Office Design Project: Wildlife Conservation Society Regional Headquarters

North Dakota State University
ADHM 253 Interior Design Studio II:
Office Design
Spring 2018

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Mission Statement

WCS saves wildlife and wild places worldwide through science, conservation action, education, and inspiring people to value nature.

User/Client Description

Overall, there will be 13 employees sharing this office space. The Regional Executive Director oversees the development and implementation of operational plans used to put in action the strategic objectives of Wildlife Conservation Society. The Regional Board Secretary keeps records of the boards actions. The Regional Finance Director assists with the budget, assists the corporate office with month end general ledger close, prepares account reconciliations and reports, performs variance analysis, and records recurring monthly journal entries. The Regional Human Resources Director guides and manages the overall provision of Human Resources services, policies, and programs for the Wildlife Conservation Society. The Regional Development Officer solicits and secures donations. The Regional Communications Officer prepares, plans and manages the publication of all publicity material. The Regional Program Officer is responsible for the evaluation and distribution of Wildlife Conservation Society's grants. The Information Systems Specialist Works with the National Information Technology Director to oversee network security, network needs, and the planning and management of Wildlife Conservation Society's telephone system and upgrade. The Marketing Staff, Development Staff, Communications Staff, and Program Staff receive duties from the officer of the corresponding department. The receptionist greets guests and directs them to the right office, answers the telephone and directs the calls, prepares correspondence and documents, receives and sorts mail, schedules appointments, and organizes conference and meeting room bookings.

With all these team members working in the same place, it's important to have a team collaboration area as well as a file area and work room. The employees are going to need breaks, so a break room is also necessary. A small conference room is needed to be used by staff for meetings and a board room is also needed to conduct board meetings and to have people come in and address entire staff. Guests will also need a place to enter and sit while waiting to be directed to the correct officer by the receptionist which makes a lobby necessary to include.

Scope of Work

In creating a new Regional Headquarters for the Wildlife Conservation Society (WCS), it is my responsibility to successfully create an office that fits the needs and goals of the people using it. To do this, I must make sure that each officer and staff has the appropriate amount of space that is vital to getting their job done, and create an environment they can be productive in. Since it is a non-profit organization, possible donors will be coming in to see the office and talk to the staff, so it's vital to the success of the Wildlife Conservation Society that these guests feel comfortable and welcomed in their office space. Creating a positive brand for WCS is important because of these donors as well.

Goals & Objectives

Goal: Have natural lighting spread throughout the space
Objectives:

- Utilize shorter or glass walls to allow the light from most windows to reach all the way across the space.
- Keep solid doors and separation to a minimum.

Goal: Have an open, accessible floor plan.
Objectives:

- Create wide hallways.
- Create wide open spaces that are still functional.
- Utilize ADA Standards when creating the layout

Goal: Create a positive branding of the Regional Wildlife Conservation Society office.
Objectives:

- Use natural colors throughout the design.
- Incorporate their logo in the space.
- Incorporate colors and inspiration from their website

Goal: Be as eco-friendly as possible when choosing furniture and finishes.
Objectives:

- Find the best option available for ecofriendly products.
- Consider shipping and processing effects on the environment as well as the material itself.
- Choose products that have a longer lifetime and better sustainability.

Design Concept Statement

This office space is a Regional Headquarters for the Wildlife Conservation Society (WCS) that will be located in North Dakota. The office design will utilize durable, ecofriendly materials to match the values of the company itself. Overall, the office layout and design will be very open and transparent, showing potential donors that there's nothing to hide. Accomplishing this will be done using glass, minimizing the use of walls and closed off areas, and short panels used throughout the space. The overall design of the Wildlife Conservation Society Regional Headquarters will allow the organization to have a positive branding associated with it, as well as be a functional, work-inductive, friendly environment.

4.13 Doors.

4.13.5 Clear Width.
All the doors to the offices in the space are 36 inches wide and no deeper than 24 inches.

4.13.6 Maneuvering Clearances at Doors.
All doors have a minimum of 18 inches clearance of the pull side of swinging doors and at least 12 inches on the push side.

403 Walking Surfaces.

403.5.1 Clear Width.
All walking surfaces are a minimum of 36 inches.

902 Dining Surfaces and Work Surfaces

902.3 Height.
All work surfaces will be adjustable height or greater than 28 inches, but no greater than 34 inches.

302 Floor or Ground Surfaces.

302.1 General.
All floor finishes used will be stable, firm, and slip resistant.

302.2 Carpet.
All carpet tile used will be securely attached and have a firm backing. It will also have a level loop, textured loop, level cut pile, or level cut/uncut pile texture with no greater than ½ inch pile height.

703 Signs.

703.1 General.
The space will have both visual and tactile signs.

703.2.1 Depth.
All raised character will be a minimum of 1/32 inch above their background.

704 Telephones.

704.2.2 Operable Parts.
All telephones will have push buttons.

704.3 Volume Control Telephones.
All telephones will have volume control that can be adjusted up to a minimum of 20 dB.

706 Assistive Listening Systems.

706.2 Receiver Jacks.
Receivers that are required for an assistive listening system will include a 1/8-inch standard mono jack.

706.3 Hearing-Aid Compatibility.
All receivers will be hearing-aid compatible.

Information Gathering Summary

The first thing that was necessary to gather was some information on the non-profit itself. Wildlife Conservation Society is a non-profit organization that dedicates itself to protecting and conserving the wild animals and wild places in the world. They say right in their mission statement, "WCS saves wildlife and wild places worldwide through science, conservation action, education, and inspiring people to value nature." (WCS, 2018) Wildlife Conservation Society has many means of doing this like education, donations, and spreading awareness. They have a vision that they will help wildlife and wild places be restore to what it once was. They've been around since 1895 doing this, so they're a very established and trusted organization.

Obtaining this knowledge was essential because what an organization stands for directly impacts what makes sense for a space's design. The organization is old, however, they utilize science and education, so it's not like they fell behind on the advancements of science and technology. Because of this, the space should have a bit more modern feel to it with those natural colors showing through; the space should remind the workers what they are fighting for yet be open and inviting to visitors and donors.

Many of the lower-ranking officers were not in the office often. They were more of the ones who were out in the fields doing the work while the board of directors ran the company. Because the directors, executive officers, and receptionist are going to be there for longer periods of time and more often, they should have a more ergonomic chair with more adjustable features on them to maximize comfort and productivity in the workplace.

The guest seating should be stylish and reflect the organizations brand, but also must be functional within the space. For this reason, it's essential for at least some of the guest seating to have arm rests; not everyone can support themselves enough to get out of a chair without armrests (Lecture, 2018). The crosshatch chair by Herman Miller embodied the natural elements of the organization through its natural wood frame and rope chords supporting the cushion and armrests. Throwing a green colored material further brought out a natural look from the chairs. Another concern with guests and donors are spills and accidents in the lobby. Using a Stain-Resistant vinyl on the chairs was important to help prevent having to buy new furniture every time there is a spill or accident (Lecture, 2018).

The reception area should be impactful to the branding of the organization. As soon as a client, donor, or guest walks through the door, they should know they are in the right place. This reduces confusion when it comes to wayfinding throughout the space. It was said that it's crucial to have a defined entrance because guests will actually just walk by the place otherwise. This is done by choosing an entry that is easy to access and is also noticeable to everyone who walks by. Creating a reception area that further engrains into a user's head that they are in the right place helps them feel more comfortable and sure of the space.

Wayfinding was another issue addressed. Everyone has been into the doctor's office and when you go to leave, you don't know whether you should go right or left. Utilizing successful and efficient wayfinding is a way to further increase employee and guest morale. A client being able to confidently find their way through a space without having to ask for directions or help is the goal. There are different ways to do this, however.

One way to subtly create a wayfinding is to color code areas, offices, elevators, etc. By doing this, visually separate spaces are made, and users can then have a clear definition of where spaces and offices start and end (Foltz, n.d.). Another way to help with wayfinding is to reduce the number of paths someone can take within a space, or create a clear, dominant path over the others. By doing this, people get lost in the space less often and can get to where they are going more directly. Creating "landmarks" within a space also helps, so if someone does get lost, they can easily find where they've been and get to where they need to be in a timelier manner (Foltz, n.d.)

It's essential for remodels to follow ADA guidelines while building, so it's also expected for designers to have knowledge on these guidelines. These allow for designers to create spaces that everyone can be in and enjoy; the guidelines give standards that are not hard to accommodate. Some example would be partially a 30" high transaction table that can accommodate for wheelchair users, creating hallways and doors at least 36 inches wide, but a little wider if it's the main hallway, and just generally using products that fit the guidelines, like low-pile carpet and more cleanable surfaces (Evelith, n.a.).

Utilizing all the aspects by incorporating them throughout a design is a challenge for designers but is essential for the success of a design. For that exact reason, it's very important designers do their research beforehand, so they are successful in branding the organization and pleasing and accommodating all of those who will be working within the office space designed.

Branding Analysis

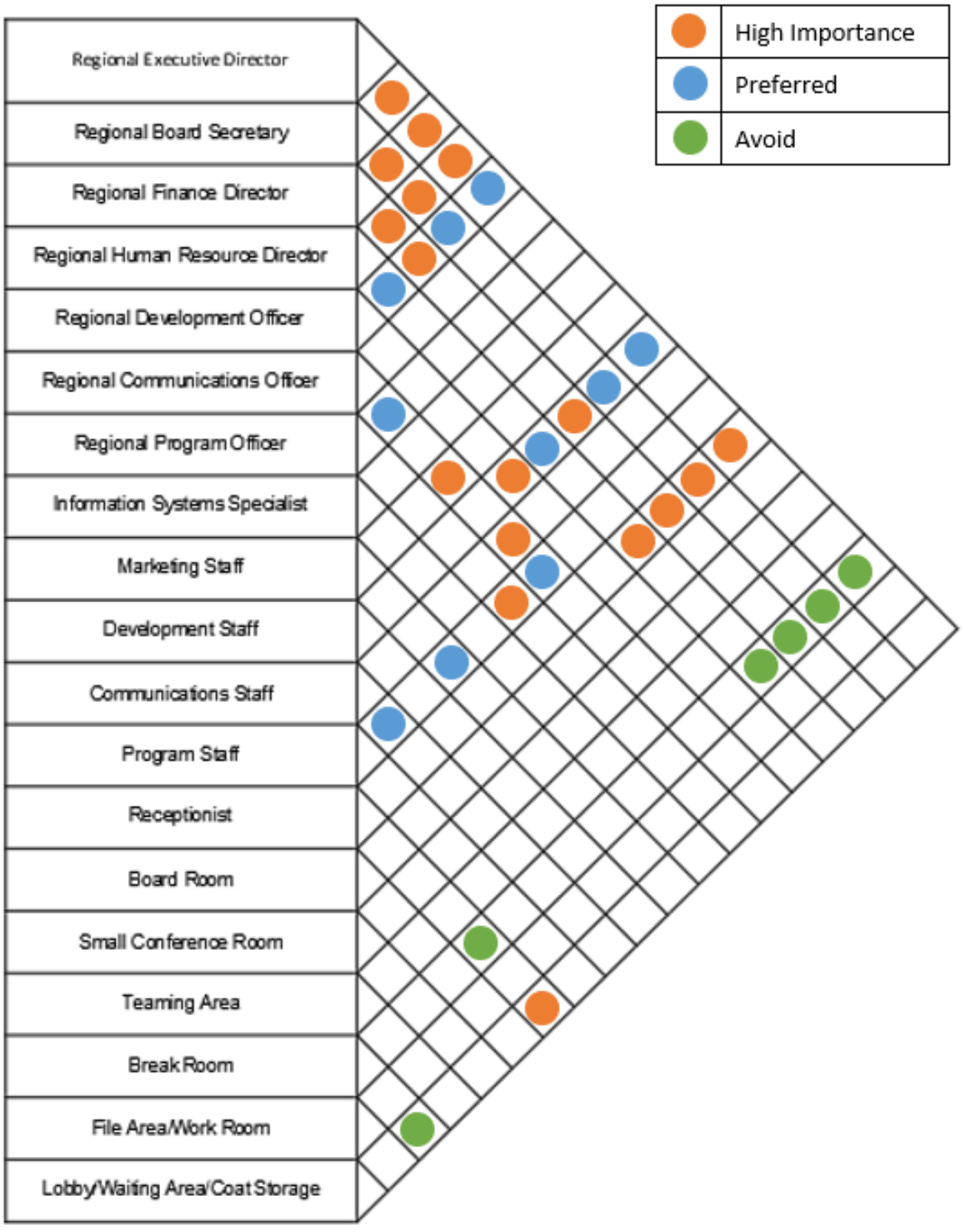
Wildlife Conservation Society is an organization dedicated to conserving all wildlife. It ranged from buffalo to lions to sea turtles, so all bases are covered. Incorporating this natural feel into the office will be done by utilizing natural colors and finishes. Using greens, natural woods, and wood accents throughout the space brings a very natural feel into the space while keeping it professional. Organic shapes were also used, like the backlit glass on the reception desk with grass throughout it. With the logo displayed behind the reception desk, it will be the first thing people see when they walk in. Utilizing a seagrass covering on the ceiling will give a natural accent to the room without being overwhelming.

Wayfinding Analysis

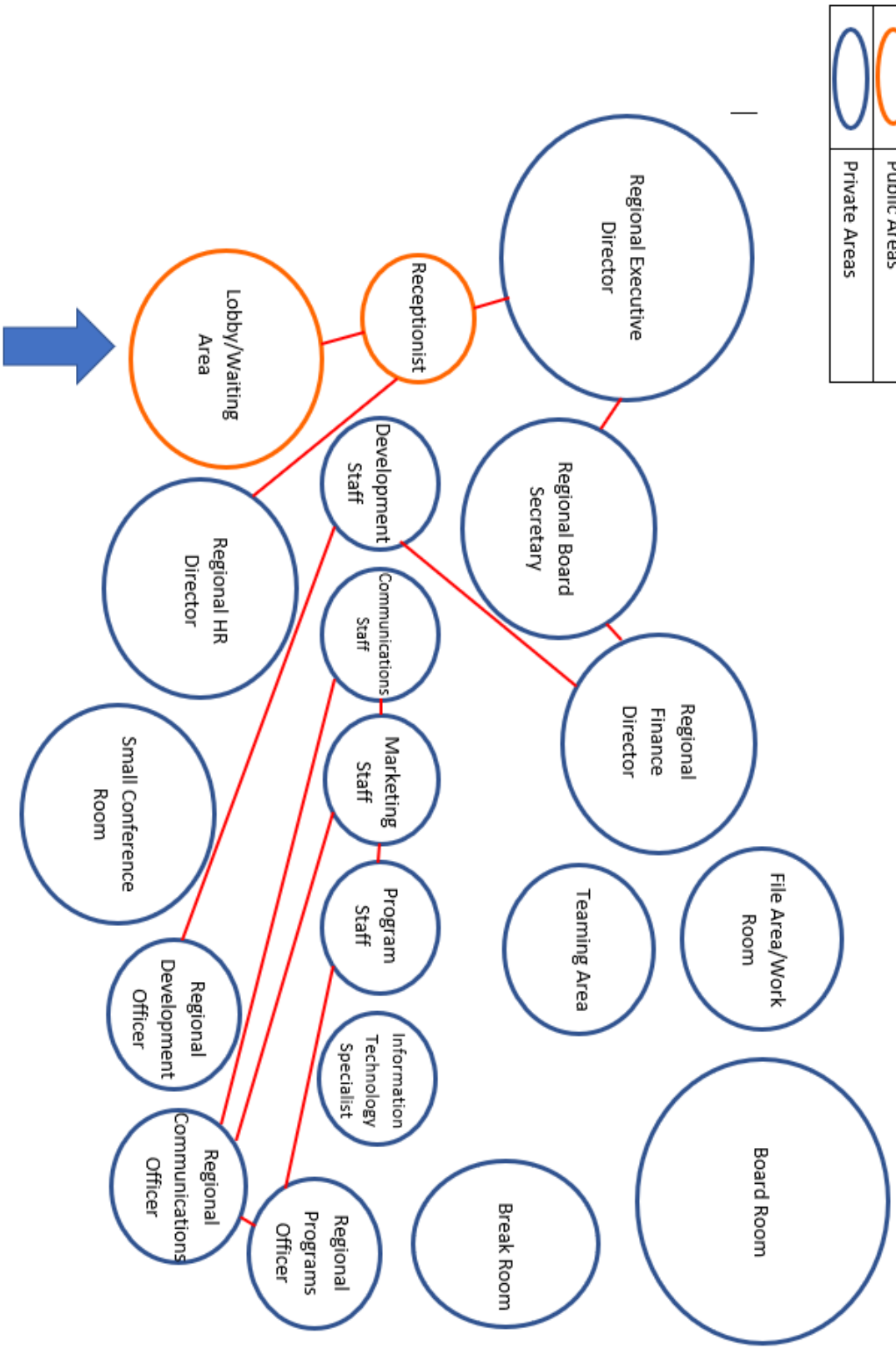
In some commercial spaces, users have a challenging time maneuvering the space. Some of this difficulty comes down to lack of direction within the space. This could mean lack of signage, lack of regions within the space, or lack of landmarks or memorable places. It can also be the result of having too many options for paths within the space, and not going where to go because of that. These are fixable issues, but some thought is required to do so.

In the Wildlife Conservation Society Regional Headquarters, there are three sets of offices, the closed offices, the larger open offices, and the small open offices. This creates three separate visual spaces within the office's interior. By creating only two hallways, and one with a straight path to the board room that passes the small conference room, guests can easily navigate the space. If they are unsure where to go, the secretary will be right there to direct them. The titles of the executive team will be clearly printed outside the door so guests know which room to enter when they come to visit. These applications will make wayfinding, even of a small space, much easier for everyone.

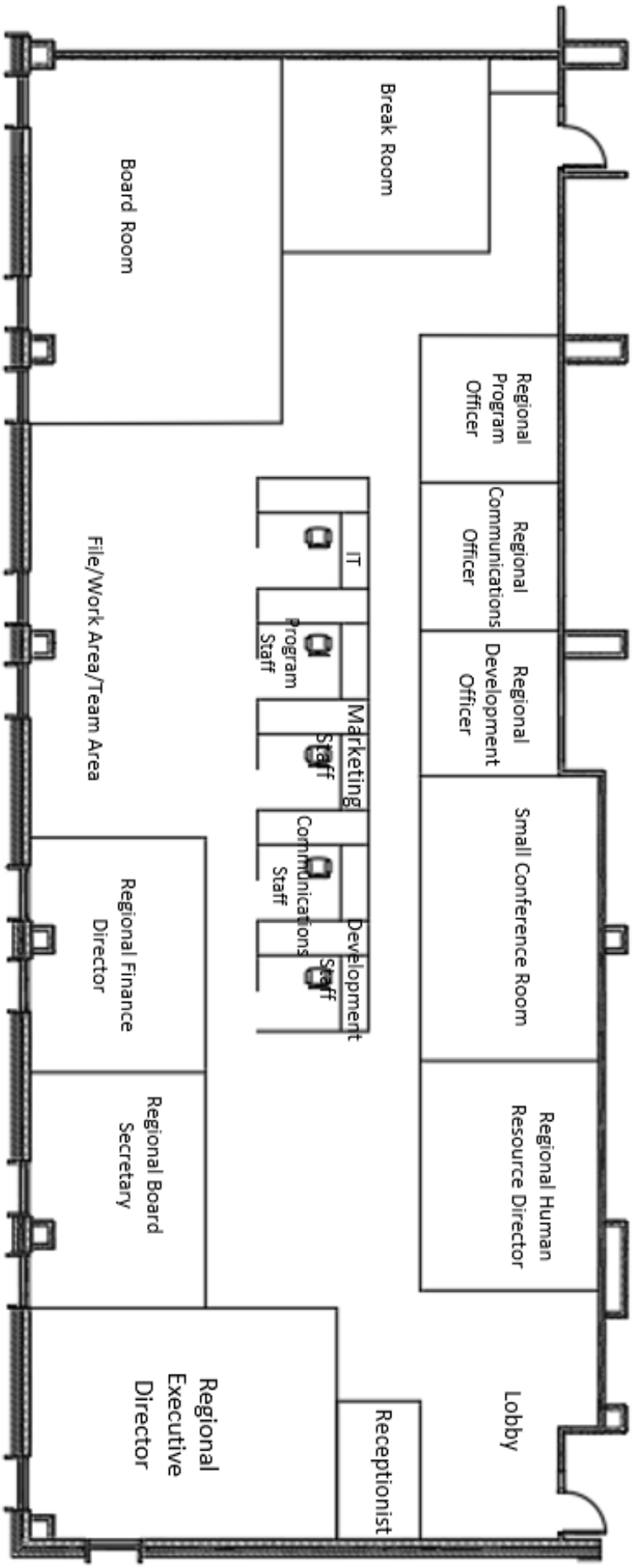
Adjacency Matrix



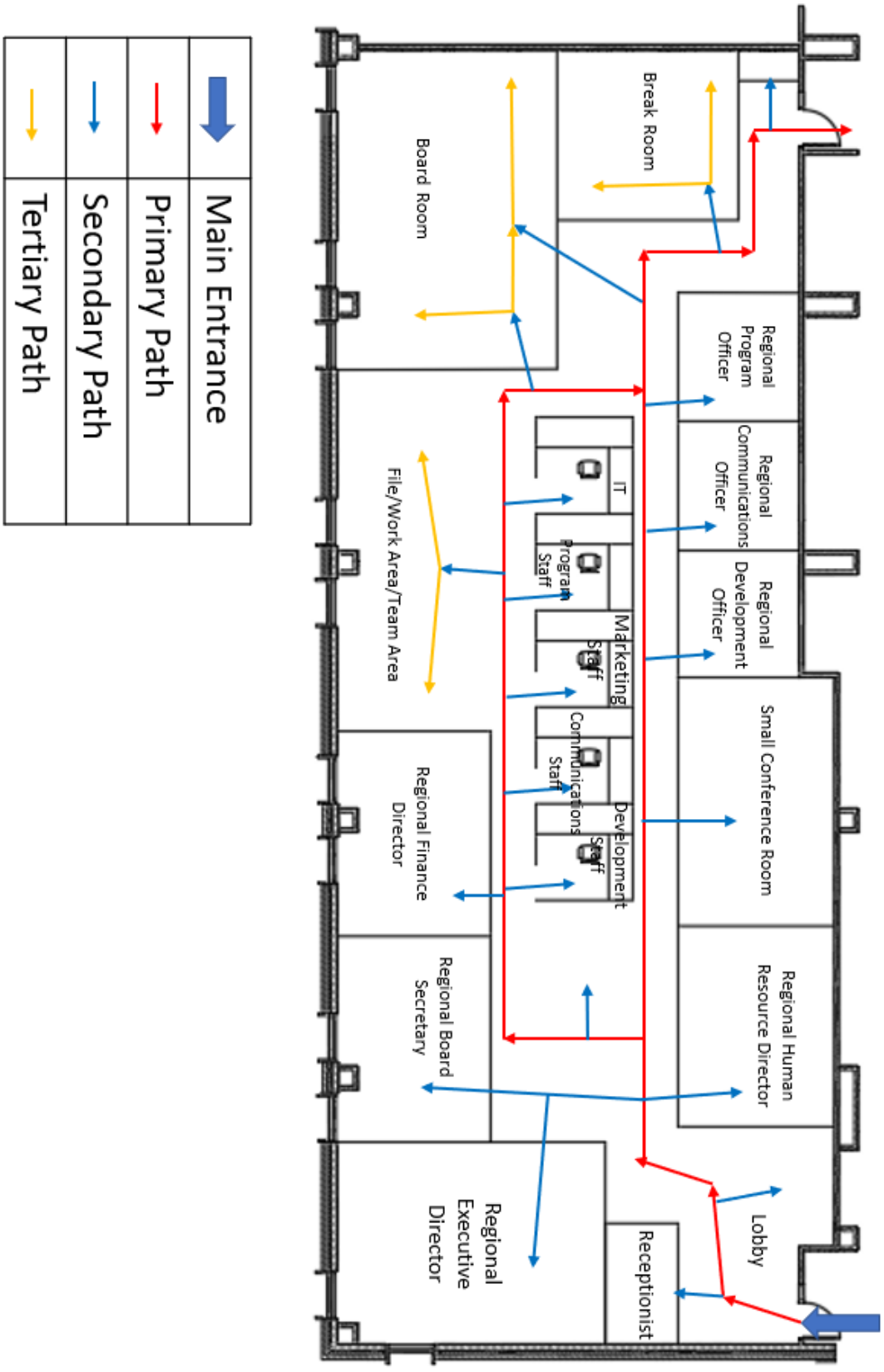
Bubble Diagram



Blocking Diagrams



Circulation Diagrams

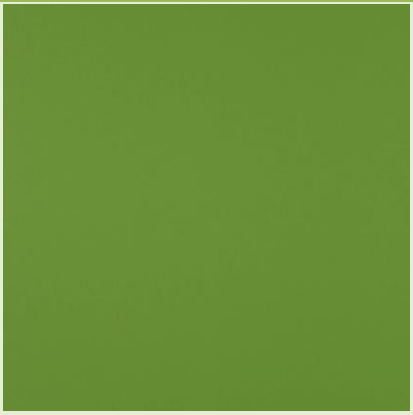


FF&E Schedule		
Code	C-1	
Description	Office Chair	
Manufacturer	Herman Miller	
Item/Model Name	Embody Chair	
Item/Model Number	CN122AWAAG1G1BB3007	
Dimension/Size	42”-45”H x 29.5”W x 29”D	
Quantity	8	
Finish/Color	Frame: White Base Finish: Titanium	
Fabric Pattern/Name, Number	Rhythm	
Fabric Color/Name, Number	Charcoal-3015	
Description	• 100% Polyester • Wyzenbeek, 200,000 double rubs • Grade 4 lightfastness • CA TB 117-2013 • NFPA 260	
Location	Room 3 (1), Room 4 (1) Room 5 (1), Room 15 (1), Room 16 (1), Room 17 (1), Room 19 (1)	
Notes	• Pixelated Support™ technology • Backfit™ adjustment • Tilt zones • Adjustable seat depths • Fully adjustable arms • Built using 100% green energy • 42% recycled content and is 95% recyclable	

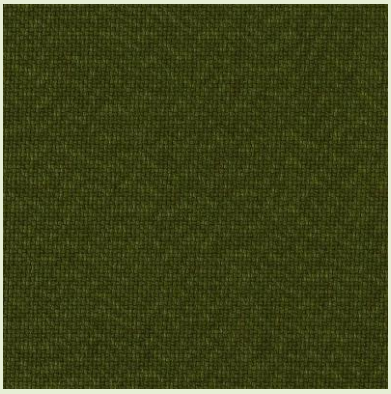
Code	C-2
Description	Office Chair
Manufacturer	Herman Miller
Item/Model Name	Aeron Chair
Item/Model Number	AER1C23DFALPVPRSNASNABB231012118
Dimension/Size	43”H x 28.5”W x 18.5”D
Quantity	5
Finish/Color	Frame: Mineral Base: Satin Aluminum
Location	Development Staff (1), Communications Staff (1), Marketing Staff (1), Programing Staff (1), Information Systems Specialist (1)
Notes	• Adjustable Lumbar Support • Tilt limiter and Seat Angle

Code	**C-3**
Description	Stacking Chair
Manufacturer	Herman Miller
Item/Model Name	Caper Stacking Chair
Item/Model Number	WC420PMS98YXBK6V01
Dimension/Size	32”H x 24.25”W x 18.5”D
Quantity	8
Finish/Color	Color: Studio White Frame: Metallic Silver
Location	Break Room
Notes	

Code	C-4
Description	Waiting Chair
Manufacturer	Herman Miller
Item/Model Name	Crosshatch Chair
Item/Model Number	SES1A6A117206CCMNOCAL
Dimension/Size	28.5”H x 31.25”W x 30.25”D
Quantity	6
Finish/Color	Frame Cord: White Ash / Cream
Fabric Pattern/Name, Number	Pitch
Fabric Color/Name, Number	Chive ZPC09
Description	• 100% Vinyl • Antimicrobial stain and ink resistant • Wyzenbeek: 100,000 double rubs • Grade 4 Lightfastness
Location	Lobby
Notes	

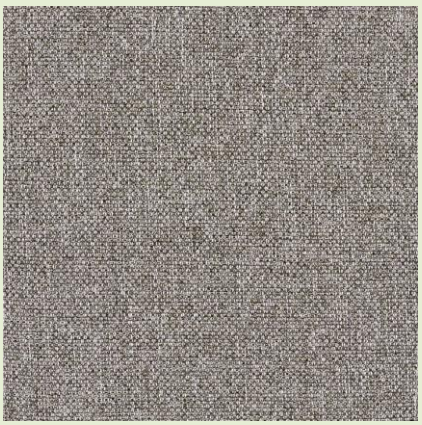


Code	C-5
Description	Conference Chair
Manufacturer	Herman Miller
Item/Model Name	Keyn Chair 2-Star Base
Item/Model Number	KNN6S98989814A42
Dimension/Size	35”H x 23.75”W x 20.25”D
Quantity	38
Finish/Color	Frame: Studio White
Fabric Pattern/Name, Number	Hopsack
Fabric Color/Name, Number	Olive Green Dark-14A42
Description	• 100% recycled polyester • Wyzenbeek, 200,000 double rubs • Grade 4 lightfastness • CA TB 117-2013, NFPA 260, ASTM E 84
Location	Room 3 (6), Room 4 (2), Room 5 (2), Room 13 (12), Room 15 (2), Room 16 (2), Room 17 (2), Room 18 (8), Room 19 (2)
Notes	• Breathable backrest • Smooth recline motion



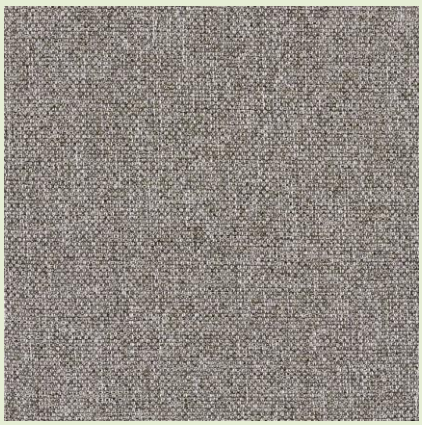
Code	C-6
Description	Bar-height Stool
Manufacturer	Herman Miller
Item/Model Name	Aeron Stool Bar Height
Item/Model Number	AER721HFSZSVPRSNADVPBB231012118
Dimension/Size	49-54.5”H x 27”W x 17”D
Quantity	4
Finish/Color	Frame: Mineral Base: Dark Mineral
Location	Teaming area
Notes	• Zonal Basic Back Support • Standard Tilt • Stationary Arm

Code	C-7
Description	Arm Chair
Manufacturer	Herman Miller
Item/Model Name	Plex Left Arm Chair
Item/Model Number	
Dimension/Size	35.25" H x 28" W x 31.5" D
Quantity	1
Finish/Color	White ash wood base
Fabric Pattern/Name, Number	N/A
Fabric Color/Name, Number	Pewter-1HA23
Description	• 100% Polyester • Grade 4 lightfastness • CA TB 117-2013 • NFPA 260 • ASTM E 84
Location	Teaming Area
Notes	• Suspension seat technology • Sculpted Backrests • Integrated Lumbar support



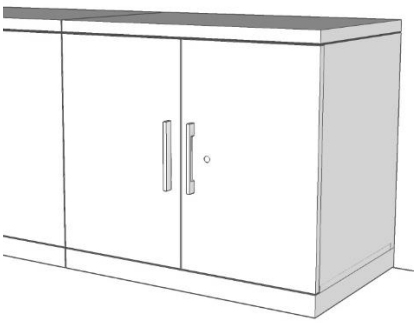
Code	C-8
Description	Arm Chair
Manufacturer	Herman Miller
Item/Model Name	Plex Center Arm Chair
Item/Model Number	
Dimension/Size	35.25" H x 28" W x 31.5" D
Quantity	2
Finish/Color	White ash wood base
Fabric Pattern/Name, Number	N/A
Fabric Color/Name, Number	Pewter-1HA23
Description	• 100% Polyester • Grade 4 lightfastness • CA TB 117-2013 • NFPA 260 ASTM E 84
Location	Teaming Area
Notes	• Suspension seat technology • Sculpted Backrests • Integrated Lumbar support

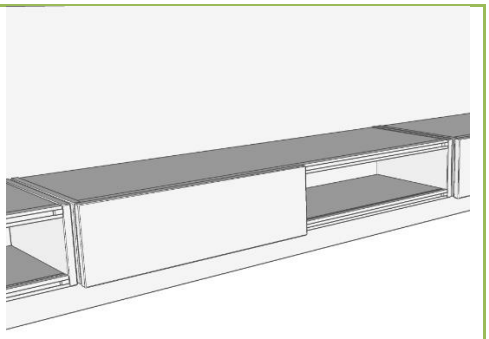
Code	C-9
Description	Arm Chair
Manufacturer	Herman Miller
Item/Model Name	Plex Right Arm Chair
Item/Model Number	
Dimension/Size	35.25" H x 28" W x 31.5" D
Quantity	1
Finish/Color	White ash wood base
Fabric Pattern/Name, Number	N/A
Fabric Color/Name, Number	Pewter-1HA23
Description	• 100% Polyester • Grade 4 lightfastness • CA TB 117-2013 • NFPA 260 ASTM E 84
Location	Teaming Area
Notes	• Suspension seat technology • Sculpted Backrests • Integrated Lumbar support



Code	CP-1
Description	Copier
Manufacturer	HP
Item/Model Name	HP LaserJet Enterprise MFP M633fh
Item/Model Number	J8J76A#BGJ
Dimension/Size	40.5”W x 31.7”D x 34.1”H
Quantity	1
Finish/Color	White
Location	File Area
Notes	• FCC Class A emissions • ENERGY STAR® qualified; Blue Angel; CECP; EPEAT® Silver

Code	CR-1
Description	Credenza
Manufacturer	Herman Miller
Item/Model Name	
Item/Model Number	
Dimension/Size	1’-8”D x 2’-8”W x 3’-0”H
Quantity	4
Finish/Color	Wood Veneer
Location	Small Conference Room
Notes	-



Code	CR-2	
Description	Credenza	
Manufacturer	Herman Miller	
Item/Model Name		
Item/Model Number		
Dimension/Size	1’-2”D x 4’-0”W x 1’-6”H	
Quantity	3	
Finish/Color	Wood Veneer, Yellow and Jade Paint	
Location	Teaming Area	
Notes	-	

Code	FC-1	
Description	Filing Cabinet	
Manufacturer	WorkPro	
Item/Model Name	WorkPro® 42"W 4-Drawer Steel Lateral File Cabinet	
Item/Model Number	361334	
Dimension/Size	42”W x 18 5/8”D x 52 ½”H	
Quantity	4	
Finish/Color	Light Grey	
Location	Filing Room (4)	
Notes	• 30% Recycled Content • GREENGUARD Gold Eco-Label/Standard • CPG Eco-Policy Compliant	

Code	T-1	
Description	Conference Table	
Manufacturer	Geiger	
Item/Model Name	Caucus Table	
Item/Model Number		
Dimension/Size	45-60”W x 216”D x 28 3/8”H	
Quantity	1	
Finish/Color	Wood Veneer	
Location	Board Room	
Notes		

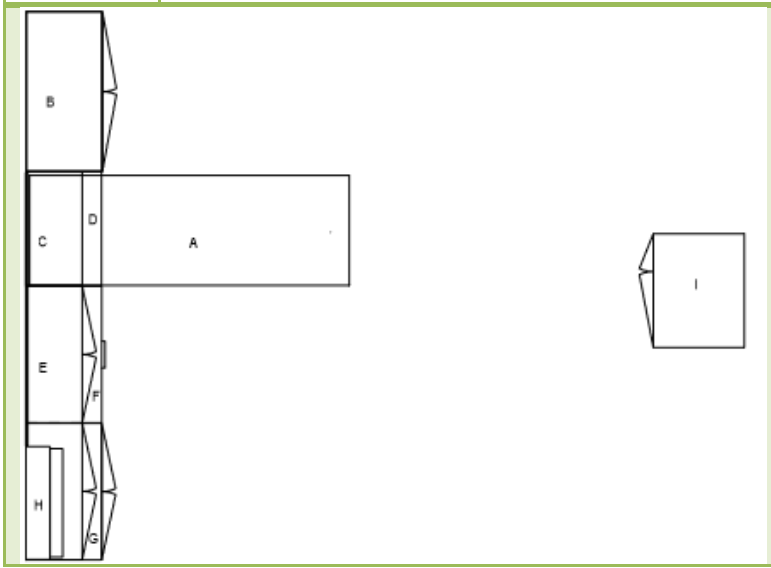
Code	T-2	
Description	Side Table	
Manufacturer	Mattiazzi	
Item/Model Name	Mattiazzi Side Table	
Item/Model Number		
Dimension/Size	18”DIA x 15”H	
Quantity	2	
Finish/Color	Natural Wax Oak	
Location	Lobby	
Notes		

Code	T-3	
Description	Table	
Manufacturer	Herman Miller	
Item/Model Name	Plex table	
Item/Model Number	PX301.17WP A2	
Dimension/Size	17”DIA. x 25.5”H	
Quantity	2	
Finish/Color	• white ash veneer top • base finish: white	
Location	Teaming Area	
Notes		

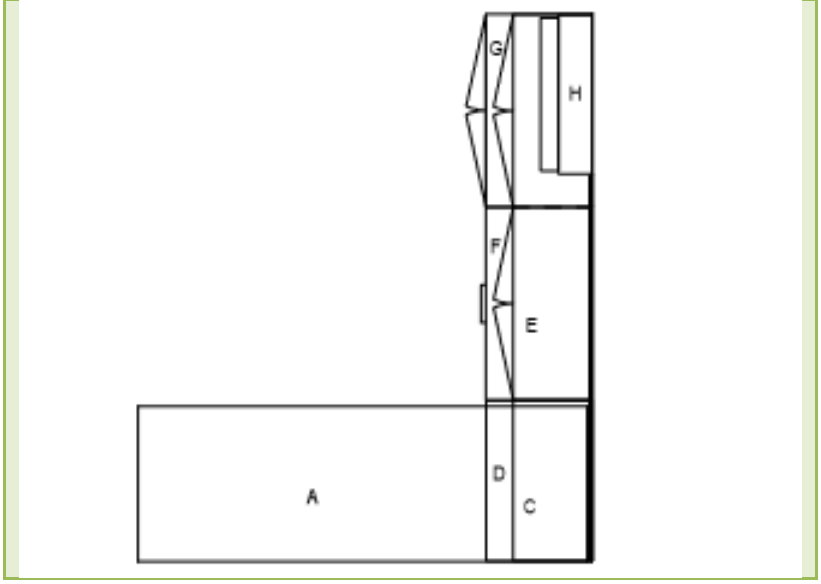
Code	T-4	
Description	Conference Table	
Manufacturer	Herman Miller	
Item/Model Name	Everywhere Rectangular Table	
Item/Model Number	DT1AS.3060LP76769120254	
Dimension/Size	60”W x 30”D x 28.5”H	
Quantity	3	
Finish/Color	• Top Finish- Light Brown Walnut • Leg-White	
Location	Small Conference Room, Regional Executive Director	
Notes	5 Port Cutout for Logic Grommet Mounted Power Outlet	

Code	T-5
Description	Round Table
Manufacturer	Herman Miller
Item/Model Name	Everywhere Round Table
Item/Model Number	DT1CS.48LPHMHMBU57
Dimension/Size	42”DIA x 28.5”H
Quantity	2
Finish/Color	Top – Natural Maple Leg – Black Umber
Location	Break Room
Notes	N/A

Code	Typical Office Layout One



Code	Typical Office Layout Two



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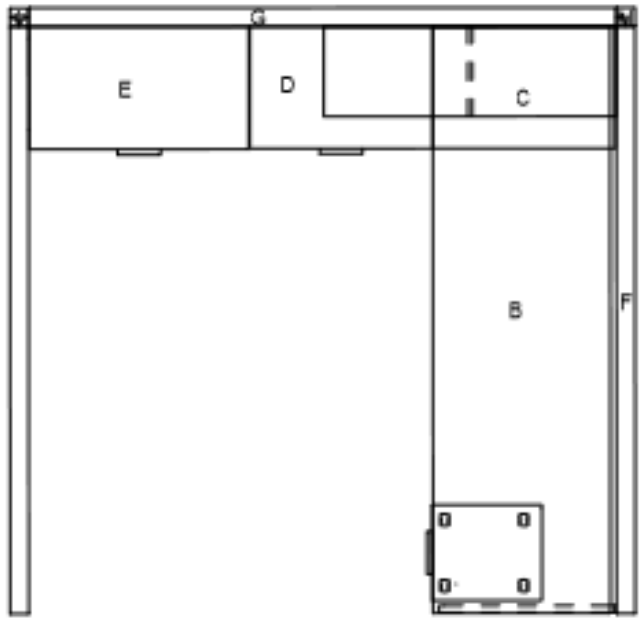

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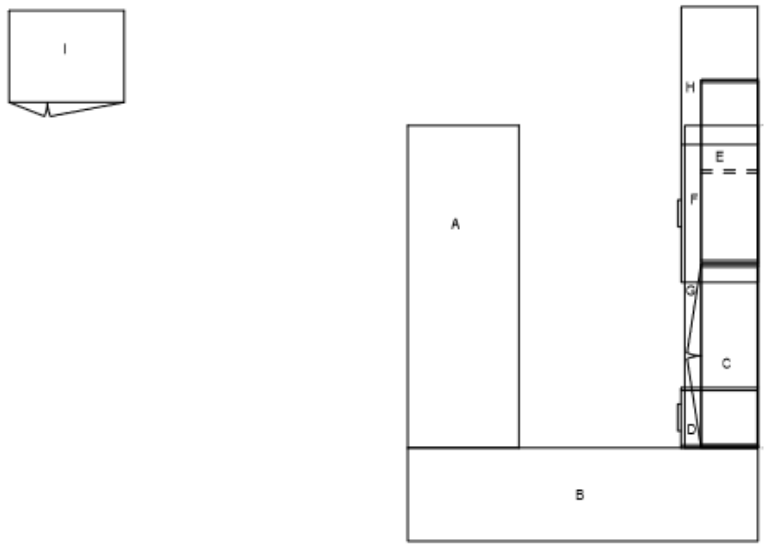
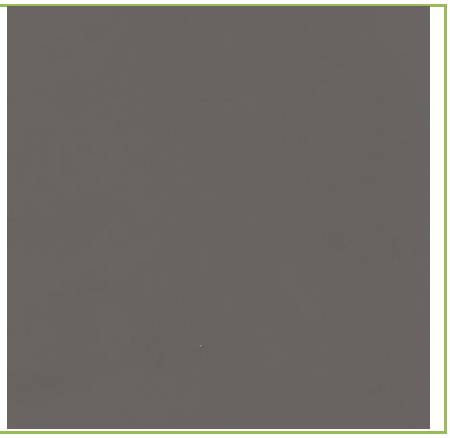


Room Finish Schedule

Finish Schedule		
Code	ACT-1	
Description	Acoustical Ceiling Tile	
Manufacturer	Armstrong	
Product/Style Name	LYRA Concealed	
Product Number	8432	
Product Finish/Color	White	
Dimension/Size	24 in. X 24 in. X 7/8 in.	
Location	Open Offices	
Notes	• Recyclable • Recycled content	

Code	CPT-1	
Description	Carpet Tiles	
Manufacturer	J+J Carpet Group	
Product/Style Name	Rusted Modular	
Product Number	7901	
Product Finish/Color	Focus	
Dimension/Size	24” x 24” x	
Location	Room 1, Room 2, Room 3, Room 4, Room 5, Room 6, Room 7, Room 8 Room 9, Room 10, Room 11, Room 12, Room 15, Room 16, Room 17, Room 19	
Notes	• 38.7% Recycled content	

Code	CT-1	
Description	Countertop	
Manufacturer	LG	
Product/Style Name	LG HI-MACS Concrete Gray Solid Surface Kitchen Countertop	
Product Number	523145	
Product Finish/Color	Concrete Gray	
Dimension/Size	10’-7” x 2’-0” x 1 ½” thick	
Location	Break Room	
Notes	• Green Guard and NSF Certified • Renewable	

Code	LVT-1	
Description	Luxury vinyl tile	
Manufacturer	Amtico	
Product/Style Name	Amtico Signature	
Product Number	AR0W8230	
Product Finish/Color	Ink Wash Wood	
Dimension/Size	6”W x 36”L x 1” thick	
Location	Room 13 and Room 18	
Notes	• BRE Green Guide: A/A+ rating	

Code	LVT-2	
Description	Luxury vinyl tile	
Manufacturer	Amtico	
Product/Style Name	Assura Stone	
Product Number	AAOSFL33	
Product Finish/Color	Fossil Limestone	
Dimension/Size	12”W x 24”L x 1” thick	
Location	Break Room	
Notes	• BRE Green Guide: A/A+ rating	

Code	R-1	
Description	Resin Surface	
Manufacturer	Lumicor	
Product/Style Name	Rainforest	
Product Number		
Product Finish/Color	Rainforest	
Dimension/Size	48”W x 96”L x 1” thick	
Location	Reception Desk	
Notes		

Code	P-1	
Description	Paint	
Manufacturer	Sherwin Williams	
Product/Style Name	Restful White	
Product Number	SW 7563	
Product Finish/Color	Restful White	
Dimension/Size		
Location	Room 3, room 4, room 5, room 13, room 14, open offices, room 18, and room 19	
Notes		

Code	P-2	
Description	Paint	
Manufacturer	Sherwin Williams	
Product/Style Name	Houseplant	
Product Number	SW 6727	
Product Finish/Color	Houseplant	
Dimension/Size		
Location	Coat Closet Shelf	
Notes		

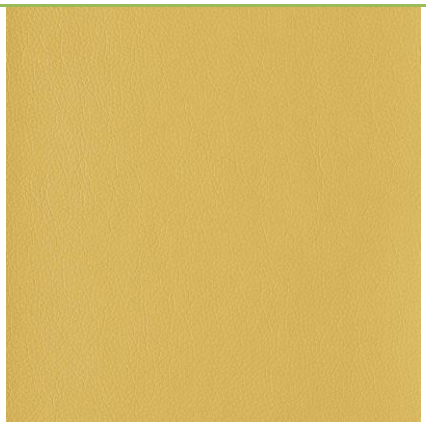
Code	PF-1	
Description	Panel Finish	
Manufacturer	Herman Miller	
Product/Style Name	Formcoat	
Product Number	LU	
Product Finish/Color	Soft White	
Dimension/Size	-	
Location	60 sq. ft. Open Office Panels	
Notes		

Code	PF-2	
Description	Panel Finish	
Manufacturer	Herman Miller	
Product/Style Name	Crepe	
Product Number	9241	
Product Finish/Color	Beach Glass	
Dimension/Size	54”W	
Location	Panels in 100 sq. ft. open offices	
Notes	100% Recycled Polyester	

Code	R-1	
Description	Resin Surface	
Manufacturer	Lumicor	
Product/Style Name	Rainforest	
Product Number		
Product Finish/Color	Rainforest	
Dimension/Size	48”W x 96”L x 1” thick	
Location	Reception Desk	
Notes		

Code	TF-1
Description	Typical Finish
Manufacturer	Herman Miller
Product/Style Name	ColorGuard
Product Number	3P04
Product Finish/Color	Jade
Dimension/Size	54” Wide
Location	Typical 3 and 4 storage and teaming area credenzas
Notes	• Flammability – CA TB 117-2013, NFPA 260, ASTM E 84 • Abrasion –Wyzenbeek, 200,000 double rubs

Code	TF-2
Description	Typical Finish
Manufacturer	Herman Miller
Product/Style Name	Marvel
Product Number	1MV10
Product Finish/Color	Citrus
Dimension/Size	54” Wide
Location	Typical 1,2,3, AND 4 storage accessories, teaming area credenza
Notes	• 100% PVC-free polyurethane • Abrasion – Wyzenbeek, 240,000 double rubs • Flammability – CA TB 117-2013, NFPA 260



Code	V-1
Description	Wood Veneer
Manufacturer	Herman Miller
Product/Style Name	Wood and Veneer
Product Number	ET
Product Finish/Color	Clear on Ash
Dimension/Size	-
Location	All work surfaces, tables, and storage
Notes	-

Code	WC-1
Description	Vinyl wall covering
Manufacturer	Schumacher
Product/Style Name	Abstract Leaf
Product Number	SCMH1035
Product Finish/Color	Linen
Dimension/Size	27”W x 13’-6”L
Location	Room 1, Room 2, Room 11, and Room 12
Notes	

Code	WC-2
Description	Cork Wall Tile
Manufacturer	AmCork
Product/Style Name	Designer Accent Cork Panel
Product Number	SCMH1035
Product Finish/Color	N/A
Dimension/Size	22 3/8” x 22 3/8” x 5/32” Thick
Location	South Reception Wall and Board Room Ceiling
Notes	• Made from recycled cork materials • Greenguard Certified for low VOCs

Code	WPC-1
Description	Wood Panel Ceiling
Manufacturer	Woodworks
Product/Style Name	WOODWORKS Open Cell
Product Number	6622
Product Finish/Color	Grille Maple
Dimension/Size	24”W x 24”L x 2 ¼”D
Location	Reception
Notes	

Code	WT-1
Description	Wall Tile
Manufacturer	Botanical Glass
Product/Style Name	Turquoise 5/8” x 5/8” Glossy and Iridescent Glass Tile
Product Number	BKI0270
Product Finish/Color	Turquoise
Dimension/Size	12” x 12” x 1/8” thick
Location	East Breakroom Wall
Notes	

Lighting Schedule

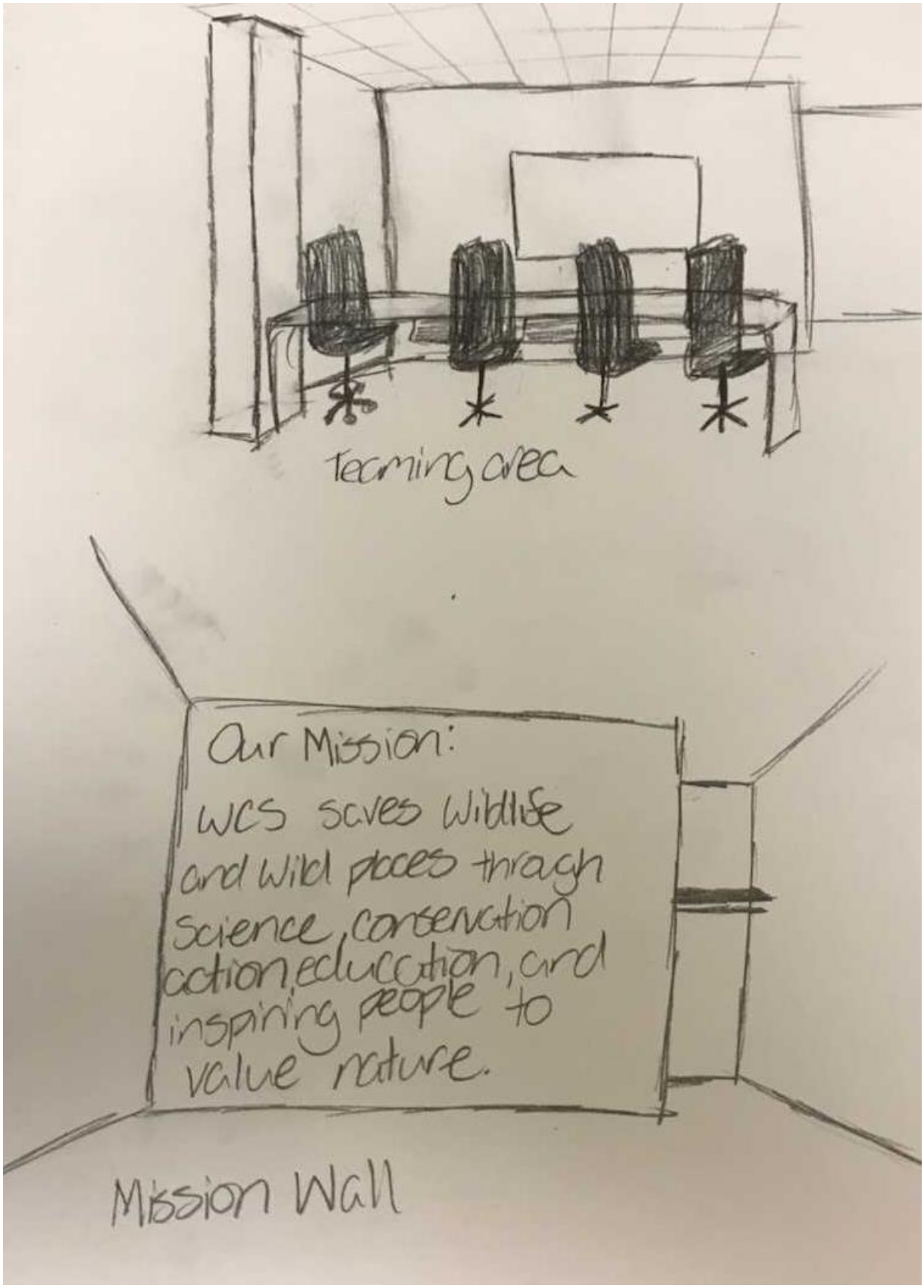
Lighting Schedule		
Code	L-1	
Fixture Type	Linear lighting	
Manufacturer	Ametrix	
Item/Model Number	LC-2-27K-1-C-120-24-30	
Description	Architectural cove lighting	
Dimension/Size	2.74”W x 2.43”H x 24”L	
Quantity	30	
Lamp Source	LED	
Location	Board Room	
Notes	• Low-power LED linear module • Up to 90 lumens per watt • 50,000 hours rated life	

Code	R-1	
Fixture Type	Recessed Can	
Manufacturer	Juno	
Item/Model Number	TC22LED 900LM	
Description	6” round LED recessed cans	
Dimension/Size	11 ¾”W x 11 ½”L x 5 5/8”H	
Quantity		
Lamp Source	LED	
Location	Room 1, Room 3, Room 4, Room 5, Room 18, Room 19	
Notes	• ENERGY STAR certified • Non-IC	

Code	L-2	
Fixture Type	Recessed Troffer	
Manufacturer	Lithonia Lighting	
Item/Model Number	2TL2 33L FW A12 EZ1 LP830 N80 E10WLCP	
Description	Recessed lighting	
Dimension/Size	24”L x 24”W x 3 ¾”D	
Quantity		
Lamp Source	LED	
Location		
Notes	• CSA Certified • DLA qualified	

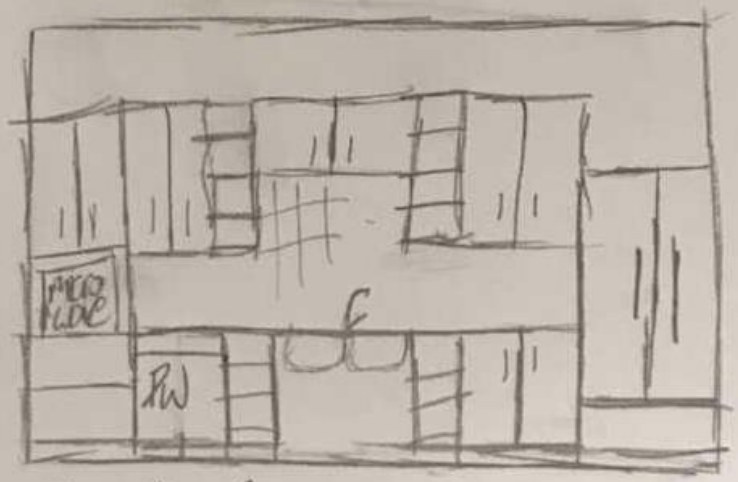
Code	P-1	
Fixture Type	Pendant	
Manufacturer	VIBIA	
Item/Model Number	0270-03	
Description	Pendant lighting	
Dimension/Size	11 ¾” DIA x see reflected ceiling plan	
Quantity	5	
Lamp Source	LED	
Location	Reception	
Notes		

Schematic Sketches

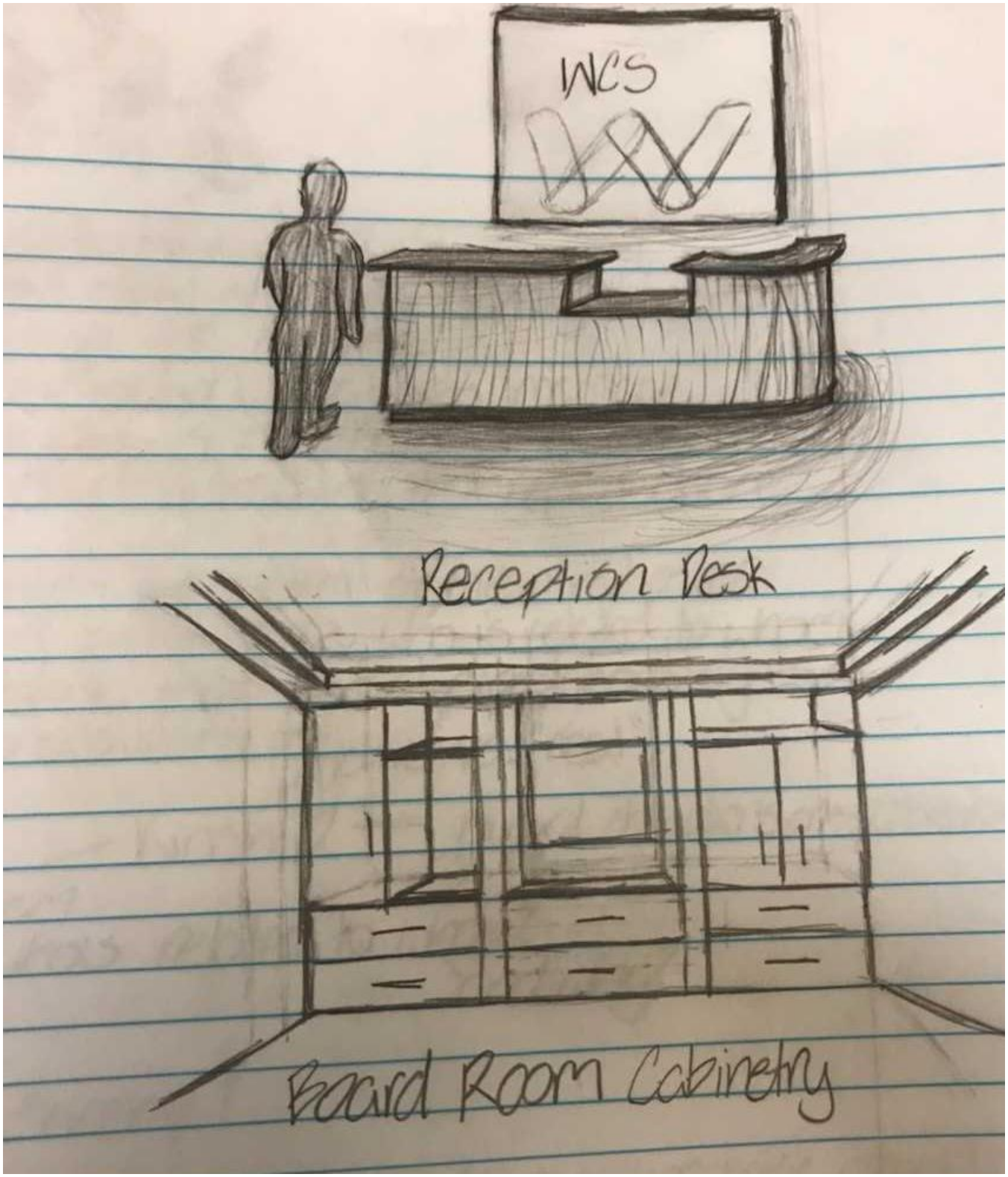



Small Conference Room Glass Wall
File Room

Wood Paneling in Reception



Break Room
Cabinetry


WCS
Reception Desk
Board Room Cabinetry

Presentation: PowerPoint

Appendix

Allison Voigt

ADHM 253

1/18/2018

InterOffice Reaction Paper

Aubree did an amazing job with the InterOffice tour. This is the first tour I've been on that focused on commercial design instead of residential. It was very intriguing to see all of the options out there for office spaces, even in just the Herman-Miller lines. We went through the Action Office System, the Canvas System, types of storage, and the kinds of ergonomic work chairs available through Herman-Miller.

I was very surprised at how many different little parts had to come together to create the office systems and how many different options were out there for those parts. In the Action Office System, which is a panel system, there's height options of 39",53"65", and 85" with the finish options of fabric covered, veneer, laminate, and painted. These choices alone can shape the feel and look of an office. The Canvas System is a frame and tile system, and has even more options to finished because of this. Both panels offer power, but the Action Office System only offers it to be run across the bottom and the Canvas System can have it every 11" vertically. I enjoyed the looks of the Action Office System more, but there is more practicality to having power on top of the workstation. A quick solution to this would be to have a powered Worksurface.

Accessories, like mountable paper management trays, from Herman-Miller worked with all of their systems. We learned that file cabinets used under work surfaces are better left unattached, so the work surfaces can be height-adjustable. Work surfaces generally run the length of the panel and have supports on the sides because if they attach to the panels, they must attach to the sides of them. There were many options to choose from for the chairs, but almost all offered adjustable height, armrests, and back support. There was a range of chairs available to look at with different price points for each of them. Aubree explained to us that chairs with less adjustable features available are good conference chairs because the person using them will not be spending their entire day in them, however, when talking about chairs that will be placed at desks, it's important to have the adjustable features to create a comfortable seat at the work station.

Allison Voigt

ADHM 253

1/18/2018

Sara Knudson Reaction Paper

Sara was great at showing us how to put what we learned at InterOffice in action. She's the Design and Project Coordinator at Bell Bank. She talked about what's "in" for office design at this time, and how key features need to be included in offices to up morale and work ethic. She talked about some of the projects that she's endured during her time at Bell Bank, and some of the solutions to fix these problems.

One issue she told us about was the lack of height-adjustable desks in the office and how more and more people were getting doctors' notes to require them. This being said, as a designer, it should be known that a height adjustable desk is generally better in a work environment; full-time workers spend nearly their entire day at their job, so it's fair, for their health, that they have the option of sitting or standing while there. To accommodate stations that weren't already height adjustable, Sara told us about an accessory that just sits on the desk and acts as a height adjustable surface.

Another thing that was touched on was open office areas and how important it is to balance open offices with private areas to maximize productivity. She gave us an example of an office where they tried lowering the panels on the cubicles to encourage people to be quieter by showing them the others they are directly impacting with their noise levels, but in this case, it did not work and turned out to be more of a nuisance than beneficial. It was also brought to our attention that males and females have separate ways to be more productive. Males are more productive when placed in a bar-like setting where they are sitting side-to-side with one another. Females on the other hand, work better when facing each other.

All of this information was very helpful and put into consideration for the design of this project. Sara was a huge help and I loved that she came back and helped to critique some, too. She was very helpful with the critiques and the information she gave us when she came and spoke.

Thompson, M. (2017, February 1). *Is an Open Office Plan Healthy for Your Staff?.* Forbes, Forbes Magazine. Retrieved from www.forbes.com/sites/melissathompson/2017/02/01/is-an-open-office-plan-healthy-for-your-staff/#746103e6fe74. https://www.mendeley.com/guides/apa-citation-guide

An open office's success depends greatly on the structure and support of the space. Nearly 70 percent of US office workers are in open space, and collaborative spaces are becoming more and more popular. There's positive impacts to having an open office design such as a sense of shared responsibility, a boost creativity and productivity, a greater sense of community and teamwork, and ability to communicate more openly with each other. On the other hand, an open office concept can produce some negative effects as well. These include distraction, over-stimulation, lack of privacy, and workers become more prone to illnesses.

As an interior designer, it's important to research all options, and choose which one is best for the client. In this case, researching some of the pros and cons of an open-office design, and taking into consideration how the staff may feel about it. Because there are so many positive effects created from an open office design, it's important to incorporate that into the design for the Wildlife Conservation Society Regional Headquarter, but because of the negatives effects, it's important to have areas of privacy as well.

Foltz, M. A. (n.d.). *Design Principles for Wayfinding.* Retrieved February 08, 2018, from http://www.ai.mit.edu/projects/infoarch/publications/mfoltz-thesis/node8.html

This article talks about design principles for wayfinding and how to make spaces more navigable. The first principle of wayfinding is to create an identity at each location that's different from all the other ones. The second principle is to use landmarks. The third principle is to create well-structured paths in the space. The fourth principle is creating visually different regions. The fifth principle is not to give users too many choices. The sixth principle is to give users a map. The seventh principle is to place signs at decision points. The eighth principle is to utilize sight lines to show what's ahead.

Utilizing some of these tips for any commercial project will make a space much more navigable. Designing a space sometimes makes paths feel obvious, but one may forget that users of the space were not the people that put the paths where they are. Successfully using these design principles for wayfinding will create a space that is much more enjoyable and comfortable for all who use it.

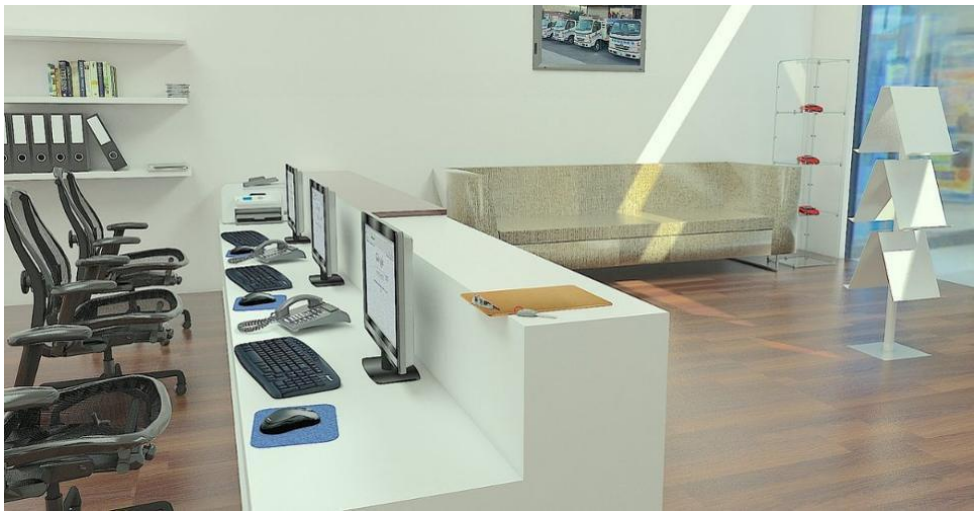
Eveleth, P. A. (2008, February). *ADA Office Checklist: Is Your Office Accessible?.* Office of Compliance Fast Facts. Retrieved February 7, 2018, from https://www.compliance.gov/sites/default/files/wp-content/uploads/2010/03/fastfacts_ada.pdf

This article provides a checklist of things to watch out for when designing an ADA compliant office space. It addresses doors and the requirements behind them. Conference tables are briefly discussed. Signage, documents, and evacuation alarms and the requirements behind them are also mentioned. Restrooms are also addressed. This checklist provides a quick and straightforward way to see if a space is ADA compliant without having to read through all the nonapplicable standards. It also provides contact information if a user believes their office space is not compliant.

Having a checklist like this for all projects would greatly reduce the time used looking through ADA Standards when not all are applicable to every design. It provided a very effortless way to check if the space designed was ADA compliant or not, and greatly reduced frustration in looking through the list of standards.

Is An Open Office Plan Healthy For Your Staff?

Melissa Thompson



Open office plan. Image credit: pixabay.com

Depending on who you ask, open work spaces are the best thing to come along since sliced bread, or they're the devil's invention to sow chaos and discord among employees. Fair-minded managers and efficiency experts say that the open office space plan can be both a blessing and a curse; it all depends on how it's structured and supported. Remember that the original purpose of the open office was to bust employees out of their mind-numbing cubicles to increase their satisfaction and efficiency. The jury is still out as to whether this has succeeded one-hundred percent. My own office space has both open and closed areas. Here's a look at the pros and cons to help you see what you might do if you're considering an open office space:

On The Plus Side

Germany pioneered the open work space back in the 1950's. It didn't catch on in the United States until around 2000. Recent surveys show that nearly seventy percent of US office workers are now in open space instead of corralled in a cubicle. Collaborative work spaces are all the rage, from Silicon Valley to the Rust Belt.

Employers find open work spaces reduce their overhead because they minimize the costs of equipment and office space. Cubicle material can get expensive when you put up a lot of them. It's also easier to chart an employee's progress when they are out in plain sight instead of holed up in some dark corner. I recently filled my own office space with some Sea Gull Lighting, which added my style as well as some solid light to my work area.

Open office spaces are believed to grant a sense of shared responsibility among employees because they are perceived as less rigid and more mellow in atmosphere. Coworkers are better

able to collaborate in an open space, rather than have to go hunt someone down in their office or cubicle. So, creativity and productivity are given a boost.

A sense of community is important for employees, so that they feel part of a bigger picture than just their own day to day duties and responsibilities. It's hard to promote the concept of teamwork when your workers are cooped up in separate cubicles all day long, without the chance to communicate openly with each other. There's only so much that email and texting can do to replace face to face contact and brainstorming! A feeling of camaraderie comes with open work spacing, which in turn helps to boost company morale and gives employees an added impetus to do well and keep a positive attitude about their goals and projects.

On The Minus Side

But it's not all cakes and ale, as Shakespeare put it in one of his plays. There's a downside to open work spaces.

To start with, the open work space can be noisy, which certainly can be distracting when there is work to be done that needs concentration and focus. The constant movement and conversations are distinct mufflers to better efficiency in an undisciplined workforce.

Noise leads to over-stimulation, which leads to stress, which leads to lowered productivity.

Another downer about the open work space is the lack of privacy. Many employees regard a lack of privacy in the workplace as intrusive and stressful, which is fairly plain to see based on the amazing proliferation of encrypted file sharing sites like pCloud and DropBox. When a worker has nowhere to go to privately blow off steam or have a confidential conversation with a coworker it tends to build up anxiety and even paranoia to the point where some workers go find a convenient broom closet in which to have a little quiet 'me' time.

And finally, open work spaces can become breeding grounds for contagious microbes that in some cases have been known to increase employee absenteeism by as much as twenty percent. One sneeze can send millions of germs or viruses across an open space to infect coworkers much more easily than if that same sneeze is confined in a cubicle.

Which makes more sense for your office, the cubicle or the wide-open spaces? Or perhaps a little bit of both? That seems to be the trending consensus of most office managers today -- have some open space combined with a few cubicles to get the best of both worlds.

Design Principles for Wayfinding

This set of design principles is concerned making information spaces effectively navigable. Navigability means that the navigator can successfully move in the information space from his present location to a destination, even if the location of the destination is imprecisely known. Three criteria determine the navigability of a space: first, whether the navigator can discover or infer his present location; second, whether a route to the destination can be found; and third, how well the navigator can accumulate wayfinding experience in the space.

The first criterion, successful recovery of location and orientation, asks the navigator if he can definitively answer the questions, ``Where am I?" and ``Which way am I facing?" A response to these questions could be verbal, such as ``I am in Lobby 7, facing Massachusetts Avenue[3]," or written, by drawing an arrow on a map of the environs.

The second criterion for navigability is the ability to successfully perform wayfinding tasks. Successful wayfinding occurs when the navigator can make correct navigation decisions that take him from his present location to a destination that fulfills his larger purpose. Examples of such decisions are whether to continue along the present route or to backtrack, what turn to take at an intersection of paths, or whether to stop and aquire information from the environment to confirm the present route. Arthur and Passini call wayfinding spatial problem solving [Arthur and Passini, 1992], in which the navigator finds a satisfactory solution to a larger task through navigation.

The third criterion for navigability is how well the navigator can accumulate wayfinding experience in the space. The *imageability* of a large-scale space is the ability of a navigator to form a coherent mental image or map of it. Kevin Lynch, an urban planner, first investigated how the characteristics of an urban space affected how well people remembered features in it [Lynch, 1960]. Lynch interviewed residents of Boston, Los Angeles, and Jersey City, New Jersey, and asked them to draw sketch maps of their city from memory. From these sketch maps and verbal interviews Lynch compared the imageability of the the cities: how well the sketch maps and interviews reflected the actual layout of each city. Lynch found that the respondents organized their city images using a set of common features: paths, landmarks, regions, edges (barriers), and nodes (intersections).

What makes Lynch's findings especially interesting is that the imageable or memorable features of a space are used by people to assist wayfinding. Landmarks are memorable locations that help to orient the navigator; regions are distinct areas that place him in one part of the environment; and nodes mark points where wayfinding decisions are made. Since a navigator's uses these features to record his past route-following experiences, a designed space that employs them should be more effectively navigable.

These last two criteria, wayfinding ability and imageability, have special relevance for information spaces. Wayfinding in an information space, we have argued, should correspond

with information-seeking behavior in an information access environment. Successful wayfinding then implies that the user can use the information access environment to fulfill his information need. In a navigable information space, the problem of being ``lost in hyperspace" [Edwards and Hardman, 1993] could then be solved.

In an imageable space, each episode of successful navigation can contribute in building a coherent mental picture of the information environment and of the content therein. Ideally, the user becomes more and more effective in fulfilling information needs every time he navigates through the environment. And in an information space organized on a principle relevant to the user's task, the mental map corresponds to a conceptual map of the content, reflecting important relationships in the information and the principles used to organize it.

The principles here come from both the study of museum exhibits and the research of environmental psychologists, cognitive scientists, and others who study how humans represent and navigate in the physical environment.

Principles for effective wayfinding include:

- Create an identity at each location, different from all others.
- Use landmarks to provide orientation cues and memorable locations.
- Create well-structured paths.
- Create regions of differing visual character.
- Don't give the user too many choices in navigation.
- Use survey views (give navigators a vista or map).
- Provide signs at decision points to help wayfinding decisions.
- Use sight lines to show what's ahead.

1. The Principles

1. Create an identity at each location, different from all others.

The principle. Give every location in a navigable space a unique perceptual identity, so that the navigator can associate his immediate surroundings with a location in the larger-scale space. It speaks most directly to the first criterion for navigability, the ability to recover position and orientation. This principle indicates that every place should function, to some extent, as a landmark - a recognizable point of reference in the larger space.

Source. The idea of places needing an identity for wayfinding is discussed in Arthur and Passini [Arthur and Passini, 1992]. They introduce the notions of *identity* and *equivalence* for speaking of the perceptions of places. Identity is what makes one part of a space distinguishable from another, and equivalence is what allows spaces to be grouped by their common attributes. They argue that identifiable places form the building

blocks of our cognitive maps and the spatial anchors for the decisions made during wayfinding.

Applicability and design consequences. Ideally, a space should have just enough differentiability for this principle to hold, but no more. Neon lights should not be necessary. And, if the information space is built around an organizational principle, differentiability may be reflected by that organization naturally. For example, suppose the navigator is traversing a spatial timeline. Then each location corresponds to a point in time, giving a ready-made identity to it.

An example. Perhaps the best way to illustrate this principle is to see what happens when it fails. Those familiar with the original text-adventure game ADVENT will know that the adventurer will eventually find his way into a part of the cave which the game describes as:

```
You are in a maze of twisty little passages, all alike.
```

No matter which direction the player moves, the system will again respond

```
You are in a maze of twisty little passages, all alike.
```

(unless the player is fortunate enough to emerge from the maze strictly by chance.) What to do?

An effective strategy is for the player to drop one of the items he is carrying in the room, then make a move and see what happens. When the player re-encounters a room with an item, the system responds

```
You are in a maze of twisty little passages, all alike.
There is a bag of coins here.
```

Now the room has an *identity*. The player can repeat this process to map out the entire maze as a directed graph, and emerge on the other side.

2. Use landmarks to provide orientation cues and memorable locations.

The principle. Landmarks serve two useful purposes. The first is as an orientation cue. If the navigator knows where a landmark is in relation to his present position, he can say something about where he is, and which way he is facing, in the space he shares with the landmark. A desirable property of a landmark for this use is visibility, the ability to be seen from a large surrounding area. Such global landmarks can help the navigator judge his orientation within a wide area, as opposed to local landmarks, which can be seen only in the immediate vicinity. A system of local landmarks which exhaustively cover the space can also provide the same cues as a single, towering landmark. The second use of a landmark is as an especially memorable location. In his sketch-map interviews, Lynch noted that

different respondents marked or mentioned many of the same places. It is these memorable places that can provide instant recognition of one's location. A shared vocabulary of landmarks provides the basis for verbal or written descriptions of locations or routes. Landmarks associated with decision points, where the navigator must choose which path of many to follow, are especially useful as they make the location and the associated decision more memorable.

Source. Lynch [Lynch, 1960] dicusses landmarks in an urban context at length, and describes their defining physical characteristic as ``singularity, some aspect that is unique or memorable in context."

Landmarks were also evident in an exhibit setting. Landmarks such as the large water pump model in *Leonardo* (catalog number 112) and the octagonal case holding Jacqueline Kennedy's dinner gown (catalog number O26) were both physically large and visually distinct from their context, meeting Lynch's requirements as landmarks. Landmarks can be distinguished spaces as well as memorable objects; for example, the Oval Office exhibit marked the midpoint of the Kennedy museum.

Applicability and design consequences. A system of landmarks helps to organize and define an information space. However, they should be used sparingly; placing too many landmarks in the space belies their usefulness as memorable and unique locations. Landmarks, then, are a scarce resource that can be used not only to assist wayfinding but also to serve the space's larger purpose. Since a landmark defines a surrounding region to which it is adjacent, it could stand as a exemplar or representative for that region's content. Landmarks can also head paths emanating from junctions, and indicate what's down the road. Landmarks are the anchors along which paths are defined and our mental maps are built; they should reflect the top level of the organizing principle of the space.

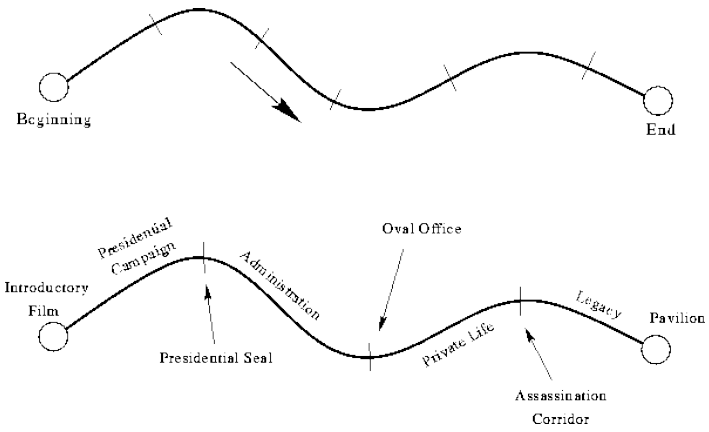
An example. An interesting use of a landmark is found in the National Museum of Natural History's fossils exhibit. Near the entrance, a tall (approximately 20 meters high) ``time tower" is visible from most of the central area of the exhibit (Figure 5-1). In a multi-level exhibit with a complex circulation pattern, it is a valuable physical landmark and point of reference with wide visibility. It also displays the time periods represented by the fossils in the exhibit and the corresponding terms associated with them. So, it serves as both a wayfinding aid and a way of communicating information important to understanding the exhibit.

Figure 5-1: The time tower in the Fossils exhibit.

3. Create well-structured paths.

The principle. Paths should possess a set of characteristics to be ``well-structured." Well-structured paths are continuous and have a clear beginning, middle, and end when viewed in each direction. They should confirm progress and distance to their destination along their length. And a navigator should easily infer which direction he is moving along the path by its directionality or ``sidedness." These concepts are summarized in Figure 5-2. A well-structured path maintains a navigator's orientation with respect to both the next landmark along the path and the distance to the eventual destination.

Figure 5-2: Well-structured paths. Top: In the abstract. Below: The Kennedy museum as a well-structured path.



Source. The exhibits studied can each be thought of as a well-structured path. For those that were spatial timelines, the start of the timeline, its extent, and its end create the path. For those that communicated messages, movement from one message to the next marked progress. Exhibits with memorable introductions and conclusions have well-defined beginning and end-points for their paths.

Applicability and design consequences. This principle informs how the traversal of a pre-defined route will appear to the navigator. The features of a well-structured path should again correspond to concepts relevant to the content of the space. The beginning and end of the path form an introduction and conclusion, and progress is marked by moving from one concept or message to the next. A continuous path should have both shared attributes that define it as distinct from its context, and evolving or changing features that mark its length and connect one part to a subsequent part.

An example. The Kennedy museum, as a spatial timeline, was a well-structured path (again, refer to Figure 5-2). The beginning of the path is the 18-minute introductory film; progress is marked by proceeding through his campaign, administration, family life, assassination, and legacy; and the pavilion provides an end-point. Directional ambiguity is resolved by whether motion is forward or backward in time through the events in Kennedy's life.

Another example outside of the domain of exhibits are interstate highways. The entrances and exits along the highway are clearly marked by signs, and mile markers indicate progress and relative distance to destinations. In this case, the path is structured not so much by diversity of appearance or meaning, but by a system of signs arranged along its length.

4. Create regions of differing visual character.

The principle. Subdivide the space into regions with a distinct set of visual attributes to assist in wayfinding. The character that sets a region apart can be some aspect of its visual appearance, a distinction in function or use, or some attribute of its content that is consistently maintained within the region but not without. Regions may not have sharply defined boundaries, or their extent may be in some part subjective; but a minimal requirement is that there is a generally agreed space said to be within the region, and a surrounding area said to be outside it.

Regions assist wayfinding by providing another set of cues for recovering location. They associate a set of defining features with an area in space, and give a way of identifying a place as being in a certain region. When the navigator moves from one region to another, the shift in the character of the space is another fact that informs him of his location along the boundary of the two regions.

Source. Regions are used in exhibits in two ways. The first is as another aspect of the environmental look principle, from a wayfinding perspective. The consistent environmental elements that make for the visual identity of the exhibit as a whole define it as a region, apart from the rest of the museum. In addition, the distinct appearance of individual parts of the exhibit define sub-regions within that larger region.

The second is the use of enclosures to create regions in an exhibit. Moving from one room or gallery to another through a threshold makes explicit the motion from one region of the exhibit to another.

Applicability and design consequences. Regions allow the navigator to distinguish one part of the space from another and to know when he has moved across the boundary between two regions. These boundaries can serve as demarcations along a well-structured path through several regions. For communication, a region can correspond to some attribute shared by the content within, such as supporting the same message, teaching the same concept, or relating the same event.

An example. In *Leonardo*, Ed Rodley [Rodley, 1997] cited how visual elements marked the boundaries of the main areas of the exhibit; variations in color treatments of walls and moldings, archways of differing shapes, and differing light levels all reinforced the transitions through archways from one region to another. And, referring back to the message hierarchy for *Leonardo*, we see that each message corresponds to a particular, enclosed region of the exhibit (Figure 4-1).

5. Don't give the user too many choices in navigation.

The principle. If there is a story to tell, design the space so that it is coherent for every route the navigator might take.

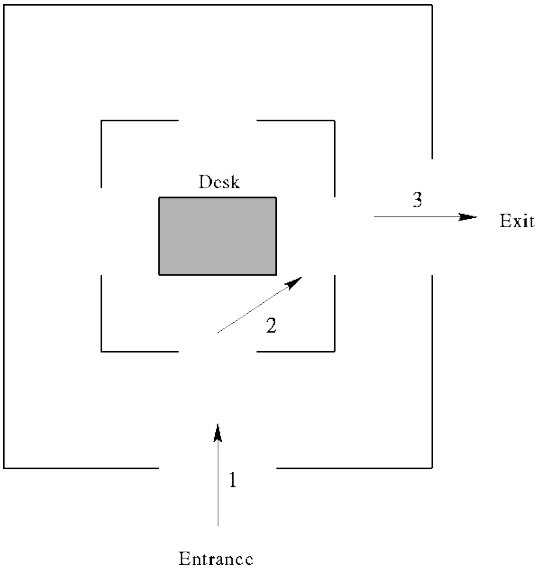
Source. This principle was explicitly used to inform the design of the *Leonardo* exhibit. In particular, the visitor was given a choice at the ``Florence in 1470" room to proceed straight ahead into the ``Art Gallery" to or to veer right into the ``Art Studio" rooms. According to Ed Rodley [Rodley, 1997], the exhibit was designed to repeat the messages conveyed in the Art Studio in a display in the Art Gallery, so that even if a visitor missed the ``Art Studio" they would be exposed to these messages. This principle was applied throughout the exhibit, with the layout designed to ensure that people encountered the main points no matter what route they took.

Applicability and design consequences. This principle is best used when there is a story you want every navigator to see. This basic story should be communicated by every path the navigator can take through the space. Opportunities for detours, side-tours, and exploration can branch off of this main path, eventually returning to resume the main story.

This principle, and the underlying assumption of a narrative for the space, indicate that the organization should have a primary path for visitors to follow (for example, as in Figure 4-3). The underlying question that this principle tries to address is, how many choices should be made for the navigator? An answer is, enough for the navigator to learn what the communicators intend.

An example. We can also look at what happens when this principle is not applied. The original Kennedy museum had a plan in which the visitor entered a central area with his desk and had to then choose where to explore from this area (see Figure 5-3). By making a right turn, the visitor could skip the majority of the central area of the exhibit, possibly without being aware of it, and proceed to exit onto the pavilion. Frank Rigg noted this problem in an interview [Rigg, 1998].

Figure 5-3: Schematic plan of the original Kennedy museum. Some visitors would enter from below (1) to the central area with his desk (2) and proceed directly to the exit (3).



6. Use survey views (give navigators a vista or map).

The principle. When navigating in any type of space, a map is a valuable navigation aid. It places the entire space within the navigator's view, and several kinds of judgements can be made readily:

- the location of the navigator, and what is in the immediate vicinity;
- what destinations are available, and what routes will take the navigator there; and

- the size of the space, and how far the navigator is along his chosen path.

In addition, the survey view provides a ready image of the space, which can provide the basis for the navigator's mental map. Several researchers have found that giving subjects access to only survey knowledge of an environment can give comparable or superior performance to knowledge gained from route-following experience on landmark estimation and sketch-mapping tasks [Thorndyke and Hayes-Roth, 1982] [Golledge et al., 1995]. The navigator's mental map, primed with the image of his environment, can be augmented readily with experience gained from actual navigation in the space.

For an information space, a survey view has another role. It not only assists navigation in the space, but because the space corresponds to a conceptual organization of the information it contains, it serves as a succinct expression of meaningful relationships in that information. In more concrete terms, it assocaties the location of every document, image, or object with a message, a point on a timeline, or a concept to be learned. A map of the physical (or virtual) space can thus serve as an external representation of the conceptual map of the content. This conceptual map uses the navigator's ability to form mental representations of a physical space to store knowledge about conceptual relationships in the information space.

Source. Nearly every exhibit studied had a plan map either on a brochure distributed to visitors as they went in or mounted as wall plaques inside the exhibit itself.

Applicability and design consequences. Although it would seem to always be beneficial to provide a map, there may be sufficient wayfinding aids (such as signs and landmarks) already embedded in the space already to make a map unnecessary. Small spaces with which the navigator is already familiar may not need a map. A map can serve as reference material: available when needed, and able to be tucked away when not.

Maps are more useful when views in the space are insufficient to give information about unfamiliar regions, which is true in enclosed spaces with limited views in each direction.

An example. *Leonardo* had two maps situated at the entrances to the two latter sections of the exhibit (catalog numbers 74 and 148), identical to the map on visitor brochures (Figure 3-1). The Holocaust exhibit had wall-mounted maps at the beginning of each floor, labeled with each major section of that floor. Maps of the entire Holocaust Memorial Museum were also provided in visitor brochures (Figure 3-13).

7. Provide signs at decision points to help wayfinding decisions.

The principle. Place signs, when necessary, at decision points. Decision points are where the navigator must make a wayfinding decision (for example, whether to continue along the current route or to change direction.) A sign embeds additional information into the space to direct the navigator's next navigational choice. This information should be relevant to both the choices offered to the navigator at that point, and the larger goal of the navigational task.

Simply put, a sign should tell the navigator what's in the direction it points, and the destinations so indicated should help the navigator reach his eventual goal.

Source. Passini describes this principle as part of his theory for wayfinding as spatial decision-making [Arthur and Passini, 1992] [Passini, 1984]. According to this theory, a navigator begins with a high-level goal, and acquires information from his environment (or uses what he already knows about the space) to make his first move towards a top-level destination. At decision points along the route, the navigator combines observation of local features with previous knowledge of the space to make the proper navigational move.

When the navigator does not have previous knowledge of the space, or a map to refer to, only the local features at the decision point can inform his navigational choice. A sign placed at a decision point in this framework, needs to inform the navigator of the correct route.

Applicability and design consequences. When placing signs, we can ask two questions at the decision points in the space:

- *Should a sign be placed here?* Signs have navigational information that is authoritative and unambiguous. If the cost of making a wrong choice is high for the navigator or insufficient information is available from the view at the decision point for the navigator to make the correct choice, a sign is necessary.
- *What destinations should be included on the sign?* Considerations that come into play are the destination's frequency (*how often is it a navigator's goal?*), its importance or memorability (*is it a landmark, a place that could be used as a point of reference for other destinations?*), its immediacy (*how close is it?*), and its utility (*Does the destination help navigator complete a task?*). Each of these argue for adding a sign for that destination.

By design, signs must be in a location to acquire the navigator's attention, yet space for signage is a scarce resource. The benefits of signage must be weighed against the other potential uses for the space it occupies.

An example. One example of effective signage in action is at an airport. The environment may be completely unfamiliar to first-time visitors, and signs are the main means of directing them to their destination. Departing travelers have a typical routine of leaving from ground transportation or parking, checking in with their baggage, passing through security, and going to the departure gate. Arriving passengers must claim their baggage and proceed to ground transportation or parking. Effective signs in an airport both direct visitors at decision points to useful destinations and confirm their route along the way.

8. Use sight lines to show what's ahead.

The principle. Give the navigator a more extensive view in a particular direction and a goal to draw him in that direction. In an exhibit space, in which the first-time visitor has uncertain

expectations as to its extent and purpose, sight lines are valuable means of giving enough information about what's ahead to encourage the visitor to move farther. Sight lines give long but narrow samples of unfamiliar space. Based on that sample, the viewer can determine if that direction is of interest or not.

To make a sight line interesting, the designer can provide a ``wienie'' - a goal to navigate toward. It might be some feature or object that is striking or unusual, something to spark the navigator's interest. It is the reward for choosing the path that it lies at the end of.

Source. This principle comes from Martin Sklar, president of Disney Imagineering, relating ``Mickey's Ten Commandments'' for museum exhibitions at the 1987 American Association of Museums Annual Meeting [McLean, 1993]: ``Create a `wienie' [*sic*]... That's what Walt Disney called it...You lead visitors from one area...or one exhibit to the next by creating visual magnets. Reward people for walking from point A to point B."

Applicability and design consequences. Providing selective views into a larger space is a way of letting the viewer take a representative sample of what's available and letting him make wayfinding decisions on that basis. It could be thought of as an alternative to a sign; instead of telling him that the destination is down this path, you can show him where it is (although it might be far away). The information available at a decision point should also depend on what sight lines are offered by each of the choices. Sight lines and wienies are tools the designer has to lead the visitor from one part of the space to the next.

An example. Sight lines were important in the Kennedy museum. At the end of the main corridor, an octagonal case with Jacqueline Kennedy's dinner gown was visible from the beginning, and served to draw people forward through the corridor. The case was situated in a temporary exhibit space that formerly housed an exhibit on the Nuclear Test Ban Treaty, which apparently was less interesting; once the case was installed, it actually improved visitor traffic into the adjacent exhibit on Robert F. Kennedy [Rigg and Wagner, 1997].

Another example is from the original Kennedy museum, before redevelopment. In exhibit 17, a film clip of a press conference was activated by a floor sensor: the monitor in the exhibit was blank until the visitor stepped in. Visitors would glance into the exhibit, see a blank screen, and move on. Once the clip was made into a continuous loop, traffic flow improved into the exhibit.

2. Reflections

These principles can be roughly divided into two classes. The first class of principles, one through four, develop a basic vocabulary of spatial features that assist wayfinding and imageability: identifiable places, landmarks, paths, and regions. In an information space, these features should be used to communicate the conceptual organization of its content. It is this correspondence that makes meaningful navigation possible in the space.

Principles in the second class, six through eight, are about the views that the navigator has into the space, and how designers can provide the information necessary for wayfinding and decision-making. Survey views are maximal; they give the navigator the most information about the space at once. Sight lines are local views deep into the space in an interesting direction. And signs are the authorities in information spaces, providing locally relevant wayfinding cues.

The remaining principle, the fifth, ties the structure of the space to the task of interest - communication of some body of knowledge - by ensuring that the route the navigator takes will expose him to the ideas the communicator wishes to express.

Office of Compliance

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February 2008

ADA Office Checklist

Is Your Office Accessible?

The Americans with Disabilities Act of 1990 (ADA) was enacted to prohibit discrimination against persons with disabilities in employment and in access to public entities and accommodations. The ADA is made applicable to the U.S. Congress under the Congressional Accountability Act of 1995.

The following checklist will assist office managers and others to help ensure that your work space is in compliance with the ADA. Although this list is not exhaustive, if you have marked "yes" to each item on this checklist, your office space conforms with these requirements of the ADA.

Image 1: The force required to open this door is too great.

- ❑ Doors to office suites are at least 32 inches wide. When an office has double doors that are fewer than 32 inches per door, both doors are able to be opened.
- ❑ Doors to office suites require fewer than five pounds of force to open. If the doors are heavier, as in Image 1, they are always kept open or have a person posted nearby at all times when the office is open for business.
- ❑ Routes to all areas within the office where the elected representative, staff, or other government officials meet with members of the public are at least 36 inches wide to allow for passage by an individual in a wheelchair.
- ❑ Conference tables in public meeting areas are at least 27 inches high to allow for knee clearance for individuals in wheelchairs.
- ❑ Carpeting in hallways and all office areas open to the public is secured to the floor and has a pile of less than ½ inch.
- ❑ Objects that protrude more than four inches into a passageway (such as shelves, mailboxes or water fountains, as in Image 2) are detectable by a blind person using a white cane; the leading edge is fewer than 27 inches above the floor.

Image 2: Leading edge on this water fountain is too high: more than 27 inches above the floor.

- ❑ The office has access to a telephone relay system or a Telecommunications Device for the Deaf (TDD).
- ❑ Written documents are available in large print or alternate formats or readers are provided for constituents who are vision-impaired.

- ❑ Tactile signs indicating the office's room number are in Braille, with raised and contrasting characters, mounted 60 inches above the floor on the latch side of the door. Nothing blocks access to tactile signage (e.g., flags, sign-in stands, cabinets, etc., as in Image 3.)

Image 3: Flag placed in hallway is blocking access to the tactile room sign.

- ❑ Sign language interpreters or other auxiliary aid and services are provided, upon request, for constituents who are hearing-impaired.

- ❑ Brochures and other documents available in the office waiting area are within reach (generally between 15" and 48" off the floor) for an individual who is in a wheelchair.

Image 4: Staging area for emergency evacuation.

- ❑ Visual evacuation alarms are provided by the building or facilities manager in all restrooms open to the public.

- ❑ All staff know the location of the accessible building exit doors and the primary and secondary staging areas to be used during an emergency by individuals who are mobility impaired, such as that pictured in Image 4.

- ❑ Restrooms that are marked as ADA compliant have doors that require fewer than five pounds of force to open.

- ❑ Restrooms that are marked as ADA-compliant have grab bars behind and to the side of at least one toilet stall; the bars are mounted between 33 and 36 inches above the floor.

- ❑ Public restrooms that are not accessible to individuals in wheelchairs are to have signage indicating the location of the nearest ADA-compliant restroom.

Contact your supervisor if you see an access barrier that needs to be removed. If the matter is not resolved, legislative branch employees may contact the Office of Compliance at the address or phone number indicated below.

Peter Ames Eveleth
General Counsel
Rachel Berg Schemer
Editor

If you spot a safety hazard in your legislative branch workplace, contact the Office of Compliance to report it:
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110 Second Street, SE
Washington, DC 20540
v/ 202-724-9250; tdd/ 202-426-1912; f/ 202-426-1913
Recorded Information Line/ 202-724-9260
www.compliance.gov

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Branding Board

(Remove this writing and insert your Branding Board.)

Concept Board

(Remove this writing and insert your Concept Board.)