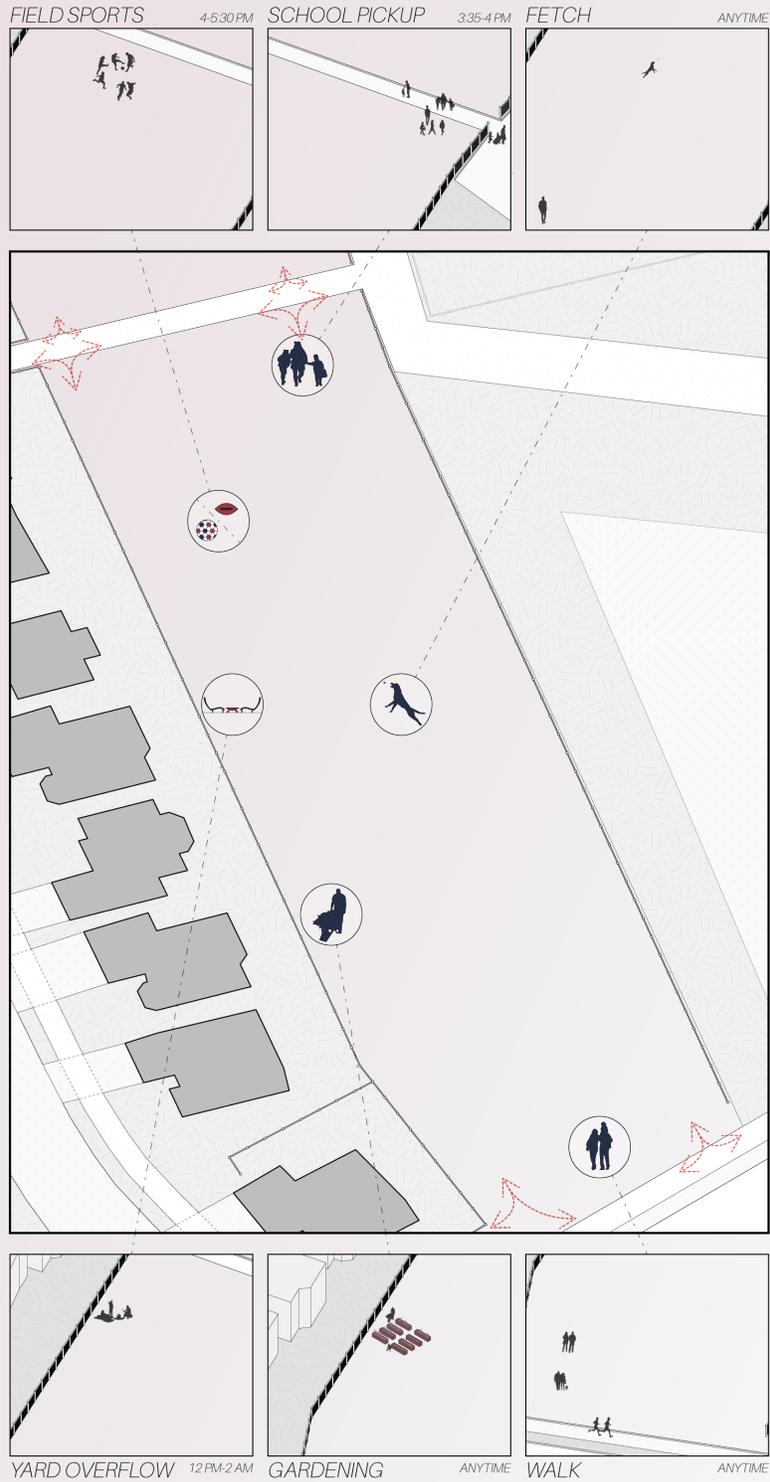


fig. 42: Study of informal activity in the Utility Corridor

WALK

ANYTIME

DOG WALKERS MEETUP

4-8 PM

FIELD SPORTS

4-8 PM

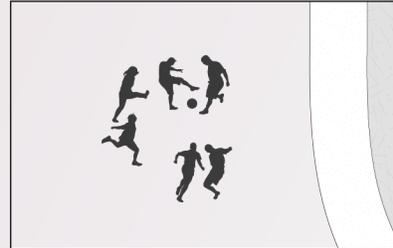
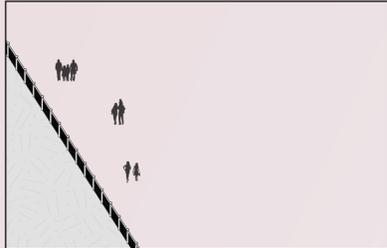


fig. 43: Study of informal activity in the Open Field

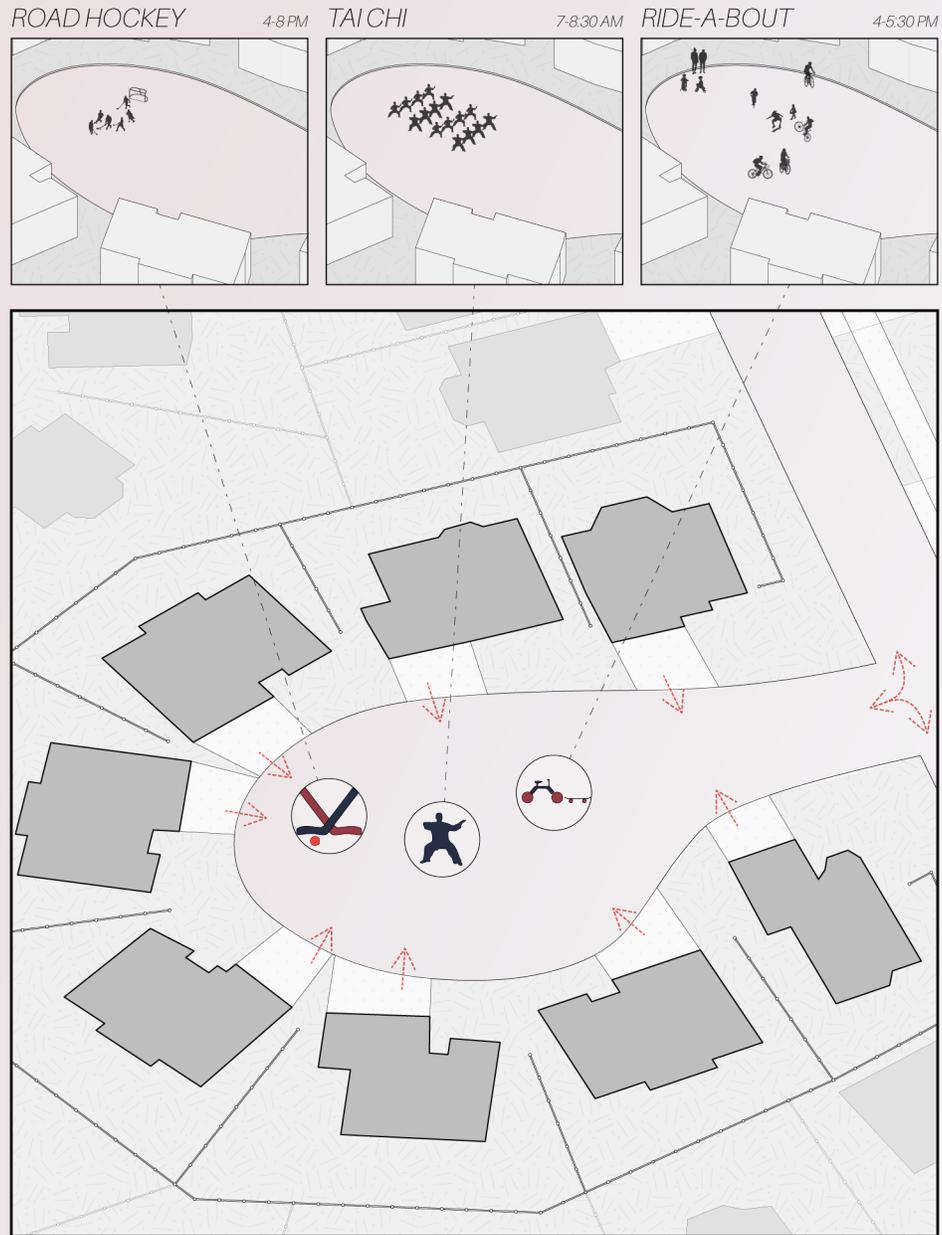


fig. 44: Study of informal activity in the Cul-de-Sac



prioritizing the automobile over pedestrian means of travel such as walking or biking to, and through the proposed sites.

Within the Cachet neighborhood, underutilized spaces such as the Utility Corridor, the Open Field, and the Cul-de-Sac can be privately owned and maintained but underutilized by their owners to the point where community members appropriate the land for informal gathering and activity. Many different types of use and programming can occur to maximize the allowance for community gathering.

### ***Historical Precedent Study of Space and Place***

To appreciate an understanding of historical examples of urban intervention, Aldo Van Eyck's playground designs for the city of Amsterdam were studied to compliment the contemporary intervention methods of The Loneliness Lab and Project for Public Spaces. The terms 'Space' and 'Place' were introduced into architectural discourse by Van Eyck after entering Amsterdam's architectural scene in 1946 to differentiate "the realm of the in-between."<sup>36</sup> What this distinction reveals is the transformation from a physical place within a city to a socially activated space by communities through Van Eyck's playground designs (figs46-47).<sup>37</sup>

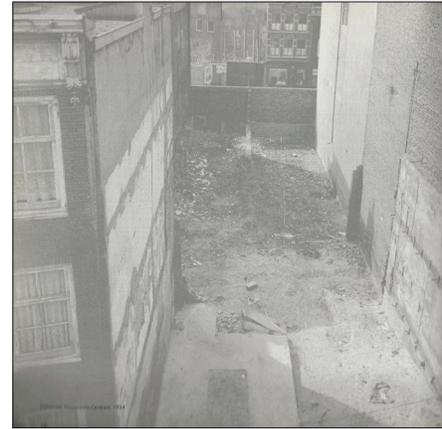


fig. 46: Dijkstraat, Amsterdam-Centrum, 1954. Pre-Intervention. From "Aldo van Eyck: the Playgrounds and the City." Pg. 16.

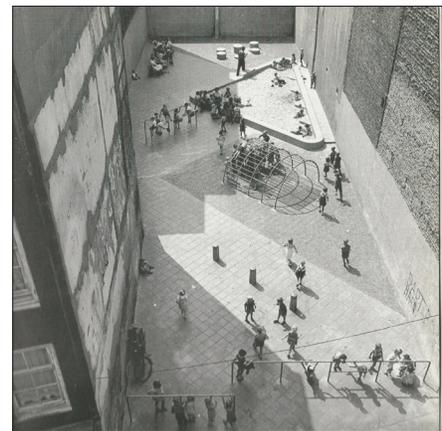


fig. 47: Dijkstraat, Amsterdam-Centrum, 1954. Post-Intervention. From "Aldo van Eyck: the Playgrounds and the City." Pg. 17.

<sup>36</sup> Lefaivre, Liane., Ingeborg de Roode, and Rudi Fuchs., *Aldo van Eyck: the Playgrounds and the City*, (Amsterdam: Stedelijk Museum, 2002,) 24.

<sup>37</sup> Ibid, 16,17, 25.



fig. 48: Zeedijk Playground, Amsterdam-Centrum, 1955. Site Allocation. From "Aldo van Eyck: the Playgrounds and the City." Pg. 30.

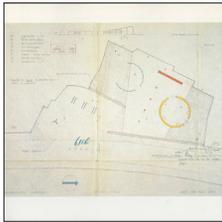


fig. 49: Zeedijk Playground, Amsterdam-Centrum, 1955. Design Drawing. From "Aldo van Eyck: the Playgrounds and the City." Pg. 31.



fig. 50: Zeedijk Playground, Amsterdam-Centrum, 1955. Pre-Intervention. From "Aldo van Eyck: the Playgrounds and the City." Pg. 32.



fig. 51: Zeedijk Playground, Amsterdam-Centrum, 1956. Post-Intervention. From "Aldo van Eyck: the Playgrounds and the City." Pg. 33.

Between the years of 1947-1958, Amsterdam's Department of Public Works began receiving hundreds of letters from parents from multiple neighborhoods around the city requesting playgrounds be built for children due to Amsterdam's rapid rate of development.

<sup>38</sup> Buildings were being constructed on land that was previously thought to be undevelopable, which is where children would appropriate the space to play and gather.<sup>39</sup> Fitting with Van Eyck's interests both as a father and architect in 'the world of the child,' his playgrounds for Amsterdam's Department of Public Works began to utilize voids in Amsterdam's urban fabric on land that was undeveloped or underutilized as sites by introducing suggestive interventions of play and gathering through the formal design of elements within the playgrounds themselves (figs. 48-51).<sup>40</sup>

Infrastructures of play such as sand pits, climbing frames, benches, and tables were initially designed to be site specific. Once the Department of Public Works began seeing the positive reaction towards Van Eyck's suggestive designs, every playground had some variant of each play structure.<sup>41</sup> By creating a base 'kit of parts' Amsterdam's playgrounds kept a continuous design

<sup>38</sup> Lefaivre, et. al. *Aldo van Eyck: the Playgrounds and the City*, 59.

<sup>39</sup> *Ibid.*

<sup>40</sup> *Ibid.* Pgs. 30-33, 66

<sup>41</sup> *Ibid.* Pg. 86

language that instilled a sense of place with pretenses of play and gathering with similar formal gestures in different arrangements that were dictated by each site (space) on an urban scale.

### ***Formulating City Connectedness in the Suburbs***

Van Eyck's playgrounds can be broken down into macro and micro scales of intervention. At the urban (macro) scale, the interventions created formal moments within Amsterdam's fabric where children and families can migrate, gather, and play in or near their neighborhood. At the scale of the child (micro) Van Eyck's structures of play give program to the previously underutilized plot of land where the playgrounds sit, but also introduces suggestiveness and freedom to how the interventions are being used within it's program (figs. 52-53).<sup>42</sup>

The concepts of space, place, suggestiveness, and repetitive physical elements as interventions by Aldo Van Eyck's Amsterdam playgrounds, as well as the contemporary renditions of those ideas from The Loneliness Lab and Project for Public Spaces can be implemented onto the three chosen sites in Cachet Woods. These concepts of urban connectedness aim to assist in socially activating the three Cachet Woods sites by transposing conditions of community space into



*fig. 52: Buckenblaserstraat, Bos en Lommer, Amsterdam-Nieuwwest, 1955. Pre-Intervention. From "Aldo van Eyck: the Playgrounds and the City." Pg. 20.*



*fig. 53: Buckenblaserstraat, Bos en Lommer Amsterdam-Nieuwwest, 1956. Post-Intervention. From "Aldo van Eyck: the Playgrounds and the City." Pg. 21.*

<sup>42</sup> Lefaivre, et. al. *Aldo van Eyck: the Playgrounds and the City*, 20-21.

the suburban context. Ultimately, what the use of these concepts will reflect are how effective urban interventions are within a suburban context. The concepts will also interrogate how the chosen sites can offer opportunities for public social interaction through human (micro) scale interventions to a suburban neighborhood (macro) to foster connectedness and a sense of community for residents of Cachet Woods.

### ***Studies of Potential Interventions***

The methodologies that inform the design and placement of interventions onto the sites began with studies of potential community scale interventions formulated around notions of shared connections and interactions ranging from suggestive to programmed based on how the spaces will be used in conjunction with equipment or elements needed to conduct certain activities (fig. 54). However, due to the large scale of the Utility Corridor and the Open Field, the sites do not lend themselves well to creating moments where residents of the neighborhood can potentially have a chance encounter, plan informal gathering, or even facilitate community events. 'Outdoor Rooms' formed by proposed interventions can assist in shaping the sites into semi-defined spaces with a more intimate scale.

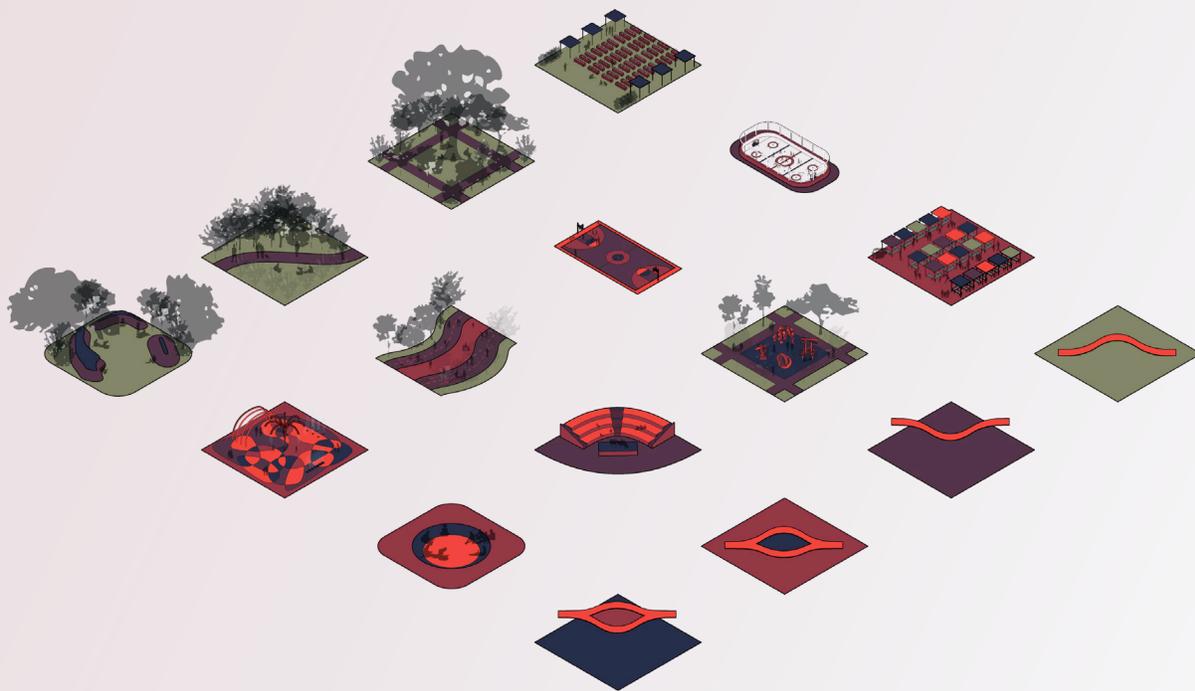


fig. 54: Studies of potential community scale interventions formulated around notions of shared connections and interactions

## Site Augmentation

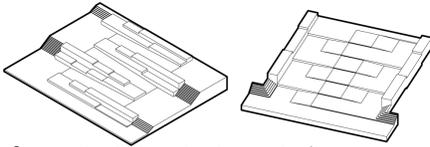


fig. 55: Deviations in site verticality- systems of ramps and stairs that begin to create 'Outdoor Rooms' through physical edges

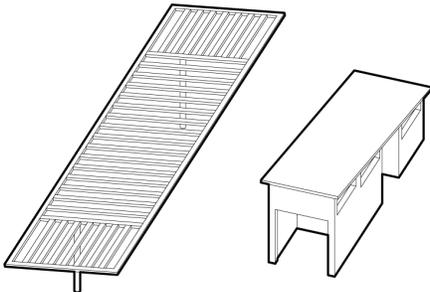


fig. 56: Permanent Structures - Canopies & other facilities (community sheds, relief facilities, utilities, etc.)

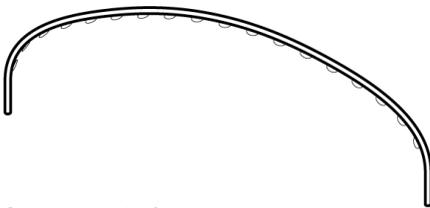


fig. 57: Social Infrastructures - Interventions that frame or host activity.

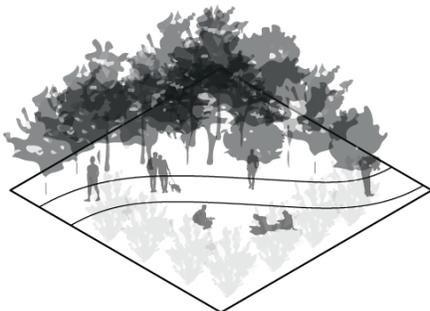


fig. 58: Natural Landscaping

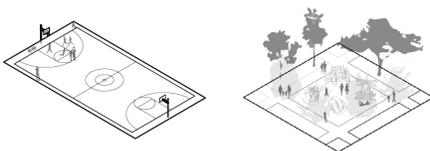


fig. 59: Suggestive & prescribed spaces to host activity.

Augmenting sectional qualities allow for integrated levels which can increase the community's feeling of place by removing the ubiquitous flatness that currently exists across all three sites, in addition to supplementing the notion of outdoor rooms by arranging them vertically as well as horizontally across the sites for added wayfinding ease. These interventions can be incorporated into abstracted forms that suggest activity and interaction without prescribing monofunctionally in the spaces to the community.

## Site Fixtures as Social Infrastructures

Permanent site fixtures such as sports nets, relief facilities, utility-based infrastructures (water, electricity, heating, and cooling), community sheds for sharing tools and equipment, as well as canopies can define 'outdoor rooms' where a mixture of suggestive and prescribed community activity can occur (figs. 55-59).

## The Intervention's Effect on the Community

Understanding that residents cannot be forced out of their homes to physically interact with one another, as well as some feeling comfortably detached to their community to the point where they do not feel the need to change anything in the neighborhood is conscious in these studies. However, if residents are

willing to participate in placemaking, these spaces give the opportunity of social involvement in their community which can possibly decrease the effects of loneliness in the neighborhood and increase gathering.

# IMPLEMENTATION OF SOCIAL INFRASTRUCTURES

## ***Connectedness Boulevard: Utility Corridor***

The portion of the utility corridor chosen to be one of the Cachet Woods community intervention sites is approximately 500 meters long. The site is bordered by Calvert Road to the south, a perpendicular paved pathway which cuts through the field as a shortcut to the north, St. Monica Catholic School to the east, and single-family homes to the west. The site hosts peripheral multi-use pathways which flank terracing central spaces for gathering and activity.



*fig. 60: Connectedness Boulevard - Site location within Cachet Woods*

Although the intervention may not cover the entire 22-kilometer length of the corridor as it cuts through rural farmland, the portions that slice through other suburban fabrics can connect the community of one neighborhood, as well as string together multiple subdivisions to one another, creating a strip of connectedness on a greater urban level that reaches beyond a single suburban neighborhood (figs. 60-70).

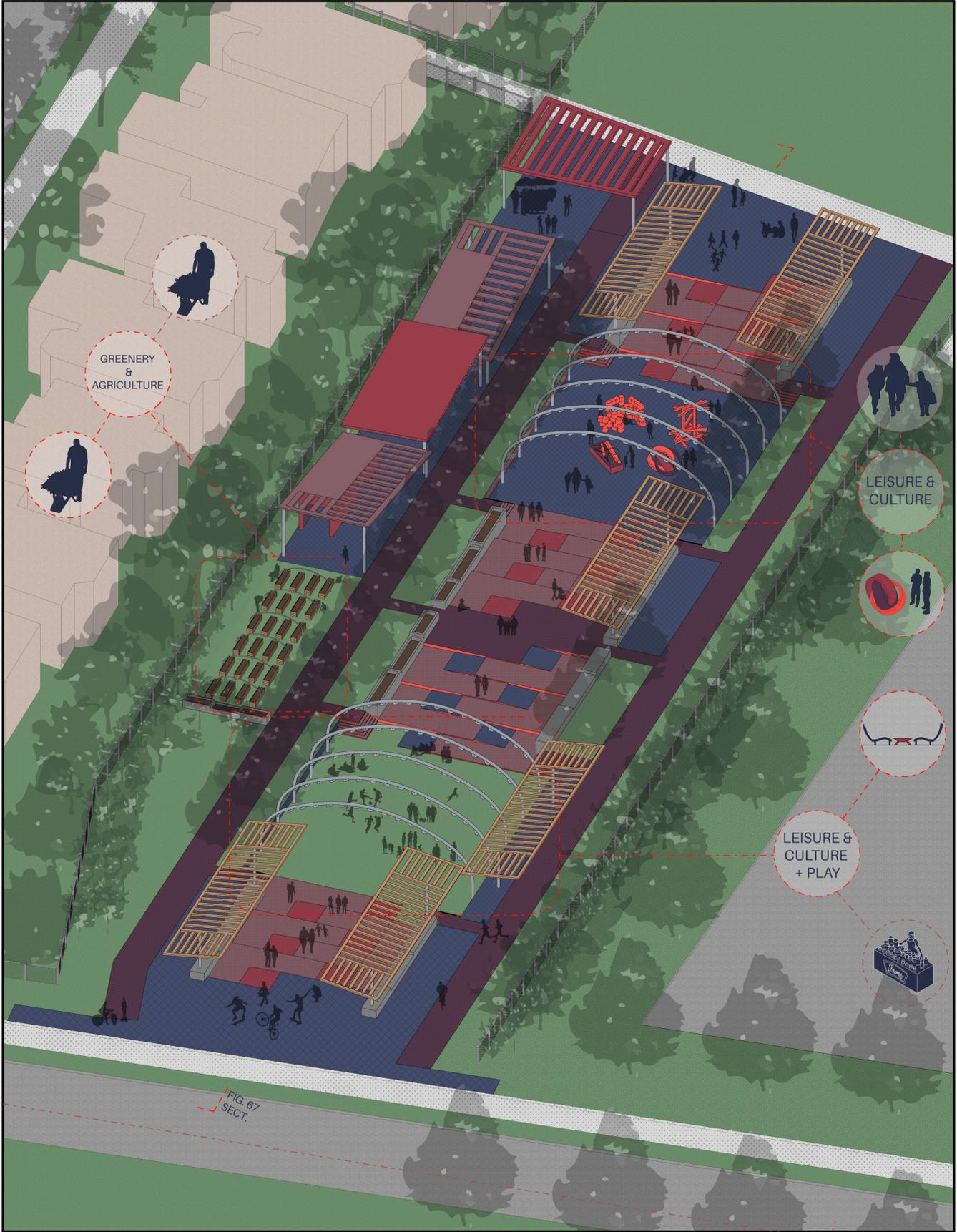


fig. 61: Activity on Connectedness Boulevard - Axonometric



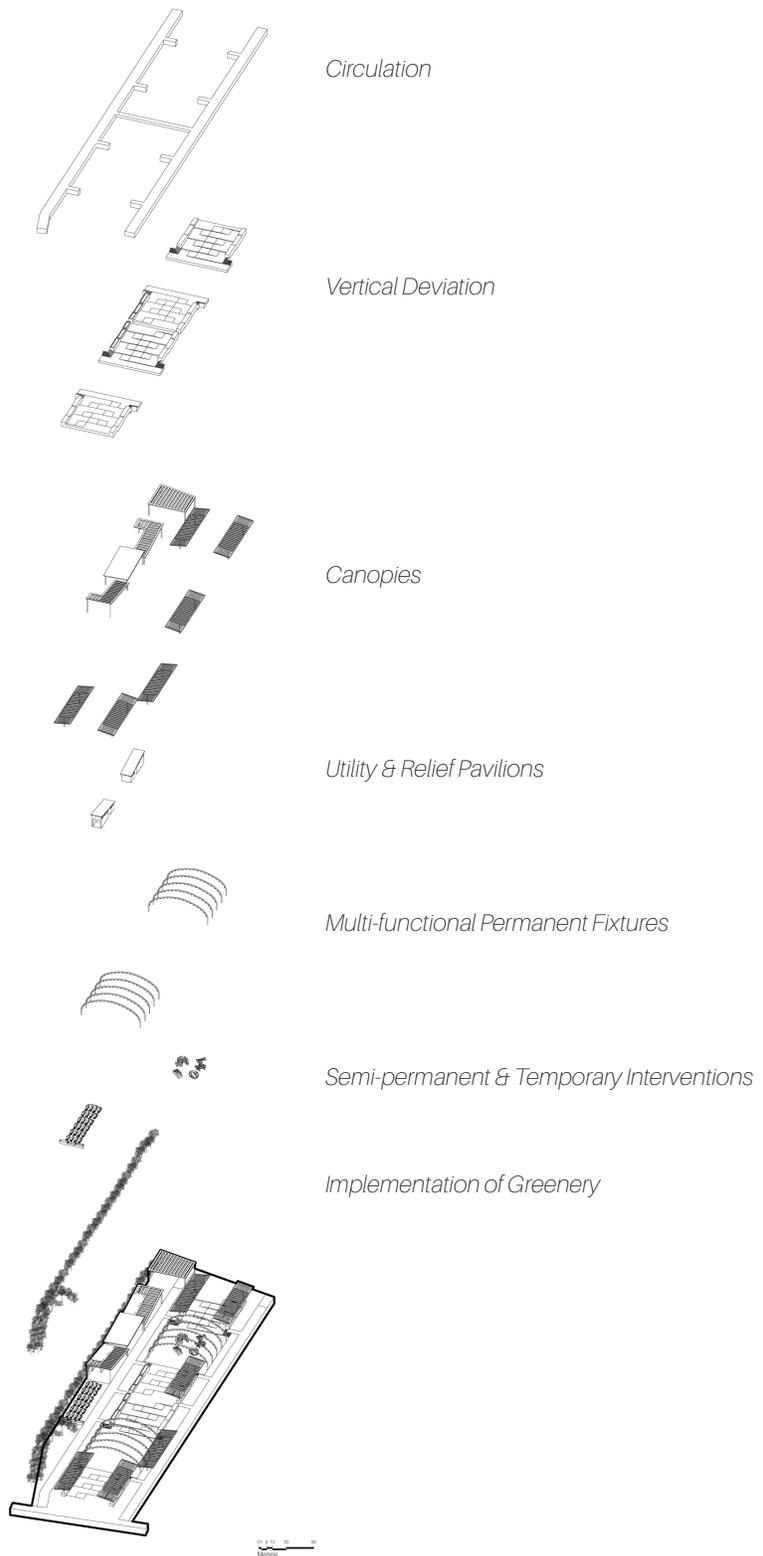


fig. 62: Elements of Connectedness  
Boulevard- Exploded Axonometric

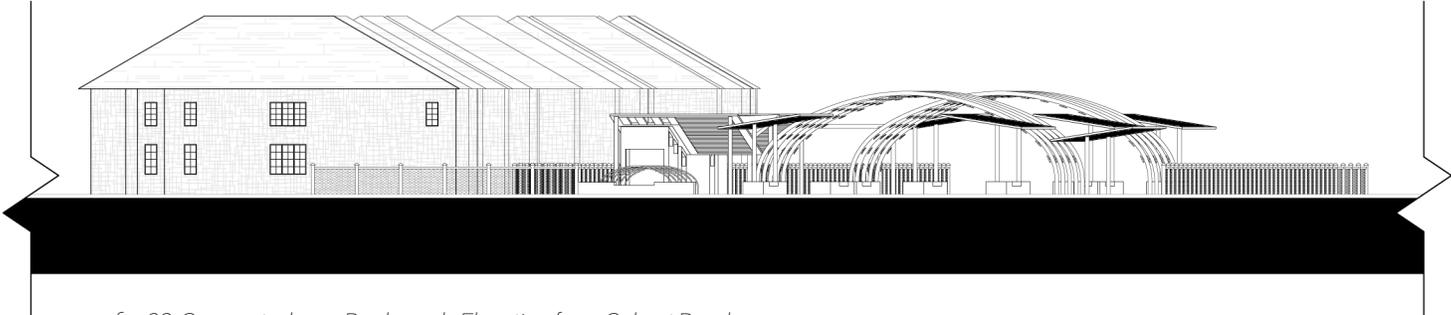


fig. 63: Connectedness Boulevard - Elevation from Calvert Road



## SUMMER



fig. 64: Local Artist  
Sculpture Exhibition

Sat. June, 21, 2025  
11:30am

Connectedness  
Boulevard

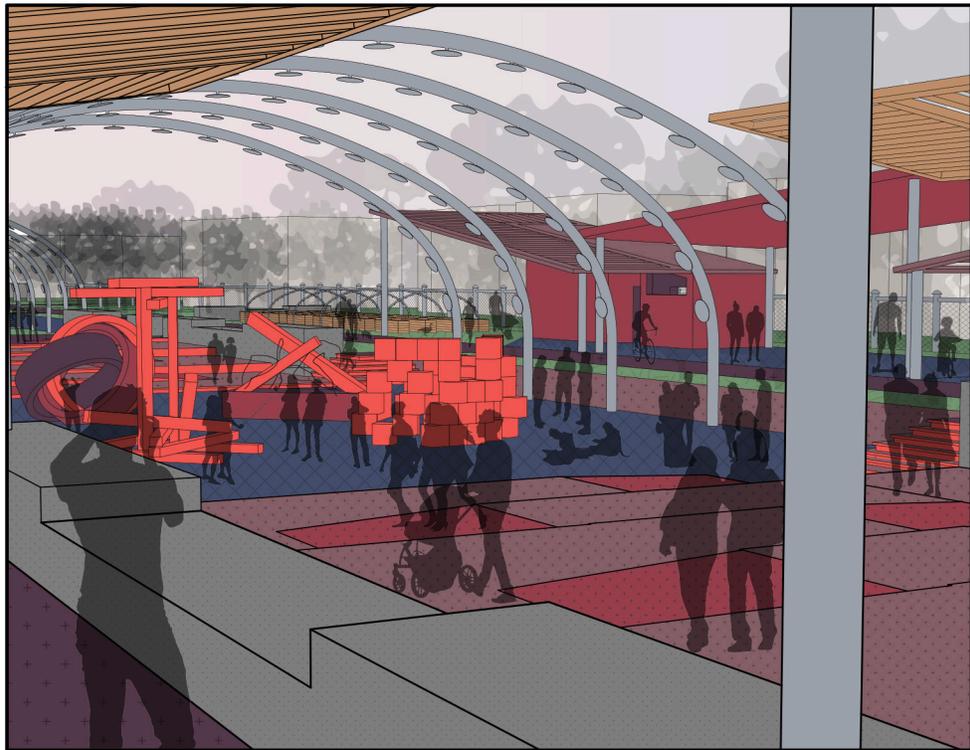




fig. 65: Community Gardening

April-November

Connectedness Boulevard

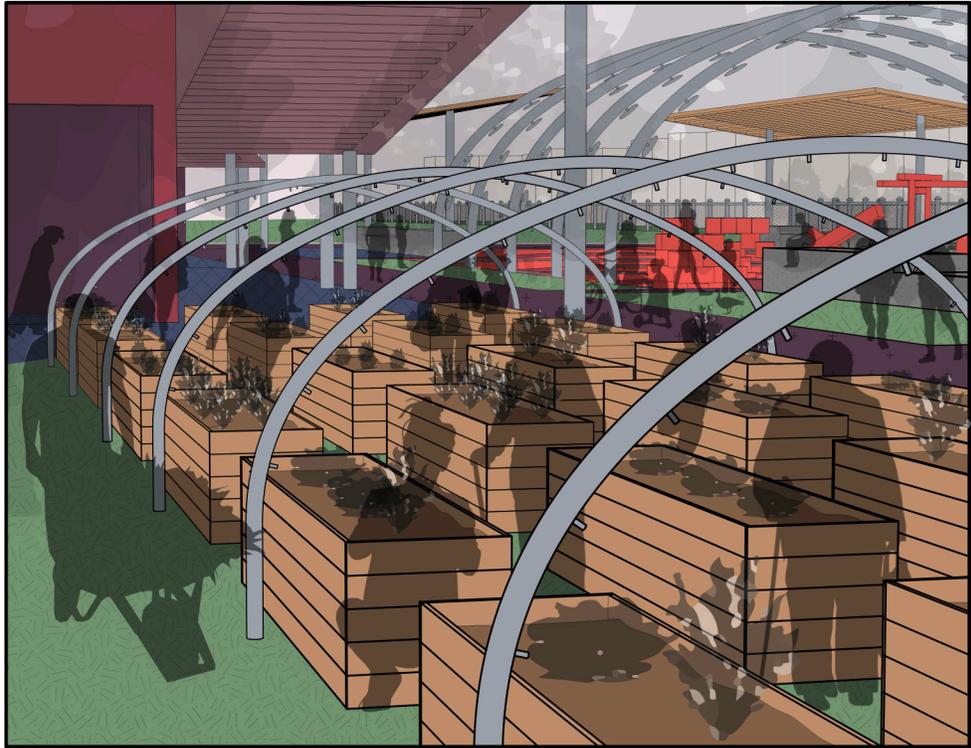
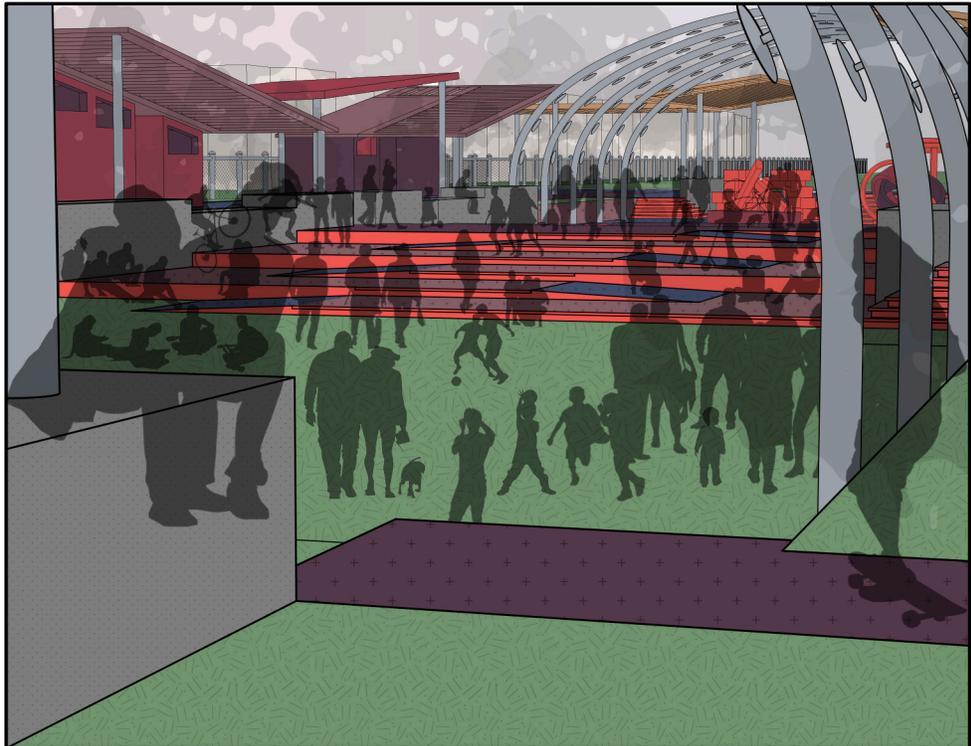


fig. 66: Communal Backyard

Year-round

Connectedness Boulevard



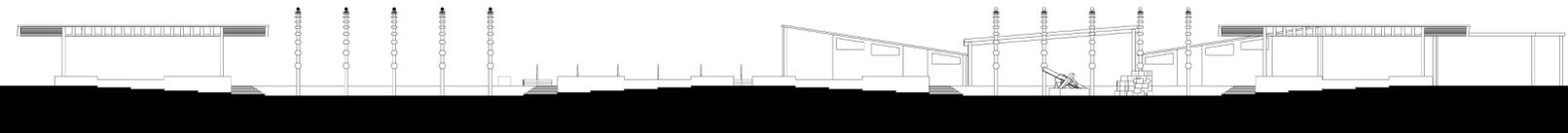


fig. 67: Connectedness Boulevard - Section



## AUTUMN



fig 68: After School Pickup

Sept.-June  
3:45pm

Connectedness  
Boulevard

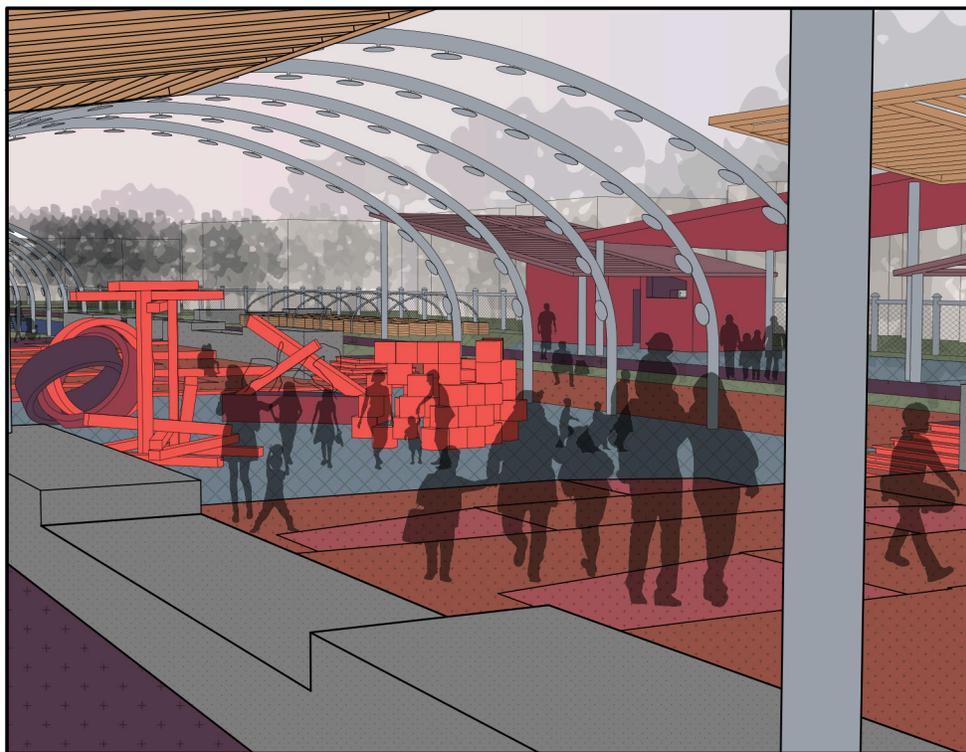




fig. 69: Community Gardening

April-November

Connectedness Boulevard

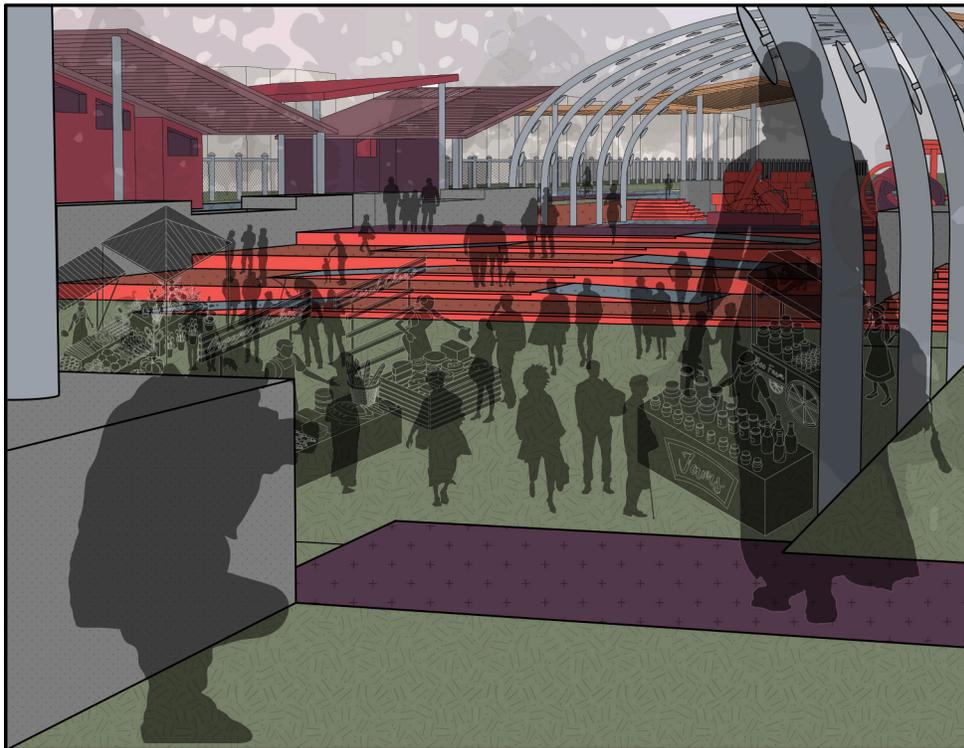


fig. 70: Farmers Market

Saturdays & Sundays

Sun. October 12, 2025

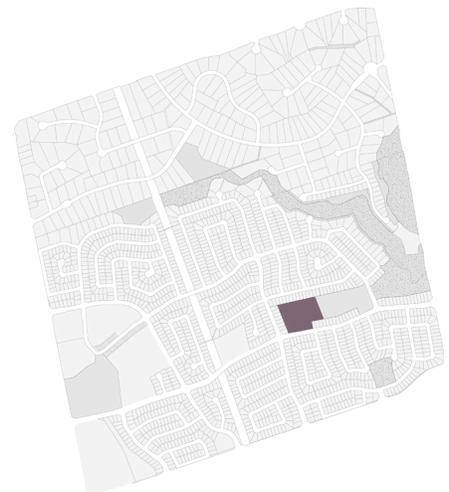
Connectedness Boulevard



### ***The Community Yard: Open Field***

With an area of nearly 500,000 square feet, the open field is the largest single site of the three being intervened in Cachet Woods. By using a similar terracing effect as the interventions found in The Utility Corridor to create 'outdoor rooms' in both horizontal and vertical planes; aesthetic, circulative, suggestive, and wayfinding continuity create a unified design language that promotes familiarity to the communal spaces in the neighborhood. Surrounded on two and a half sides by single family homes to the north, south, and west also allows for direct access to the site to most residents if they were interested in installing gates to access the site from their back yards.

With direct access to Calvert Road to the south, pathway connections to smaller residential streets to the north and west, in addition to its adjacency to Calvert Park to the East, The Open Field also has the most pedestrian access points compared to The Utility Corridor and The Cul-de-Sac. These adjacencies allow for easy communal access to the site for community members, as well as permit a multitude of different types of programs to be hosted in the many outdoor rooms created by the different terraced levels; extending 3 meters down in total with levels large enough to host gathering and activity in 1-meter increments (figs. 58-63).



*fig. 71: The Community Yard - Site location within Cachet Woods*

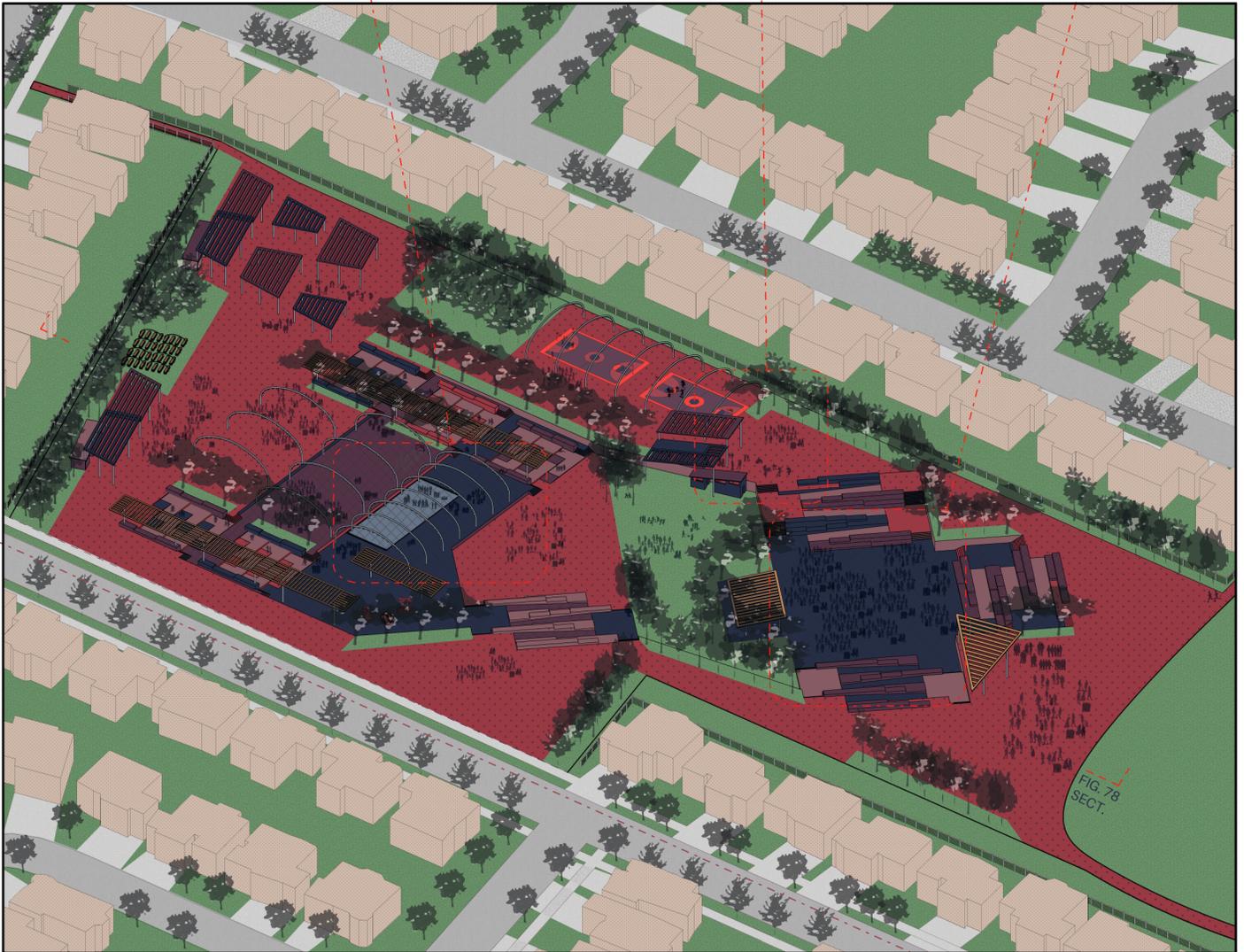


fig. 72: The Community Yard - Axonometric

FIG. 74  
ELEV.



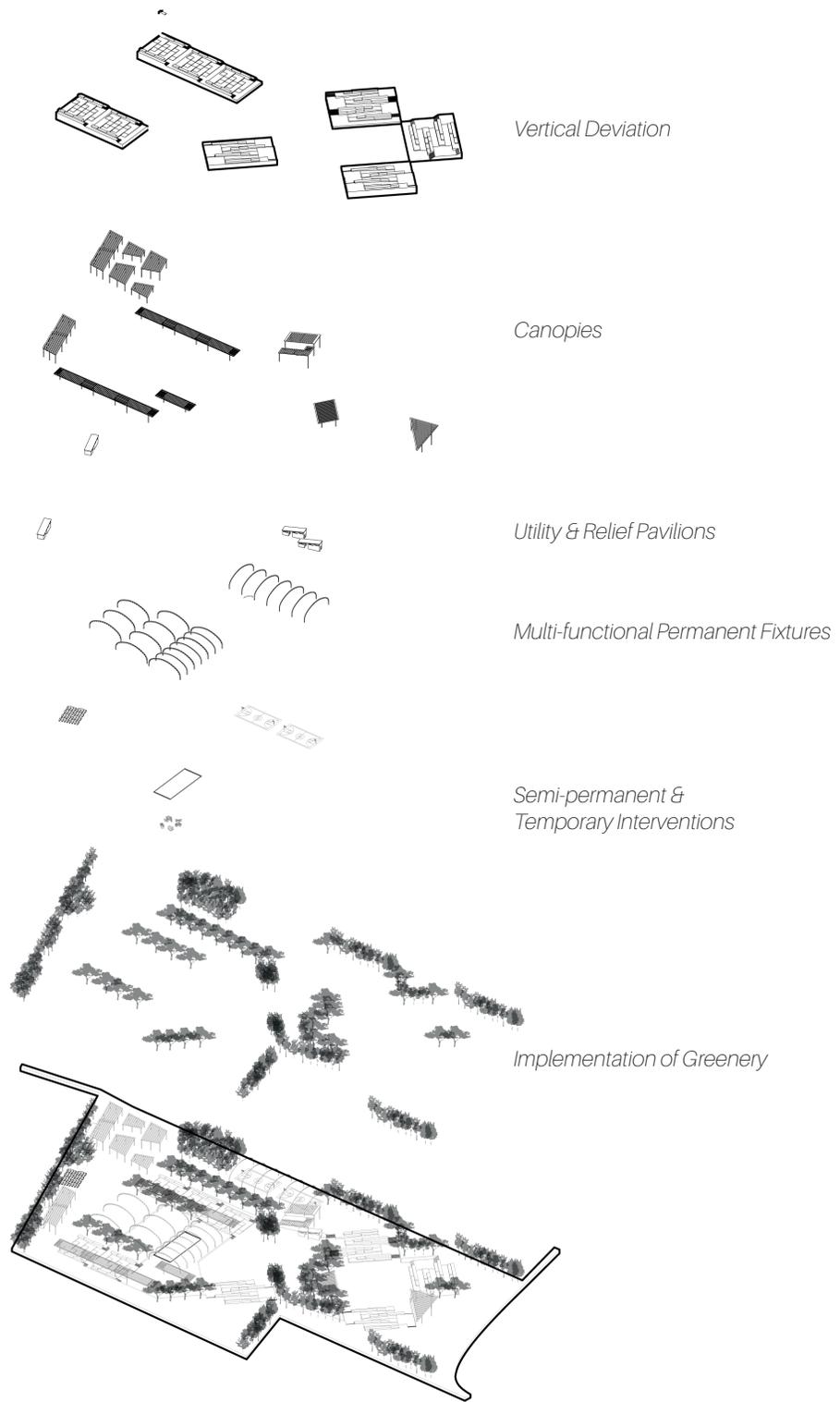


fig. 73: Elements of The Community Yard  
- Exploded Axonometric

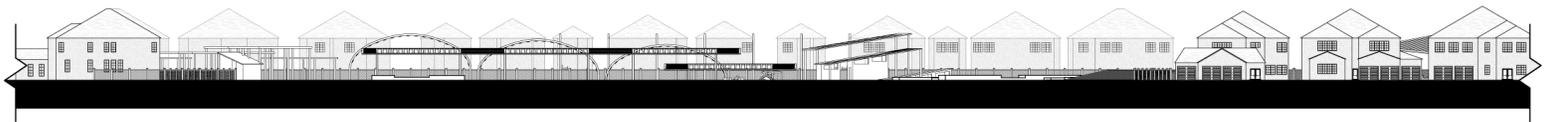


fig. 74: The Community Yard - Elevation



## SUMMER



fig. 75: Local  
Theatrical  
Group Performance

Tues. July, 8, 2025  
6:30pm

The Community  
Yard

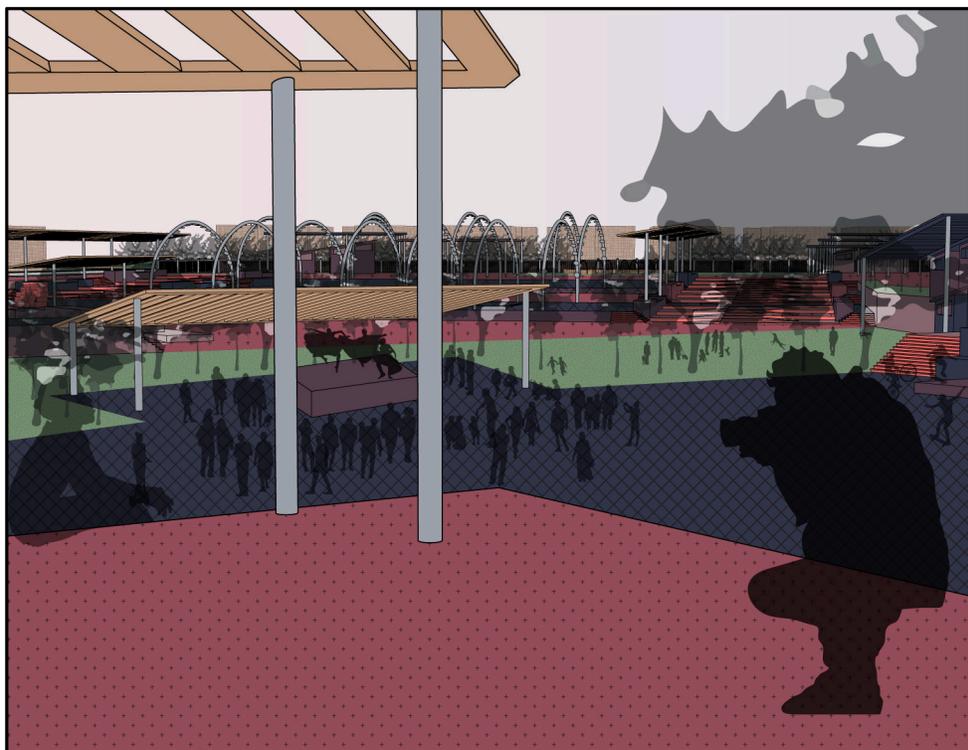




fig. 76: Misters & Splashpad

May-September

The Community Yard

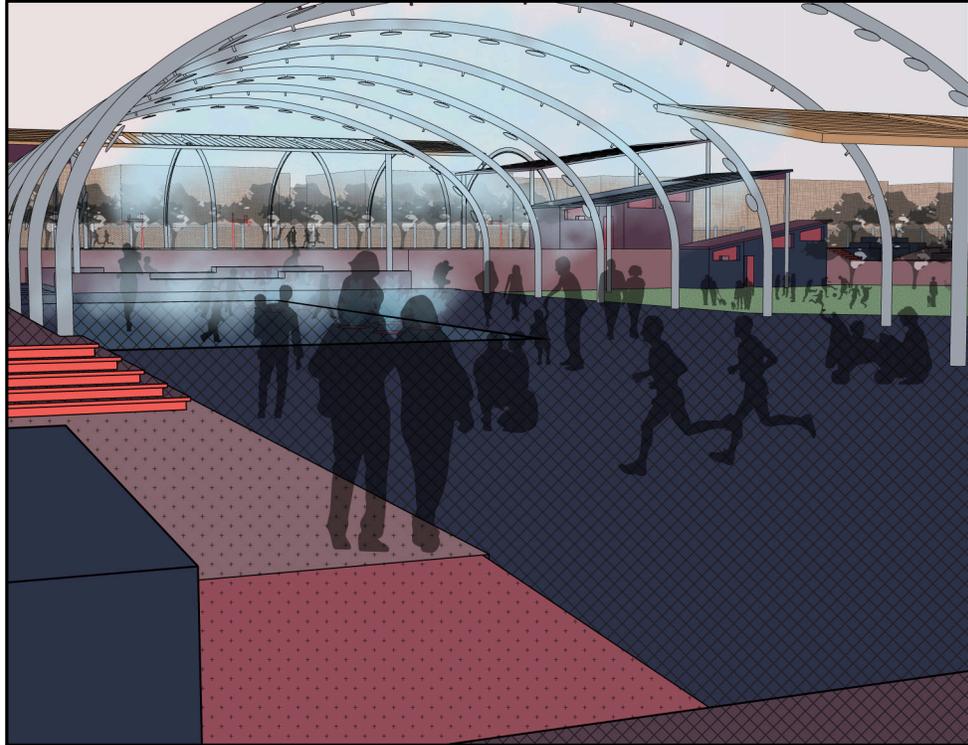
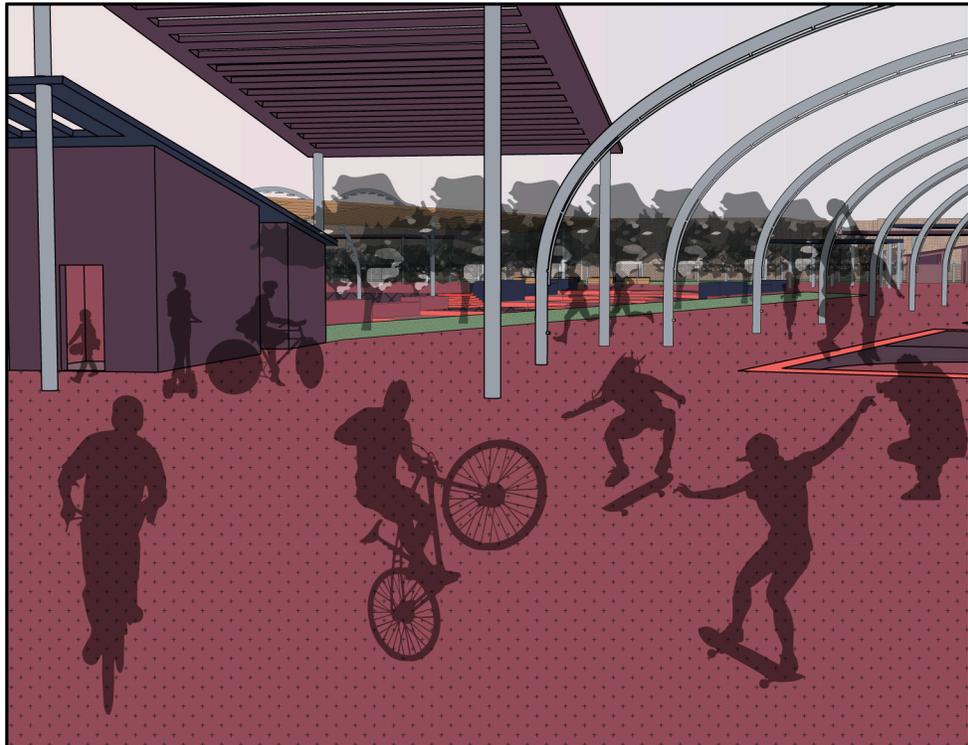


fig. 77: Community Sports Equipment Share Shed

Year-round

The Community Yard



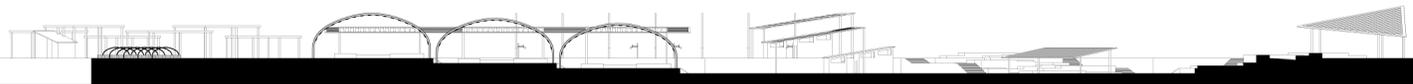
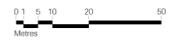


fig. 78: The Community Yard - Section



## WINTER



fig. 79: Weekend  
Holiday Market

December  
6-December 24

The Community  
Yard

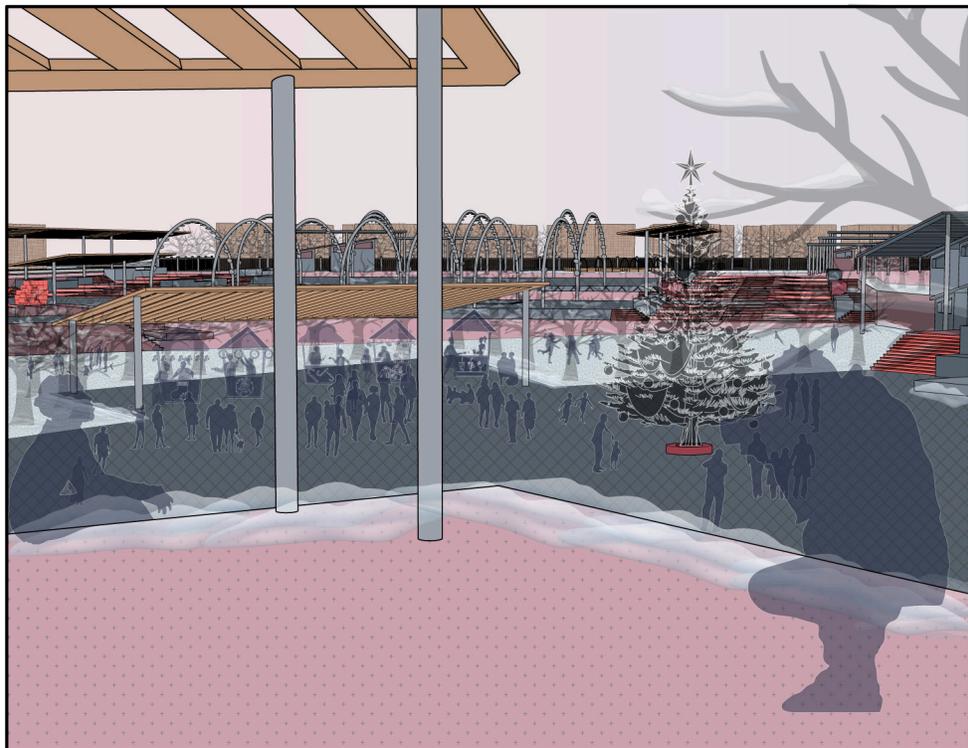




fig. 80: Skating Pad  
November-February  
The Community  
Yard

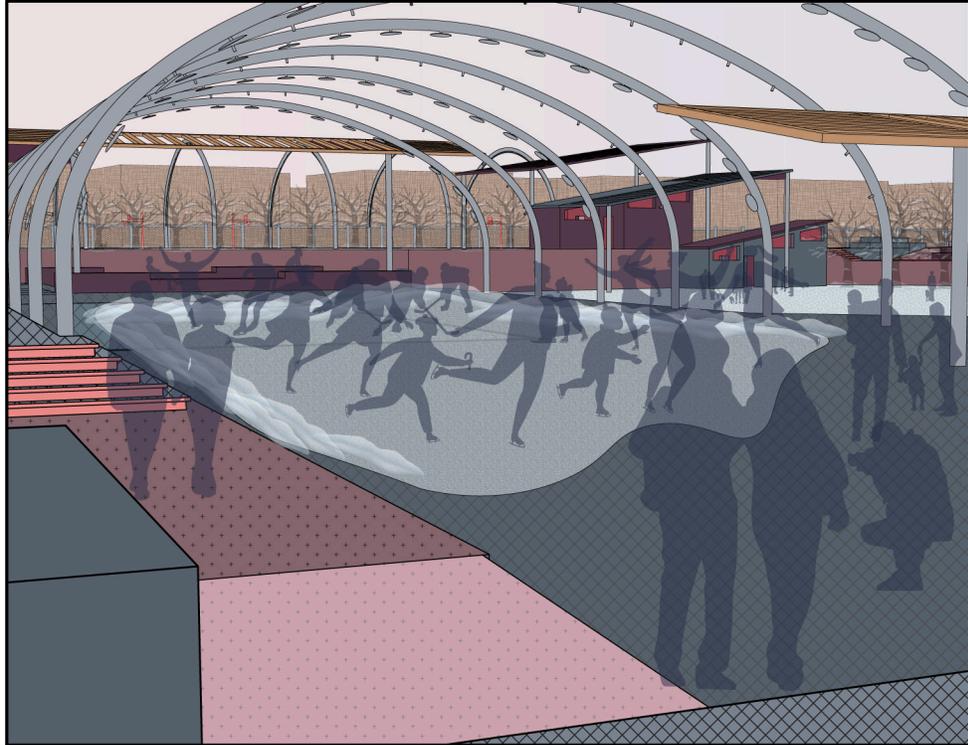
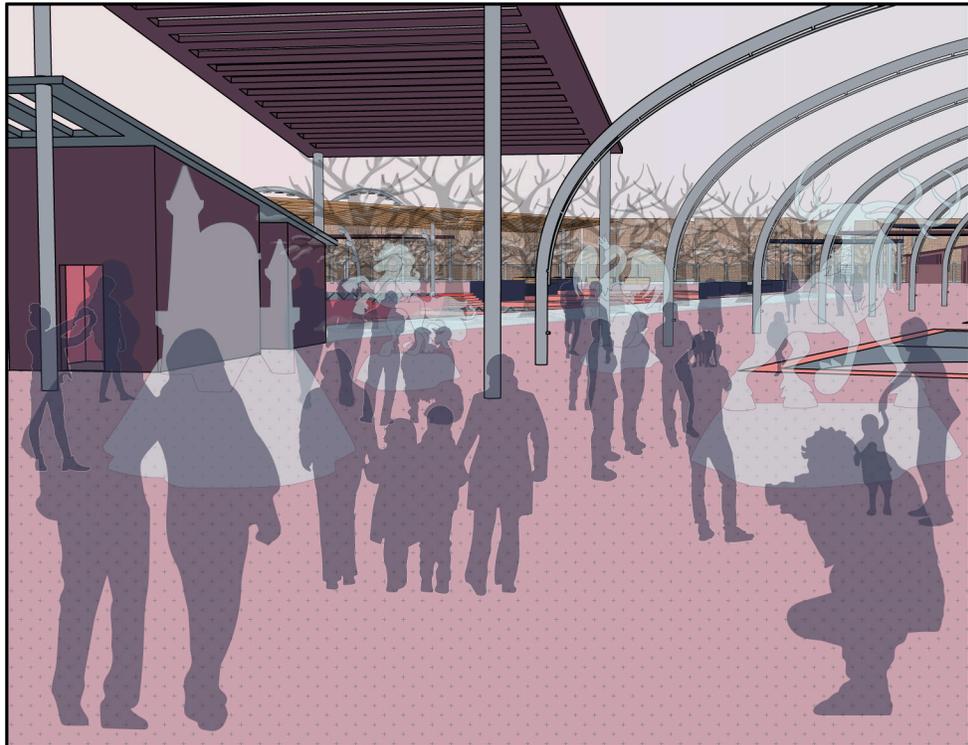


fig. 81: Ice Sculpture  
Exhibition  
December 18-  
January 18  
The Community  
Yard



### ***The Neighborly Porch: Cul-de-Sac***

Cul-de-sacs are sprinkled across many suburbs across North America, including Cachet Woods. What this residential street typology can offer is safety; because cul-de-sacs are not through-streets, the only people using them are mainly residents who have an address on them. Unlike the other two interventions which respond to open masses of land, the cul-de-sac is representative of taking back the street for public use, or at the least sharing the street with a shift in emphasis from primarily automobile use to community interactive uses. Each cul-de-sac can be imagined as their own individual 'outdoor rooms' with an open concept arrangement that allows the residents to easily appropriate the space in multiple ways even before intervening on the site. Emphasis on pedestrian activity through design implementation not only retracts the dominance of the car on this type of street, but also creates a framework for a greater variety of gathering to an already diverse typology in suburbia (figs. 82-92).

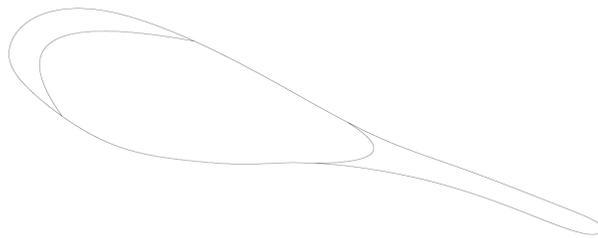


*fig. 82: The Neighborly - Site location within Cachet Woods*



fig. 83: The Neighborly Porch - Axonometric

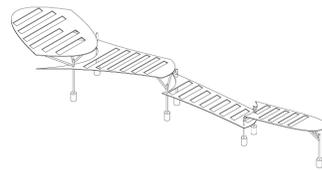
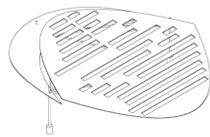




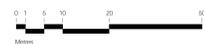
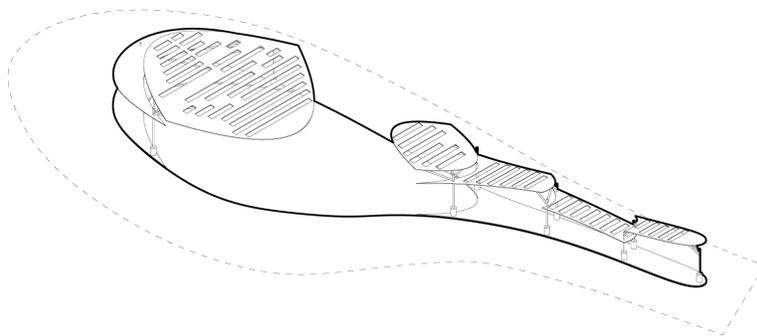
*Pedestrian Allocation*



*Curbing (Vehicular Separation)*



*Canopies*



*fig. 84: Elements of The Neighborly Porch  
- Exploded Axonometric*



fig. 85: The Neighborly Porch - Elevation

## SPRING



fig 86: Morning Tai Chi

May-September  
7:45am-8:30am  
Daily

The Neighborly  
Porch

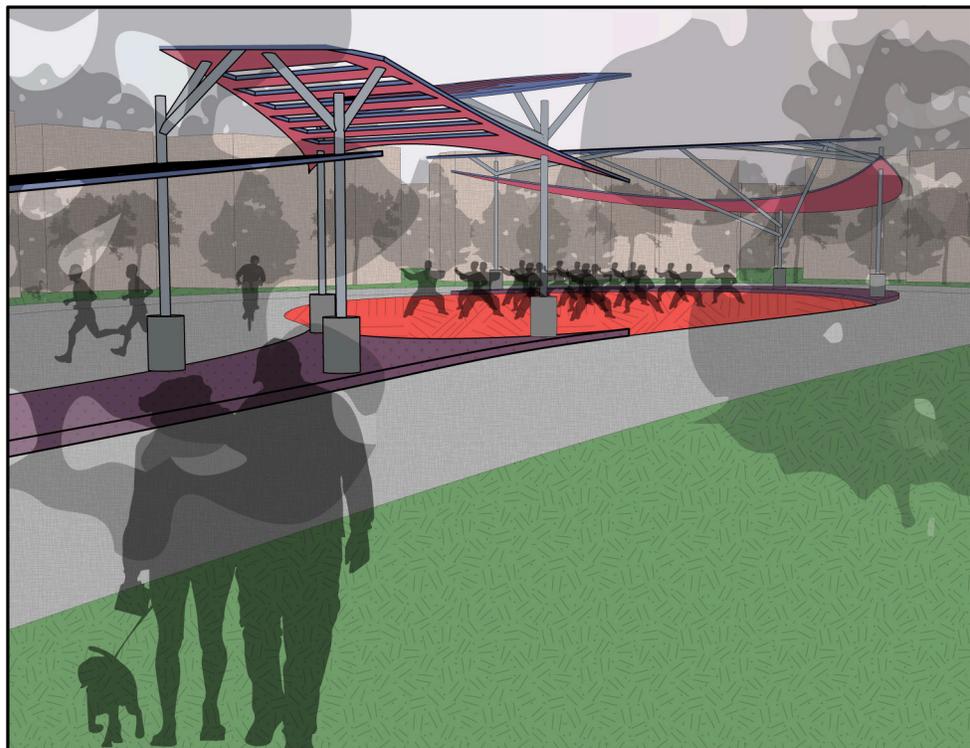




fig. 87: Road Hockey

May-October  
Spontaneously  
during Evenings &  
Weekends

The Neighbory  
Porch

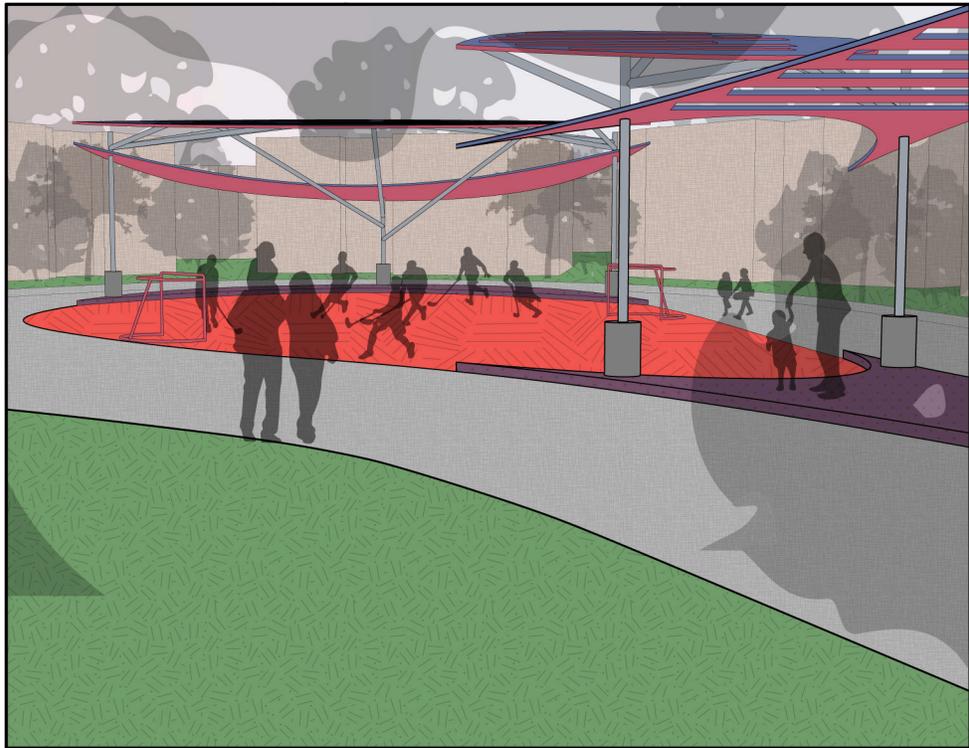
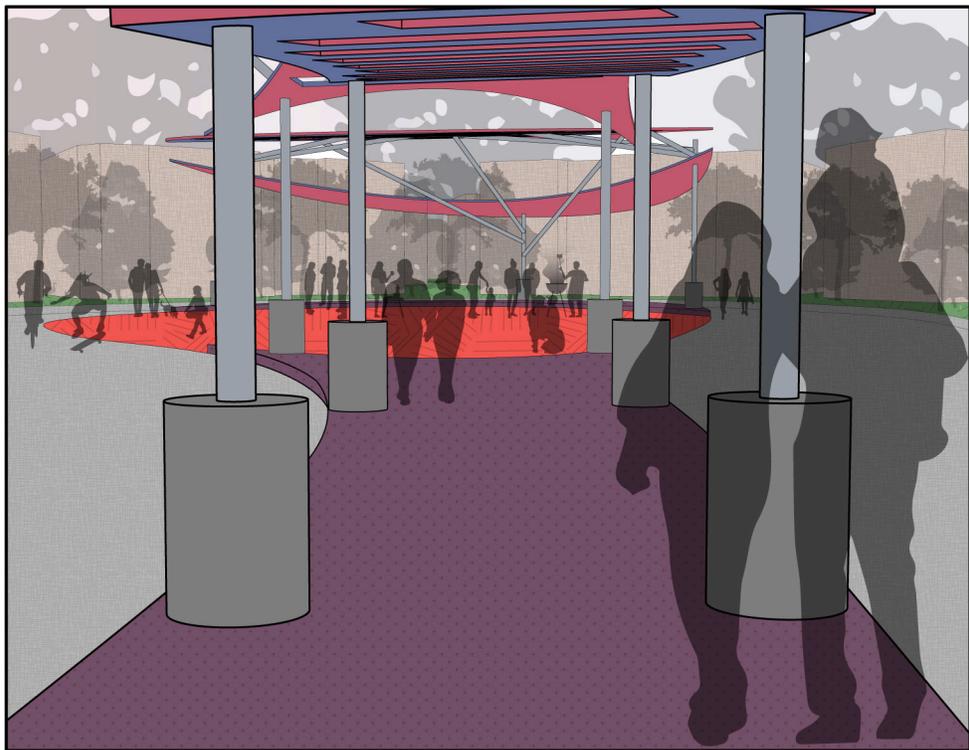


fig. 88: Community  
Spring BBQ

May 3, 2025  
5:30pm

The Neighbory  
Porch



SPRING



fig. 89: The Neighborly Porch - Section



fig 90: Snow Fort Building

First Heavy Snowfall, 2025

The Neighborly Porch

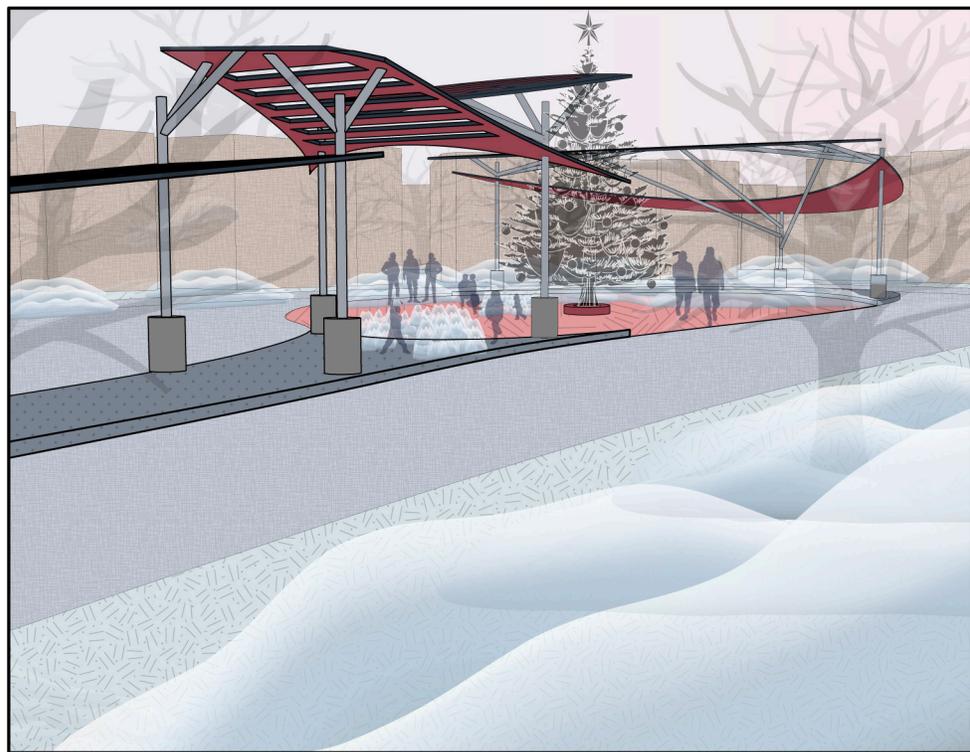




fig. 91: Snowball Fight

Spontaneous

The Neighborly Porch

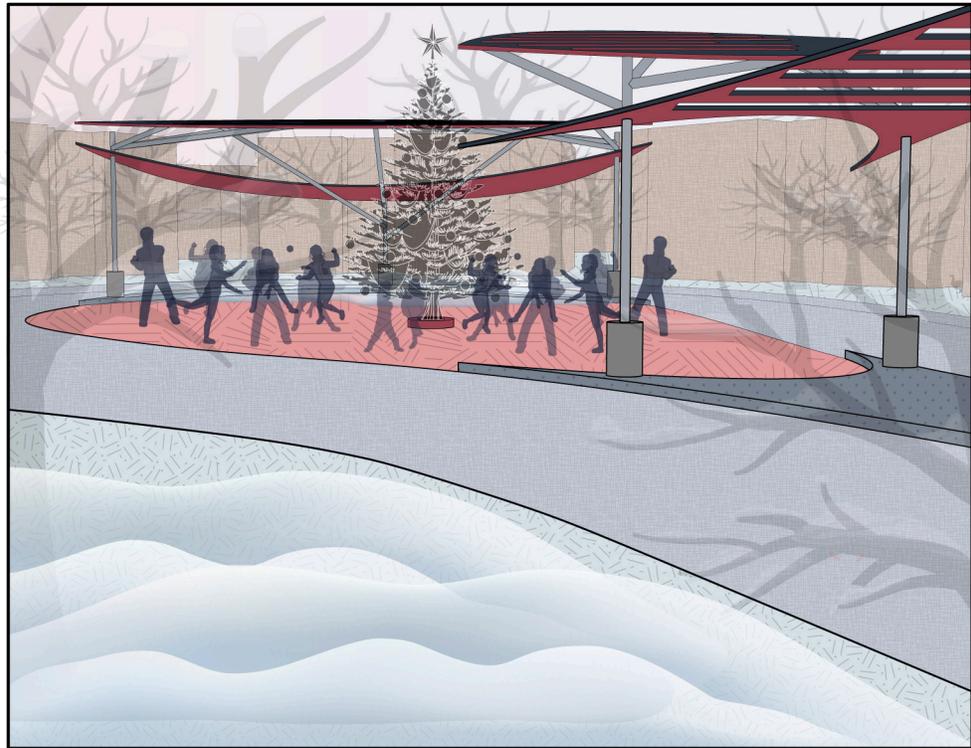
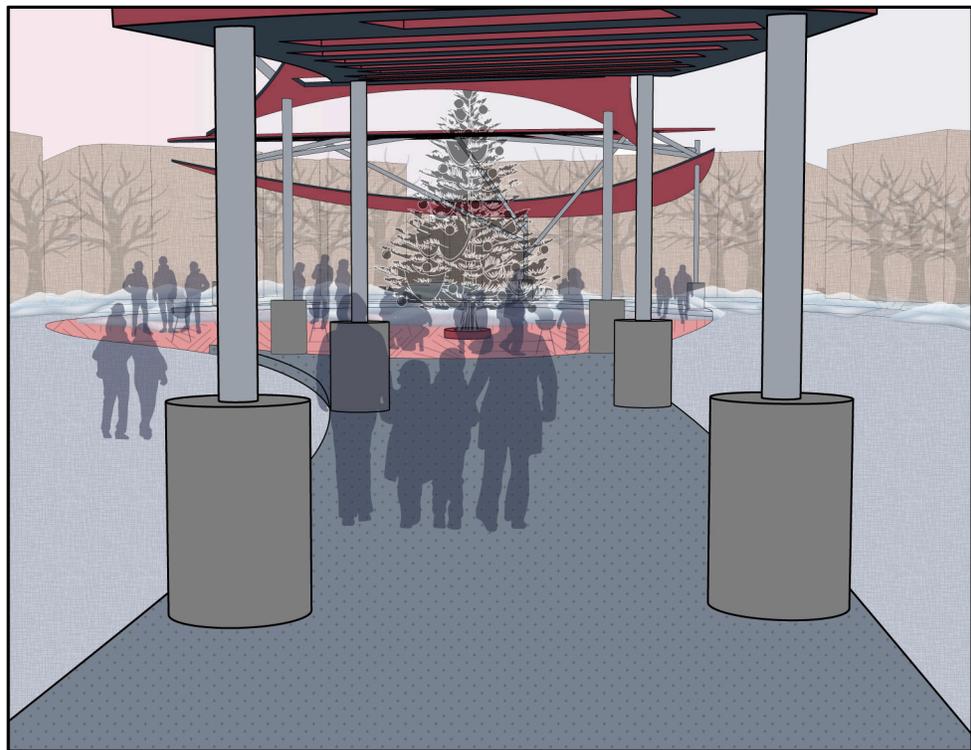


fig. 92: Holiday Tree Lighting

November 29, 2025

The Neighborly Porch



# CONCLUSION

Suburbs have unquestionably affected the planning of North American have created conditions that accentuated isolation for their citizens. Being conscious of residential design can position residents to lead a socially-engaged lifestyle for those who care to do so. However, without the presence of accessible, adaptable, and community-oriented public spaces that prioritize pedestrian activity, the opportunities for meaningful community interaction and gathering are greatly reduced. Adjusting the North American Suburb: Combining Internalization and Loneliness through Design proposes interventions that foster communal acts of gathering, sharing, activity, building, and placemaking in disregarded spaces of suburbia where personal and communal adoption of use already occurs.

Individualism and connectedness are contrasted to imagine a new perspective on what public space in suburbia can offer residents. Every neighborhood has their own nuanced characteristics within its suburban context that differentiate themselves from one another, allowing for countless possibilities of how communities

can design and use the spaces available to them to create meaningful places for interaction. In the case of Cachet Woods' Utility Corridor, Open Field, and Cul-de-Sac, multifunctional interventions that range from site augmentation (macro) in tandem with individual elements (micro) which aim to create meaningful space of physical interaction and communal activities within the suburban context through informed placemaking at the human scale. Such ideas and implementations can take any physical form; there is not one concrete answer as to how such ideologies can materialize, nor should there be. Communal placemaking should create uniqueness that could never be found in current examples of suburban developments such as the ones presented earlier in this thesis. Furthermore, some of the designs should be iterative and adaptable to change with community needs rather than only consisting of permanent fixtures.

In practice, one of the most effective components of creating successful placemaking interventions is community involvement during the design and building processes; such participation allows for a heightened sense of ownership and place to community members.

While this thesis proposes a series of speculative interventions that combine concepts of community interaction through the implementation of organizational design elements, the newly-introduced ideas of gathering are embodied by the physical elements on the site. Community consultation would create more specific interventions that would be unique to the community and their needs; only deepening the sense of place on these sites if the ideologies were to materialize into reality.

Although this thesis does not solve the many overlying issues of modern suburban life that have existed both pre-pandemic and throughout Covid-19; the ideologies and insights offered in this thesis are intended to inspire further investigation into community gathering through an architectural perspective in a post-pandemic context in efforts to rekindle a sense of community that could have been crippled during such an unprecedentedly challenging global episode. Adjusting the North American Suburb: Combining Internalization and Loneliness through Design ultimately aims to foster trust, sharing, collectivity, social responsibility, and pride amongst neighbors to engage the community on a higher level.

Implementing interventions that promote these traits in a suburban setting, along with community members who are willing to partake in a less internalized lifestyle, are the canons of combatting loneliness in suburbia.

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