



A Global Solution

Allison Voigt – Interior Design Student





Table of Contents

Current Issues Research Application Chart	3
Design Concept Statement	5
Scope of Work	5
User/Client Description	5
Goals and Objectives	6
Color and Concept Boards	7
Adjacency Matrix	10
Blocking/Circulation/Bubble Diagrams	10-12
Schematic Sketches	13
House Study Model Photos	14
Presentation Drawings	15
Custom Element	19
FF&E Schedule	20
Lighting Schedule	26
Room Finish Schedule	27
Artwork Schedule	33
Appendix	34
Works Cited	42



Current Issues Research Application Chart

Reference	Research Discovery/Findings	Design Applications
Poitra, P. F., & Poitra, K. L. (1997). <i>The history and culture of the turtle mountain band of chippewa</i> (pp. 43-52) (United States, North Dakota Department of Public Instruction, State Superintendent). ND: North Dakota Department of Public Instruction.	They utilized animals they hunted for both clothing and food and started out as hunters/gatherers.	<ul style="list-style-type: none"> • Use natural influences throughout the space • Incorporate their history through the use of patterns, prints, artwork, etc.
Poitra, P. F., & Poitra, K. L. (1997). <i>The history and culture of the turtle mountain band of chippewa</i> (pp. 43-52) (United States, North Dakota Department of Public Instruction, State Superintendent). ND: North Dakota Department of Public Instruction.	They value their education and the upholding of their traditions.	<ul style="list-style-type: none"> • Respect and support their traditions. • Utilize features that encourage the passing on of tradition and education.
Poitra, P. F., & Poitra, K. L. (1997). <i>The history and culture of the turtle mountain band of chippewa</i> (pp. 43-52) (United States, North Dakota Department of Public Instruction, State Superintendent). ND: North Dakota Department of Public Instruction.	In their past, the Turtle Mountain Band of the Chippewa Tribe made birch huts to dwell in called wigwams, and in the winter, they insulated these with snow and covered the floor with woven mats and furs.	<ul style="list-style-type: none"> • Use birch textured finishes. • Use the roof to recreate the wigwam in shape
Arman, M., Zuo, J., Wilson, L., Zillante, G., & Pullen, S. (2009). Challenges of responding to sustainability with implications for affordable housing. <i>Ecological Economics</i> , 68(12), 3034-3041. doi:10.1016/j.ecolecon.2009.07.007	Leaving the environment in good condition for future generations is, to some, considered a moral obligation.	<ul style="list-style-type: none"> • Use materials and finishes that have a low-impact on the environment • Use long-lasting furnishings.
Arman, M., Zuo, J., Wilson, L., Zillante, G., & Pullen, S. (2009). Challenges of responding to sustainability with implications for affordable housing. <i>Ecological Economics</i> , 68(12), 3034-3041. doi:10.1016/j.ecolecon.2009.07.007	It's important to separate needs from wants in order to encourage sustainability.	<ul style="list-style-type: none"> • Use a minimalist approach in the design. • Understand what is needed in the space and what is wanted.
Arman, M., Zuo, J., Wilson, L., Zillante, G., & Pullen, S. (2009). Challenges of responding to sustainability with implications for affordable housing. <i>Ecological Economics</i> , 68(12), 3034-3041. doi:10.1016/j.ecolecon.2009.07.007	There's complexity and layers to sustainability to sustainable design that we have limited knowledge about.	<ul style="list-style-type: none"> • Expand knowledge on sustainable design and apply it. • Incorporate sustainable features.
Seltenrich, N. (2012). Healthier tribal housing: combining the best of old and new. <i>Environmental Health Perspectives</i> , 120(12), A 460-A 469. doi:10.1289/ehp.120-a460	Tribes are working to build homes that are healthier, more sustainable, and utilize locally sourced and natural materials.	<ul style="list-style-type: none"> • Use sustainable finishes. • Find ways to include locally sourced items.



Current Issues Research Application Chart

Reference	Research Discovery/Findings	Design Applications
Seltenrich, N. (2012). Healthier tribal housing: combining the best of old and new. <i>Environmental Health Perspectives</i> , 120(12), A 460-A 469. doi:10.1289/ehp.120-a460	Native Americans are dealing with mold infestations in their housing and more and more health complications because of it.	<ul style="list-style-type: none"> • Use antimicrobial finishes. • Use other products that are resistant and cleanable.
Seltenrich, N. (2012). Healthier tribal housing: combining the best of old and new. <i>Environmental Health Perspectives</i> , 120(12), A 460-A 469. doi:10.1289/ehp.120-a460	They're working on creating unique solutions for each tribe.	<ul style="list-style-type: none"> • Use information about the tribe's traditions in the design. • Incorporate features that highlight the tribe's uniqueness.
Berens, M. J. (2017, May 23). Design for Aging in Place Goes Mainstream. ASID Icon. Retrieved November 2, 2018, from http://icon.asid.org/index.php/2017/05/23/design-for-aging-in-place-goes-mainstream/	The demand for accessibility, adaptability, and universal design features have gone up.	<ul style="list-style-type: none"> • Use guidelines to make the space as accessible as possible • Incorporate design features that are accessible.
Berens, M. J. (2017, May 23). Design for Aging in Place Goes Mainstream. ASID Icon. Retrieved November 2, 2018, from http://icon.asid.org/index.php/2017/05/23/design-for-aging-in-place-goes-mainstream/	People wanted to make homes safer and improve function.	<ul style="list-style-type: none"> • Include safety features, or plan for safety features to be places there in the future. • Utilize easy to use appliances and furniture.
Berens, M. J. (2017, May 23). Design for Aging in Place Goes Mainstream. ASID Icon. Retrieved November 2, 2018, from http://icon.asid.org/index.php/2017/05/23/design-for-aging-in-place-goes-mainstream/	A major area of concern was the bathroom for many homeowners because of a foreseeable future of having a disability such as being in a wheelchair.	<ul style="list-style-type: none"> • Design a complete accessible bathroom. • Plan for future grab bars.
Mazuch, R. (2017). Salutogenic and biophilic design as therapeutic approaches to sustainable architecture. <i>Architectural Design</i> , 87(2), 42-47. doi:10.1002/ad.2151	Salutogenic design concentrates on creating an overall feeling of wellness.	<ul style="list-style-type: none"> • Use finishes and furnishings that promote wellness. • Incorporate all senses to create an overall feeling of wellness.
Mazuch, R. (2017). Salutogenic and biophilic design as therapeutic approaches to sustainable architecture. <i>Architectural Design</i> , 87(2), 42-47. doi:10.1002/ad.2151	Biophilic design is essentially bringing the outside living nature into the designs through architectural features, finishes, and other elements of the home.	<ul style="list-style-type: none"> • Utilize plants inside the home. • Use natural shapes and textures for various finishes and furnishings.
Mazuch, R. (2017). Salutogenic and biophilic design as therapeutic approaches to sustainable architecture. <i>Architectural Design</i> , 87(2), 42-47. doi:10.1002/ad.2151	Spaces can help prolong life, heal, and help close wounds.	<ul style="list-style-type: none"> • Use colors that evoke feelings of comfort and healing. • Use features that will help with a prolonged life.



Design Concept

The small home is an affordable home designed to be placed on the Turtle Mountain Chippewa Reservation. The home is built using durable materials and universal design is implemented throughout the home. This will allow for many families to live there no matter their age or if they have a disability. Sustainable practices such as energy efficient lighting and recycled materials will be used throughout the home.

The home provides spaces to connect the families. It will encourage them to spend quality time together through the interior and exterior spaces that are dedicated to that. The colors used throughout the space are inspired by nature. The colors can be seen in the fall leaves of the trees, beautiful sunsets, and some of the traditional beading done by the Chippewa.

User/Client Description

This home will host a variety of users. There's a lot of adults in the Turtle Mountain Band of Chippewa that struggle with addiction, so the guardian often becomes a grandparent. The space is designed for a grandparent raising two grandchildren. Because many families will live here, there's no telling whether the grandparent will have a disability, so it's designed with that in mind. It's also common for families to house other families for a night or few, so the space must take this into consideration as well; there will be many different guests in the space.

Scope of Work

The first step of the design process is to create color and concept boards as inspiration for the space. Then, the process of developing bubble, blocking, and circulation diagrams will start. Once a floorplan is approved, the final floorplan will be put into AutoCAD.

Research will play a huge role in the design process during the development of the floorplan as well as the selection of furniture and finishes. The furniture and finishes will be carefully selected to meet the needs of all users of the space. These will be showed in the renderings of the spaces and FF&E schedules.

The presentation boards and 3-D renderings will be used to tell the story of the home and show how the final model will look. There will be a programming folio that will have all of the above information and more.





Goals and Objectives

Goal 1: Create a space that is connected with the outdoors.

- ❖ Use natural light throughout the space.
- ❖ Use natural materials.
- ❖ Be conscious of sustainability and recyclability of products when specifying them.
- ❖ Use colors, textures, artwork, and other finishes that relate back to nature.

Goal 2: Design an accessible home.

- ❖ Create a single-story small home.
- ❖ Leave at least 3' wide paths.
- ❖ Use ADA guidelines in the bathroom.
- ❖ Use 3' wide doors.

Goal 3: Design a home that incorporates the culture of the Turtle Mountain Band of Chippewa.

- ❖ Use colors, textures, and patterns that are inspired by the traditions and elements of the tribe.
- ❖ Create spaces that bring family together.
- ❖ Use artwork native to the Turtle Mountain Band of Chippewa.
- ❖ Make sure there are places to display valuable cultural items.

Goal 4: Design so the home is sustainable.

- ❖ Use LED Lights throughout the home.
- ❖ Use reclaimed and recyclable wood.
- ❖ Use water conservation fixtures.
- ❖ Look at durability of products as well as price.

Goal 5: All spaces and fixtures should be practical.

- ❖ Use small spaces as a place for storage.
- ❖ Make sofa a sleeper sofa so it can function as part of the living room as well as a guest bed.
- ❖ Create efficient plumbing.
- ❖ Make practical uses for thick wall, like built ins or closets.

Goal 5: All spaces and fixtures should be practical.

- ❖ Use small spaces as a place for storage.
- ❖ Make sofa a sleeper sofa so it can function as part of the living room as well as a guest bed.
- ❖ Create efficient plumbing.
- ❖ Make practical uses for thick wall, like built ins or closets.

Goal 6: Create space for diverse activities.

- ❖ Keep furniture to a minimal to keep the place from becoming cramped.
- ❖ Leave an empty area in between the kitchen/dining and living room for various activities.
- ❖ Use durable finishes to support these activities.
- ❖ Use various types of furniture throughout the home.

Goal 7: Design a home that is affordable.

- ❖ Schedule items from local vendors and manufacturers to cut back on shipping costs.
- ❖ Use durable, but less expensive materials, finishes, and fixtures.
- ❖ Utilize the local trade college to assemble the homes.
- ❖ Use appliances that are appropriate for the home.

Goal 8: Design a space that gives off the feeling of home.

- ❖ Use a warm color palette in the space.
- ❖ Use windows to allow light to shine through the spaces.
- ❖ Incorporate warm patterns and textures.
- ❖ Use natural finishes to create a warm feeling.

Goal 9: Find creative solutions for storage and spacing.

- ❖ Use bunk beds in the children's room to add storage and space.
- ❖ Schedule a bed with storage underneath.
- ❖ Schedule a sofa with storage incorporated.
- ❖ Utilize cabinet storage.

Goal 10: Create a space that allows families to form new traditions and cherish memories.

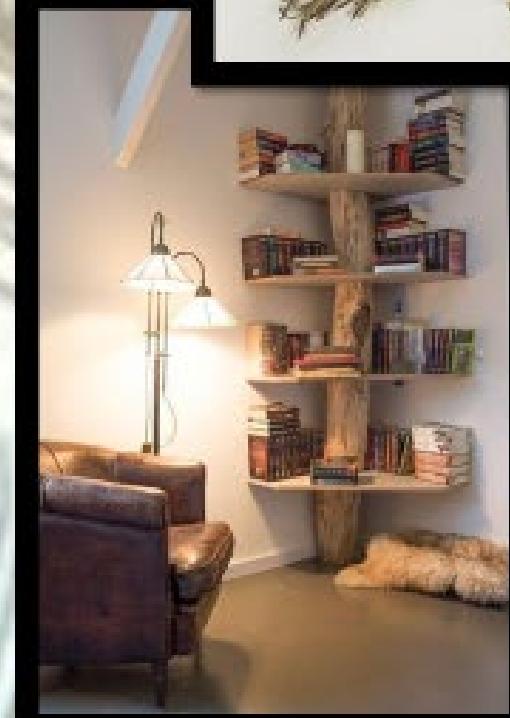
- ❖ Dedicate spaces to family time.
- ❖ Provide abundant seating in the living room.
- ❖ Create flexible spaces that allow for other family members to stay over.
- ❖ Create flexible spaces that can be used for various family gatherings.



Allison Voigt A Global Solution



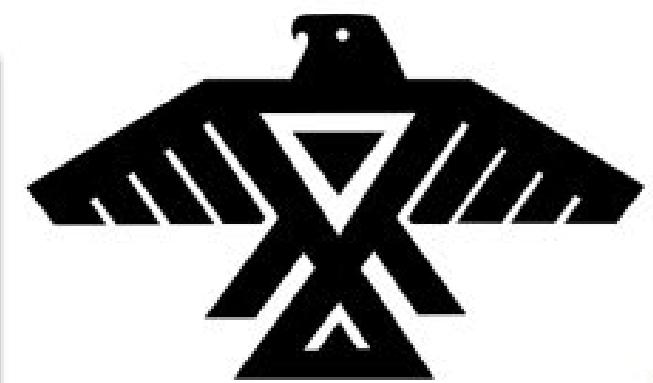
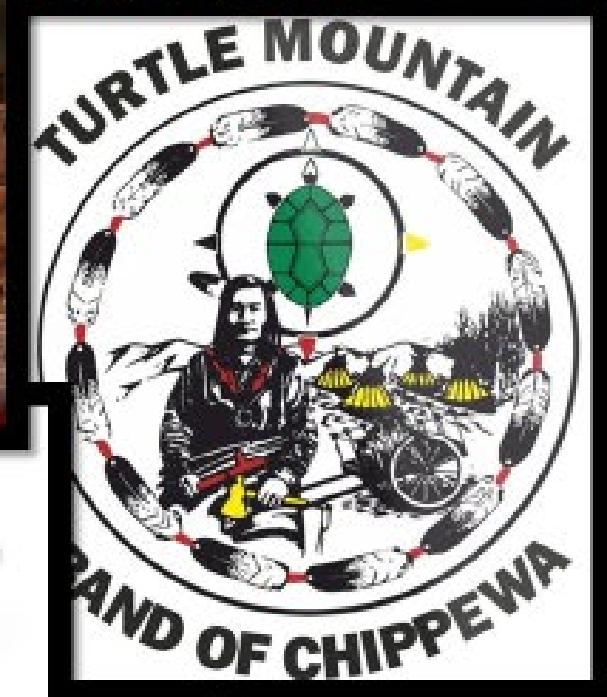
Colorful



Accessible



Natural



Allison Voigt

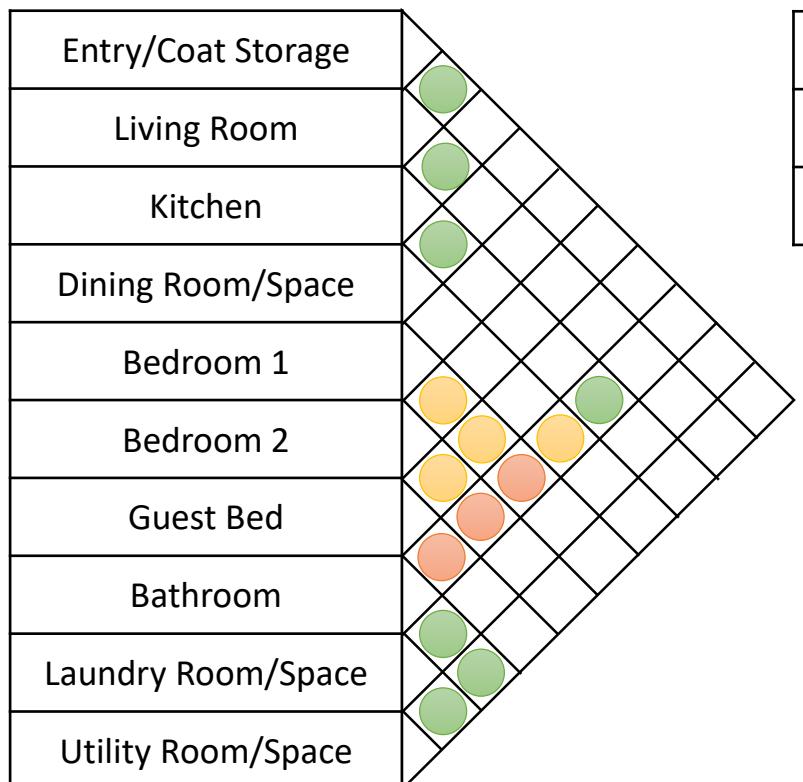
A Global Solution



Allison Voigt
A Global Solution
Table of Life

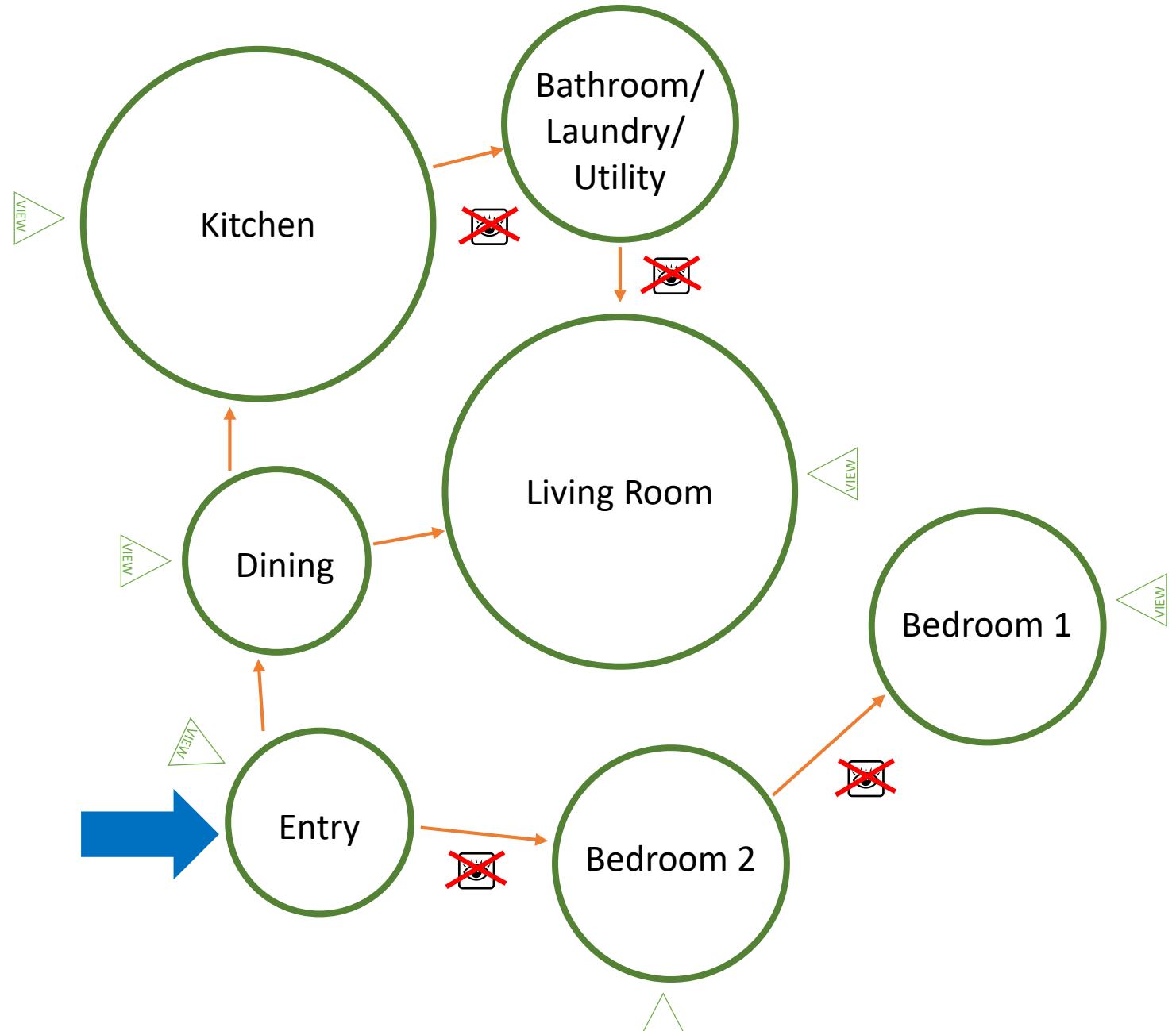


Adjacency Matrix

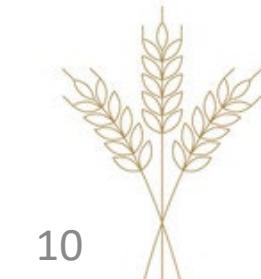


High Importance	(Green)
Low Importance	(Yellow)
Avoid	(Orange)

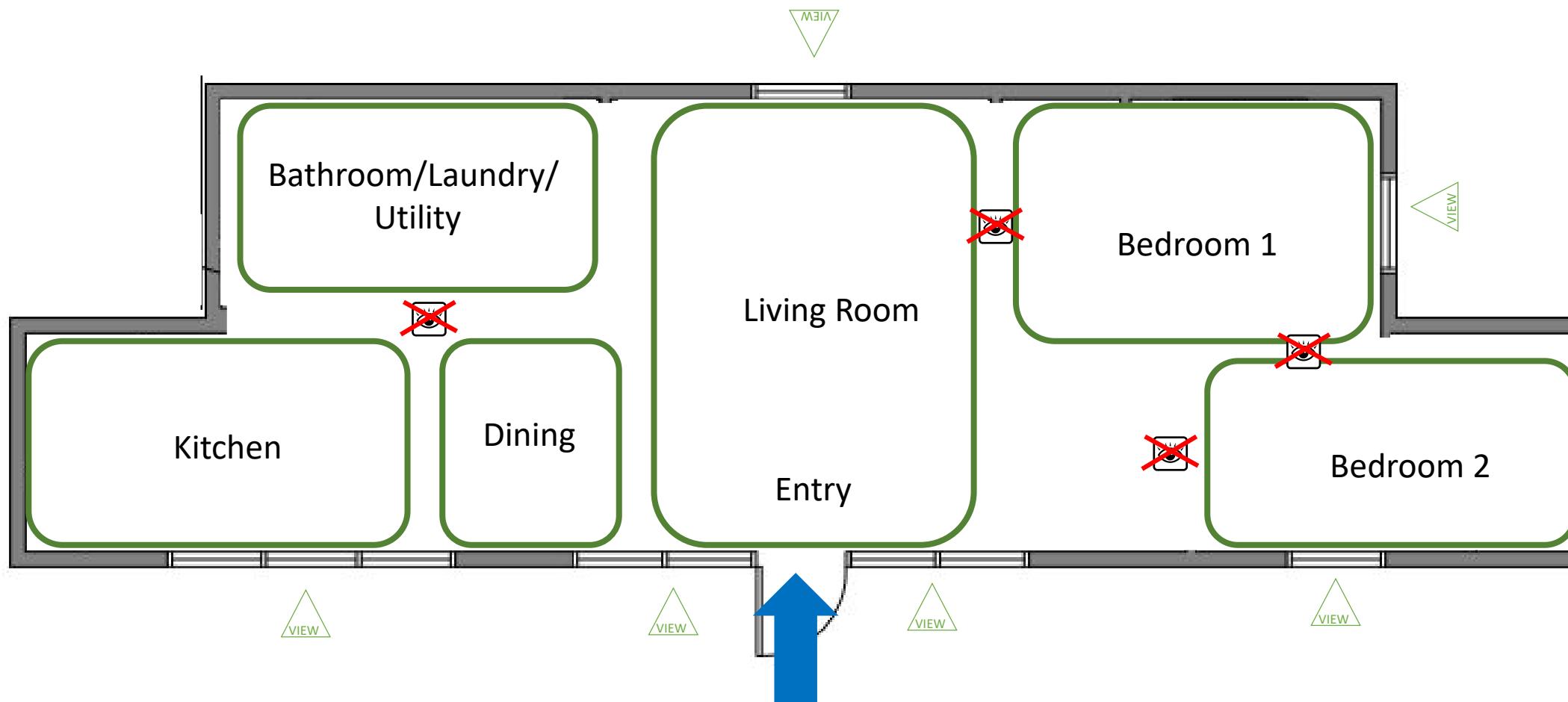
Key	
(X)	Visual Separation
(VIEW)	Exterior view consideration
→	Main entrance



Bubble Diagram



Blocking Diagram

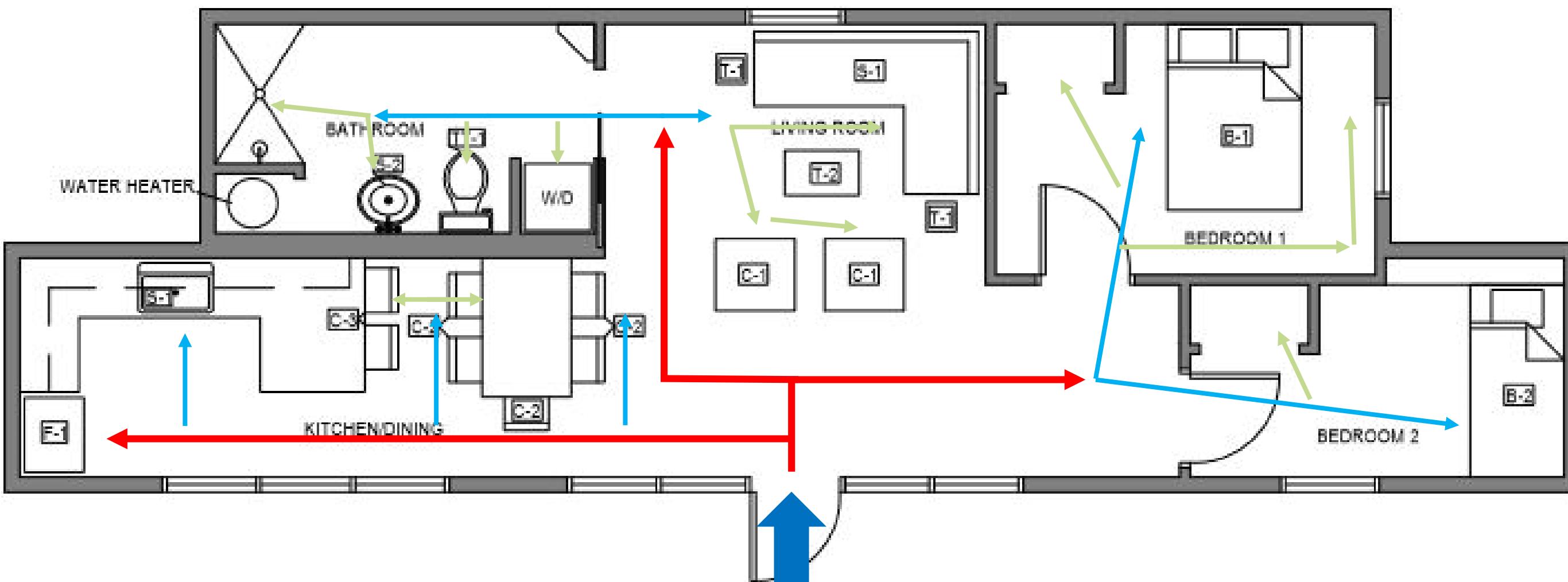


Key	
	Visual Separation
	Exterior view consideration
	Main entrance

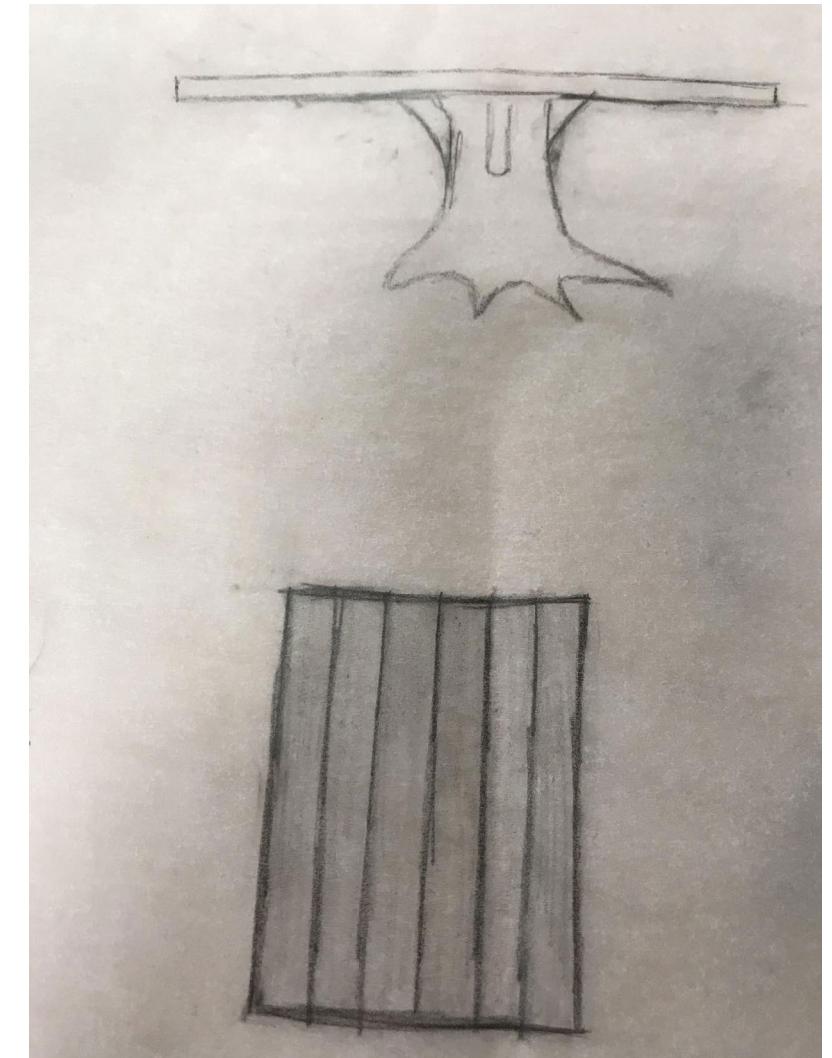
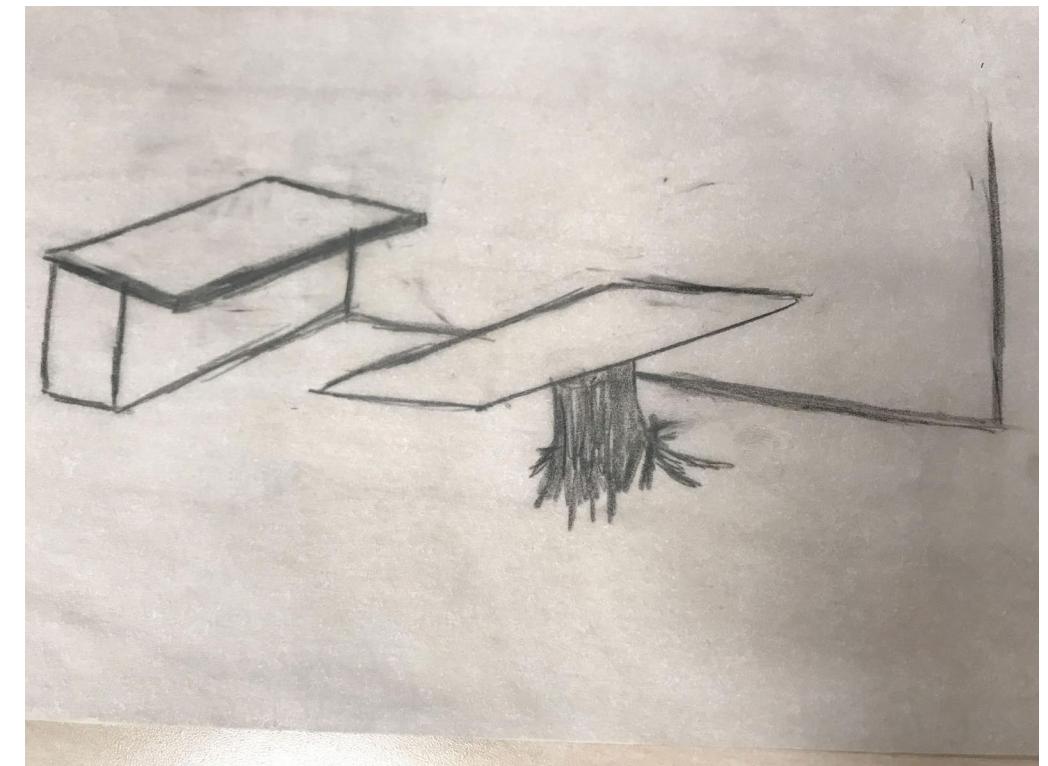
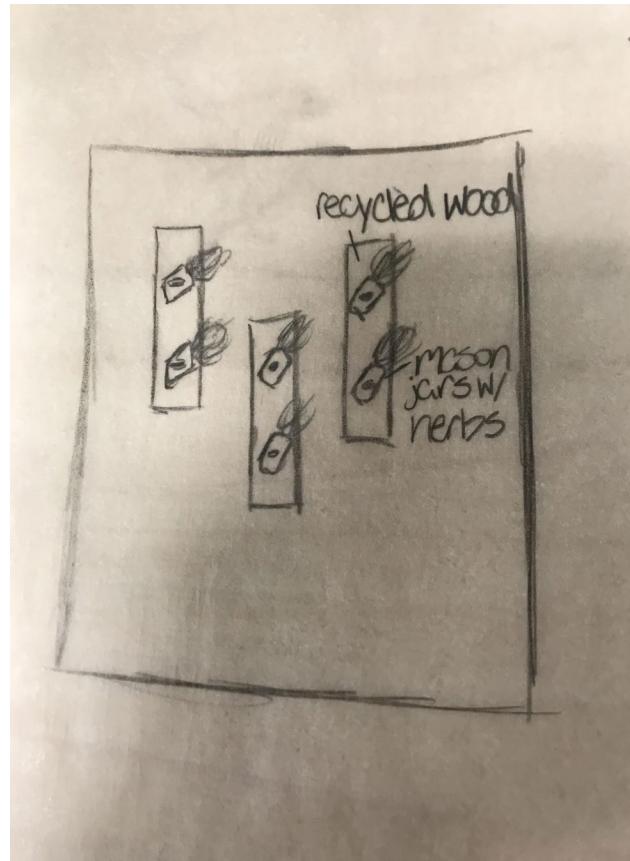
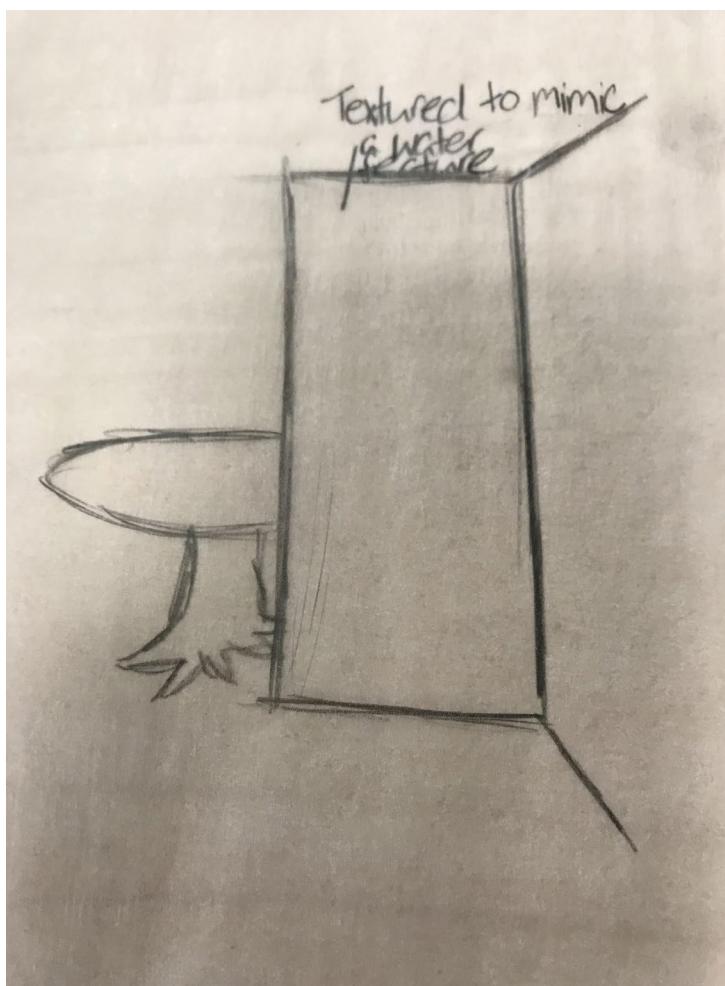


Circulation Diagram

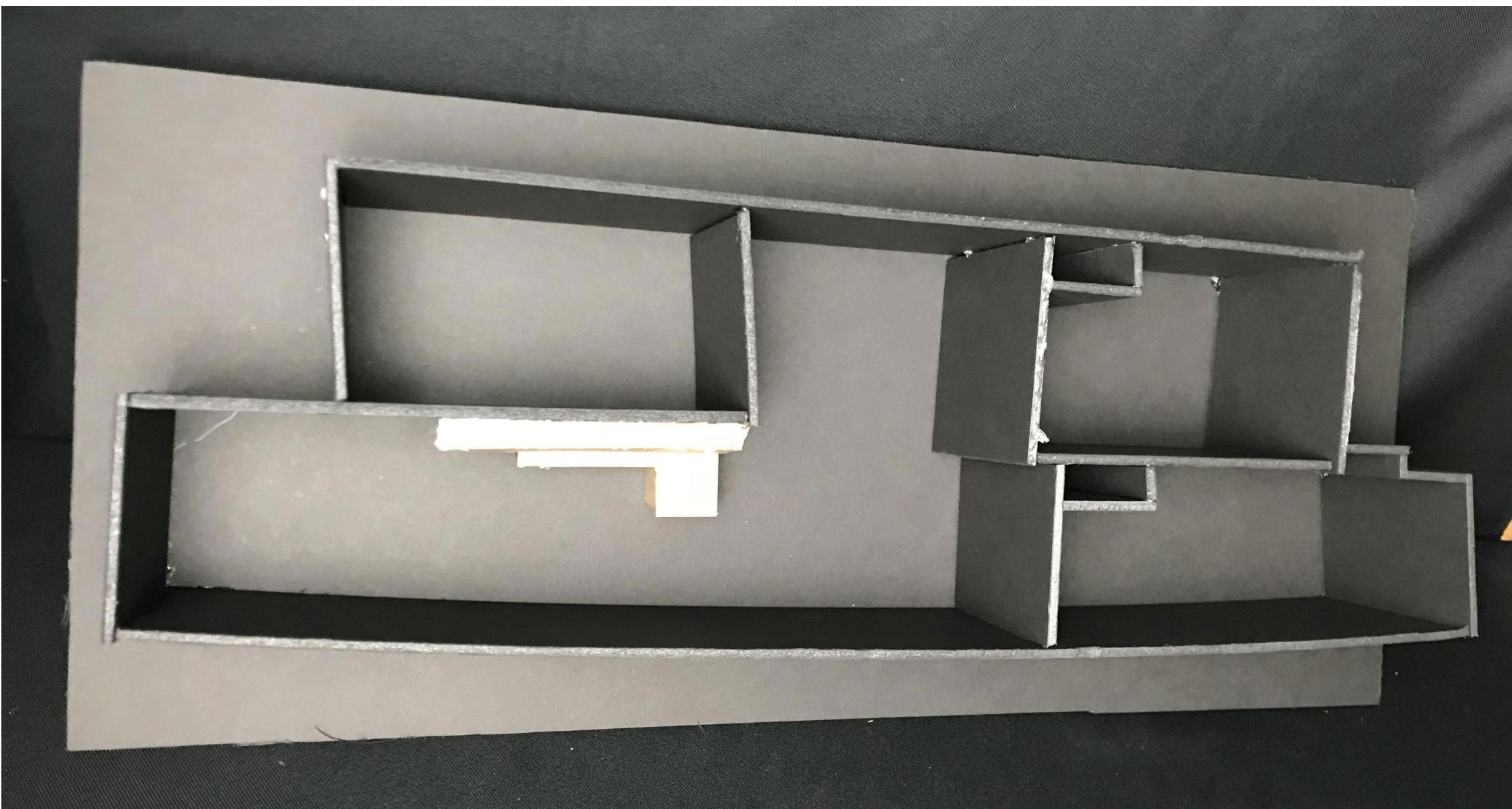
Key	
Red arrow	Primary Path
Blue arrow	Secondary Path
Green arrow	Tertiary Path
Blue arrow	Main entrance



Schematic Sketches



House Study Model



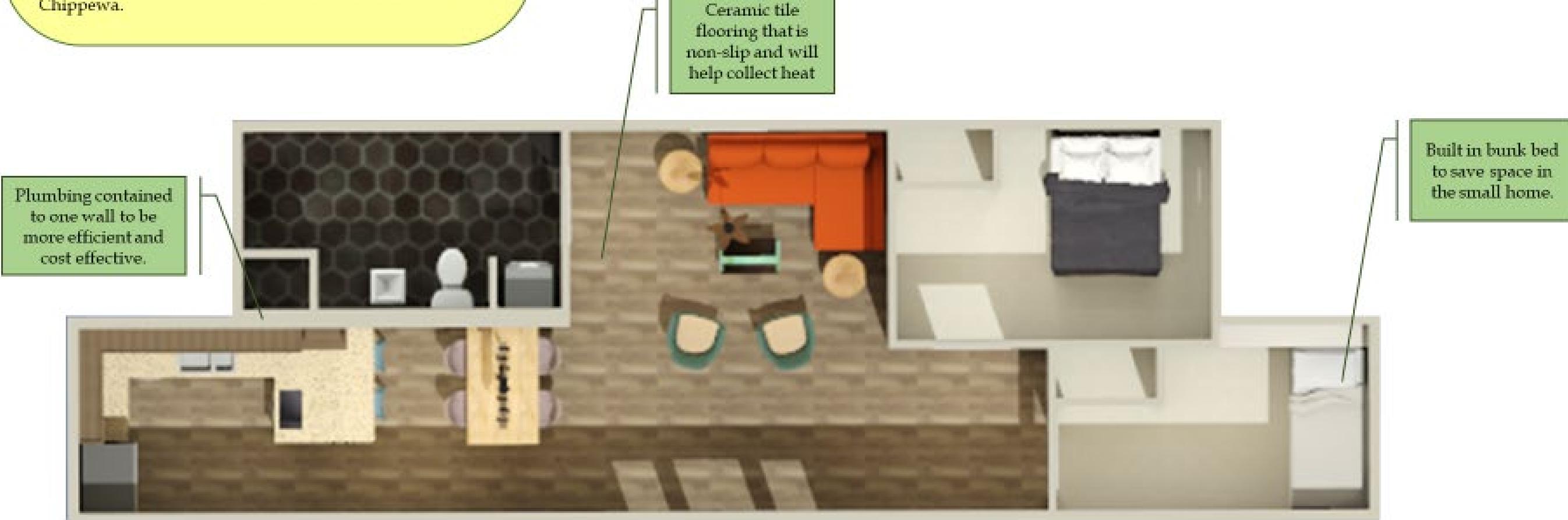
Design Concept

The small home is an affordable home designed to be placed on the Turtle Mountain Chippewa Reservation. The home is built using durable materials and universal design is implemented throughout the home. This will allow for many families to live there no matter their age or if they have a disability. Sustainable practices such as energy efficient lighting and recycled materials will be used throughout the home.

The home provides spaces to connect the families. It will encourage them to spend quality time together through the interior and exterior spaces that are dedicated to that. The colors used throughout the space are inspired by nature. The colors can be seen in the fall leaves of the trees, beautiful sunsets, and some of the traditional beading done by the Chippewa.



Designed by Allison Voigt



Tables made out of recycled teakwood.



North East Livingroom View



CF-1

The leaf-shape design on the fan blades is a way to incorporate biophilic design.



Living Room



T-1



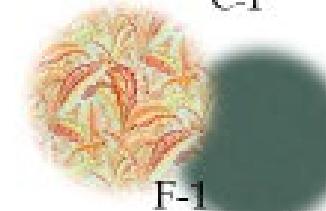
S-1



T-2



C-1



F-1





C-2



F-2



C-3



Kitchen/Dining Room



The dining table, The Table of Life, is the custom element of this project



Contrast between the counter and the cabinets is so it's easier to distinguish apart from each other.

The brick wall and the wood beam light give the room a natural feeling



Ceramic tile to catch heat from the lights through the windows.

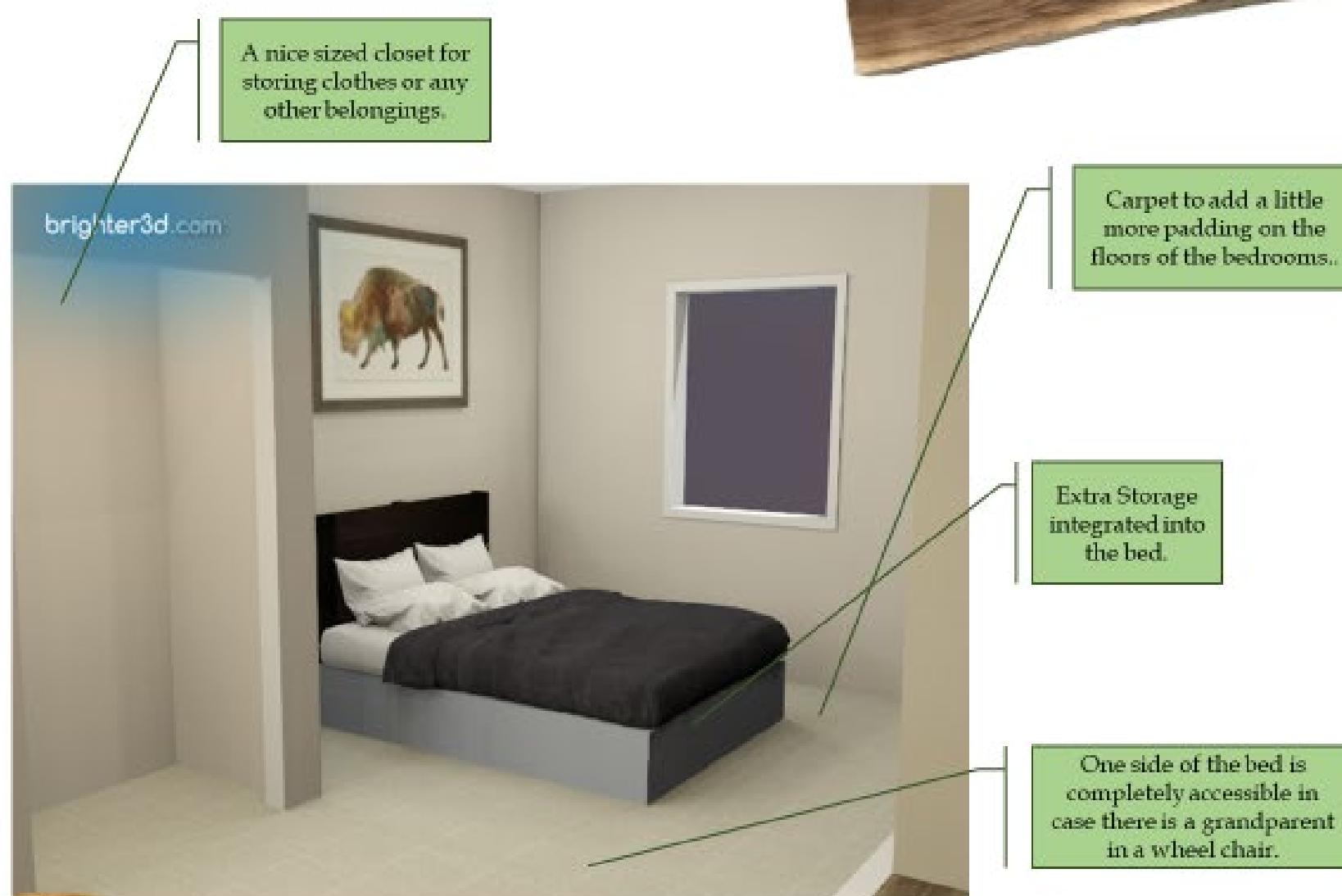


P-1





A-2



B-1



The Table of Life



FF&E Schedule

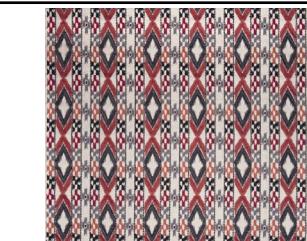
FF&E Schedule - Furniture	
Code	C-1
Description	Accent Chair
Manufacturer	SoMa Jaxon
Item/Model Name	SoMa Jaxon Upholstered Swivel Armchair
Item/Model Number	Item: 4024327 (depends on color?)
Dimension/Size	Overall: 32"W x 29"D x 33"H Seat: 18"W x 19.5"D x 17"H Arm: 23"H
Quantity	2
Product Finish/Color	Metal
Fabric Code	F-1
Fabric Pattern Name/Number	Clarence Paisley – Lagoon 8017155.113.0
Fabric Code	F-2
Fabric Pattern Name/Number	Oxford Velvet – Aegean 2016122.135.0
Location	Living Room
Notes	F-1 on seat cushion and F-2 on surround



FF&E Schedule - Furniture	
Code	B-1
Description	Full bed
Manufacturer	Mack & Milo
Item/Model Name	Bourquin Storage Platform Bed
Item/Model Number	W000650896
Dimension/Size	Overall 56"W, 76"L Headboard 55.25"W, 3.75"D, 40"H
Quantity	1
Product Finish/Color	Walnut/White Laminate
Fabric Code	N/A
Fabric Pattern Name/Number	N/A
Location	Bedroom 1
Notes	



FF&E Schedule - Furniture	
Code	C-2
Description	Dining Chair
Manufacturer	Ivy Bronx
Item/Model Name	Capasso Upholstered Dining Chair
Item/Model Number	IVBX3552
Dimension/Size	34.75"H, 17.5"W, 21"D
Quantity	1 – set of 4
Product Finish/Color	Dark Walnut
Fabric Code	F-3
Fabric Pattern Name/Number	Queen - Rojo/Gris GDT5403.2.0
Location	Kitchen/Dining Room
Notes	



FF&E Schedule - Furniture	
Code	C-3
Description	Counter height stool
Manufacturer	Trent Austin Design
Item/Model Name	Lompoc 24" Bar Stool
Item/Model Number	TADN6929
Dimension/Size	24"H, 16"W, 16"D
Quantity	2
Product Finish/Color	Metal - Distressed Kelly Blue
Fabric Code	N/A
Fabric Pattern Name/Number	N/A
Location	Kitchen/Dining Room
Notes	



FF&E Schedule - Furniture	
Code	S-1
Description	Sleeper sectional,3 seat w/storage
Manufacturer	IKEA of Sweden
Item/Model Name	FRIHETEN
Item/Model Number	792.168.13
Dimension/Size	Length: 90 1/2 " Depth: 59 1/2 " Height: 26 " Bed width: 55 1/8 " Bed length: 80 3/8 "
Quantity	1
Product Finish/Color	Skiftebo dark orange
Fabric Code	N/A
Fabric Pattern Name/Number	Skiftebo dark orange
Location	Livingroom
Notes	



FF&E Schedule - Furniture	
Code	T-1
Description	Side Table
Manufacturer	Loon Peak
Item/Model Name	Stilwell End Table
Item/Model Number	LOON6713
Dimension/Size	Overall 22" H x 20" W x 22" D Table Top Thickness, 2"
Quantity	2
Product Finish/Color	Natural
Fabric Code	N/A
Fabric Pattern Name/Number	N/A
Location	Living Room
Notes	Made of reclaimed teakwood



FF&E Schedule - Furniture	
Code	T-2
Description	Coffee Table
Manufacturer	Grain Designs
Item/Model Name	Helen Coffee Table
Item/Model Number	"original"
Dimension/Size	Made to order
Quantity	1
Product Finish/Color	Douglas Fir
Fabric Code	N/A
Fabric Pattern Name/Number	N/A
Location	Living Room
Notes	To be made out of recycled wood and iron



FF&E Schedule – Appliance	
Code	CKT-1
Description	Cooktop
Manufacturer	Fisher & Paykel
Item/Model Name	2-Element Induction Cooktop
Item/Model Number	Item #1026130 Model #C122DTB2N
Dimension/Size	Actual Depth 20.876" Actual Width 11.5125" Adjustable Height – NO Max. Assembled Height 3.69"
Quantity	1
Product Finish/Color	Black
Location	Kitchen
Notes	



FF&E Schedule – Appliance	
Code	D-1
Description	Dryer
Manufacturer	LG
Item/Model Name	LG 7.4-cu ft Stackable Gas Dryer
Item/Model Number	1072527/DLGX3701V
Dimension/Size	27"W, 38"H, 30"D
Quantity	1
Product Finish/Color	Graphite Steel
Location	Bathroom
Notes	ENERGY STAR Certified



FF&E Schedule – Appliance	
Code	DW-1
Description	
Manufacturer	Fisher-Paykel
Item/Model Name	45-Decible Drawer Dishwasher
Item/Model Number	Item # 1028516 Model # DD24SAX9 N
Dimension/Size	16.125"H, 23.5625"W 22.5625"D
Quantity	1
Product Finish/Color	Stainless Steel
Location	Kitchen
Notes	



FF&E Schedule – Appliance	
Code	F-1
Description	Refrigerator
Manufacturer	Samsung
Item/Model Name	Samsung 17.5 cu Counter Depth French Door Refrigerator with Ice Maker
Item/Model Number	719466-RF18HFENBSR
Dimension/Size	33"W, 30.5"D, 70"H
Quantity	1
Product Finish/Color	Stainless Steel
Location	Kitchen
Notes	



FF&E Schedule – Appliance	
Code	MW-1
Description	Microwave
Manufacturer	Frigidaire
Item/Model Name	1.1-cu ft 1,100-Watt Countertop Microwave
Item/Model Number	Item # 510519 Model # FFCM1134LS
Dimension/Size	Height 12.75" Width 20.375" Depth 16.125" Capacity 1.1 Cu. Ft.
Quantity	1
Product Finish/Color	Stainless Steel
Location	Kitchen
Notes	



FF&E Schedule – Appliance	
Code	O-1
Description	Oven
Manufacturer	Frigidaire
Item/Model Name	Self-cleaning Single Electric Wall Oven
Item/Model Number	Item # 884237 Model # LFEW3026TF
Dimension/Size	27.25"H, 28.5"W, 24"D
Quantity	1
Product Finish/Color	Stainless Steel
Location	Kitchen
Notes	

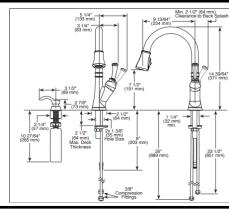


FF&E Schedule – Appliance	
Code	W-1
Description	Washer
Manufacturer	LG
Item/Model Name	LG 4.5-cu ft High Efficiency Stackable Front-Load Washer
Item/Model Number	1072525/WM3700HVA
Dimension/Size	27"W, 29.75"D, 52"H
Quantity	1
Product Finish/Color	Graphite Steel
Location	Bathroom
Notes	ENERGY STAR Certified

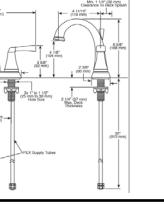


FF&E Schedule – Plumbing Fixture	
Code	S-2
Description	Pedestal Sink
Manufacturer	Aquatica
Item/Model Name	Crystal Stone 18" Pedestal Bathroom Sink
Item/Model Number	SKU: XAI1511 Part #: 627722004019
Dimension/Size	Overall - 17.75" L x 17.75" W x 33.75" H Drain Hole Diameter 1.75" Pedestal Height - Top to Bottom 33.75"
Quantity	1
Product Finish/Color	Matte Stone
Location	Bathroom
Notes	



FF&E Schedule – Plumbing Fixture	
Code	FIX-1
Description	Faucet
Manufacturer	Delta
Item/Model Name	Savile Stainless 1-handle Deck Mount Pull-down ShieldSpray Kitchen Faucet
Item/Model Number	5365/19949Z-SSSD-DST
Dimension/Size	
Quantity	1
Product Finish/Color	Stainless
Location	Kitchen
Notes	

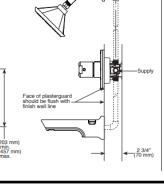


FF&E Schedule – Plumbing Fixture	
Code	FIX-2
Description	Faucet
Manufacturer	Delta
Item/Model Name	Dryden SpotShield Stainless 2-Handle 4-in Centerset WaterSense Bathroom Faucet
Item/Model Number	842167/2551-SPMPU-DST
Dimension/Size	
Quantity	1
Product Finish/Color	Spotshield Stainless
Location	Bathroom
Notes	



FF&E Schedule – Plumbing Fixture	
Code	S-1
Description	Sink
Manufacturer	Moen
Item/Model Name	2000 Stainless Steel Single-Basin Drop-In 3-Hole Kitchen Sink
Item/Model Number	1215432/G201963Q
Dimension/Size	22"W, 25"L, 7"D
Quantity	1
Product Finish/Color	Stainless
Location	Kitchen
Notes	Compatible with Garbage Disposals



FF&E Schedule – Plumbing Fixture	
Code	FIX-3
Description	Shower Valve
Manufacturer	Kohler
Item/Model Name	Loure Vibrant Brushed Nickel 1-Handle Shower Faucet
Item/Model Number	512751/T14665-4-BN
Dimension/Size	
Quantity	1
Product Finish/Color	Vibrant Brushed Nickel
Location	Bathroom
Notes	



FF&E Schedule – Equipment	
Code	SD-1
Description	Smoke detector and Carbon Monoxide Alarm
Manufacturer	Kidde
Item/Model Name	Worry-Free AC Hardwired Combination Smoke & Carbon Monoxide Alarm Sealed Lithium Battery Backup
Item/Model Number	i12010SCO
Dimension/Size	5.5" in diameter x 1.75" depth
Quantity	5
Product Finish/Color	White
Location	All rooms
Notes	Hardwired with battery backup



Lighting Schedule	
Code	P-1
Fixture Type	Pendant
Manufacturer	Wyckhoff
Item/Model Number	GRCS7150
Description	8-Light Kitchen Island Pendant
Dimension/Size	45" H, 5" W, 4.8" D
Quantity	1
Lamp Source	LED
Location	Above Dining Table
Notes	



Lighting Schedule	
Code	CF-1
Fixture Type	Down rod
Manufacturer	Columbus
Item/Model Number	DRPW1041
Description	Leaf Blade fan
Dimension/Size	52" W, 20.2" H
Quantity	1
Lamp Source	LED
Location	Livingroom
Notes	



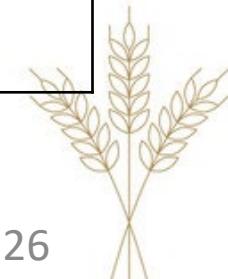
Lighting Schedule	
Code	L-1
Fixture Type	Flush Mounted
Manufacturer	Progress Lighting
Item/Model Number	558718/P7252-09EBWB
Description	Modular Fluorescent White Acrylic Ceiling Fluorescent Light ENERGY STAR
Dimension/Size	31.25" DIA, 6.5" h
Quantity	2
Lamp Source	Fluorescent
Location	Bedroom 1 and Bedroom 2
Notes	



Lighting Schedule	
Code	R-1
Fixture Type	Recessed Can
Manufacturer	Seagull Lighting
Item/Model Number	14700s-15
Description	Wet rated, ENERGY STAR, dimmable, white finish, one lamp
Dimension/Size	6" DIA
Quantity	7
Lamp Source	LED
Location	Livingroom, Kitchen
Notes	



Lighting Schedule	
Code	FL-1
Fixture Type	Fan/Light Combo
Manufacturer	Utilitech
Item/Model Number	785737/7109-01
Description	Utilitech Ventilation Fan 2-Sone 80-CFM Brushed Nickel Bathroom Fan
Dimension/Size	8.12" L, 8.37" W, 5.75" H
Quantity	1
Lamp Source	LED
Location	Bathroom
Notes	



Lighting Schedule

Room Finish Schedule



Room Finish Schedule	
Code	CPT-1
Description	Carpet
Manufacturer	Shaw Flooring
Product/Style Name	Parallel
Product Number	00105
Product Finish/Color	oat
Dimension/Size	36"W, 41 1/2"L
Location	Bedroom 1 & Bedroom 2
Technical Specifications	
Notes	



Room Finish Schedule

Room Finish Schedule	
Code	CT-1
Description	Ceramic Tile
Manufacturer	Welles Hardwood
Product/Style Name	Tampico Ceramic Wood Look Tile
Product Number	SNLN1882
Product Finish/Color	Dark Brown
Dimension/Size	7"W, 24)L, .38"D
Location	Kitchen/Dining & Livingroom
Technical Specifications	
Notes	



Room Finish Schedule

Room Finish Schedule	
Code	CT-2
Description	Ceramic Tile
Manufacturer	Bedrosians
Product/Style Name	Anthologie
Product Number	1120622
Product Finish/Color	Black
Dimension/Size	8)L, 9"W, 7.9mm Thick
Location	Bathroom Floors
Technical Specifications	Impervious
Notes	



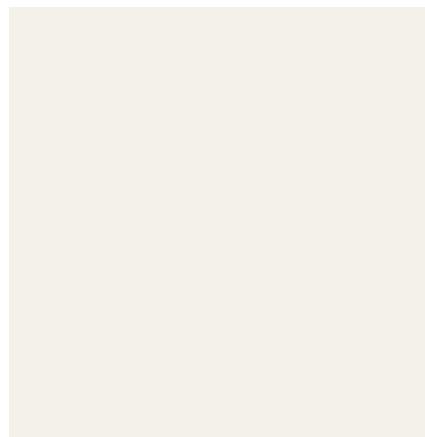
Room Finish Schedule	
Code	LAM-1
Description	Laminate
Manufacturer	Formica
Product/Style Name	Formica Laminate
Product Number	9484
Product Finish/Color	Matte Oxidized BeamWood
Dimension/Size	N/A
Location	Wall Cabinets
Technical Specifications	Impact Resistant Stain Resistnat
Notes	



Room Finish Schedule	
Code	LAM-3
Description	Laminate
Manufacturer	Formica
Product/Style Name	Formica Laminate
Product Number	6925
Product Finish/Color	Maple Woodline
Dimension/Size	N/A
Location	Kitchen Countertops
Technical Specifications	Impact Resistant Stain Resistnat
Notes	



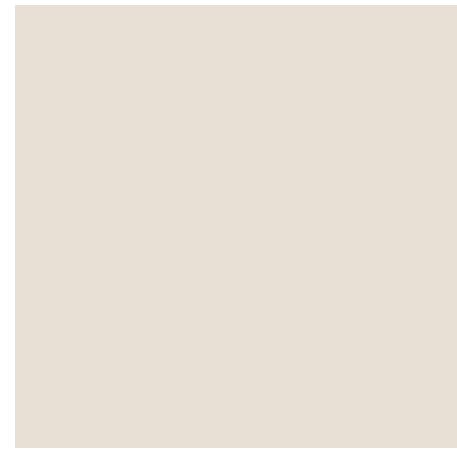
Room Finish Schedule	
Code	LAM-2
Description	Laminate
Manufacturer	Formica
Product/Style Name	Formica Laminate
Product Number	934
Product Finish/Color	Matte Pearl
Dimension/Size	N/A
Location	Kitchen Base Cabinets
Technical Specifications	Impact Resistant Stain Resistnat
Notes	



Room Finish Schedule	
Code	PT-1
Description	Paint
Manufacturer	Sherwin Williams
Product/Style Name	Sherwin Williams Colors
Product Number	SW 6155
Product Finish/Color	Rice Grain
Dimension/Size	N/A
Location	Livingroom and entry walls
Technical Specifications	LRV: 64 Semi-Gloss
Notes	



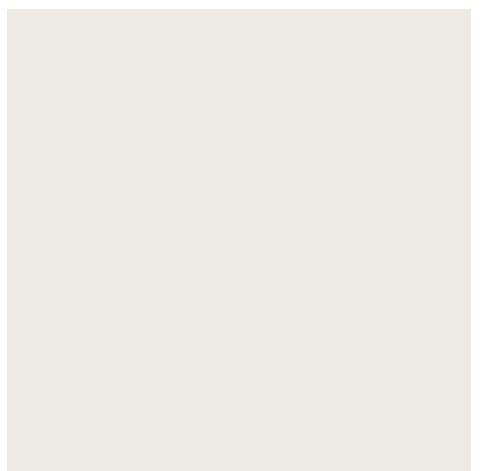
Room Finish Schedule	
Code	PT-2
Description	Paint
Manufacturer	Sherwin Williams
Product/Style Name	Historic Colors
Product Number	SW 0053
Product Finish/Color	Porcelain
Dimension/Size	N/A
Location	Bedroom 1, Bedroom 2
Technical Specifications	LRV: 76 Semi-Gloss
Notes	



Room Finish Schedule	
Code	WT-1
Description	Wall Tile
Manufacturer	MSI
Product/Style Name	Vintage 8 x 36 Porcelain Wood lookTile in White
Product Number	MVP2987
Product Finish/Color	Wood Look
Dimension/Size	8"W, 36"L, .4"D
Location	Bathroom Walls
Technical Specifications	GREENGUARD Certified
Notes	



Room Finish Schedule	
Code	PT-3
Description	Paint
Manufacturer	Sherwin Williams
Product/Style Name	White & Pastel
Product Number	SW 7004
Product Finish/Color	Snowbound
Dimension/Size	N/A
Location	All Ceilings
Technical Specifications	LRV: 83 Semi-Gloss
Notes	



Room Finish Schedule	
Code	WT-2
Description	Wall Tile
Manufacturer	Daltile
Product/Style Name	Travertine Collection
Product Number	T730412SPLIT1T
Product Finish/Color	Mediterranean ivory
Dimension/Size	5.33 sq. ft.per carton
Location	North and West kitchen/dining walls
Technical Specifications	
Notes	



Room Finish Schedule	
Code	BC-1
Description	Passport Base
Manufacturer	Kraftmaid
Product/Style Name	Passport Base Single Door
Product Number	B182434.5LFH
Product Finish/Color	LAM-2
Dimension/Size	18"W, 34.5"H, 24"D
Location	Kitchen
Technical Specifications	
Notes	Whispertouch Hinge



Room Finish Schedule	
Code	BC-2
Description	Passport Base
Manufacturer	Kraftmaid
Product/Style Name	Passport Base Blind Corner Universal
Product Number	BBCU36
Product Finish/Color	LAM-2
Dimension/Size	36"W, 34.5"H, 24"D
Location	Kitchen
Technical Specifications	
Notes	Whispertouch Hinge



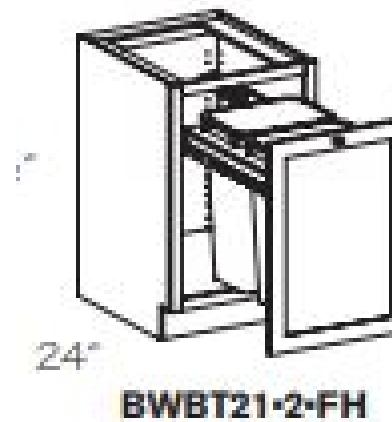
Room Finish Schedule	
Code	BC-3
Description	Passport Base
Manufacturer	Kraftmaid
Product/Style Name	Passport Base Microwave Drawer
Product Number	BMDC242434
Product Finish/Color	LAM-2
Dimension/Size	24"W, 34.5"H, 24"D
Location	Kitchen
Technical Specifications	
Notes	Whispertouch Hinge



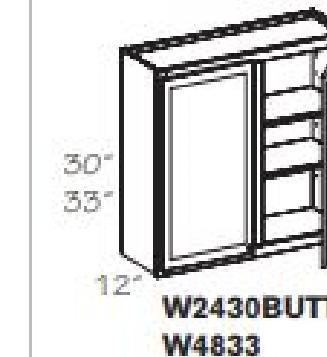
Cabinet Schedule



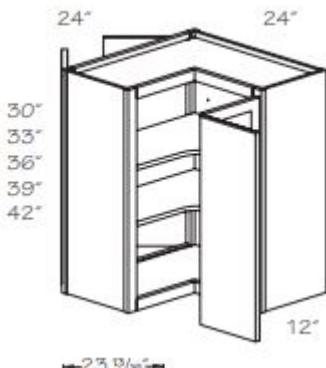
Room Finish Schedule	
Code	BC-4
Description	Passport Base
Manufacturer	Kraftmaid
Product/Style Name	Passport Base Top Mount Wastebasket
Product Number	BWBT21 2FHSC
Product Finish/Color	LAM-2
Dimension/Size	21"W, 34.5"H, 24"D
Location	Kitchen
Technical Specifications	
Notes	Whispertouch Hinge



Room Finish Schedule	
Code	W-1
Description	Passport Wall
Manufacturer	Kraftmaid
Product/Style Name	Passport Wall Double Door
Product Number	BMDC242434
Product Finish/Color	LAM-1
Dimension/Size	24"W, 30"H, 12"D
Location	Kitchen
Technical Specifications	
Notes	Whispertouch Hinge



Room Finish Schedule	
Code	W-2
Description	Passport Wall
Manufacturer	Kraftmaid
Product/Style Name	Passport Wall Easy Reach Corner Cabinet
Product Number	BBCU36
Product Finish/Color	LAM-1
Dimension/Size	24"W, 30"H, 24"D
Location	Kitchen
Technical Specifications	
Notes	Whispertouch Hinge



Room Finish Schedule	
Code	W-3
Description	Passport Wall
Manufacturer	Kraftmaid
Product/Style Name	Passport Wall Single Door
Product Number	B182434.5LFH
Product Finish/Color	LAM-1
Dimension/Size	24"W, 30"H, 12"D
Location	Kitchen
Technical Specifications	
Notes	Whispertouch Hinge



Room Finish Schedule	
Code	W-4
Description	Passport Wall
Manufacturer	Kraftmaid
Product/Style Name	Passport Wall Double Door
Product Number	BBCU36
Product Finish/Color	LAM-1
Dimension/Size	36"W, 24"H, 12"D
Location	Kitchen
Technical Specifications	
Notes	Whispertouch Hinge



Room Finish Schedule	
Code	W-5
Description	Passport Wall
Manufacturer	Kraftmaid
Product/Style Name	Passport Wall Double Door
Product Number	B182434.5LFH
Product Finish/Color	LAM-1
Dimension/Size	30"W, 30"H, 12"D
Location	Kitchen
Technical Specifications	
Notes	Whispertouch Hinge



Art Schedule

Art Schedule	
Code	A-1
Description	Art
Artist	Red Barrel Studio
Creation Date	2018
Code	N/A
Title	Painted Sunflowers Wall Art
Medium	Print
Dimension/Size	34"H, 25"W, 1"D
Quantity	1
Location	Livingroom
Notes	



Art Schedule	
Code	A-2
Description	Art
Artist	Pottery Barn
Creation Date	N/A
Title	Buffalo Impression Framed Print
Medium	Giclee Print
Dimension/Size	48"W, 36"H
Quantity	1
Location	Bedroom 1
Notes	






Appendix



Project 2: Global Solution

General Project Information	
Date of Research: November 2018	
PROJECT NAME	A Global Solution Project
Project Address/Location	Turtle Mountain Reservation, North Dakota
Project Description	One Family Dwelling
Project Type	<input checked="" type="checkbox"/> New Building <input type="checkbox"/> Existing Building*
<small>*For existing buildings, check all those that apply:</small> <div style="display: flex; justify-content: space-around;"> <input type="checkbox"/> Change of Occupancy <input type="checkbox"/> Relocation <input type="checkbox"/> Historic Building <input type="checkbox"/> Repair <input type="checkbox"/> Renovation <input type="checkbox"/> Addition </div>	
Square Footage	Building: 620 sq. ft Floor: 620 sq. ft
Occupancy Classification	One Family Dwelling
Building Type	<input checked="" type="checkbox"/> Dwelling; No. stories above grade <u>1</u> <input type="checkbox"/> Townhouse; No. stories _____ <input type="checkbox"/> Basement Habitable: <input type="checkbox"/> yes <input type="checkbox"/> no
Project Notes: Slab on Grade Concrete Foundation	

Interior Codes and Standards Checklist

Date of Research: November 2018

PUBLICATIONS REQUIRED – Codes & Regulations (Select all those that apply to your project)		YEAR OF EDITION	YEAR OF AMENDMENT(s)
Building Code	<input checked="" type="checkbox"/> IRC <input type="checkbox"/> NFPA 5000 <input type="checkbox"/> Other:	2018	
Performance Code	<input checked="" type="checkbox"/> ICCPC <input type="checkbox"/> NFPA <input type="checkbox"/> Other:	2018	
Fire Code	<input checked="" type="checkbox"/> IFC <input type="checkbox"/> UFC <input type="checkbox"/> Other:	2018	
Life Safety Code	Life Safety Code (NFPA 101)	2018	
Plumbing Code ⁴	<input checked="" type="checkbox"/> IPU <input type="checkbox"/> UPC <input type="checkbox"/> Other:	2018	
Mechanical Code ⁴	<input checked="" type="checkbox"/> IMC <input type="checkbox"/> UMC <input type="checkbox"/> Other:	2018	
Electrical Code ⁴	<input checked="" type="checkbox"/> ICCEC <input type="checkbox"/> NEC <input type="checkbox"/> Other:	2018	
Energy Code	<input checked="" type="checkbox"/> ICCEC <input type="checkbox"/> NFPA 9000 <input type="checkbox"/> Other:	2018	
Existing Building Code	<input type="checkbox"/> IEBC <input type="checkbox"/> Other:		
Accessibility Regulations & Standards	<input checked="" type="checkbox"/> ADA Guidelines ¹ <input checked="" type="checkbox"/> Fair Housing Act (residential) <input checked="" type="checkbox"/> ICC/ANSI A117.1: Accessible and Usable Buildings and Facilities <input type="checkbox"/> Other:	ICC/ANSI A117.1-2017	
Additional Codes for Jurisdiction ²	N/A		
Standards ³			
National Fire Protection Agency (NFPA)	[include all standard numbers referenced]	2018	
American Society of Testing & Materials (ASTM)	[include all standard numbers referenced]	2018	
Underwriters Laboratory (UL)	[include all standard numbers referenced]	2018	
Notes:			
1. All projects should be reviewed for ADA compatibility. 2. Be sure to check for other state and local codes. Local codes can include special ordinances, health codes, zoning regulations and historic preservation laws. List all that apply. 3. Refer to the codes as well as local requirements to determine which standards are required. List the specific publications. 4. Interior Designers need to know certain aspects of the code. The Engineer designs the corresponding system in detail. The Interior Designer must know enough information to work in conjunction with other contractors.			



Project 2: Global Solution

INTERIOR CODES & STANDARDS ANALYSIS

R303.7 Stairway Illumination. There will be a wall switch at each level of the stairs case.

M1901.1 Clearances. The range will have a vertical clearance above the cooking top of no less than 30 inches to unprotected combustible material.

ICC/ANSI 403.5 Clear Width. Clear width of an accessible route will be 36 inches minimum.

ICC/ANSI 404.2.2 Clear Width. Doorways will have a clear opening width of 32 inches minimum

ICC/ANSI 404.2.3.2 Maneuvering Clearances at Manual Swinging Doors. Door openings from the pull side will have 60 inches perpendicular, and 18 parallel. On the hinge side there will be at least 18 inches space from the door.

ICC/ANSI 404.2.3.3 Sliding and Folding Doors. Pocket doors will have a 42 inches minimum approach. On the latch side there will be 24 inches on along that wall, and 22 inches on the non-latch side.

ICC/ANSI 404.2.4 Thresholds. If there are any thresholds at doorways, they will be a $\frac{1}{8}$ inch maximum in height.

ICC/ANSI 802.3 Width. There will be 36 inches for a wheelchair to pull up to a dining room table.

ICC/ANSI 804.2.1 Pass through Kitchens. There will be 40 inches minimum width provided between a wall and kitchen island to allow for wheelchair accessibility.

ICC/ANSI 804.5.3 Dishwasher. When the dishwasher opens, it will not obstruct any other objects. There will be a clear floor space for the door to open all the way.

ICC/ANSI 804.5.4 Cooktop. The controls will be located at the front of the appliance to avoid reaching across the burners.

ICC/ANSI 804.5.5 Oven. The controls will be located at the front of the appliance to avoid reaching across burners.

Project 2: Global Solution

Building Planning Checklist

Date of Research: November 2018

General Information ¹			
Checklist is for: <input type="checkbox"/> Floor _____ (<i>indicate floor</i>) <input checked="" type="checkbox"/> Building <input type="checkbox"/> Room			
	Location in Dwelling (Room name/number)	Spatial Requirements	Notes
<i>Reqd by Code</i> <i>Provided</i>			
Floor Area Requirements			
<input checked="" type="checkbox"/> Habitable rooms (<i>list all individually</i>)	Living Room	120	
	Dining Area	70	
	Bedroom 1	70	
	Bedroom 2	70	
	Bedroom 3	70	
	Lounge	120	
<input checked="" type="checkbox"/> Kitchen	Kitchen	N/A	
<input checked="" type="checkbox"/> Bathrooms	Bathroom 1	N/A	
	Bathroom 2	N/A	
<input checked="" type="checkbox"/> Other:	Laundry Area	N/A	Utility
Ceiling Height Requirements (<i>group like spaces</i>)			
<input checked="" type="checkbox"/> Habitable rooms (<i>group like spaces</i>)	Living Room, Dining Area, & Kitchen	7'-0" AFF	
	Bedroom 1	7'-0" AFF	
	Bedroom 2	7'-0" AFF	
	Bedroom 3	7'-0" AFF	
<input checked="" type="checkbox"/> Hallways/corridors	Hallway	7'-0" AFF	
<input checked="" type="checkbox"/> Bathrooms	Bathroom 1	6'-8" AFF	
	Bathroom 2	6'-8" AFF	
<input checked="" type="checkbox"/> Laundry rooms	Laundry Area	6'-8" AFF	
<input type="checkbox"/> Habitable Basement			
<input type="checkbox"/> Basement without habitable space			
<input type="checkbox"/> Other:			



Project 2: Global Solution

	Location in Dwelling (room name/number)	Spatial Requirements		Type of Glass Installed (tempered safety, etc.)
		Req'd by Code	Provided	
Glazing R308				
<input type="checkbox"/> Hazardous Locations (list; R308.4)				
<input type="checkbox"/> Skylights				
<input type="checkbox"/> Other:				
Means of Egress Components				
	Location in Dwelling (room name/number)	Window Opening Area		Notes
		Req'd by Code	Provided	
Emergency Escape & Rescue Openings				
<input checked="" type="checkbox"/> Habitable rooms (list all individually)	Bedroom 1	1'-8" W x 2'-0"H		
	Bedroom 2	1'-8" W x 2'-0"H		
	Bedroom 3	1'-8" W x 2'-0"H		
<input checked="" type="checkbox"/> Sill height for above grade windows (min, max) R310.1, R613.2				R310.2.2
<input type="checkbox"/> Window Wells (min openings, sill heights, etc.)				
<input type="checkbox"/> Open directly into public way				
<input type="checkbox"/> Other:				
Stairways				
<input checked="" type="checkbox"/> Stairways	<input type="checkbox"/> Ramps			
Clear Width: 3'-0"	Clear Width: _____			
Landing (size, locations, etc.)	Slope: _____			
Riser Height: 7"	Rise: _____			
Tread Depth: 10"	Landing (size, locations, etc.)			
Handrail Height: 34" (projection, return, profile, continuity, etc.)	Handrail Height: (projection, return, profile, continuity, etc.)			
Guards: N/A	Guards: _____			
<input type="checkbox"/> Special Stairway requirements (winders, spiral, etc.)	<input type="checkbox"/> Other (list):			
<input type="checkbox"/> Other (list):				
Other code considerations				
<input checked="" type="checkbox"/> Exit Door (type, size, landing, swing, etc.)		IRC R311.2		
<input type="checkbox"/> Elevators & Platform Lifts R323				
<input checked="" type="checkbox"/> Hallways (min. width requirements)		IRC R311.6		
<input type="checkbox"/> Space under stairs (proper construction & enclosure)				
<input type="checkbox"/> Fireplaces (proper construction & enclosure)				
Notes:	1. Refer to codes and standards for specific information as well as ADA guidelines and ICC/ANSI standard for additional requirements.			

Project 2: Global Solution

BUILDING PLANNING ANALYSIS

R301.3 Story Height. Each story height will be no higher than 11'-7" AFF for the construction of the wood framed walls or structural insulated panel (SIP) walls.

R304.1 Minimum Area. The habitable rooms in the spec home have a floor area of over 70 square feet.

R304.2 Minimum dimensions. The habitable rooms in the spec home will be over 7 feet in any horizontal dimension.

R305.1 Minimum height. All ceiling heights are over 8'-0" AFF

R310.1.1 Operational constraints and opening control devices. Emergency escape and rescue openings will be operational from the inside of the room without the use of keys, tools, or special knowledge.

R310.2.1 Emergency escape and rescue openings. Minimum. Emergency and escape rescue openings will have a net clear opening will be no less than 5.7 square feet.

R311.2 Egress Doors. There will be two egress doors in each dwelling unit. These doors will be side-hinged and has a clear width of 32" or more. The clear height of the door opening will be no less than 78 inches in height measured from the top of the threshold to the bottom of the stop.

R311.3 Floors and Landings at Exterior Doors. There will be a landing or floor on each side of each exterior door. The width of each landing will extend past the door served, which is 36" in width.

R311.6 Hallways. Hallways are no less than 3'-0".

R311.7.1 Stairways. Width. Stairways will be 36 inches in clear width at all points above the permitted handrail height and below the required headroom height. Handrails will not project more than 4 1/2 inches on either side of the stairway and the clear width of the stairway at and below the handrail height, including treads and landings, will be no less than 31 1/2 inches where a handrail is installed on one side and 27 inches where handrails are provided on both sides

R311.7.2 Stairways. Headroom. The headroom in stairways will be 7 feet measured vertically from the sloped line adjoining the tread nosing or from the floor surface of the landing or platform on the portion of the stairway.

R311.7.3 Vertical Rise. A flight of stairs will have a vertical rise shorter than 151 inches between floor levels.

R311.7.5.1 Stairways. Stair Risers. The riser height will not be more than 7 1/4 inches. The riser will be measured vertically between leading edges of the adjacent treads.

R311.7.5.2 Stairways. Stair Treads. The tread depth will not be less than 10 inches.

R311.7.5.3 Stairways. Stair Nosing. The projection of the nosing will be no less than 1/4 inch and no more than 1 1/4 inches and will be provided on stairways with solid risers.

R311.7.6 Landings and Stairways. There is a floor or landing at the top and bottom of each stairway. The width perpendicular to the direction of travel will be no less than the width of the flight served which is 36 inches.

R311.7.8.1 Handrails. Height. Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, is between 34 inches and 38 inches.



Project 2: Global Solution

R311.7.8.2 Handrails. Continuity. Handrails for stairways will be continuous for the full length of the flight, a point directly above the top riser of the flight to a point directly above the lowest riser of the flight. Handrail ends will be returned. Handrails adjacent to a wall will have a space of not less than 1 ½ inches between the wall and the handrails.

R311.7.8.3 Handrail clearance. Handrail clearance not less than 1 ½".

R311.7.8.5 Handrails. Grip Size. The handrails for the stairs will have a diameter of no less than 1 ¼ inches and no greater than 2 inches.

R312.2 Window Sills. All window sills in the dwelling have a minimum height of 24" and no greater than 72".

Project 2: Global Solution

Fire Resistance & Protection Checklist

Date of Research: November 2018

FIRE RESISTANCE ^{1,2}			
Required Fire Protection (Check which apply)	Type of Assembly Required (i.e. Fire partition, Smoke partition, etc.)	Hourly Rating of Assembly (i.e. 1-hour, 2-hour, etc.)	
Fire Separation			
<input type="checkbox"/> Dwelling Unit separation R317 No. units:			
<input type="checkbox"/> Townhouse Unit Separation No. units: 4			
<input type="checkbox"/> Garage Separation requirements met (rating of walls, penetrations, door/window assemblies, etc.) [R302, R309, etc.]			
<input type="checkbox"/> Other:			
FIRE PROTECTION^{1,2}			
Required Fire Protection (Check which apply)	Location in Dwelling (Room name/number)	Qty Needed	Notes
		Ext'g	New
Detection Systems			
<input checked="" type="checkbox"/> Smoke Detectors	Bedroom 1	1	
	Bedroom 2	1	
	Bedroom 3	1	
	Living Room	1	
	Hallway	1	
<input checked="" type="checkbox"/> Carbon Monoxide Detectors	Hallway	1	
	Living Room	1	
<input type="checkbox"/> Other:			
<input checked="" type="checkbox"/> Detection systems hard wired with battery backup			
Alarm Systems			
<input type="checkbox"/> Visual/Audible Alarm(s)			
<input type="checkbox"/> Audible ONLY			
<input type="checkbox"/> Visual ONLY			
<input type="checkbox"/> Voice Communication System(s)			
<input type="checkbox"/> Other:			
Extinguishing Systems			
<input checked="" type="checkbox"/> Fire Extinguisher(s)	Kitchen	1	
<input checked="" type="checkbox"/> Sprinkler System(s)			R313.2.1
<input type="checkbox"/> Types of Head(s)			
<input type="checkbox"/> Orientation of Head(s)			
<input type="checkbox"/> Other:			
Notes:			



Plumbing Checklist

Date of Research: November 2018

General Information						
Checklist is for: <input type="checkbox"/> Floor _____ (<i>indicate floor</i>) <input checked="" type="checkbox"/> Building Type and Number of Plumbing Fixtures (<i>Check those that apply</i>)						
Fixture Type	Location in Dwelling (Room name/number)	Qty of Fixtures Required		Temperature Control Devices Req'd (Yes/No)	Spatial Requirements	
		New	Exist. ¹		Req'd by Code	Provided
<input checked="" type="checkbox"/> Shower	Bathroom 1	1	0	Yes	30" x 30"	
	Bathroom 2	1	0	Yes	30" x 30"	
<input checked="" type="checkbox"/> Lavatory						
<input checked="" type="checkbox"/> Water Closet	Bathroom 1	1	0	Yes		
	Bathroom 2	1	0	Yes		
<input checked="" type="checkbox"/> Bathtub	Bathroom 1	1	0	Yes		
<input checked="" type="checkbox"/> Sinks	Bathroom 1	1	0	yes		
	Bathroom 2	1	0	Yes		
	Kitchen	1	0	Yes		
<input type="checkbox"/> Laundry Tubs						
<input checked="" type="checkbox"/> Dishwasher	Kitchen	1	0	Yes		
<input checked="" type="checkbox"/> Clothes Washing Machine	Laundry Area	1	0	Yes		
<input type="checkbox"/> Whirlpool Bathtubs						
<input type="checkbox"/> Bidet						
<input type="checkbox"/> Other:						
Other Plumbing Code and Accessibility Requirements to Consider						
<input checked="" type="checkbox"/> Fixtures (<i>Mounting heights, clear floor space, faucet/control location, projections, water consumption</i>) <input checked="" type="checkbox"/> Faucet/Controls: Ease of operation (<i>i.e. lever, automatic, etc.</i>), Water Consumption <input checked="" type="checkbox"/> Grab Bars (<i>Location, lengths, heights, orientations, additional requirements for special situations</i>) <input checked="" type="checkbox"/> Finishes (<i>Smooth, non-absorbent, slip resistant</i>) <input type="checkbox"/> Room (<i>Turning space, overlapping clear floor space, privacy, signage, stall size, privacy panel, door swing</i>) <input checked="" type="checkbox"/> Shower Access (<i>compartment access and clear width</i>) <input type="checkbox"/> Whirlpool Bathtubs (<i>access to equipment</i>)						
Notes: 1. If no existing fixtures, leave cells BLANK 2. Refer to codes and standards for specific information. Also check ADA guidelines and ICC/ANSI standards for accessible mounting locations.						

1. Refer to codes and standards for specific information as well as ADA guidelines and ICC/ANSI standard for additional requirements.
 2. If automatic sprinkler systems are used, make sure they are approved and CHECK FOR POSSIBLE CODE TRADEOFFS.

FIRE RESISTANCE & PROTECTION ANALYSIS

R313 Auto Sprinkler Systems. Automatic residential fire sprinkler systems will be installed.

R314 Smoke Alarms. Smoke alarms will comply with the NFPA 72 and Section R314. Smoke alarms will be installed in sleeping rooms, outside of each sleeping area, in each story and dwelling, and 3 feet horizontally from the door or opening of a bathroom that contains a bathtub or shower.

R315 Carbon Monoxide Detectors. Carbon monoxide alarms will be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms.



Project 2: Global Solution

PLUMBING ANALYSIS

P2701.1 Quality of Fixtures. Plumbing fixtures, faucets and fixture fittings will all be smooth impervious surfaces, will be free from defects, will be concealed foul surfaces, and will conform to the material and standard table listed.

P2705.1 Installation. The installation of the water closet or lavatory will not be set closer than 15" from its center to any side wall, partition, or vanity, or closer than 30" center to center between adjacent fixtures. There will be a clearance of 21" minimum in front of the water closet and lavatory to any wall, fixture, or door. The location of piping, fixtures or equipment will not interfere with the operation of windows or doors.

P2708.1 General. Shower compartments will be no less than 900 square inches of interior cross-section area. Shower compartments will be no less than 30" in minimum dimension measure from the finished interior dimension of the shower compartment, exclusive of fixtures valves, showerheads, soap dishes, and safety grab bars or rails. The minimum required area and dimension will be no less than 70" above the shower drain outlet.

P2710.1 Bathtub and Shower Spaces. All walls in shower compartments and walls above bathtubs that have a wall-mounted showerhead will be finished in accordance with Section R307.2.

P2712.7 Water Closet Seats. Water closets will be equipped with seats of smooth, nonabsorbent material and will be properly sized for the water closet bowl type.

P2713.3 Bathtub and Whirlpool Bathtub Valves. Hot water supplied to bathtubs will include a water-temperature limiting device to limit the temperature of not greater than 120°F.

P2716.2 Water Supply Required. The kitchen sink equipped with a food-waste disposer will be provided with a faucet.

P2724.1 Temperature-Actuated Mixing Valves. Temperature-actuated mixing valves will be installed to reduce water temperatures and will be installed at the hot water source.

Project 2: Global Solution

Mechanical & Electrical Checklist

Date of Research: November 2018

General Information				
Checklist is for: <input type="checkbox"/> Floor _____ (indicate floor) <input checked="" type="checkbox"/> Building				
Required Electrical (Check which apply)	Location in Dwelling (Room name/number)	Maximum Spacing (ft.)	Min. number required	Notes
Power Distribution				
<input checked="" type="checkbox"/> Habitable Rooms	Living Room	12'-0"	4	
	Dining Area	12'-0"	1	
	Bedroom 1	12'-0"	4	
	Bedroom 2	12'-0"	4	
	Bedroom 3	12'-0"	4	
<input checked="" type="checkbox"/> Kitchen wall counters	Kitchen	4'-0"	3	
<input type="checkbox"/> Kitchen Island or peninsula counter	Kitchen			
<input checked="" type="checkbox"/> Hallway		N/A	1	
<input checked="" type="checkbox"/> Bathroom	Bathroom 1		1	
	Bathroom 2		1	
<input checked="" type="checkbox"/> Outdoors	Front and Back		1 Front 1 Back	
<input type="checkbox"/> Deck, balcony or porch				
<input checked="" type="checkbox"/> Laundry Area	Laundry Area		1	
<input type="checkbox"/> Basement - uninhabitable				
<input type="checkbox"/> Garage				
<input checked="" type="checkbox"/> HVAC Equipment	Utility Room		1	
<input type="checkbox"/> Other:				
<input checked="" type="checkbox"/> Ground-Fault Circuit Interrupters GFCI protection (wet areas where required)				
<input type="checkbox"/> Arc-Fault Circuit Interrupters AFCI protection (locations where required)				
Luminaires				
<input checked="" type="checkbox"/> Recessed luminaires clearance from combustibles				
<input checked="" type="checkbox"/> Bathtub and shower area clearances				
<input checked="" type="checkbox"/> Clothes closet – fixture type and clearances				
<input checked="" type="checkbox"/> Stairways				
<input type="checkbox"/> Other:				



Project 2: Global Solution

MECHANICAL & ELECTRICAL ANALYSIS

ANSI4.2.6: All electrical Receptacles are mounted 15" above finished floor.

NEC 210.52(A): All rooms have 120-volt wall receptacles installed every 6'-0" or closer. Kitchen has ground fault circuit interrupter receptacles every 6'-0" or closer.

NEC 201.8: Ground fault circuit interrupter (GFCI) receptacles are installed in kitchen and bathroom areas with wet and damp areas considered.

R303.10 Required Heating. Heating facilities will be provided capable of maintaining a room temperature of no less than 68 degrees.

Material and Finish Checklist

Date of Research: November 2018

MATERIAL AND FINISH VERIFICATION & ANALYSIS

R613.4 Structural Insulated Panel. The exterior walls and roof are constructed of Structural Insulated Panels (SIPs).

R702.2.1 Gypsum Plaster. The plaster within the dwelling complies to all testing and installation requirements.

R702.4.2 Backer Boards. Master bathroom and kitchen contain backer boards on the walls where tile is located.





Works Cited

Arman, M., Zuo, J., Wilson, L., Zillante, G., & Pullen, S. (2009). Challenges of responding to sustainability with implications for affordable housing. *Ecological Economics*, 68(12), 3034-3041.
doi:10.1016/j.ecolecon.2009.07.007

Berens, M. J. (2017, May 23). Design for Aging in Place Goes Mainstream. ASID Icon. Retrieved November 2, 2018, from <http://icon.asid.org/index.php/2017/05/23/design-for-aging-in-place-goes-mainstream/>

Poitra, P. F., & Poitra, K. L. (1997). *The history and culture of the turtle mountain band of chippewa* (pp. 43-52) (United States, North Dakota Department of Public Instruction, State Superintendent). ND: North Dakota Department of Public Instruction.

Seltenrich, N. (2012). Healthier tribal housing: combining the best of old and new. *Environmental Health Perspectives*, 120(12), A 460-A 469. doi:10.1289/ehp.120-a460