

Architecture as Actant for Protest: Solidarity with Amiskwaciwâskahikan's (Edmonton)
Unhoused Community

by

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How may architecture and urban design be mobilized to challenge settler colonial systems of exclusion in ways that grant agency to mutual aid networks and unhoused community members?

Abstract

Conditioned by neoliberal imperatives and settler colonial impositions of ‘property’, architecture is complicit in upholding spatial and social inequities. The neologism ‘houselessness’ foregrounds housing as a human right, which must be addressed through the provision of accessible housing, yet this process is slow. Moreover, unhoused individuals are disproportionately affected by pandemics. Their aggravated health risks owe to crowded shelters, comorbidities, and pandemic-related restrictions of supportive services. While COVID-19 has worsened the pre-existing houselessness crisis, some immediate effects may be addressed locally through mutual aid: a form of rapid response and community care that demonstrates both the need for bottom-up solutions and interim approaches to houselessness. This thesis explores how architecture might challenge existing frameworks of power to act in solidarity with houseless neighbours. The series of design interventions proposed for Edmonton, Alberta, focus on socio-spatial relationships — related to water, sanitation, and hygiene — that act in solidarity with houseless people.

Keywords:

Alberta
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Right to WASH
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Table of Contents

iii	Author's Declaration	
v	Abstract	
vii	Acknowledgements	
x	List of Figures	
xviii	List of Abbreviations	
xix	Glossary	
xx	Preface	
1		<i>Introduction</i>
7	<i>Chapter 1</i>	<i>Settler Colonial Origins of Houselessness in Edmonton</i>
9	1.1	Protest Event Analysis
21	1.2	Glacial History of the Edmonton Region
25	1.3	Early Settlement and the Commons as a Resource
33	1.4	Wealth Inequality in Alberta
41	<i>Chapter 2</i>	<i>Mutual Aid & Community Care</i>
43	2.1	Houselessness in Edmonton
47	2.2	Solidarity, not Charity
49	2.3	History of Mutual Aid
55	2.4	The Commons as a Practice
63	2.5	Right-to-WASH
71	<i>Chapter 3</i>	<i>Designing Social Spaces of Solidarity</i>
73	3.1	Precedents
81	3.2	Site Analysis
91	3.3	Program
99	3.4	Designing Social Spaces of Solidarity
137		<i>Conclusion</i>
142		<i>Bibliography</i>
152		<i>Appendix A: Wash Bag</i>

List of Figures

xvii	fig. 0.1	Park Signage at 9549 108 Avenue. [Photograph by Justin Bell]. <i>Source:</i> Photograph by Justin Bell, Park Signage, n.d., Photograph, Edmonton, AB.
8–9	fig. 1.1	National Protest Events in Canada. [Map by author]. <i>Source:</i> Data from GardaWorld, https://www.garda.com/search?query=protest%20canada&sort_by=search_api_relevance&page=0 .
10–11	fig. 1.2	Political Temperature Check across Canada. [Map by author]. <i>Source:</i> Data from The Samara Centre for Democracy, https://www.samaracanada.com/research/active-citizenship/temperature-check .
10–11	fig. 1.3	Top Provincial Issues. [Table by author]. <i>Source:</i> Data from the Angus Reid Institute, https://angusreid.org/provincial-spotlight-health-care-economy/ .
12	fig. 1.4	Provincial Comparisons of Houselessness in Canada. [Diagram by author]. <i>Source:</i> Data from Aaron Segart, “The National Shelter Study: Emergency Shelter Use in Canada 2005–2009,” <i>The Homeless Hub</i> , accessed March 28, 2022, https://homelesshub.ca/sites/default/files/Homelessness%20Partnering%20Secretariat%202013%20Segart_0.pdf .
13	fig. 1.5	Houselessness in Alberta. [Diagram by author]. <i>Source:</i> Data from Stephen Gaetz, Jesse Donaldson, Tim Richter and Tanya Gulliver-Garcia, “The State of Homelessness in Canada 2013,” <i>The Homeless Hub</i> , https://www.homelesshub.ca/sites/default/files/attachments/SOHC2103.pdf .
15	fig. 1.6	Houselessness Definitions. [Drawing by author]. <i>Source:</i> Data from Stephen Gaetz et al., “Canadian Definition on Homelessness,” <i>The Homeless Hub</i> , https://www.homelesshub.ca/sites/default/files/COHhomelessdefinition.pdf . Interview excerpt from Amber Bracken, “Scenes from Canada’s Housing Crisis,” <i>The Walrus</i> , https://thewalrus.ca/scenes-from-canadas-housing-crisis/ .
16–17	fig. 1.7	Analysis of Protest Spaces in Edmonton. [Diagram by author]. <i>Source:</i> Data from “The Evolution of Anthropometrics and User Control”, <i>Herman Miller</i> , accessed December 1 2021, https://www.hermanmiller.com/research/categories/white-papers/the-evolution-of-anthropometrics-and-user-control/ .
18	fig. 1.8	Map of Protest Events in Edmonton during the COVID-19 Pandemic. [Map by author]. <i>Source:</i> Data from Adam Lachacz, “‘A Time for Reflection’: Edmontonians Show Support for Reconciliation on Canada Day,” <i>CTV News Edmonton</i> , July 1 2021, https://edmonton.ctvnews.ca/a-time-for-reflection-edmontonians-show-support-for-reconciliation-on-canada-day-1.5493670 ; “‘Our future is at stake’: Greta Thunberg tells climate rally in Edmonton,” <i>CBC News Edmonton</i> , October 18 2019, https://www.cbc.ca/news/canada/edmonton/greta-thunberg-edmonton-climate-rally-1.5325030 ; Slav Kornik, “Edmonton Anti-Racism Organizers Call for Action against Hate Crimes,” <i>Global News</i> , accessed March 27, 2021, https://globalnews.ca/news/7723928/edmonton-anti-racism-walk/ ; “Hundreds March Downtown to Support Black Lives Matter,” <i>CTV News Edmonton</i> , June 15 2020, https://edmonton.ctvnews.ca/hundreds-march-downtown-to-support-black-lives-matter-1.4982482 ; Sean Amato, “Hundreds March, Shouting ‘free Palestine’ at Alberta Legislature Rally,” <i>CTV News Edmonton</i> , May 20, 2021, https://edmonton.ctvnews.ca/hundreds-march-shouting-free-palestine-at-alberta-legislature-rally-1.5433880 ; Adam Lachacz, “Oromo Community of Edmonton Protests Violence in Ethiopia,” <i>CTV News Edmonton</i> , May 15, 2021, https://edmonton.ctvnews.ca/oromo-community-of-edmonton-protests-violence-in-ethiopia-1.5429571 ; “Protest in Support of Indian Farmers Winds Its Way through Edmonton,” <i>CTV News Edmonton</i> , February 7, 2021, https://edmonton.ctvnews.ca/protest-in-support-of-indian-farmers-winds-its-way-through-edmonton-1.5299539 .

19	fig. 1.9	Analysis of Protest Events in Edmonton. [Diagram by author]. <i>Source:</i> Photos from Lachacz, “A Time for Reflection,”; “‘Our future is at stake’: Greta Thunberg tells climate rally in Edmonton”; Kornik, “Edmonton anti-racism organizers call for action against hate crimes”; “Hundreds March Downtown to Support Black Lives Matter”; Amato, “Hundreds March, Shouting ‘free Palestine’”; Lachacz, “Oromo Community of Edmonton Protests Violence in Ethiopia”; “Protest in Support of Indian Farmers.”
20–21	fig. 1.10	Ecozones within the Boundaries of Alberta. [Map by author]. <i>Source:</i> Adapted from Alberta Park “Natural Regions and Subregions of Alberta,” December 2014, https://www.albertaparks.ca/media/6256258/natural-regions-subregions-of-alberta-a-framework-for-albertas-parks-booklet.pdf .
22	fig. 1.11	Land Burning Practices in Alberta. [Diagram by author]. <i>Source:</i> Adapted from Todd Kristensen and Ashley Reid, “Alberta on Fire: A History of Cultural Burning,” <i>Alberta Wilderness Association</i> , April 1, 2016, https://albertawilderness.ca/31152-2/ , 1.
22–23	fig. 1.12	Bison and Controlled Fire Areas in Alberta. [Map by author]. <i>Source:</i> Adapted from Todd Kristensen and Ashley Reid, “Alberta on Fire: A History of Cultural Burning,” <i>Alberta Wilderness Association</i> , April 1, 2016, https://albertawilderness.ca/31152-2/ , 1.; Statistics Canada, “Total bison (buffalo) by census division (CD), 2016 Canada,” April 26, 2018, https://www150.statcan.gc.ca/n1/pub/95-634-x/2017001/article/54906/catm-ctra-324-eng.htm .
24	fig. 1.13	Fort Edmonton Sites. [Map by author]. <i>Source:</i> Adapted from James Grierson MacGregor, <i>Edmonton: A History</i> , (Edmonton: Hurtig Press, 1967), 24.
25	fig. 1.14	Dominion Lands Act Requirements. [Diagram by author]. <i>Source:</i> Data from Geo Takach, <i>Will the Real Alberta Please Stand Up?</i> (Edmonton: University of Alberta Press, 2010), 40.
26–27	fig. 1.15	Map of De Facto Settlement in Alberta. [Map by author]. <i>Source:</i> Adapted from James Grierson MacGregor, <i>Edmonton: A History</i> , (Edmonton: Hurtig Press, 1967), 96–97.
28–29	fig. 1.16	Map of Central Edmonton Railway Network. [Map by author]. <i>Source:</i> Adapted from City of Edmonton Archives, “EAM-3 - Map 6a, Edmonton Alberta, Isobathic Lines showing cover over “Clover Bar” coal seam,” 1910, https://cityarchives.edmonton.ca/map-6a-edmonton-alberta-isobathic-lines-showing-cover-over-clover-bar-coal-seam .
30–31	fig. 1.17	Edmonton’s Population Growth Timeline. [Image by author]. <i>Source:</i> Data from City of Edmonton, “Population History,” 2019, https://www.edmonton.ca/city_government/facts_figures/population-history ; Merrily K. Aubrey, Edmonton Historical Board Heritage Sites Committee, and City of Edmonton, <i>Naming Edmonton: From Ada to Zoie</i> (Edmonton: University of Alberta Press, 2004), xxix.
32	fig. 1.18	Land Annexation in Edmonton. [Map by author]. <i>Source:</i> Adapted from City of Edmonton Archives, “EAM-120 - History of Annexations - City of Edmonton,” c.1982, https://cityarchives.edmonton.ca/history-of-annexations-city-of-edmonton .
33	fig. 1.19	Detail of Morell and Nichols’ Masterplan of Edmonton. [Drawing by Anthony Morrell and Arthur Nichols]. <i>Source:</i> Drawing from City of Edmonton Archives, “EA-362 - Morell & Nichols’ Proposed Civic Centre Drawings,” 1912, https://cityarchives.edmonton.ca/morrell-nichols-proposed-civic-centre-drawings;rad?sf_culture=en .
33	fig. 1.20	Areas of Affluence in Edmonton. [Map by author]. <i>Source:</i> Adapted from Peter John Smith, <i>Edmonton: Emerging Metro Pattern</i> , (Victoria: Western Geographical Press, 1978), 175.

34–35	fig. 1.21	Pipeline Infrastructure and First Nations Communities in Alberta. [Map by author]. <i>Source:</i> Data from Northern Spirit Regional Council, “Indigenous Ministries,” n.d. https://northernspiritr.ca/about-us/indigenous-ministries/ ; Alberta Energy Regulator, “Oil Pipelines,” June 2021, https://www.aer.ca/providing-information/data-and-reports/statistical-reports/st98/pipelines-and-other-infrastructure/pipelines .
36–37	fig. 1.22	Layers of Resource Extraction. [Map by author]. <i>Source:</i> Data from Alberta Biodiversity Monitoring Institute, “Status of Human Footprint in Alberta,” 2018, https://www.abmi.ca/home/reports/2020/human-footprint?#introduction .
39	fig. 1.23	Edmonton’s Demographics in the <i>Atlas of Suburbanisms</i>. <i>Source:</i> Maps by Markus Moos from <i>Atlas of Suburbanisms</i> , “Edmonton,” University of Waterloo, https://uwaterloo.ca/atlas-of-suburbanisms/maps-and-data/cities/edmonton .
40–41	fig. 1.24	Edmonton’s Central River Valley. [Diagram by author]. <i>Source:</i> Data from City of Edmonton “Touch the Water & North Shore Promenades Concept Design Report,” September 2021, https://www.edmonton.ca/sites/default/files/public-files/assets/PDF/TTW_NSP_Final_Concept_Report.pdf?cb=1651777478 ; Background Image from Explore Edmonton, “Digital Resources,” n.d., https://exploreedmonton.com/industry/tools-resources/digital-resources .
44	fig. 2.1	Encampments & Golf Courses in Edmonton. [Map by author]. <i>Source:</i> Data from Paige Parsons, “Maps show homeless camps sprawled across City of Edmonton,” <i>Edmonton Journal</i> , November 19, 2018, https://edmontonjournal.com/news/local-news/maps-show-homeless-camps-sprawled-across-city-of-edmonton .
45	fig. 2.2	Public Washrooms in Edmonton. [Map by author]. <i>Source:</i> Data from City of Edmonton, “Public Washrooms Map,” accessed March 14, 2022, https://data.edmonton.ca/Facilities-and-Structures/Public-Washrooms-Map/tzpx-p8qu .
45	fig. 2.3	Laundromats in Edmonton. [Map by author using data gathered from Google Maps search of public laundry facilities in the City of Edmonton].
46–47	fig. 2.4	Recreation & Enforcement in Edmonton. [Image by author illustrating the relationship between downtown Edmonton, the ICE District sports and entertainment hub and nearby River Valley areas of recreation and encampment].
48–49	fig. 2.5	Index of Service Providers in Edmonton. [Diagram by author of a categorized index of supportive service providers in Edmonton]. <i>Source:</i> Data from OrgCode Consulting, “Report on Homeless Encampments on Public Land,” March 26, 2019.
50	fig. 2.6	Service Hub Walkability in Edmonton. [Map by author that illustrates walking distances between nodes in Edmonton’s supportive service network for houseless individuals]. <i>Source:</i> Adapted from Joshua Evans, Damian Collins, and Cher-Ann Chai, “On Thin Ice: Assembling a Resilient Service Hub,” <i>Area</i> 51, no. 3 (September 2019): 451–60, https://doi.org/10.1111/area.12448
51	fig. 2.7	Pillars of Urban Social Programs. [Diagram by author].
52–53	fig. 2.8	Mutual Aid Timeline. [Diagram by author]. <i>Source:</i> Adapted from Ariel Aberg-Riger “‘Solidarity, Not Charity’: A Visual History of Mutual Aid,” <i>Bloomberg</i> , December 22, 2020, https://www.bloomberg.com/news/features/2020-12-22/a-visual-history-of-mutual-aid .
54	fig. 2.9	Houseless Individual (1949). <i>Source:</i> City of Edmonton Archives, “EA-600-2853b - 72 year-old John Bassol lives in a tin rainbarrel,” September 2, 1949, https://cityarchives.edmonton.ca/72-year-old-john-bassol-lives-in-a-tin-rainbarrel .

54	fig. 2.10	Houseless Individual (2012). <i>Source:</i> City of Edmonton Archives, “EA-784-1314 - Homeless,” November 10, 2012, https://cityarchives.edmonton.ca/homeless-4 .
55	fig. 2.11	Community Leagues. [Map by author]. <i>Source:</i> Data from Edmonton Federation of Community Leagues, “Facility Map,” n.d., https://efcl.org/facility-map/ .
56	fig. 2.12	Crestwood Community League. [Photograph by author].
56	fig. 2.13	Westmount Community League. [Photograph by author].
56	fig. 2.14	Forest Heights Community League. [Photograph by author].
56	fig. 2.15	Alberta Avenue Community League Plan. <i>Source:</i> Adapted from plans provided by Alberta Avenue Community League.
58	fig. 2.16	Morning Coffee at Pekiawewin. <i>Source:</i> Jordan Omstead, “Camp Pekiawewin issues new demands, collaborates with service agencies,,” <i>CBC News</i> , August 31, 2020, https://www.cbc.ca/news/canada/edmonton/camp-pekiawewin-new-demands-service-1.5705725 .
58	fig. 2.17	Beaver Hills Warriors. <i>Source:</i> Jordan Omstead, “Camp Pekiawewin issues new demands, collaborates with service agencies,,” <i>CBC News</i> , August 31, 2020, https://www.cbc.ca/news/canada/edmonton/camp-pekiawewin-new-demands-service-1.5705725 .
58	fig. 2.18	Pekiawewin Camp Media Address. <i>Source:</i> Dan Grummett, “Camp organizers escalating demand for free transit for homeless Edmontonians,” <i>CTV News Edmonton</i> , September 23, 2020, https://edmonton.ctvnews.ca/camp-organizers-escalating-demand-for-free-transit-for-homeless-edmontonians-1.5116894 .
59	fig. 2.19	Designs for Spatial Exclusion. [Isometric drawing by author showing various urban spaces where municipal by-law and enforcement of privately-owned public spaces exclude individuals experiencing houselessness through enforcement]. <i>Source:</i> Data from Student Legal Services of Edmonton, “A 2015 Alberta Guide to the Law: Homeless Rights,” 2015, https://clg.ab.ca/wp-content/uploads/2016/03/Homeless-Rights-2015.pdf .
60	fig. 2.20	Media footage of Pekiawewin Prayer Camp. [Aerial helicopter video still that reflects invasive reporting methods through birds-eye view imagery of the prayer camp. This point of view parallels reporting methods reserved for disaster reporting and breaking news]. <i>Source:</i> “An insiders view of the Camp Pekiawewin Rosedale homeless encampment,” <i>Global News Edmonton</i> , September 24, 2020, https://globalnews.ca/video/7356971/an-insiders-view-of-the-camp-pekiawewin-rossdale-homeless-encampment/ .
61	fig. 2.21	Police oversee eviction. <i>Source:</i> Photograph by Amber Bracken from “Scenes from Canada’s Housing Crisis,” <i>The Walrus</i> , June 14, 2021, https://thewalrus.ca/scenes-from-canadas-housing-crisis/ .
61	fig. 2.22	Closing Round Dance. <i>Source:</i> Photograph by Amber Bracken from “Scenes from Canada’s Housing Crisis,” <i>The Walrus</i> , June 14, 2021, https://thewalrus.ca/scenes-from-canadas-housing-crisis/ .
61	fig. 2.23	Nighttime Fire. <i>Source:</i> Photograph by Amber Bracken from “Scenes from Canada’s Housing Crisis,” <i>The Walrus</i> , June 14, 2021, https://thewalrus.ca/scenes-from-canadas-housing-crisis/ .
61	fig. 2.24	Wrapped Feet. <i>Source:</i> Photograph by Amber Bracken from “Scenes from Canada’s Housing Crisis,” <i>The Walrus</i> , June 14, 2021, https://thewalrus.ca/scenes-from-canadas-housing-crisis/ .

61	fig. 2.25	Kathy Hamelin. <i>Source:</i> Photograph by Amber Bracken from “Scenes from Canada’s Housing Crisis,” <i>The Walrus</i> , June 14, 2021, https://thewalrus.ca/scenes-from-canadas-housing-crisis/ .
62–63	fig. 2.26	Mutual Aid in Public Space. [Isometric drawing by author that illustrates the various program types and uses of public space to provide community care to unhoused neighbours].
64	fig. 2.27	Rendering of Boyle Street Community Services Building. <i>Source:</i> Paige Parsons, “Boyle Street Community Services to get new \$28.5M home north of downtown Edmonton,” <i>CBC News</i> , December 15, 2021, https://www.cbc.ca/news/canada/edmonton/new-home-boyle-street-community-services-1.6285957 .
64	fig. 2.28	Trailer-style Washroom at 100 St. and 104 Avenue. <i>Source:</i> Image from Natasha Riebe, “Move over porta-potties, trailer toilets coming to Edmonton this summer,” <i>CBC News</i> , January 7, 2022, https://www.cbc.ca/news/canada/edmonton/edmonton-public-washrooms-1.6307010 .
65	fig. 2.29	Cost of Housing Support and Services. [Drawing by author]. <i>Source:</i> Data from Stephen Gaetz, <i>The Real Cost of Homelessness: Can we save money by doing the right thing?</i> (Toronto: Canadian Homelessness Research Network Press, 2012), https://www.homelesshub.ca/sites/default/files/attachments/costofhomelessness_paper21092012.pdf , 5.
67	fig. 2.30	City of Edmonton Public Washroom Assessment Report. <i>Source:</i> Report excerpt from Sean Amato, “Gotta go? Edmonton building more public potties, but it’s not happening quickly,” <i>CTV News Edmonton</i> , January 17, 2022, https://edmonton.ctvnews.ca/gotta-go-edmonton-building-more-public-potties-but-it-s-not-happening-quickly-1.5743532 .
68	fig. 2.31	Meanings of WASH. [Image by author].
68	fig. 2.32	Physical Forms of Property. [Image by author].
72	fig. 3.01	Stegastein Lookout Public Washrooms. <i>Source:</i> Photograph by SaundersArchitecture from “Aurland Public Toilets / Saunders Architecture,” <i>ArchDaily</i> , December 4, 2008, https://www.archdaily.com/9724/aurland-public-toilets-saunders-arkitektur-wilhelmsen-arkitektur .
72	fig. 3.02	Baños Públicos Parque Urquiza. <i>Source:</i> Photograph by Luis Vignoli from “Baños Públicos Parque Urquiza / Diego Jobell,” <i>Plataforma Arquitectura</i> , October 11, 2011, https://www.plataformaarquitectura.cl/cl/02-111955/banos-publicos-parque-urquiza-diego-jobell .
74	fig. 3.03	Frimhamnen Sauna & Baths. <i>Source:</i> Photograph from “Göteborg Bathing Culture / Raumlabor,” <i>ArchDaily</i> , October 25, 2015, https://www.archdaily.com/775677/goteborg-bathing-culture-raumlabor .
74	fig. 3.04	Celsious Williamsburg. <i>Source:</i> Photograph from Bridget Cogley, “Corinna and Theresa Williams Pair Laundromat and Cafe at Celsious in Brooklyn,” <i>Dezeen</i> , June 30, 2018, https://www.dezeen.com/2018/06/30/corinna-theresa-williams-celsious-laundromat-cafe-williamsburg-brooklyn/ .
74	fig. 3.05	Skid Row Handwashing Stations. <i>Source:</i> Photograph from Lexis-Olivier Ray, “LA Installed Hundreds of Hand-Washing Stations at Homeless Camps. Some Are Drying Up,” <i>Curbed LA</i> , April 1, 2020, https://la.curbed.com/2020/4/1/21203396/homeless-coronavirus-los-angeles-handwashing-stations .
74	fig. 3.06	Arolsen Public Baths. <i>Source:</i> Photograph from “Public Bath / Muntinga + Puy Architekten,” <i>ArchDaily</i> , November 26, 2015, https://www.archdaily.com/777708/public-bath-muntinga-plus-puy-architekten .
76	fig. 3.07	Indigenous Peoples Space. <i>Source:</i> Rendering from “Indigenous Peoples Space,” <i>David T Fortin Architect</i> , accessed March 10, 2022, https://www.davidtfortinarchitect.com/indigenous-peoples-space .

76	fig. 3.08	Koganeyu Bath House. <i>Source:</i> Photograph from Hana Abdel, “Koganeyu / Schemata Architects,” <i>ArchDaily</i> , September 7, 2020, https://www.archdaily.com/947215/koganeyu-schemata-architects-plus-jo-nagasaka .
76	fig. 3.09	Isfuglen Winter Bathing House. <i>Source:</i> Photograph from Clara Ott, “Isfuglen Winter Bathing House / Matters Architects,” <i>ArchDaily</i> , November 20, 2021, https://www.archdaily.com/972255/isfuglen-winter-bathing-house-matters-architects .
76	fig. 3.10	Split Bathhouse. <i>Source:</i> Photograph from “Split Bathhouse / BaO Architects,” <i>ArchDaily</i> , August 20, 2011, https://www.archdaily.com/162116/split-bathhouse-bao-architects .
78	fig. 3.11	Guðlaug Baths. <i>Source:</i> Photograph by Ragnar Th Sigurðsson/Arctic Images from Paula Pinto, “Guðlaug Baths / BASALT Architects,” <i>ArchDaily</i> , February 8, 2021, https://www.archdaily.com/956428/gudlaug-baths-basalt-architects .
78	fig. 3.12	Dennis Design Center. <i>Source:</i> Photograph from “Dennis Design Center - Milan,” <i>Bureau Detours</i> , n.d., https://detours.biz/projects/dennis-design-center-milan/
80–81	fig. 3.13	Adversarial Project Siting. [Image by author demonstrating the proximity of Pekiwevin Prayer Camp and the proposed design interventions to the Alberta Legislature grounds]. <i>Source:</i> Background Image from Explore Edmonton, “Digital Resources,” n.d., https://exploreedmonton.com/industry/tools-resources/digital-resources .
82	fig. 3.14	Site Context. [Map by author].
82	fig. 3.15	Habitats and Stormwater Outfall Locations. [Map by author]. <i>Source:</i> Adapted from City of Edmonton, “Touch the Water & North Shore Promenades - Concept Design Report,” last modified September 2021, https://www.edmonton.ca/sites/default/files/public-files/assets/PDF/TTW_NSP_Final_Concept_Report.pdf?cb=1651777478 , 19.
82	fig. 3.16	Tree Inventory. [Map by author]. <i>Source:</i> Adapted from City of Edmonton, “Trees Map,” accessed April 22, 2022, https://data.edmonton.ca/Environmental-Services/Trees-Map/udbt-eiax .
84	fig. 3.17	Site History. [Map by author]. <i>Source:</i> Adapted from City of Edmonton, “Touch the Water & North Shore Promenades - Concept Design Report,” last modified September 2021, https://www.edmonton.ca/sites/default/files/public-files/assets/PDF/TTW_NSP_Final_Concept_Report.pdf?cb=1651777478 , 19.
84	fig. 3.18	Connectivity and Proximity to Washrooms. [Map by author]. <i>Source:</i> Data from City of Edmonton, “Eco Counter - Cyclist & Pedestrians,” <i>Tableau Public</i> , last updated March 13, 2022, https://public.tableau.com/app/profile/city.of.edmonton/viz/EcoCounter-CyclistPedestrians_15833346762900/EcoCounters .
84	fig. 3.19	Private Property and Areas of Surveillance. [Map by author].
84	fig. 3.20	Lot Lines. [Map by author]. <i>Source:</i> Data from City of Edmonton, “SLIM Maps,” accessed February 25, 2022, https://maps.edmonton.ca/map.aspx .
86	fig. 3.21	View of the Alberta Legislature from Ezio Faraone Park. [Photograph taken on behalf of author]. <i>Source:</i> Photograph by Cheryl Bergquist, May 3, 2022.
87	fig. 3.22	View of the High Level Bridge from Ezio Faraone Park. [Photograph taken on behalf of author]. <i>Source:</i> Photograph by Cheryl Bergquist, May 3, 2022.

88–89	<i>fig. 3.23</i>	Existing Conditions and Proposed Interventions. [Image by author demonstrating site context, existing land use and proposed areas of design intervention].
90	<i>fig. 3.24</i>	Programming. [Drawing by author illustrating program types and embedded spaces and supports for houseless community members within larger public programs].
92	<i>fig. 3.25</i>	Existing Conditions and Sites of Intervention. [Drawing by author].
92	<i>fig. 3.26</i>	Massing of Park Amenities Building. [Drawing by author].
93	<i>fig. 3.27</i>	Adversarial Design Programs Nested Within Public Facing Programs. [Diagram by author].
94	<i>fig. 3.28</i>	Building Nodes and Circulation Flows. [Drawing by author].
96	<i>fig. 3.29</i>	The Park Bench House by Sean Godsell. <i>Source:</i> Photograph from “Park Bench House,” <i>Sean Godsell Architects</i> , 2002, https://www.seangodsell.com/park-bench-house .
96	<i>fig. 3.30</i>	Archisuit by Sarah Ross. <i>Source:</i> Photograph from Sarah Ross, “Archisuits,” n.d., https://www.insecurespaces.net/archisuits.html .
97	<i>fig. 3.31</i>	Pay & Sit Park Bench by Fabian Brunsing. <i>Source:</i> Photograph from “Pay & Sit,” <i>Landezine</i> , September 15, 2010, https://landezine.com/pay-sit-by-fabian-brunsing/ .
97	<i>fig. 3.32</i>	paraSITE Shelter by Michael Rakowitz. <i>Source:</i> Photograph from “paraSITE,” <i>Michael Rakowitz</i> , accessed March 10, 2022, https://www.michaelrakowitz.com/parasite .
98	<i>fig. 3.33</i>	Designing Disorder. [Drawing by author].
100–101	<i>fig. 3.34</i>	Site Section. [Drawing by author].
102	<i>fig. 3.35</i>	Planting Strategy. [Drawing by author]. <i>Source:</i> Tree Inventory from City of Edmonton, “Trees Map,” accessed April 22, 2022, https://data.edmonton.ca/Environmental-Services/Trees-Map/udbt-eiax .
103	<i>fig. 3.36</i>	Overall Site Plan. [Drawing by author].
104	<i>fig. 3.37</i>	Disintegrating Physical Markers of Property. [Drawing by author].
105	<i>fig. 3.38</i>	Sandstone Repairs at the Legislature. <i>Source:</i> Photograph by Kim Trynacity from “Big cost and challenges to major restoration of Alberta legislature,” <i>CBC News</i> , accessed May 4, 2022, https://www.cbc.ca/news/canada/edmonton/big-cost-and-challenges-to-major-restoration-of-alberta-legislature-1.5242169 .
106–107	<i>fig. 3.39</i>	Ornamental Pond. [Drawing by author].
108	<i>fig. 3.40</i>	Isometric Section of Public Washroom. [Drawing by author].
110	<i>fig. 3.41</i>	Plan and Section of Public Washroom. [Drawing by author].
112	<i>fig. 3.42</i>	Plan and Section of Satellite Community League Office. [Drawing by author].
113	<i>fig. 3.43</i>	Plan and Section of Bus Shelter. [Drawing by author].
114–115	<i>fig. 3.44</i>	Rendering of Park Pavilion Entrance. [Drawing by author].
116–117	<i>fig. 3.45</i>	Longitudinal Section. [Drawing by author].
118	<i>fig. 3.46</i>	Isometric Drawing of Park Pavilion Building. [Drawing by author].

120–121	<i>fig. 3.47</i>	Park Pavilion Floor Plan. [Drawing by author].
122–123	<i>fig. 3.48</i>	Urban Design Plan. [Drawing by author].
124	<i>fig. 3.49</i>	Isometric Drawing of Courtesy Washing Rooms. [Drawing by author].
126	<i>fig. 3.50</i>	Cafe Seating Area & Phone Room. [Rendering by author].
126	<i>fig. 3.51</i>	Public Laundromat. [Rendering by author].
127	<i>fig. 3.52</i>	Tiered Hotdesks. [Rendering by author].
128	<i>fig. 3.53</i>	Longitudinal Section of Park Pavilion Lower Level. [Drawing by author].
128	<i>fig. 3.54</i>	Cross Section of Park Pavilion. [Drawing by author].
130	<i>fig. 3.55</i>	Landscape Intervention. [Drawing by author].
132–133	<i>fig. 3.56</i>	View from Fitness Stairs. [Drawing by author].
140–141	<i>fig. 4.01</i>	View of the Alberta Legislature from Ornamental Pond. [Rendering by author].
150	<i>fig. 5.01</i>	Wash Bag. [Photograph and object by author].
152	<i>fig. 5.02</i>	Exterior Shell. [Photograph and object by author].
153	<i>fig. 5.03</i>	Removable Lining and Map. [Photograph and object by author].

List of Abbreviations

COE	City of Edmonton
EFCL	Edmonton Federation of Community Leagues
HBC	Hudson's Bay Company
NWC	Northwest Company
WASH	Water, Sanitation and Hygiene

Glossary

Adversarial Design	Term coined by Carl DiSalvo to describe the ways in which design can challenge prevailing political forces, practices and dominant agendas.
Amiskwaciwâskahikan	Cree word for <i>beaver hills house</i> and the traditional name of the region where the City of Edmonton is located.
Design Activism	Design activism, or design as activism, is a term that recognizes design's capacity to act as a vehicle for social change.
Harm Reduction	Regarding public health, harm reduction is a healthcare and social care approach to service and practice that does not require the cessation of substance use. More broadly, harm reduction as a term used by abolitionist activists, refers to the provision of care without judgment, discrimination or preconditions.
Houselessness	A neologism for the term 'homeless' that acknowledges the human dimension of housing insecurity and the existing relationships to community and place among houseless individuals. This term popularized among activists suggests that housing is a human right and can be solved through the provision of housing.
Multistability	Postphenomenological belief that objects can take on multiple meanings and uses, and are microcosms of the dynamics and agendas of public space.
Mutual Aid	Mutual aid is a form of community-based support in which members in a community unite against a struggle, or in solidarity with people who face immediate harm or risk to their well-being.
Outflanking	Describes the efforts by supportive services and agencies to remain in place, or age-in-place.
Prairie West	A term used to describe the region of Turtle Island where prairie cities are located without reference to the settler-imposed boundaries of Canadian provinces.
Service Hub	An agglomeration of supportive services and agencies.

Preface

This thesis began between peaks in COVID-19 variant cases at a time when pandemic fatigue seemed to be at an all-time high. The political position of this thesis emerged from the countless conversations around the pandemic, the handling of information or misinformation, the polarizing issue of body autonomy, and the disproportionate impact of COVID-19 among houseless neighbours and racialized communities.

The political position of this thesis stems from my direct, and indirect, experiences with racism, stigmatization of drug use, poverty, displacement and houselessness. Within my own family, I have witnessed cycles of addiction, incarceration, and houselessness and have experienced uncertainty due to poverty and displacement earlier in life. Throughout the last eight months, the topics of this thesis have challenged my own political position, bias, and privilege as a cisgender person of colour enrolled in a post-secondary institution. To probe architecture's role in both upholding spatial exclusion and its potential to establish a counter narrative, this research required a study of natural environments, settler colonial Canadian history, and Indigenous histories. Discourse relating to issues of houselessness, racism, addiction, criminalization of poverty, and the language used to discuss these topics are ongoing and change at a rapid pace. Hence, I acknowledge that the terms selectively used, such as 'houselessness' and 'Prairie West' may not be the most appropriate of terms in the future.

The topics explored in this thesis are a point-in-time account of my own personal journey and study into systemic issues and spatial inequity. Shelter, food security, knowledge sharing, as well as material and energy sovereignty are other potential avenues of exploration in architecture and the experience of houselessness. I hope that this work inspires others to explore design's capacity to challenge prevailing political forces in public space, and its ability to support community methods of care.

Mapping and diagramming are the primary tools used to investigate themes and histories of ontological violence faced by houseless community members in Edmonton. Part of the research methodology was to geospatially represent the deeper historical origins of houselessness in Edmonton and link them to present-day protest-events to demonstrate longstanding spatial inequities in Edmonton. Through a series of protest-event analysis drawings and maps, observations from COVID-19 era protest events were drawn to discuss the reality of a double-standard of rights for housed versus houseless people to rest and protest in public space.

This inquiry into the realities of spatial inequity and systems of exclusion facing houseless people is further supported by street level accounts of events sourced from local news outlets, social media accounts managed by mutual aid networks, empirical research and knowledge, as well as published reports relating to houselessness in Edmonton.

As much as I have learned throughout the development of this thesis, the viability of architecture to address issues concerning human rights to water, sanitation and hygiene in urban environments deserves evidence-based methods that were not possible due to the timeframe of this thesis and the level of teamwork required. The human right-to-WASH is one of the many barriers to basic needs faced by houseless neighbours, and those underserved by existing shelter systems. A true bottom-up approach to design activism in solidarity with houseless people requires ethical and equitable engagement with houseless individuals and care providers. Work of this nature is best suited to larger teams of people with professional experience in public health, crisis response and social work in addition to architecture.

Part of the research methodology of this thesis was to engage with local mutual aid networks and discuss infrastructural barriers facing houseless community members, as well as systems of exclusion and the criminalization of poverty. However, delays in research ethics approval, interprovincial travel and budget limitations, as well as the ad hoc and volunteerism nature of mutual aid, have had impacts on the potential for this thesis to explore more firmly rooted bottom-up design approaches in early stages. Understanding that this thesis probes issues concerning a vulnerable and sensitive population and that some community activists wish to protect their privacy, audio and video recordings were not gathered. Notes and excerpts from interviews conducted with mutual aid organizers were verbally approved by interviewees prior to their integration into this thesis.

To supplement gaps and delays in engaging with mutual aid network organizers in Amiskwaciwâskahikan, this thesis draws from the harm reduction and abolitionist writing of activist-lawyer Dean Spade in *Mutual Aid: Building Solidarity During This Crisis (and the next)* and the work of various contributors in *Settler City Limits, Design (&) Activism*, and *The Red Deal*. This work is also informed by Brenna Bhandar's *Colonial Lives of Property* and Craig Fortier's *Unsettling the Commons*. Graham A. MacDonald's *The Beaver Hills Country* and Bruce Ziff and Sean Ward's "Squatter Rights and the Origins of Edmonton Settlement" are key texts used to position the deeper histories of land expropriation in Edmonton, while Robert Rosenberger's *Callous Objects* and Richard Sennett and Pablo Sendra's text, *Designing Disorder*, are referenced as key texts that discuss architecture's capacity to resist political forces, norms, and neoliberal imperatives.

This thesis is limited by the eight-month timeline allotted to research the deep history of houselessness in Edmonton. If it were possible to develop this thesis over a longer period, I would have dedicated more time to establishing bottom-up design approaches and toward challenging the conventions of architectural process and representation through drawing in earlier stages.

Introduction —



fig 0.1 Photograph of Park Signage at 9549 108 Avenue NW, Edmonton, AB

“Homeless is such a strong word, a picture of somebody that is, like, down and out and not capable of taking care of things—but it’s not. Homelessness is not that.”
— Sonny B.¹

Introduction

Social, economic and ethical complexities of the COVID-19 pandemic have created conditions conducive for houselessness: job insecurity, an increase in domestic violence, and an uptick in substance abuse.² While the ongoing pandemic is not a direct cause of houselessness, it has exacerbated preexisting conditions and accelerated upward trends toward a state of crisis. Houselessness in Canada and the long-standing inequities stemming from settler colonialism are particularly poignant in Canada’s Central Plains. Income, ethno-racial identity and housing type are identified by public health and social equity researchers as social determinants of health and COVID-19 risk, particularly among individuals experiencing houselessness and those within racialized communities.³ Where the highest per capita rate of houselessness is most soberingly observed in Canada is in the province of Alberta, as defined by the settler-imposed provincial boundaries. Although Alberta’s population is one third of Ontario’s, sources have reported a higher incidence of chronic houselessness, i.e., individuals with a range of comorbidities who have been houseless for six or more months in a year. In Edmonton, the metropolitan region reports a higher overrepresentation of Indigenous people among total houseless populations at rates of 44% to 57% compared to the national average of 30%. Within Edmonton, the rate of people experiencing chronic houselessness is greater than in other urban centres in Alberta such as Calgary and Red Deer.⁴

Throughout this research, the terms ‘houseless’ and ‘homeless’ are used to differentiate between individuals experiencing housing issues and those provisionally accommodated, from the smaller population of high acuity individuals who feel as if they do not have a home.⁵ The experience of ‘homelessness’ recalls more nuanced aspects

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- 1 Throughout this thesis, excerpts from interviews with houseless community members at Pekiwevin Prayer Camp provide insight into the lived experiences of houselessness in Edmonton. Amber Bracken, “Scenes from Canada’s Housing Crisis,” *The Walrus*, June 14, 2021, <https://thewalrus.ca/scenes-from-canadas-housing-crisis/>
 - 2 Jakob Koziel, Maria Savidov, and Andrea Frick, “A Brief Scan of COVID-19 Impacts on Equity-Deserving Groups and Corresponding Responses,” Bissell Centre, n.d., 4-7.
 - 3 Allen Upton et al., “Impacts of COVID-19 in Racialized Communities,” May 2021, 52-54; Tanya Gulliver-Garcia, “Which City in Canada Has the Most Homeless People per Capita and Why?,” *The Homeless Hub*, accessed October 20, 2021, <https://www.homelesshub.ca/resource/which-city-canada-has-most-homeless-people-capita-and-why>.
 - 4 Gulliver-Garcia, “Which City in Canada,”; John Kolkman, *A Profile of Poverty in Edmonton Update*, 2017, <https://www.deslibris.ca/ID/10093506>, 2.
 - 5 Natalie Orenstein, “Homeless? Unhoused? Unsheltered? Word Choice Matters When Reporting on Oaklanders Who Don’t Have Permanent Housing,” *The Oaklandside*, November 10, 2020, <https://oaklandside.org/2020/11/10/homeless-unhoused-unsheltered-word-choice-matters-when-reporting-on-oaklanders-who-dont-have-permanent-housing/>.

of home that refer to a lack of family relationships, safety, security, a sense of community, and a cultural or spiritual connection to the land or a birthplace. The use of the term ‘the homeless’ is considered by some as a dehumanizing term through its singularizing of identity of individuals experiencing housing insecurity as a catchall label describing their identity.⁶ In short, the use of the neologism ‘houseless’ and the phrase ‘people experiencing houselessness’ acknowledges the human dimension of housing insecurity and the existing relationships to community and place among unhoused community members. Property ownership and taxation should not exclude people experiencing housing insecurity from being considered community members, neighbours and humans.

Since the start of the COVID-19 pandemic, the number of people experiencing houselessness in Edmonton has doubled, and to meet demands the City of Edmonton requires 500 to 1200 additional emergency shelter beds.⁷ Pandemic-related restrictions of houseless supports and the increase in rates of houselessness combined with crowded shelters have created conditions that place those experiencing houselessness at greater risk of contracting COVID-19.⁸ As a response, mutual aid networks have emerged as a method of community care in solidarity with those experiencing housing difficulties amidst the pandemic.⁹ Throughout this thesis, the terms ‘mutual aid’ and ‘harm reduction encampment’ will be used interchangeably to refer to grassroots, and often crowdfunded, methods of community care.

Mutual aid is a form of community care with a harm reduction approach centered around the immediate wellbeing of people struggling to achieve basic needs, or whose livelihoods face immediate risk: it is a social space of solidarity.¹⁰ The history of mutual aid in North America dates back to as early as 1780 when the first African Union Society was founded, while the practice of mutual aid is arguably much older

6 Alissa Walker, “How We Talk About Homelessness Is Finally Changing,” *Curbed*, June 11, 2020, <https://archive.curbed.com/2020/6/11/21273455/homeless-people-definition-copy-editing>; Orenstein, “Homeless? Unhoused? Unsheltered?”

7 Sean Amato, “Edmonton about 500 Shelter Beds Short as Homeless Count Doubles in 2 Years,” *CTV News Edmonton*, November 16, 2021, <https://edmonton.ctvnews.ca/edmonton-about-500-shelter-beds-short-as-homeless-count-doubles-in-2-years-1.5668910>.

8 Kate McGillivray, “Ontario’s Homeless 5 Times More Likely to Die of COVID-19, Study Finds,” *CBC News*, January 12, 2021, <https://www.cbc.ca/news/canada/toronto/ontario-s-homeless-5-times-more-likely-to-die-of-covid-19-study-finds-1.5869024>.

9 John Humphrey Centre for Peace and Human Rights, “Dignity During a Pandemic: No One Left Behind Podcast: Episode One,” accessed October 31, 2021, https://www.jhcentre.org/dignity-podcast_episode-one.

10 Dean Spade, *Mutual Aid: Building Solidarity during This Crisis (and the Next)* (London; Verso, 2020), 2.

and better known as the principle of reciprocity on Turtle Island.¹¹ More recently, the practice of mutual aid has re-emerged in Canada in the form of harm reduction encampments. These spaces of solidarity have been organized to mitigate the immediate risks of houselessness. In Edmonton, the numerous ‘curbside communities’ have co-opted park spaces as both sites of solidarity and as sites of protest outside the typical architectural proxies of power—Edmonton City Hall and the Alberta Legislature.¹² The public yet peripheral nature of these protests prompted this research inquiry through the analysis of the actants, the sites, the issues and the scales of various COVID-19 era protest events in Edmonton.

The theoretical framework and methodology of this thesis is directed by two research questions, namely: **To what extent does architecture play a role in protest?**; and **How may architecture and urban design be mobilized to challenge settler colonial systems of exclusion in ways that grant agency to mutual aid networks and unhoused community members?** In its simplest form, architecture provides a site of occupation, it acts as a proxy for power, and it physically frames the protest event in an Arendtian perspective. Alternatively, Judith Butler argues that it is the space in-between bodies, which formalizes a political space that yields visibility and contributes a *gravitas* to protest and ‘alliance’.¹³ Harm reduction encampments throughout cities in Canada are typically situated outside the usual architectural loci of power. The atypical location of the encampment as protest suggests that issues concerning unhoused communities may not be afforded the same rights-to-the-city and rights to organize and peacefully protest as other citizen groups and issues are. Recent protest events organized by the so-called ‘Freedom Convoy’ in Ottawa and the non-violent resolution of truck blockades in Coutts, Alberta, present a disturbing double-standard of protest, policing and the right-to-the-city that will be discussed to explore potential methods for architecture to act in solidarity with mutual aid networks and houseless people.¹⁴

11 Ariel Aberg-Riger, “‘Solidarity, Not Charity’: A Visual History of Mutual Aid,” *Bloomberg*, December 22, 2020, <https://www.bloomberg.com/news/features/2020-12-22/a-visual-history-of-mutual-aid>; Keri Ferguson, “‘Relationships, Respect, Reciprocity’ Guide Indigenous Researcher’s Teaching Principles,” *Western University*, December 10, 2021, <https://news.westernu.ca/2021/12/relationships-respect-reciprocity-guide-indigenous-researchers-teaching-principles/>.

12 “An Insiders View of the Camp Pekiwewin Rosedale Homeless Encampment,” *Global News Edmonton*, September 24, 2020, <https://globalnews.ca/video/7356971/an-insiders-view-of-the-camp-pekiwewin-rossdale-homeless-encampment/>.

13 Judith Butler, *Notes Toward a Performative Theory of Assembly*, (Cambridge, MA: Massachusetts: Harvard University Press, 2018), 72-73.

14 Alex Cosh, “Critics Highlight Police Double Standards in Ottawa,” *The Maple*, February 4, 2022, <https://www.readthemaple.com/critics-slam-police-double-standards-in-ottawa/>.

Chapter 1 begins with the analysis of protest events in Edmonton, which prompts the exploration into the deeper histories of houselessness in Edmonton that span the end of the Holocene to the present day. The region of *beaver hills*' natural, post-contact and post-war histories are discussed to present a range of systemic issues framed by ideas of property, so-called 'natural resources' and the accumulation of wealth, all of which are embedded in Canadian history and centuries old projects of modernity through Indigenous dispossession and land expropriation. This exploration of the various histories of Amiskwaciwâskahikan (Edmonton) unearth the deeper roots of wealth inequality that funnel into the present-day housing crisis. Findings from this inquiry into deep time are used to support the choice of Edmonton as an important area of study when discussing houselessness on Turtle Island. The acute experience of houselessness in Edmonton combined with dangerous winter conditions can be solved through safe and affordable housing solutions. However, adequate housing solutions take time and are currently driven by neoliberal imperatives, which as this thesis will argue, necessitates diverse interim solutions to houselessness. Pandemic-era conditions that have lead to higher rates of houselessness in the Prairie West, especially in times of slowed government response, highlight needs for immediate, radical, and multilayered approaches to mitigate harm for those experiencing houselessness.

Chapter 2 examines the current state of supportive service provision for people experiencing houselessness in Edmonton that range from formal services, city services, and grassroots mutual aid initiatives. Select examples of international mutual aid precedents along with local Edmonton-based mutual aid organizations are studied to reflect on architecture's role in upholding systems of spatial exclusion, and inversely, its potential to challenge existing political agendas and sociospatial inequalities through design activism. A range of care methods—their building typologies and organizational structures—are discussed to understand the current state of service provision for unhoused community members in Amiskwaciwâskahikan. This inquiry into existing methods of care will inform a series of design interventions that support ad hoc and volunteer-run initiatives serving unhoused people. Throughout this chapter, the commons and the human right to water, sanitation, and hygiene (Right-to-WASH) will be discussed to identify a cluster of architectural programs that can complement the work of mutual aid organizations, at street level, and act as both a community hub and agitator in Amiskwaciwâskahikan's River Valley.¹⁵

Chapter 3 explores design scenarios that speculate on ways architecture and design can fill infrastructural gaps in public space that concern unhoused community members, and resist prevailing forces that contribute to spatial exclusion in Edmonton. These interventions probe the 'right-to-wash' in public space and explore solidarity through design through five categories of design intervention: ground, below ground infrastructure, above, boundary, and democratic space/building as solidarity.¹⁶ The proposed interventions are sited at Constable

15 Sayed Mohammad Nazim Uddin et al., "Water, Sanitation and Hygiene for Homeless People," *Journal of Water and Health* 14, no. 1 (July 7, 2015): 47–51, <https://doi.org/10.2166/wh.2015.248>.

16 The idea of multistability is used by Robert Rosenberger to describe and categorize the ways in which everyday objects and design harness social and political agendas. He introduces these three categories of multistability while discussing the dual-purpose of park benches as places of seating, and as places of sleeping, if designed compassionately. Robert Rosenberger, *Callous Objects: Designs against the Homeless*, (Minneapolis:

Ezio Faraone Park, which is located on the culturally and historically significant banks of the North Saskatchewan River Valley.¹⁷ The River Valley is a traditional place of trading, alliance renewal, burial grounds and an area where Indigenous people maintain a relationship to the river.¹⁸ Since the arrival of settler colonists, the development of the River Valley in Edmonton favored histories of settler squatters, wealthy elites, and exclusive recreational clubs.¹⁹ Spatial exclusion in the River Valley persists today through municipal zoning—much of the valley is zoned as a ‘Recreation Zone’—that is protected by municipal by-laws that criminalize cultural practices, encampment and loitering in public ‘recreation zones’.²⁰ For some, the River Valley is a key area of respite from the harmful aspects of the city’s largely faith-based shelter and service system.²¹ Through the proposed design interventions, Chapter 3 demonstrates that despite the prevailing systems of spatial exclusion and double-standards in the enforcement of encampments, these can be mitigated through architectural interventions in solidarity with unhoused community members.

Ultimately, housing as a human right can only be solved through adequate housing solutions. In times of slowed government response, or when existing systems of care are considered unsafe and harmful, protest events have brought attention to the inherent harm in shelter systems and systems of spatial exclusion. Protest events and the reemergence of mutual aid throughout Turtle Island have shown that formal responses to housing issues during the COVID-19 pandemic have not adapted quickly enough to address the immediate dangers facing houseless people, or those teetering on the edge of houselessness. Community level response like mutual aid networks and harm reduction encampments are likely to persist beyond this pandemic. Architects and designers must question their own biases and harm in upholding systems that contribute to the experience of houselessness.

University of Minnesota Press, 2017), 19.

17 Graham A. MacDonald, *The Beaver Hills Country: A History of Land and Life* (Edmonton: Athabasca University Press, 2009), 27.

18 Caroline Andrew, Katherine A. Graham, and Neil John Bradford, *Canada in Cities: The Politics and Policy of Federal-Local Governance*, (Montreal & Kingston: McGill-Queen’s University Press, 2014), 282.

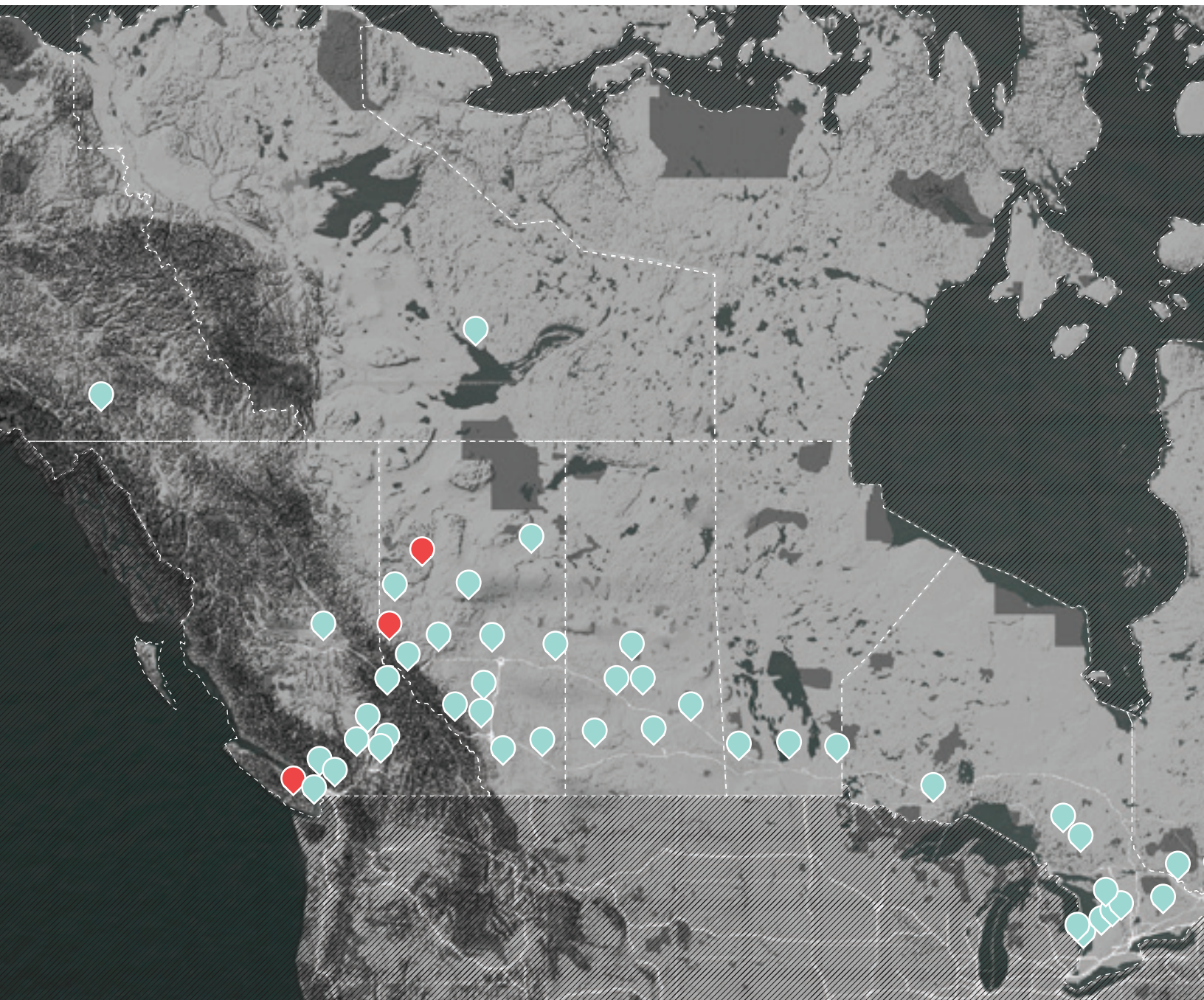
19 Bruce Ziff and Sean Ward, “Squatters’ Rights and the Origins of Edmonton Settlement” in *Essays in the History of Canadian Law: A Tribute to Peter N. Oliver*, ed. J. Phillips et al., (Toronto: University of Toronto Press, 2016), <https://doi.org/10.3138/9781442689510-015>.

20 “City of Edmonton : SLIM Maps,” accessed February 25, 2022, <https://maps.edmonton.ca/map.aspx>; Student Legal Services of Edmonton, “A 2015 Alberta Guide to the Law: Homeless Rights,” 2015, <https://clg.ab.ca/wp-content/uploads/2016/03/Homeless-Rights-2015.pdf>, 3-7; City of Edmonton, “Zoning Bylaw Renewal Initiative GBA+ Equity Toolkit,” *GBA+ & Equity Toolkit Story Document*, July 2021, 44.

21 OrgCode Consulting, “Report on Homeless Encampments on Public Land,” March 26, 2019, 17-19; Paige Parsons, “Maps Show Homeless Camps Sprawled across City of Edmonton,” *Edmonton Journal*, November 19, 2018, <https://edmontonjournal.com/news/local-news/maps-show-homeless-camps-sprawled-across-city-of-edmonton>; Rebecca Reid and WaterWarriorsYEG, Architecture and Mutual Aid, interview by Robert Maggay, January 12, 2022.

1

Settler Colonial Origins of Houselessness in Edmonton



Legend

- Environmental Component
- Multiple Protest Types

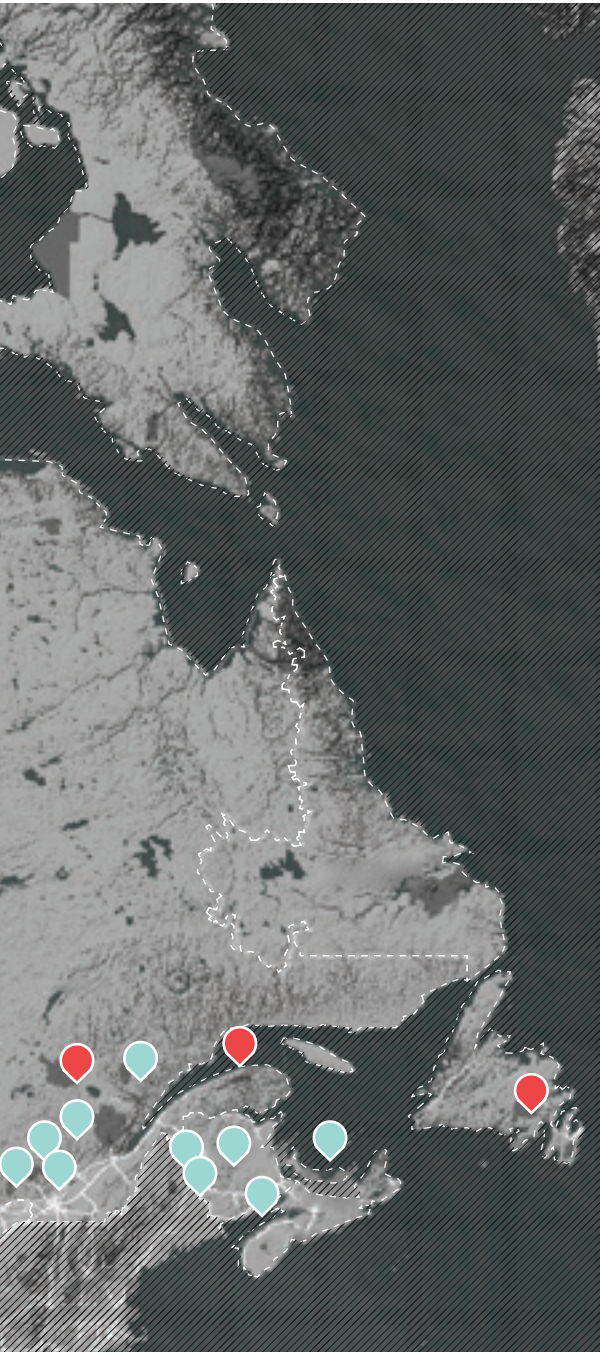


fig 1.1 National Protest Events in Canada

1.0 Settler Colonial Origins of Houselessness in Edmonton

This chapter discusses the commonness of protest events in Canada during the COVID-19 pandemic and the ways protests concerning houseless communities are excluded from typical spaces of political action and gathering. Social and spatial exclusion from standard protest spaces supports the position that architectural interventions in solidarity with unhoused neighbours require a level of secrecy, subversion, and multistable dimensions in their design.

1.1 Protest-Event Analysis

Throughout the COVID-19 pandemic in Canada there is a palpable sense of tension relating to issues ranging from body autonomy, systemic racism, militarized policing, Indigenous genocide, and public health mandates.²² Although data on protest events in Canada during the pandemic is piecemeal due to the lack of tracking and cataloguing of events, as well as unclear definitions for protest data collection, this thesis does its best to approximate where and when certain protest events have occurred in specific parts of Canada.

The Carnegie Endowment for International Peace's *Global Protest Tracker* identifies over 230 anti-government protests since 2017. In Canada, this global protest tracker has only identified one significant protest, which concerned COVID-19 restrictions.²³ GardaWorld, a private security firm based in Montréal, Quebec, tracked several Canadian protest events through their blog, totaling an estimated 60 significant protests nationwide since the enactment of Canada's first COVID-19 safety measures (see fig. 1.1).²⁴ However, the metric for GardaWorld's reporting of protest events remains unclear. Independent web searches of news articles relating to protest events, in addition to data gathered from GardaWorld and the Carnegie Endowment for International Peace, provided approximate locations of protest events in Canada since the start of the coronavirus pandemic. Although this method for data collection is not without its limitations, Figure 1.1

22 The term 'genocide' was used in the report to refer to the pattern of violence against Indigenous women and girls and the deliberate acts of human rights violations and abuse. National Inquiry into Missing and Murdered Indigenous Women and Girls, "A Legal Analysis of Genocide," May 29, 2019, https://www.mmiwg-ffada.ca/wp-content/uploads/2019/06/Supplementary-Report_Genocide.pdf.

23 Carnegie Endowment for International Peace, "Global Protest Tracker," accessed October 20, 2021, <https://carnegieendowment.org/publications/interactive/protest-tracker>.

24 "Rechercher | GardaWorld," *GardaWorld*, accessed October 20, 2021, https://www.garda.com/search?query=protest%20canada&sort_by=search_api_relevance&page=0.

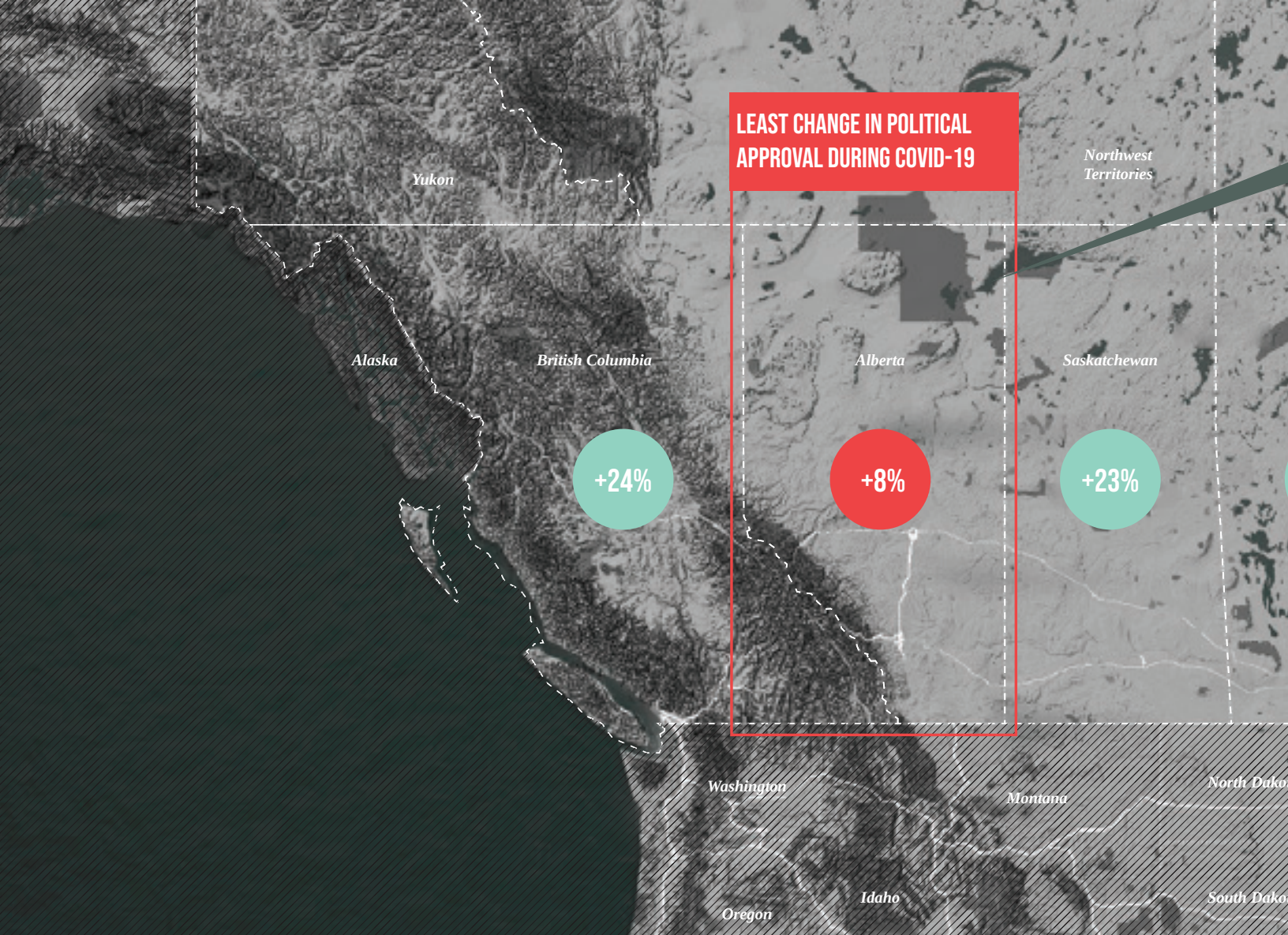
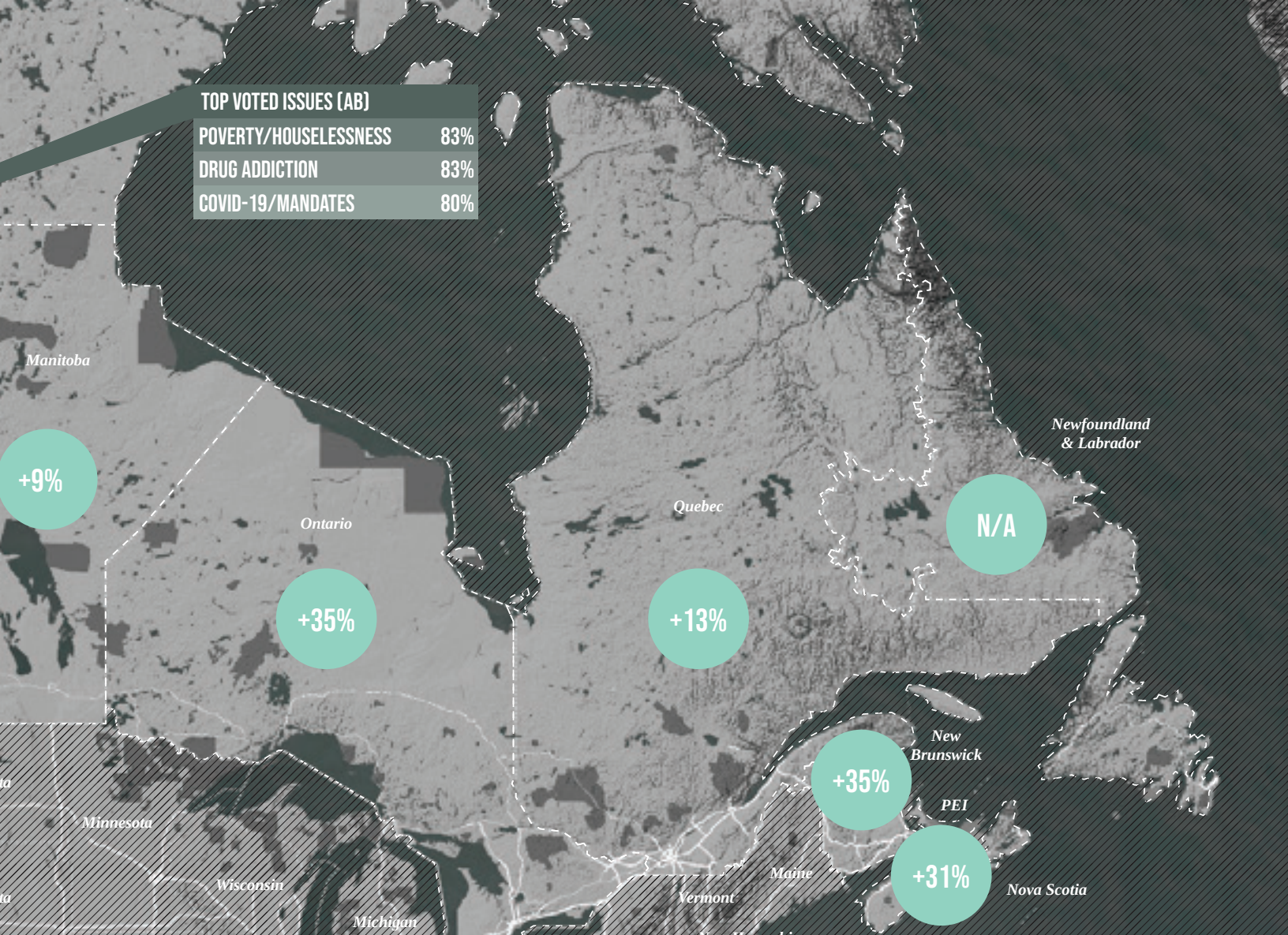


fig 1.2 Political Temperature Check across Canada

British Columbia	Housing Affordability	Poverty/Houselessness	Drug Use/Addictions
Alberta	Poverty/Houselessness	Drug Use/Addictions	COVID-19 Response
Saskatchewan	Drug Use/Addictions	Poverty/Houselessness	Seniors Care
Manitoba	Poverty/Houselessness	Drug Use/Addictions	Seniors Care
Ontario	Housing Affordability	Seniors Care	Poverty/Houselessness
Quebec	Housing Affordability	Poverty/Houselessness	Drug Use/Addictions
New Brunswick	Drug Use/Addictions	Housing Affordability	Poverty/Houselessness
Nova Scotia	Housing Affordability	Poverty/Houselessness	Energy/Oil & Gas/Pipelines
Newfoundland & Labrador	Poverty/Houselessness	Housing Affordability	Government Spending
Prince Edward Island	N/A	N/A	N/A
Yukon	N/A	N/A	N/A
Northwest Territories	N/A	N/A	N/A
Nunavut	N/A	N/A	N/A

fig 1.3 Top Provincial Issues



approximates the widespread nature of COVID-19 era protest events in Canada. A more robust data collection method that leverages Twitter API data, which can be geospatially represented using software like *RStudio* may offer a more accurate representation of protest event location, size and duration. Within the scope of this thesis, this general understanding of protest events will provide a sufficient background to position the experience of houselessness within a wider range of systemic issues addressed in this work through ‘adversarial design’ methods.²⁵

In 2019, an estimated 67% of Canadians participated in a form of activism: 28% of activists were young adults engaged in some form of protest, while an estimated 18% were adults and 9% were adults over the age of 55. These values of protest involvement were gathered by the Samara Centre for Democracy; the location of respondents was not provided in their latest 2019 *Democracy 360* report.²⁶ To approximate the location of protest events at a general level, the Samara Centre’s political temperature check during the pandemic surveyed respondents on political satisfaction at a provincial level (see fig. 1.2), while key issues

25 The term *adversarial design* was coined by design theorist, Carl DiSalvo, to refer to the potential for objects, products, services and design to contest political forces and agendas embedded in their design. In this thesis, I deploy DiSalvo’s term to describe architecture’s capacity to co-opt property lines to create new and radical social and spatial scenarios for mutual aid networks and houseless communities. Carl DiSalvo, *Adversarial Design* (Cambridge, MA: The MIT Press, 2012);

Robert Rosenberger, *Callous Objects: Designs against the Homeless*, Minneapolis: University of Minnesota Press, 2017), 61.

26 The Samara Centre for Democracy, “2019 Democracy 360: The Third Report Card on How Canadians Communicate, Participate, and Lead in Politics,” accessed December 3, 2021, https://issuu.com/samaracanada/docs/2019_democracy_360_by_the_samara_ce, 24-25.

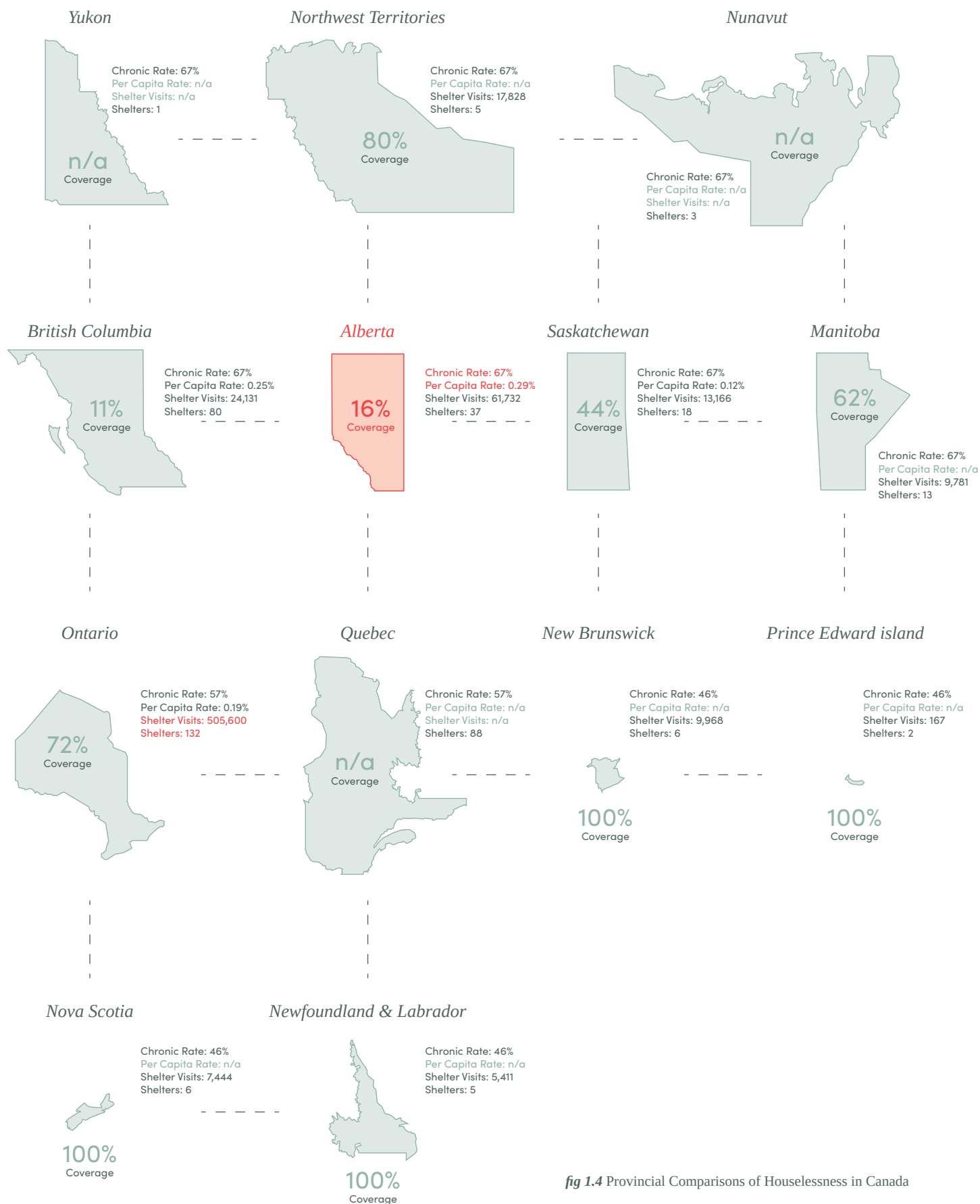


fig 1.4 Provincial Comparisons of Houselessness in Canada

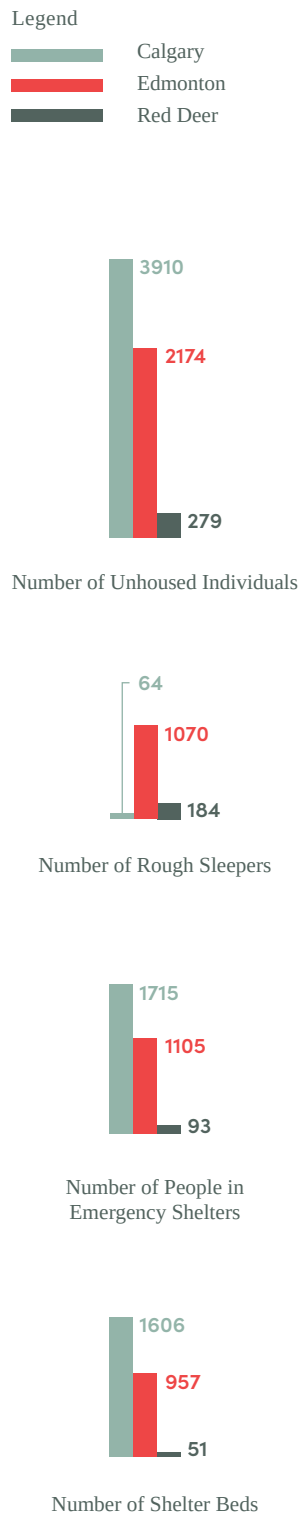


fig 1.5 Homelessness in Alberta

in each province were derived from data gathered by the Angus Reid Institute (see fig. 1.3).²⁷ The province that exhibited the least amount of change in political approval was Alberta.²⁸ Moreover, reports by the Samara Centre and the Angus Reid Institute reveal a potential relationship between protest events, and political dissatisfaction. At a provincial level the top three issues in Alberta, as of 2020 among respondents of the Samara Centre's political temperature check, were: houselessness (83%), drug addiction (80%) and the handling of the COVID-19 pandemic (80%).²⁹

To understand why houselessness was identified as a key issue among respondents of the Samara Centre's political temperature check, an overview of the rate and scale of houselessness nationwide is required (see fig. 1.4). Although the province of Ontario has the highest number of individuals experiencing houselessness, the highest per capita rate of houselessness in Canada is found in Alberta (0.29%) while Ontario's per capita rate is 0.19%.³⁰ Northern and Western Canada also report higher rates of chronic houselessness among unhoused people compared to Central and Eastern Canada with values of 67%, 57% and 46% respectively.³¹ At a provincial level in Alberta, one might expect the number of houseless individuals to be proportional to the size of the urban centre. However, data released in 2014 by the Homeless Hub—a national research institute dedicated to the issue of houselessness—revealed a disproportionately higher incidence of chronic houseless in Edmonton (see fig. 1.5).³²

During the same year this data was released, the price of oil collapsed due to global oversupply leading to the decline of local economies dependent on the surplus of wealth from the extraction of

27 The Samara Centre for Democracy, "Temperature Check: Canadian Democratic Attitudes in a Pandemic," accessed February 25, 2022, [https://www.samaracanada.com/docs/default-source/reports/temperature-check-by-the-samara-centre-for-democracy.pdf?sfvrsn=60661e2f_4_8](https://www.samaracanada.com/docs/default-source/reports/temperature-check-by-the-samara-centre-for-democracy.pdf?sfvrsn=60661e2f_4_8;); Angus Reid Institute, "Spotlight on the Provinces: Concerns over Health Care, Economy Drive Increasing Dissatisfaction with Governments," October 27, 2021, <https://angusreid.org/provincial-spotlight-health-care-economy/>.

28 Samara Centre for Democracy, "Temperature Check," 8.

29 Angus Reid Institute, "Spotlight on the Provinces."

30 Tanya Gulliver-Garcia, "Which City in Canada Has the Most Homeless People per Capita and Why?," *Homeless Hub*, accessed October 20, 2021, <https://www.homelesshub.ca/resource/which-city-canada-has-most-homeless-people-capita-and-why>.

31 Government of Canada and Employment and Social Development Canada, *Everyone Counts 2018: Highlights: Preliminary Results from the Second Nationally Coordinated Point-in-Time Count of Homelessness in Canadian Communities.*, 2019, http://epe.lac-bac.gc.ca/100/201/301/weekly_acquisitions_list-ef/2019/19-37/publications.gc.ca/collections/collection_2019/edsc-esdc/Em12-25-2018-eng.pdf, 7-8.

32 Gulliver-Garcia, "Which City in Canada."

so-called resources. The resultant job losses and increases in substance use parallel the same preconditions of houselessness experienced during the current COVID-19 pandemic.³³ As a way to combat the immediate harmful effects of houselessness during the pandemic, mutual aid networks and harm reduction encampments have emerged as a way to address the symptoms of wealth inequality and injustice in Edmonton.

Locally, in Edmonton, there have been at least a dozen protest events. This number continues to increase as tensions pertaining to public health mandates and harm reduction rise. Upon mapping the location of each significant protest in Edmonton during COVID-19, through a series of protest event analysis drawings (see fig 1.8), three main observations were drawn. Firstly, most protest events occur at architectural sites that act as proxies of power. In this context, these symbols of governance in built form are the Alberta Legislature and Edmonton City Hall (see fig 1.7). The second observation was the importance of the motor vehicle and convoy in protests that span larger areas, as convoys account for 33% of protest events in Edmonton. Lastly, outside of protest convoys, the harm reduction encampment and protest of police brutality, *Pekiwewin Prayer Camp*, occurred outside the usual places of protest. This encampment was organized by Indigenous Two-Spirit women and femme folx in solidarity with Black, 2SLGBTQQIA+ and settler volunteers. The prayer camp inspired the emergence of other street outreach initiatives throughout the city, which are aid networks that also operate outside typical proxies of power.³⁴ In effect, this thesis is driven by the interpretation that mutual aid and harm reduction encampments are sites of protest and operate outside of Edmonton City Hall and the Alberta Legislature due to double standards of policing and law enforcement in public space (see fig 1.9). This double standard of law enforcement is best understood when comparing the rapid militarized enforcement of encampments at Lamport Stadium in Toronto versus the peaceful and non-violent enforcement of so-called ‘Freedom Convoy’ occupiers in Ottawa.³⁵ Similar police response to mutual aid and harm reduction encampments are reported at encampments in Vancouver, Toronto and Boise.³⁶

33 John Kolkman, *A Profile of Poverty in Edmonton Update*, 2017, <https://www.deslibris.ca/ID/10093506>, 2.

34 John Humphrey Centre for Peace and Human Rights, “Dignity During a Pandemic: No One Left Behind Podcast: Episode One,” accessed October 31, 2021, https://www.jhcentre.org/dignity-podcast_episode-one.

35 Alex Cosh, “Critics Highlight Police Double Standards in Ottawa,” *The Maple*, February 4, 2022, <https://www.readthemaple.com/critics-slam-police-double-standards-in-ottawa/>.

36 Kristen Robinson, “Vancouver Taxpayers on Hook for at Least \$3.5M for Oppenheimer Park Tent City,” *Global News*, accessed October 5, 2021, <https://globalnews.ca/news/7846922/vancouver-taxpayers-on-hook-for-at-least-3-5m-for-oppenheimer-park-tent-city/>; Ryan Rocca, “City of Toronto Spent Nearly \$2M to Clear 3 Homeless Encampments, Repair Parks,” *Global News Toronto*, accessed October 4, 2021, <https://globalnews.ca/news/8199534/city-of-toronto-homeless-encampment-clearing-costs/>; Tyler Walicek, “Occupy-Style Protest at Idaho Capitol Highlights Brutal Conditions Faced by the Unhoused,” *Truthout*, accessed March 19, 2022, <https://truthout.org/articles/occupy-style-protest-in-boise-highlights-brutal-conditions-faced-by-the-unhoused/>.

Unsheltered:

People who lack housing who live in public, or private spaces, with or without consent. Alternatively, people living in places not intended for human habitation.

Transitional Houseless:

People who experience short term houselessness (less than one month).

Emergency Sheltered:

People who access emergency overnight shelters, shelters for individuals/families impacted by family violence, and emergency shelters fleeing disasters or destruction of accommodations.

An illustration featuring several stylized human figures in various shades of green and grey. In the background, a man and a child walk away. In the center, a man stands holding a cup. To the right, a person in a cap and hoodie is on a skateboard. In the foreground, an elderly person with a cane sits on the left, and a person sits cross-legged on the right. Overlaid on this illustration is the text:

**“Well, what does homeless look like?
This is just my living situation, not
my mental state.”**

Chronic Houseless:

People who experience houselessness for 6 or more months in a calendar year, or have remained unhoused for more than a year.

Episodic Houseless:

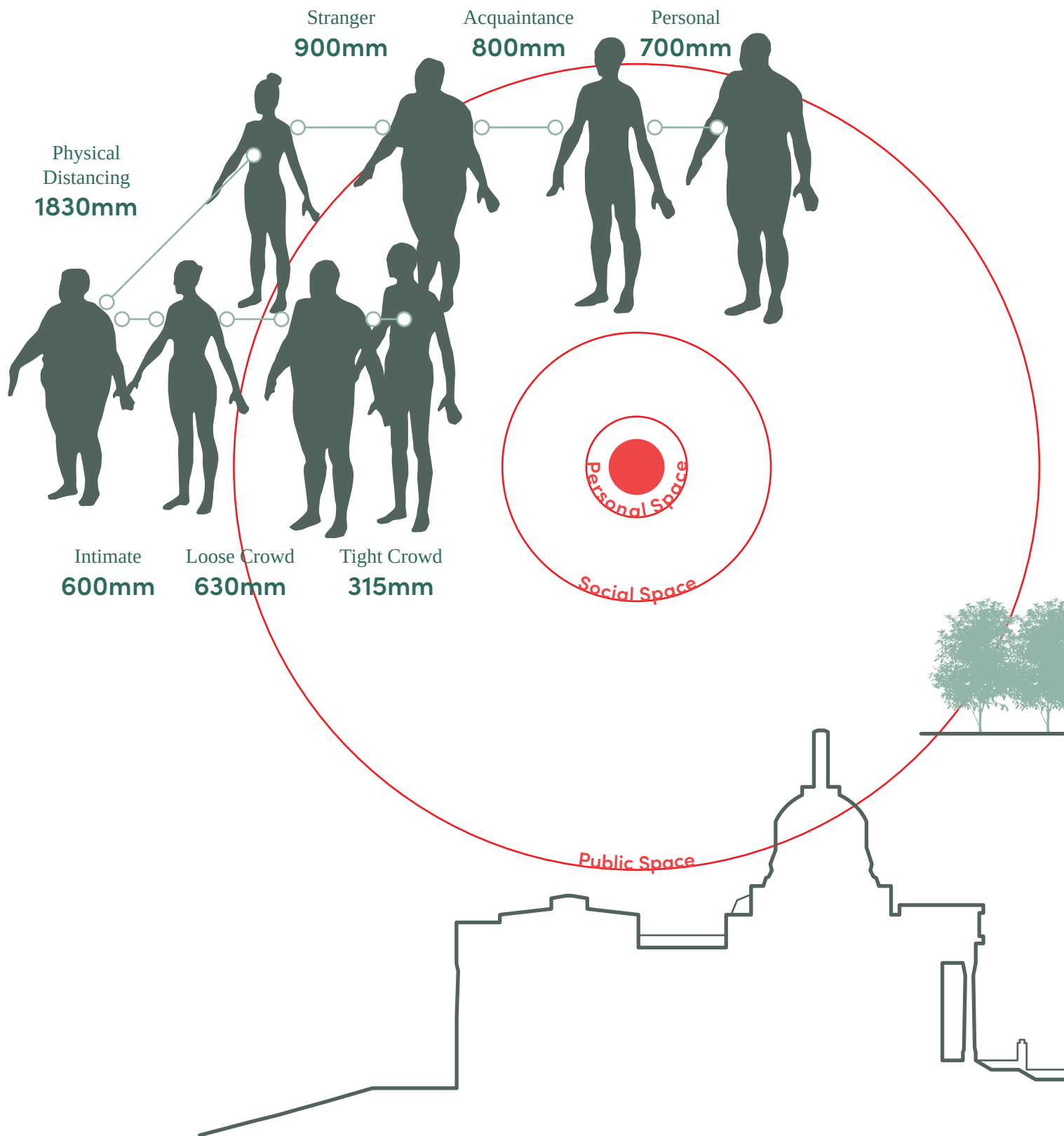
People who experience houselessness periodically.

Provisionally Accommodated:

Interim housing for people without housing, people accommodated temporarily with friends, family or strangers, people accessing short term rentals, people accommodated in health institutions or penal institutions, and people in reception centres for arrived immigrants and refugees.

At-risk of Houselessness
People facing job instability, housing instability, divisions of households and unsafe housing conditions.

fig 1.6 Houselessness Definitions



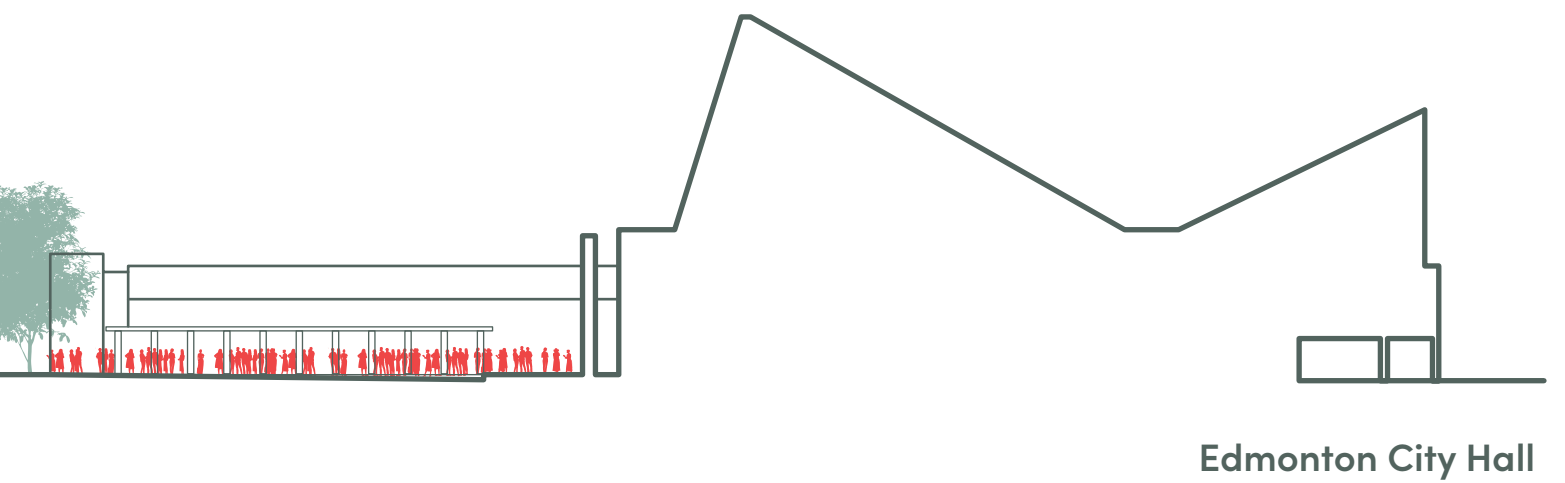


fig 1.7 Analysis of Protest Spaces in Edmonton

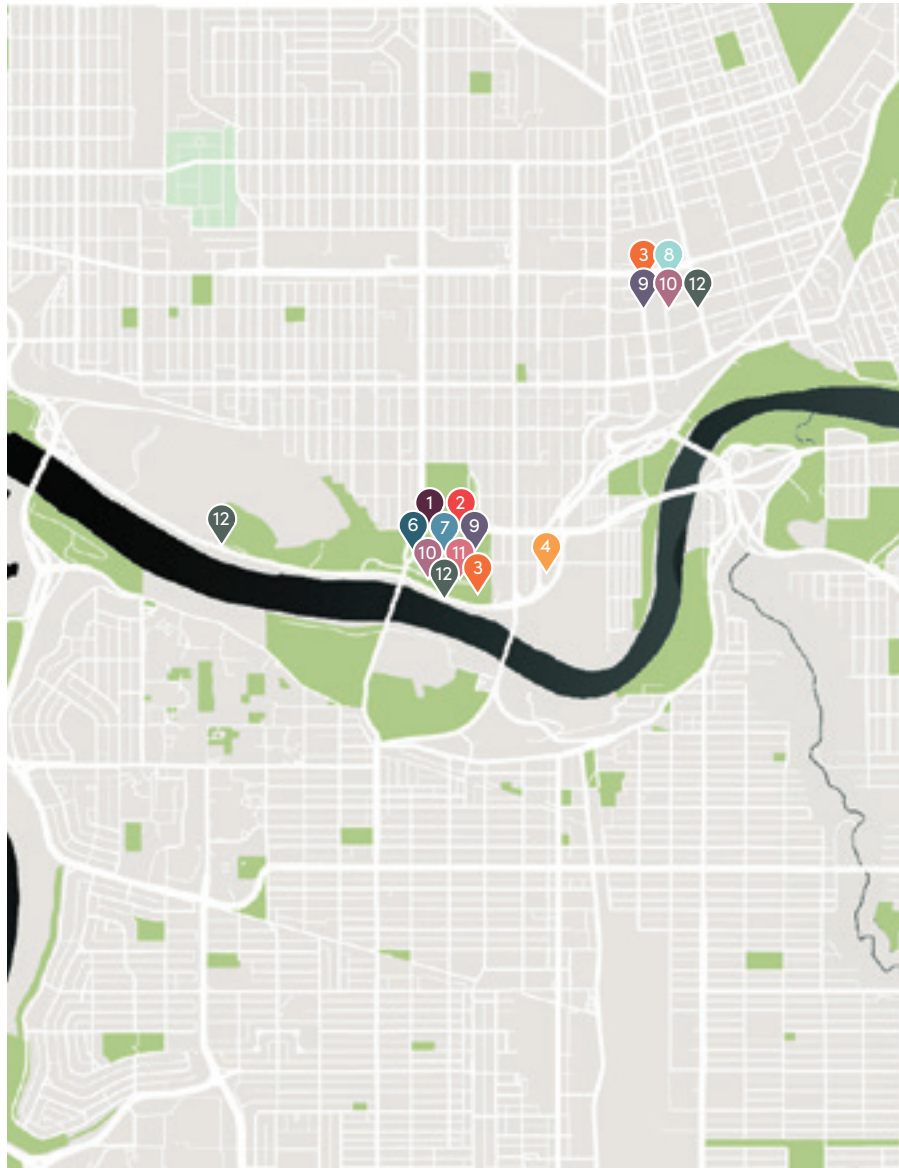


fig 1.8 Map of Protest Events in Edmonton during the COVID-19 Pandemic

Legend

- 1. Climate Action Rally
- 2. Anti-lockdown Protest
- 3. Black Lives Matter Rally
- 4. Pekiwin Prayer Camp
- 5. Indian Farmers Rally
- 6. Oromo Protest
- 7. Palestinian Solidarity
- 8. Stop Asian Hate
- 9. Every Child Matters
- 10. Anti-mask Protest
- 11. Frontline for Freedom
- 12. So-called 'Freedom Convoy'

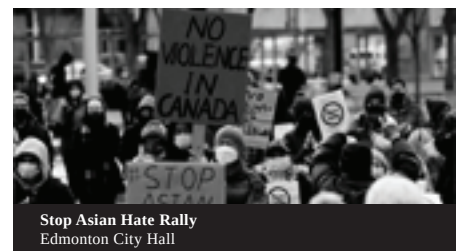
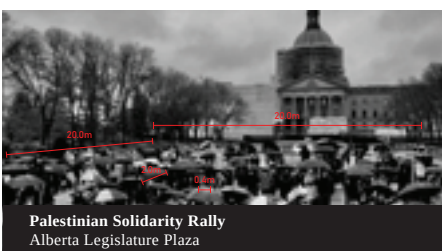
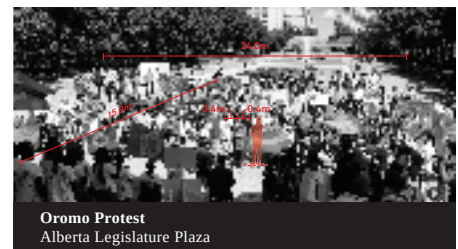
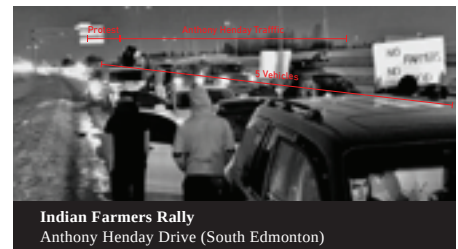
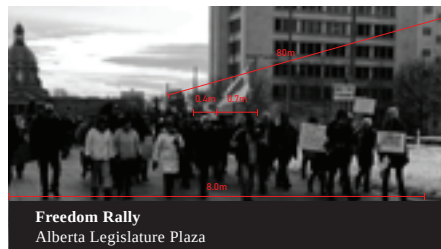
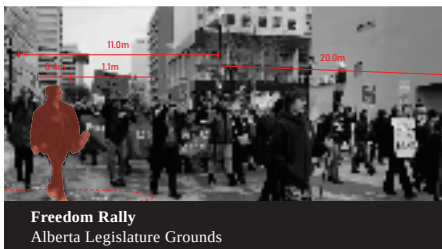
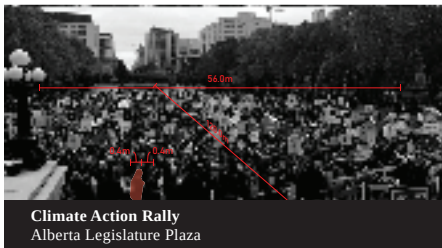
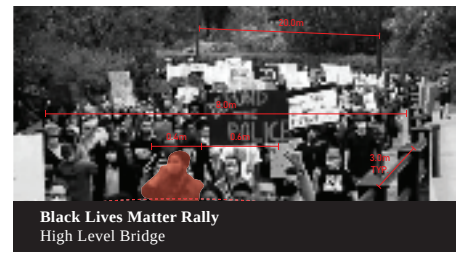
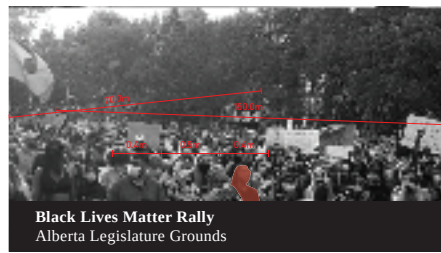
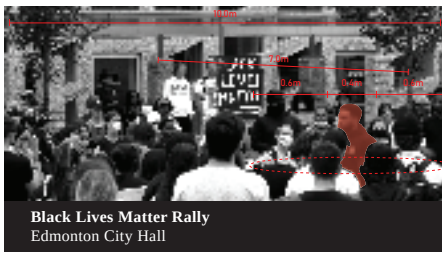


fig 1.9 Analysis of Protest Events in Edmonton

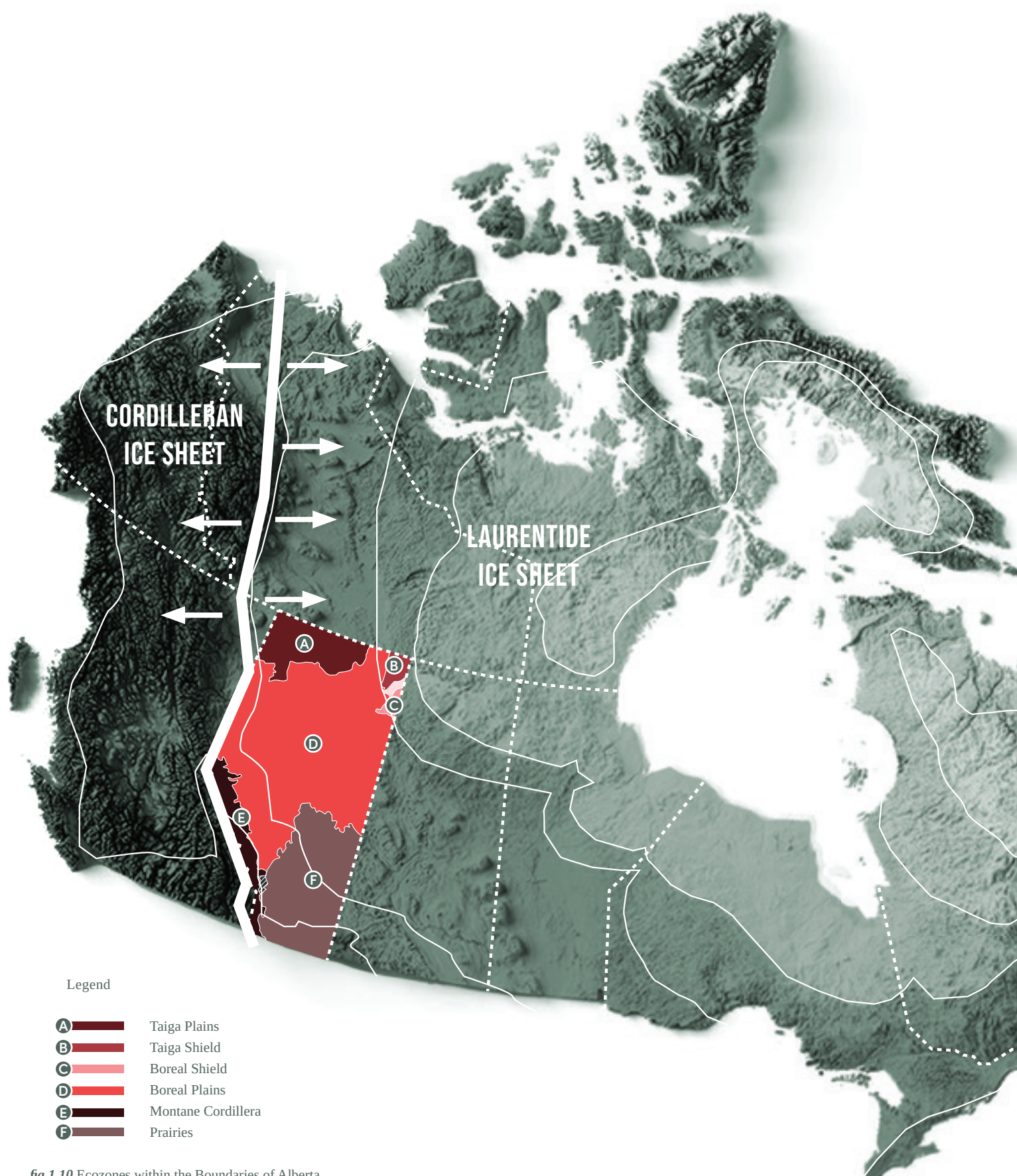


fig 1.10 Ecozones within the Boundaries of Alberta

The experience of houselessness in the Prairie West is deeply embedded in histories of land expropriation, the extraction of so-called resources and the development of wealth inequality. This inquiry into protest events highlights the present-day spatial exclusion enforced through policing and property law. Yet, the roots of the larger systemic issues of spatial exclusion facing unhoused people require a deeper historical analysis into the origins of the settler colonial City of Edmonton.

1.2 Glacial History of Edmonton Region

To understand the deeper history of houselessness in Amiskwaciwâskahikan (Edmonton region), it is critical to begin this inquiry as far back as the Holocene. The settler-imposed boundaries of Alberta follow landscapes that were formed roughly 21,000 years ago along the edges of the Cordilleran and Laurentide ice sheets (see fig 1.10).³⁷ Glacial recession formed six diverse eco-zones—Prairie, Boreal Plains, Montane Cordillera, Boreal Shield, Taiga Shield and Taiga Plains—that would eventually become the main source of Alberta's wealth.³⁸ The Edmonton region, known as *amiskwaci* in Plains Cree meaning 'beaver hills' or *amiskwaciwâskahikan* meaning 'beaver hills house' is located in the Aspen Parklands of the Prairie West. Landscapes in this region are characterized by thick boreal and mixed wood forests, rolling hills, river valleys and plains. The interglacial shift would eventually welcome grazing and wintering areas for Plains and Woods bison along with beaver, geese, pelican and waterfowl. Bison have historically grazed from Alaska to the Gulf of Mexico. Relatedly, archaeological evidence confirms that seasonal resource use around *beaver hills* dates back as early as 8,000 years ago.³⁹ Following contact with early settler colonizers and the expansion of the Dominion of Canada into Indigenous Prairie West land, there are two key environmental events that catalyzed a shift toward the commons as a 'resource', rather than as a practice. These events are inextricably tied to the development of wealth and surplus in Alberta.

The first event is the deliberate and symptomatic eradication of bison populations in the Prairie West effected in part through mass bison killings, and partly through land-clearing methods used to raze bison grazing lands for agriculture, the forest industry, and the construction of the railway.⁴⁰ The second key environmental event was the emergence of large-scale fires. Unfettered use of fire in land-clearing methods for infrastructure and resource accumulation left grasses ungrazed by bison

37 Graham A. MacDonald, *The Beaver Hills Country: A History of Land and Life* (Edmonton: Athabasca University Press, 2009), 9.

38 Geo Takach, *Will the Real Alberta Please Stand Up?* (Edmonton: University of Alberta Press, 2010), 13.

39 MacDonald, *The Beaver Hills Country*, 1, 2, 7, 15, 19, 27.

40 In this case, the term 'killing' is used to differentiate from 'hunting' where there is a nuance of livelihood, sustenance, and cultural significance to the act of wounding an animal as a source of livelihood. The use of the 'killing' is meant to contrast the histories of bison slaughter by settler colonizers across Canada and the United States in the 19th century. MacDonald, *The Beaver Hills Country*, 19.

Land Burning Practices in Alberta

-  Grasses burned to attract bison to pastures
-  Meadows burned for trails and paths
-  Wetland edges burned for marsh re-growth to attract beaver
-  Traplines burned in spring for rich grasses that attract rodents
-  Early spring grasses burned to attract fur-bearing predators
-  Yards burned to re-grow willow to attract moose
-  Pastures kept healthy by horses and regular burning
-  Fires used to limit trespassing and drive away other bison stock

fig 1.11 Land Burning Practices in Alberta

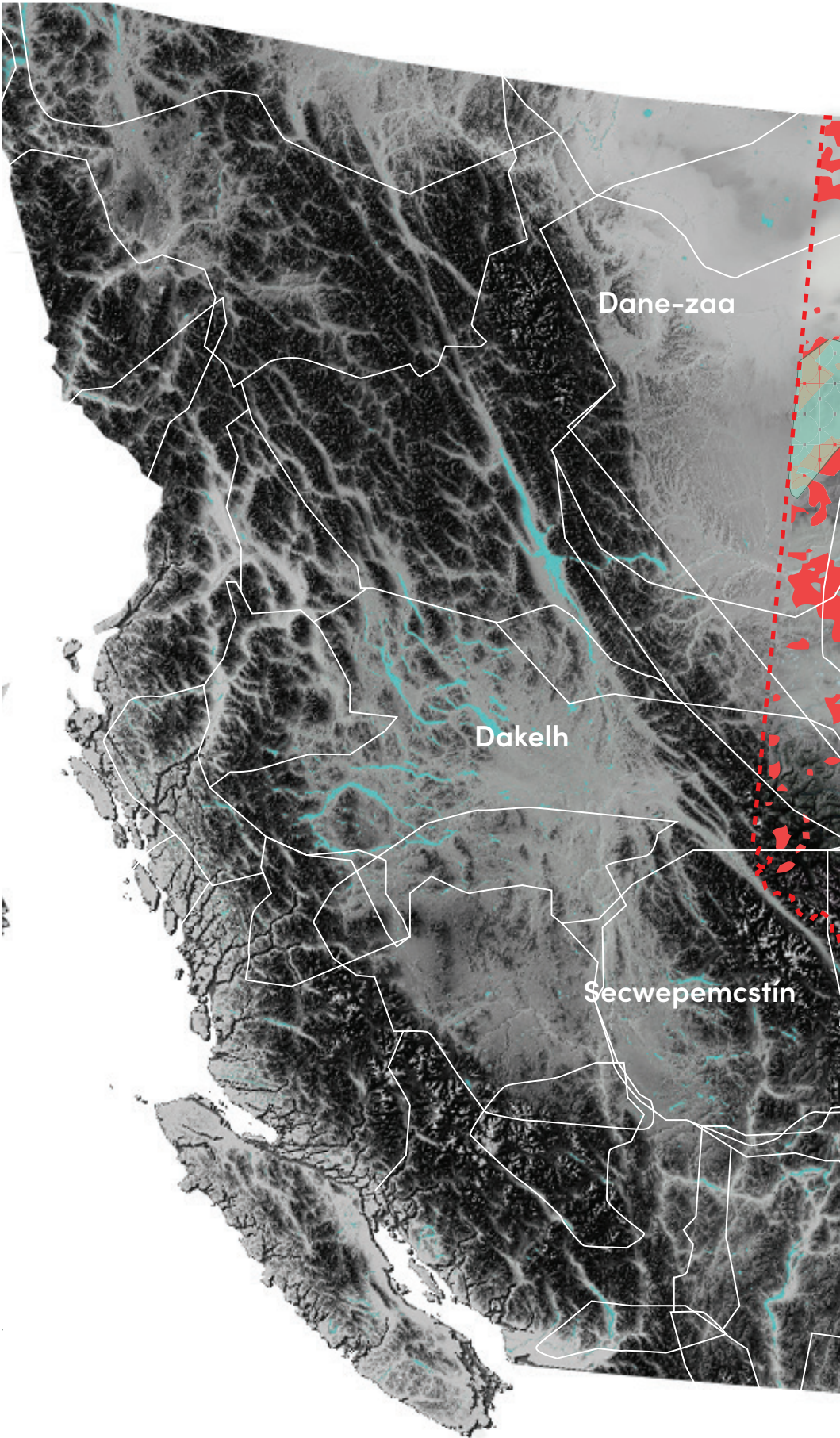
Legend

Traditional Land Burning

Woods Bison

Plains Bison

Wildfire Zone



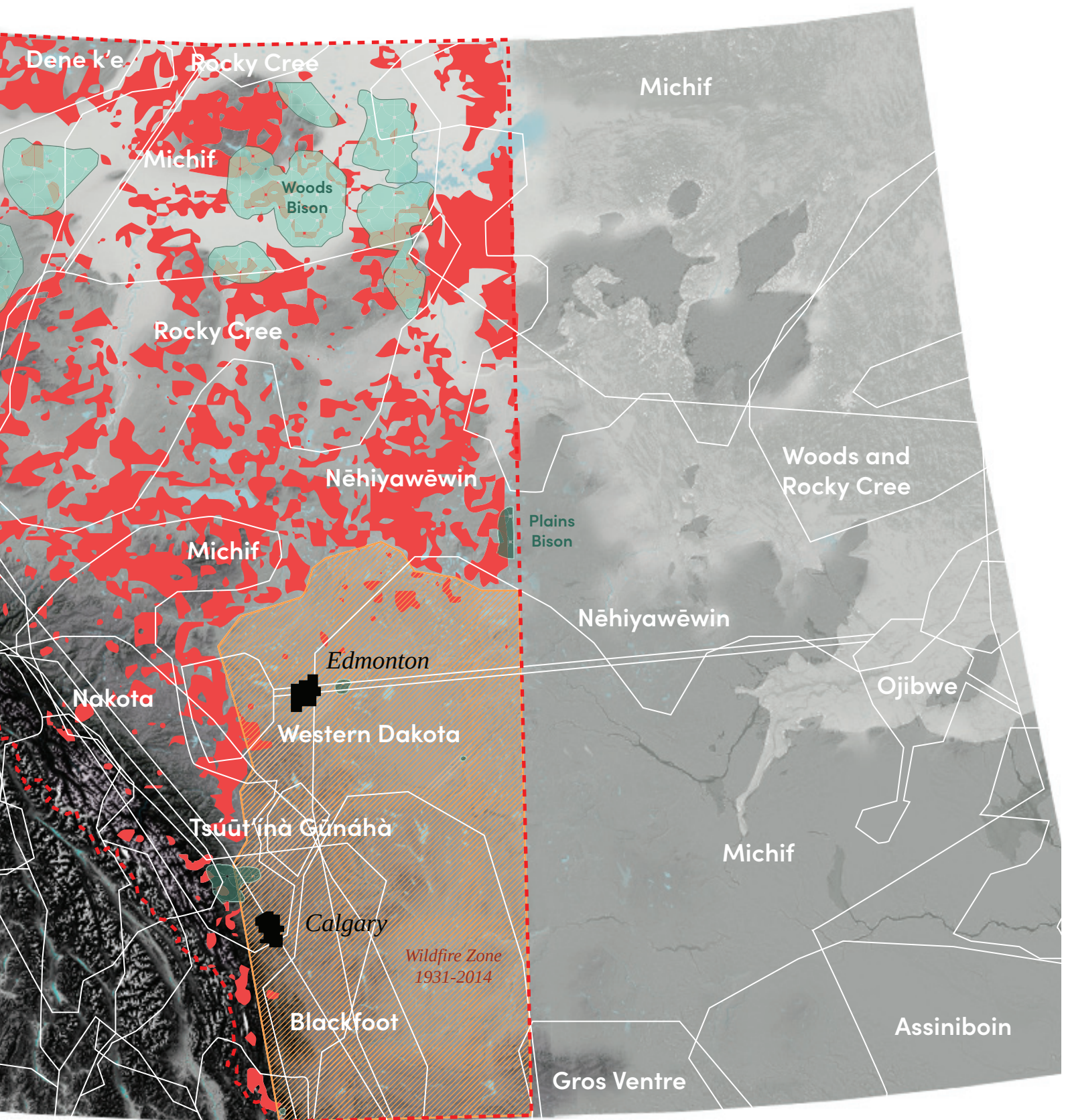


fig 1.12 Bison and Controlled Fire Areas in Alberta

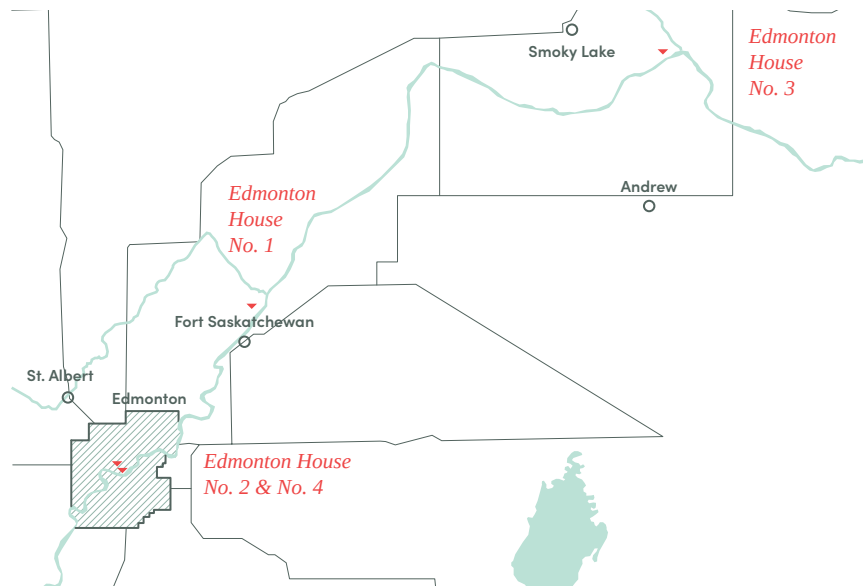


fig 1.13 Fort Edmonton Sites

susceptible to massive wildfire.⁴¹ In contrast, the traditional cultural fires practiced by Indigenous people in the Prairie West prevented the overgrowth of willow and aspen, and attracted moose, fur-bearing predators, beaver, horse and bison. Today, bison grazing lands and areas where traditional controlled fires are practiced are limited to much smaller regions of Central and Northern Alberta (see fig. 1.12). In relation to houselessness and wealth inequality, these events mark significant shifts in the idea of the commons and the land as a perceived resource available for mass extraction versus a reciprocal living being. It is no coincidence that because of these events in early settler colonial history, there are fewer First Nations communities in Southern Alberta where many wildfires burned between 1931 and 2014 (see fig. 1.22).⁴²

This brief inquiry into the glacial history of Amiskwaciwâskahikan presents a shift in the relationship of land as life for all, to a ‘resource’ that in part, led to large-scale settlement, land expropriation and Indigenous dispossession in pursuit of wealth for settler colonial elites.

1.3 Early Settlement and the Commons as a Resource

The root of wealth, and concomitantly, the root of houselessness, can be attributed to the shift in the commons as a practice into the perception of the commons as resource.⁴³ Eighteenth-century settlement

41 Graham A. MacDonald, *The Beaver Hills Country: A History of Land and Life* (Edmonton: Athabasca University Press, 2009), 19-20.

42 Todd Kristensen and Ashley Reid, “Alberta on Fire: A History of Cultural Burning,” *Alberta Wilderness Association* (blog), April 1, 2016, <https://albertawilderness.ca/31152-2/>, 1.

43 Craig Fortier, *Unsettling the Commons: Social Movements within, against, and beyond Settler Colonialism* (Winnipeg, MB: ARP Books, 2017), 60.

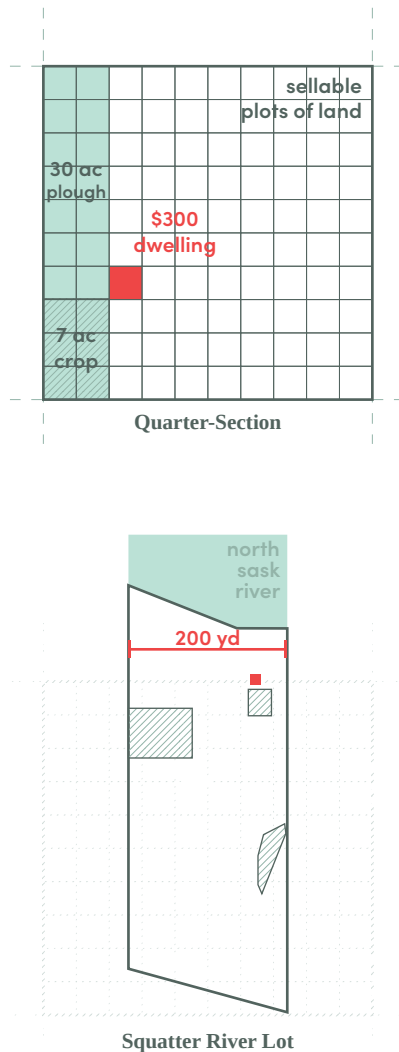


fig 1.14 Dominion Lands Act Requirements

of the Prairie West followed riches of the fur trade. The arrival of Anthony Henday, the earliest recognized settler fur trader to venture into the Prairie West in 1754, and the establishment of the Northwest company in 1795 marked the beginning of this shift in land relations and appropriation of the *beaver hills* region as a source of wealth.⁴⁴ By 1796, Fort Edmonton, otherwise known as Edmonton House, became the *de facto* administrative hub and outpost of trade for two competing entities in present-day Alberta: the Northwest Company (NWC) and the Hudson's Bay Company (HBC). Following the merger of HBC and NWC in 1821, the Fort Edmonton trading post relocated on a number of occasions due to flooding. Both companies engaged in trade with Cree, Assiniboine, Blackfoot, Sarcee, Papaschase, Piegan and Gros Ventre communities along the banks of the River Valley.⁴⁵ The North Saskatchewan River valley is a traditional place of gathering, alliance renewal, burial grounds and a meeting place in Amiskwaciwâskahikan known as *pehonan*. Yet, this culturally significant area was co-opted as the primary outpost for trade and wealth accumulation by settlers.⁴⁶ Through the continued accumulation of wealth and growth of colonial settlement in Amiskwaci, many interconnected waterways, portage trails and bodies of water were transformed beyond recognition through the imposition of industrial infrastructure and expansion.⁴⁷ By the mid-19th century, the establishment of railway infrastructure serving the Canadian Pacific Railway, the Canadian Northern Railway, and the Grand Trunk Pacific Railway, accelerated the scale and pace of settler occupation.⁴⁸ Increased interprovincial travel on trains and roadways facilitated unprecedented growth and development that made even larger scale settlement possible.

In Edmonton, despite the enactment of the Dominion Lands Act, which was designed to incentivize settlement, the land around Amiskwaciwâskahikan's River valley was divided into sellable plots through other informal but more aggressive means.⁴⁹ The establishment of railway infrastructure facilitated the deliberate and symptomatic eradication of bison populations, which caused irreparable harm to Indigenous people and Indigenous land practice. The enactment of the Dominion Lands Act of 1872 incentivized settlement in the Prairie West through property law, by promising prospective settlers 160 acres of (Indigenous) land upon proof of the following requisites: 30 out of 160 acres must be ploughed; 20 out of 30 ploughed acres must be cropped; a dwelling worth \$300 must be constructed within six months of arrival (see fig. 1.14).⁵⁰ This unit of measurement — 160 acres — was known as a 'quarter-section' and was derived from the American Homestead Act of 1862: the American equivalent of the Dominion Lands Act that

44 Geo Takach, *Will the Real Alberta Please Stand Up?* (Edmonton: University of Alberta Press, 2010), 37.

45 Ron Kuban, *Edmonton's Urban Villages: The Community League Movement*, (Edmonton, Alta: University of Alberta Press, 2005), 2.

46 Caroline Andrew, Katherine A. Graham, and Neil John Bradford, *Canada in Cities: The Politics and Policy of Federal-Local Governance*, (Montreal & Kingston: McGill-Queen's University Press, 2014), 282.

47 Merrily K. Aubrey, Edmonton Historical Board Heritage Sites Committee, and City of Edmonton, *Naming Edmonton: From Ada to Zoie* (Edmonton: University of Alberta Press, 2004), 362.

48 Henry C. Klassen, *A Business History of Alberta*, (Calgary: University of Calgary Press, 1999), 127.

49 Bruce Ziff and Sean Ward, "Squatters' Rights and the Origins of Edmonton Settlement" 10 (2016): 447, <https://doi.org/10.3138/9781442689510-015>.

50 Takach, *Will the Real Alberta Please Stand Up?*, 40.

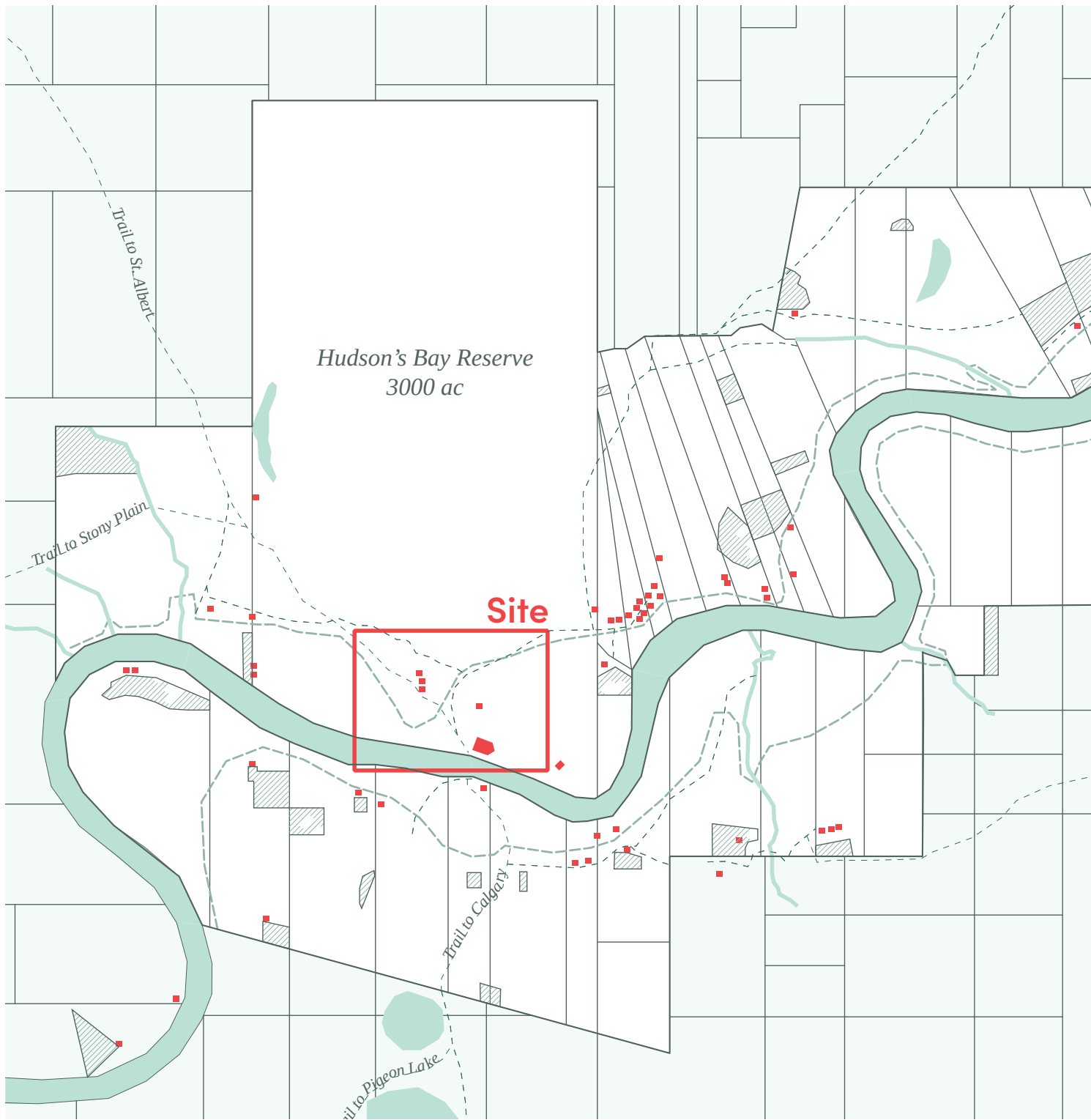




fig 1.15 Map of De Facto Settlement in Alberta

accelerated settlement across the United States.⁵¹ Quarter-sections remain visible in aerial photographs of rural Alberta and the surrounding Edmonton area, but were not the primary method of land acquisition in Central Edmonton. Property law and legal theorist, Brenna Bhandar, argues that property law was the most powerful tool deployed in land expropriation.⁵² While the Dominion Lands Act attracted many prospective settlers, it is through drawing that the process of land expropriation is formalized and made law.

Upon the arrival of Dominion-hired surveyor, Michael Deane, who was tasked with illustrating and calculating quantities of cultivated lands, settlers had already established a 'river lot' system that was in effect squatting on stolen land. This river lot system was a locally reported consensus that settlers could 'claim' 200-yards of highly sensitive and culturally significant river front land. By 1892, half of the land inventory in central Edmonton was acquired through the informal squatting of river lots (see fig. 1.15). Settler-squatted Indigenous lands in Central Edmonton became *de facto* land boundaries through the legal document of the survey following pressures on surveyor, Michael Deane, to formalize the river lot system. Although today many of these river lot boundaries have been transformed beyond recognition (see fig. 1.16), the acquisition of wealth through sellable and highly valued river lots effectively benefitted settler squatters in Edmonton, many of whom became prominent local politicians and namesakes for several neighbourhoods.⁵³ Today, much of the river valley in Edmonton is zoned as either Metropolitan Recreation Zones or Public Utility Zones, and overlaid with Mature Neighbourhood Protection Overlays and River Valley and Ravine System Protection Overlays.⁵⁴ These land use protections and planning ordinances suggest that the River Valley is a public and inclusionary zone in the city. However, the combination of municipal by-laws, socioeconomic barriers and even the exclusivity of private recreation clubs depict a more spatially exclusive reality of Edmonton's River Valley.⁵⁵

51 Frances W Kaye, *Goodlands: A Meditation and History on the Great Plains*, (Edmonton: Athabasca University Press, 2011), 25.

52 Brenna Bhandar, *Colonial Lives of Property: Law, Land, and Racial Regimes of Ownership*, (Durham, NC: Duke University Press, 2018), 4.

53 Bruce Ziff and Sean Ward, "Squatters' Rights and the Origins of Edmonton Settlement," in *Essays in the History of Canadian Law: A Tribute to Peter N. Oliver*, ed. J. Phillips et al. (Toronto: University of Toronto Press, 2016), 447-449, 451-452, 463, <https://doi.org/10.3138/9781442689510-015>.

54 City of Edmonton, "SLIM Maps," accessed February 25, 2022, <https://maps.edmonton.ca/map.aspx>.

55 The following sources explore the legal rights of people experiencing houselessness, the systems of inequity and spatial exclusion embedded in zoning bylaw and equity of park access. Student Legal Services of Edmonton, "A 2015 Alberta Guide to the Law: Homeless Rights," 2015, <https://clg.ab.ca/wp-content/uploads/2016/03/Homeless-Rights-2015.pdf>, 3-7; Sandeep Agrawal et al., "Edmonton's Zoning Bylaw Under the Lens of Equity" (University of Alberta School of Urban and Regional Planning, June 19, 2021); Elise Stolte, "Elise Stolte: Who Gets to Live by the Park? Planners Question How Equitable Edmonton's Zoning Rules Really Are," *Edmonton Journal*, accessed December 3, 2021, <https://edmontonjournal.com/opinion/columnists/elise-stolte-who-gets-to-live-by-the-park-planners-question-how-equitable-edmontons-zoning-rules-really-are>.

Legend

- ① Canadian Pacific Railway
- ② Edmonton, Yukon & Pacific Railway
- ③ Canadian Northern Railway
- ④ Grand Trunk Pacific Railway

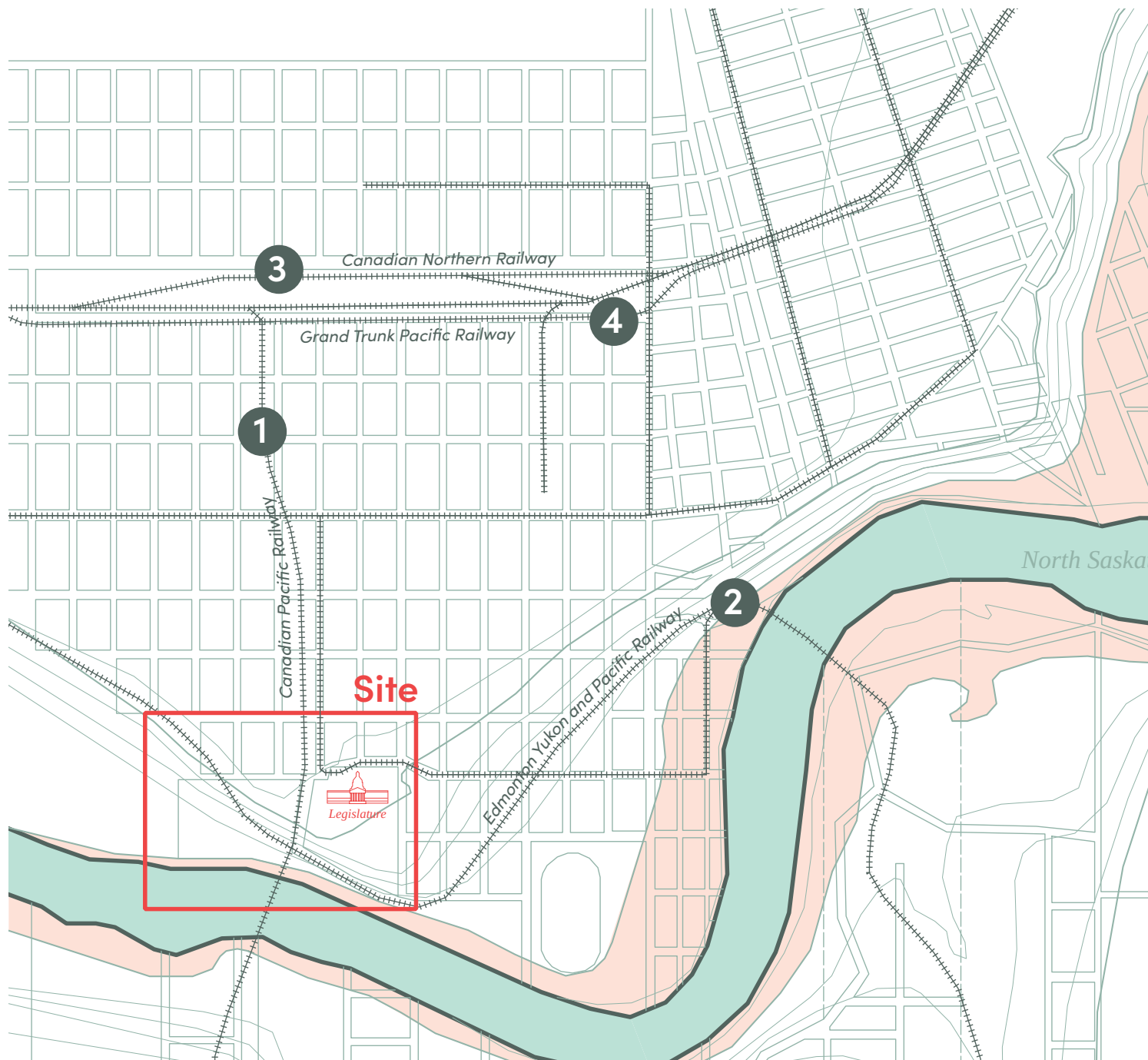
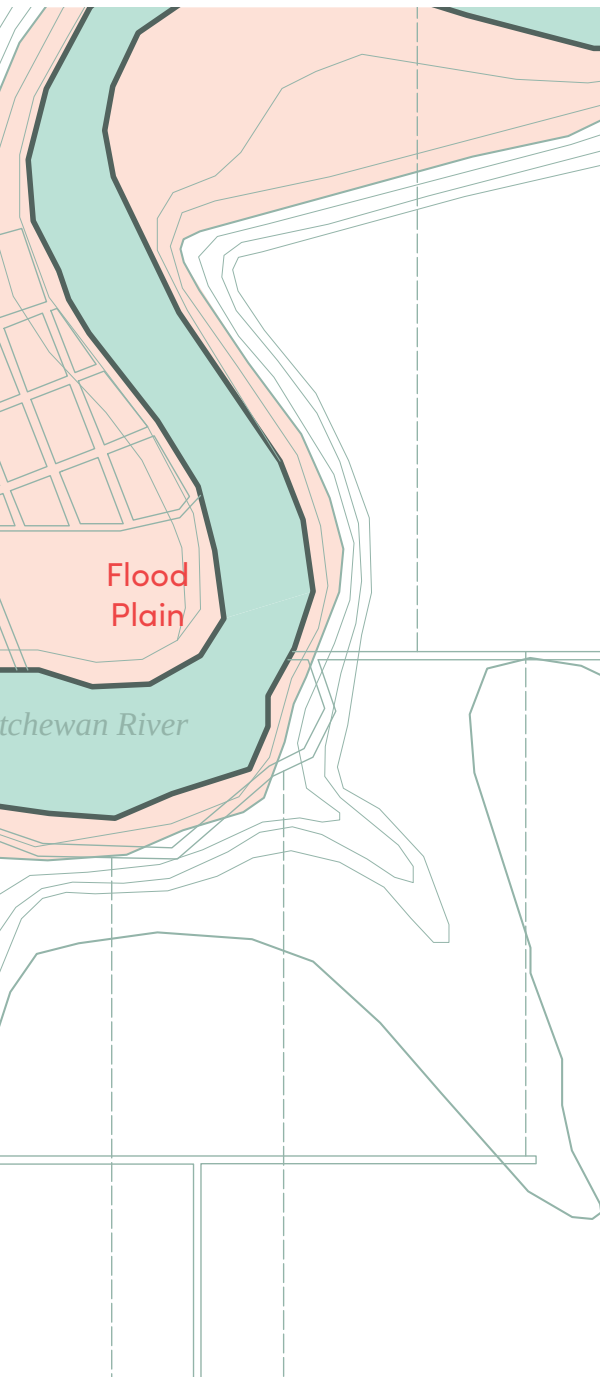


fig 1.16 Map of Central Edmonton Railway Network



Compelling parallels may be drawn between the land expropriation by early settler squatters and the socio-spatial exclusion of today's River Valley. Current zoning ordinances, municipal by-laws and fire codes protect a certain portrayal of Edmonton's River Valley, while limiting the movement of unhoused people in the River Valley and cultural practices tied to the land.⁵⁶ This thesis proposes a series of design interventions located in the Amiskwaciwâskahikan River Valley because this region of *beaver hills* has a long history of land expropriation, Indigenous resistance, and in more nuanced ways, remains a site of spatial exclusion and dispossession. The charged political nature of the selected site, its proximity to architectural symbols of wealth and power, and the contrast of household incomes versus exclusive recreational land use are key drivers in the selection of a River Valley site as the focus of this architectural thesis.

1.4 Wealth Inequality in Alberta

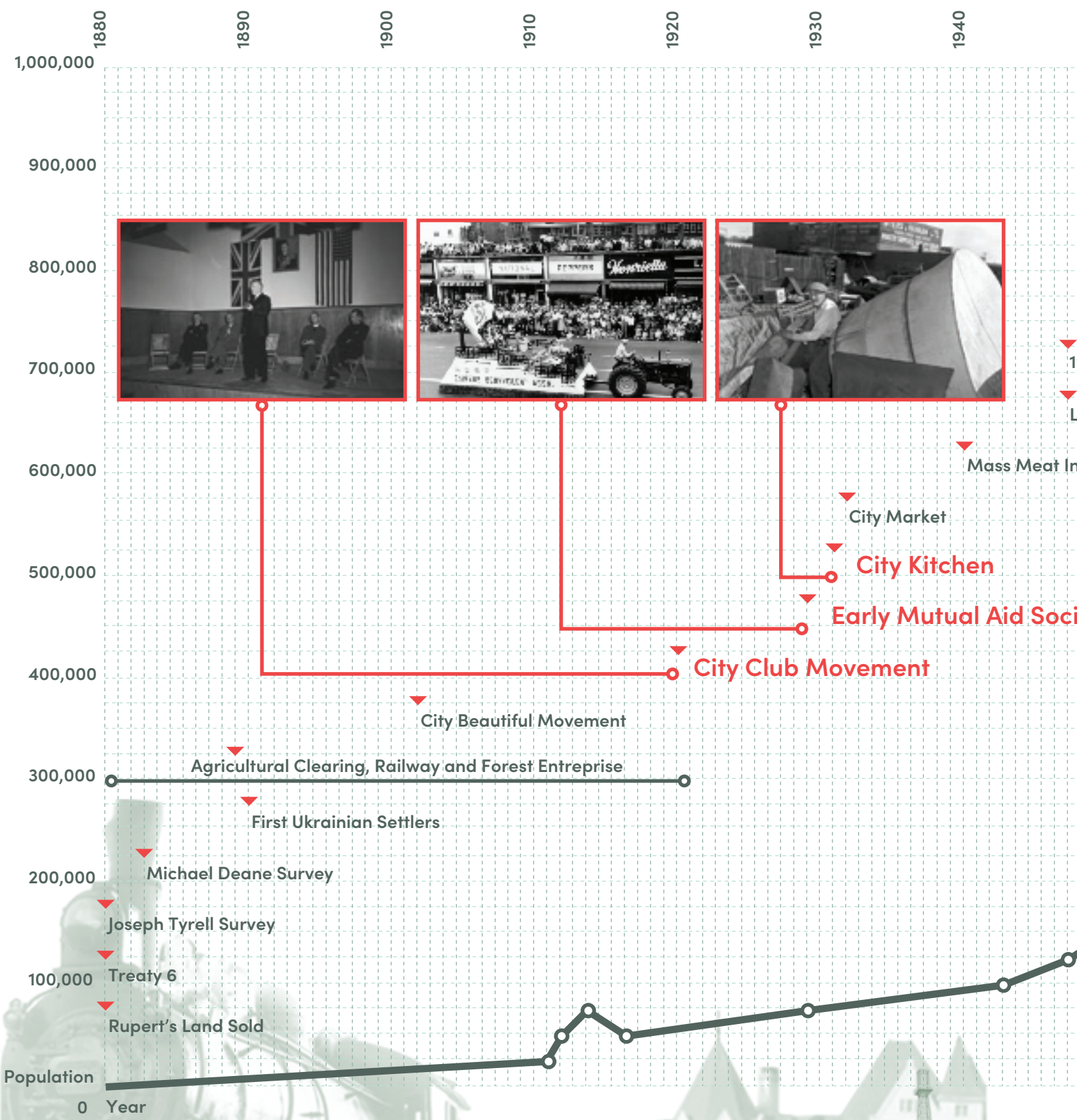
Today there is but one remaining river lot in Edmonton that retains its original 1883 settlement boundaries: the Royal Mayfair Golf Course.⁵⁷ The century-old golf link with so-called royal distinction is a vivid example of wealth inequity and land expropriation in the River Valley. In 1902, the urban fabric of Edmonton shifted from an urban settlement characterized as an agricultural hinterland combined with *de facto* settler-squatter lots, into an urban plan inspired by the City Beautiful movement (see fig. 1.19).⁵⁸ The adoption of Morell and Nichols' first civic plan presented a gridded system, which touted order and measure and acted as a tool for quantifying sellable plots of land.⁵⁹ By 1910, the arrival of settler immigrants from the United States, the British Isles and Eastern Canada comprised 70% of the total settlers in the

56 "An Insiders View of the Camp Pekiawewin Rosedale Homeless Encampment," *Global News Edmonton*, September 24, 2020, <https://globalnews.ca/video/7356971/an-insiders-view-of-the-camp-pekiawewin-rossdale-homeless-encampment/>; Student Legal Services of Edmonton, "A 2015 Alberta Guide to the Law: Homeless Rights," 2015, <https://clg.ab.ca/wp-content/uploads/2016/03/Homeless-Rights-2015.pdf>, 7.

57 Merrily K. Aubrey, Edmonton Historical Board Heritage Sites Committee and City of Edmonton, *Naming Edmonton: From Ada to Zoie*, (Edmonton, AB: University of Alberta Press, 2004), xxii.

58 Kathryn Chase Merrett, *A History of the Edmonton City Market, 1900-2000: Urban Values and Urban Culture*, (Calgary, AB: University of Calgary Press, 2001), 8.

59 Aubrey, *Naming Edmonton*, xxii.



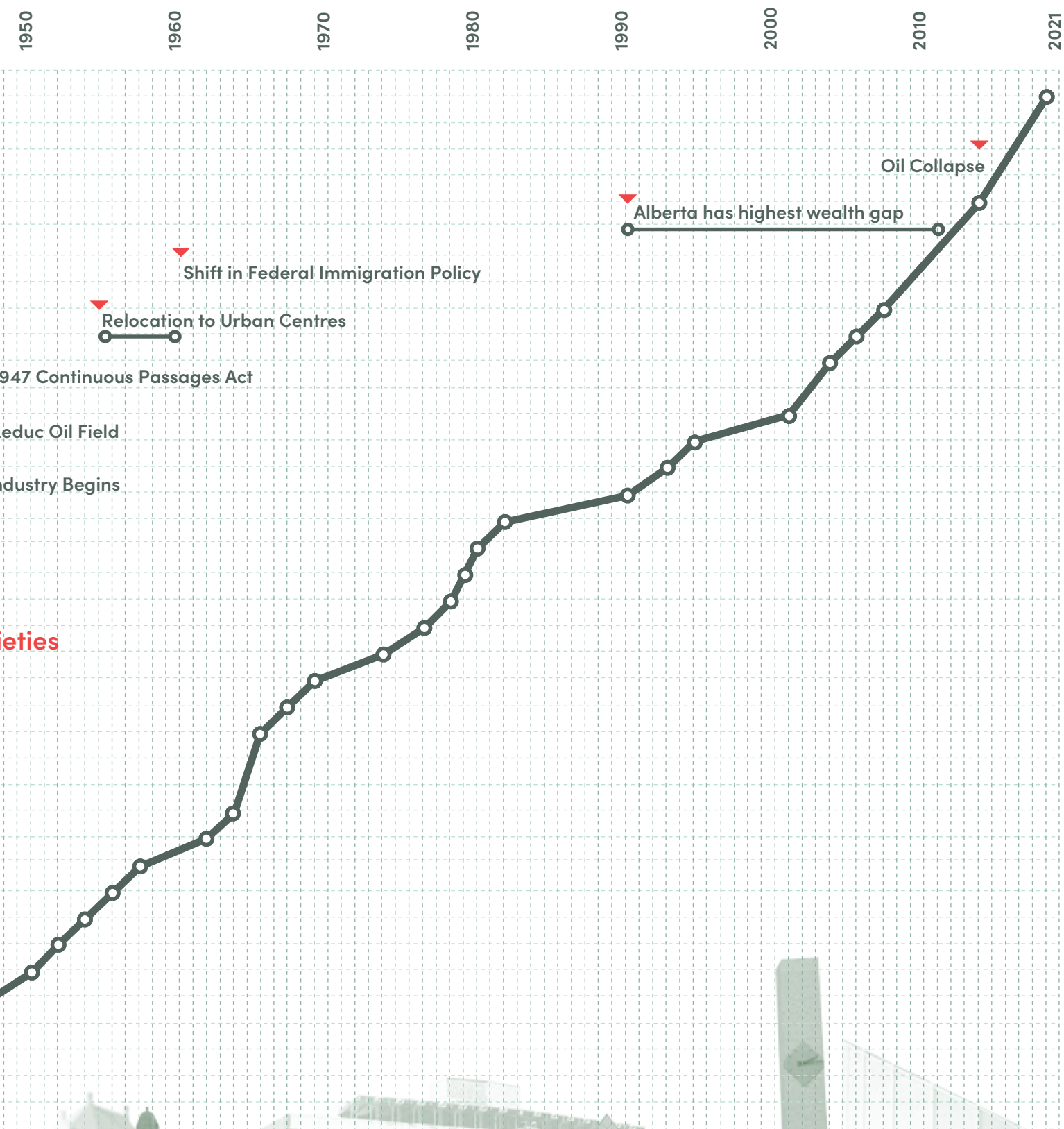


fig 1.17 Edmonton's Population Growth Timeline

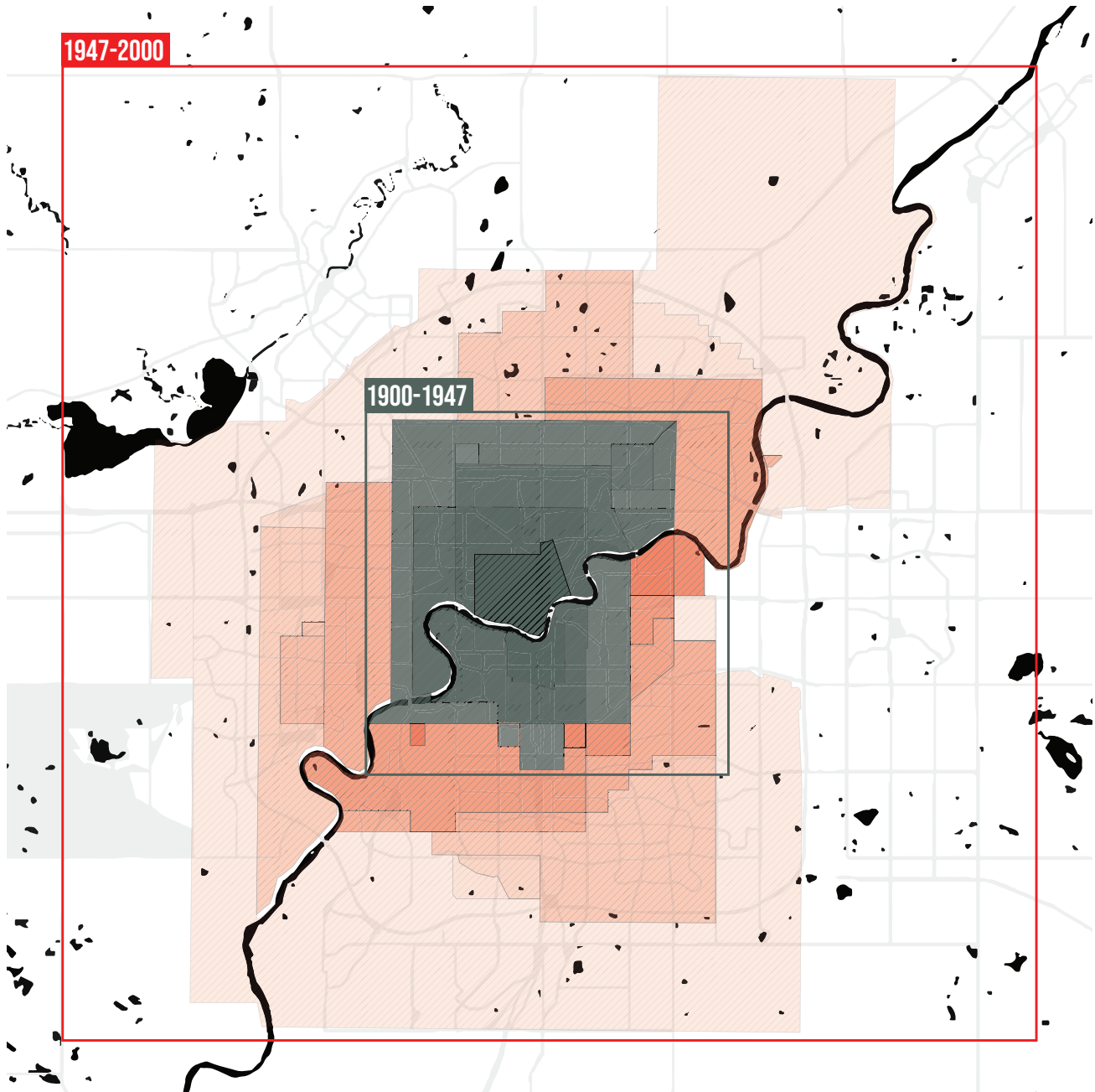


fig 1.18 Land Annexation in Edmonton



fig 1.19 Detail of Morell and Nichols' Masterplan of Edmonton

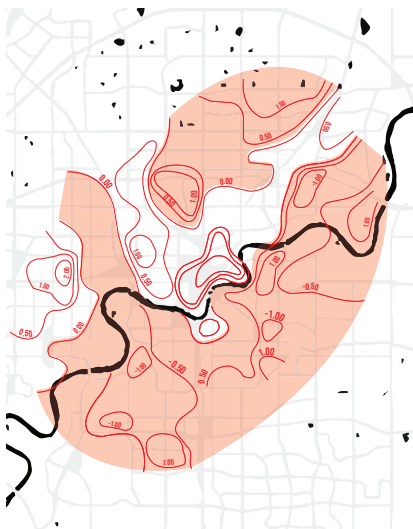


fig 1.20 Areas of Affluence in Edmonton

beaver hills area.⁶⁰ The other 30% of settlers were Italian, Ukrainian, Jewish and Chinese immigrants who developed their own “counter-hegemonic” survival strategies and mutual aid networks to support those who were not accepted by the larger settler population. Figure 1.18 illustrates the increased rate of land annexation in Edmonton and Strathcona throughout the 20th century. A visible presence of Majority World immigrants from Asia, Latin America, the Caribbean, the Middle East and Africa followed the oil boom of the 1950s and 1960s upon the discovery of oil in 1947 thirty kilometres south of Edmonton in Leduc, Alberta. By 1967, the urban centres of Calgary and Edmonton attracted more immigrants than the provinces of Manitoba and Saskatchewan combined, and by 1996 Calgary and Edmonton were ranked third and fourth as the most immigrant-receiving cities in Canada.⁶¹

Since the mid-twentieth century, recently landed immigrants in Edmonton live centrally and tend to move to suburbs upon acquiring wealth (see fig. 1.20). Neighbourhoods in Central Edmonton were typified by the prevalence of lower income households, and became linguistic pockets and ethnic enclaves for primarily Italian, Chinese, Somali, Ukrainian and Polish communities.⁶² Researchers at the University of Waterloo represented 2005 census data geospatially as part of a project titled, *Atlas of Suburbanisms*, that mapped socioeconomic and built environment conditions as a tool to understand larger trends in 19 Canadian cities, including trends between urban and suburban Edmonton (see fig. 1.23).⁶³ This data visualization research revealed a higher concentration of low-income households, a higher density of mid-rise and high-rise buildings, and a greater concentration of Majority World residents in Central Edmonton.⁶⁴ Income, ethno-racial identity and housing type are identified by COVID-19 researchers as social determinants of health and COVID-19 risk. Those living in areas with a greater concentration of the three aforementioned determinants are more likely to be employed in essential services, as well as live and work in close quarter environments.⁶⁵ Thus when considering these social determinants of health, Central Edmonton stands out as the part of the city in which people are at a greater risk of the immediate harm from wealth inequality as well as COVID-19. Relatedly, houselessness is most acute in Central Edmonton. That being said, the experience of houselessness in Edmonton is citywide.⁶⁶

60 Ron Kuban, *Edmonton's Urban Villages: The Community League Movement*, (Edmonton, AB: University of Alberta Press, 2005), 20.

61 Royden Loewen and Gerald Friesen, *Immigrants in Prairie Cities: Ethnic Diversity in Twentieth-Century Canada* (Toronto: University of Toronto Press, 2018), 13-14, 102-104, <https://doi.org/10.3138/9781442697676>.

62 Loewen and Friesen, *Immigrants in Prairie Cities*, 13-14, 102-104.

63 Markus Moos, “About,” *Atlas of Suburbanisms*, accessed February 26, 2022, <https://uwaterloo.ca/atlas-of-suburbanisms/about>.

64 Markus Moos, “Edmonton,” *Atlas of Suburbanisms*, June 14, 2017, <https://uwaterloo.ca/atlas-of-suburbanisms/maps-and-data/cities/edmonton>.

65 Allen Upton et al., “Impacts of COVID-19 in Racialized Communities,” *Royal Society of Canada Task Force on COVID-19*, May 2021, 53, 76.

66 Paige Parsons, “Maps Show Homeless Camps Sprawled across City of Edmonton,” *Edmonton Journal*, accessed October 20, 2021, <https://edmontonjournal.com/news/local-news/maps-show-homeless-camps-sprawled-across-city-of-edmonton>.

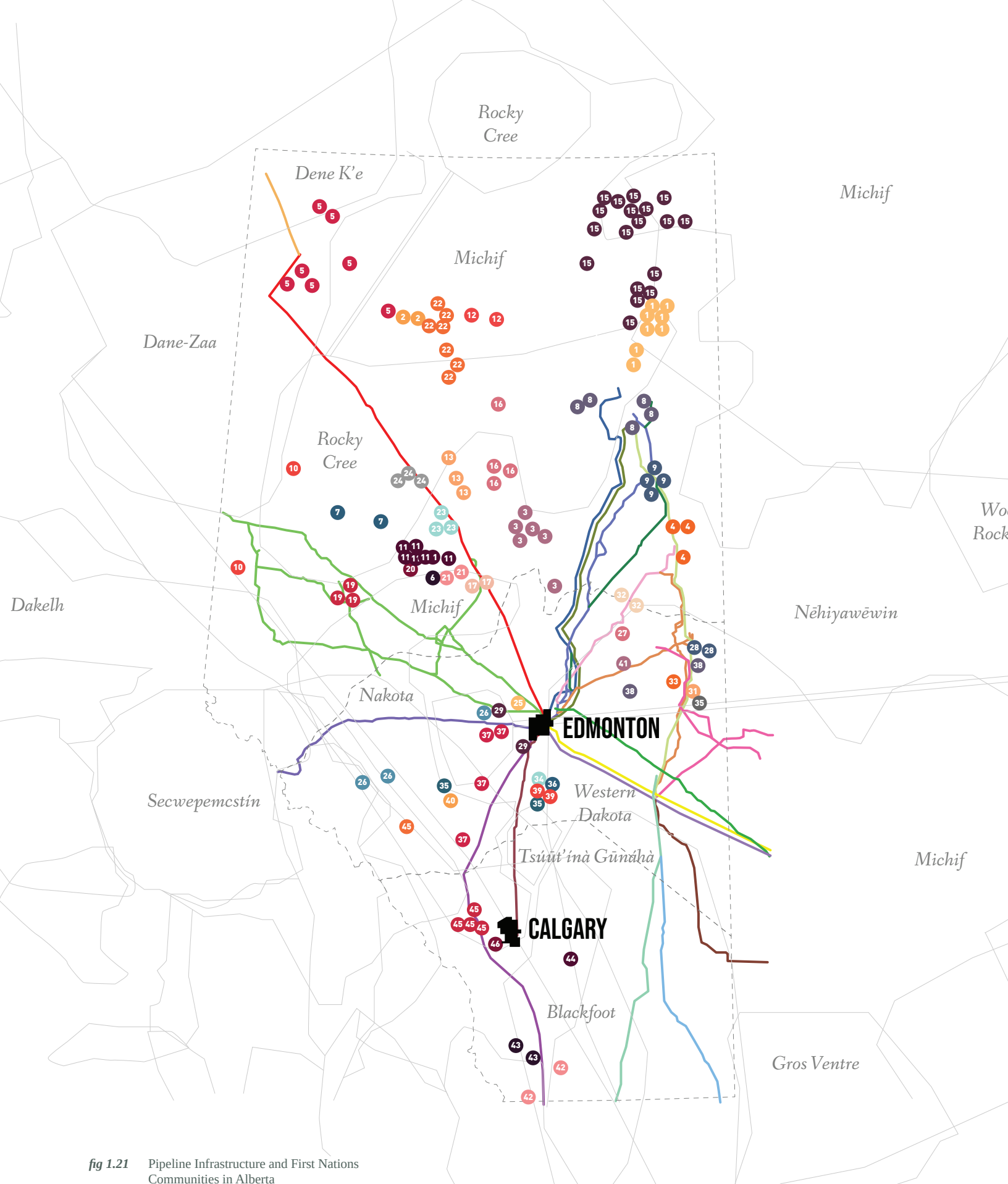
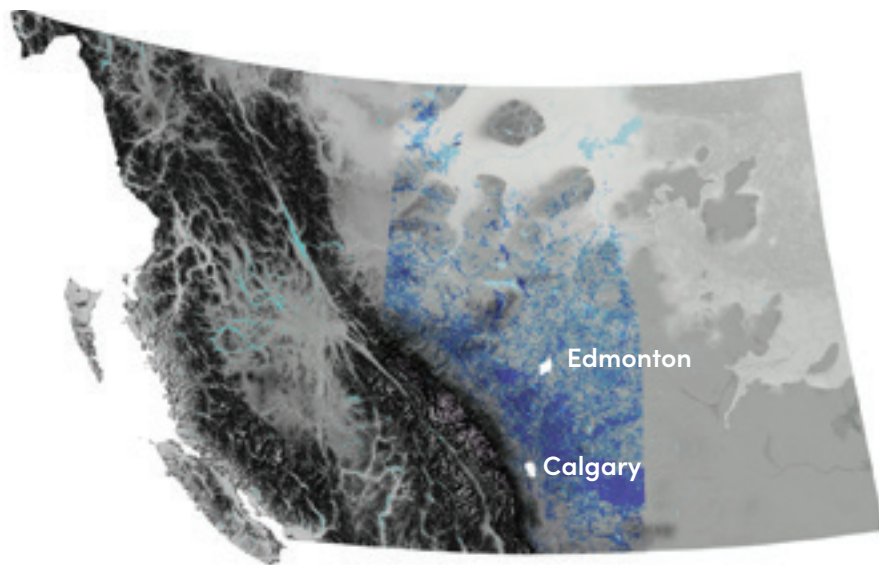


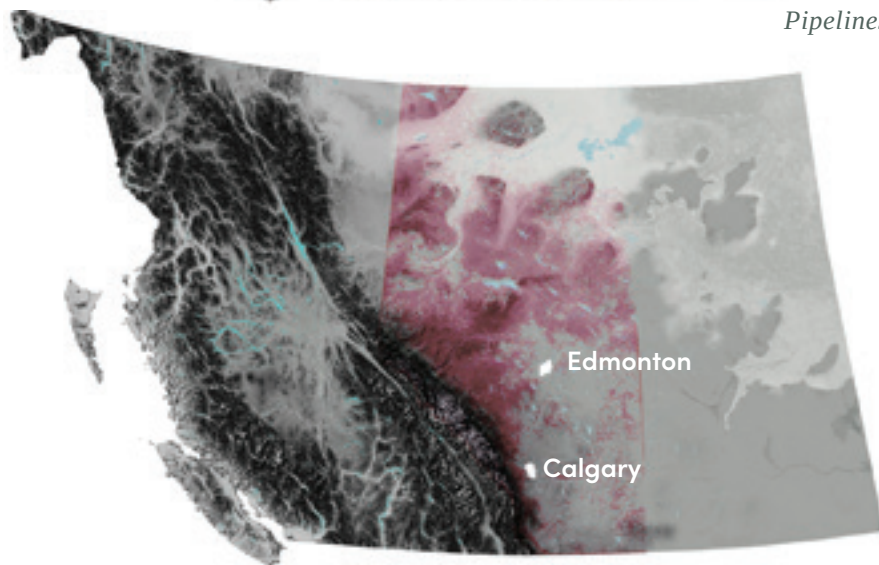
fig 1.21 Pipeline Infrastructure and First Nations Communities in Alberta

Legend

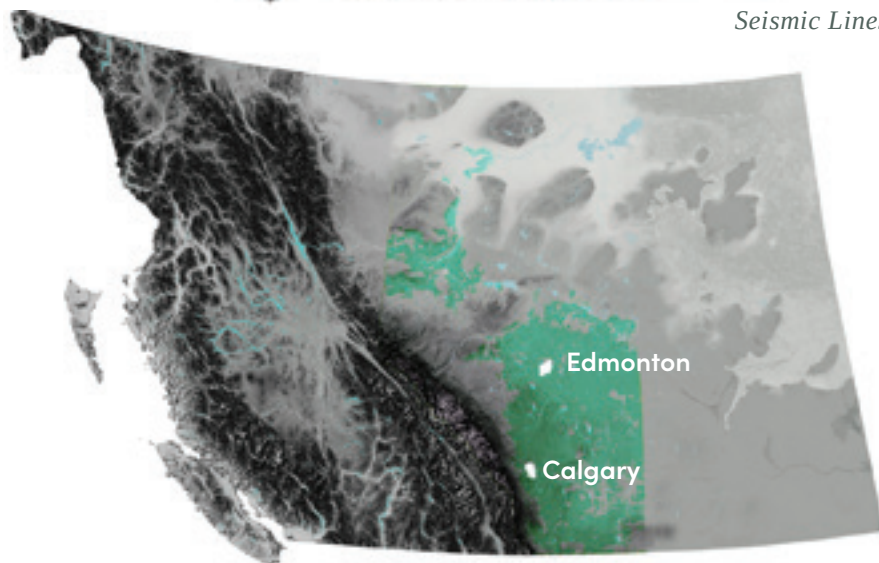
1 Athabasca Chipewyan First Nation	24 Woodland Cree First Nation	Norman Wells Pipeline
2 Beaver First Nation	25 Alexander First Nation	Rainbow Pipeline
3 Big Stone Cree Nation	26 Alexis Nakota Sioux Nation	Pembina Pipeline System
4 Chipewyan Prairie First Nation	27 Beaver Lake Cree Nation	Trans Mountain Pipeline
5 Dene Tha' First Nation	28 Cold Lake First Nation	Rangeland Pipeline
6 Driftpile First nation	29 Enoch Cree Nation	Alberta Products Pipeline
7 Duncan's First Nation	30 Ermineskin Cree Nation	Bow River Pipeline
8 Fort McKay First Nation	31 Frog Lake First Nation	Express Pipeline
9 Fort McMurray First Nation	32 Heart Lake First Nation	Keystone Pipeline
10 Horse Lake First Nation	33 Kehewin Cree Nation	Southern Lights Pipeline
11 Kapawe'no First Nation	34 Louis Bull Tribe	Enbridge Mainline
12 Little Red River Cree Nation	35 Montana First Nation	Cochin Pipeline
13 Loon River First Nation	36 O'Chiese First Nation	Husky Pipelines
14 Lubicon Lake Indian Nation	37 Paul First Nation	Cold Lake Pipeline
15 Mikisew Cree First Nation	38 Saddle Lake First Nation	Waupisoo/Woodland Pipeline
16 Peerless Trout Lake First Nation	39 Samson Cree Nation	Access Pipeline
17 Sawridge Band	40 Suncild First Nation	Athabasca Pipeline
18 Smith's Landing First Nation	41 Whitefish Lake First Nation #128	Syncrude Pipeline
19 Sturgeon Lake Cree Nation	42 Blood Tribe	
20 Sucker Creek First Nation	43 Piikani Nation	
21 Swan River First Nation	44 Siksika Nation	
22 Tallcree First Nation	45 Stoney Tribe	
23 Whitefish Lake First Nation	46 Tsuu T'ina Nation	



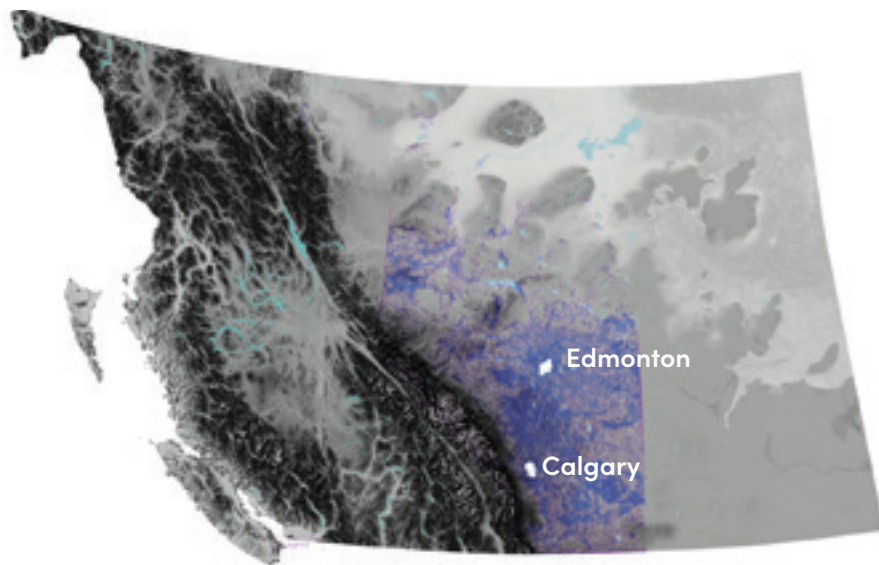
Pipelines



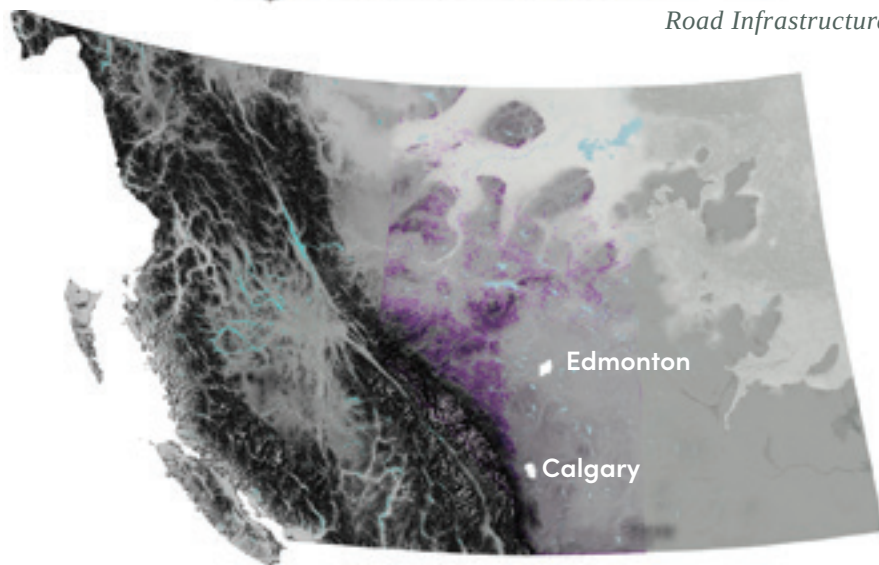
Seismic Lines



Cultivation



Road Infrastructure



Forestry Cut Blocks



All Layers Combined

fig 1.22 Layers of Resource Extraction

The hope for outward mobility becomes increasingly difficult as rental rates in Edmonton rise by 1.2% annually. In this context, more people will find themselves straddling the poverty line, or risk entering cycles of houselessness.⁶⁷ What continues to work against residents of Central Edmonton is Alberta's high wealth inequality gap. From 1990 to 2015, Alberta had the highest Gini index coefficient of wealth inequality in Canada; a title now held by Ontario (0.31) with Alberta trailing closely behind at 0.29.⁶⁸ Industrial development, rapid population growth and large-scale extraction of so-called resources has afforded Edmonton's top 1% of earners an income 40 times greater than the bottom 10% of earners combined.⁶⁹ As of 2019, 1 in 10 Edmontonians are low-income residents. To make things worse, individuals living near or below the poverty line are less likely to participate in their communities and are more prone to becoming socially isolated.⁷⁰ The human aspect of community is ultimately the distinction between the terms 'homeless' and 'houseless'. Thus, a central question driving this thesis concerns how architecture and urban design may be mobilized to challenge settler colonial systems of exclusion in ways that grant agency to mutual aid networks and unhoused community members **through community building and the provision of inclusive infrastructure.**

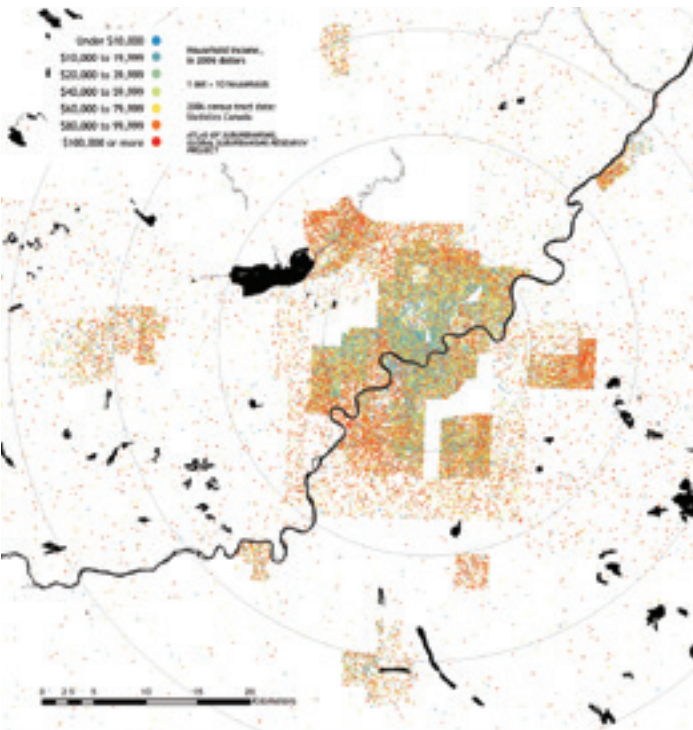
67 John Kolkman, *A Profile of Poverty in Edmonton Update*, 2017, <https://www.deslibris.ca/ID/10093506>, 30.

68 "Measure of Income Inequality in Canada 2019 by Province," *Statista*, accessed December 3, 2021, <https://www.statista.com/statistics/613032/measure-of-income-inequality-in-canada-by-province/>.

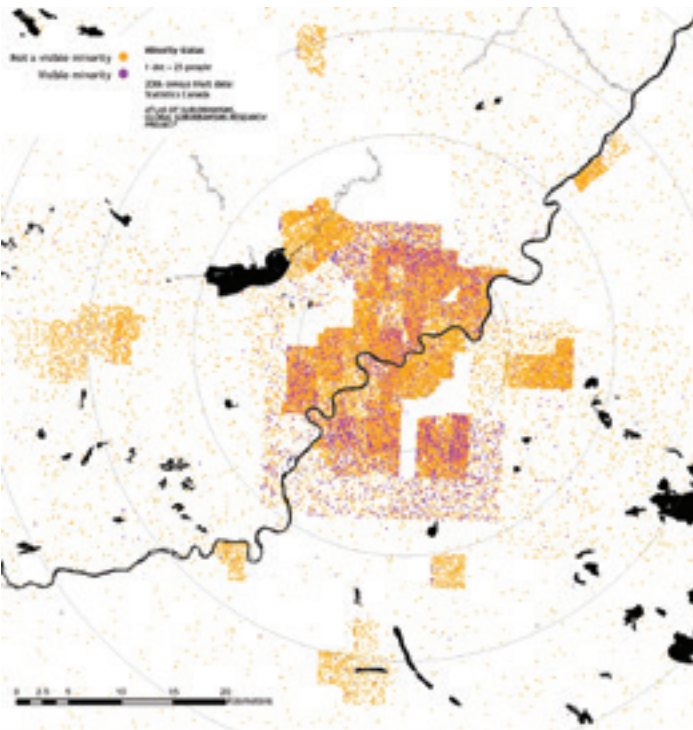
69 Rebecca Graff McRae, "A Rising Tide Doesn't Lift All Boats: What Census 2016 Reveals about Income Inequality in Alberta," *Parkland Institute*, accessed November 23, 2021, https://www.parklandinstitute.ca/a_rising_tide_doesnt_lift_all_boats.

70 Kolkman, *A Profile of Poverty in Edmonton Update*, 2, 8.

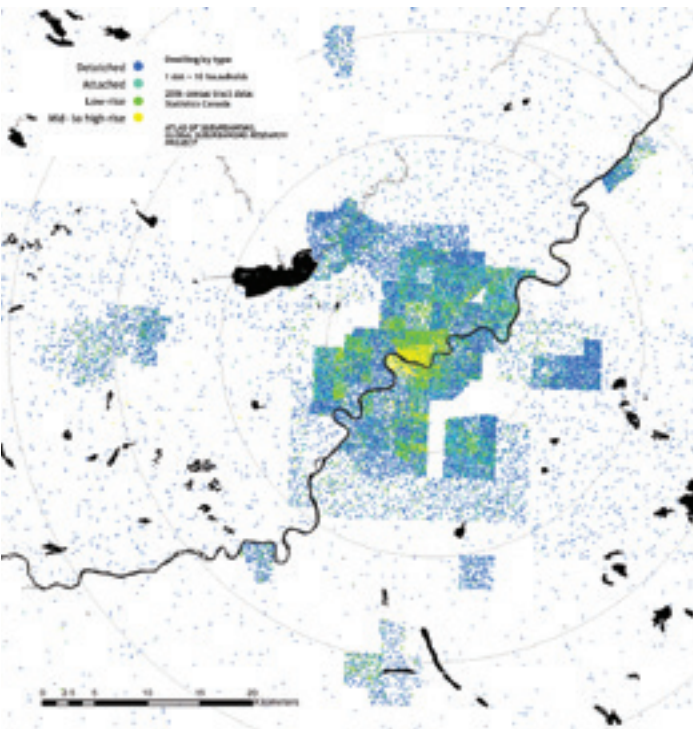
Household Income



'Minority' Status



Dwelling Type



Household Tenure

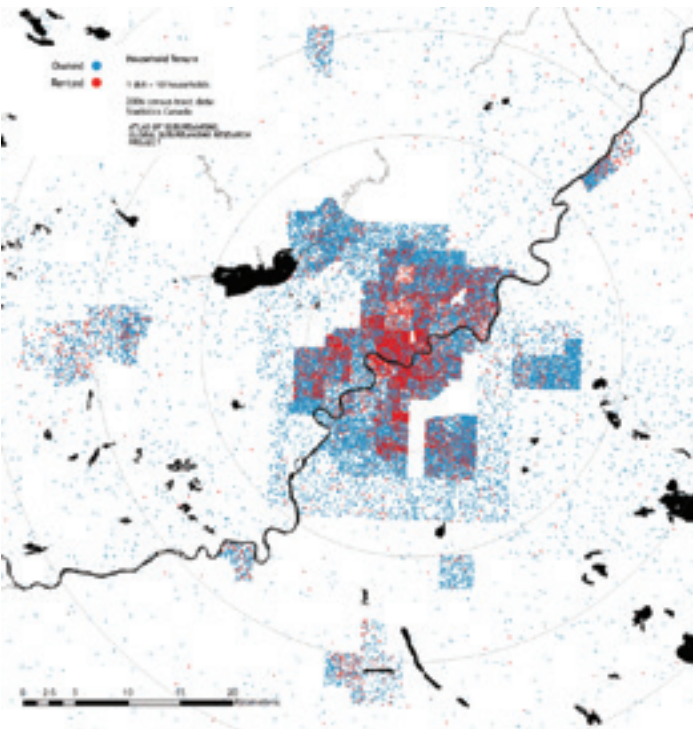


fig 1.23 Edmonton's Demographics in the *Atlas of Suburbanisms*



Downtown
Edmonton

Government Hill
House Park



Washrooms



Cycling Trail



Fish Habitat



Bird Flyaways



Outfall



Mammal Corridor



fig 1.24 Edmonton's Central River Valley

2

Mutual Aid & Community Care

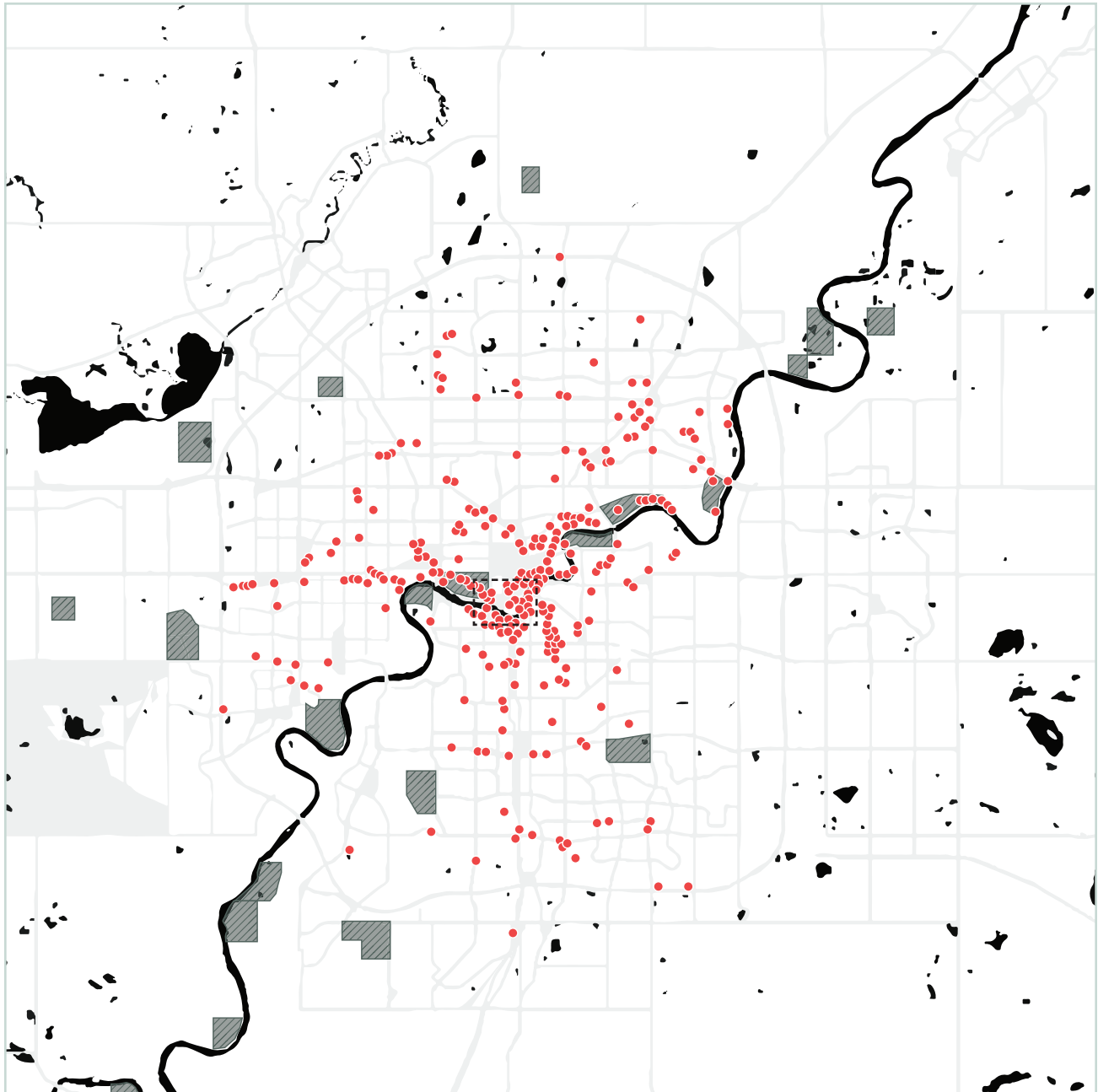


fig 2.1 Encampments & Golf Courses in Edmonton

Legend

-  Golf Course
-  Encampment

2.0 Mutual Aid & Community Care

Chapter 2 explores the history of mutual aid and its resurgence as a network of care and solidarity with unhoused individuals in urban centres throughout Turtle Island. This chapter discusses why mutual aid is necessary, and its role within a larger network of actors working to end houselessness in Edmonton.

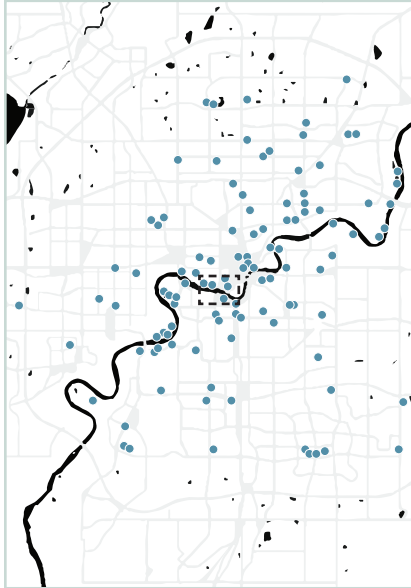


fig 2.2 Public Washrooms in Edmonton

2.1 Houselessness in Edmonton

It is important to note that houselessness is an experience that can only be truly solved through housing. Yet in addition to the slow pace of public housing developments, the current issue with affordable housing solutions is their low rate of success and the limited subsidies that protect newly housed individuals in Edmonton from the pressures of payment cycles beginning as soon as thirty days.⁷¹ For many, houselessness is cyclical in nature, creating an experience of sustained, acute precarity. This thesis takes the position that the field of architecture should question its role in the larger network of infrastructure that has the power to contribute or mitigate harm for those experiencing housing insecurity. Houselessness in Edmonton is experienced citywide (see fig. 2.1). While some people have successfully exited cycles of houselessness, there will be others entering the cycle along with those who are unable to meet prerequisites for affordable and supportive housing. In some instances, the lack of hygiene is a barrier for people seeking support. The lack of hygiene keeps some people from accessing shelters, or is used as grounds to reject access and service. Therefore, given the rising numbers of unhoused individuals and the chronically slow and inadequate responses to this crisis by governments and other agencies sponsoring housing solutions, this thesis takes the position that architecture (and the design fields more broadly) have an important role to play in offering more immediate, bottom-up solutions to mitigate harm for those on the street. Diverse, multi-scalar design solutions that refuse to be complicit with entrenched forms of discrimination can operate as supports to community levels of care in providing rapid responses to urgent concerns of wellbeing and basic survival among houseless people. These include access to food, water, and temporary shelter and operate as an urgently-needed interim strategy in light of the slower-moving processes of approvals and construction timelines for housing. The focus of this thesis is the human right to water, sanitation and hygiene (WASH). Although Figure 2.2 illustrates a sizeable number of public washrooms and outhouses in the city, the hours, level of security and enforcement vary between each place. The provision of adequate permanent public washrooms are barriers to water, sanitation and

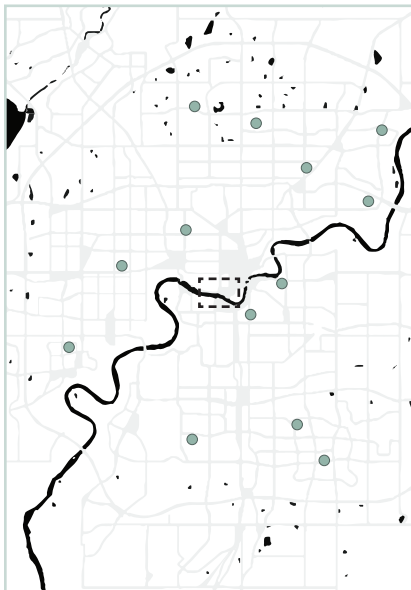
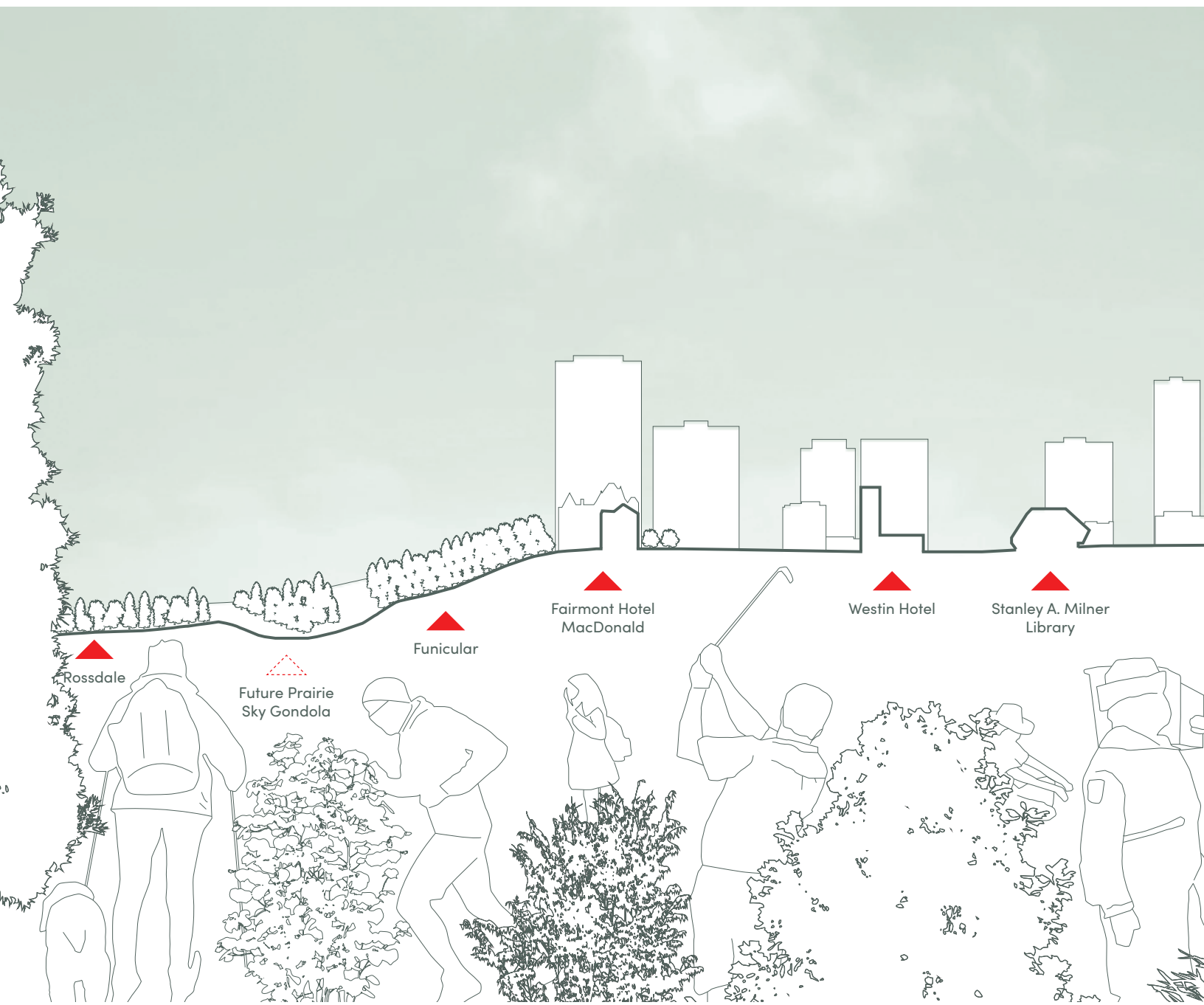


fig 2.3 Laundromats in Edmonton

⁷¹ Rebecca Reid and WaterWarriorsYEG, interviewed by Robert Maggay, January 12, 2022.



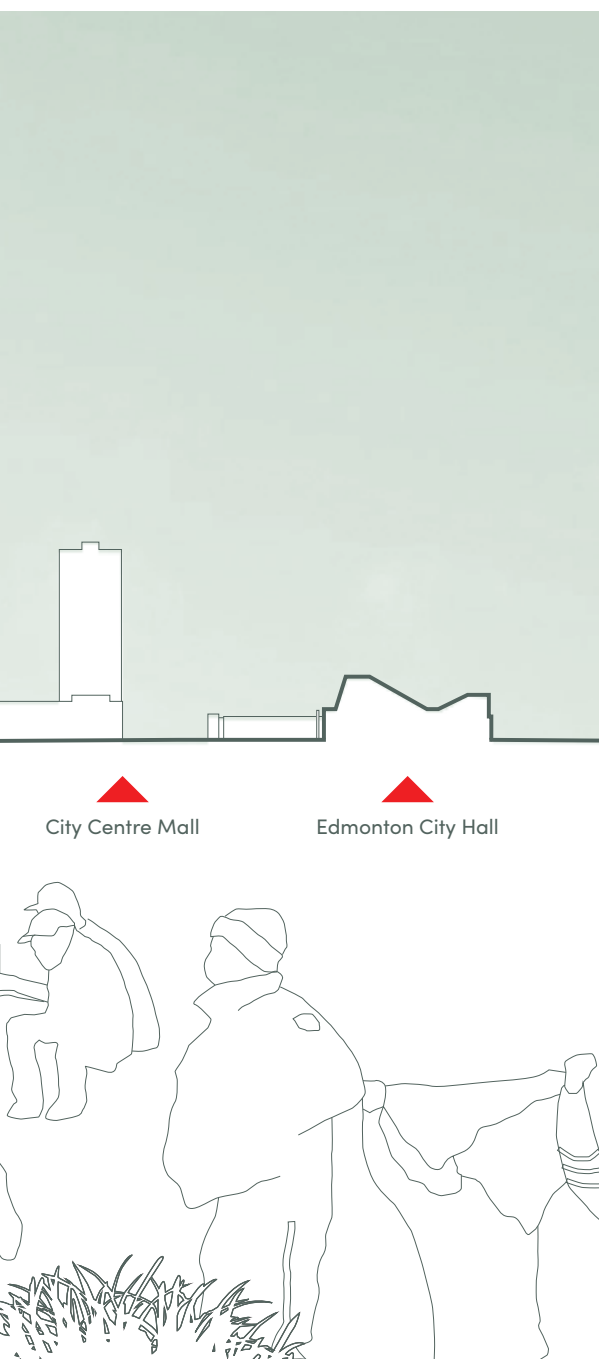


fig 2.4 Recreation & Enforcement in Edmonton

hygiene among unhoused individuals that may affect health outcomes, or one's ability to access shelter services. Public hygiene facilities and laundromats in Edmonton are fewer in number, and the provision of dignified washing spaces are very much within the scope of design and architecture (see fig. 2.3). Protestors at Pekiwewin Prayer Camp shared a list of demands to end houselessness, within which access to water, sanitation and hygiene spaces was identified.

As discussed earlier, there is a worrisome increase in houselessness in Alberta. In Canada, there are approximately 32,000 people who experience houselessness throughout the year. Nationally, 14% of houseless individuals are unsheltered or sleep rough, while the remainder are provisionally accommodated with friends and family, or in remand centres, hospitals, and emergency shelters. Of the total number of people experiencing houselessness in Canada, 49% are adults, 26% are youth and 25% are older adults or seniors.⁷² Where the numbers begin to show a more acute experience of houselessness in Alberta is in the chronic experience of houselessness: being unhoused for six or more months in a calendar year.⁷³ Equally, if not more disturbing, is Alberta's higher-than-average rate of Indigenous representation among unhoused community members. Indigenous people represent up to 57% of Edmonton's unhoused community, which is almost double the national average of 30%.⁷⁴ In 2001, 76% of people from First Nations communities relocated to urban centres in Alberta.⁷⁵ Yet, urban Indigenous residents are at risk of experiencing poverty at a rate three times greater than non-Indigenous residents.⁷⁶ It goes without saying that poverty does not always lead to houselessness, but it is critical to acknowledge poverty as a condition of increased risk. Figure 1.5 suggests that between Edmonton and Calgary there are more people experiencing houselessness chronically in Edmonton.⁷⁷ This disproportionate rate of chronic houselessness suggests that Calgary has a more robust and barrier-free shelter system, that Calgary's unhoused populations are mostly hidden, or that existing systems in Edmonton cannot sustain needs for housing and supportive services. Currently, 15% of Indigenous people in Canada live in Alberta.⁷⁸ In 2016, the Indigenous populations in Amiskwaci, *beaver hills* (Edmonton region), was an estimated 83,000 people while in Mohkinstsis, *elbow* (Calgary region), the Indigenous population was roughly 41,000 people.⁷⁹ This

72 Government of Canada and Employment and Social Development Canada, *Everyone Counts 2018: Highlights: Preliminary Results from the Second Nationally Coordinated Point-in-Time Count of Homelessness in Canadian Communities.*, 2019, http://epe.lac-bac.gc.ca/100/201/301/weekly_acquisitions_list-ef/2019/19-37/publications.gc.ca/collections/collection_2019/edsc-esdc/Em12-25-2018-eng.pdf, 4,6,8.

73 Tanya Gulliver-Garcia, "Which City in Canada Has the Most Homeless People per Capita and Why?," *Homeless Hub*, accessed October 20, 2021, <https://www.homelesshub.ca/resource/which-city-canada-has-most-homeless-people-capita-and-why>.

74 Homeward Trust Edmonton, "Homeward Trust Community Update 2018", <http://homewardtrust.ca/wp-content/uploads/2018/12/2018-Community-Update-Booklet.pdf>, 3.

75 "Off Reserve Aboriginal Population: Provincial and Territorial Reports: Alberta," accessed December 18, 2021, <https://www150.statcan.gc.ca/n1/pub/89-618-x/2006001/reports-rapports/4159179-eng.htm>.

76 John Kolkman, *A Profile of Poverty in Edmonton Update*, 2017, <https://www.deslibris.ca/ID/10093506>, 15.

77 Gulliver-Garcia, "Which City in Canada."

78 Anna McMillan, "Alberta's Indigenous Population Outpacing Non-Indigenous Growth," *CBC News*, August 2, 2018, <https://www.cbc.ca/news/canada/edmonton/alberta-indigenous-population-growth-1.4770904>.

79 Mohkinstsis is the traditional Blackfoot name describing the region where the Bow River meets

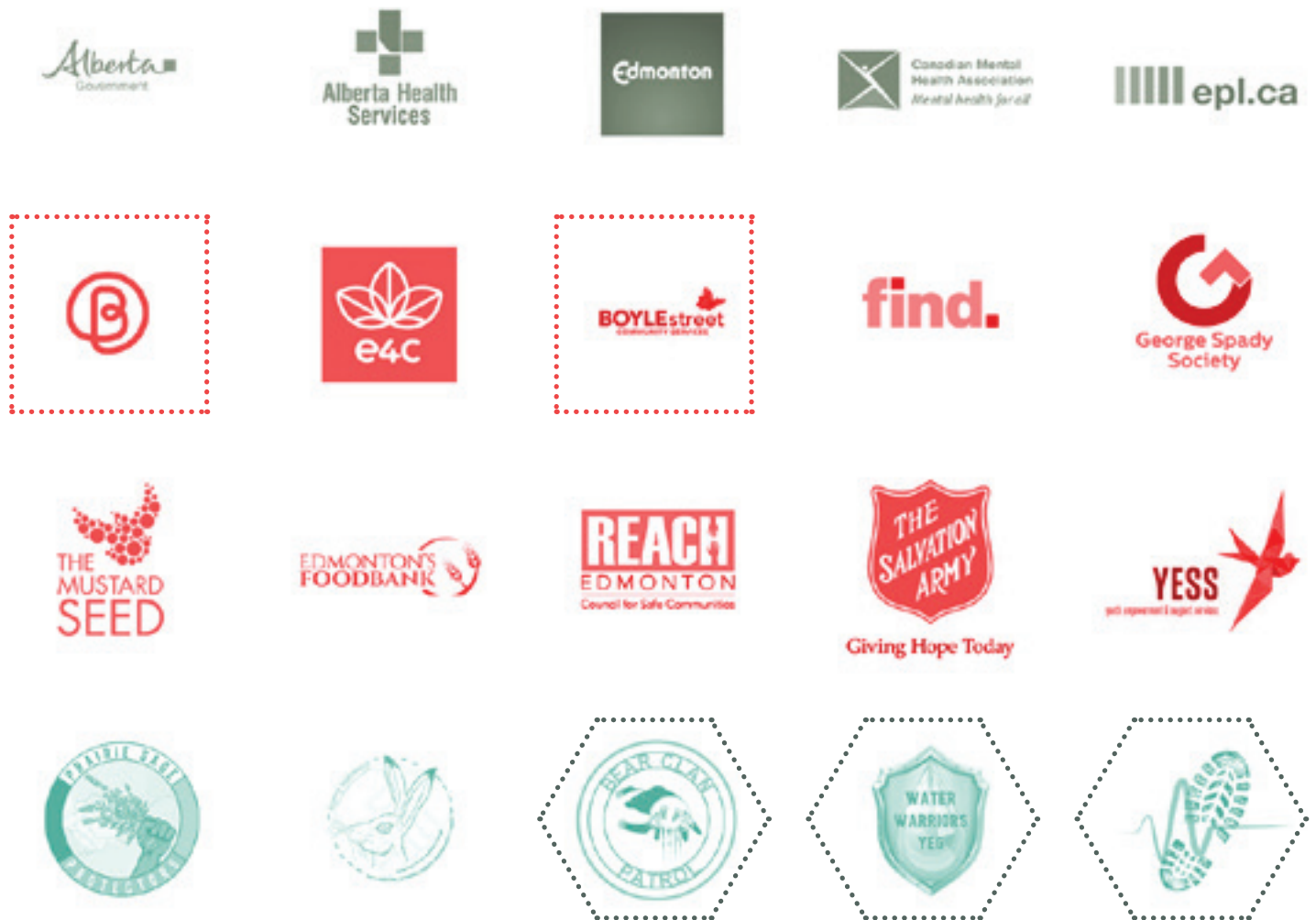


fig 2.5 Index of Service Providers in Edmonton

- Legend
- Public Service
 - Formal Service
 - Mutual Aid
 - Non-Faith Based Services
 - Interviewees



population difference is arguably informed by a deeper history of land expropriation, resource extraction and wildfires as shown in Fig. 1.22. The City of Edmonton has grown to a metropolitan population of 1.41 million people which closely follows the City of Calgary's metropolitan population of 1.48 million people.⁸⁰ Yet despite having similar metropolitan population sizes, Amiskwaci (Edmonton region) is home to twice as many Indigenous people than Mohkinstsis (Calgary region).⁸¹ While the experience of houselessness is not ethno-racially exclusive, the risks and prevalence of houselessness among ethno-racial groups suggest larger systemic issues that need to be dismantled. One method of dismantling systemic barriers and proposing alternative solutions to systems that keep people chronically unhoused is that of mutual aid. Mutual aid is a form of community care with a harm reduction approach concerned with the immediate wellbeing of those struggling to achieve basic needs.⁸²

2.2 Solidarity, not Charity

Mutual aid is a system of care that can provide food, water, financial aid, legal aid, healthcare, cultural support, or other methods of care to people in crisis at a community-driven level.⁸³ In 2018, there were 400 people who reported sleeping rough in Edmonton at some point during the year, with this number being higher due to the doubling of people experiencing houselessness during the pandemic.⁸⁴ In 2018 alone, emergency shelters in Edmonton operated at 81% of funded capacity.⁸⁵ Shelter avoidance and barriers-to-access services and shelters are some reasons why houseless people choose to sleep rough. Other unsheltered community members are deterred from shelters due to concerns of violence, theft, overcrowding, early wake-up times, bedbugs, separation from a partner, or a lack of hygiene.⁸⁶ In addition, 11 out of 13 shelters

the Elbow river that exists in, and beyond, the boundaries of the City of Calgary. Bow Valley College, "Acknowledgement of Territory," accessed February 28, 2022, <https://bowvalleycollege.ca/about/governance/acknowledgement-of-territory>; McMillan, "Alberta's Indigenous Population Outpacing Non-Indigenous Growth," *CBC News*, August 2, 2018, <https://www.cbc.ca/news/canada/edmonton/alberta-indigenous-population-growth-1.4770904>; Statistics Canada Government of Canada, "Focus on Geography Series, 2016 Census - Census Metropolitan Area of Calgary," February 8, 2017, <https://www12.statcan.gc.ca/census-recensement/2016/as-sa/fogs-spg/Facts-cma-eng.cfm?LANG=Eng&GK=CMA&GC=825&TOPIC=9>.

80 Government of Alberta, "Edmonton," accessed February 28, 2022, <https://regionaldashboard.alberta.ca/region/edmonton/#/>; Government of Alberta, "Calgary," accessed February 28, 2022, <https://regionaldashboard.alberta.ca/region/calgary/#/>.

81 Anna McMillan, "Alberta's Indigenous Population Outpacing Non-Indigenous Growth.," Government of Canada, "Census Metropolitan Area of Calgary."

82 Dean Spade, *Mutual Aid: Building Solidarity during This Crisis (and the Next)* (London: Verso, 2020), 2.

83 Dean Spade, "Why Not Aid? A Reading Event w/ Dean Spade on Mutual Aid," Materials & Applications, 2021, https://www.youtube.com/watch?v=FF_F00NiFBI.

84 Homeward Trust Edmonton, "Homeward Trust Community Update 2018," <http://homewardtrust.ca/wp-content/uploads/2018/12/2018-Community-Update-Booklet.pdf>, 4.; Sean Amato, "Edmonton about 500 Shelter Beds Short as Homeless Count Doubles in 2 Years," *CTV Edmonton*, November 16, 2021, <https://edmonton.ctvnews.ca/edmonton-about-500-shelter-beds-short-as-homeless-count-doubles-in-2-years-1.5668910>.

85 Homeward Trust Edmonton, "Homeward Trust Community Update 2018", 5.

86 OrgCode Consulting, "Report on Homeless Encampments on Public Land," March 26, 2019, 9-10.



fig 2.6 Service Hub Walkability in Edmonton

Legend

- | | |
|------------------------------|-----------------------------|
| Community Health Clinic | Physical & Mental Treatment |
| Daytime Drop-in Centres | Transitional Housing |
| Detox | Youth/Children Services |
| Overnight Emergency Shelters | |
| Permanent Supportive Housing | |

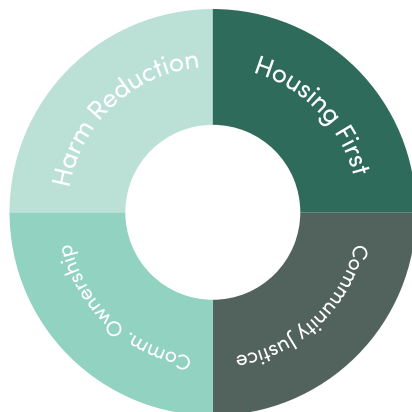


fig 2.7 Pillars of Urban Social Programs

and services in Edmonton are faith-based organizations, which have deeper and traumatic implications when considering the higher Indigenous overrepresentation among houseless community members.⁸⁷ Charitable faith-based structures of care are not suitable for all individuals experiencing houselessness; the roots of charity are bound to the Christian practice of alms-giving where wealthy people give their time, or money, to financially poor people to “buy their way into heaven”. Tax exemptions and annual charity contributions, as argued by activist and law professor Dean Spade, perpetuates wealth and power relations that appeal to the wealthy. In some (but not all) instances, powerful elites and decision-makers are given control to disburse aid only to the most deserving, the most rehabilitated or the most pious of people seeking aid.⁸⁸ By contrast, mutual aid networks offer a non-hierarchical approach to helping houseless neighbours that is in line with non-judgmental and barrier-free beliefs of harm reduction practice.

The reality of rough sleeping in Edmonton is complicated due to the prevalence of comorbidities and high acuity status among those sleeping rough.⁸⁹ Mutual aid as a form of care is volunteer-led and crowdfunded through calls-to-action and mutual aid requests. Although many volunteers are trained in crisis response, trauma informed care and healthcare, the commonness of high acuity status among rough sleepers is best suited to trained crisis responders to effectively and safely mitigate harm among high acuity unhoused people. Interviews with three lead organizers from mutual aid groups in Amiskwaciwâskahikan revealed a lack of communication, or desire for coordination, between certain mutual aid groups.⁹⁰ The ad hoc volunteerism nature of mutual aid is its strength: it has not been formalized and there are no leading groups, investors, or neoliberal imperatives. Mutual aid at its core practices reciprocity and engages the commons as a practice, rather than as a resource. Throughout the COVID-19 pandemic, the practice of mutual aid has typically occurred outdoors—in park spaces, parking lots, sidewalks, and streets (see fig. 2.26). In relation to architecture, the provision of food, financial aid, legal aid, healthcare, and cultural support can occur and be facilitated through architecture, but in the case of access to water, sanitation and hygiene, the heated building is a necessary interface to water and dignified washing.

2.3 History of Mutual Aid

There are four broad pillars of urban social programs for unhoused individuals: harm reduction, housing first, community justice and community ownership.⁹¹ Harm reduction mitigates harm without requiring the cessation of drug use, alcohol consumption or the participation in faith-based programming. Methods of harm reduction are practiced through safe needle disposal and exchange programs, the

⁸⁷ Rebecca Reid and WaterWarriorsYEG, interviewed by Robert Maggay, January 12, 2022.

⁸⁸ Dean Spade, *Mutual Aid: Building Solidarity during This Crisis (and the Next)* (London: Verso, 2020), 14, 21.

⁸⁹ OrgCode Consulting, “Report on Homeless Encampments on Public Land,” March 26, 2019, 7.

⁹⁰ Rebecca Reid, interviewed by Robert Maggay, January 12, 2022.

⁹¹ Jackie Dale Sieppert, *Community Solutions Promising Practices and Principles for Addressing Street Level Social Issues* (Calgary, AB: Canada West Foundation, 2009), ii.

1780



AFRICAN UNION SOCIETY

First known early Black mutual aid society in Newport, Rhode Island established in 1780

1902



PYOTR KROPOTKIN

Anthropological essays compiled in Mutual Aid: A Factor of Evolution by anarchist philosopher, Pyotr Kropotkin.

1922



SOCIEDADES MUTUALISTAS

Statesman, Melchor Ocampo, establishes mutual aid network for Mexicans in Eagle Pass, Texas

1969



BLACK PANTHER PARTY

The Black Panther Party's Free for Children Breakfast Program

CHINESE CONSOLIDATED BENEVOLENT ASSOCIATION

Mutual aid and protection support networks for Chinese immigrants in San Francisco



LANDSMANSHAFTN

Emergence of Jewish mutual aid groups for immigrants in New York City before World War I



ELIZABETH BAGSHAW

Canada's first, and at the time illegal, birth control clinic in Hamilton, Ontario



THE YOUNG LORDS

Latinx and Black New Yorkers demand a People's Hospital to combat environmental and systemic racism



1900

1905

1932

1970

fig 2.8 Mutual Aid Timeline

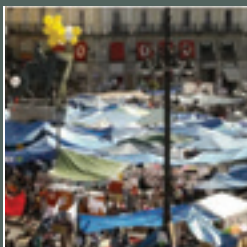
1980



CHICKEN SOUP BRIGADE

Seattle's volunteer-run
gay clinic and mutual aid
network supporting over
450 men battling AIDS

2011



M-15 PROTEST

Protestors camp at Puerta
del Sol in protest of
political corruption, mass
unemployment and wealth
inequality

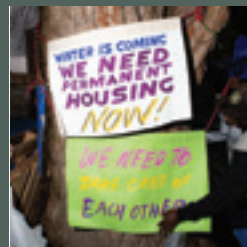
2017



NO MORE DEATHS

Humanitarian aid networks
for migrants along
Arizona's Mexico-US
border

2020

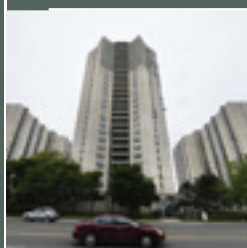


ENCAMPMENT SUPPORT

Toronto artists set up
an encampment support
network in Moss Park

DIXON ROAD

North America's first civil
war-era diaspora of Somali
refugees in Toronto



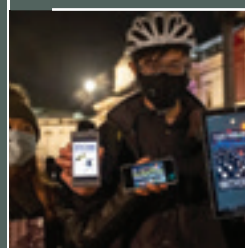
OCCUPY WALL STREET

Protestors occupy
Zuccotti Park in protest of
inequality, capitalism and
socioeconomic class



FIRECHAT/HK MAP LIVE

Apple removes apps used
to communicate offline
and used to locate police at
demonstrations



1990

2011

2019



fig 2.9 Houseless Individual (1930)



fig 2.10 Houseless Individual (2000)

provision of naloxone kits, drug education and testing, and supervised injection sites. While this definition of harm reduction is very specific to addictions and substance use, activist and abolitionist bodies of text vary in their application of the term and deploy the term more so in reference to the non-judgmental approach of harm reduction. Another pillar of urban social programs is referred to as housing first initiatives. These are initiatives that bring unhoused community members directly from the street, or shelter system, to stable housing with a range of supports that may include income support, mental health services and addictions services. A third pillar of urban social programming is community justice. Crime prevention and justice work reduce harm caused by systems of exclusion and the criminalization of poverty that keeps people in cycles of poverty and houselessness. Community justice is practiced through community involvement, legal aid and relationship building to improve community life among those experiencing houselessness. The fourth pillar of urban social programs is community ownership and involvement, which seeks participant involvement in partnership with service providers, health professionals, government and business to establish greater place-based relationships.⁹² The practice of mutual aid resembles aspects of these four broad pillars of urban social programs as described by Jackie Sieppert. The greatest difference however, is that they are volunteer-led, ad hoc and ‘informal’.

Mutual aid organizations from as early as 1793 have provided care through meals, financial aid, protection, shelter, legal defense and employment (see fig. 2.8). The Free African Society, the New York Committee of Vigilance and the Ex-Slave Mutual Relief, Bounty & Pension Association are some of the earliest examples of mutual aid and harm reduction during settler colonialism. Mutual aid was largely a tool to care for and protect diaspora of people navigating racist systems and exclusion. As more settler immigrants and people Indigenous to Turtle Island moved throughout Turtle Island, networks like the Chinese Consolidated Benevolent Association, Landsmanshaftn and Sociedades Mutualistas emerged to support those living within systems that did not protect their lives and interests.⁹³ Figure 2.8 presents a timeline of select international mutual aid initiatives over the last 250 years. In the case of the African Union Society, Chinese Consolidated Benevolent Association and Canada’s first birth control clinic, these mutual aid networks operated out of buildings. Other mutual aid initiatives, such as the Young Lords’ seizure of a chest x-ray truck in 1970 and No More Death’s network of aid tents along the Mexico-US border, present mutual aid as a mobile initiative. More recent examples of mutual aid in this timeline are tied to the occupation of public space through protest and encampment. This notion of mutual aid as a form of protest and community care will be the focus of this architectural thesis. Architecture is conditioned by neoliberal imperatives and the settler colonial imposition and exclusive framework of ‘property’. The practice of architecture is inevitably complicit in upholding spatial exclusion and inequity in cities through its recognition of property and land use law.

92 Jackie Dale Sieppert, *Community Solutions Promising Practices and Principles for Addressing Street Level Social Issues* (Calgary, AB: Canada West Foundation, 2009), ii-iii.

93 Ariel Aberg-Rieger, “‘Solidarity, Not Charity’: A Visual History of Mutual Aid,” *Bloomberg*, December 22, 2020, <https://www.bloomberg.com/news/features/2020-12-22/a-visual-history-of-mutual-aid>.

“Homeless for the first time right at the start of the pandemic, in the cold of winter. I didn’t know how to be homeless. I was cold. I was riding a bus all night, till like three in the morning, till they closed, and riding the bus again at five o’clock in the morning. Sleeping under bridges, breaking into abandoned buildings to sleep in.”

— Larry G.⁹⁴

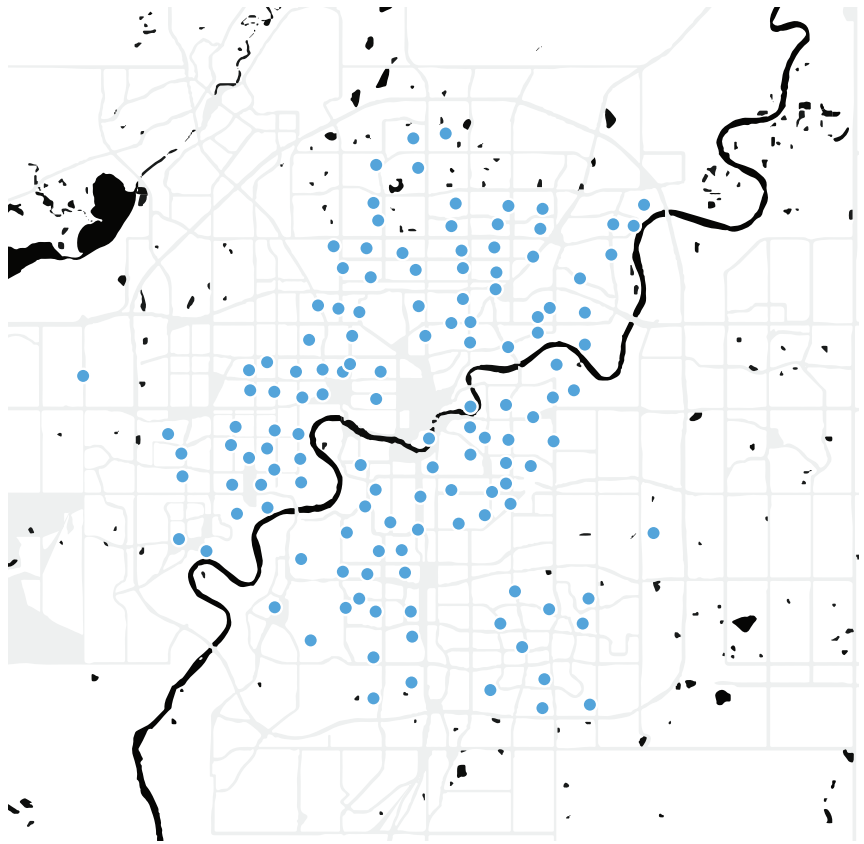


fig 2.11 Community Leagues

To briefly return to the principle of harm reduction, a key part of harm reduction not included in the four pillars of urban social programs is language. The use of non-judgmental language and stances that neither condone nor condemn issues like drug use are core to this approach of care. The definition of harm reduction is narrowly focused in relation to addiction and drug use; it encourages safe use, education and action plans, as well as informed participation.⁹⁵ Architecture and urbanism can approach houselessness in a similar manner by rethinking the language of built form and its approach to ‘property’ and houselessness. Houselessness, like drug use, is complex and informed by diverse behaviours and decisions. Rather than condemn houselessness through concerns of security and exclusionary design practice, there is a potential for architecture and urban design to reposition itself by reimagining barriers in cities through radical experiments of housing and dwelling in public space. The language and conventions of design and architecture can be challenged to take on a harm reduction approach.

In Edmonton, there exist a network of buildings that were mobilized by the city to allow for the proliferation and organization of community activism and care. The Edmonton Federation of Community Leagues (EFCL) was established in 1920 and was composed of nine public buildings that served as community hubs for residents to discuss neighbourhood development and local issues. Based on the Social

94 Amber Bracken, “Scenes from Canada’s Housing Crisis,” *The Walrus*, June 14, 2021, <https://thewalrus.ca/scenes-from-canadas-housing-crisis/>

95 Jackie Dale Sieppert, *Community Solutions Promising Practices and Principles for Addressing Street Level Social Issues* (Calgary, AB: Canada West Foundation, 2009), 5.



fig 2.12 Crestwood Community League



fig 2.13 Westmount Community League



fig 2.14 Forest Heights Community League



fig 2.15 Alberta Avenue Community League

Center and City Club Movement in the United States, these community hubs were to remain unaffiliated with any political party or religion. Community League membership was open to all residents regardless of gender identity, social class and ethno-racial identity; it was a place to advocate for, or against, development, infrastructure maintenance and businesses in communities. Another key part of EFCL's early work was the lobbying for access to public infrastructure to host after-hour community events and fundraisers. These municipally-funded and maintained buildings provide places to gather and organize in Edmonton's neighbourhoods. Today, there exist 160 community leagues throughout the City of Edmonton, and most neighbourhoods are served by a community league building with kitchens, storage spaces, a gathering hall or gymnasium space, as well as washrooms to support community gathering functions.⁹⁶ This citywide network of buildings has the potential to provide emergency shelter space for unhoused individuals—especially in winter conditions. However, each community league is made up of elected board members and each league operates as its own entity. The construction of league buildings is funded and maintained by the City of Edmonton, while each league's operations are supported by community-led fundraisers. Although some community leagues in Edmonton like Sherbrooke, Boyle Street, McCauley and Alberta Avenue are more active in houselessness harm reduction efforts, the reality is that not all leagues are committed to advocacy and issues concerning houselessness. Both mutual aid and community leagues are volunteer-run initiatives and there is a lack of time, resources, and discourse between the two. This citywide network of buildings in Edmonton are underutilized public facilities with the necessary infrastructure to provide houseless community members with access to kitchens, washrooms, and storage spaces (see fig. 2.15). Yet, due to a person's vulnerable status many of these community leagues, and their events, have historically excluded houseless community members.⁹⁷

2.4 The Commons as a Practice

During the summer of 2020, Pekiwevin Prayer camp emerged as a harm reduction encampment in protest of police brutality and unsafe shelter conditions in solidarity with unhoused community members.⁹⁸ What began as an encampment of a dozen tents grew to an encampment of nearly 300 people at its peak.⁹⁹ The prayer camp was led by Indigenous Two-Spirit women and femme folx working in solidarity with Black, 2SLGBTQQIA+ and settler volunteers to provide emergency relief, as well as cultural support, with a harm reduction approach.¹⁰⁰ In this case, harm reduction is practiced in its narrow definition relating to

96 Ron Kuban, *Edmonton's Urban Villages: The Community League Movement*, (Edmonton, Alta: University of Alberta Press, 2005), 27-29, 31.

97 Alyssa Miller and Boots on Ground Harm Reduction, interviewed by Robert Maggay January 6, 2022.

98 John Humphrey Centre for Peace and Human Rights, "Dignity During a Pandemic: No One Left Behind Podcast: Episode One," accessed October 31, 2021, https://www.jhcentre.org/dignity-podcast_episode-one.

99 Dan Grummett, "Camp Organizers Escalating Demand for Free Transit for Homeless Edmontonians," *CTV News Edmonton*, September 23, 2020, <https://edmonton.ctvnews.ca/camp-organizers-escalating-demand-for-free-transit-for-homeless-edmontonians-1.5116894>.

100 John Humphrey Centre for Peace and Human Rights, "Dignity During a Pandemic."



fig 2.16 Morning Coffee at Pekiwewin



fig 2.17 Beaver Hills Warriors



fig 2.18 Pekiwewin Camp Media Address

drug use, and more broadly as a non-judgmental space of community care. Unlike other protest events in the City of Edmonton during the pandemic, Pekiwewin Prayer Camp was located in Rosedale, which is a higher income neighbourhood in the central River Valley.¹⁰¹ The location of this protest and encampment was outside the typical architectural proxies of power where protest occurs. This anti-authoritarian display of solidarity through protest and the practice of harm reduction coopted ‘public’ park space to carve out a safe nonjudgmental place for houseless people. Since it’s forcible disbanding in November of 2020, Pekiwewin Prayer Camp has prompted the formation of other mutual aid and harm reduction organizations which include HARES Outreach, Prairie Sage Protectors, Water Warriors YEG, Boots on Ground Harm Reduction, Turtle Island Mutual Aid Organization, Bear Clan Patrol Beaver Hills and the now defunct Edmonton Mutual Aid and Treaty 6 Outreach. The proliferation of mutual aid is largely attributable to the power of social media to provide rapid response through crowdfunding and crowdsourcing of goods, support, action and bodies. While there has been plenty of criticism of ‘informal’ community outreach, the rapid growth of Pekiwewin Prayer Camp and other aid networks demonstrates the need for diverse and multi-layered approaches to houselessness; part of which can be achieved through architecture and design.

Pekiwewin Prayer Camp is just one of the many mutual aid networks and harm reduction encampments in Canada; other large urban centres like Vancouver and Toronto have had similar encampments addressing houselessness.¹⁰² The decolonializing power of community-led methods of care and solidarity with unhoused people is less about the occupation of ‘public’ space, and more about creating a network of people and spaces that view the commons as a practice rather than a resource or property. For architecture to be mobilized and to provide agency to mutual aid networks and houseless communities, an architectural intervention should exist within and against logics of neoliberalism and the settler colonial state.¹⁰³ An architecture of solidarity should exist within the city but deployed in a way that resists settler colonial architecture and urban design impositions—like the property line, the use of non-renewable energy sources and the exclusivity of natural environments in urban settings for wealthy elites. Drawing from the work of Stefano Harney and Fred Moten, architectures of solidarity would exist in what they have coined as the *undercommons*; i.e., in a realm that exists within something and simultaneously against—as a form of displacement from current systems.¹⁰⁴ Similar to this notion of displacement regarded as the *undercommons*, Thomas Markussen offers a definition of design activism that echoes the idea of the *undercommons* as a relation or practice. Design activism engages with political and social realms with a critical lens to challenge or unsettle prevailing agendas of power and authority.¹⁰⁵

101 Dan Grummett, “Camp Organizers Escalating Demand for Free Transit for Homeless Edmontonians,” *CTV News Edmonton*, September 23, 2020, <https://edmonton.ctvnews.ca/camp-organizers-escalating-demand-for-free-transit-for-homeless-edmontonians-1.5116894>.

102 Robinson, “Vancouver Taxpayers on Hook,”; Yaniya Lee, Leah S, et al., “Mutual Aid during a Pandemic: Why Artists Helped Form Toronto’s Encampment Support Network,” *Canadian Art*, accessed October 4, 2021, <https://canadianart.ca/interviews/mutual-aid-during-a-pandemic-why-artists-helped-form-torontos-encampment-support-network/>.

103 Red Nation, *The Red Deal: Indigenous Action to Save Our Earth*, (Brooklyn, NY: Common Notions, 2021), 55.

104 Stefano Harney and Fred Moten, *The Undercommons: Fugitive Planning & Black Study*, (Wivenhoe, UK: Minor Compositions, 2013), 149.

105 Tobias Bieling, *Design (&) Activism: Perspectives on Design as Activism and Activism as*

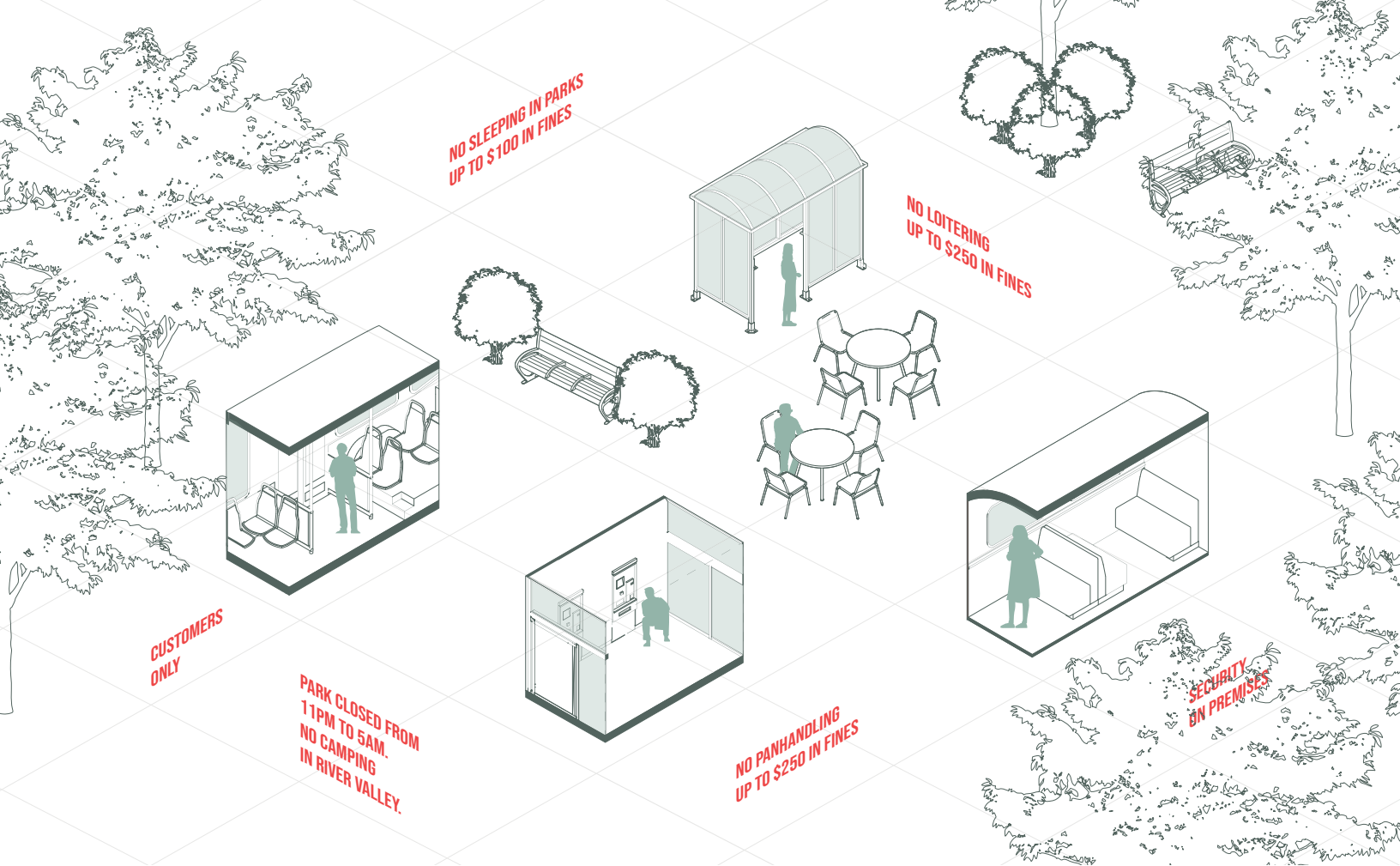


fig 2.19 Designs for Spatial Exclusion

Housing is the only true solution to houselessness, but the conditions for houseless people that have inspired the Pekiwevin Prayer Camp protest can in part be solved by re-thinking rights-to-the-city and addressing systems of spatial exclusion. Pekiwevin Prayer Camp organizers shared a list of seven demands with the City of Edmonton to mitigate harm and exclusion for community members experiencing houselessness. The first demand was a call to end racialized police violence against unhoused individuals, which has historically included tent slashing, pepper spraying, and the destruction and/or theft of one's only belongings. Organizers also called for the end of forcible displacement and removal of people from encampments, which to some people provides safer and less hostile living conditions.¹⁰⁶ Although many of the demands were not met, city officials amended certain bylaws that have perpetuated systems of exclusion that risk the safety and dignity of those experiencing houselessness. These bylaws that criminalize poverty and the lack of water, sanitation and hygiene infrastructure include trespassing fines, loitering in transit stations, transit fare evasion, public intoxication and public urination.¹⁰⁷ The amended bylaw infractions carried fines from \$100 to \$250 for loitering

Design, ([Italy]: Mimesis International, 2019), 35.

106 Dan Grummett, "Camp Organizers Escalating Demand for Free Transit for Homeless Edmontonians," *CTV News Edmonton*, September 23, 2020, <https://edmonton.ctvnews.ca/camp-organizers-escalating-demand-for-free-transit-for-homeless-edmontonians-1.5116894>.

107 Chris Chacon, "Loitering Tickets Will No Longer Be Handed out at Edmonton Transit Facilities," *Global News Edmonton*, July 8, 2021, <https://globalnews.ca/news/8014785/edmonton-loitering-tickets-transit-ets/>.



fig 2.20 Media Footage of Pekiwewin Prayer Camp

Legend

- ① Check-in Tent
- ② Drop-off
- ③ Storage
- ④ Medical
- ⑤ Volunteers
- ⑥ Security
- ⑦ Storage
- ⑧ Elders
- ⑨ Outhouses
- ⑩ Tents

fig 2.21 Police Oversee Eviction



fig 2.22 Closing Round Dance



fig 2.23 Nighttime Fire



fig 2.24 Wrapped Feet



fig 2.25 Kathy Hamelin, Volunteer

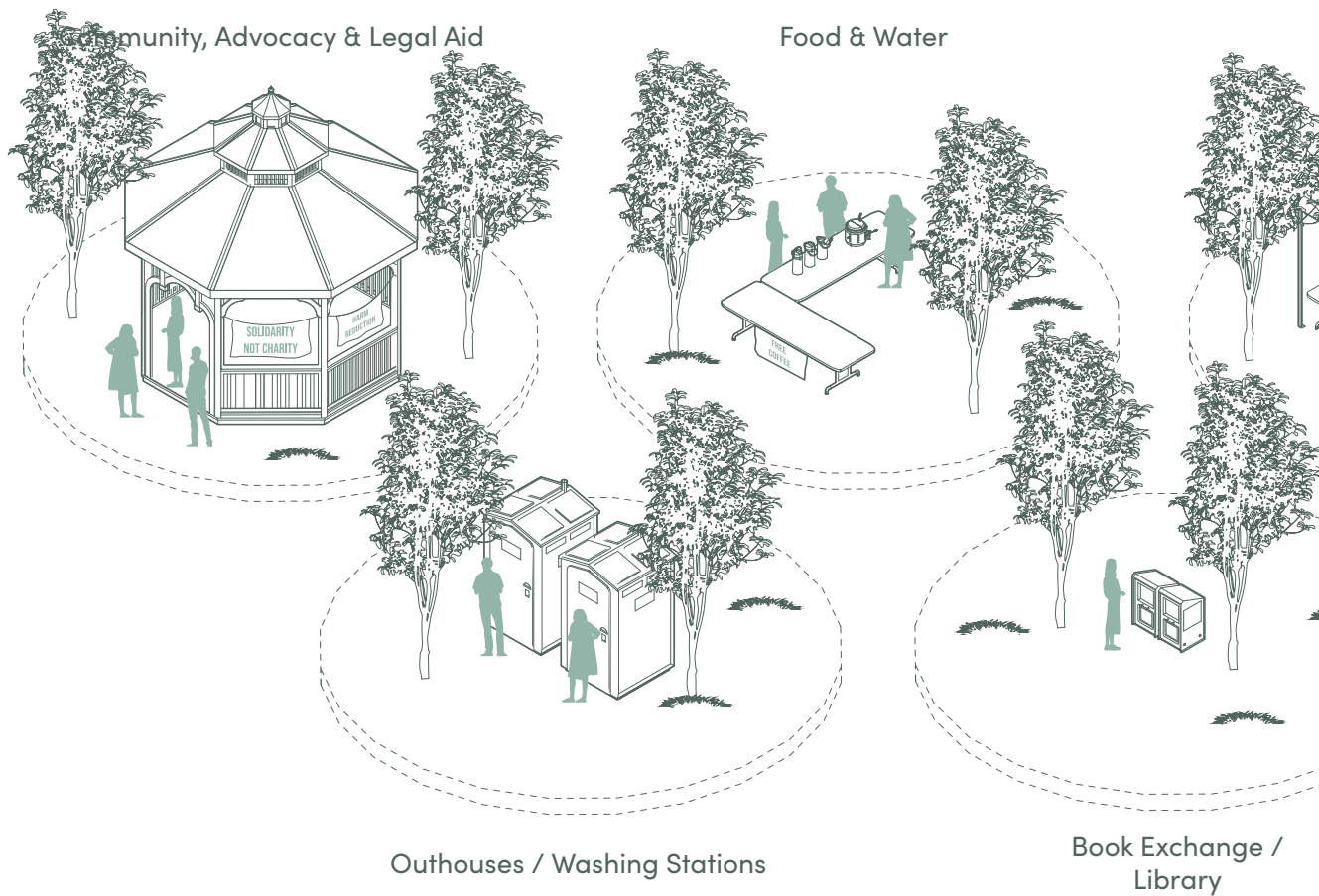


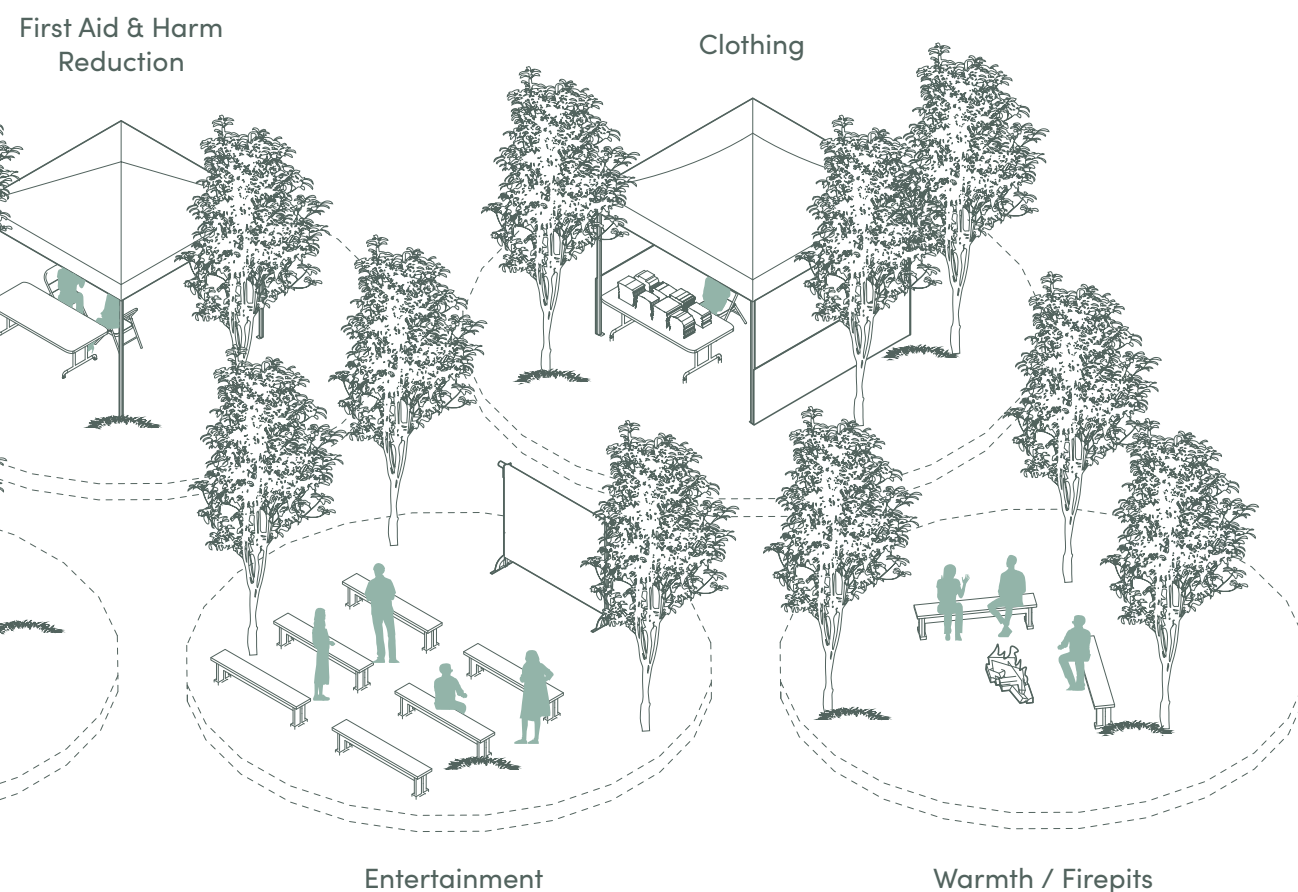
fig 2.26 Mutual Aid in Public Space

or sleeping in public spaces.¹⁰⁸ Part of Pekiwevin's seven demands were calls for free transit. This call recognizes that people have the right to move freely between spaces in the city. The inability to move freely in the city is an architectural and urban design issue stemming from the sprawling nature of the city. Given the higher overrepresentation of urban Indigenous people experiencing houselessness in Edmonton, it was also demanded that Treaty Rights be acknowledged for Indigenous people who choose to live within the urban centres on their land. Additional demands were made for more transitional supports, accessible 24/7 drop-in spaces, harm reduction sites, public washrooms, and access to hand washing and hygiene facilities.¹⁰⁹ Since the publishing of these demands, the City of Edmonton has approved a new \$28.5 million supportive service centre in Boyle Street to serve houseless community members (see fig. 2.27).¹¹⁰ Within weeks of each other, city council also approved the conversion of four hotels into supportive housing that provides a total of 360 units for unhoused

108 Student Legal Services of Edmonton, "A 2015 Alberta Guide to the Law: Homeless Rights," 2015, <https://clg.ab.ca/wp-content/uploads/2016/03/Homeless-Rights-2015.pdf>, 7.

109 Dan Grummett, "Camp Organizers Escalating Demand for Free Transit for Homeless Edmontonians," *CTV News Edmonton*, September 23, 2020, <https://edmonton.ctvnews.ca/camp-organizers-escalating-demand-for-free-transit-for-homeless-edmontonians-1.5116894>.

110 Paige Parsons, "Boyle Street Community Services to Get New \$28.5M Home North of Downtown Edmonton," *CBC News*, December 15, 2021, <https://www.cbc.ca/news/canada/edmonton/new-home-boyle-street-community-services-1.6285957>.



“I’ve been out here for two years. And, last winter, I just went the easy way, pretty much, by going to jail. But I don’t know how to survive out here in the winter.”

— Angel L.¹¹¹

people in Amiskwaciwâskahikan.¹¹² Additional efforts by Edmonton City Council were made to reduce the local policing budget by \$11.9 million, which was passed with a vote of eight to five in part to divert funding to supportive services.¹¹³ Protest events and harm reduction encampments have generated productive conversations and inquiry into the systems of spatial exclusion in the City of Edmonton. However, not all harm reduction organizers believe a \$28.5 million facility is the best use of funding to end houselessness.

In an interview with a lead mutual aid network organizer in Amiskwaciwâskahikan—who will remain unnamed in this portion of research—cost expenditures for supportive services can be better utilized to mitigate harm among unhoused people by providing safe and affordable housing solutions. During the interview, the observation was shared that architecture and buildings are treated with greater humanity than houseless neighbours: buildings such as the Epcor Tower are provided heating, water, security and land despite being largely vacant during the COVID-19 pandemic. In support of the argument

111 Amber Bracken, “Scenes from Canada’s Housing Crisis,” *The Walrus*, June 14, 2021, <https://thewalrus.ca/scenes-from-canadas-housing-crisis/>

112 Natasha Riebe, “Edmonton Plans to Convert Four Hotels into New Supportive Housing Units,” *CBC News*, August 17, 2021, <https://www.cbc.ca/news/canada/edmonton/city-council-covid-19-1.6143035>.

113 Natasha Riebe, “Edmonton Police Face \$11M Budget Cut amid Calls to Defund Police,” *CBC News*, July 1, 2020, <https://www.cbc.ca/news/canada/edmonton/edmonton-city-council-covid-19-edmonton-police-1.5633900>.



fig 2.27 Rendering of Boyle Street Community Services Building



fig 2.28 Trailer-style Washroom at 100 St. and 104 Avenue



made during the interview, Figure 2.29 shows the cost savings of a housing first approach versus the varying methods of accommodation of houseless people through means of hospitalization, incarceration, and remanding. Houselessness in Canada costs an estimated \$7.05 billion annually. In other words, higher acuity clients with multiple comorbidities and mental health barriers cost an average of \$53,143 to accommodate annually.¹¹⁵ In Edmonton, higher acuity houseless individuals comprise 90% of the rough sleeping population.¹¹⁶ The extrapolated cost of rough sleeping in Edmonton totals more than \$19 million in services and provisional accommodation.¹¹⁷ Rapid Housing Initiatives are projects trending toward a more compassionate city for houseless people in Edmonton, but these long-term solutions require a longer timeline of implementation. As protest demands by mutual aid advocates have presented, there is a need for immediate interim harm reduction solutions to address urgent and basic needs among houseless community members. In the last two years, there have been projects and initiatives explored in Edmonton that address needs for housing and a diversion of policing budget, but concerns for human rights to water, sanitation and hygiene are just now in early development stages.¹¹⁸ The focus of this thesis was prompted by recent protest demands and is informed by the broad understanding of harm reduction as the provision of non-judgmental clustering of spaces. Houselessness is a broad and complex experience that spans issues of housing, food insecurity, systemic racism, policing, and healthcare. To limit the scope of this thesis, the series of design proposals are focused on the access to water and the human right to WASH (Water, Sanitation And Hygiene).

2.5 The Right-to-WASH

In an interview with *Metropolis Magazine*, architect Pablo Sendra and urban scholar Richard Sennett discuss mutual aid in the city during times of crisis. The notion of providing the public with necessary infrastructure to solve their own problems is an idea that is not new to Richard Sennett. Sennett's *The Uses of Disorder* (1970) discussed the necessity to design and provide the public with tools of survival; especially in scenarios where state interest for control does not align

114 Amber Bracken, "Scenes from Canada's Housing Crisis," *The Walrus*, June 14, 2021, <https://thewalrus.ca/scenes-from-canadas-housing-crisis/>

115 Stephen Gaetz, *The Real Cost of Homelessness: Can we save money by doing the right thing?* (Toronto: Canadian Homelessness Research Network Press, 2012), https://www.homelessnesshub.ca/sites/default/files/attachments/costofhomelessness_paper21092012.pdf, 5.

116 OrgCode Consulting, "Report on Homeless Encampments on Public Land," March 26, 2019, 7.

117 Gaetz, *The Real Cost of Homelessness*, 5.

118 Sean Amato, "Gotta Go? Edmonton Building More Public Potties, but It's Not Happening Quickly," *CTV News Edmonton*, January 17, 2022, <https://edmonton.ctvnews.ca/gotta-go-edmonton-building-more-public-potties-but-it-s-not-happening-quickly-1.5743532>.

fig 2.29 Cost of Housing Support & Services

with public interest. In Sennett's words from his interview with *Metropolis*, "in order for people to prosper, they have to make their own mutual aid networks, and they have to live in environments that allow them to translate these social environments into how they physically occupy space together".¹¹⁹ Yet, in the case of Pekiwevin Prayer Camp, which is arguably both a protest and a mutual aid network, there are larger city scale and governmental scale agendas that prevent the proliferation of bottom-up community organization like encampments, or more sensitively referred to as 'curbside communities'.¹²⁰ Thus, an architecture in solidarity with harm reduction networks must be secretive and subversive—one that is hidden in plain sight. Architect Pablo Sendra notes that mutual aid networks occur out of necessity, and cities must recognize their importance by allowing local aid networks to thrive.¹²¹ Sendra and Sennett in their most recent work, *Designing Disorder*, share the belief that vital and open cities do not occur naturally.¹²² To draw from their latest work, the idea of designing disorder is arguably a prerequisite to creating resilient cities and urban environments. These 'disorderly' environments offer flexibility for the public to create specific social conditions out of flexible built and urban environments. Ultimately, the development of a flexible and robust architecture that supports mutual aid will better prepare cities for future crises.¹²³

Richard Sennett and Pablo Sendra's work depict these physical realms of disorder and designed disruption as truly public areas with access to potable water, power, shared infrastructure and collectively generated resources.¹²⁴ These truly public approaches to basic needs like food and water can be applied in a way that promotes sovereignty by disconnecting from larger systems of governance like the city grid, but this can also be explored in terms of food sovereignty, energy sovereignty, or material sovereignty.¹²⁵ Sennett argues that flexible capitalism has targeted ambiguity and disorder in favor of controlled homogeneity; a process of sorting and segregating the city.¹²⁶ In Edmonton, this process of sorting the city has resulted in what is referred to as a "service hub" for individuals experiencing houselessness.¹²⁷ The majority of existing supportive services in Edmonton are located in the downtown neighbourhood of

119 Annie Howard, "Richard Sennett and Pablo Sendra on Mutual Aid and Density in Times of Urban Crisis," *Metropolis*, accessed October 4, 2021, <https://metropolismag.com/profiles/richard-sennett-pablo-sendra/>; Richard Sennett, *The Uses of Disorder: Personal Identity & City Life*. (New York: Knopf, 1970), 47.

120 Allison Bench, "Edmonton's Camp Pekiwevin Set to Close down Saturday Afternoon," *Global News*, accessed October 5, 2021, <https://globalnews.ca/news/7442204/camp-pekiwevin-edmonton-closure/>.

121 Howard, "Richard Sennett and Pablo Sendra on Mutual Aid."

122 Pablo Sendra, Richard Sennett, and Leo Hollis, *Designing Disorder: Experiments and Disruptions in the City* (London: Verso, 2020), 52.

123 Howard, "Richard Sennett and Pablo Sendra on Mutual Aid."

124 Sendra, Sennett, and Hollis, *Designing Disorder*, 65.

125 Red Nation, *The Red Deal: Indigenous Action to Save Our Earth*, (Brooklyn, NY: Common Notions, 2021), 95.

126 Sendra, Sennett, and Hollis, *Designing Disorder*, 52.

127 Joshua Evans, Damian Collins, and Cher-Ann Chai, "On Thin Ice: Assembling a Resilient Service Hub," *Area* 51, no. 3 (September 2019): 451–60, <https://doi.org/10.1111/area.12448>, 451.

128 Amber Bracken, "Scenes from Canada's Housing Crisis," *The Walrus*, June 14, 2021, <https://thewalrus.ca/scenes-from-canadas-housing-crisis/>

Washroom Options



Porta Potty



Temporary Washroom Facility



Enhanced Temporary Washroom Facility



Permanent



fig 2.30 City of Edmonton Public Washroom Assessment Report

“I’m in good health. I’m strong. I’m not aching anywhere, no bones aching. I keep my feet warm all the time. I change my socks at least three times a day on account of my shoes, because they’re so absorbent of the water.”
— Clark R.¹³⁰

Boyle Street.¹²⁹ This part of inner-city Edmonton is associated with lower income households and a concentration of people experiencing houselessness.¹³¹ Among those experiencing houselessness, the accessibility and centrality of services is essential. This idea of services remaining in place over time is considered *outflanking*.¹³² Figure 2.1 presents the experience of houselessness and the existence of encampments as city wide, but both are most acute in downtown Edmonton.¹³³ There are however dense clusters of encampments that exist in the River Valley. Figure 2.2 illustrates the cluster of public washrooms throughout the city, most of which are outhouses. What the two figures reveal is a lack of permanent and adequate WASH spaces downtown and in the River Valley.

The ‘Right-to-WASH’ is a rights-based approach and term used to describe the human right to water, sanitation, and hygiene. WASH recognizes systems of discrimination of unhoused people and their lack of access to the basic human right to water as marginalized individuals.¹³⁴ To return to Pekiwevin Prayer Camp’s seven demands to ‘end houselessness’, access to public washrooms, handwashing and

129 Joshua Evans, Damian Collins, and Cher-Ann Chai, “On Thin Ice: Assembling a Resilient Service Hub,” *Area 51*, no. 3 (September 2019): 451–60, <https://doi.org/10.1111/area.12448>, 454.

130 Amber Bracken, “Scenes from Canada’s Housing Crisis,” *The Walrus*, June 14, 2021, <https://thewalrus.ca/scenes-from-canadas-housing-crisis/>

131 John Kolkman, *A Profile of Poverty in Edmonton Update*, 2017, <https://www.deslibris.ca/ID/10093506>, 16.

132 Evans, Collins, and Chai, “On Thin Ice”, 457.

133 Paige Parsons, “Maps Show Homeless Camps Sprawled across City of Edmonton,” *Edmonton Journal*, accessed October 20, 2021, <https://edmontonjournal.com/news/local-news/maps-show-homeless-camps-sprawled-across-city-of-edmonton>

134 Sayed Mohammad Nazim Uddin et al., “Water, Sanitation and Hygiene for Homeless People,” *Journal of Water and Health* 14, no. 1 (July 7, 2015): 47–51, <https://doi.org/10.2166/wh.2015.248>.



fig 2.31 Meanings of WASH



fig 2.32 Physical Forms of Property

hygiene facilities were identified as key issues.¹³⁵ As of January 2022, the City of Edmonton approved a budget of \$2 million to build new temporary washroom trailers and one permanent public washroom (see fig. 2.28). From January 2021 to October of that year, there were 90,000 total public washroom uses from a total of seven permanent public washrooms such as the Whyte Avenue restroom presented in Figure 2.30. As population growth in Edmonton trends upward and the number of unhoused neighbours continues to increase, the need for public WASH will only be exacerbated. The fear and stigma of public washrooms in Edmonton is a divisive issue for some business owners and residents. In part, the stigma of drug use in public washrooms has led to the staffing of public washroom facilities: these permanent and mobile washrooms are staffed by attendants who ensure cleanliness but also act as safety measures. In the case of Boyle Street Community Services, washrooms are staffed by peers with a lived experience of houselessness. The staffing of washrooms has reduced EMS visits for overdoses, resulted in fewer police calls as well as a reduction in vandalism. As City of Edmonton Councillor Michael Janz notes, “[it is] a human rights issue” and “a public responsibility” that should not rely on independent businesses to open their doors.¹³⁶ The provision of more public washrooms can mitigate harm and illness among people experiencing houselessness, but interrelated rights to water and hygiene are not typically programs co-located with public washroom facilities in Edmonton. To return to the primary research question of this thesis: how may architecture and urban design be mobilized to challenge settler colonial systems of exclusion in ways that grant agency to mutual aid networks and unhoused community members?

135 Dan Grummett, “Camp Organizers Escalating Demand for Free Transit for Homeless Edmontonians,” *CTV News Edmonton*, September 23, 2020, <https://edmonton.ctvnews.ca/camp-organizers-escalating-demand-for-free-transit-for-homeless-edmontonians-1.5116894>.

136 Sean Amato, “Gotta Go? Edmonton Building More Public Potties, but It’s Not Happening Quickly,” *CTV News Edmonton*, January 17, 2022, <https://edmonton.ctvnews.ca/gotta-go-edmonton-building-more-public-potties-but-it-s-not-happening-quickly-1.5743532>.

3

Designing Social Spaces of Solidarity



fig 3.01 Stegastein Lookout Public Washrooms



fig 3.02 Parque Urquiza Public Washrooms

3.0 Designing Social Spaces of Solidarity

Chapter 3 explores how architecture can act in solidarity with houseless community members through gestures of design activism that challenge prevailing exclusionary political forces in public space. The thesis design is informed by a series of public washroom precedents and site analysis, which precede the presentation of five categories of design activism gestures. These five categories—ground, below ground infrastructure, above, boundary, and democratic space/building as solidarity—draw from the work of Richard Sennett and Pablo Sendra in *Designing Disorder: Experiments and Disruptions in the City*.

3.1 Precedents

The following examples of public architecture were selected in part for their design approach to northern climates, as well as their contributions to redefining expectations of public washrooms and the right to water, sanitation and hygiene facilities in urban settings.

Stegastein Lookout in Aurland Public Toilets

The Stegastein Lookout and Public Toilets by Todd Saunders and Timmie Wilhelmsen are located in Aurland, Norway, atop a stone retaining wall that supports a partially cantilevered public washroom. This small structure provides two toilet rooms, a small kiosk lobby, and a maintenance room. Saunders and Wilhelmsen's work deviates from standard notions of public washrooms by providing each toilet room with a view of the valley. This work suggests that public washrooms and framed views of surrounding landscape are not mutually exclusive.¹³⁷

Parque Urquiza Public Restroom

The Parque Urquiza Public Restroom by Diego Jobell in Rosario, Argentina, is a 362 square metre public restroom that explores the relationship of the public restroom to the street. This design solution acts as a permeable border between street conditions and park space, while improving pedestrian access from the street to the waterfront through the integration of stairs and ramps. Portions of the roof structure are accessible as occupiable roof space overlooking the urban park and waterfront.¹³⁸

137 "Aurland Public Toilets / Saunders Architecture," *ArchDaily*, December 4, 2008, <https://www.archdaily.com/9724/aurland-public-toilets-saunders-arkitektur-wilhelmsen-arkitektur>.

138 "Baños Públicos Parque Urquiza / Diego Jobell," *Plataforma Arquitectura*, October 11, 2011, <https://www.plataformaarquitectura.cl/cl/02-111955/banos-publicos-parque-urquiza-diego-jobell>.

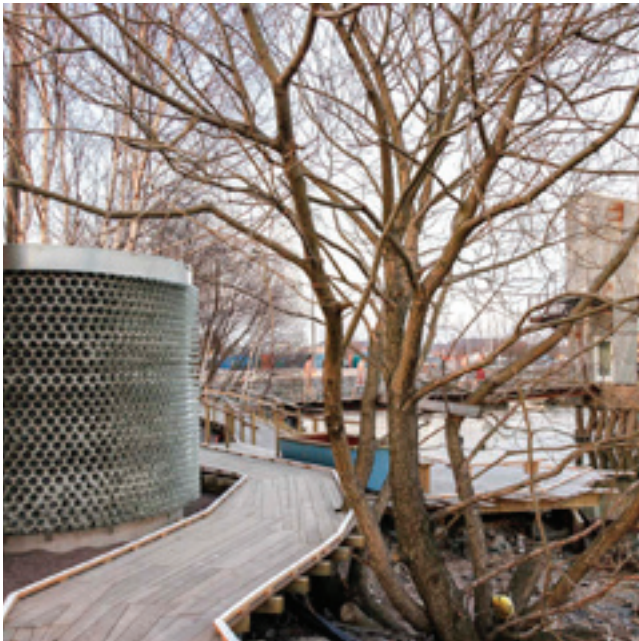


fig 3.03 Frimhamnen Sauna & Baths



fig 3.04 Celsius Williamsburgs



fig 3.05 Skid Row Handwashing Stations



fig 3.06 Arolsen Public Baths

Frihamnen Sauna and Baths

The industrial port of Frihamnen in Gothenburg, Sweden, was reimagined by architects, raumlabor, in partnership with multiple community stakeholders and user groups to revitalize the central industrial port as a community hub. This project introduces the intimate practice of bathing in an otherwise utilitarian and hostile environment of the dock. A series of saunas, outdoor showers, indoor showers and washrooms are provided to introduce the social practice of gathering through public bathing. The public bath is a social place of relaxation as well as a place of conversation, business discussion, eroticism, crime and politics—the bath is a public forum.¹³⁹

Celsious Williamsburg

Celsious in Brooklyn, New York, is an independent laundromat business co-located with a café. Self-service coin operated laundry machines are provided at ground level, while a small café and seating area are located upstairs on a mezzanine.¹⁴⁰ The program mixture of independent business and self-service business model is one method of encouraging community interaction between café patrons and community members without the means to do laundry, or who choose laundromats out of convenience.

Skid Row Handwashing Stations

The City of Los Angeles implemented 50 mobile handwashing stations in the ‘Skid Row’ area of downtown Los Angeles. Although the actual design of these stations concerns tasks best suited to industrial design, this urban and municipal level of planning aligns with concerns of a lack of handwashing facilities by mutual aid organizers in Edmonton. The issue with mobile handwashing stations is upkeep and ensuring that water and soap are filled. In response to the lack of maintenance of these stations, local Los Angeles based mutual aid groups like LACAN, Street Watch LA and K-Town for All have taken the approach of volunteer-run washing stations to support hygiene practice due to detritus of city-run washing stations.¹⁴¹

Arolsen Public Bath

The Arolsen Public Bath is an amenities building in central Germany designed by Muntinga + Puy Architekten. In this instance, bathing occurs in the small lake that faces the beach and amenities building. With similar sloped conditions to Edmonton’s River Valley, this amenities building project navigates the terrain with stepped massing and a snaking floor layout.¹⁴² This design solution demonstrates an architecture that responds more to existing terrain than the colonial imposition of ‘property’ and sellable plots of land.

139 “Göteborg Bathing Culture / Raumlabor,” *ArchDaily*, October 25, 2015, <https://www.archdaily.com/775677/goteborg-bathing-culture-raumlabor>.

140 Bridget Cogley, “Corinna and Theresa Williams Pair Laundromat and Cafe at Celsious in Brooklyn,” *Dezeen*, June 30, 2018, <https://www.dezeen.com/2018/06/30/corinna-theresa-williams-celsious-laundromat-cafe-williamsburg-brooklyn/>.

141 Lexis-Olivier Ray, “LA Installed Hundreds of Hand-Washing Stations at Homeless Camps. Some Are Drying Up,” *Curbed LA*, April 1, 2020, <https://la.curbed.com/2020/4/1/21203396/homeless-coronavirus-los-angeles-handwashing-stations>.

142 “Public Bath / Muntinga + Puy Architekten,” *ArchDaily*, November 26, 2015, <https://www.archdaily.com/777708/public-bath-muntinga-plus-puy-architekten>.



fig 3.07 Indigenous Peoples Space



fig 3.08 Koganeyu Bath House



fig 3.09 Isfuglen Winter Bathing House



fig 3.10 Split Bathhouse

Indigenous Peoples Space

The Indigenous Peoples Space designed for the Assembly of First Nations (AFN), in collaboration with Inuit Tapiriit Kanatami and the Métis National Council, and partnered with David T Fortin, Wanda Dalla Costa, Eladia Smoke and Elder Winnie Pitawanakwat envisioned a building that represents First Nations, Inuit and Métis Nation culture and history. As part of the 2021 *Scapegoat* journal release, Fortin discussed his past work and the ways that the building rejects the imposition of ‘property’ and boundary lines.¹⁴³

Koganeyu Bath House

The Koganeyu Bath House in Sumida City, Japan, by Schemata Architects is a renovation project of an existing bathhouse that experienced a decline in patronage due to the prevalence of private bathrooms in Japanese households. The *senso*, unlike onsen which are naturally occurring hot springs, are engineered bathhouses that are usually located in urban centers.¹⁴⁴ The urban setting of this *senso* bathhouse offered thought provoking solutions that address the right-to-WASH in social and urban settings.

Isfuglen Winter Bathing House

The Isfuglen Winter Bathing House in Hvidovre, Denmark, by Matters Architects is a community facility for winter bathers with a community room, change rooms and a sauna. Its form echoes Danish harbor working structures, sheds used for boat repair, and storage buildings for fishing equipment.¹⁴⁵ In terms of building vernacular, this project is unlike what will be proposed in this thesis. However, its use of a large wood terrace and wood construction influence the design interventions in this thesis.

Split Bathhouse

The Split Bathhouse in Gansu, China, by BaO Architects is a community bathing space split into halves for men and women. Each half is provided with showers, change rooms, lockers, and washrooms. Connecting the two volumes is a well-lit lobby spaces with seating. The project itself is autonomous and not connected to any existing services: it is powered by solar energy, and water for bathing is sourced from a well 8-metres below.¹⁴⁶ This idea of existing within urban settings, but independent from city infrastructure is an interesting idea to carry forward and aligns with Sendra and Sennett’s ideas of shared infrastructure in *Designing Disorder* and ideas of energy sovereignty discussed in The Red Nation’s *The Red Deal*.

143 “Indigenous Peoples Space,” *David T Fortin Architect*, accessed March 10, 2022, <https://www.davidtfortinarchitect.com/indigenous-peoples-space>.

144 Hana Abdel, “Koganeyu / Schemata Architects,” *ArchDaily*, September 7, 2020, <https://www.archdaily.com/947215/koganeyu-schemata-architects-plus-jo-nagasaka>.

145 Clara Ott, “Isfuglen Winter Bathing House / Matters Architects,” *ArchDaily*, November 20, 2021, <https://www.archdaily.com/972255/isfuglen-winter-bathing-house-matters-architects>.

146 “Split Bathhouse / BaO Architects,” *ArchDaily*, August 20, 2011, <https://www.archdaily.com/162116/split-bathhouse-bao-architects>.



fig 3.11 Guðlaug Baths



fig 3.12 Dennis Design Center

Guðlaug Baths

The Guðlaug Baths are located 40 minutes away from Reykjavik, Iceland, and were designed by BASALT Architects. The outdoor pools offer a safer and warmer bathing experience that faces the Northern Atlantic Ocean. The concrete pools are free to enter and can be considered democratic and truly public spaces. Unique to certain regions, such as Iceland, is the ancient tradition of geothermal bathing.¹⁴⁷ This democratic approach to the right-to-WASH through bathing is relevant for northern climactic conditions and its approach to providing an open architecture.

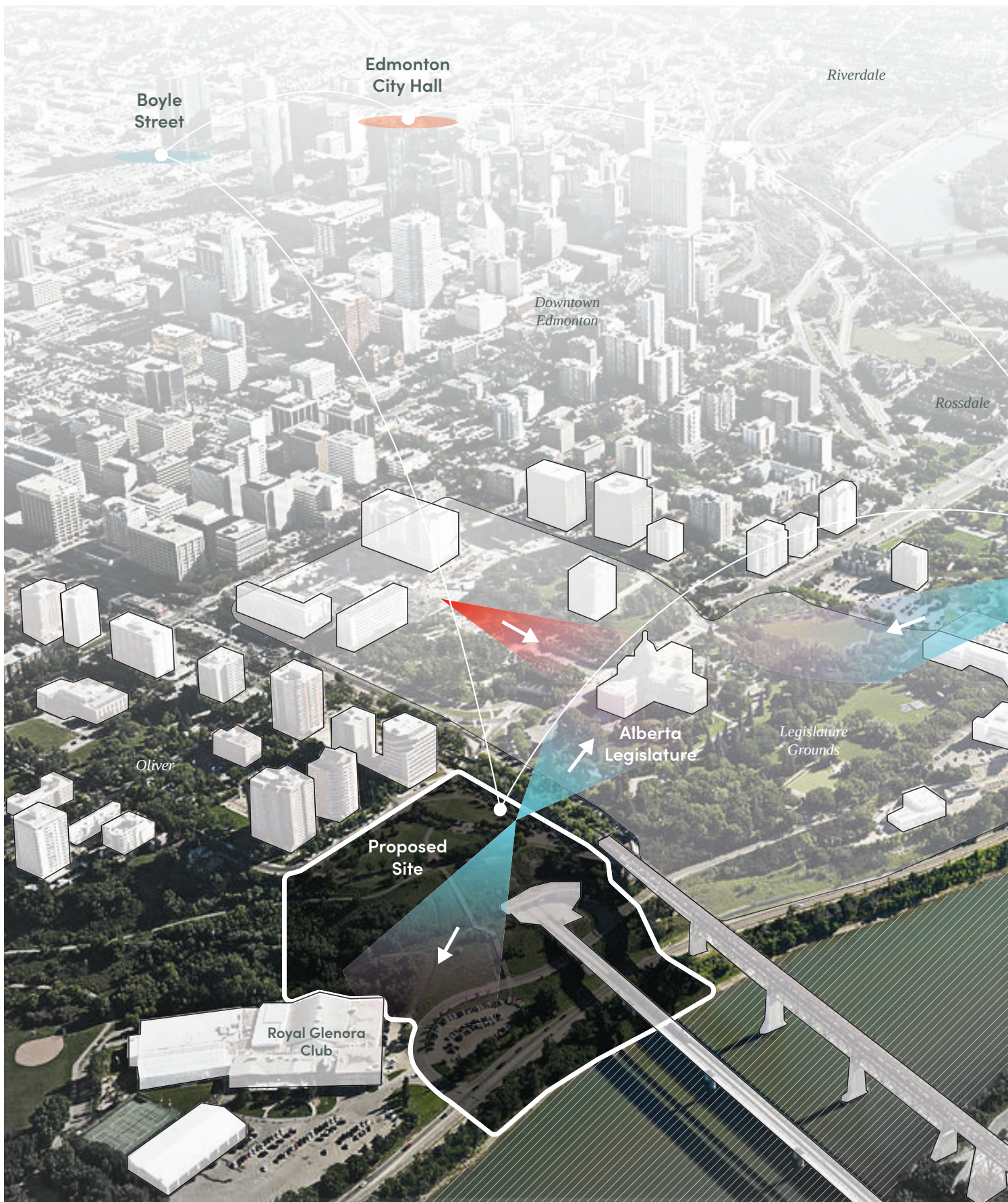
Dennis Design Center

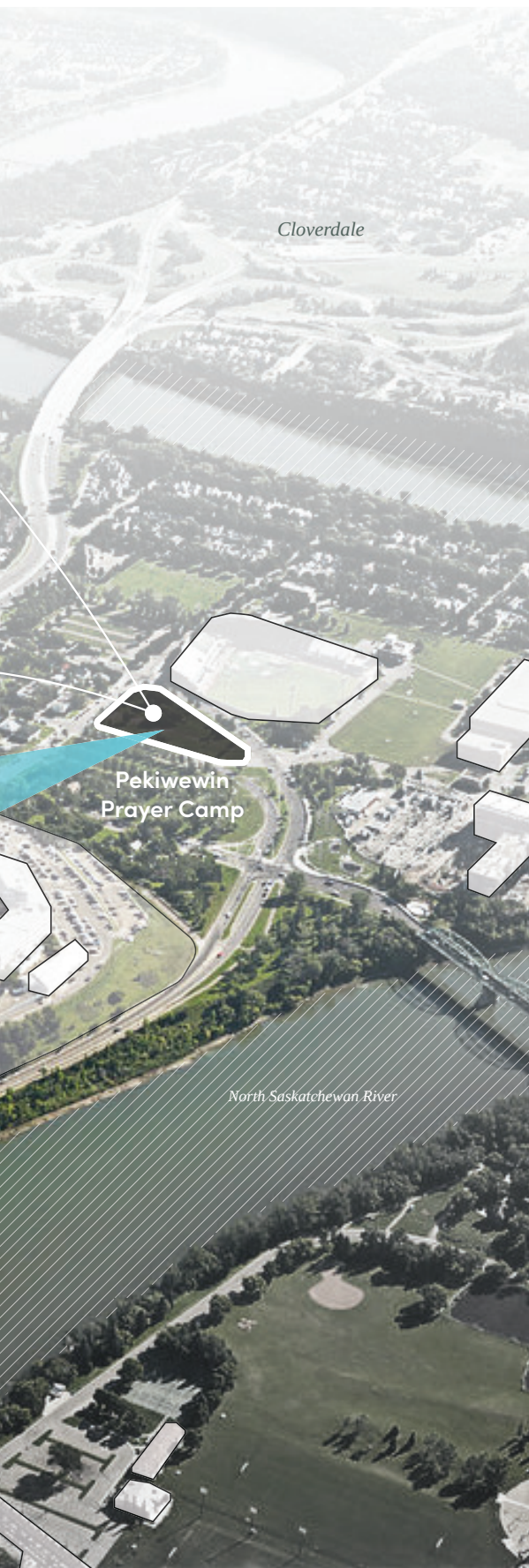
The Dennis Design Center was a temporary urban installation organized by the design collective Bureau Detours, during the 2012 Milan Design Week. A team of architects, designers, artists and craftspeople installed the ‘design center’ to design and produce objects in situ to compliment the real time use of urban space by visitors of the installation. This temporary and responsive approach to urban activation resembles the deployment of mutual aid networks in urban park spaces. This design precedent informed earlier thesis explorations relating to temporary infrastructure and tactical urbanism approaches.¹⁴⁸

Each of these projects approach the right to water, sanitation, and hygiene in different ways. Some design solutions are deeply cultural and concern matters of health — both physical and spiritual — while other solutions respond to symptoms of inequity in the city through informal community channels as a method of crisis response. In urban settings, projects like Koganeyu and Celsius explore unique program pairings to attract patronage and create new socio-spatial conditions and contradictions that redefine washing in public settings. Formally, projects like the Indigenous Peoples Space and Arolsen Public Bath Amenities building demonstrate methods of siting architecture beyond the imposition of ‘property’ and boundary lines. In the case of the Arolsen Public Bath, its snaking layout is organized in relation to the terrain and nearby lake. Each precedent informed design gestures explored in this thesis.

147 Paula Pintos, “Guðlaug Baths / BASALT Architects,” *ArchDaily*, February 8, 2021, <https://www.archdaily.com/956428/gudlaug-baths-basalt-architects>.

148 “Design Design Center - Milan,” *Bureau Detours*, n.d., <https://detours.biz/projects/dennis-design-center-milan/>





3.2 Site Analysis

Constable Ezio Faraone Park is a public park space located in the central neighbourhood of Oliver. The low-to-middle income neighbourhood in downtown Edmonton is in the process of being renamed due to the problematic history of its neighbourhood namesake, Frank Oliver, who was a eugenicist, a government minister and an early settler-squatter who influenced and benefitted from land theft through the formalization of the Michael Deane Survey.¹⁴⁹ The park constructed in memory of slain officer Constable Faraone sits along the high banks of the River Valley and overlooks the Victoria Golf Course, the Royal Glenora Club and the existing light rail transit bridge. The Royal Glenora Club is an example of spatial exclusion in the River Valley where sensitive river bank lands exclusively serve less than 1% of Edmonton's population; first year memberships are upwards of \$18,000.¹⁵⁰ Bordering the eastern edge of the park is a built-up berm for the High Level Streetcar, a seasonal tourist attraction historically used for the Canadian Pacific Railway, which separates the park from the city's primary protest space: the Alberta Legislature (see fig. 3.13).

The site is zoned as a *Metropolitan Recreation Zone* and is flanked by *Urban Service Zones* and *Alternative Jurisdiction Zones*. Municipal zoning and by-law enforced park hours, dictate opening hours between 5:00am and 11:00pm, which limits the ways in which houseless community members rest in public space (see fig. 3.18).¹⁵¹ While the enforcement of park access does not affect the majority of park patrons, it risks criminalizing poverty for anyone seeking respite in public space (see fig. 2.19). Between the Royal Glenora Club, park rangers and law enforcement, nearby residents providing eyes-on-the-street, and security personnel on Legislature Grounds, there are multiple power relations at play on this site. Among all the possibilities for design intervention sites, Constable Ezio Faraone Park was chosen for its proximity to the Legislature and existing encampments in order to expand the network of social spaces of solidarity with houseless people.

149 Dustin Cook, "Oliver Community League launches neighbourhood renaming process, search for project consultant," *Edmonton Journal*, last modified June 9, 2021, <https://edmontonjournal.com/news/local-news/oliver-community-league-launches-neighbourhood-renaming-process-search-for-project-consultant>.

150 Government of Alberta, "Royal Glenora Club Modernization," n.d., <https://majorprojects.alberta.ca/details/Royal-Glenora-Club-Modernization/3873>.

151 Chris Chacon, "Loitering Tickets Will No Longer Be Handed out at Edmonton Transit Facilities," *Global News Edmonton*, July 8, 2021, <https://globalnews.ca/news/8014785/edmonton-loitering-tickets-transit-ets/>.

fig 3.13 Adversarial Project Siting

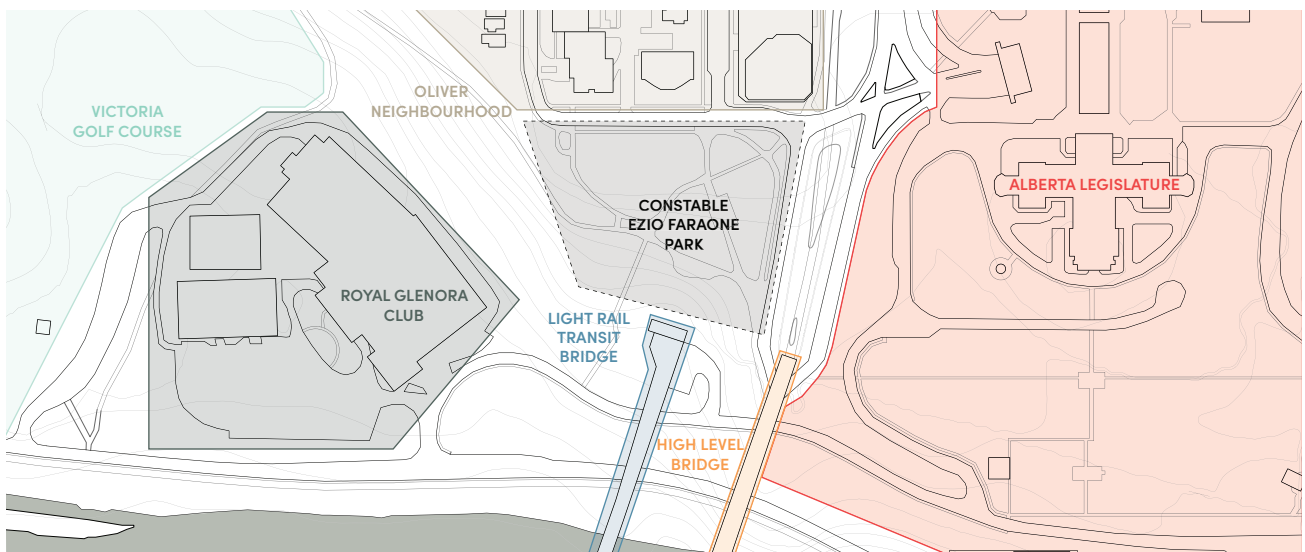


fig 3.14 Site Context

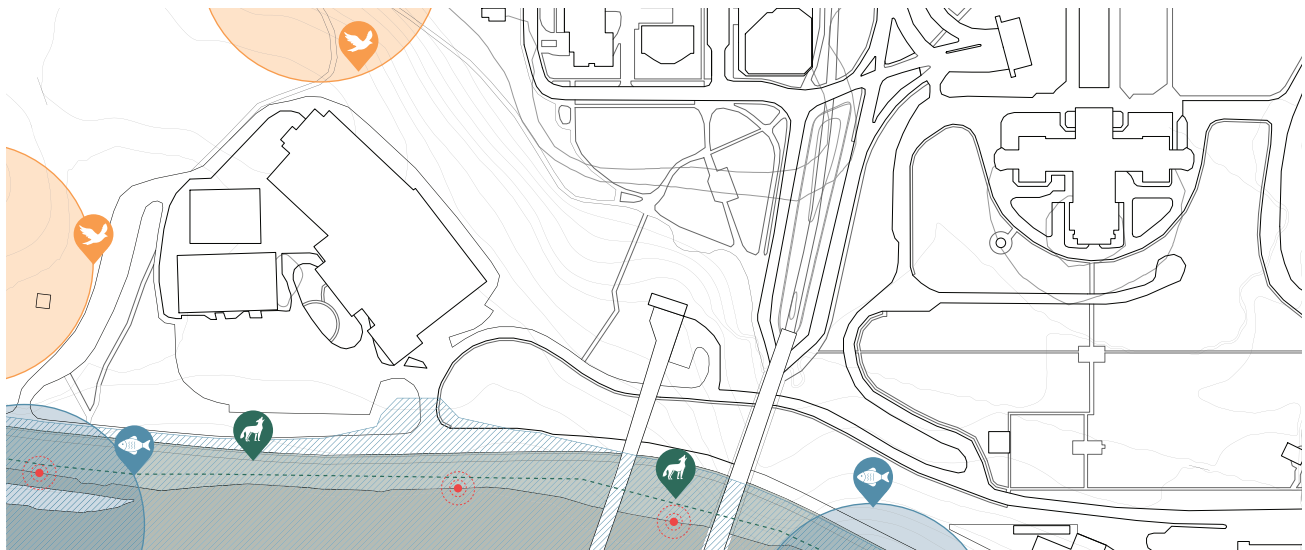


fig 3.15 Habitats and Stormwater Outfall Locations



fig 3.16 Tree Inventory

The relationship between infrastructure, exclusionary land use, protest space, and concentration of rough sleepers in the River Valley led to the selection of this site. In terms of the site's ecological health, it features a diverse tree inventory, but few are naturally occurring wooded areas; those that are, consist of trembling aspen and tall shrubland.¹⁵² Sensitive river habitats for yellow perch, mountain whitefish and lake sturgeon are located downslope from the park site, as well as mammal corridors for longtailed weasel, coyotes, and white-tailed deer. Key bird flyaways are found throughout the river valley for common loon and great horned owls.¹⁵³ A key arterial roadway, River Valley Road, borders the edge of the North Saskatchewan River below and exists within a flood plain (see fig 3.15).¹⁵⁴ This edge is reinforced by maple, balsam and poplar modified woodlands to protect the low banks from eroding. It is also along this edge where numerous stormwater outfalls are found, and where sawmills and steamboat decks were once located (see fig 3.16).

Lending to the politically charged nature of this site is its proximity to early Fort Edmonton trading outposts, RCMP offices, historic trails, and early railway infrastructure (see fig. 3.17). Along the site's southern edge is Fort Way Road, which connects the Alberta Legislature to the North Saskatchewan River. Connecting the northern and southern banks of the river valley is the LRT bridge, which connects Grandin Station to the University of Alberta, and the High Level Bridge. Constructed between 1910 and 1913, the High Level Bridge consists of 28 spans supported by massive concrete piers and steel legs, and it towers 47-metres above water level. Up until 1951, the bridge was used as a transportation corridor for both streetcar and railway traffic, as well as personal vehicles and pedestrians.¹⁵⁵ Today, this city landmark remains a critical transportation corridor that connects downtown Edmonton to the University of Alberta. A total of 4,000 peak daily pedestrians and cyclists travel through Ezio Faraone Park to cross the river on the High Level Bridge multi-use path (see fig 3.18).¹⁵⁶

152 City of Edmonton, "Trees Map," accessed April 22, 2022, <https://data.edmonton.ca/Environmental-Services/Trees-Map/udbt-eiax>.

153 City of Edmonton, "Touch the Water & North Shore Promenades - Concept Design Report," September 2021, https://www.edmonton.ca/sites/default/files/public-files/assets/PDF/TTW_NSP_Final_Concept_Report.pdf?cb=1647005619, 19.

154 City of Edmonton "Touch the Water & North Shore Promenades."

155 City of Edmonton Historic Resource Management Program, "High Level Bridge," accessed April 22, 2022, <https://www.edmonton.ca/public-files/assets/document?path=InfraPlan/HighLevelBridge.pdf>.

156 City of Edmonton, "Eco Counter - Cyclist & Pedestrians," Tableau Public, last updated March 13, 2022, https://public.tableau.com/app/profile/city.of.edmonton/viz/EcoCounter-CyclistPedestrians_15833346762900/EcoCounters.

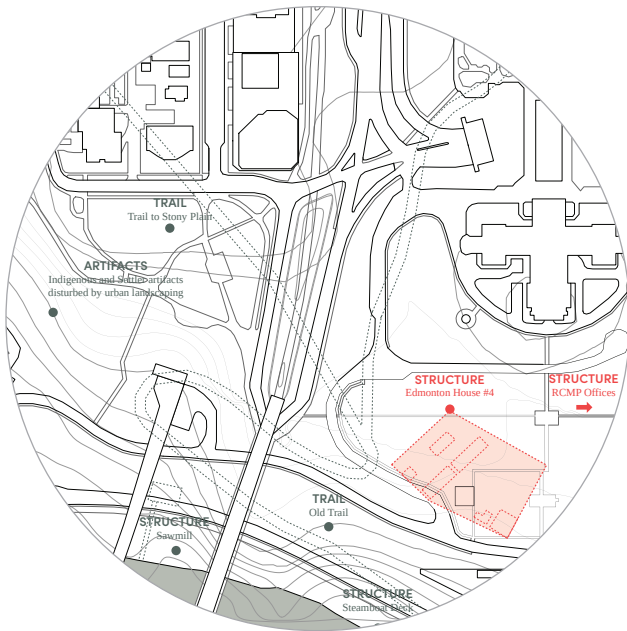


fig 3.17 Site History

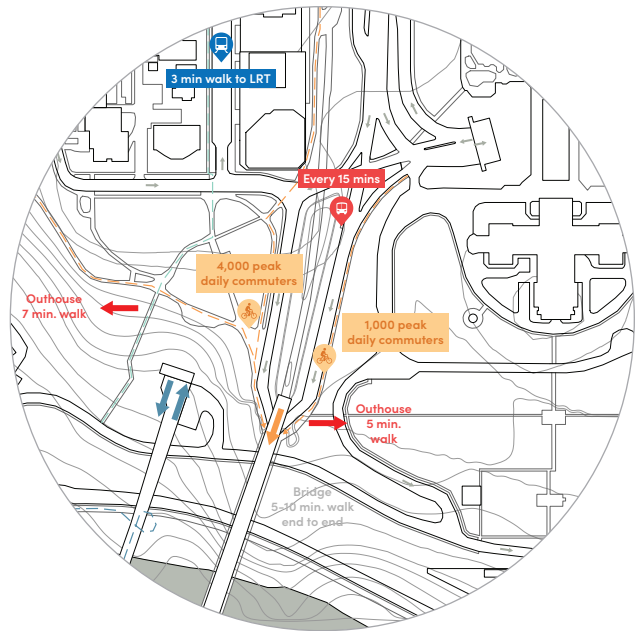


fig 3.18 Connectivity and Proximity to Washrooms

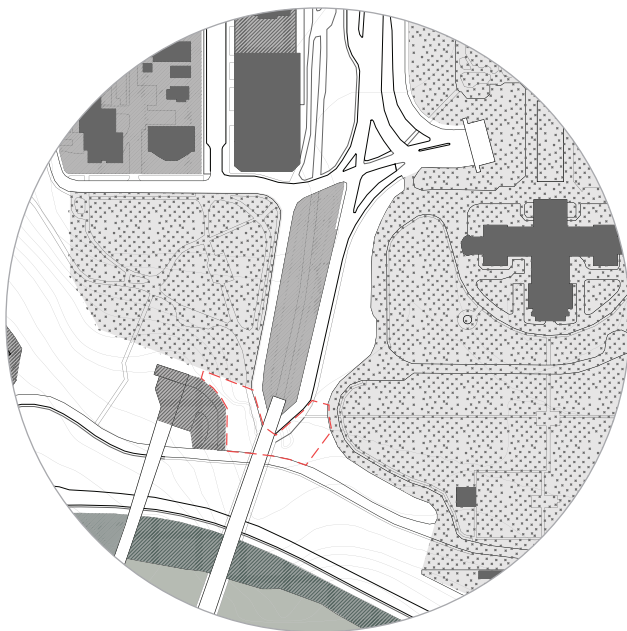


fig 3.19 Private Property & Areas of Surveillance

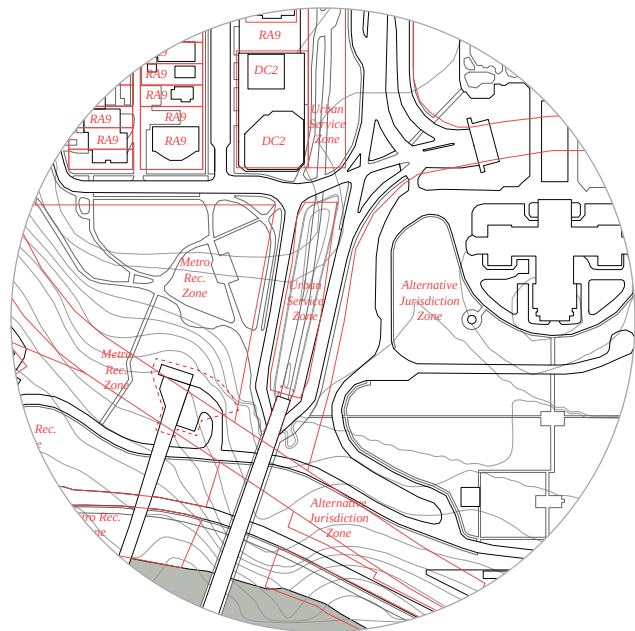


fig 3.20 Lot Lines

Yet, there are only two standalone portable outhouses serving this high traffic transportation corridor (see fig 3.18). This transportation node is popular among fitness enthusiasts and commuters, but the River Valley network is also home to encampments for an estimated 486 houseless community members.¹⁵⁷ As one of Canada's largest continuous stretches of urban parkland, a surprising amount of land is reserved for the exclusive recreation of golfers, with thirteen golf courses along the banks of the river (see fig. 2.1). This demonstrates a level of spatial and recreational exclusivity of the River Valley in the city. In effort to counteract agendas and political positions that disagree with River Valley encampments, this thesis will explore design activism in solidarity with houseless people through five categories (see fig. 3.33).

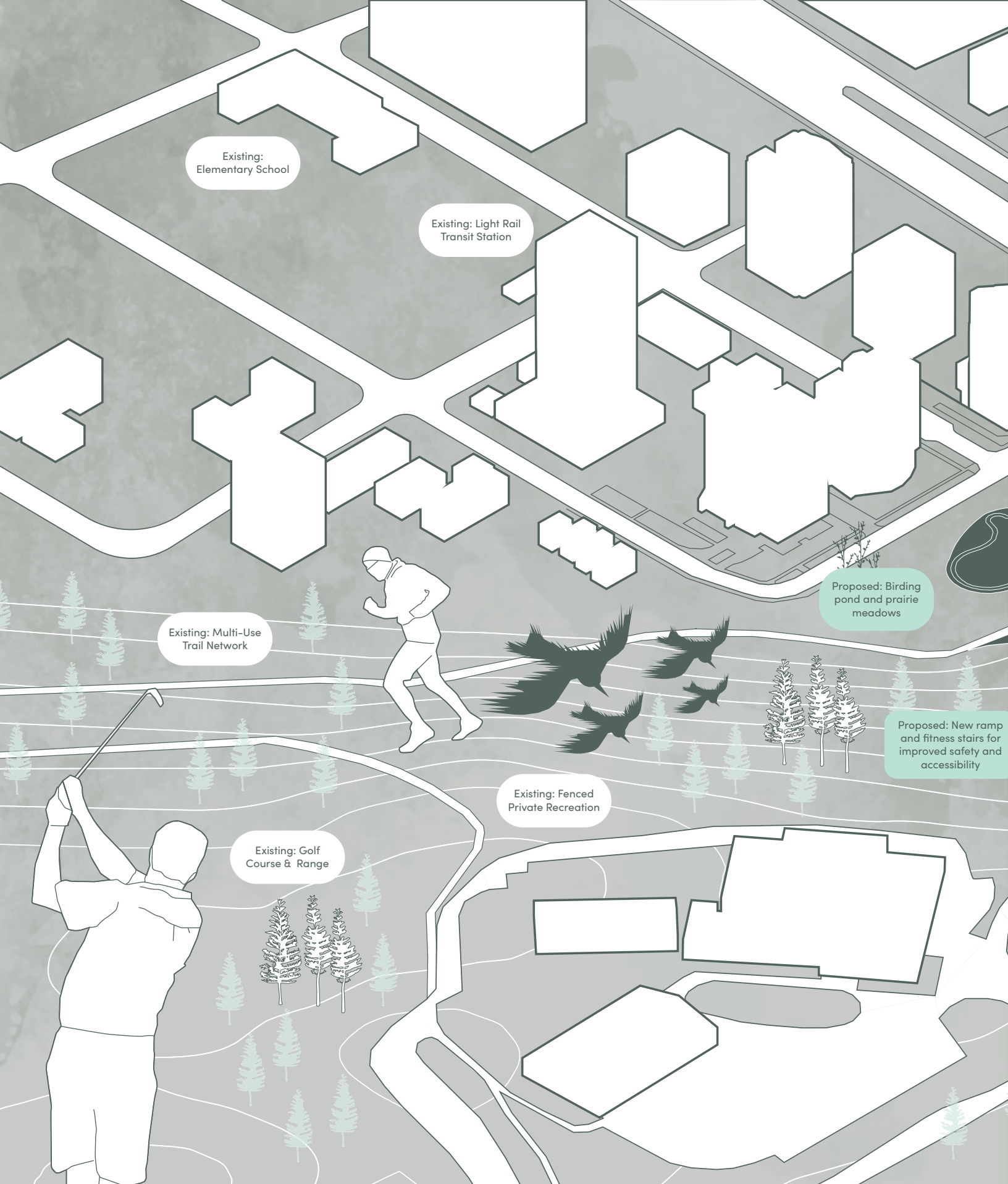
157 Scott Johnston, "486 sleep homeless in Edmonton river valley while shelter beds go unused," *Global News Edmonton*, last modified May 3, 2019, <https://globalnews.ca/news/5234480/edmonton-homeless-sleep-river-valley-beds/>.



fig 3.21 View of the Alberta Legislature from Ezio Faraone Park



fig 3.22 View of the High Level Bridge from Ezio Faraone Park



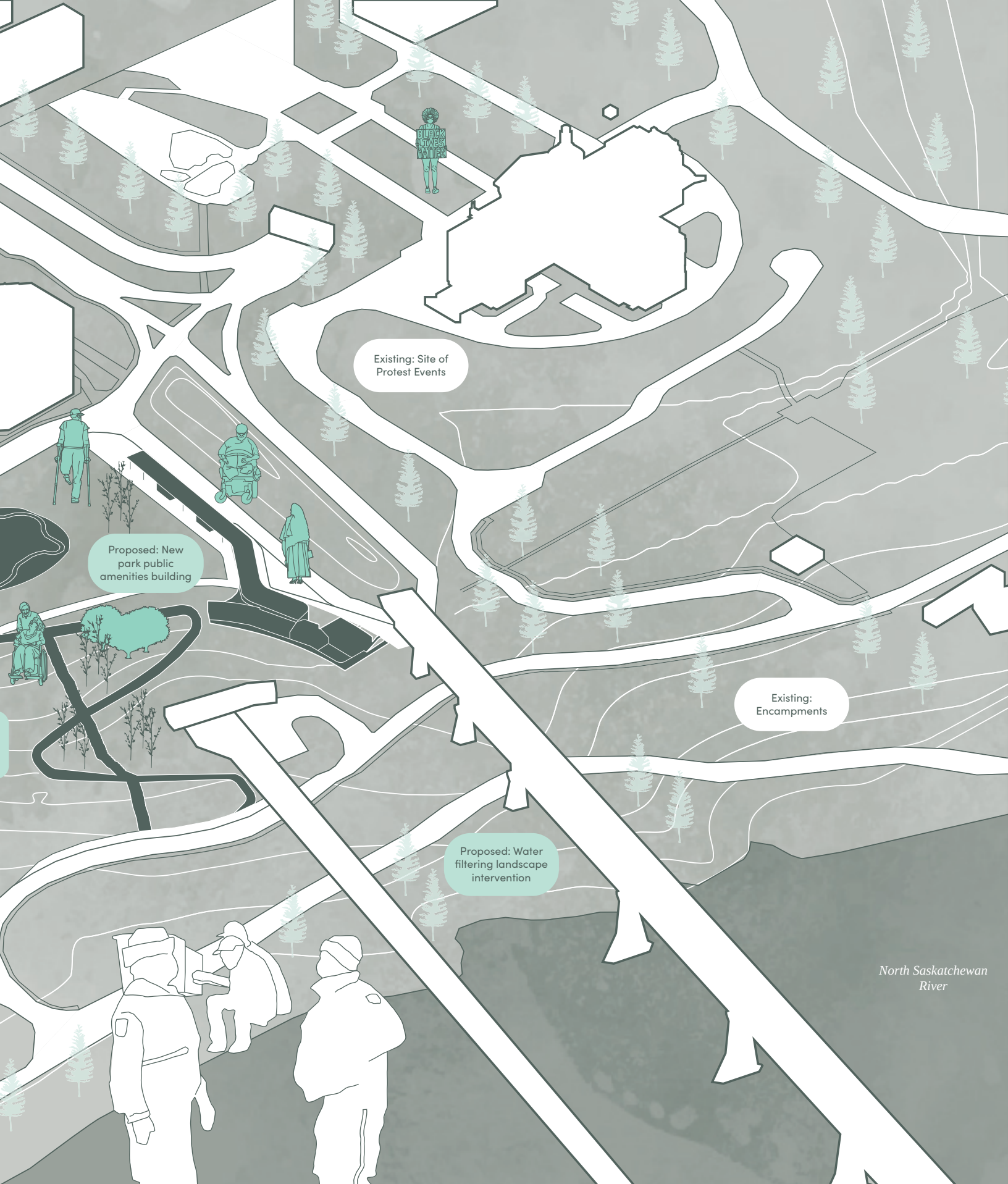


fig 3.23 Existing Conditions and Sites of Intervention

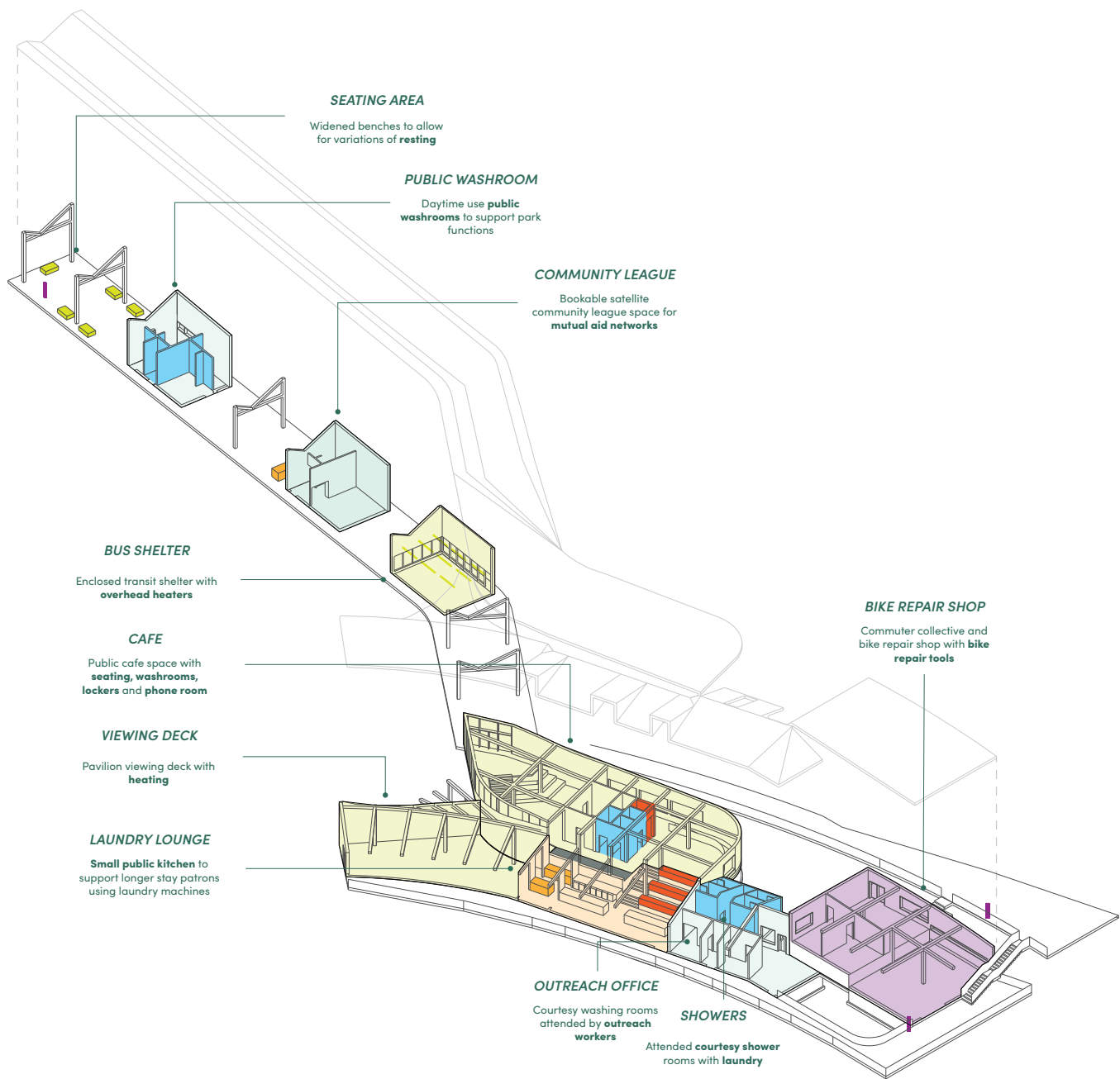


fig 3.24 Programming

Legend

 Eat + Drink	 Rest
 Connect	 Support
 Repair	 Wash

3.3 Program

The human Right-to-WASH is not exclusive to washroom facilities. As Sennett and Sendra have presented, the notion of the open and flexible city where mutual aid thrives is dependent on a shared infrastructure and equal access to basic needs like potable water. Pekiwevin Camp organizers and the three mutual aid organizations interviewed (Bear Clan Patrol, WaterWarriorsYEG and Boots on Ground) have described a need for hygiene and bathing facilities. Lack of hygiene to some rough sleepers is a deterrent for some people accessing emergency shelters, while in other facilities it is a service barrier to accessing supports. Figure 2.31 explores the many meanings of washing, sanitation, and hygiene in relation to architecture, while, Figure 2.32 identifies ways architecture and urban design reinforce the colonial imposition of the city, the grid and ‘property’. The property line is where things end and begin, and in Sennett and Sendra’s work, boundaries are opportunities to embrace exchange between ethno-racial identity, species, and class.¹⁵⁸ In theory, Sennett and Sendra’s ideas for an open city are feasible, but in practice, Figure 2.26 illustrates the ways mutual aid networks and harm reduction encampments have had to adapt to public park space to provide community care to unhoused neighbours in the face of by-law enforcement and policing. The spaces and programs offered by mutual aid networks are temporary and use portable furniture, or existing park structures to provide street outreach. This mobile aspect of mutual aid networks is in part an adaptation to COVID-19 public health recommendations, as well as the enforcement of public park by-laws. Mutual aid’s portability lends to its efficacy as a form of rapid response, therefore, the formalization of mutual aid through architecture may seem counter-productive to its cause and mode of operating.

Thus, the building programs selected for this thesis are informed by existing site uses but clustered in a way to provide a range of available supports and services to houseless people sleeping rough in the River Valley. The intent through program selection is not to ghettoize individuals experiencing houselessness by creating a ‘hub’ for houseless people, but to expand the network of publicly available water, sanitation and hygiene services in a way that is dignified and embedded

158 Pablo Sendra, Richard Sennett, and Leo Hollis, *Designing Disorder: Experiments and Disruptions in the City* (London: Verso, 2020), 30, 65.

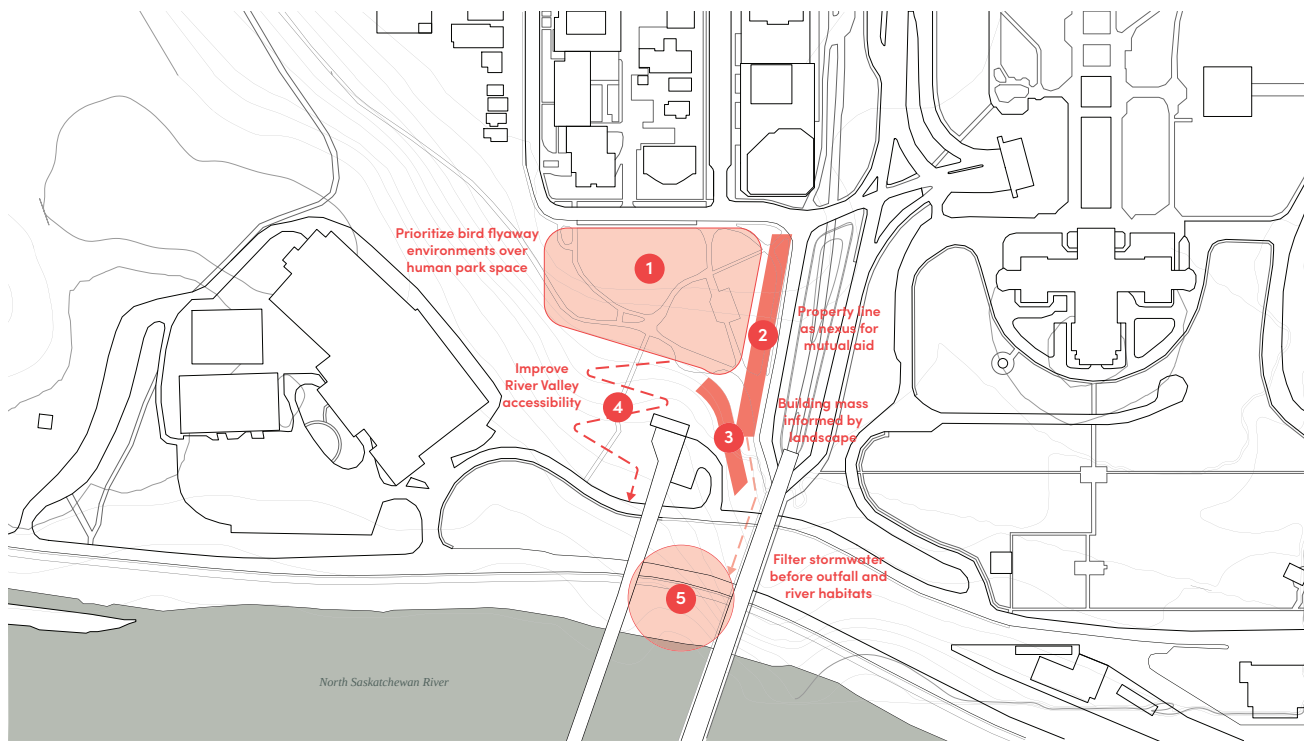


fig 3.25 Proposed Interventions

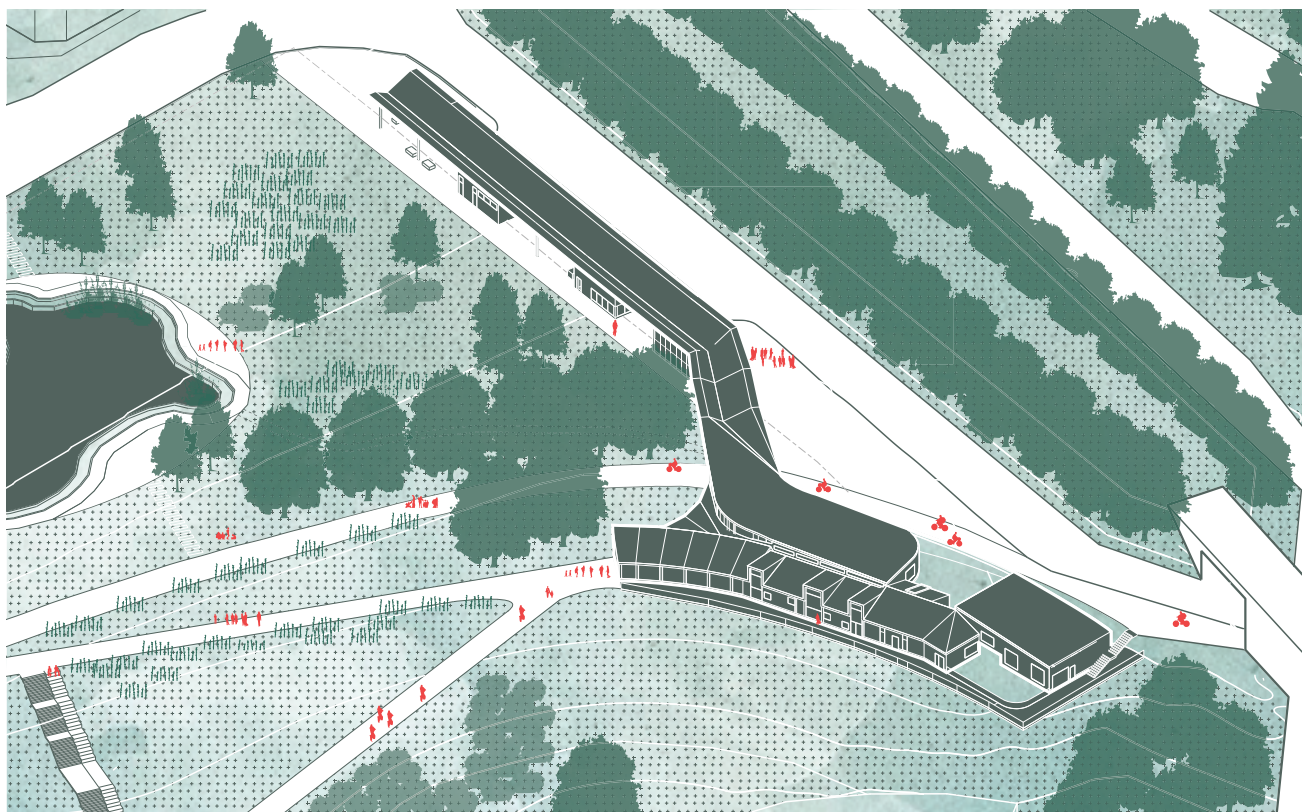


fig 3.26 Massing of Park Amenities Building

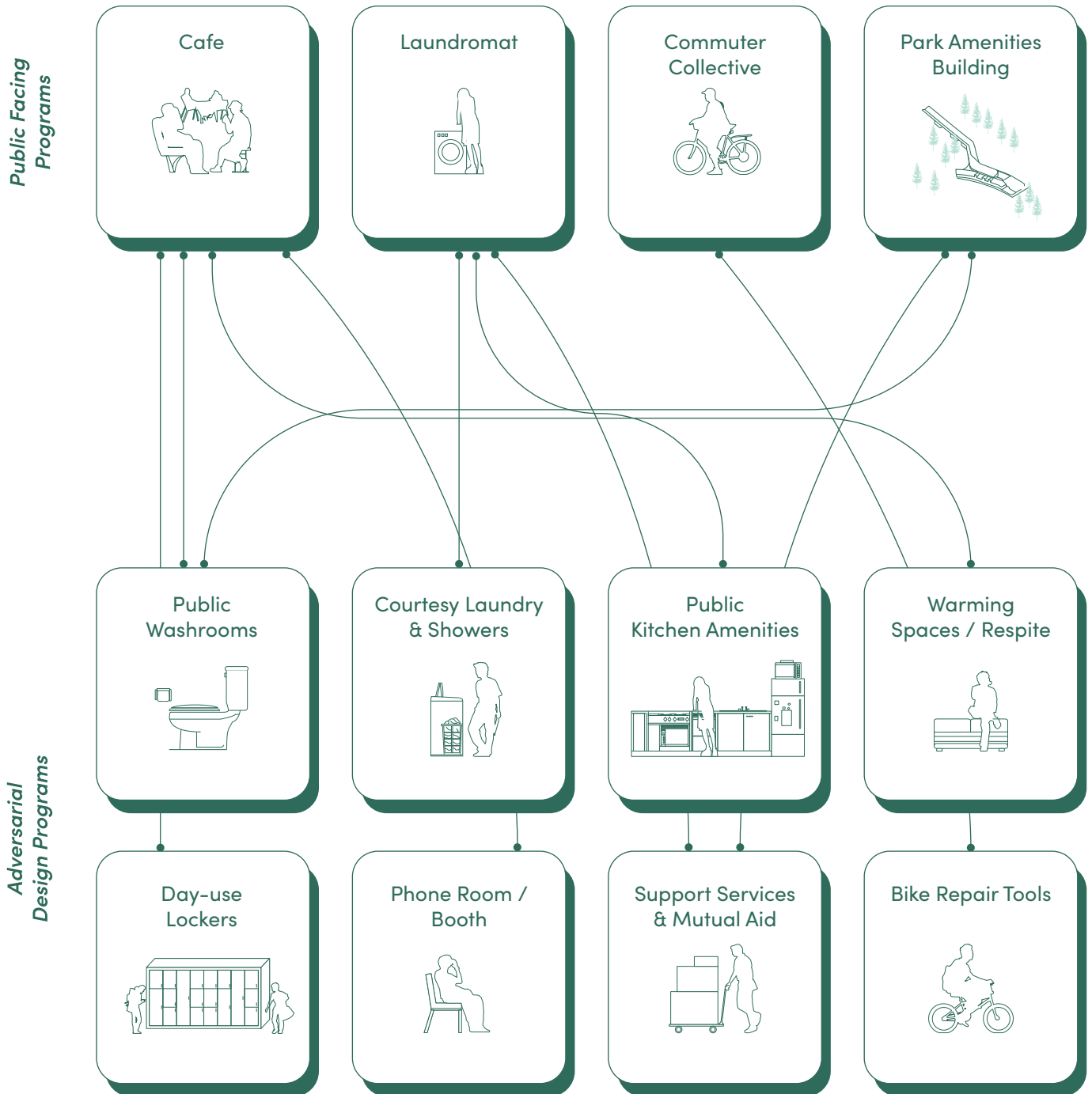


fig 3.27 Adversarial Design Programs Nested Within Public Facing Programs

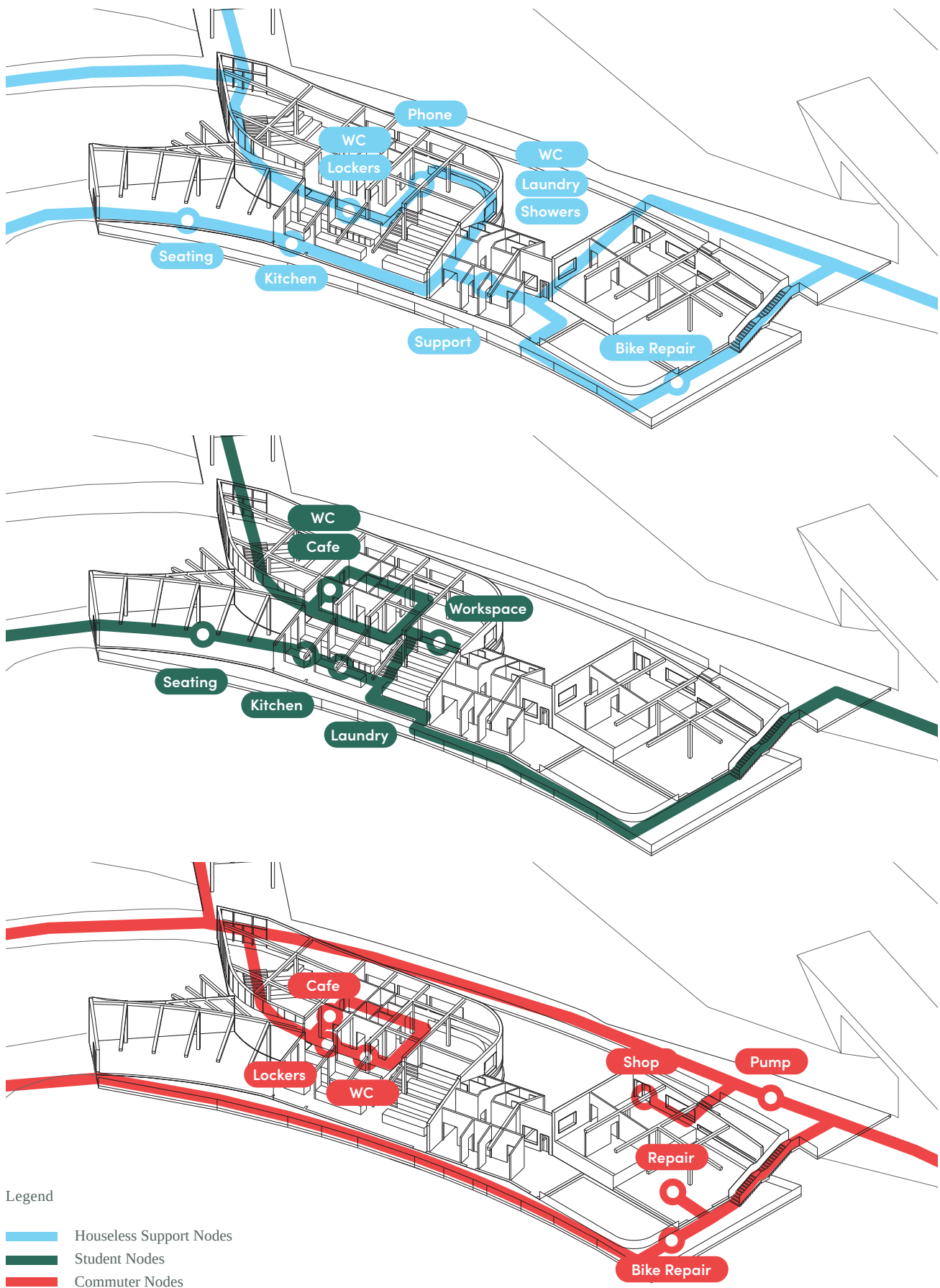


fig 3.28 Building Nodes and Circulation Flows

within other public facing building programs that support the site. This idea of a dual purpose is best described through Robert Rosenberger's notion of *multistability*. A multistable architecture is supported by the postphenomenological belief that objects, or buildings in this case, can take on multiple meanings, and are microcosms of political dynamics or agendas in public space.¹⁵⁹ The clusters of programs shown in figure 3.27 are a form of adversarial design in which supportive spaces and infrastructure for houseless community members are nested within normative public facing programs. This list of harm reducing spaces, beyond housing, was generated from discussions with local mutual aid organizers. By concealing houseless supports in plain sight, the intent is to challenge prevailing political forces of property, park by-law, human (or other species') rights-to-the-city and their rights-to-WASH. By exploring socio-spatial conditions where houseless supports are embedded in a public park pavilion, the building itself is a protest of architectural norms for public washrooms and a protest of property in Edmonton. Embedding dignified opportunities to wash in existing normative forms of building program does not solve houselessness, but it may mitigate harm from the lack of hygiene facilities whose by-products are barriers to shelter systems and supportive services. Figures 3.28 illustrates the potential differences in circulation paths and points of interest among commuters, housed park pavilion visitors, and houseless community members in the park pavilion building.

159 Robert Rosenberger, *Callous Objects: Designs against the Homeless*, (Minneapolis: University of Minnesota Press, 2017), 5, 8.

Multistable Objects

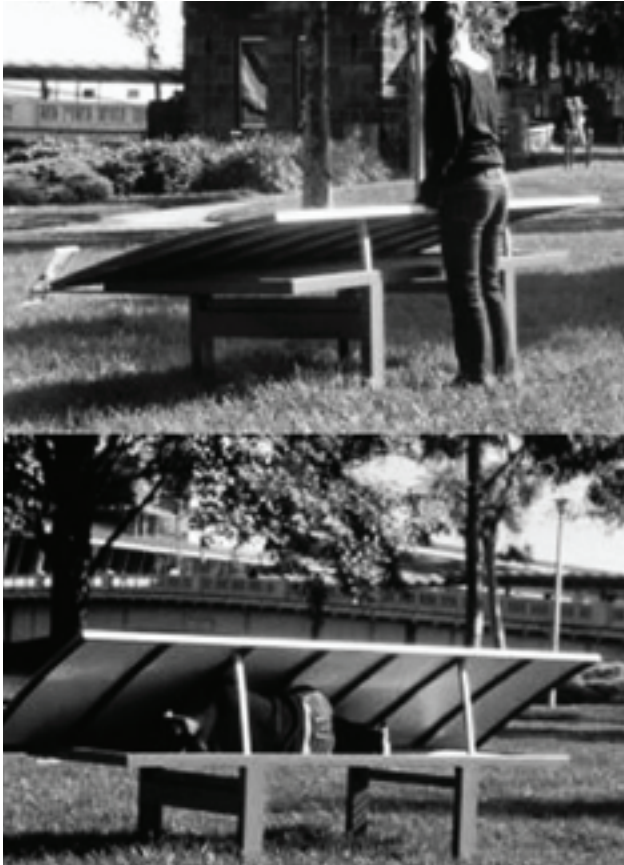


fig 3.29 The Park Bench House by Sean Godsell



fig 3.30 Archisuit by Sarah Ross



fig 3.31 Pay & Sit Park Bench by Fabian Brunsing



fig 3.32 paraSITE Shelter by Michael Rakowitz

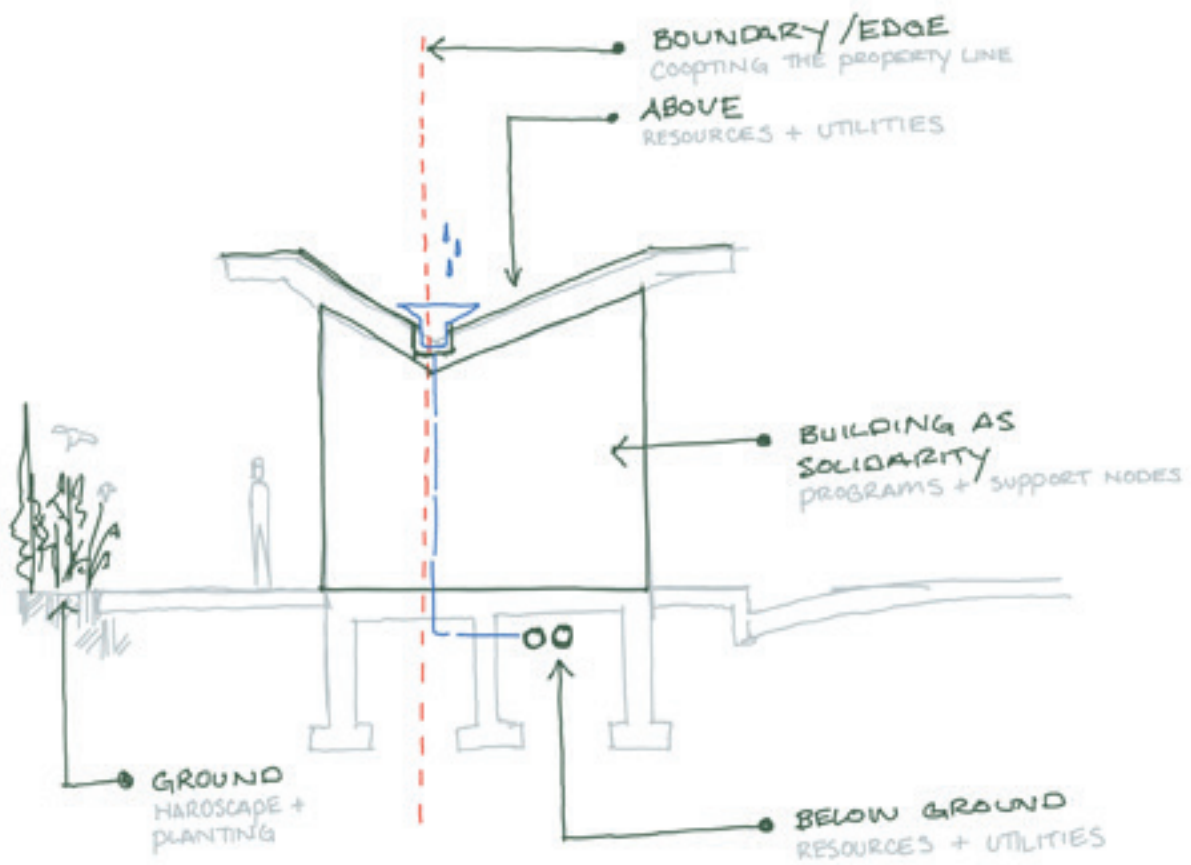


fig 3.33 Designing Disorder

3.4 Architecture as Actant for Protest

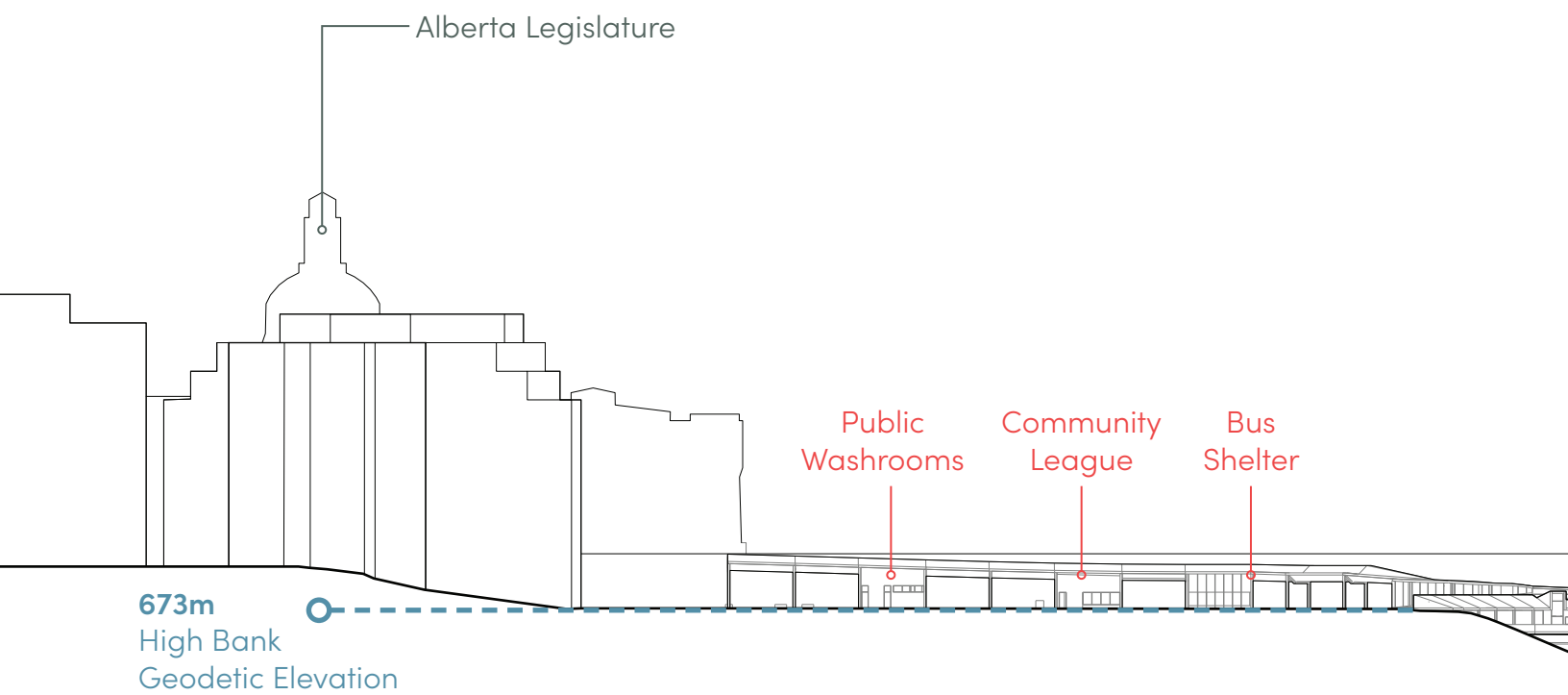
The organization and presentation of the design proposals are grouped into five categories that draw from the work of Richard Sennett and Pablo Sendra in their work *Designing Disorder*: ground, below ground infrastructure, above, boundary, and democratic space/building as solidarity (see fig. 3.33).¹⁶⁰

The proposed design interventions are spread across the site (see fig 3.25). Each intervention explores one or two categories discussed in Sennett and Sendra's work. The first intervention explores the design of an ornamental pond and the replanting of prairie meadow grasses that support bird species and flyaways nearby (see fig. 3.35). This first gesture investigates the 'ground' and its material as tools to enforce, or undermine property (see fig 3.37). A second design gesture examines the property lines of Constable Ezio Faraone Park, and suggests ways to dismantle and undermine boundaries, both physical and invisible, created by the imposition of property. Along this eastern edge of the site, the categories of 'above' ground infrastructure and 'boundary' are explored. The third design proposal and the largest of the interventions probes the categories of 'democratic space' and 'below ground infrastructure' through adversarial programming of a public park pavilion. Interviews with mutual aid network organizers and information gathered from aid network social media accounts helped identify infrastructural gaps and needs among houseless neighbours that extend beyond housing. These include day-use lockers, phone booths, charging stations, and shower facilities as some examples. While some of these services and spaces are available in larger public buildings like malls and libraries, there is an ontological violence experienced by people with vulnerable status when attempting to access 'public' services in privately-owned public spaces.

A fourth design intervention explores the design of a low-slope ramp that connects the site to the existing River Valley trail network. As shown in Figure 3.14, the proximity of golf courses and exclusive recreation clubs to nearby low-to-middle income households suggests that, at some point, urban planning trends preferred wealthy recreation use over the needs of nearby low and middle income residents. In an effort to challenge exclusionary River Valley land use planning, the proposed increased accessibility counteracts ableist and elitist urban environments. Differences in elevation from river water level to the high banks of the valley averages 50-metres, and many parks realistically require personal vehicles, or the mobility and endurance to walk to these park spaces.

The final design intervention explores the category of 'below ground infrastructure' through a landscape intervention that filters surface runoff prior to reentering the existing stormwater outfall system.

160 Pablo Sendra, Richard Sennett, and Leo Hollis, *Designing Disorder: Experiments and Disruptions in the City* (London: Verso, 2020), 29-30, 35, 79-80.



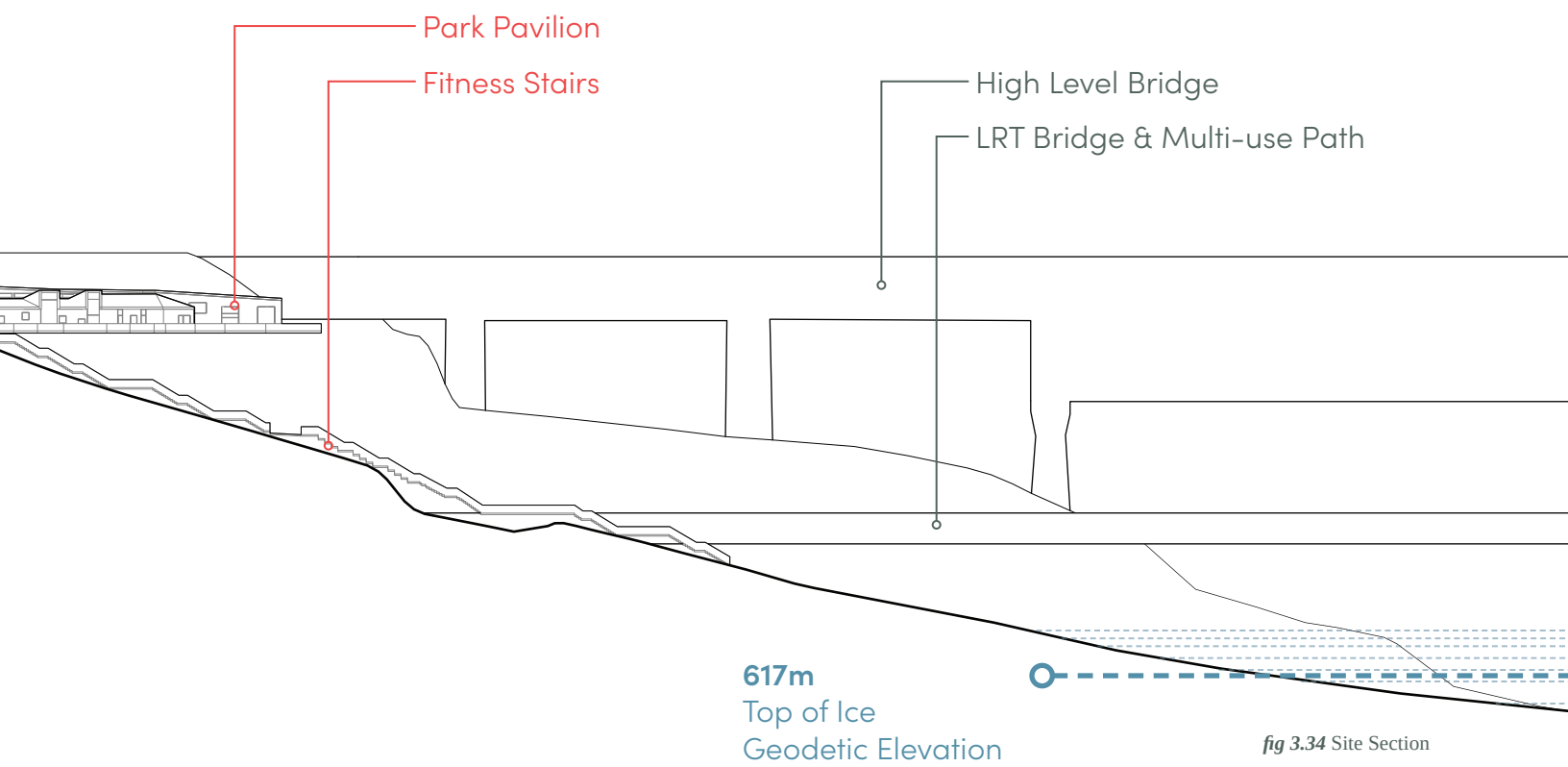
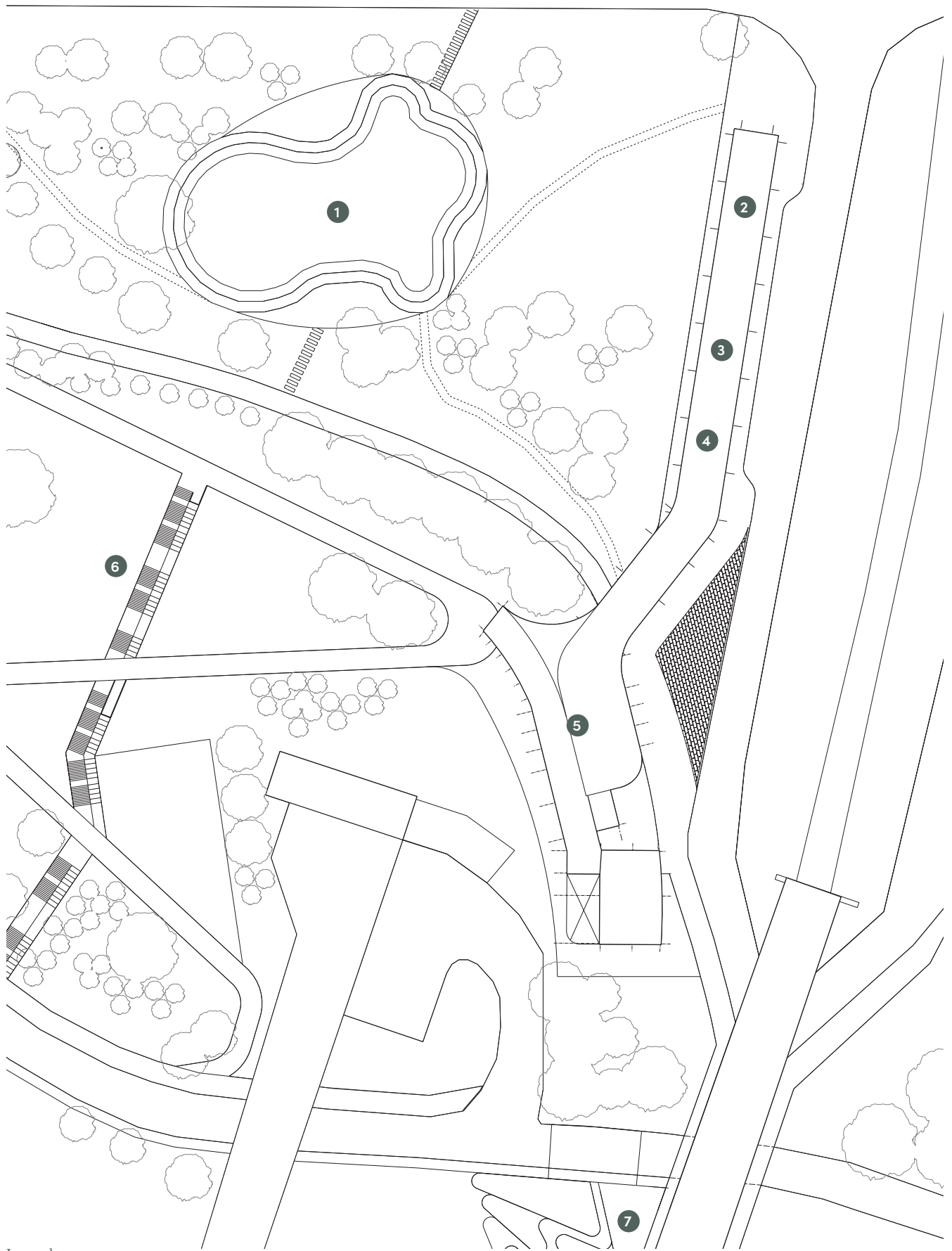


fig 3.34 Site Section



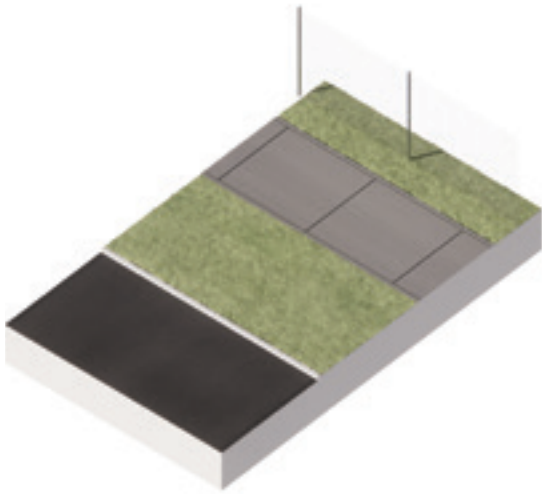
fig 3.35 Tree Inventory & Planting Strategy



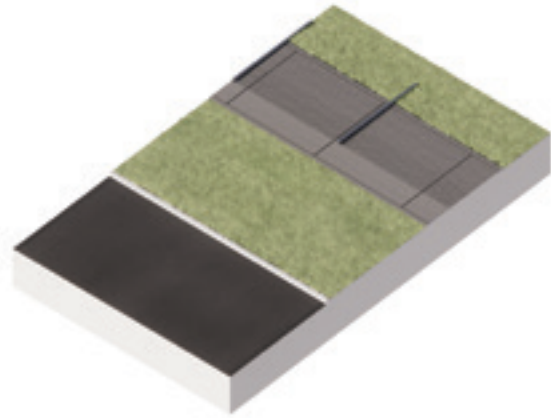
Legend

- | | | | |
|---|------------------|---|------------------------|
| 1 | Ornamental Pond | 5 | Park Pavilion |
| 2 | Public Washroom | 6 | Fitness Stairs |
| 3 | Community League | 7 | Landscape Intervention |
| 4 | Bus Shelter | | |

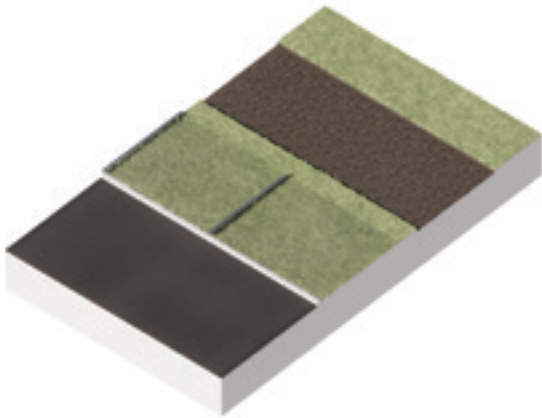
fig 3.36 Overall Site Plan



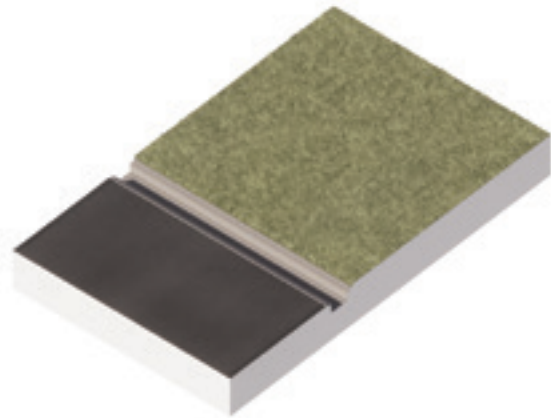
i. Existing hardscape facilitates human movement along the site's edges and fencing limits access to the centre of property



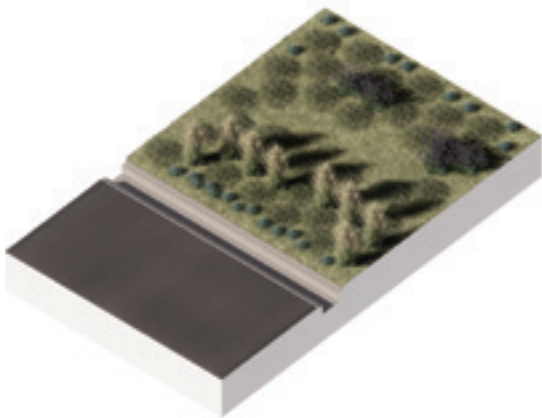
ii. Existing fencing is toppled over to allow for the movement of mammals with habitats in the river valley



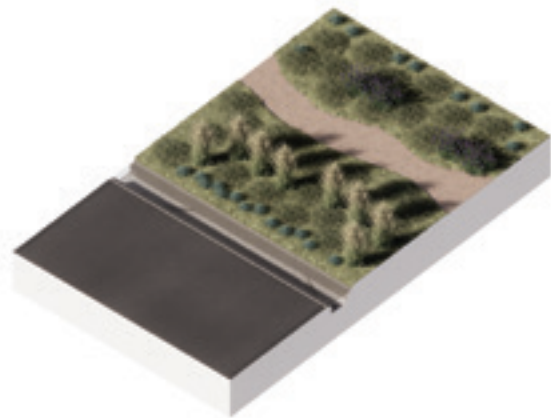
iii. Hardscape is removed to discourage pedestrians and commuters from cutting across planted areas with vegetation for nesting birds



iv. Trough is formed to facilitate the movement of water along the site's edges, rather than that of people.



v. Hardy local plants and prairie meadow grasses are introduced to support nesting birds and mammals in the river valley



vi. Crushed sandstone gravel from the Alberta Legislature's crumbling and broken masonry blocks pave paths for visitors to walk on

fig 3.37 Disintegrating Physical Markers of Property



fig 3.38 Sandstone Repairs at the Legislature

Ground

Sennett and Sendra's work discusses a flexible urban infrastructure that resists the rigidity and homogeneity of post-war urban planning through a process of sorting and segregating. In their work, *Designing Disorder*, they argue that the city can be designed to be resilient to future crises by offering flexible urban infrastructure and tools to support a complex, diverse and loose city environment – that can be nurturing if people so choose to use the tools and infrastructure in that way. Design from the ground up – like protest-informed design decisions – can, in Sennett and Sendra's view, contest top-down decision making and support alternative land use planning. In doing so, communities are provided greater agency and the city is thus informed by multiple solidarities that resist and agree with one another. Although I agree with many of Sennett and Sendra's ideas in *Designing Disorder*, my reading of their ideas on the "open city" are human-centered and can perhaps comment more on the imposition of human over animal habitats. In response, the first design gesture is to eliminate human-focused design elements in place of landscape features and plantings that benefit other living beings over human park-goers (see fig 3.37). Urban design and planning enforce social control of human land use, but also other living beings, and I believe to design in disorder not only requires a shift to challenge human land use systems but also its imposition on land use of other living beings.¹⁶¹

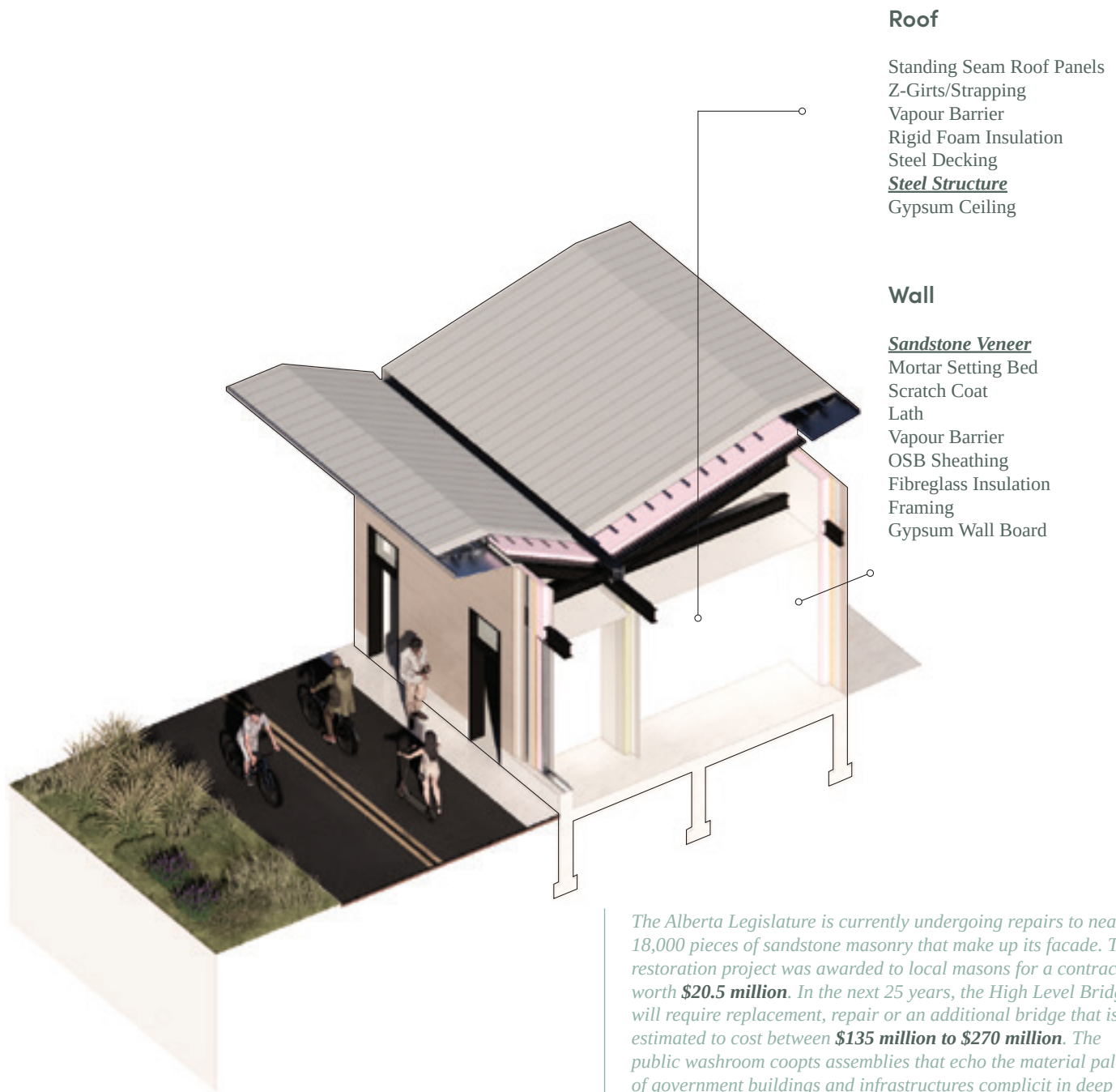
The first design gesture proposes a park space that prioritizes bird flyaway and bird nesting over human-centered park landscaping. In place of large areas of sod, prairie meadow grasses and hardy bird nesting plants such as blue fescue grass and reed grasses are proposed to reintroduce local grasses and divert human-focused land use to the site's east edge. Replacing the existing areas of lawn is an ornamental pond to attract ducks along with additional trees to densify the existing tree inventory on site. Existing hardscape paths are replaced with crushed gravel paths. The change from hardscape to crushed gravel establishes a threshold transition from 'modern' streetscape to a natural unmanicured park space. The so-called Oliver neighbourhood in Edmonton is a low-to-middle income neighbourhood in the city. The integration of an ornamental pond serves both bird flyaway zones and introduces a relationship to water that resists the existing exclusionary land use and zoning practices of Edmonton's River Valley, where wealthy Edmontonians are ones that live along the River Valley, or in close proximity to water with desired views of natural landscapes. This first gesture explores land strategies that prioritize fauna and challenge exclusionary urban patterns with respect to the access and visibility of water. The removal of lawn space is a priority of this intervention. When looking at the Alberta Legislature grounds as an example, the building is an architectural symbol of power, but its monumentality is reinforced by the extensive amount of open space it sits on. Roughly 55% of the grounds area is lawn, while the remaining 45% contains hardscaping or buildings. The Legislature grounds establishes power through the excess of manicured open space that it commands. Power in this case is exemplified through the display of land acquisition and the distance one must traverse to reach the building.

161 Pablo Sendra, Richard Sennett, and Leo Hollis, *Designing Disorder: Experiments and Disruptions in the City* (London: Verso, 2020), 9, 20-21, 40, 45.





fig 3.39 Ornamental Pond



*The Alberta Legislature is currently undergoing repairs to nearly 18,000 pieces of sandstone masonry that make up its facade. The restoration project was awarded to local masons for a contract worth **\$20.5 million**. In the next 25 years, the High Level Bridge will require replacement, repair or an additional bridge that is estimated to cost between **\$135 million to \$270 million**. The public washroom coopts assemblies that echo the material palette of government buildings and infrastructures complicit in deep histories of harm, but for programs and spaces that attempt to mitigate harm among houseless communities.¹⁶²*

fig 3.40 Isometric Section of Public Washroom.

Boundary/Edge

Borders, edges and boundaries are where spaces end and where different groups interact. The boundary acts as a closure and its treatment as a closure diminishes exchange between different communities by their distinctions ethno-racial, socioeconomic or human versus non-human.¹⁶³

The existing edges of the site formalize the spatial experience of property through the imposition of the street grid, sidewalks, fencing, hardscape and engineered terrain. Edges throughout the proposed design intervention are challenged by eliminating the hardscaped north edge, which typically facilitates human movement across the site (see fig. 3.37). In its place, bird nesting grasses are planted where hardscape exists, and the transition from street to sidewalk hardscape using curbs are replaced by a trough that prioritizes the movement of water around the site rather than human movement. Another design approach that contests the settler colonial imposition of site boundary is the cooption, or subversion, of the property line itself. Rather than eliminate architectural and urban design tools to formalize boundaries like hardscape, fencing, or building, the property line is explored as a nexus, or ecotone, where unhoused individuals who are spatially excluded in some manner are provided basic supports and access to water, sanitation and hygiene along the ‘property line’ or ‘lot line’. Published articles, street level accounts of events from social media and interviewed mutual aid networks substantiate the ontological and spatial violence facing houseless community members through park by-law enforcement, and the security and surveillance of private property. There is a double standard to the city that limits movement and access of spaces and public places by unhoused community members that create a city of invisible boundaries. In acknowledgement of these invisible boundaries that exclude unhoused community members from the participation and access of public space, a series of pavilions and programs are deployed along the property line in an effort to complement existing site uses, but also work to broaden the network of infrastructure available to unhoused community members. The site edge coopts the ‘property line’ by existing within the boundaries of the street grid, but programmed in a way that opposes existing systems of spatial exclusion.

162 Lauren Boothby, “Council weighs options to renew or replace Edmonton’s 109-year-old High Level Bridge,” *Edmonton Journal*, April 10, 2022, <https://edmontonjournal.com/news/local-news/council-weighs-options-to-renew-or-replace-edmontons-109-year-old-high-level-bridge>.; Government of Alberta, Kim Trynacity, “Big cost and challenges to major restoration of Alberta Legislature,” *CBC News*, August 11, 2019, <https://www.cbc.ca/news/canada/edmonton/big-cost-and-challenges-to-major-restoration-of-alberta-legislature-1.5242169>.

163 Pablo Sendra, Richard Sennett, and Leo Hollis, *Designing Disorder: Experiments and Disruptions in the City* (London: Verso, 2020), 29.

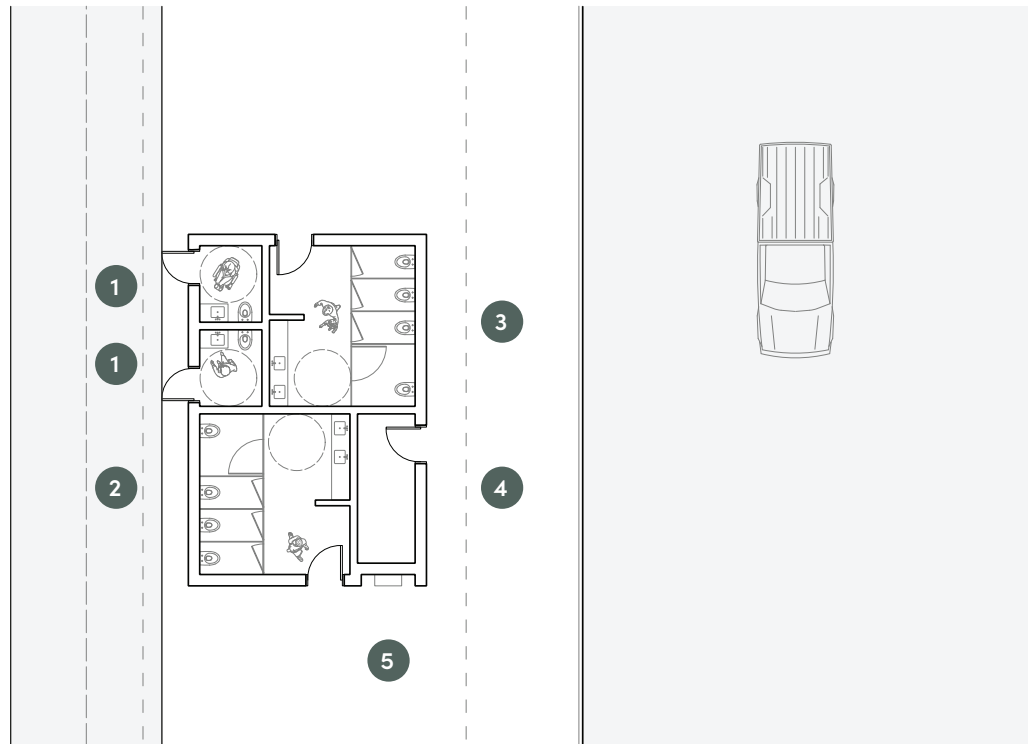
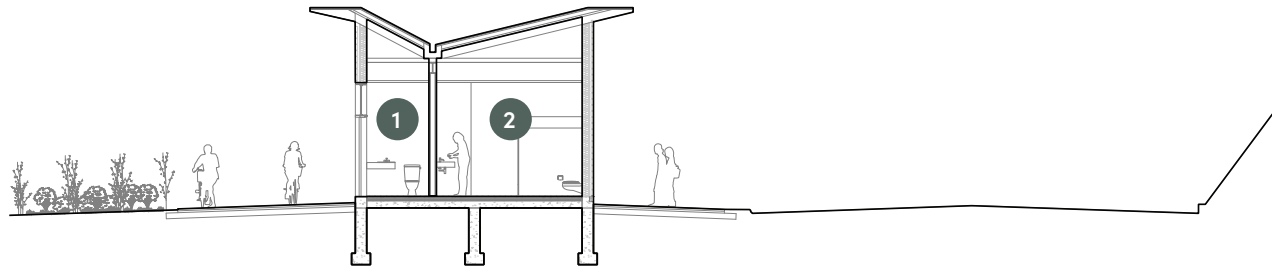
Constable Ezio
Faraone Park

Multi-use
Path

Public Washrooms

109 St. NW (Southbound)

Berm



Legend

- | | |
|---------------------------|--------------------------------|
| 1 Gender Neutral Washroom | 4 Service Room |
| 2 Men's Washroom | 5 Water Fountain / Bottle Fill |
| 3 Women's Washroom | |

fig 3.41 Plan and Section of Public Washroom

A new public washroom facility is proposed to support existing park functions and the high traffic nature of the site among commuters. Increasing permanent and adequate public washroom facilities at this location supports improved washroom access for all populations, but the integration of a public washroom on this site expands the network of available washroom, sanitation, and hygiene facilities for the more than 450 individuals who camp, or seek respite, in Edmonton's River Valley. Interview participants shared on-the-ground accounts of multiple public washroom closures and an observed increase in public urination and human waste in public spaces.¹⁶⁴ A second building placed on the property line for the so-called Oliver Community League is a small office designed as a satellite office and bookable community space for one of the 160 community league buildings in Edmonton. The community league is a building type that has been incorporated into Edmonton's neighbourhood planning since 1920, operating as spaces for community members to organize, address community issues and lobby for, or against development.¹⁶⁵ From interviews with local mutual aid organizers in Edmonton, community league spaces are typically reserved for property owners and housed community members. Yet, some centrally located community leagues have opened their storage spaces, halls and commercial kitchens for use by mutual aid networks to prepare and store meals before distribution to unhoused neighbours.¹⁶⁶ The integration of this program type, which is very specific to Edmonton's urban planning strategy, provides an unofficial but potential space for mutual aid networks to operate without formalizing the temporary and ad hoc nature of mutual aid networks through built form. Bookending the eastern lot line is a relocated transit stop. The existing stop is located on the east side of the mound, and its relocation allows for a transit stop location with increased trail connectivity, while offering a heated place of respite from harsh winter conditions through overhead radiant heaters.

Together, these programs are intended to undermine one of the primary tools used to exclude vulnerable populations. Although washrooms, community leagues and heated transit stops are citywide building typologies, when grouped together they have the potential to act as a nexus of harm reducing infrastructures for unhoused people. Each program is justified from existing site functions, but integrated with a subversive design intent that embeds interim harm reducing design solutions in plain sight.

164 Rebecca Reid and WaterWarriorsYEG, interviewed by Robert Maggay, January 12, 2022.

165 Ron Kuban, *Edmonton's Urban Villages: The Community League Movement*, 1st ed. (Edmonton, AB: University of Alberta Press, 2005), 31.

166 Rebecca Reid and WaterWarriorsYEG, interviewed by Robert Maggay, January 12, 2022.

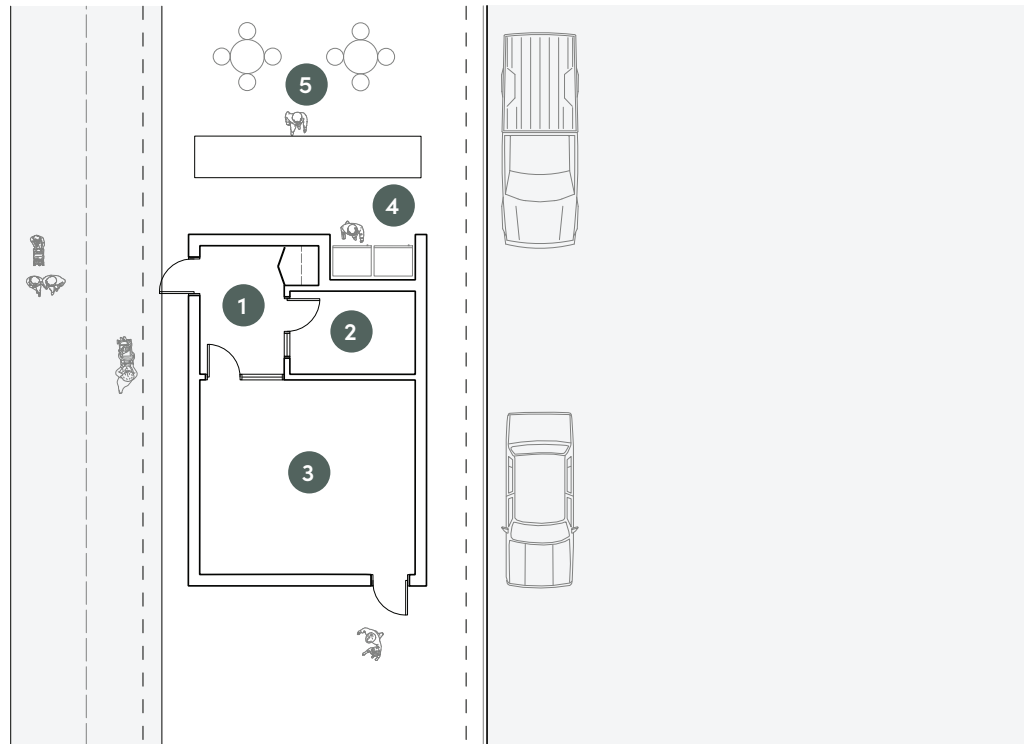
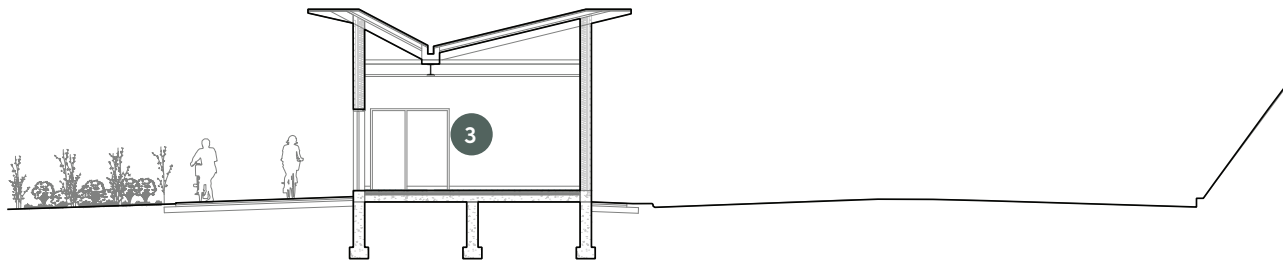
Constable Ezio
Faraone Park

Multi-use
Path

Public Washrooms

109 St. NW (Southbound)

Berm

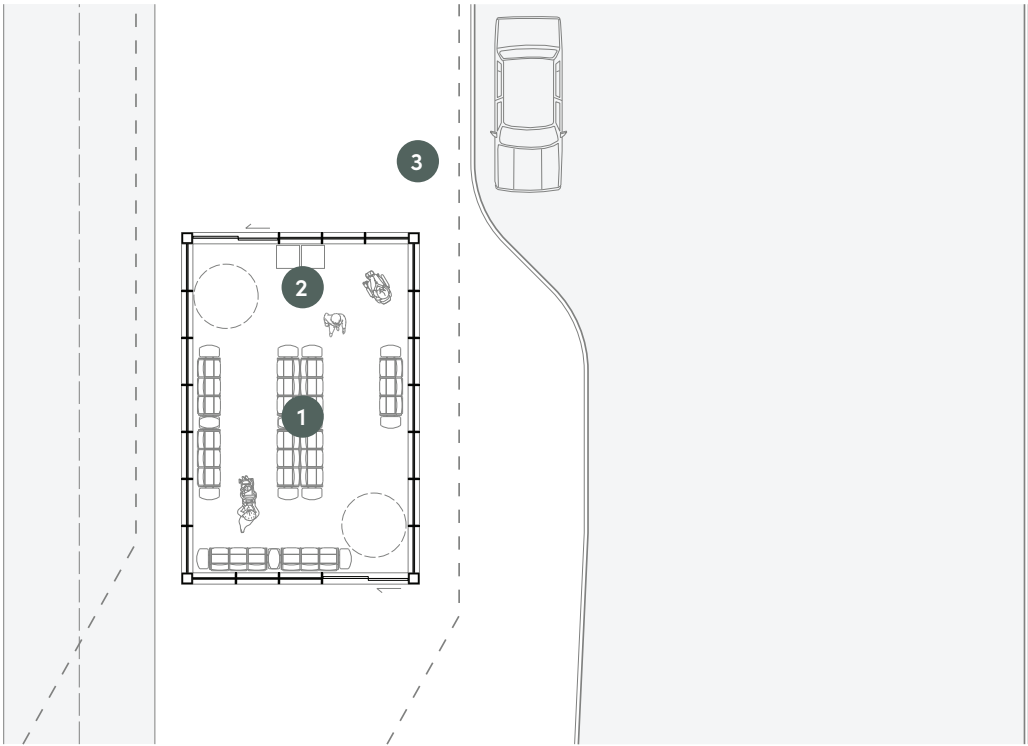
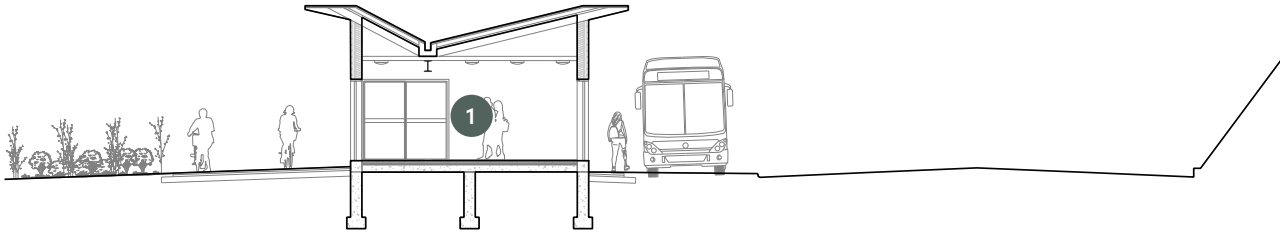


Legend

- | | | | |
|---|-------------------------|---|------------------------|
| 1 | Entry | 4 | Community Fridge |
| 2 | Office | 5 | Counter & Seating Area |
| 3 | Bookable Community Room | | |

fig 3.42 Plan and Section of Satellite Community League Office

Constable Ezio Faraone Park Multi-use Path Public Washrooms 109 St. NW (Southbound) Berm



Legend

- 1 Seating Area
- 2 Public Phones
- 3 Transit Stop

fig 3.43 Plan and Section of Bus Shelter

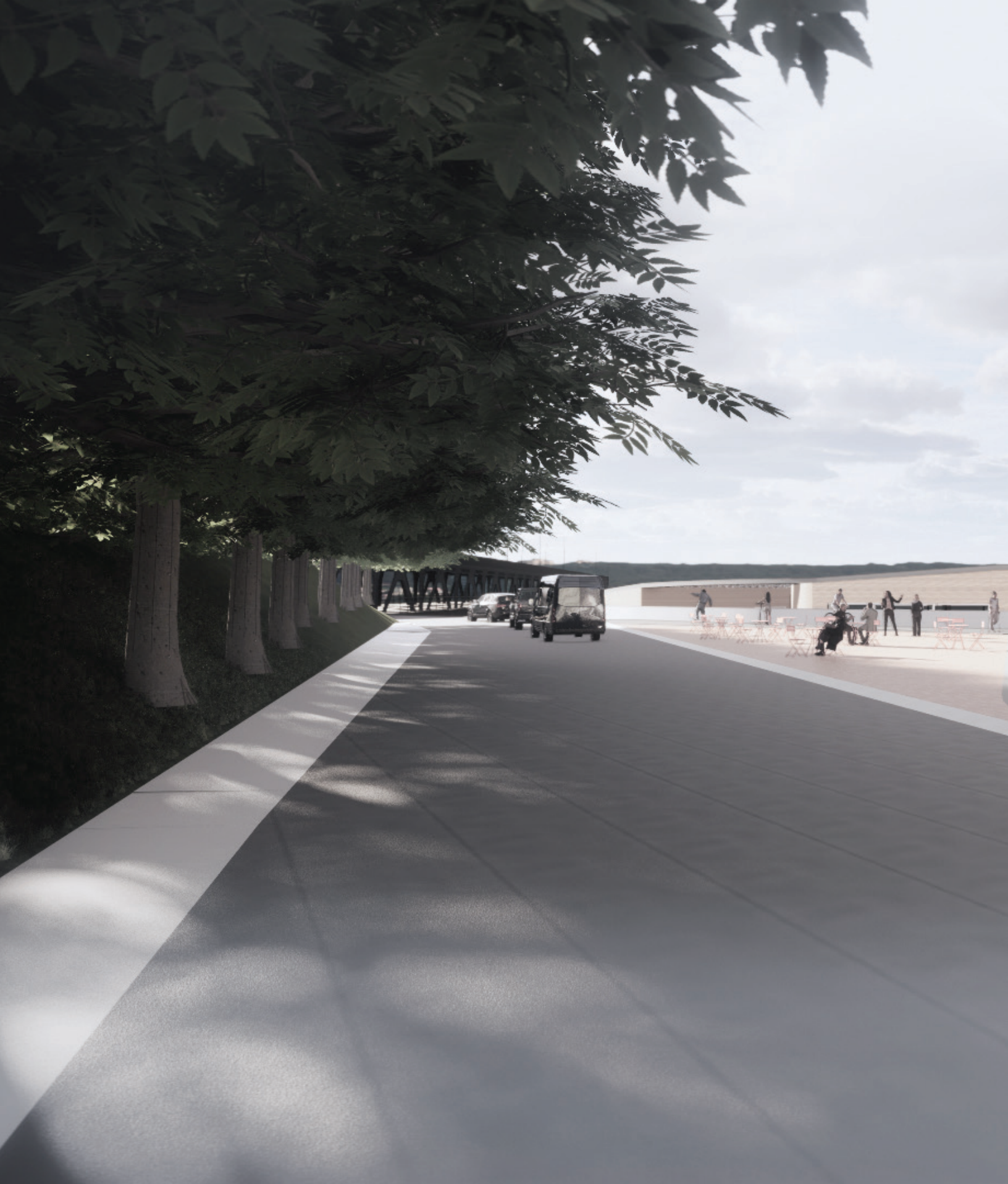
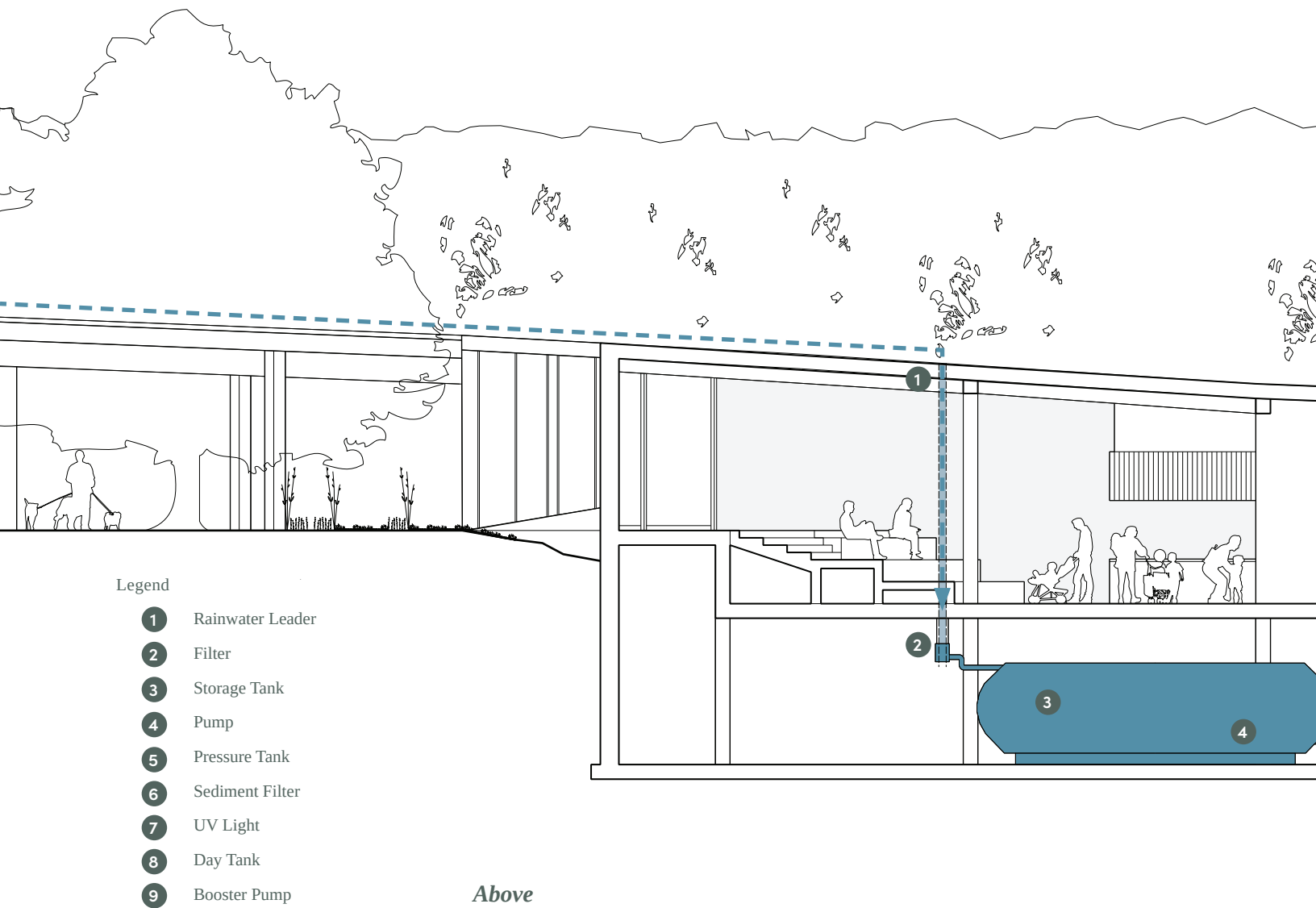




fig 3.44 Rendering of Park Pavillion Entrance



Above

Discussed in Sennett and Sendra's work, is the idea of an 'open system' as one of truly communal infrastructure. Components of an 'open system' include public access to potable water and power as collectively generated resources, and embracing additions and alterations to shared infrastructure. Based on their writing, this approach to infrastructure can resist homogeneity but also risks being understood as incomplete, of a lesser standard, and potentially as ghettoizing regions or communities through a form of 'light architecture'. The total decentralization of "the common place" and public architecture with regard to public washroom facilities, when considering the acute need for places to wash, is perhaps not the best way to explore these notions of the 'open city'.

The design explorations proposed in this thesis in solidarity with unhoused community members challenge physical markers of property, such as hardscape and fencing, by rethinking the application of these materials on site. In Figure 3.37, a chain link fencing pattern informs the patterning of a steel grate deployed along the site's northern edge.

Connecting the three building masses along the east property line is a canopy structure that harvests and directs rainwater to the main park pavilion building. From the ornamental pond, the canopy frames a view of the Alberta Legislature and provides covered spaces, as well as connects building programs in support of houseless people, along

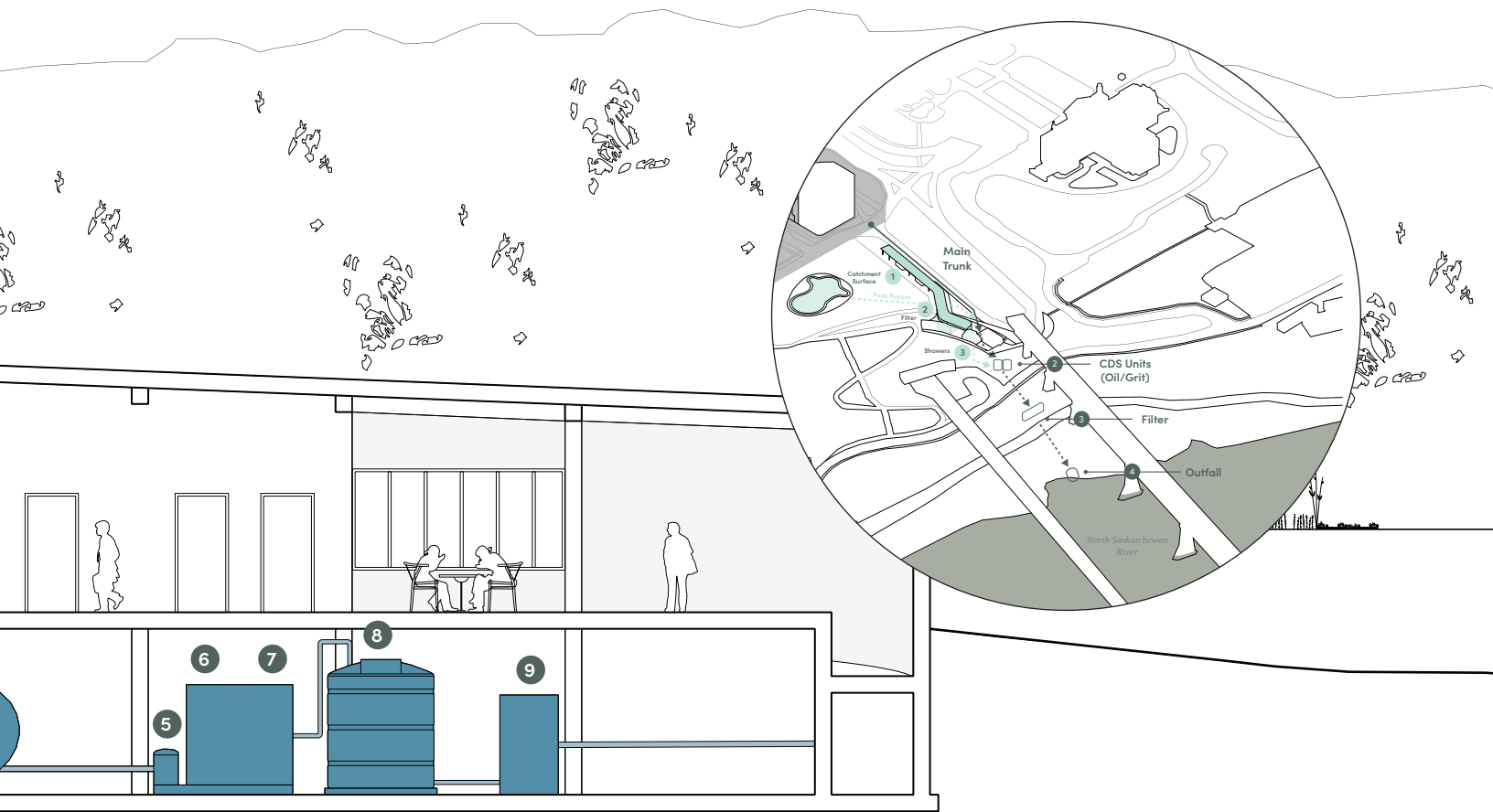
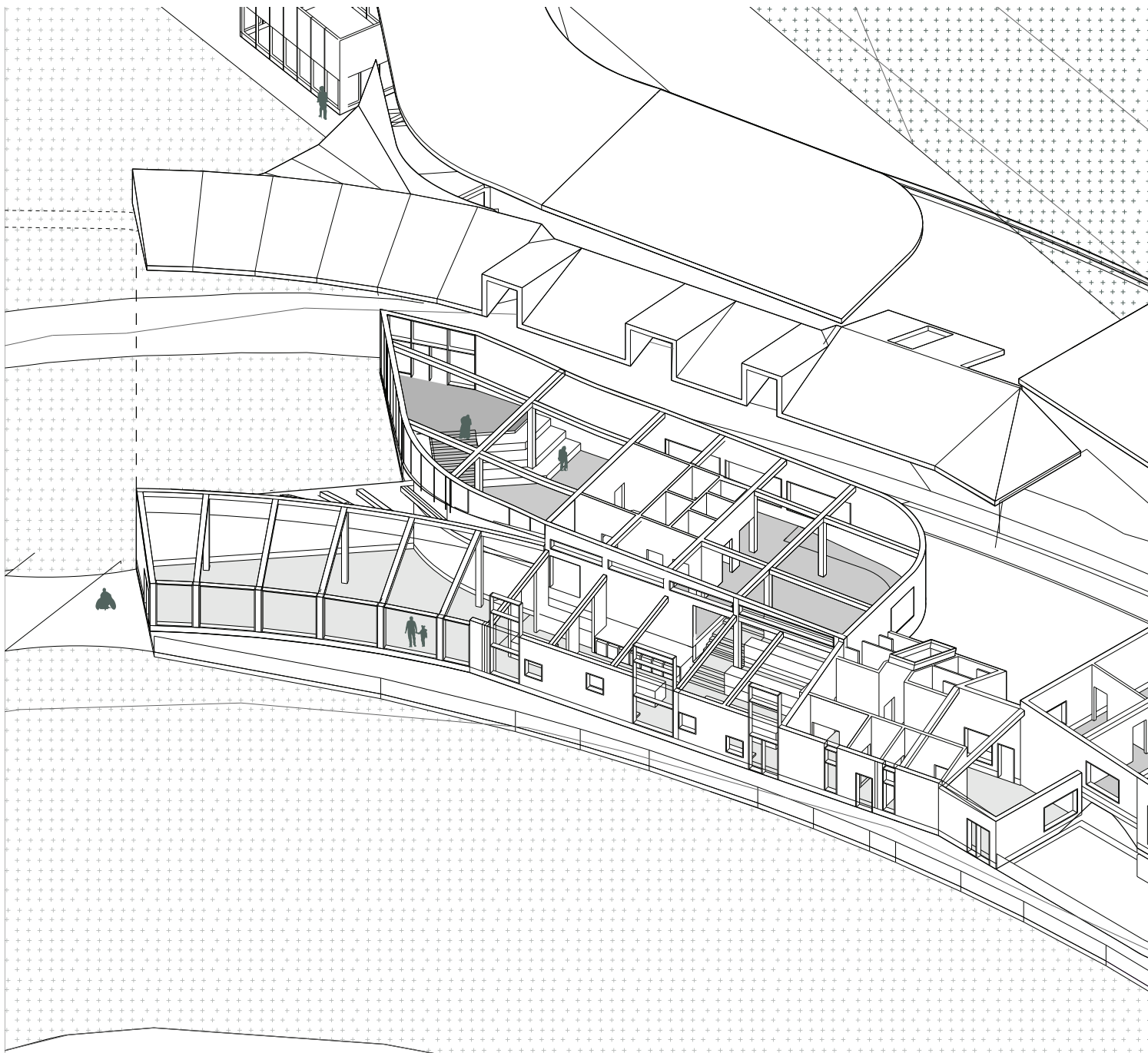
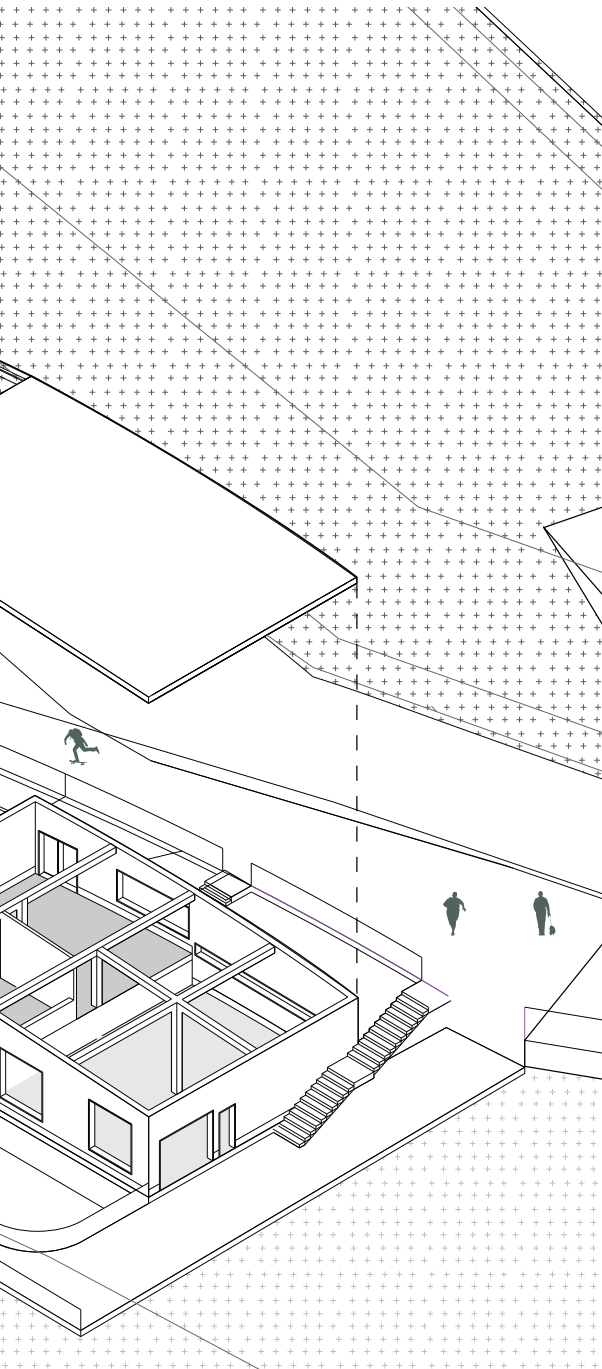


fig 3.45 Longitudinal Section

the length of the property line. The butterfly roof is supported by steel structural members. Between building masses and structural elements, the property line is furnished with widened park benches, community fridges with counter spaces. The proposed roof canopy shown in Figure 3.44 and Figure 3.45 explore the idea of an ‘open system’ where resources, like water used for the cleansing of oneself and one’s only belongings, are sourced separate from city services; this also draws from the idea of energy sovereignty and ‘resource’ sovereignty from the Red Nation’s *The Red Deal*.¹⁶⁷ The building masses are constructed out the oppressor’s material palette of concrete and steel, and are clad in sandstone veneer echoing the walls of the Alberta Legislature. Materially, this exploration of design solidarity draws from materials found in examples of power, governance and modernity like the Alberta Legislature and the High Level Bridge. These materials are coopted to construct basic support buildings like public washrooms, a small office space, and a heated transit stop to challenge the application and patterns of material application in architecture.

167 Pablo Sendra, Richard Sennett, and Leo Hollis, *Designing Disorder: Experiments and Disruptions in the City* (London: Verso, 2020), 27, 32, 35.; Red Nation, *The Red Deal: Indigenous Action to Save Our Earth*, (Brooklyn, NY: Common Notions, 2021), 95.





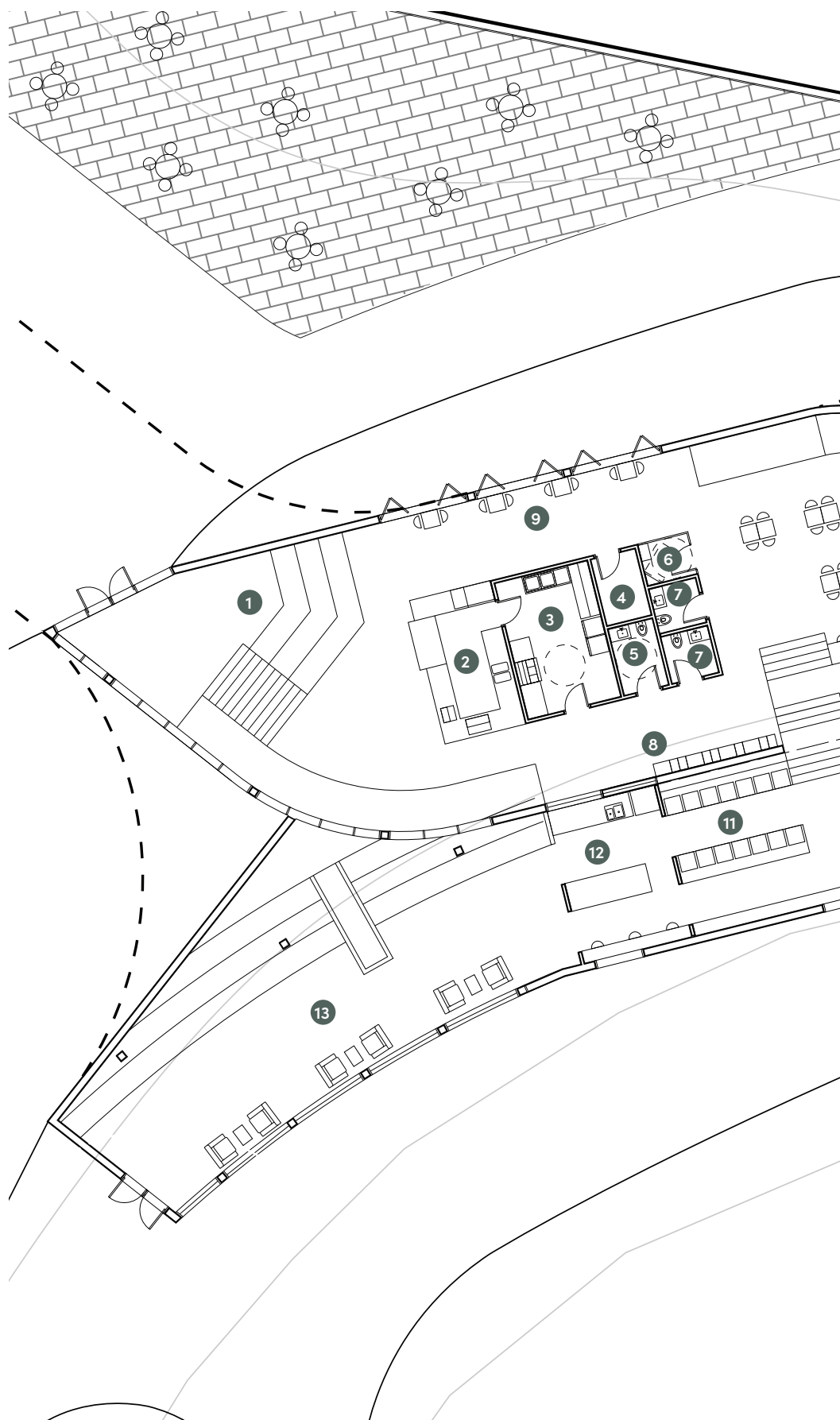
Building as Solidarity

The canopy that covers the property line harvests rainwater and diverts it to the main park pavilion located on the edge of the high banks of the River Valley adjacent the High Level Bridge. This lookout point has views of the Royal Glenora Club, the North Saskatchewan River and the University/Garneau areas across the bridge. The building itself is informed by the existing steep topography of the site and is sited along the edge of the bank. Unlike the proposed buildings that trample on and coopt the property line, the main park pavilion ignores the lot lines of three parcels — and encroaches on all three. In terms of massing, the building steps down to maintain some street level views of the valley. Two programs are located at street level: a café space and a bike repair shop to support the existing function of the park as a high traffic transportation corridor in the city, and as an area popular among fitness enthusiasts. Supporting the café space is a centrally located CLT mass that encloses a small commercial kitchen, a storage room, three public washrooms and an accessible phone room. Surrounding this CLT core are day-use lockers and multiple seating areas that range from bleacher style seating, café seating, and tiered hot desks that cater to laundromat and café patrons who wish to oversee their laundry while working, studying, or simply enjoying views of the River Valley. Tucked one-storey below street level is a laundromat, a viewing deck and a small lounge kitchen (see fig. 3.47).

fig 3.46 Isometric Drawing of Park Pavilion Building

Legend

- 1 Bleacher Seating
- 2 Cafe Service Counter
- 3 Cafe Commercial Kitchen
- 4 Janitor's Closet / Storage
- 5 Accessible Washroom
- 6 Accessible Phone Room
- 7 Gender Neutral Washroom
- 8 Day Use Lockers
- 9 Cafe Seating
- 10 Tiered Hotdesks
- 11 Laundry Machines
- 12 Laundry Lounge / Kitchen
- 13 Viewing Deck
- 14 Outreach Worker Offices
- 15 Courtesy Washing Rooms
- 16 Warming Room
- 17 Storage
- 18 Staff Washroom
- 19 Staff Room
- 20 Retail Space
- 21 Repair Shop



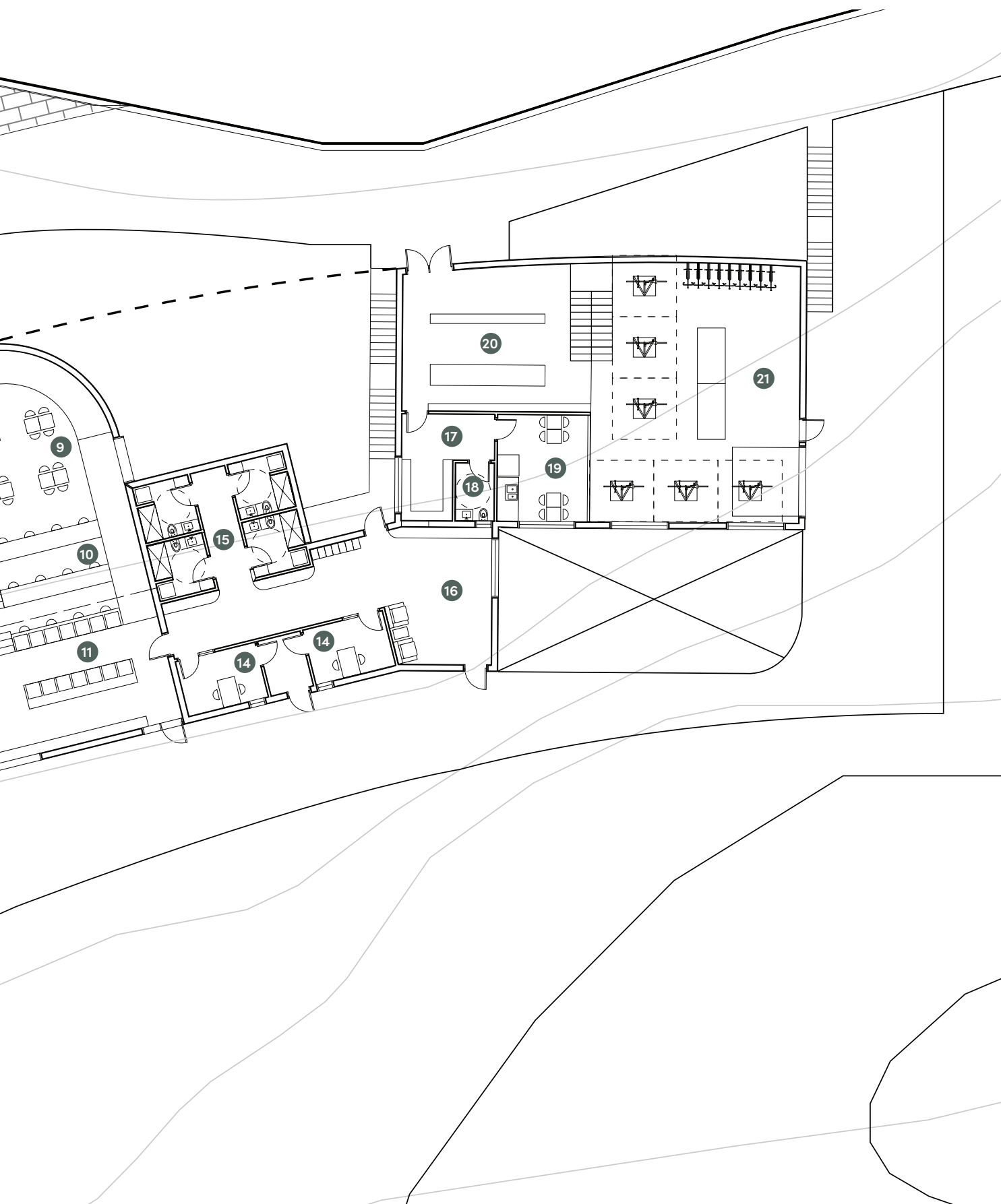
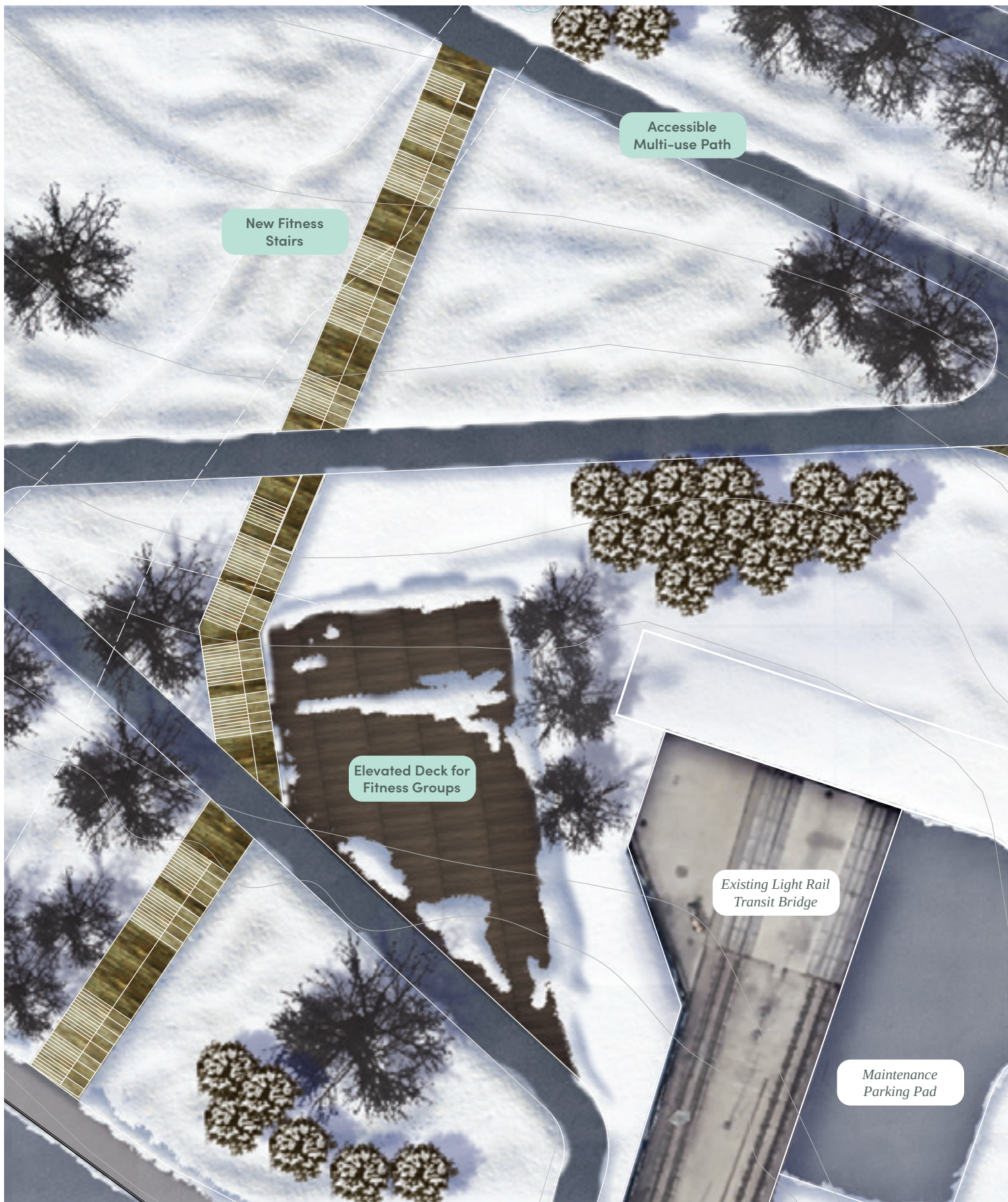


fig 3.47 Park Pavilion Floor Plan



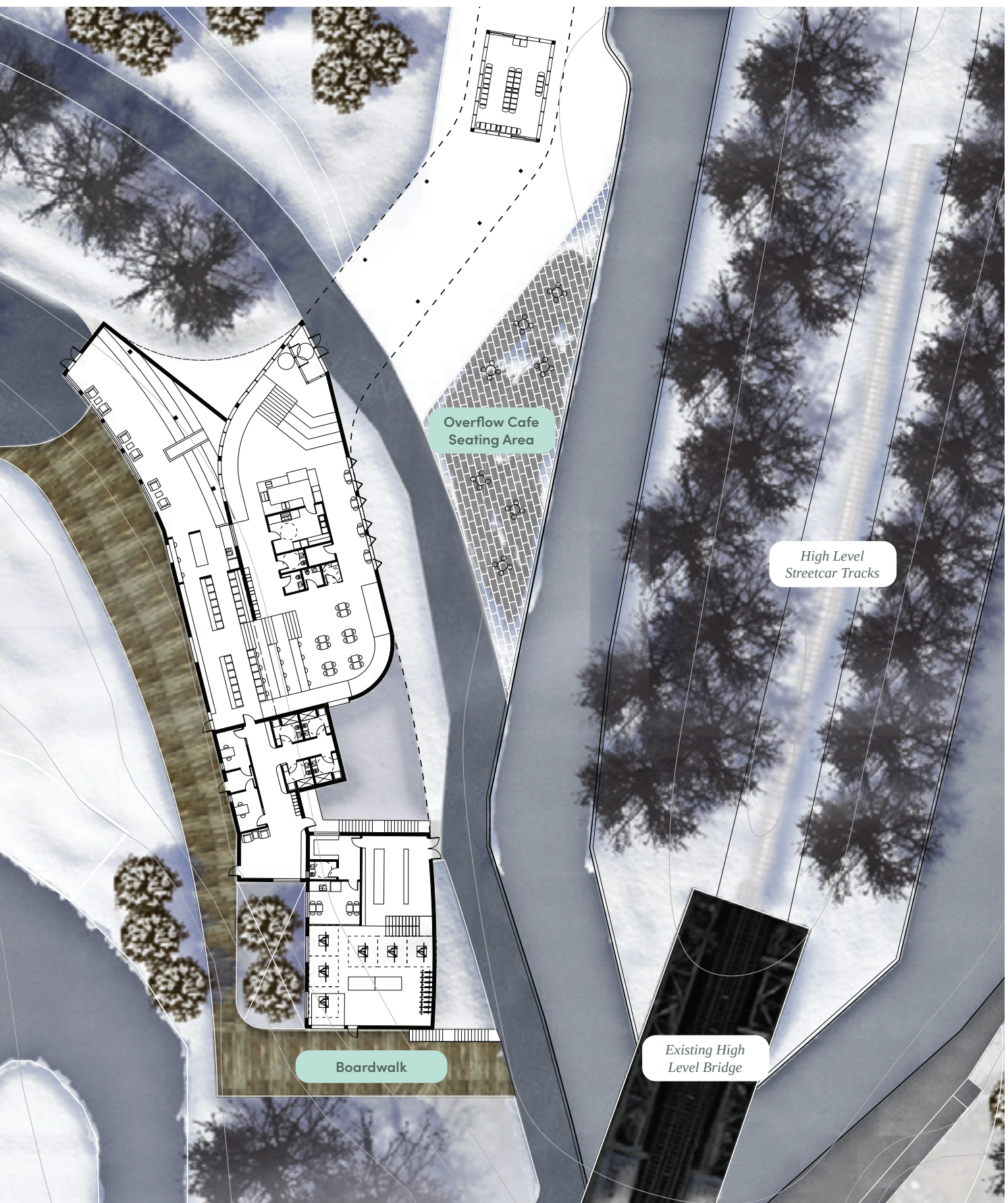


fig 3.48 Urban Design Plan



Legend

- ① Fold Down Seat
- ② Barrier-Free Sink
- ③ Sharps Container
- ④ Zero Threshold Shower
- ⑤ Stacked Laundry Unit
- ⑥ Warming Area
- ⑦ Lockers
- ⑧ Outreach Worker Office

fig 3.49 Isometric Drawing of Courtesy Washing Rooms

The two building masses are treated as two streams of design approaches: one stream is informed by the existing landscape, while the other design stream is dependent on the property line and the imposition of lot boundaries. Nestled between the main café-laundromat space and the bike repair shop are 24/7 courtesy public washing rooms attended by trauma-informed support workers, or attendants with a lived experience of houselessness (see fig 3.49). In Edmonton, there exists some attended public washroom facilities to ensure the cleanliness of spaces, as well as the safety of washroom visitors in the event of drug overdoses.¹⁶⁸ Since the staffing of public washrooms in Edmonton, like the Whyte Avenue public washroom, there has been a reduction in overdoses in public washrooms and wellness checks. Yet, the issue of public washroom availability and drug stigmatization through a lack of safe consumption sites remains a relevant and important topic in Edmonton. Since March 7, 2022, 50% of public washrooms in Edmonton have been closed in efforts to reduce drug poisoning risk. As expressed by Councillor Michael Janz, washroom closures will displace vulnerable people and will concentrate vulnerable populations to centrally located libraries, unless the City of Edmonton begins broadening its network of available water, sanitation and hygiene facilities.¹⁶⁹ Each courtesy washing room in the proposed scheme is provided a shower, sink and toilet, as well as a fold-down seat and a stacked washer-dryer for visitors needing to wash themselves, and what may be their only outfit.

168 Caley Gibson, "Public washroom on Whyte Avenue to be staffed by attendant," *Global News Edmonton*, last modified December 17, 2019, <https://globalnews.ca/news/6302340/edmonton-whyte-ave-bathroom-attendant/>.

169 Kyra Markov, "City closes nearly all public washrooms in transit stations to reduce drug poisoning risk," *CTV News Edmonton*, March 24, 2022, <https://edmonton.ctvnews.ca/city-closes-nearly-all-public-washrooms-in-transit-stations-to-reduce-drug-poisoning-risk-1.5833006>.



fig 3.50 Cafe Seating Area & Phone Room



fig 3.51 Public Laundromat



fig 3.52 Tiered Hotdesks

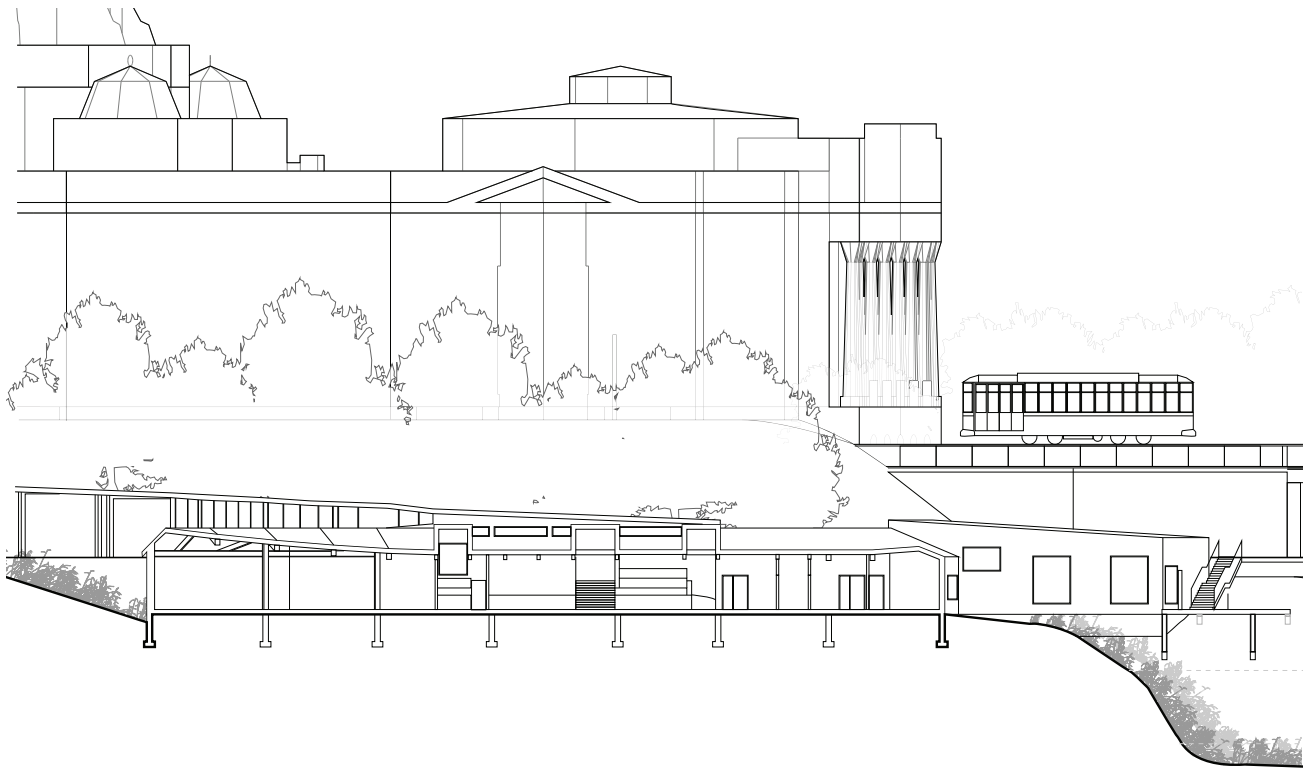


fig 3.53 Longitudinal Section of Park Pavilion Lower Level

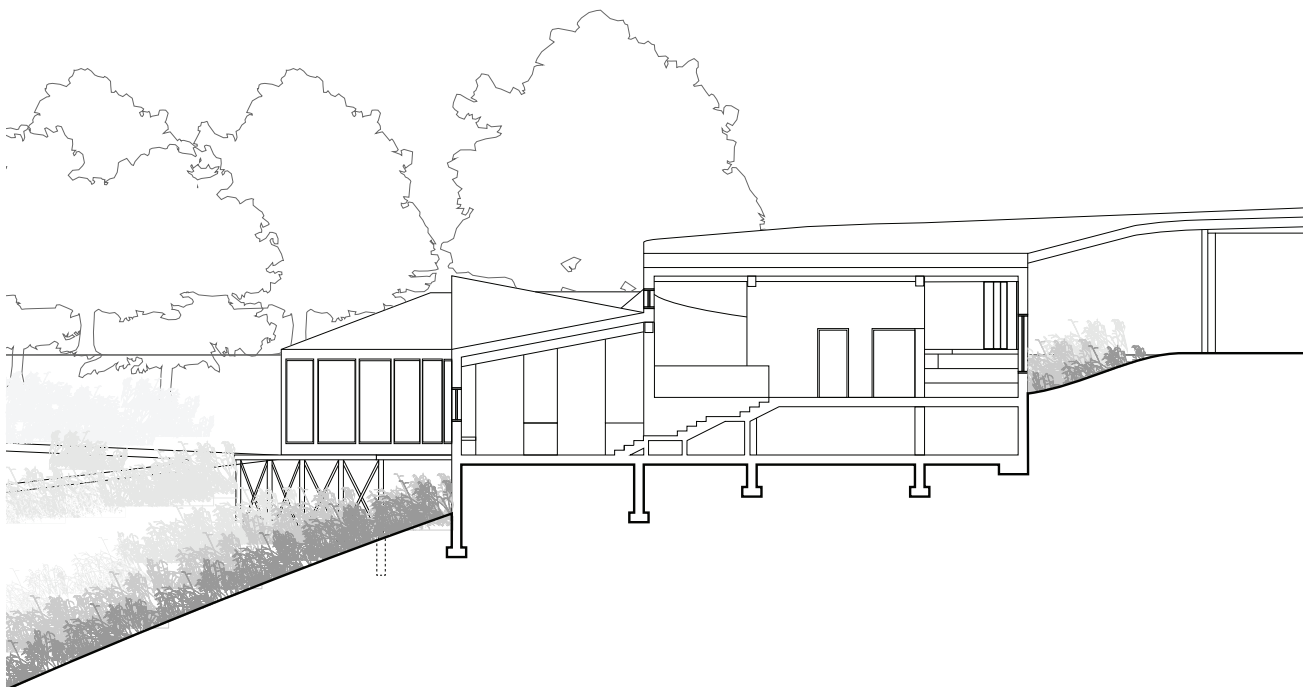


fig 3.54 Cross Section of Park Pavilion

While the spaces that offer the greatest potential to address barriers to water, sanitation and hygiene for houseless community members are tucked away from street level, a variety of circulation options to access these shower rooms allow individuals to enter a discrete walkway from street level, internally from the café space through the public laundromat, or from the exterior boardwalk. By providing a variety of circulation options, the access of courtesy washing rooms encourages socio-spatial conditions that increase interaction between housed and unhoused community members to create a sense of inclusivity and a sense of place. Unlike a formal community hub that provides numerous supportive services and housing supports for those experiencing housing insecurity, this thesis explores the capacity and need for public architecture to address the ontological violence and spatial exclusion faced by those underserved by existing shelter and care systems. Ultimately, the buildings proposed in this thesis are public facilities, but interviews and research gathered of lived experiences of houselessness in Edmonton support the need to mitigate immediate harm among houseless neighbours. In light of recent public washroom closures, displaced and vulnerable individuals are at risk of harm from the lack of permanent, safe and adequate water, sanitation and hygiene facilities.

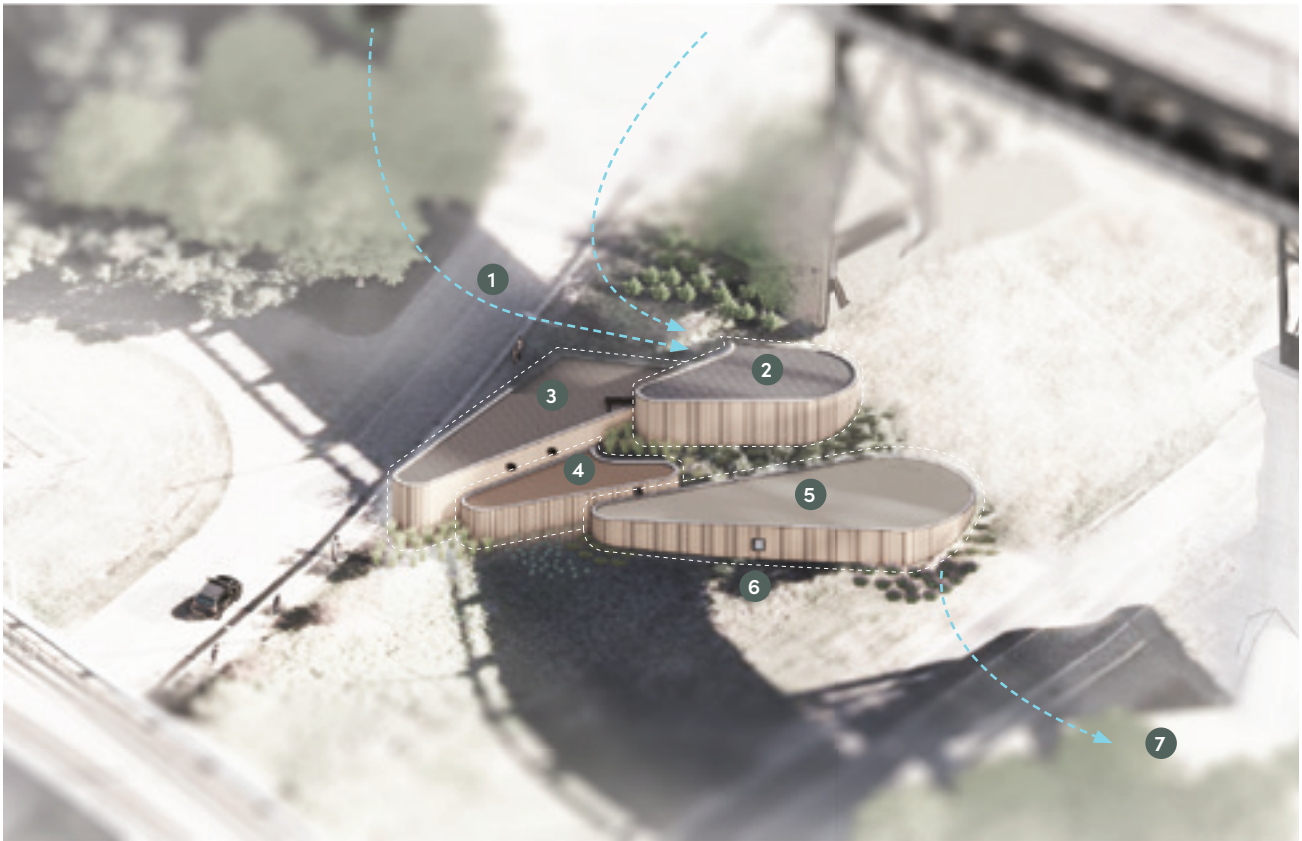


fig 3.55 Landscape Intervention

Legend

- ① Traffic Calming Rolled Curbs
- ② Rock
- ③ Gravel
- ④ Coarse Sand
- ⑤ Fine Sand + Charcoal Sublayer
- ⑥ Scupper
- ⑦ Connection to Existing Outfall

Below Ground

Beneath the main park pavilion café is the mechanical room where harvested rainwater and snowmelt are stored for use in washrooms, washing machines and courtesy shower rooms. Although it may not be entirely feasible for the proposed building to operate independently from city services and utilities, the intent is that the water harvested for the cleansing of belongings and one's self is sourced independently from city utilities and infrastructure. Symbolically, the water sourced for cleansing vulnerable community members does not originate from city services and systems that are fundamentally rooted in land acquisition and displacement of people. However, greywater from washroom and laundry facilities are recycled for use in toilets prior to connecting to existing sewage systems. Excess harvested rainwater and snowmelt water are directed south away from the park pavilion along a trough that prioritizes the crossing of runoff water over the crossing of vehicles. This water is directed into a land art intervention where a series of sands, gravels and filters are used to cleanse runoff before being diverted into the North Saskatchewan River and into nearby fish habitats (see fig 3.55). While the efficacy of a land art filtration system is nowhere near efficient as the engineered filtration of stormwater, this bookending design gesture draws from ideas of energy, material and resource sovereignty from existing systems when discussing the capacity for architecture and design to work toward decolonial and Indigenous futures. Moreover, it is making a subversive statement about ecological sustainability in a way that adjacent communities of financial and/or political power would consider reflecting well on them.





fig 3.56 View from Fitness Stairs

Conclusion —

Conclusion

Based on interviews with mutual aid network organizers, the combination of COVID-19 era protest events and the emergence of mutual aid networks have been effective in increasing dialogue between the City of Edmonton and community activists working in solidarity with houseless communities. The act of protest and community activism during the pandemic, and the use of unsettling slogans and neologisms are useful tools that have prompted reflection into the deep histories of ontological violence facing houseless communities in Edmonton. While COVID-19 certainly is not the singular cause for the increase in people experiencing houselessness, the pandemic and the prevalence of protest during COVID-19 are foundational to this thesis. The longstanding social and spatial inequities and deep histories of houselessness in Edmonton that were exacerbated during the pandemic, from symptoms such as increased substance use, job loss and domestic violence, may not have been apparent without protest. Issues concerning houseless community members were brought forward by activists in response to unsafe shelter conditions and pandemic-related restrictions to supportive services. Protests have made the complexities of the housing crisis more visible.

Issues brought to light by mutual aid networks and harm reduction supporters in protest pinpoint systems of spatial exclusion that concern architecture and the urban environment, like the right to move freely in the city, the right to rest and protest, and the right to water, sanitation and hygiene. Learning from sentiments and abolitionist viewpoints of activists working in solidarity with houseless people, these systems of sociospatial exclusion are deeply rooted in land expropriation, Indigenous dispossession and the interpretation of the commons as a resource, rather than as a practice. Through this process of analysing street level protest issues and longer-range timelines of wealth inequality, the central question of architecture's role in upholding settler colonial systems of exclusion emerged. By questioning the methods architecture deliberately or unwittingly contributes to an exclusionary experience of the city, this thesis draws from the writings of Ann Thorpe, Richard Sennett, Pablo Sendra, Brenna Bhandar, The Red Nation, Robert Rosenberger, Chantal Mouffe, and Judith Butler to explore ways the settler colonial imposition and framework of property can be challenged at the scale of a park pavilion.

I hope that the development of this thesis offers community activists some tools to lobby for change in exclusionary urban environments beyond housing. Although houselessness can only be solved through safe, adequate and affordable housing solutions, the position of this thesis is supported by the belief that architecture and design as activism can create change through the provision of dignified social and spatial conditions that combat feelings of urban isolation and mitigate harm among houseless people.

While architecture is not ‘social work’ by definition, the work of designers is undeniably social, and the tools, conventions and best practices of architecture should be explored through an anti-oppressive lens. Architecture’s complicity in upholding property, the public and the private, warrants a deeper analysis of design practice, drawing conventions and ideas of the commons to fully explore its capacity to act in solidarity with oppressed people. In doing so, architectural resistance of neoliberal frameworks of property can change its course toward supporting Indigenous futures and a decolonial future on Turtle Island.

This thesis inquiry is focuses on the access to water, sanitation and hygiene for houseless community members underserved by shelter systems in urban Edmonton. Yet, as discussed in *The Red Deal*, resistance to ontological violence and support of Indigenous resurgence and resistance through design and architecture can also be explored through the lens of material sovereignty, energy sovereignty, or food sovereignty. I hope that this thesis encourages other students and designers to question architecture’s complicity in larger systemic issues in order to further discourse on architecture in a decolonial future. Throughout this thesis, the City of Edmonton has been developing solutions for temporary and public washroom facilities. I hope that this thesis can be used to further discussion around the provision and quality of washroom facilities in Edmonton, and that it may one day be presented to city councilors whose platforms are focused on addressing poverty, houselessness and inequity in my hometown.

“Design can reconnect the disconnected and make new connections. [It] can challenge the underlying, implicit ethics of the explicit forms we create. [... It...] can disturb current narratives. [It] can rupture the present with counter-narratives [and] contribute to reformist approaches. It has the ability to catalyse societal transformations. Design is critical imagining.”¹⁶⁹

169 Tobias Bieling, *Design (&) Activism: Perspectives on Design as Activism and Activism as Design*, ([Italy]: Mimesis International, 2019), 13.





fig 4.01 View of the Legislature from Ornamental Pond

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Appendix A: Wash Bag



fig 5.01 Wash Bag

Wash Bag

Permanent and safe access to water, sanitation and hygiene facilities is a barrier to chronic and rough sleeping houseless neighbours. A by-product of limited access to water, sanitation and hygiene spaces (WASH) is a lack of hygiene among some houseless folx. Barriers of membership or entry fees to access washing facilities creates conditions of precarity among houseless people striving to meet basic human needs to wash. For some, concerns of a lack of hygiene, illness and bedbugs in shelter settings deter them from accessing emergency shelters. While for others, a lack of hygiene poses a barrier to service when attempting to access emergency shelter services. In order to practice some form of hygiene, the public washroom, specifically the basin or sink, is an essential service to individuals experiencing chronic houselessness, and its availability may influence whether or not emergency shelter services are granted, or denied, based on hygiene. Public washroom facilities in malls, public libraries and transit terminals are part of a network of spaces that function as more than rooms with sinks and lavatories, but as places of cleansing and laundry.

The object, a wash bag, condenses the core ideas of this thesis and was designed in response to numerous public washroom closures in Edmonton. The wash bag uses 1050 denier ballistic nylon fabric to create a rigid shell that can act as a vessel for water. Lining the bag's interior is a waterproof 70 denier ripstop nylon fabric that facilitates portable laundry as needed. In addition, a separate wet bag is provided for soiled laundry, or to be used to wash smaller articles of clothing. Printed on the separate wash bag is a graphic of Edmonton's North Saskatchewan River. This wet bag serves two functions: the first function is to separate one's belongings, and the second function of the bag is to act as a waterproof map. The vinyl graphic indicates places of respite, public washroom facilities and mutual aid network locations in relation to the North Saskatchewan River—where hundreds of houseless folx camp, sleep or seek respite. Small openings along the bottom seam of the bag are left to allow for slim cable locks to lock what may potentially be one's only belongings.



fig 5.02 Exterior Shell



fig 5.03 Removable Lining & Map