



A NEW GENERATION²

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A NEW GENERATION²

THE IMPROPER APPROPRIATION OF
THE MODERN HOUSING MARKET IN
TODAY'S SOCIETY, TAKING A LOOK AT
A NEW GENERATION'S NECESSITIES
AND AMBITIONS.

A DESIGN THESIS SUBMITTED TO THE
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PRIMARY THESIS ADVISOR _____

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THESIS ABSTRACT

IN MANY CITIES THROUGHOUT THE USA, RECENT GRADUATES HAVE TO DEAL WITH INCREASING RENT PRICES WITH A VERY LIMITED INCOME. STANDARD APARTMENT BUILDINGS AND OTHER TYPES OF DWELLINGS ARE FAIRLY STANDARD WITH SPACE AND COST. GENERALLY SPEAKING, MANY RESIDENTS ONLY USE THEIR RENTAL UNITS FOR <12 HOURS/DAY, FOR THE REST OF THE DAY THAT UNIT SITS EMPTY. SO WHY NOT LOOK AT ALTERNATIVE SOLUTIONS?

RECENT GRADUATES MAY NOT DESIRE A LOT OF SPACE/ HIGHER RENT, AND RATHER SAVE MONEY BY LIVING FARTHER FROM THE CITY CENTER. BUT WHY NOT FIND AN ALTERNATIVE SOLUTION AND DEVELOP A SPACE OF CO-COMMUNITY LIVING IN A MORE PRIME LOCATION? RENT COSTS CAN BE CUT BY LOWERING THE AMOUNT OF RENTABLE SQUARE FOOTAGE PER PRIVATE UNIT WITH AN OFF-BALANCE OF INCREASED AMENITY SPACES AND SHARED SPACES. AND THUS THE RESEARCH WAS STARTED.

DURING THIS THESIS RESEARCH, I LOOKED AT ALTERNATIVE MEANS OF LIVING IN ORDER TO CREATE A CLOSER SENSE OF COMMUNITY AS WELL AS CUT DOWN ON RENT COSTS. THE PROPOSAL CALLS FOR A MIXED USE PREFABRICATED RESIDENTIAL DEVELOPMENT IN DOWNTOWN NASHVILLE. BY CREATING MORE MEANS OF MIXED USE, THE SITE GAINS USE THROUGHOUT THE DAY, INCREASING IT'S VALUE DESPITE THE LOWER COST OF RENT.

THESIS NARRATIVE

IN CITIES ACROSS THE UNITED STATES, THE MARKET PRICES FOR RESIDENTIAL IS AT AN ALL TIME HIGH, IN MANY CITIES YOU MAY BE SPENDING AS MUCH AS 30%+ OF YOUR INCOME FOR YOUR MONTHLY RENT, THIS IS ONLY GETTING WORSE IN LARGE METROPOLITAN AREAS ACROSS THE COUNTRY. WITH MODERN HOUSING MARKETS, APARTMENTS ARE COMMONLY ONE IN THE SAME, YOU HAVE STANDARD ONE BEDROOM, EFFICIENCIES, ETC. GENERALLY SPEAKING, UNLESS YOU WANT TO GIVE UP LOCATION, AMENITIES, SAFETY, OR SPACE, YOU ARE GOING TO PAY A HEFTY PRICE.

RECENT COLLEGE GRADUATES ARE MAKING AN AVERAGE OF \$51,000/YEAR (FAIN, 2019). WITH INCREASING RENT PRICES IN CITIES ACROSS THE COUNTRY, WE ARE SETTING THEM UP FOR FAILURE, AND WITH AN ESTIMATED 3.8 MILLION NEW COLLEGE GRADUATES EVERY YEAR (BUSTAMANTE, 2019), THIS PROBLEM IS WIDESPREAD.

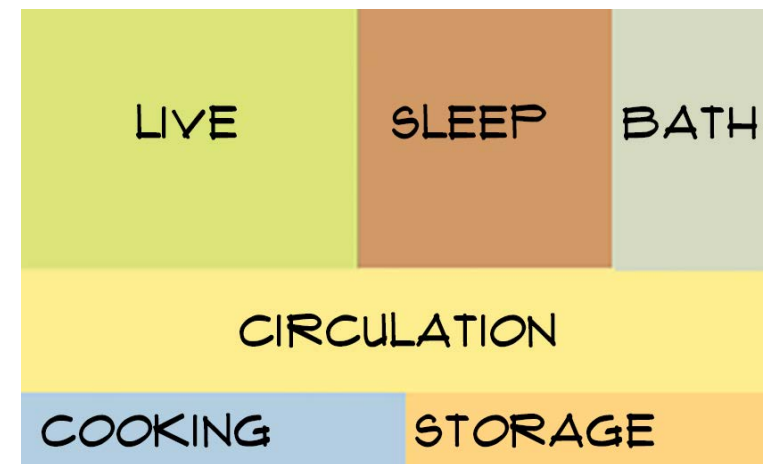


FIGURE 01 | INEFFICIENT SPACE PROGRAMING | DANE VONASEK

THESIS NARRATIVE

EFFICIENCY STANDARDS IN REFERENCE TO DESIGN WITHIN MODERN APARTMENTS ARE FAIRLY CONSTANT. MOST APARTMENTS MAKE UP A PLACE TO REST/SLEEP, A PLACE TO COOK, A PLACE TO BATH, AND A PLACE TO STORE YOUR POSSESSIONS. THE PROBLEM WITH THIS PRACTICE IS THAT A RESIDENT CAN ONLY USE ONE SPACE AT A TIME. WHILE THIS MAY NOT BE AN ISSUE IN LOWER POPULATION DENSITY AREAS, IN AREAS WHERE THE PRICE PER SQUARE FOOT CAN BE UNREASONABLY HIGH, WASTED SPACE IS WASTED MONEY.



FIGURE 02 | NAKAGIN CAPSULE TOWER BEDROOM A | [HTTP://ARCHYES.COM/NAKAGIN-CAPSULE-TOWER-KISHO-KUROKAWA/](http://archeyes.com/NAKAGIN-CAPSULE-TOWER-KISHO-KUROKAWA/)

THESIS NARRATIVE

IN CITIES ACROSS THE COUNTRY, MANY RENT A SPACE TO LIVE IN, HOWEVER DUE TO THEIR LIVES THEY ONLY SPEND < 12 HOURS IN THE APARTMENT PER DAY. TO SPEND \$1,500+ PER MONTH ON AN APARTMENT TO HAVE IT SIT EMPTY 50% OF THE TIME DOES NOT SEEM LIKE THE BEST FINANCIAL PRACTICE. THIS IS WHY I PROPOSE A SYSTEM OF HOUSING WITH HIGHER EFFICIENCY IN MIND TO NOT ONLY CUT DOWN ON WASTED SPACE, BUT TO MAKE USE OF SPACE 24 HOURS PER DAY. THIS WOULD PRIMARILY BE DESIGNED FOR THOSE OF A YOUNGER GENERATION, WHO HAVE LESS POSSESSIONS AND DON'T MIND GIVING UP SPACE IN RETURN FOR LESS OF A FINANCIAL BURDEN.

AN EXCELLENT EXAMPLE OF LOWER EFFICIENCY OF SPACE WITHIN AN APARTMENT IS A SHOWER/BATH. A PLACE TO BATHE IS A NECESSITY THAT EVERY DWELLING REQUIRES, HOWEVER WE USE IT FOR A VERY SHORT AMOUNT OF TIME EVERY DAY. WHILE THIS MAY NOT BE AN ISSUE IN SMALLER DENSITY CITIES, IN PLACES LIKE NEW YORK CITY, WHERE RENT PER SQUARE FOOT IS KNOWN TO BE UPWARDS OF \$4.98/SqFT/ MONTH (KOLOMATSKY, 2018), THIS CAN BECOME EXPENSIVE QUICK. A STANDARD 3'X3' SHOWER WOULD COST YOU \$537.84/YEAR JUST FOR THE SPACE IN NYC. AS A RECENT GRADUATE MAKING THAT \$51,000 A YEAR, \$537.84 IS A LOT OF MONEY. IF A DESIGN COULD BE IMPLEMENTED THAT ALLOWED THAT SPACE TO BE USED FOR OTHER ACTIVITIES THROUGHOUT THE DAY, THE PRICE COULD BE BETTER JUSTIFIABLE.



FIGURE 03 | INEFFICIENT APARTMENT SPACE | DANE VONASEK

ANOTHER MACRO SCALE WAY TO LOOK AT EFFICIENCY IS THE USE OF A SITE, THROUGHOUT CITIES IN THE USA, STANDARD BUILDING PLOTS MAKE UP STRUCTURES, BUT WHAT ABOUT THOSE SPACES THAT MAY BE DEEMED UNFIT OR LESS SUITABLE FOR STANDARD DEVELOPMENTS? ROUNDABOUTS, WATERWAYS, HIGH TRAFFIC AREAS, ETC. THROUGH LOOKING AT LESS THAN IDEAL SITE WORK, EFFICIENCY AND LOWER COSTS CAN BE REACHED.

TO LIVE AND DWELL WITHIN A SPACE CAN BE MORE THAN JUST SOMEPLACE TO LAY YOUR HEAD AT THE END OF THE DAY. IT CAN BE A SPACE TO SHARE IDEAS AND GROW AS A PERSON, TO DEVELOP A SENSE OF COMMUNITY WITH THOSE THAT YOU LIVE WITH. TO FIND THAT GOOD MIX OF PRIVATE SPACES AND PUBLIC COMMUNITY INTERACTION, IS THE PERFECT SENSE OF AN ALTERNATIVE MEANS OF DWELLING. WITH THIS PROJECT, I WANT TO DEVELOP A SPACE THAT ALLOWS FOR A YOUNGER GENERATION TO NOT ONLY SAVE MONEY BY RESIDING IN SPACES DESIGNED WITH HIGHER EFFICIENCY, BUT TO FIND THEMSELVES LIVING IN AN INTERPERSONAL COMMUNITY OF CLOSE NEIGHBORS AND COLLEAGUES. THIS WOULD ALLOW ONE TO DEVELOP THEIR CHARACTER FURTHER, BOTH IN A PROFESSIONAL AND PERSONAL SENSE.

HOW IS ALL OF THIS ACHIEVED THOUGH? WITH DEVELOPERS BEING THE CENTER OF ALL MAJOR REAL ESTATE MARKET DECISIONS WITHIN A SOCIETY, WHY WOULD ANYONE WANT TO ATTEMPT SOMETHING NEW WHILE CHARGING LESS FOR RENT. AS OPPOSED TO CONTINUE THE NORM AND RAKING IN THE PROFITS FROM IT. WITH THIS NEW CLASSIFICATION OF SOCIAL HOUSING, INCENTIVES NEED TO BE RESEARCHED TO PROVIDE REASONING FOR BACKERS TO BECOME INTERESTED. LOOKING AT OTHER WAYS TO DEVELOP A SITE MAY BE BENEFICIAL, WHILE THE BASIS OF A PROJECT MIGHT BE LOWER COST HOUSING, HAVING A SECONDARY USE FOR THE SITE AND STRUCTURE CAN BE SEEN TO HAVE A LUCRATIVE VALUE FOR SURROUNDING BUSINESSES AND COMMUNITIES. THIS WOULD ALSO WORK IN PART WITH THE MULTI USE SPACE I AM TRYING TO REACH.

PROJECT TYPOLOGY:

THE PROJECT TYPOLOGY IS A MODULAR BASED MULTIFAMILY HOUSING DEVELOPMENT DESIGNED WITH YOUNGER GENERATIONS IN MIND, TAKING USE OF LAND OF A CITY WHICH MAY BE DEEMED AS LESS USABLE THEN YOUR STANDARD SITE. I IMAGINE THIS BUILDING TO CREATE A SPACE IN WHICH ONE MAY LIVE AND DWELL WITHIN A COMMUNITY, GIVING UP WASTED SPACE WITHOUT SACRIFICING COMFORT, WITH A LOWER COST TO RENT IN MIND. HIGH COMMUNITY INTERACTION ALONG WITH HIGHER EFFICIENCY TIED WITH DEVELOPMENT OF LESS SUITABLE LAND WITHIN AN URBAN ENVIRONMENT ARE CORE FOCUSES. I WANT THIS PROJECT TO BE A STAPLE OF RESIDENTIAL DESIGN WITH HIGHER EFFICIENCY IN MIND FOR RECENT GRADUATES AND THOSE OF A YOUNGER GENERATION WHO REQUIRE LESS SPACE AND HAVE LESS POSSESSIONS THEN THOSE OF OLDER GENERATIONS.

TITLE: CO-COMMUNITY MINIMALISTIC DWELLING
TYPOLOGY: MIXED USE MULTI FAMILY RESIDENTIAL
STRUCTURE: MODULAR PREFABRICATED UNITS
SITE: NASHVILLE, TN
PROJECT SIZE: <100,000 SQFT

MAJOR PROJECT ELEMENTS:

1. PRIVATE RESIDENTIAL UNITS

- HIGH EFFICIENCY IN MIND
- MULTI USE SPACE - ABILITY TO CHANGE THE USAGE OF A SPACE (EX. LIVING ROOM TURNS INTO BEDROOM)
- CONSCIOUS OF STORAGE SPACE
- MODULAR CONSTRUCTION
- USES PREFABRICATED FURNITURE TO SAVE SPACE/TIME

2. CO-COMMUNITY SHARED AMENITY SPACES

- LESSER USED SPACES IN MIND (EX. LARGER KITCHEN, LAUNDRY, LARGER LIVING ROOM/MOVIE ROOM)
- VARIETY OF USES
- ENCOURAGES INTERACTION WITH OTHER RESIDENTS
- BOTH AMENITY AND UTILITY BASED - LIVING ROOMS AND STORAGE ROOMS

3. MIXED USE SPACES

- ENCOURAGE THE USE OF THE SITE THROUGHOUT THE DAY
- RETAIL SPACES
- PUBLIC GATHERING SPACES
- MULTI USE SPACES - THE USAGE CAN CHANGE DEPENDING ON THE TIME OF DAY, EVENT, ETC.
- KNOWN AS A RECOGNIZABLE LANDMARK IN NASHVILLE

USER/CLIENT DESCRIPTION

CO-COMMUNITY RESIDENTS 1-650 OCCUPANTS

- YOUNGER GENERATION/YOUNG PROFESSIONALS
- THOSE WHO ARE NEW TO THE CITY AND DON'T WANT TO SEARCH FOR ROOM MATES
- INDIVIDUALS WHO HAVE LESS POSSESSIONS THAN MOST
- RESIDENTS WHO DON'T SPEND MUCH TIME AT HOME
- RESIDENTS WHO WOULD PREFER TO LIVE CLOSER TO THE CITY WITHOUT PAYING THE HIGH COST OF RENT
- PROFESSIONALS WHO ARE ONLY GOING TO BE STAYING IN NASHVILLE FOR A SHORT PERIOD OF TIME (1-4 MONTHS)

APARTMENT STAFF 1-10 OCCUPANTS

- YOUNGER GENERATION/YOUNG PROFESSIONALS
- COULD BE RESIDENTS OF THE BUILDING
- COULD BE A PART TIME POSITION HELD BY MANY RESIDENTS, AS AN INCENTIVE TO LOWER RENT
- STAFF WOULD BE IN CHARGE OF LEASING, MAINTENANCE, SOCIAL FUNCTIONS, UPKEEP, ETC.

USER/CLIENT DESCRIPTION

PEDESTRIANS/VISITORS 1-200 OCCUPANTS

- THOSE WHO USE THE SITE WHEN RESIDENTS ARE NOT,
- THOSE WHO USE THE SITE DURING NON PEAK HOURS OF RESIDENCY
- INDIVIDUALS WHO MAY BE PASSING THROUGH OR USING ONE OF THE RETAIL SPACES LOCATED ON SITE
- PEDESTRIANS WHO MAY USE THE SITE AS A MEETING POINT
- PEDESTRIANS COMMUTING TO WORK

RETAIL STAFF 1-25 OCCUPANTS

- RETAIL USERS COULD BE RESIDENTS
- OCCUPANTS COULD BE OWNERS OR WORKERS OF A BUSINESS
- OCCUPANTS COULD BE DOING TEMPORARY CONTRACTING WORK ON SITE
- USERS WOULD BE FROM ALL SOCIAL CLASSES

THE SITE: NASHVILLE

NASHVILLE - TENNESSEE

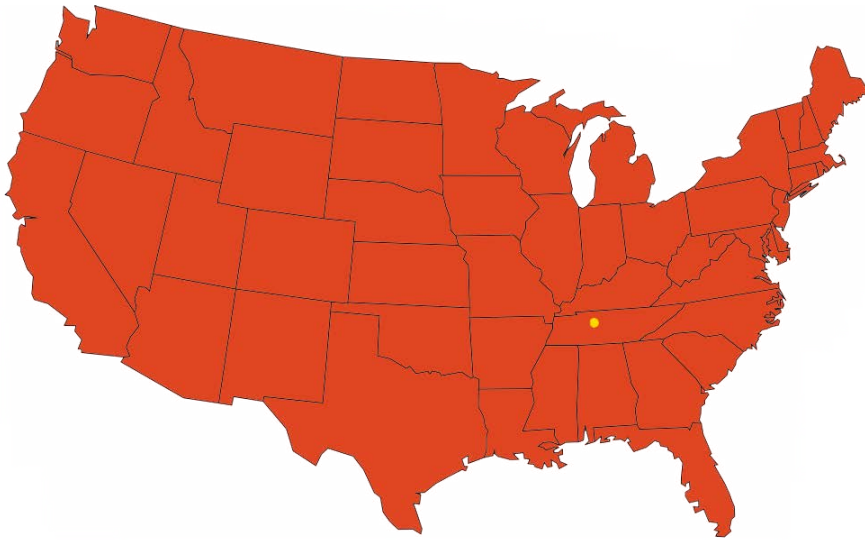


FIGURE 04 | MAP OF USA | SOURCE IMAGE: [HTTPS://WWW.GOOGLE.COM/MAPS](https://www.google.com/maps)

NASHVILLE, TENNESSEE WAS CHOSEN AS THE PERFECT LOCATION FOR THIS THESIS PROPOSAL DUE TO A VARIETY OF FACTORS.

- INCREASING ECONOMY - GROWING METROPOLITAN AREA
- UNIQUE CULTURE - PERFECT FOR YOUNG PROFESSIONALS RELOCATING
- INCREASING COST IN RENT
- MODERATE CLIMATE, WITH THIS STUDY I WANTED TO DESIGN FOR A CLIMATE OUTSIDE OF THE MIDWEST WITH OUR HARSH WINTERS.

THE SITE: NASHVILLE

THE SITE CHOSEN WITHIN NASHVILLE IS A ROUND ABOUT LOCATED NEAR THE CITY CENTER CONNECTING 4 MAJOR STREETS. THIS LOCATION WAS CHOSEN AS TO FOLLOW THE DESIGN CRITERIA I WANT TO MEET WITH THE PROJECT.

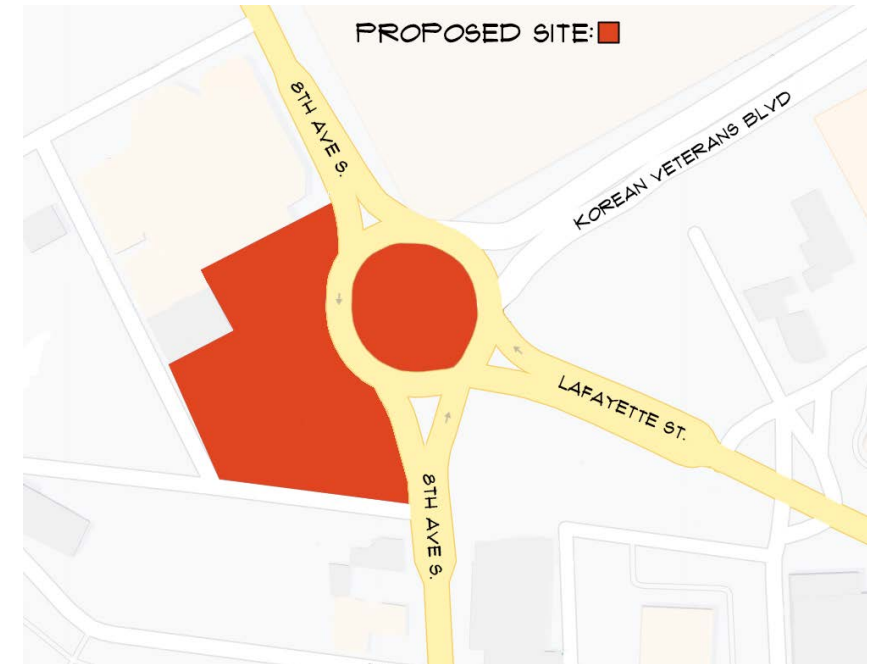


FIGURE 05 | SITE MAP | SOURCE IMAGE: [HTTPS://WWW.GOOGLE.COM/MAPS](https://www.google.com/maps)

WHILE BEING A RESIDENTIAL STRUCTURE, I WANT THE PROJECT ALSO TO SERVE THE COMMUNITY IN OTHER WAYS. WAYS OF MIXED USE AND COMMUNITY INTERACTION SO THE SITE WILL SEE USE THROUGHOUT THE DAY, NOT ONLY WHEN RESIDENTS ARE HOME. THE ROUNDABOUT WAS CHOSEN AS IT IS SEEN AS A CENTER POINT IN THE CITY, HOWEVER DEVELOPMENT IS DIFFICULT DUE TO THE HIGH LEVEL OF TRAFFIC AND TROUBLE PASSING THROUGH THE SITE AS A PEDESTRIAN.

THE SITE: NASHVILLE

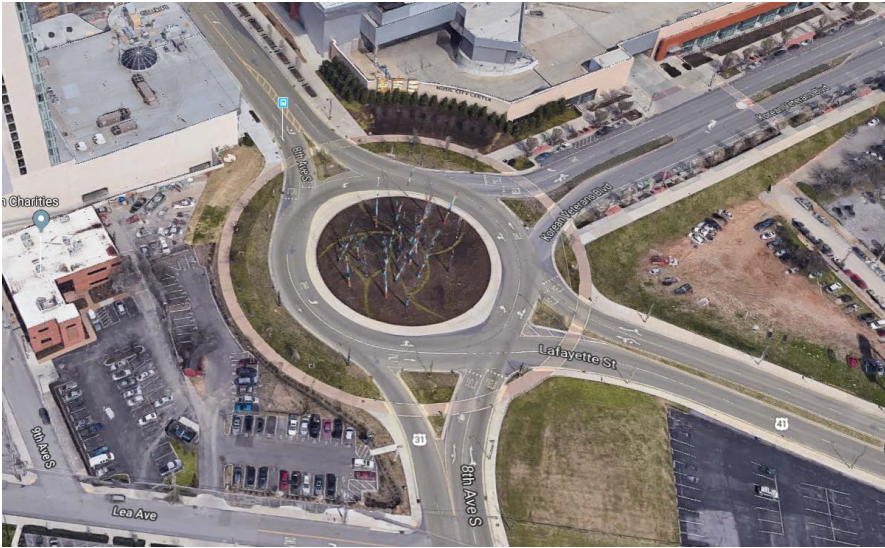


FIGURE 06 | SITE VIEW A - AERIAL | [HTTPS://WWW.GOOGLE.COM/ MAPS](https://www.google.com/maps)



FIGURE 07 | SITE VIEW B - 8TH AVE S. NORTH SIDE | [HTTPS:// WWW.GOOGLE.COM/MAPS](https://www.google.com/maps)

THE SITE: NASHVILLE



FIGURE 08 | SITE VIEW C - KOREANS VET. BLVD. | [HTTPS://WWW. GOOGLE.COM/MAPS](https://www.google.com/maps)

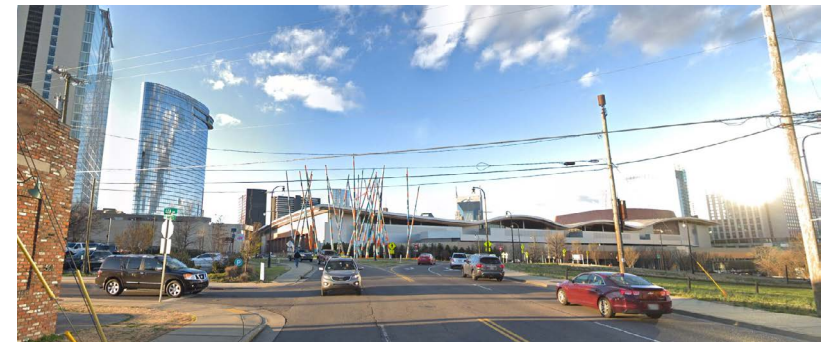


FIGURE 09 | SITE VIEW D- 8TH AVE. S. SOUTH SIDE | [HTTPS:// WWW.GOOGLE.COM/MAPS](https://www.google.com/maps)

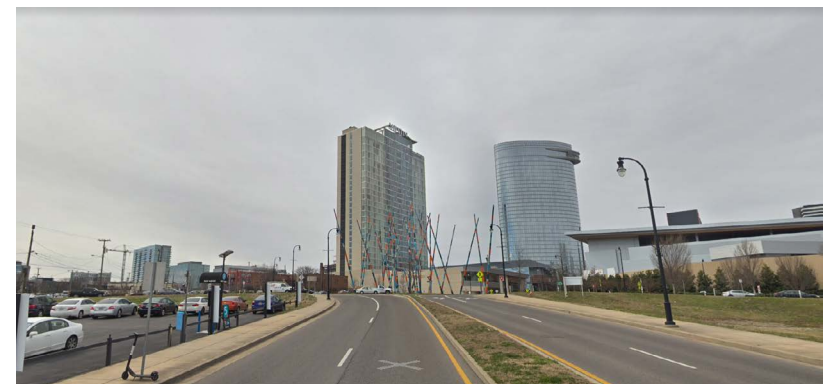


FIGURE 10 | SITE VIEW E - LAFAYETTE ST. | [HTTPS://WWW.GOOGLE. COM/MAPS](https://www.google.com/maps)

THE PROJECT EMPHASIS

1. TO EXPLORE ALTERNATE MEANS OF DWELLING FOR YOUNGER GENERATIONS, TO MAKE A PLACE OF RESIDENCY TO STAND FOR MORE THEN JUST WHERE YOU RESIDE. A PLACE OF RESIDENCY COULD HELP YOU NETWORK, BUILD FRIENDSHIPS, MEET NEW PEOPLE, ETC.
2. ALTERNATIVE USE AND DEVELOPMENT OF THE SITE TO EMPLOY USE THROUGHOUT THE DAY. THE BUILDING SHOULD NOT SIT EMPTY HALF THE DAY WHILE THE OCCUPANTS ARE AT WORK, THE SITE SHOULD BE USED FOR MORE THEN JUST A PLACE OF RESIDENCY. MIXED USE CAN BE TAKEN FURTHER THEN YOUR STANDARD USE IN CITES, WHICH IS JUST TO INCLUDE RETAIL OR OTHER USES ON SITE.
3. DEVELOP HIGHER MEANS OF EFFICIENCY IN DESIGN TO REDUCE UNUSED SPACE. TO DRAW DOWN COSTS OF RENT, LOWER SQUARE FOOTAGE IS REQUIRED. THIS CAN BE ACHIEVED BY REPLACING LARGE APARTMENTS WITH COMPACT APARTMENTS PAIRED WITH SHARED AMENITY SPACES.

GOALS OF THE THESIS

GOALS FOR THIS ALTERNATIVE MEANS OF DWELLING:

1. LOCATING THE AMBITIONS AND NEEDS OF YOUNGER GENERATIONS
2. FINDING ALTERNATIVE USES FOR SPACE TO CREATE COMMUNITY INTERACTION THROUGHOUT THE DAY
3. UNDERSTAND THE WORKING RELATIONSHIP BETWEEN INDIVIDUALS RESIDING TOGETHER
4. CREATE ALTERNATE USES OF THE PROJECT BESIDES ITS PRIMARY RESIDENCY USE.
5. ALL IDEAS MUST BE FEASIBLE IN TODAY'S SOCIETY, THIS REFERS TO BOTH COST AND PRACTICALITY.
6. FIND ALTERNATIVE MEANS OF DWELLING FOR THE IDEAL USER

PLANS FOR PROCEEDING

1. DEFINITION OF RESEARCH DIRECTION:

WITH THE SUBMISSION OF THIS PROPOSAL, I WILL CONTINUE ON WITH THE RESEARCH/DESIGN PROCESS TO FURTHER BUILD THE CASE FOR MY THESIS. I WILL START WITH A FURTHER LOOK INTO WHAT USERS FIND WOULD BE THE IDEAL LIVING SITUATION VIA SURVEYS AND INTERVIEWS. I WILL NEED TO INTERVIEW A FEW DIFFERENT TYPES OF PEOPLE, AS THIS TYPE OF LIVING SITUATION IS NOT THE BEST SOLUTION FOR EVERYONE, BUT CAN BE FOR THE RIGHT TYPE OF INDIVIDUAL. TO ACCOMPANY THAT I WILL BE STUDYING MORE RESEARCH VIA PUBLICATIONS TO FIND HIGH EFFICIENCY SOLUTIONS TO MANY OF THE SHORTCOMINGS OF MODERN RESIDENTIAL DESIGN.

2. DESIGN METHODOLOGY:

I WILL BE TAKING A TRIP TO NASHVILLE OVER THANKSGIVING BREAK, AND WILL USE THAT TIME TO FURTHER ANALYZE THE SITE AND FIND INSPIRATION FROM THE SURROUNDING CONTEXT TO CREATE A CONCEPTUAL IDEA FOR THE STRUCTURE. PUBLIC INTERACTION WILL BE TAKEN INTO CLOSE PRACTICE WHEN DESIGNING THE OVERALL CONCEPT OF DESIGN, I WILL START THIS WHEN IN NASHVILLE AND CONTINUE WITH IT ONCE I RETURN TO FARGO. MOVING ON FROM THERE I WILL MOVE ONTO THE SCHEMATIC DESIGN PHASE AND COMPILER A CONCEPTUAL PLAN PAIRED WITH A PROFORMA TO CONCLUDE IF THE PROJECT IS FEASIBLE. MOVING FORWARD I WILL CONTINUE WITH THE STANDARD DESIGN PROCESS THAT IS WIDELY PRACTICED TO CONCLUDE WITH A FINAL DESIGN SOLUTION COME MY THESIS'S COMPLETION IN MAY.

3. DOCUMENTATION OF THE DESIGN PROCESS

I WILL DOCUMENT THIS PROJECT VIA A THESIS BOOK, I WILL COVER THE ENTIRE DESIGN PROCESS AS WELL AS THE RESEARCH PORTION AND COVER IT IN DETAIL IN THE BOOK. FOR PROGRAMS I AM PRIMARILY GOING TO BE WORKING IN THE BIM SOFTWARE REVIT, AS IT IS THE BEST PROGRAM FOR STUDYING SPACES.

PLANS FOR PROCEEDING - SCHEDULE

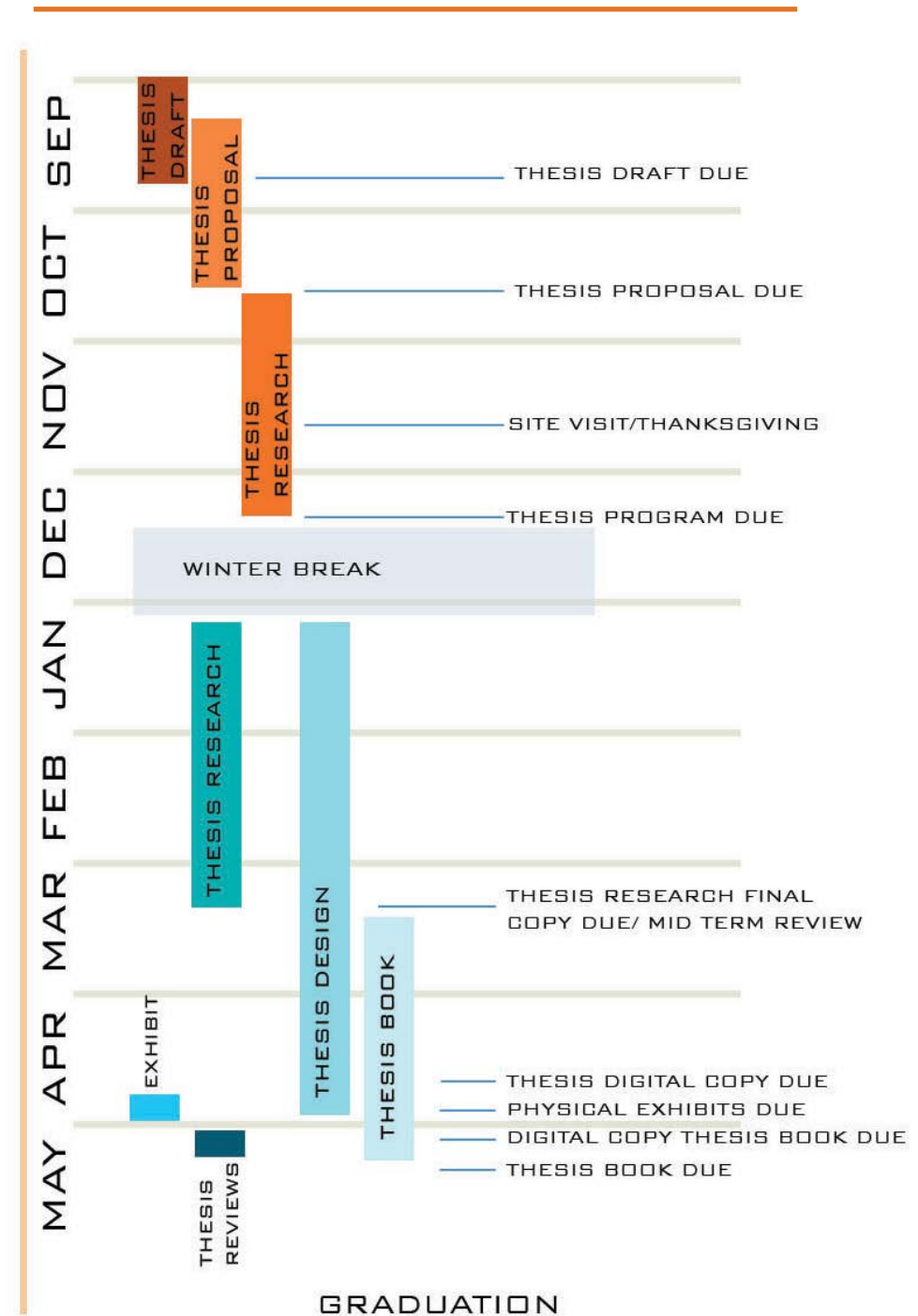


FIGURE 11 | SCHEDULE FOR PROCEEDING | DJV

THESIS RESEARCH PROGRAM

TO FIND THE BEST COURSE OF ACTION IN
RELATION TO DESIGN

HOW CAN WE PROPERLY DESIGN HOUSING
SYSTEMS WITH YOUNGER GENERATIONS
IN MIND? WHAT DO TODAY'S YOUNG
PROFESSIONALS REQUIRE WHEN DWELLING IN A
NEW ENVIRONMENT?

IN TODAY'S SOCIETY, THERE IS A REPETITIVE PROBLEM TAKING
A Foothold in cities throughout America. We are setting
up our younger generations up for financial ruin, rent
prices are out of reach with current debt rates, and
little is being done to support our nation's young
professionals. They are our future as a nation, and
unless this problem is solved, we will never be able to
fully prosper to our full ability.

THE TOPIC OF THIS RESEARCH WILL BE TO FIND AN AFFORDABLE
solution to the housing crisis with recent graduates.
To find a system of housing that lowers rent costs,
while creating a social atmosphere that allows for an
advancement of character and individualism.

RESULTS FROM THE THEORETICAL PREMISE

- **TYPOLGY RESEARCH:**

CARMEL PLACE
DRIVELINE STUDIOS
QUARTERS CHICAGO
HABITAT 67
NAKAGIN CAPSULE TOWER

- **LITERATURE REVIEW:**

MINIMALISM LIFE // THE MINIMALISTS -
TAKING A LOOK AT THE MINIMALIST LIFESTYLE
AND ITS BENEFITS INTO THIS TYPOLOGY

RICK UNDERGROUND'S 2019 GUIDE TO CO-
LIVING SPACES IN NYC: HOW TO TELL THE
COMMUNAL DISRUPTORS APART // MIMI
O'CONNOR - TAKING A LOOK AT DIFFERENT
CO-LIVING OPPORTUNITIES CURRENTLY
AVAILABLE.

SMALL STUDIO APARTMENT DESIGN -LOOKING
INTO ALTERNATIVE TECHNIQUES TO CREATE AN
ILLUSION OF SPACE .

- **RESEARCH STUDY:**

SURVEY BASED QUESTIONNAIRE TO FIND THE
BEST DESIGN SOLUTIONS FOR A RECENT
GRADUATE CO COMMUNITY HOUSING SYSTEM.

PRECEDENT RESEARCH: CASE STUDIES

COMMUNITY LIVING: CARMEL PLACE

MODULAR CONSTRUCTION: DRIVELINE
STUDIOS

COMMUNITY LIVING: QUARTERS CHICAGO

MODULAR CONSTRUCTION: HABITAT 67

MODULAR CONSTRUCTION: NAKAGIN CAPSULE
TOWER

ONLY THROUGH THE UNDERSTANDING
OF CURRENT DESIGN CAN WE STRIVE TO
DESIGN FOR THE FUTURE.

CASE STUDIES ARE A BENEFICIAL WAY TO DO THIS,
COVERING BOTH TOPICS OF COMMUNITY LIVING
SITUATIONS AS WELL AS MODULAR CONSTRUCTION.
A FURTHER UNDERSTANDING CAN BE DETERMINED
TO BETTER PLAN OUT RESEARCH PRACTICES FOR
THE CO-COMMUNITY LIVING DEVELOPMENT I PLAN TO
RESEARCH.

PRECEDENT RESEARCH: CARMEL PLACE

ARCHITECT: NARCHITECTS
CITY: NEW YORK, NEW YORK
TYPOLOGY: MULTI FAMILY RESIDENTIAL
STRUCTURE: STEEL STUDDED MODULAR UNIT
SQUARE FOOTAGE: 35,000 SQFT
UNITS/OCCUPANTS: 55 UNITS + RETAIL



FIGURE 12 | CARMEL PLACE STREET VIEW | [HTTP://NARCHITECTS.COM/WORK/CARMEL-PLACE/](http://narchitects.com/work/carmel-place/)

PRECEDENT RESEARCH: CARMEL PLACE

DESIGN CHARACTERISTICS:

CARMEL PLACE (FORMERLY KNOWN AS MY MICRO NY) WAS THE RESULT OF A DESIGN COMPETITION IN THE ADAPT NYC, WHICH WAS PUT IN TO EXPLORE THE NEW HOUSING MARKET, AND THE NEEDS OF NYC'S POPULATION. DUE TO BEING THE FIRST OF ITS KIND IN NYC, MANY REGULATIONS WERE GIVEN A PASS INCLUDING MINIMUM UNIT SIZE (THIS WAS PUT INTO PLACE TO PREVENT LANDLORDS TAKING ADVANTAGE OF THE LESS FORTUNATE BY FORCING THEM TO LIVE IN SLUM LIKE APARTMENTS), AND DENSITY LIMITATIONS. THE STRUCTURE CONSISTS OF 55 PREFABRICATED UNITS, TIED TOGETHER WITH 10 MODULAR UNITS USED FOR CIRCULATION AND STRUCTURE. THE SPACE IS MADE UP OF BOTH RETAIL SPACES AND RESIDENTIAL UNITS, COMBINED WITH A HIGH NUMBER OF SHARED AMENITY SPACES. THE STRUCTURE IS MADE UP OF A TOTAL OF 65 PREFABRICATED MODULAR UNITS WELDED TOGETHER. THIS PROCESS SHORTENED ON SITE CONSTRUCTION TIMES AND REQUIRED LESS TIME FOR A CRANE TO BE ON SITE.



FIGURE 13 | CARMEL PLACE FLOOR PLANS | [HTTP://NARCHITECTS.COM/WORK/CARMEL-PLACE/](http://narchitects.com/work/carmel-place/)

PRECEDENT RESEARCH: CARMEL PLACE



FIGURE 14 | CARMEL PLACE LIVING ROOM | [HTTP://NARCHITECTS.COM/WORK/CARMEL-PLACE/](http://narchitects.com/work/carmel-place/)

THE OVERALL DESIGN IS BASED OFF OF A QUAD TOWER DESIGN TO CREATE A SENSE OF IDENTITY FOR THE STRUCTURE WHICH CAN ALSO BE SOLELY MADE UP OF PREFABRICATED MODULAR UNITS. THE IDEA OF MINIMAL LIVING WAS A PRIMARY FOCUS WITH THE SMALLER TOWER DESIGN, AND THE DESIGN DECISIONS CAN BE SEEN WHEN TAKEN IN RELATION TO THE OVER ALL CITY BLOCK. THE SCALE IS INCREDIBLY SMALL WHEN SEEN NEXT TO YOUR STANDARD NYC SIZED STRUCTURE, ONLY SIZING UP AT A 5,000 SQFT LOT.

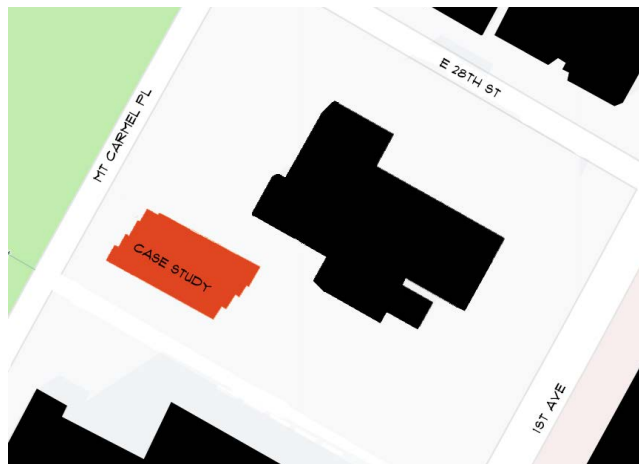


FIGURE 15 | CARMEL PLACE SITE | SOURCE IMAGE: [HTTPS://WWW.GOOGLE.COM/MAPS](https://www.google.com/maps)

PRECEDENT RESEARCH: CARMEL PLACE

22 OF THE 55 UNITS IN CARMEL PLACE ARE DESIGNATED FOR AFFORDABLE HOUSING, AND 8 OF THOSE ARE SECTION 8, THE OTHER HALF ARE ALL STANDARD UNITS PRICES AT AROUND 3K PER UNIT AT THIS TIME. THIS IS INTERESTING BECAUSE THE 22 AFFORDABLE HOUSING UNITS IN THE BUILDING ARE LISTED FOR \$950, WHICH IS 1/3 OF THE COST. 3K FOR A SMALL STUDIO UNFORTUNATELY IS SOMEWHAT STANDARD WHEN IT COMES TO NEW YORK LIVING. GIVEN THE SIMPLICITY OF THESE UNITS I DO NOT BELIEVE THE COSTS JUSTIFY THE SPACE, AND FOR MY THESIS I WANT TO FOCUS SPECIFICALLY ON A LOWER COST UNIT AS TO FIT THE NEEDS OF RECENT COLLEGE GRADUATES. THIS RESIDENCY IS OVER 40% MORE FOR THE SPACE AS A STANDARD APARTMENT, MAKING THIS RESIDENCE ALMOST TWICE AS EXPENSIVE AS THE MARKET PRICE. THESE INFLATED PRICES ARE DUE TO MANY OF THE AMENITIES THAT THE RESIDENCY PROVIDES.

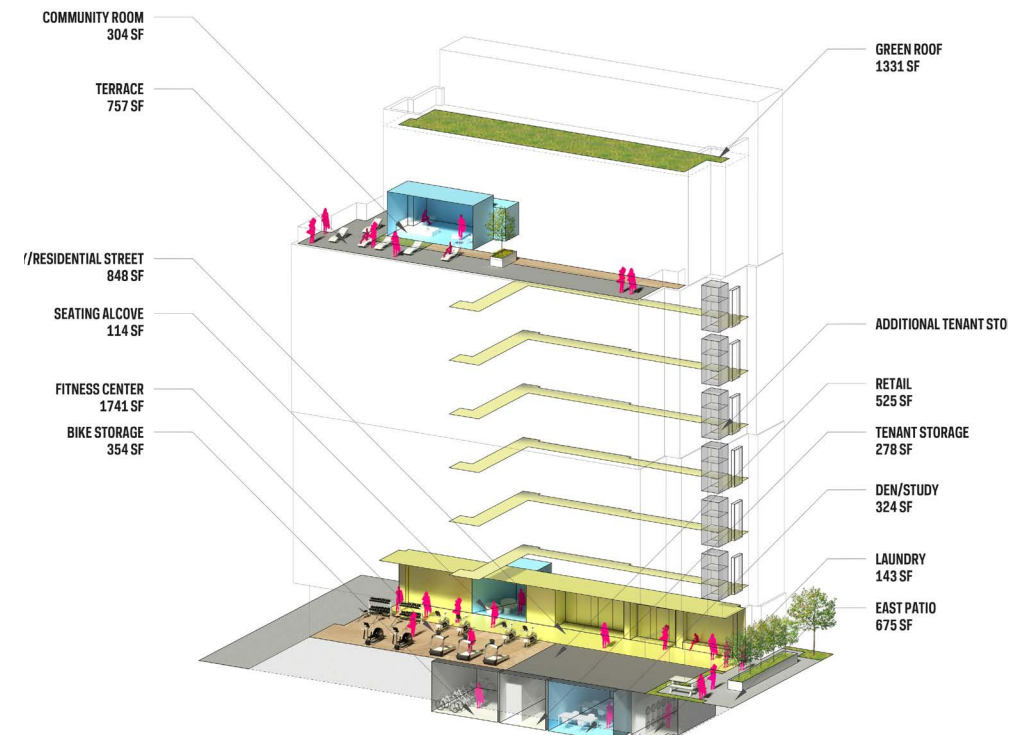


FIGURE 16 | CARMEL PLACE PROGRAMING SECTION | [HTTP://NARCHITECTS.COM/WORK/CARMEL-PLACE/](http://narchitects.com/work/carmel-place/)

PRECEDENT RESEARCH: CARMEL PLACE

INCORPORATED INTO CARMEL PLACE, A SERVICE CALLED OLLIE IS IN PLACE. OLLIE IS AN APPLICATION THAT ALLOWS RESIDENTS TO HAVE A PERSONAL BUTLER AT THE TOUCH OF A FINGER SO TO SPEAK. THEY ARE ABLE TO USE OLLIE TO PICK UP GROCERIES, DROP OFF DRY CLEANING, ETC. IT IS ONE OF THE PRIMARY REASONS THAT RENT IS HIGHER THEN YOUR STANDARD EFFICIENCY SPACE. THIS SERVICE HOWEVER IS NOT OFFERED TO THE 22 AFFORDABLE HOUSING UNITS.

PROJECT ELEMENTS:






- 55 RESIDENTIAL UNITS
- 22/55 ARE AFFORDABLE HOUSING
- 8/55 ARE SECTION 8 HOUSING
- EXERCISE ROOM
- ROOF DECK
- BIKE STORAGE
- PUBLIC LOBBY



FIGURE 17 | CARMEL PLACE MODULAR CONSTRUCTION | [HTTP://NARCHITECTS.COM/WORK/CARMEL-PLACE/](http://narchitects.com/work/carmel-place/)

PRECEDENT RESEARCH: CARMEL PLACE

SPACE PROGRAMING FOR BOTH PUBLIC AND RESIDENTIAL FLOORS.

RESIDENTIAL: 
EGRESS: 
AMENITY: 
CIRCULATION: 
UTILITY: 

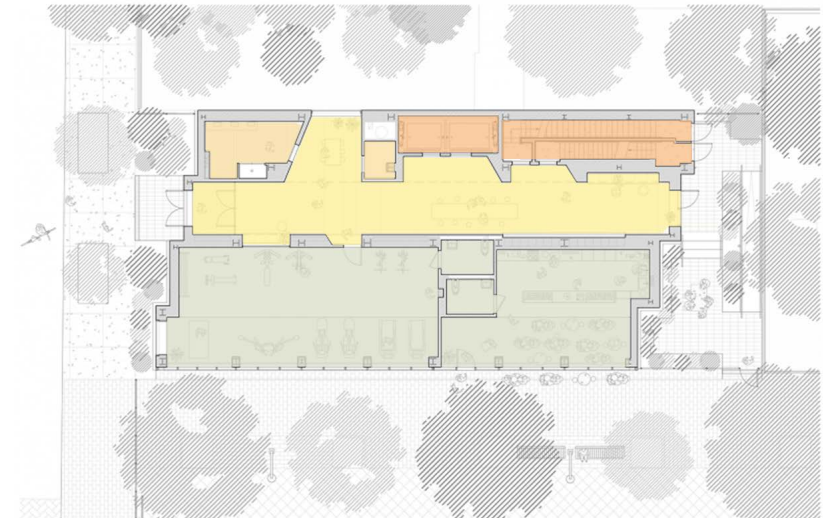


FIGURE 18 | CARMEL PLACE LEVEL 1 PROGRAMMING | SOURCE IMAGE: [HTTPS://WWW.WORLD-ARCHITECTS.COM/EN/ARCHITECTURE-NEWS/REVIEWS/CARMEL-PLACE-1](https://www.world-architects.com/en/architecture-news/reviews/carmel-place-1)

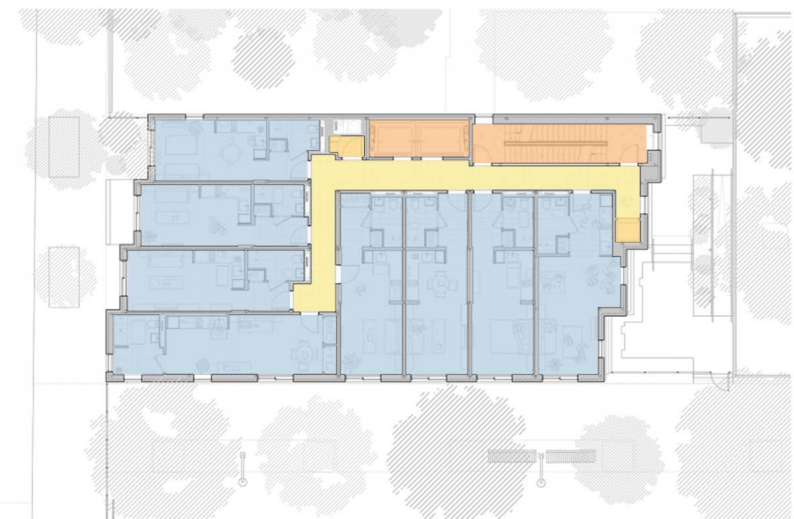


FIGURE 19 | CARMEL PLACE LEVEL 2-8 PROGRAMMING | SOURCE IMAGE: [HTTPS://WWW.WORLD-ARCHITECTS.COM/EN/ARCHITECTURE-NEWS/REVIEWS/CARMEL-PLACE-1](https://www.world-architects.com/en/architecture-news/reviews/carmel-place-1)

PRECEDENT RESEARCH: CARMEL PLACE

MODULAR UNITS CAN BE SEEN SEPARATED
INTO SECTIONS.

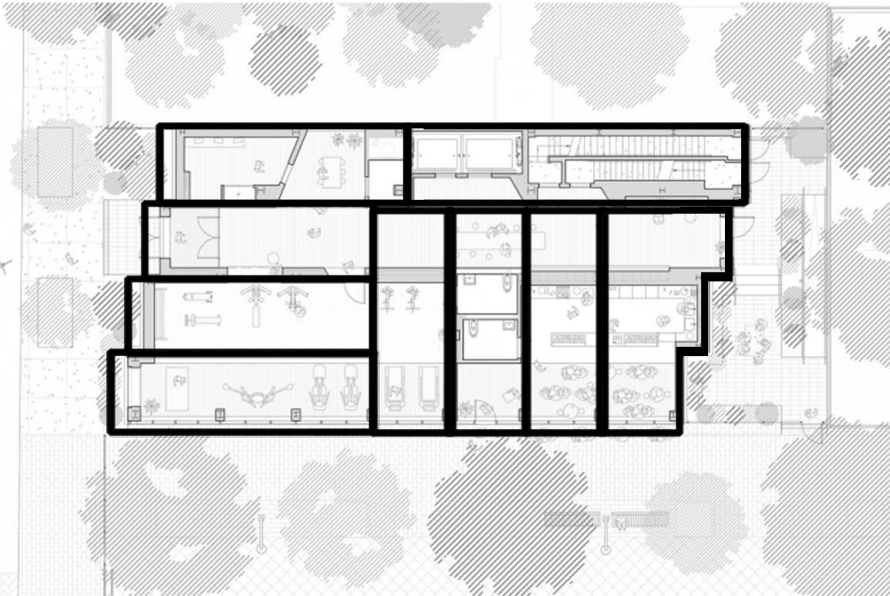


FIGURE 20 | CARMEL PLACE LEVEL 1 MODULAR LAYOUT | SOURCE IMAGE: [HTTPS://WWW.WORLD-ARCHITECTS.COM/EN/ARCHITECTURE-NEWS/REVIEWS/CARMEL-PLACE-1](https://www.world-architects.com/en/architecture-news/reviews/carmel-place-1)

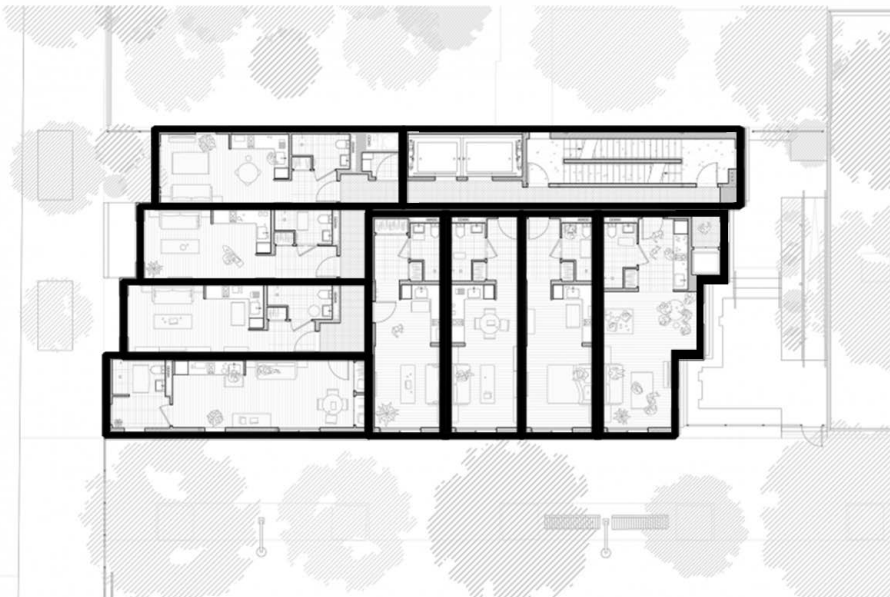


FIGURE 21 | CARMEL PLACE LEVEL 2-8 MODULAR LAYOUT | SOURCE IMAGE: [HTTPS://WWW.WORLD-ARCHITECTS.COM/EN/ARCHITECTURE-NEWS/REVIEWS/CARMEL-PLACE-1](https://www.world-architects.com/en/architecture-news/reviews/carmel-place-1)

PRECEDENT RESEARCH: CARMEL PLACE

IMPACT OF THE PROJECT:

WHILE THIS PROJECT WAS CREATED TO BECOME A STAPLE OF SIMPLISTIC LIVING, DUE TO THE HIGH COSTS OF RENT THAT GOAL WAS NOT REALLY ACHIEVED. IT WAS HOWEVER A STAPLE OF COMPACT LIVING, GIVEN THAT MANY REGULATIONS WERE SUSPENDED FOR ITS CONSTRUCTION. FOLLOWING SUIT, MANY NEW DEVELOPMENTS IN NYC ARE SOMEWHAT FOLLOWING THE SPACE SAVING EXAMPLES OF THIS PROJECT, SO THE PROJECT WAS NOT A TOTAL LOSS.



FIGURE 22 | CARMEL PLACE CONSTRUCTION PHASES | [HTTP://NARCHITECTS.COM/WORK/CARMEL-PLACE/](http://narchitects.com/work/carmel-place/)

TAKE AWAY FROM THE STUDY:

SIMPLISTIC LIVING SHOULD HAVE THE BENEFITS OF A LOWER PERCENTAGE OF INCOME BEING SPENT ON RENT. BECAUSE OF THIS I DO NOT FEEL THAT THIS STUDY IS A GOOD REPRESENTATION OF THE TYPE OF LIVING SITUATION I AM RESEARCHING. IT DOES HOWEVER OFFER A GREAT EXAMPLE OF SPACE SAVING SOLUTIONS WITHIN AN APARTMENT AND THE BENEFITS OF MODULAR CONSTRUCTION.

PRECEDENT RESEARCH: DRIVELINE STUDIOS

ARCHITECT: LOT-EK
CITY: JOHANNESBURG, SOUTH AFRICA
TYPOLOGY: MULTI FAMILY RESIDENTIAL
STRUCTURE: UPCYCLED SHIPPING
CONTAINERS
SQUARE FOOTAGE: 75,000 SQFT
YEAR: 2017



FIGURE 23 | DRIVELINES STUDIOS STREET VIEW A | [HTTPS://WWW.ARCHDAILY.COM/905460/DRIVELINES-STUDIOS-LOT-EK](https://www.archdaily.com/905460/drivelines-studios-lot-ek)

PRECEDENT RESEARCH: DRIVELINE STUDIOS

DESIGN CHARACTERISTICS:

DRIVELINES STUDIOS IS A MULTI FAMILY RESIDENTIAL STRUCTURE LOCATED IN SOUTH AFRICA, IT WAS DESIGNED BY LOT-EK WHICH IS A STUDIO THAT SPECIALIZES IN MODULAR CONSTRUCTION VIA UPCYCLED SHIPPING CONTAINERS. THE STRUCTURE IS DESIGNED TO FIT WITHIN THE UNIQUE TRIANGULAR SITE, TRIANGLES CAN ALSO BE SEEN ON THE EXTERIOR FACADES TO REPRESENT THE ESSENCE OF THE SITE. TWO WINGS MAKE UP THE STRUCTURE WITH MODULAR UNITS STACKED UP 8 LEVELS, ALL OF WHICH ARE SUPPORTED BY THE SHIPPING CONTAINERS MODULAR STRUCTURE. A TOTAL OF 140 UPCYCLED CONTAINERS ARE USED, AND THE COLORS WERE KEPT ORIGINAL TO CREATE A UNIQUE PATINA OVER THE ENTIRE STRUCTURE.

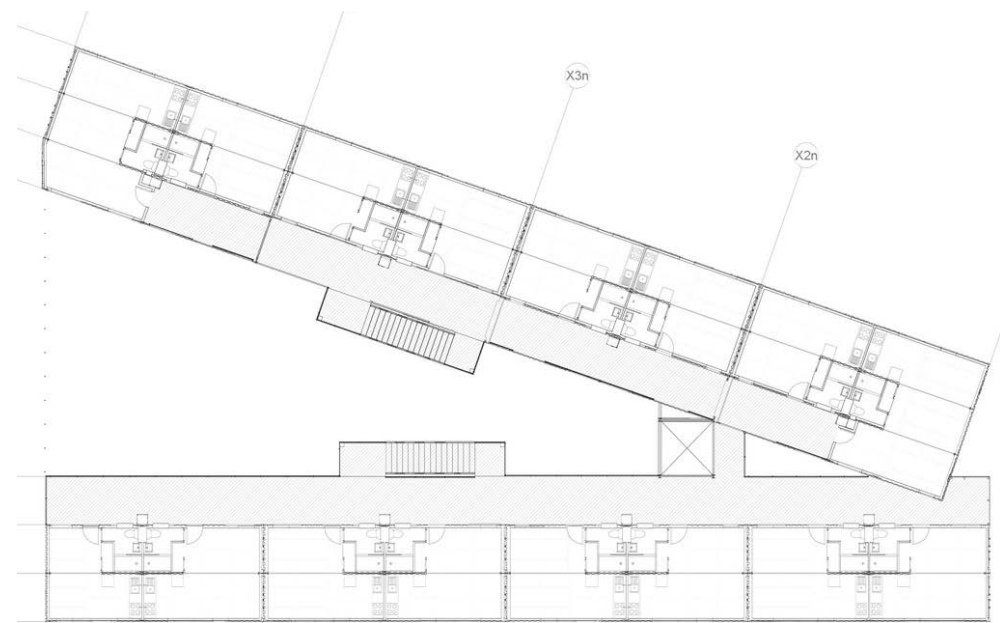


FIGURE 24 | DRIVELINES STUDIOS FLOOR PLAN | [HTTPS://WWW.ARCHDAILY.COM/905460/DRIVELINES-STUDIOS-LOT-EK](https://www.archdaily.com/905460/drivelines-studios-lot-ek)

PRECEDENT RESEARCH: DRIVELINE STUDIOS

RETAIL MAKES UP THE GROUND LEVEL ON ONE WING FACING THE STREET, THE REST OF THE STRUCTURE IS RESIDENTIAL. THE BUILDING FOLLOWS JOHANNESBURG'S PLAN FOR AN INCREASE IN URBAN LIVING, AND TO INCREASE COMMUNITY INTERACTION WITHIN DWELLING UNITS.



FIGURE 25 | DRIVELINES STUDIOS UNIT PICTURES | [HTTPS://WWW.ARCHDAILY.COM/905460/DRIVELINES-STUDIOS-LOT-EK](https://www.archdaily.com/905460/drivelines-studios-lot-ek)

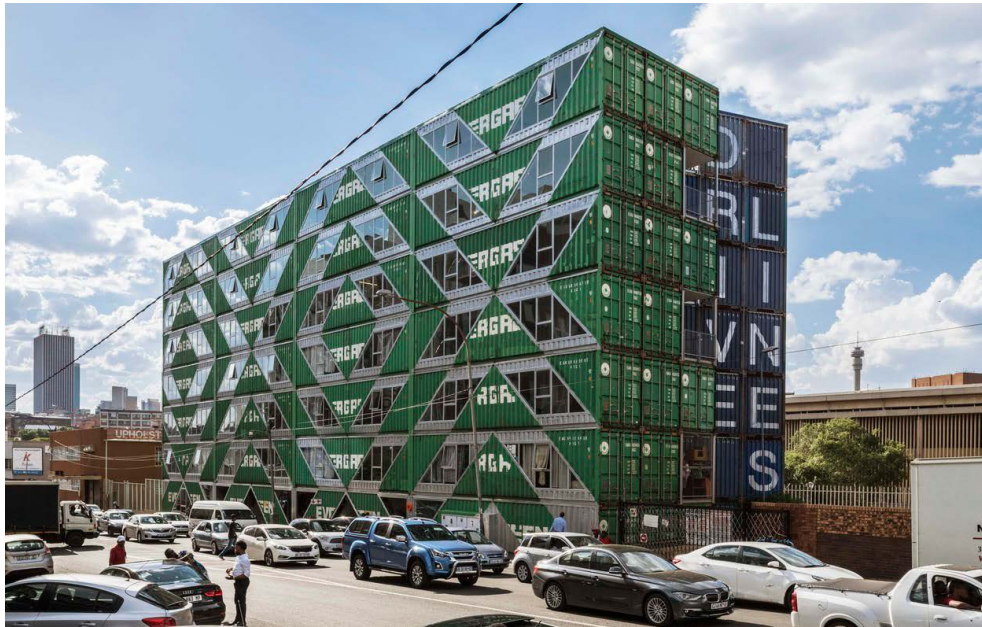


FIGURE 26 | DRIVELINES STUDIOS STREET VIEW B | [HTTPS://WWW.ARCHDAILY.COM/905460/DRIVELINES-STUDIOS-LOT-EK](https://www.archdaily.com/905460/drivelines-studios-lot-ek)

PRECEDENT RESEARCH: DRIVELINE STUDIOS

PROGRAM ELEMENTS:

- RESIDENTIAL UNITS
- SHARED CIRCULATION SPACE
- RETAIL SPACE

RESIDENTIAL: ■
EGRESS: ■
RETAIL: ■
CIRCULATION: ■
UTILITY: ■



FIGURE 27 | DRIVELINES STUDIOS SPACE PROGRAMING A | SOURCE IMAGE: [HTTPS://WWW.ARCHDAILY.COM/905460/DRIVELINES-STUDIOS-LOT-EK](https://www.archdaily.com/905460/drivelines-studios-lot-ek)

PRECEDENT RESEARCH: DRIVELINE STUDIOS

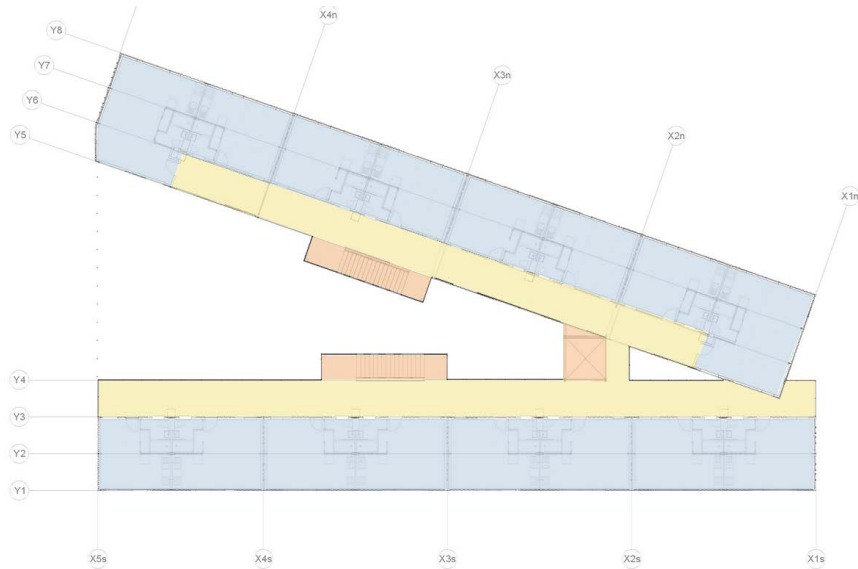


FIGURE 28 | DRIVELINE STUDIOS SPACE PROGRAMING B | SOURCE IMAGE: [HTTPS://WWW.ARCHDAILY.COM/905460/DRIVELINES-STUDIOS-LOT-EK](https://www.archdaily.com/905460/drivelines-studios-lot-ek)

IMPACT OF THE PROJECT:

DRIVELINE STUDIOS WAS AN EXCELLENT EXAMPLE OF THE LOWER COST MODULAR CONSTRUCTION CAN SUPPLY. AS WELL AS HOW A COMMUNITY CAN INCREASE ACTIVITY THROUGH INTERACTION VIA THE CENTRAL ACCESS CIRCULATION, MANY PROJECTS FOLLOW SUIT IN SOUTH AFRICA TO REVIVE NEIGHBORHOODS.

TAKE AWAY:

DRIVELINE STUDIOS IS AN EXCELLENT EXAMPLE OF HOW TO INCREASE COMMUNITY INTERACTION, HOWEVER DUE TO THE LARGE SCALE OF THE APARTMENTS I DO NOT FIND THIS PROJECT TO BE THE PERFECT EXAMPLE TO FOLLOW. A MORE VIABLE SOLUTION WOULD BE TO CUT DOWN ON INDIVIDUAL SPACE WITHIN UNITS, AND INCREASE THE USE OF SHARED AMENITY SPACES.

PRECEDENT RESEARCH: QUARTERS - CHICAGO

ARCHITECT: UNKNOWN
CITY: CHICAGO IL
TYPOLOGY: MULTI FAMILY RESIDENTIAL
STRUCTURE: STEEL
SQUARE FOOTAGE: UNKNOWN
UNITS/OCCUPANTS: UNKNOWN
YEAR: 2018



FIGURE 29 | QUARTERS CHICAGO BUILDING VIEW A | [HTTPS://CHICAGO.60QUARTERS.COM/WEST-LOOP/](https://chicago.60quarters.com/west-loop/)

PRECEDENT RESEARCH: QUARTERS - CHICAGO

DESIGN CHARACTERISTICS: QUARTERS, CHICAGO IS A CO-COMMUNITY LIVING DEVELOPMENT THAT TIES A DORM STYLE APARTMENT IN WITH MODERN RESIDENTIAL PRACTICES. THE BUILDING IS LOCATED ON THE UPPER FLOORS OF A MIXED USE STRUCTURE LOCATED IN THE FULTON MARKET NEIGHBORHOOD OF CHICAGO. THE BUILDING DOES NOT APPEAR TO BE MODULAR CONSTRUCTION WHICH DOESN'T FOLLOW THE GOALS OF THIS THESIS, HOWEVER THE PROGRAMMING OF THE SPACE IS EXACTLY WHAT I AM TRYING TO ACHIEVE.



FIGURE 30 | QUARTERS CHICAGO ROOF VIEW | [HTTPS://CHICAGO.GOQUARTERS.COM/WEST-LOOP/](https://chicago.goquarters.com/west-loop/)

QUARTERS IS THE PERFECT PROGRAMMING EXAMPLE, AS THEY PAIR LIKE MINDED PEOPLE IN THE SAME APARTMENT. THIS ALLOWS FOR NETWORKING OPPORTUNITIES AS WELL AS THE ABILITY TO MAKE FRIENDS. THEY HAVE QUITE A FEW AMENITY SPACES THAT ARE SHARED BY ALL RESIDENTS, WHICH ALLOWS OCCUPANTS TO SPREAD OUT, OUTSIDE OF THEIR PRIVATE BEDROOMS. QUARTERS ALSO FREQUENTLY HOLDS BBQ'S AND OTHER SOCIAL EVENTS WITHIN THE SPACE TO ENCOURAGE COMMUNITY INTERACTION.

PRECEDENT RESEARCH: QUARTERS - CHICAGO



FIGURE 31 | QUARTERS CHICAGO PRIVATE ROOM | [HTTPS://CHICAGO.GOQUARTERS.COM/WEST-LOOP/](https://chicago.goquarters.com/west-loop/)

IMPACT OF THE PROJECT:

FOLLOWING THIS SUIT, A NUMBER OF OTHER DORM STYLE APARTMENTS HAVE POPPED UP ALL OVER THE COUNTRY ALL HEADED UP BY THE SAME DEVELOPER. THE PROJECT IS A FANTASTIC WAY TO CREATE NEW COMMUNITIES AND CREATE UNIQUE EXPERIENCES FOR ITS TENANTS. DUE TO THE LOWER USAGE OF SPACE PER RESIDENT, RENT HAS BEEN SEEN TO BE LOWER IN THESE TYPES OF HOUSING DEVELOPMENTS.



FIGURE 32 | QUARTERS CHICAGO SHARED LIVING ROOM | [HTTPS://CHICAGO.GOQUARTERS.COM/WEST-LOOP/](https://chicago.goquarters.com/west-loop/)

PRECEDENT RESEARCH: QUARTERS - CHICAGO

PROGRAM ELEMENTS:

- ROOFTOP DECK
- SHARED KITCHENS
- PRIVATE BEDROOMS
- LAUNDRY FACILITIES
- FITNESS CENTER
- BIKE ROOM
- OUTDOOR CINEMA
- BUSINESS CENTER
- OFFICES



FIGURE 33 | QUARTERS CHICAGO SHARED REST ROOM | [HTTPS://CHICAGO.GOQUARTERS.COM/WEST-LOOP/](https://chicago.goquarters.com/west-loop/)

PROJECT TAKEAWAYS:

QUARTERS IN CHICAGO IS AN EXCELLENT EXAMPLE AS FAR AS PROGRAMING GOES FOR MY THESIS. THEIR DORM STYLE APARTMENTS WITH LEASES BY THE BEDROOM INSTEAD OF BY THE UNIT ALLOWS FOR TOTAL STRANGERS TO LIVE TOGETHER, SAVING MONEY. THE CONSTRUCTION TECHNIQUES ARE FAIRLY STANDARD AND MOST LIKELY WILL NOT BE REPLICATED. THE AMENITY SPACES ALONG WITH THE COMMUNITY INTERACTION SHOULD BE NOTED AND POSSIBLY FURTHER RESEARCHED, AS THEY WOULD PROVE TO BE BENEFICIAL TO THE OVERALL GOALS OF MY THESIS.

PRECEDENT RESEARCH: HABITAT 67

ARCHITECT: MOSHE SAFDIE

CITY: MONTREAL, CANADA

TYPOLOGY: MULTI FAMILY RESIDENTIAL

STRUCTURE: CONCRETE MODULAR UNITS

SQUARE FOOTAGE: UNKNOWN

UNITS/OCCUPANTS: 158

YEAR: 1967



FIGURE 34 | HABITAT 67 VIEW A | [HTTPS://WWW.ARCHDAILY.COM/404803/AD-CLASSICS-HABITAT-67-MOSHE-SAFDIE](https://www.archdaily.com/404803/ad-classics-habitat-67-moshe-safdie)

PRECEDENT RESEARCH: HABITAT 67

DESIGN PRINCIPLES:

HABITAT 67 IS A UNIQUE PROJECT AS HOW IT CAME TO BE, THE PROJECT STARTED AS MOSHE SAFDIE'S THESIS PROJECT, AND AFTER ITS COMPLETION IT WAS SUBMITTED TO THE WORLD FAIR 1967. THE PROJECT WAS BUILT AS A MODULAR RESIDENTIAL PROJECT, AND WAS PLANNED TO HOUSE OVER 1000 OCCUPANTS, THE CANADIAN GOVERNMENT HOWEVER TONED THAT BACK TO ONLY 158 OCCUPANTS.



FIGURE 35 | HABITAT 67 CONSTRUCTION | [HTTPS://WWW.ARCHDAILY.COM/404803/AD-CLASSICS-HABITAT-67-MOSHE-SAFDIE](https://www.archdaily.com/404803/ad-classics-habitat-67-moshe-safdie)

PROGRAM ELEMENTS:

- 158 HOUSING UNITS
- 354 PREFABRICATED MODULES

PRECEDENT RESEARCH: HABITAT 67



FIGURE 36 | HABITAT 67 VIEW B | [HTTPS://WWW.ARCHDAILY.COM/404803/AD-CLASSICS-HABITAT-67-MOSHE-SAFDIE](https://www.archdaily.com/404803/ad-classics-habitat-67-moshe-safdie)

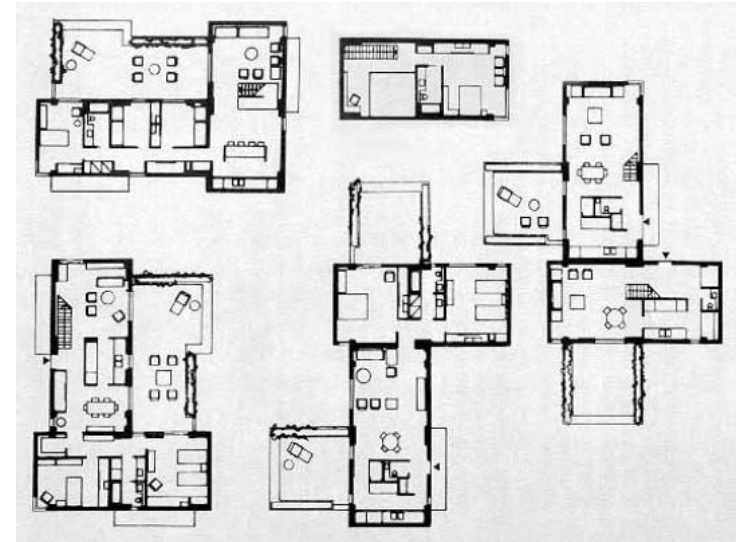


FIGURE 37 | HABITAT 67 FLOOR PLANS | [HTTPS://WWW.ARCHDAILY.COM/404803/AD-CLASSICS-HABITAT-67-MOSHE-SAFDIE](https://www.archdaily.com/404803/ad-classics-habitat-67-moshe-safdie)

PRECEDENT RESEARCH: HABITAT 67

IMPACT OF THE PROJECT:

HABITAT 67 WAS A REVOLUTIONARY DESIGN STYLE FOR ITS TIME. GIVEN THAT MOST WORLD FAIR STRUCTURES ARE TEMPORARY, THE FACT THAT THIS STRUCTURE IS STILL STANDING IS A NOTATION TO ITS IMPACT. FOLLOWING IT'S CONSTRUCTION, A NUMBER OF SIMILAR DEVELOPMENTS SPROUTED UP AROUND THE WORLD, SUCH AS RICARDO BOFFIL'S PROJECT, THE KAFKA CASTLE. AS FAR AS MODULAR CONSTRUCTION GOES, HABITAT 67 ACTUALLY CAME OUT TO BE MORE EXPENSIVE TO BUILD THEN PLANNED DUE TO A VARIETY OF UNSEEN CIRCUMSTANCES. SO WHILE THE IDEA WAS SOLID, THE FOLLOW THROUGH WAS LESS THEN ADEQUATE.



FIGURE 38 | HABITAT 67 VIEW C | [HTTPS://WWW.ARCHDAILY.COM/404803/AD-CLASSICS-HABITAT-67-MOSHE-SAFDIE](https://www.archdaily.com/404803/ad-classics-habitat-67-moshe-safdie)

PRECEDENT RESEARCH: HABITAT 67

TAKE AWAY:

HABITAT 67 IS A STAPLE OF ARCHITECTURE WHEN IT COMES TO RESIDENTIAL DESIGN, IT REALLY OPENED NEW DOORS FOR BUILDING CONSTRUCTION AS IT DIDN'T REALLY FOLLOW THE STANDARD HIGH RISE OR MID RISE CONSTRUCTION TECHNIQUE. THE ORGANIZATIONAL LAYOUT THRIVES TODAY AS AN EXCELLENT IMPLEMENTATION OF DESIGN, WITH MANY DEVELOPMENTS FOLLOWING ITS INSPIRATION. IT WOULD BE BENEFICIAL TO CONSIDER THE ORGANIZATIONAL LAYOUT OF THESE SPACES, BUT TO DRAW AWAY FROM THEIR CONSTRUCTION TECHNIQUES AS IT WAS QUITE EXPENSIVE TO BUILD.



FIGURE 39 | HABITAT 67 VIEW D | [HTTPS://WWW.ARCHDAILY.COM/404803/AD-CLASSICS-HABITAT-67-MOSHE-SAFDIE](https://www.archdaily.com/404803/ad-classics-habitat-67-moshe-safdie)



FIGURE 40 | HABITAT 67 VIEW E | [HTTPS://WWW.ARCHDAILY.COM/404803/AD-CLASSICS-HABITAT-67-MOSHE-SAFDIE](https://www.archdaily.com/404803/ad-classics-habitat-67-moshe-safdie)

PRECEDENT RESEARCH: NAKAGIN CAPSULE TOWER

ARCHITECT: KISHO KUROKAWA
CITY: TOKYO, JAPAN
TYPOLOGY: MULTI FAMILY RESIDENTIAL
STRUCTURE: CONCRETE & STEEL
MODULAR UNITS
SQUARE FOOTAGE: 33,000 SQFT
UNITS/OCCUPANTS: 140
YEAR: 1972



FIGURE 41 | NAKAGIN CAPSULE TOWER VIEW A | [HTTP://
ARCHEYES.COM/NAKAGIN-CAPSULE-TOWER-KISHO-KUROKAWA/](http://archeyes.com/nakagin-capsule-tower-kisho-kurokawa/)

PRECEDENT RESEARCH: NAKAGIN CAPSULE TOWER

DESIGN CHARACTERISTICS:

THE NAKAGIN CAPSULE TOWER IS A UNIQUE PROJECT IN IT'S TYPOLOGY. IT WAS NOT ONLY A MULTI FAMILY RESIDENTIAL UNIT, BUT WAS SPECIFICALLY DESIGNED FOR PROFESSIONALS AND TRAVELING BUSINESSMEN. EACH UNIT IS PRECONSTRUCTED AND ONLY TOOK 3 HOURS TO CONSTRUCT. EACH UNIT INCLUDED A BUILT IN BATH, BED, AND A FEW PERSONAL AMENITIES SUCH AS A COLOR TV, WHICH FOR THE TIME WAS PRETTY CLASSY. THE CORE TO THE STRUCTURE IS FAIRLY FASCINATING WITH THE EGRESS STAIR SYSTEM, IT WRAPS AROUND THE CORE (ELEVATOR) WITH AN EVER RISING STAIR SYSTEM INTEGRATED WITH THE PRIMARY CIRCULATION CONNECTING ALL THE UNITS. THIS STAIRCASE IS BUILT WITH BEARING WALLS ON ALL 4 SIDES SEPARATING THE UNITS FROM THE PRIMARY STAIR CASE CIRCULATION. EACH UNIT WAS DESIGNED TO BE EASILY REPLACEABLE WHEN REPAIRS NEEDED TO BE MADE, BUT THE STRUCTURE NEVER SAW MUCH UPKEEP.



FIGURE 42 | NAKAGIN CAPSULE TOWER UNIT DETAILS | [HTTP://
ARCHEYES.COM/NAKAGIN-CAPSULE-TOWER-KISHO-KUROKAWA/](http://archeyes.com/nakagin-capsule-tower-kisho-kurokawa/)

PRECEDENT RESEARCH: NAKAGIN CAPSULE TOWER



FIGURE 43 | NAKAGIN CAPSULE TOWER BEDROOM B | [HTTP://ARCHEYES.COM/NAKAGIN-CAPSULE-TOWER-KISHO-KUROKAWA/](http://archeyes.com/nakagin-capsule-tower-kisho-kurokawa/)



FIGURE 44 | NAKAGIN CAPSULE TOWER VIEW B | [HTTP://ARCHEYES.COM/NAKAGIN-CAPSULE-TOWER-KISHO-KUROKAWA/](http://archeyes.com/nakagin-capsule-tower-kisho-kurokawa/)

PRECEDENT RESEARCH: NAKAGIN CAPSULE TOWER

PROGRAM ELEMENTS:

- 140 CAPSULE APARTMENTS
- CENTRAL LOAD BEARING CIRCULATION



FIGURE 45 | NAKAGIN CAPSULE TOWER VIEW C | [HTTP://ARCHEYES.COM/NAKAGIN-CAPSULE-TOWER-KISHO-KUROKAWA/](http://archeyes.com/nakagin-capsule-tower-kisho-kurokawa/)

IMPACT OF THE PROJECT:

THE NAKAGIN CAPSULE TOWER WAS A FANTASTIC EXAMPLE OF DESIGN FOR THE JAPANESE CULTURE, THE EXACT STRUCTURAL SYSTEM AND REMOVABLE PODS MAY NOT HAVE BEEN REPLICATED THROUGH OUT OTHER PROJECTS. HOWEVER THE COMPACT DESIGN PRINCIPLE HAS BEEN FOLLOWED THROUGH OTHER STUDIES AND PROJECTS.

PRECEDENT RESEARCH: NAKAGIN CAPSULE TOWER

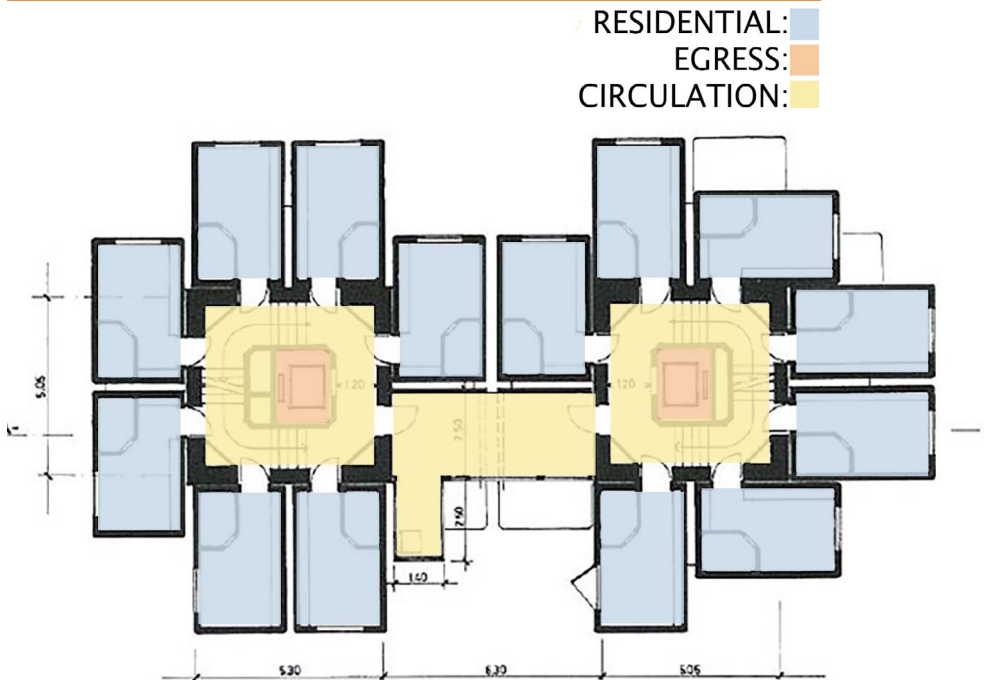


FIGURE 46 | NAKAGIN CAPSULE TOWER SPACE PROGRAMING A | SOURCE IMAGE: [HTTP://ARCHEYES.COM/NAKAGIN-CAPSULE-TOWER-KISHO-KUROKAWA/](http://archeyes.com/nakagin-capsule-tower-kisho-kurokawa/)

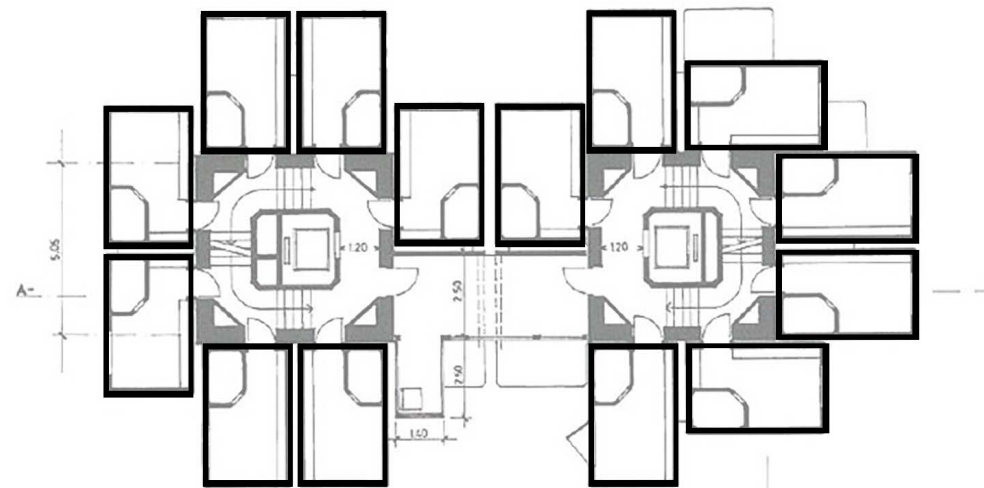


FIGURE 47 | NAKAGIN CAPSULE TOWER MODULAR LAYOUT | SOURCE IMAGE: [HTTP://ARCHEYES.COM/NAKAGIN-CAPSULE-TOWER-KISHO-KUROKAWA/](http://archeyes.com/nakagin-capsule-tower-kisho-kurokawa/)

PRECEDENT RESEARCH: NAKAGIN CAPSULE TOWER

HERE THE
UNIQUE CORE/
CIRCULATION
SYSTEM CAN
BE ANALYZED
CLOSER.

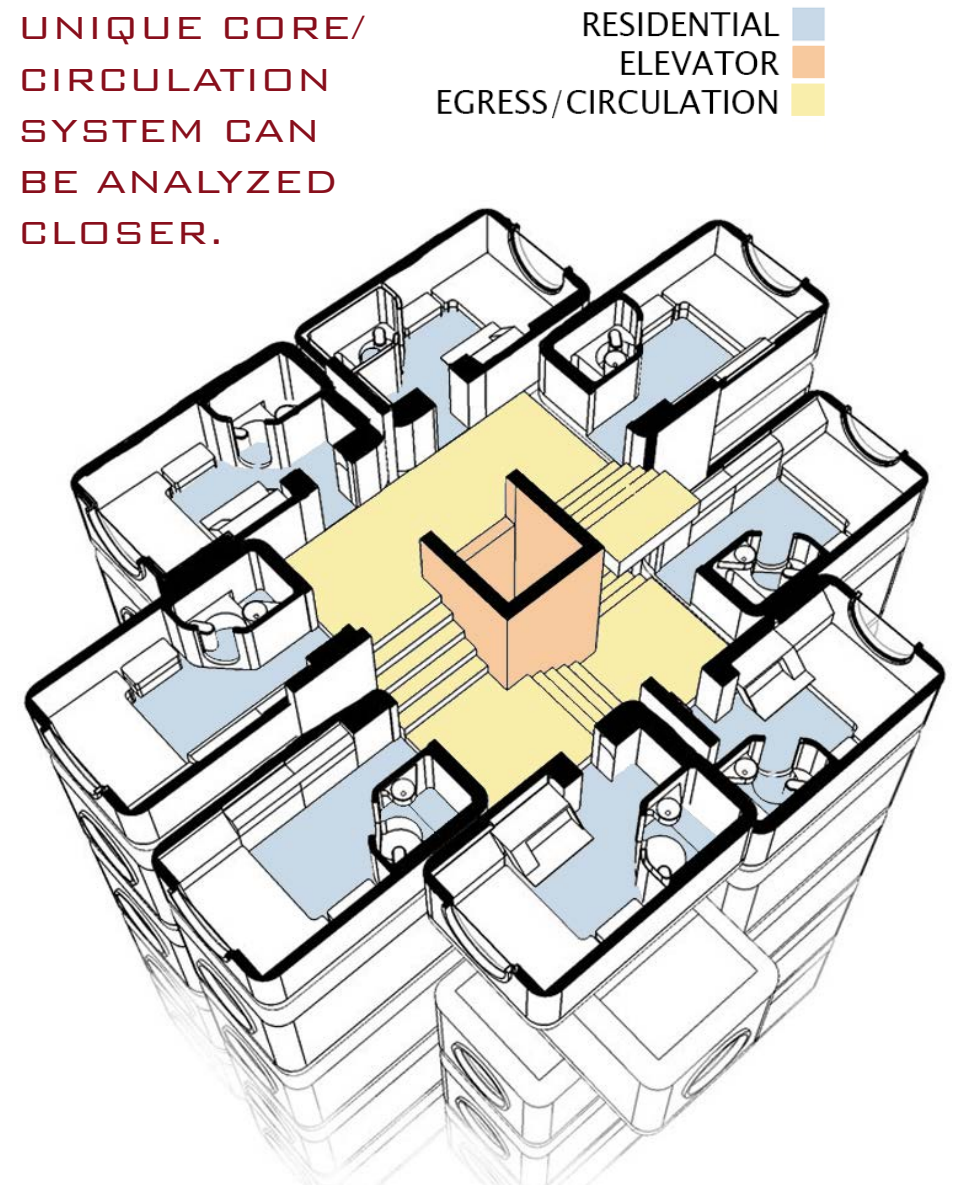


FIGURE 48 | NAKAGIN CAPSULE TOWER SPACE PROGRAMING B | SOURCE IMAGE: [HTTPS://EN.WIKIARQUITECTURA.COM/BUILDING/NAKAGIN-CAPSULE-TOWER/#NAKAGIN-CAPSULE-AXONOMETRIA](https://en.wikiarquitectura.com/building/nakagin-capsule-tower/#nakagin-capsule-axonometria)

PRECEDENT RESEARCH: NAKAGIN CAPSULE TOWER

TAKEAWAY OF THE PROJECT:

I FIND THAT THE NAKAGIN CAPSULE TOWER IS AN EXCELLENT EXAMPLE OF STRUCTURE AND CONSTRUCTION FOR MY PRIMARY PROJECT ELEMENTS I WANT TO MEET FOR MY THESIS. HOWEVER, DUE TO THE VERY LIMITED AMENITY SPACE, THE COMMUNITY ASPECT IS NOT THERE. THE CORE SYSTEM IS VERY UNIQUE AND SHOULD BE FURTHER ANALYZED FOR SPACE SAVING SOLUTIONS. THE DETACHABLE UNIT SYSTEM IS FAIRLY INTERESTING, HOWEVER I AM NOT SURE HOW PRACTICAL THIS SYSTEM IS AS IT WOULD TAKE A CRANE TO REMOVE THE UNIT WHICH WOULD HEAVILY DISRUPT AN ACTIVE TRAFFIC INTERSECTION.



FIGURE 49 | NAKAGIN CAPSULE TOWER VIEW D | [HTTP://ARCHEYES.COM/NAKAGIN-CAPSULE-TOWER-KISHO-KUROKAWA/](http://archeyes.com/nakagin-capsule-tower-kisho-kurokawa/)

RESEARCH - LITERATURE REVIEW


A LITERATURE REVIEW, OR TO LOOK FURTHER INTO RESEARCHED TOPICS VIA ANALYSIS OF PAST PUBLICATIONS. THE PERFECT WAY TO FIND THE BEST SOLUTION BASED ON PREVIOUS WORKS.

RESEARCH - LITERATURE REVIEW - A LOOK AT A MINIMALISTIC LIFESTYLE

MINIMALISM IS THE LIFESTYLE OF LIVING WITH LESS, LESS POSSESSIONS, LESS EXPENSES, LESS EVERYTHING. IT IS THOUGHT THAT THIS TYPE OF LIFESTYLE CAN BOTH INCREASE HAPPINESS BY ALLOWING YOU TO FOCUS ON MORE IMPORTANT THINGS IN LIFE, AS WELL AS HELP FINANCIALLY AS YOU ARE RESPONSIBLE FOR LESS POSSESSIONS.

THIS CAN RELATE TO YOUR LIVING SITUATION, TO LIVE A SIMPLE LIFE WITHOUT THE BURDENS OF POSSESSIONS CAN PROVE TO BE A GREAT WAY TO INCREASE FINANCIAL SECURITY. BEYOND THIS, MINIMALISM COULD EXTEND TO YOUR POSSESSIONS AS WELL, ONLY HAVING A LIMITED WARDROBE, ONLY OWNING A CERTAIN NUMBER OF IMPORTANT ITEMS, ETC. THROUGH THE WRITTEN BLOG, MINIMALISM LIFE, A LOOK IS TAKEN INTO THIS TYPE OF LIFESTYLE AND THE BENEFITS IT OFFERS.

FOR THIS LITERATURE REVIEW, I WILL BE LOOKING AT A NUMBER OF WRITTEN JOURNALS SPOKEN ABOUT ON THE BLOG.



Minimalism is about
intentionality,
not deprivation.

FIGURE 50 | INTENTIONS OF MINIMALISM | [HTTPS://
MINIMALISM.LIFE/](https://minimalism.life/)

RESEARCH - LITERATURE REVIEW - A LOOK AT A MINIMALISTIC LIFESTYLE

A QUIET PLACE

IN THIS JOURNAL, THE AUTHORS SPEAK ABOUT THEIR EXPERIENCES LIVING IN REMOTE WILDERNESS IN MONTANA FOR AN EXTENDED PERIOD OF TIME. THROUGH THIS NEWFOUND LONELINESS, THE AUTHOR WAS ABLE TO REFOCUS HER STRENGTH ON PERSONAL GROWTH AND IS ABLE TO COMPLETE A BOOK SHE HAD BEEN WORKING ON. IT COULD BE SAID THAT SHE USED THE DOWNSIDES OF LIVING IN ISOLATION TO REINFORCE POSITIVE THINGS IN HER LIFE. MAKING THE MOST OF AN UNPLEASANT SITUATION. THIS MIND SET COULD BE REFOCUSED TO OTHER SITUATIONS. IF YOU ARE MOVING TO A NEW URBAN CENTER AND ARE UNSURE OR UNHAPPY ABOUT YOUR CURRENT PREDICAMENT, YOU COULD REFOCUS THAT ENERGY TO REACH GOALS IN OTHER POINTS IN YOUR LIFE. THESE GOALS MAY BE WORK RELATED, OR PERSONAL PROFESSIONAL ADVANCEMENT, ETC.



FIGURE 51 | A QUIET PLACE - PILLOWS | [HTTPS://
MINIMALISM.LIFE/](https://minimalism.life/)

RESEARCH - LITERATURE REVIEW - A LOOK AT A MINIMALISTIC LIFESTYLE

12 CHAIRS LIGHTER

THIS JOURNAL WAS A WHOLE SECTION FOCUSED ON REDUCING THE AMOUNT OF FURNITURE ONE OWNS, WHICH HEAVILY TIES INTO THE IDEAL OF SIMPLIFYING PRIVATE SPACE WITHIN A DWELLING. IN THE JOURNAL THE AUTHOR STATED THAT THEY HAD 31 ITEMS IN THEIR HOME IN WHICH SOMEONE COULD USE TO SIT ON DURING A VISIT, HOWEVER THE NUMBER OF GUESTS THEY WOULD HAVE OVER IN THEIR COMPACT HOME WAS NEVER 31 PEOPLE, SO THE ISSUES START. THE AUTHOR MOVED INTO A SMALLER HOUSE AND TOOK ALL OF THEIR FURNITURE WITH THEM AND WHEN THEY COULDN'T FIT IT, THEY ENDED UP STORING QUITE A FEW ITEMS IN THEIR GARAGE. SETTING ITEMS, YOU DON'T HAVE ROOM FOR AND WILL MOST LIKELY NEVER USE. ONE GENERALLY DOESN'T FIND THEMSELVES MOVING AROUND THEIR HOMES SITTING IN MULTIPLE CHAIRS UNTIL THEY HAVE ALL BEEN SAT IN, I KNOW FOR MYSELF I HAVE A SINGLE SOFA IN MY APARTMENT THAT I TEND TO GO TO. AT THE END OF THE AUTHORS ORDEAL, THEY DOWNSIZED THEIR SEATING CAPACITY TO 19 ITEMS WHICH STILL IN MY MIND IS QUITE A BIT BUT THEY HAVE AN ENTIRE HOME TO FURNISH. TO DESIGN A SPACE WITH SIMPLICITY IN MIND, IT WOULD BE BENEFICIAL TO ONLY INCLUDE THE BARE MINIMUM OF SEATING THAT A RESIDENT WOULD NEED PLUS A SEAT OR TWO FOR A GUEST. CREATING SHARED COMMUNITY SPACES WOULD MAKE UP FOR THE LIMITED SEATING WITHIN UNITS.



FIGURE 52 | A HUMBLE CHAIR | [HTTPS://MINIMALISM.LIFE/](https://minimalism.life/)

RESEARCH - LITERATURE REVIEW - A LOOK AT A MINIMALISTIC LIFESTYLE

LESS STUFF, MORE VALUE

HERE THE WRITER TALKS ABOUT THE PROCESS OF SUPPLEMENTING A VAST QUANTITY OF ITEMS FOR A SMALL COLLECTION OF SPECIALLY PICKED ITEMS. MINIMALISM IN ITSELF IS TO REFRAIN FROM BUYING THINGS UNLESS YOU ABSOLUTELY NEED THEM. DE CLUTTERING, OR RIDDING YOURSELF OF ITEMS WHICH YOU NO LONGER NEED IS A VITAL PART OF A MINIMALIST LIFESTYLE. ORGANIZING YOUR POSSESSIONS AND FINDING WHAT YOU HAVEN'T USED IN YEARS IS A GREAT START TO REDUCING YOUR BELONGINGS TO ONLY WHAT YOU NEED. THROUGH THIS PROCESS, LIVING A SIMPLE LIFESTYLE CAN BECOME EASIER WHICH FOLLOWS WITH THE GOAL OF THIS THESIS PROJECT. WITH THE IDEA OF RIDDING YOURSELF OF UNNEEDED POSSESSIONS, REMOVING THE URGE OF IMPULSE PURCHASES IS ALSO OF BENEFICIAL VALUE. A BETTER COURSE OF ACTION IS TO DEEPLY THINK THROUGH A PURCHASE AND ASK YOURSELF, DO I REALLY NEED THIS? IF THE ANSWER IS MAYBE THEN YOU MOST LIKELY WON'T NEED IT.



FIGURE 53 | POSSESSIONS, LESS IS MORE | [HTTPS://MINIMALISM.LIFE/](https://minimalism.life/)

RESEARCH - LITERATURE REVIEW - A LOOK AT CO-COMMUNITY LIVING

CO-LIVING:

COVERING THIS WRITE UP, BRICK UNDERGROUND LOOKED AT DIFFERENT COMPANIES BASED OUT OF NEW YORK CITY THAT RUN CO-LIVING APARTMENTS. THE MARKET IS FAIRLY NEW, HOWEVER THERE SEEMS TO BE QUITE A BIT OF INTEREST. FOR ONE OF MY CASE STUDIES I COVERED QUARTERS OUT OF CHICAGO, QUARTERS HAS A NUMBER OF LOCATIONS AROUND THE USA AS WELL AS EUROPE. THE IDEA OF CO-LIVING IS A GREAT SYSTEM FOR MANY YOUNG PROFESSIONALS AS WELL AS DIGITAL NOMADS. WITH THIS SYSTEM YOU ARE ABLE TO ACHIEVE ALL THE BENEFITS OF LIVING WITH ROOM MATES, WITHOUT THE HASSLE OF FINDING ROOMMATES IN A NEW CITY, DEALING WITH LEASING, ETC.

THE WAY MOST OF THESE COMPANIES WORK, THEY RENT OUT ROOMS BY THE BED, NOT THE OVERALL UNIT. SO WHEN YOU MOVE IN YOU WILL BE PAYING A RENT AND A DEPOSIT FOR YOUR INDIVIDUAL ROOM, INSTEAD OF THE WHOLE UNIT. THIS SYSTEM CAN BE BENEFICIAL TO MANY, AS FINDING ROOM MATES IN A CITY WHERE YOU MAY NOT KNOW ANYONE CAN BE INCREDIBLY DIFFICULT, AND IF YOU DO FIND SOME YOU RUN INTO THE PROBLEM OF GETTING STUCK IN A LEASE. THE ABILITY TO PAY RENT WEEK BY WEEK REMOVES THE PROBLEM OF COMMITTING TO A POSSIBLE BAD ROOM MATE SITUATION.

BILLS AND EVERYTHING ELSE ARE TAKEN WITH A UNIQUE PAYING SYSTEM IN MANY OF THESE RESIDENCIES. INSTEAD OF INCLUDING THEM IN YOUR RENT, THEY TEND TO SPLIT THEM EVENLY BETWEEN EVERYONE IN THE BUILDING. BECAUSE OF THIS, RESIDENTS ARE LESS LIKELY TO WASTE ENERGY, LEAVING LIGHTS ON, ETC.

THE UNITS ARE FULLY FURNISHED, AS TO REMOVE THE NEED FOR RESIDENTS TO MOVE IN THEIR OWN FURNITURE. THE AESTHETIC CHANGES BETWEEN COMPANY, EVERYONE HAS THEIR OWN STYLE. SOME HAVE A VERY MINIMALIST DÉCOR, WHILE SOME LOOK LIKE A WEST ELM STORE.

RESEARCH - LITERATURE REVIEW - A LOOK AT CO-COMMUNITY LIVING

THE MOVE IN PROCESS CAN ALSO BE VERY DIFFERENT FROM THAT OF A STANDARD APARTMENT. MANY COMPANIES LACK THE STRINGENT INCOME REQUIREMENTS AND SUCH, AND ONLY REQUIRE A CREDIT/BACKGROUND CHECK AS WELL AS A SHORT INTERVIEW TO SEE IF YOU WOULD BE A GOOD FIT FOR A CO-LIVING SITUATION.

SO WHAT'S THE PRIMARY DIFFERENCE BETWEEN THE DOZENS OF DIFFERENT COMPANIES? PREFERENCES, GIVEN THAT THERE ARE DOZENS OF COMPANIES THAT OFFER THIS, COMPETITION IS IN THE MARKET MAKING RENT PRICES LOWER FOR ALL. BESIDES THAT YOU'RE OVERALL PREFERENCE WITH LIVING STYLE COMES INTO PLAY, AESTHETIC STYLE, SOCIAL EVENTS, ETC.



FIGURE 54 | CO-LIVING ROOM | [HTTPS://WWW.BRICKUNDERGROUND.COM/RENT/NYC-COLIVING-SPACES-DIFFERENCES-FEATURES-PRICES](https://www.brickunderground.com/rent/nyc-coliving-spaces-differences-features-prices)

RESEARCH - LITERATURE REVIEW - SMALL STUDIO APARTMENT DESIGN

TO FULLY REACH MY GOALS OF THIS PROJECT, FINDING ALTERNATIVE SPACE SOLUTIONS WITHIN THE APARTMENT UNITS THEMSELVES IS OF GREAT IMPORTANCE. TRADITIONALLY, APARTMENT DESIGN HAS HAD A FAIRLY CONSTANT PROCESS AND LAYOUT. EXCEPT FOR CERTAIN EXCEPTIONS, A NEW APARTMENT IN ONE CITY COULD BE INDISTINGUISHABLE FROM THAT OF ANOTHER CITY. THROUGH LOOKING INTO CREATIVE SPACE SAVING SOLUTIONS, AND WAYS TO CREATE THE ILLUSION OF SPACE, MAKING A 250 SQFT UNIT FEEL LIKE 500 SQFT IS ACHIEVABLE. DURING THIS RESEARCH SECTION I LOOKED AT A JOURNAL THAT PUBLISHED DOZENS OF IDEAS/EXAMPLES OF WAYS TO SAVE SPACE WITHIN A MICRO APARTMENT.

SLEEPING SYSTEM

ONE OF THE FIRST IDEAS THE ARTICLE PUT FORWARD WAS TO CREATE A **SLEEPING SYSTEM** THAT MAKES USE OF THE SPACE AROUND A BED. TRADITIONALLY SPEAKING A BEDROOM AREA IS ONLY USED FOR SLEEPING WITH THE BED ITSELF TAKING UP MOST OF THE SPACE. THIS CAN BE PROBLEMATIC DUE TO THE AMOUNT OF TIME THE BED IS LEFT EMPTY, ALONG WITH THE SPACE ABOVE, BELOW, AND TO THE SIDES OF THE BED. A SYSTEM OF BETTER EFFICIENCY WOULD BE TO CREATE A RAISED CAPTAINS BED TYPE LAYOUT. WITH A RAISED BED, STORAGE CAN BE ACCESSED UP TO THE HEIGHT THAT YOU NEED TO LAY DOWN. SO IF YOU ONLY NEED 4' TO LAY A MATTRESS/SLEEP COMFORTABLY, YOU HAVE 5' OF SPACE BELOW THE MATTRESS OF STORAGE. DEPENDING ON THE SIZE OF THE MATTRESS, THAT COULD BE ALL THE STORAGE YOU NEED IN AN ENTIRE APARTMENT.



FIGURE 55 | BED STORAGE EXAMPLE | [HTTPS://
INTERIORZINE.COM/2017/11/30/50-SMALL-STUDIO-
APARTMENT-DESIGN-IDEAS/](https://interiorzine.com/2017/11/30/50-small-studio-apartment-design-ideas/)

RESEARCH - LITERATURE REVIEW - SMALL STUDIO APARTMENT DESIGN

ADDING ONTO A RAISED BED PLATFORM, THE UNDERSIDE DOES NOT NEED TO BE USED FOR STORAGE, USING THE SPACE FOR SPACES SUCH AS AN EATING AREA OR DESK TO WORK AT ARE ALSO GREAT USES FOR THE UNUSED SPACE.

COLOR TONES:

NEXT UP IS **COLOR TONES** AND **ACCENT WALLS**, WHEN LAYING OUT/PAINTING A ROOM, ADDING ACCENT WALLS OR LINES OF COLOR THROUGHOUT THE SPACE CAN CREATE THE ILLUSION OF SPACE AND DEPTH. A RULE OF THUMB IS THAT LIGHTER COLORS CREATE A LARGER SENSE OF SPACE. HOWEVER, IN SOME CASES MIXING LIGHTS WITH DARKS CAN CREATE AN ILLUSION OF DEPTH THAT ISN'T ACTUALLY THERE. WITH THIS TECHNIQUE IT IS POSSIBLE TO MAKE WALLS SEEM LIKE THEY ARE FARTHER THEN THEY ARE.

FOLDING WALLS

FOLDING WALLS, OR OTHER DIVIDING WALLS BETWEEN SPACES CAN BE A GREAT WAY TO CREATE A SENSE OF PRIVACY WHEN YOU NEED IT, YET KEEP LINES OF SIGHT OPEN WHEN YOU PREFER IT. PARTITIONS CAN BE SOMETHING AS SIMPLE AS A CURTAIN, OR SOMETHING AS COMPLEX AS A NANO WALL. NANO WALLS HOWEVER CAN BE EXPENSIVE AND MAY NOT BE THE BEST USE OF BUDGET FOR THIS PROJECT.



FIGURE 56 | NANO-WALL EXAMPLE | [HTTPS://WWW.
NANAWALL.COM/](https://www.nanawall.com/)

RESEARCH - LITERATURE REVIEW - SMALL STUDIO APARTMENT DESIGN

MOVABLE WALL:

MOVABLE STORAGE WALL, A WALL ON TRACKS TO ALLOW IT TO BE PUSHED FROM ONE SIDE OF THE ROOM TO THE OTHER IS A GREAT WAY TO CONVERSE ON SPACE. IN ITS COMPACTED FORM YOU HAVE ROOM TO WALK ABOUT THE SPACE, WHEN FOLDED OUT YOU HAVE AMPLE ACCESS TO BOTH STORAGE AS WELL AS YOUR SLEEPING AREA (IF YOU CHOOSE TO USE A MURPHY BED SYSTEM). THIS SYSTEM MIGHT BE ONE OF THE BEST USES OF STORAGE, AS TRADITIONAL MEANS REQUIRE A SPACE TO ACCESS SAID STORAGE, THIS MIGHT BE A HALLWAY OR A SPACE IN FRONT OF YOUR CABINETS THAT NEEDS TO BE OPEN. A GREAT EXAMPLE OF THIS IN USE ARE ARCHIVES. INSTEAD OF TAKING UP HALF THE SPACE OF A ROOM WITH CIRCULATION SPACE, ARCHIVES TEND TO USE LARGE MOVEABLE BOOK CASES TO STORE ITEMS.



FIGURE 57 | MOVEABLE STORAGE WALL | [HTTPS://WWW.ALLMODULARSYSTEMS.COM/](https://www.allmodularsystems.com/)

MINIMALIST DESIGN

ONE OF THE NEXT TOPICS COVERED WAS THE IDEOLOGY OF MINIMALISM, AS SPOKEN ABOUT BEFORE, MINIMALISM REMOVES THE CLUTTER FROM A SPACE, AND ALLOWS A CLEANER LOOK WITHIN AN INTERIOR. LOOKING PAST THE ECONOMICAL AND MENTAL BENEFITS MINIMALISM CAN HAVE, A MINIMALIST STYLED SPACE CAN ACHIEVE AN ILLUSION OF SPACE, EVEN IF THE OVERALL SQUARE FOOTAGE ISN'T OVER 300 SQFT, THE ILLUSION OF SPACE WILL REMOVE THE MENTAL DESIRE TO HAVE A LARGER APARTMENT. TO THINK OF THIS IN SIMPLE TERMS A HOUSE CAN SEEM LARGER IF FURNITURE FROM SAID HOUSE IS REMOVED, THIS SAME CONCEPT CAN BE TRANSITIONED INTO THE DESIGN PRACTICE OF A STUDIO APARTMENT.

RESEARCH - LITERATURE REVIEW - SMALL STUDIO APARTMENT DESIGN

WITH CLEVER STORAGE SOLUTIONS, AND A DESIGN WHICH CAN INCORPORATE THE NEEDS OF AN INDIVIDUAL INTO THE DESIGN, A SPACE CAN HAVE THE APPEARANCE OF BEING LARGER THEN IT IS. HERE A GREAT EXAMPLE OF THIS CAN BE SEEN, AS THIS APARTMENT MAY NOT BE MORE THEN 250 SQFT, THE ILLUSION OF SPACE IS CREATED. THE ONLY DOWNSIDE OF THIS TYPE OF DESIGN IS THAT MANY MAY FEEL THAT THIS TYPE OF AESTHETIC DOES NOT CREATE THAT HOMEY OR COZY FEELING THAT THEY DESIRE IN A HOME. THAT HOWEVER WOULD BE UP TO THE OCCUPANT, AND GIVEN THAT THERE IS STILL ROOM TO DECORATE, ADDITIONS COULD BE MADE.



FIGURE 58 | A MINIMALISM APARTMENT EXAMPLE | [HTTPS://WWW.NICHOLASGURNEY.COM.AU/WORK/THE-STUDIO](https://www.nicholasgurney.com.au/work/the-studio)

RESEARCH - LITERATURE REVIEW - SMALL STUDIO APARTMENT DESIGN

MULTI LEVEL DESIGN:

A GREAT WAY ANALYZED TO CREATE SPACE IS BY CONVERTING A SPACE INTO MULTIPLE LEVELS. GIVEN MOST INDIVIDUALS ARE NOT 9' TALL, SEPARATING CERTAIN SPACES INTO DIFFERENT LEVELS IS POSSIBLE WITHIN A UNIT. WITH AN ADDITION SUCH AS THIS IT WOULD BE POSSIBLE TO RAISE A KITCHEN AREA BY 2' STILL ALLOWING FOR 7' OF CEILING HEIGHT (WHICH COULD BE RAISED IN THAT SECTION TO GIVE A FURTHER ILLUSION OF SPACE). WITH THIS 2' RAISE, SLIDE OUT DRAWERS COULD BE INTEGRATED INTO THE DESIGN, OR OTHER MEANS OF STORAGE FOR LESS ACCESSED POSSESSIONS. BECAUSE THIS IS NOT LOWERING THE CEILING HEIGHT OF AN ENTIRE UNIT, THE ILLUSION OF SPACE IS NOT REMOVED FULLY, ONLY WHEN YOU ARE STANDING ON THE SMALL RAISED SECTION OF UNIT. AND DEPENDING ON WHERE YOU DECIDE TO DO THIS, IT COULD BE A SECTION THAT IS USED LESS THROUGHOUT THE DAY AS COMPARED TO OTHER SPACES IN THE APARTMENT.



FIGURE 59 | RAISED LEVEL DESIGN | [HTTPS://INTERIORZINE.COM/WP-CONTENT/UPLOADS/2017/11/TINY-APARTMENT-DESIGN-UNDER-200-SF.JPG](https://interiorzine.com/wp-content/uploads/2017/11/tiny-apartment-design-under-200-sf.jpg)

RESEARCH - LITERATURE REVIEW - SMALL STUDIO APARTMENT DESIGN

REFLECTIVE SURFACES

MIRRORED SURFACES, OR REFLECTED SURFACES IS A SIMPLE YET EXCELLENT WAY TO CREATE AN ILLUSION OF DEPTH AND SPACE. ADDING A RELUCTANT METAL OR OTHER MATERIAL ONTO A WALL OF A UNIT CAN REFLECT IMAGES AND LIGHT OFF OTHER SURFACES AROUND IT, THIS COMBINED WITH OTHER TECHNIQUES DISCUSSED CAN BE A GREAT WAY TO MAKE ANY UNIT FEEL LARGER THEN IT ACTUALLY IS. ANOTHER ADDED BENEFIT OF THIS IS THE APPLICATION OF A MIRROR, AS IT IS AN APARTMENT BEING ABLE TO GET READY IN THE MORNING OR BEFORE YOU GO OUT ON THE TOWN WOULD BE OF ADDED BENEFIT.



FIGURE 60 | REFLECTIVE SURFACE EXAMPLE | [HTTPS://BLUPRINT.ONEMEGA.COM/](https://blueprint.onemega.com/)

THESE ARE ONLY A FEW OF MANY TECHNIQUES TO CREATE AN ILLUSION OF SPACE WITHIN ANY UNIT, USING A COMBINATION OF THESE IT WOULD NOT BE HARD TO TURN A 200 SQFT STUDIO INTO A DESIRABLE SPACE THAT AN OCCUPANT WOULD ENJOY SPENDING TIME IN. THESE IDEAS WILL BE THOROUGHLY THOUGHT THROUGH, AS TO HOW THEY COULD AFFECT THE INTERIOR SPACE WITHIN EACH UNIT OF MY PROJECT. THROUGH A COMBINATION OF THESE, THIS NEW TYPOLOGY WILL BE A PLACE PEOPLE LOOK FORWARD TO MOVING INTO.

RESEARCH - LITERATURE REVIEWS - SUMMARY OF REVIEWS

THROUGH EACH OF MY 3 RESOURCES I CONDUCTED MY LITERATURE REVIEWS OFF OF, I DEVELOPED A BASIC MIND SET TO STEM MY DESIGN PROCESS FROM.

MINIMALISM:

THROUGH THE ACTS OF MINIMALISM, ONE CAN TRULY FIND WHAT IS IMPORTANT IN THEIR LIVES, AND FOCUS MORE ENERGY INTO THEMSELVES. MINIMALISM CAN HAVE BOTH MENTAL AND FINANCIAL BENEFITS, GIVEN THAT YOU ARE SPENDING LESS OF YOUR INCOME ON RENT/POSSESSIONS, YOU ARE ABLE TO REFOCUS THAT MONEY TOWARDS MORE IMPORTANT THINGS IN LIFE. AND GIVEN THAT LESS OF YOUR METAL STRAIN IS ON PAYING FOR ALL OF THESE POSSESSIONS IN YOUR LIFE, YOU ARE ABLE TO ALTER YOUR MENTAL FOCUS ONTO OTHER ASPECTS OF ONE'S LIFE THAT CAN BE OF GREATER IMPORTANCE. ENTERING INTO A LIFE OF MINIMALISM CAN BE AS SIMPLE AS CUTTING YOUR WARDROBE IN HALF, DEPENDING ON WHAT YOU DO AND DO NOT WEAR. IT COULD BE AS SIMPLE AS REMOVING ITEMS IN STORAGE THAT HAVE NOT BEEN ACTIVELY USED IN MONTHS OR YEARS, OR TO REMOVE ITEMS WHICH DO NOT BRING YOU PERSONAL JOY. THROUGH SMALL STEPS A SIMPLER LIFE CAN BE ESTABLISHED, IMPROVING BOTH MENTAL AND PHYSICAL HEALTH.

CO LIVING:

CO-LIVING FACILITIES ARE A FAIRLY RECENT TREND IN THE UNITED STATES, WITH A NUMBER OF EXAMPLES POPPING UP ALL OVER LARGER METROPOLITAN AREAS. IN PLACES FROM CHICAGO TO SAN FRANCISCO, TO NYC, OPPORTUNITIES TO LIVE IN A UNIQUE HOUSEHOLD ASPECTS ARE THERE. THESE CO-LIVING COMMUNITIES OFFER A WIDE VARIETY OF BENEFITS SUCH AS A CLOSE SOCIAL CIRCLE, LOWER COST OF RENT, LESS HEADACHE DEALING WITH LEASES, AND SIMPLE APPLICATION PROCESSES. GIVEN MUCH OF NYC REQUIRES YOU TO HAVE AN INCOME WHICH 40X+ THAT OF THE COST OF THE UNIT, MANY OF US ARE UNABLE TO LIVE A LIFESTYLE WITH A \$150K SALARY. FOR THOSE INDIVIDUALS, ROOM MATES ARE THE BEST WAY TO GET AROUND THIS INCOME REQUIREMENT. CO-LIVING SYSTEMS REMOVE THE HEADACHE AROUND LIVING WITH ROOM MATES, AS YOU ARE RENTING VIA THE ROOM INSTEAD OF THE UNIT.

RESEARCH - LITERATURE REVIEWS - SUMMARY OF REVIEWS

GIVEN THAT THERE ARE A WIDE RANGE OF COMPANIES THAT OFFER THESE SERVICES AROUND THE USA, COMPETITION CREATES A LOWER MARKET AND MORE AFFORDABLE RATES. WITH RATES ASIDE IT'S PURELY PERSONAL PREFERENCE WHERE ONE WOULD LIKE TO RESIDE.

SMALL STUDIO APARTMENT DESIGN

MICRO APARTMENTS, COMPACT UNITS, SMALL STUDIOS, A SMALL PLACE OF DWELLING HAS A NUMBER OF NAMES, HOWEVER THEY ALL SHARE ONE THING IN COMMON, A LOWER SQUARE FOOTAGE FOOTPRINT TO PUSH BACK ON HIGH RENT COSTS IN LARGER CITIES. JUST BECAUSE A STUDIO IS 250 SQFT, DOES NOT MEAN IT NEEDS TO FEEL LIKE A CLOSET. WITH A NUMBER OF TECHNIQUES, IT IS POSSIBLE TO CREATE EFFICIENT MEANS OF LIVING IN ANY SPACE NO MATTER HOW SMALL. THIS LITERATURE REVIEW COVERED A WIDE RANGE OF TOPICS THAT CAN GREATLY HELP ANY SPACE GIVE OFF A SENSE OF ILLUSION THAT MAKES IT APPEAR LARGER THEN IT REALLY IS. MULTI USE SPACES, SUCH AS A BED THAT CAN BE USED AS A COUCH, AND A WALL THAT CAN BE USED AS A CLOSET ARE ALL GREAT EXAMPLES OF HOW WE CAN ACTIVELY BUILD OUT A SPACE TO WORK WITH SMALL SCALE LIVING. USING VISUAL TECHNIQUES SUCH AS ACCENT WALLS, REFLECTIVE SURFACES, AND LINES OF SIGHT, WE CAN RETROFIT ANY SPACE TO GIVE OFF THE APPEARANCE OF HAVING A LARGER FOOTPRINT THEN IT REALLY DOES. WITH A COMBINATION OF THESE DESIGN IDEAS, CREATE MICRO UNITS WITHIN MY PROJECT CAN BECOME WORTH WHILE AND SOUGHT OUT RESIDENCES THAT MANY WOULD LOVE TO RESIDE IN.

WITH INFORMATION COVERED IN EACH OF THESE REVIEWS, I WILL BE ABLE TO MAKE INFORMED DECISIONS ON ALL STAGES OF DESIGN WORK FOR MY THESIS PROJECT. STARTING AT A VERY EARLY DESIGN STAGE, THROUGH SPACE PROGRAMMING AND SCHEMATIC DESIGN I WILL REFLECT BACK ON THESE STUDIES TO MAKE LOGICALLY INFORMED DECISIONS ON THE OVERALL LAYOUT AND FORM OF MY STRUCTURE. FORWARD FROM THAT POINT I WILL USE INTERIOR DESIGN TECHNIQUES COVERED ALONG WITH THE MINIMALIST IDEOLOGY TO CREATE INTERIOR UNITS WHICH APPEAL TO THE RESIDENT. THIS WILL CREATE BOTH AN ENGAGING AND RELAXING SENSE OF SPACE. THESE STUDIES TIED WITH MY SURVEY STUDY COVERED NEXT SEMESTER WILL OFFER AN INSIDE LOOK TO THE BEST POSSIBLE SOLUTION FOR THIS NEW TYPE OF TYPOLOGY.

RESEARCH FINDINGS - A LOOK AT THE NEEDS OF YOUNG PROFESSIONALS

HERE I WILL BE TAKING A LOOK AT THE IDEAL SITUATION SIZE WISE TO BEST MEET THE NEEDS OF THE USERS OF THIS SPACE. ORIGINALLY A SURVEY WAS SEEN TO BE A GREAT WAY TO STUDY THIS. INSTEAD HOWEVER, I FOUND THAT RELEVANT PROJECT CASE STUDIES HAD ALREADY STUDIED THIS SITUATION IN DEPTH, AND PAST A POINT THAT I WOULD HAVE BEEN GIVEN, GIVEN TIME CONSTRAINTS.

RESEARCH FINDINGS - A LOOK AT THE NEEDS OF YOUNG PROFESSIONALS

ALL FINDINGS OF THIS STUDY WERE FOUND TO MEET THE STANDARDS OF EXISTING PROJECTS.

PROJECT JUSTIFICATION

WHY CONDUCT THIS STUDY?

WHY IS THERE A NEED TO RESEARCH ALTERNATIVE MEANS OF LIVING? WHY IS THIS A PROPER SUBJECT TO LOOK INTO RATHER THEN HAVE SOMEONE ELSE IN OUR PROFESSION LOOK INTO IT? WHY DOES FINDING AN ALTERNATIVE MEANS OF LIVING MATTER TO ME?

ALL OF THESE QUESTIONS CAN BE EASILY ANSWERED WITH A DEEPER LOOK INTO THE PROBLEM TIED TO PERSONAL EXPERIENCES. THE PROBLEM OF STUDENT DEBT IS ONLY GETTING WORSE, AND GIVEN THAT MANY OF THOSE IN SENIOR POSITIONS OF THE ARCHITECTURAL PROFESSION ARE NOT SEEING THE PROBLEM EYE TO EYE WITH THE ACTUAL RECENT GRADUATES WHO ARE EXPERIENCING IT FIRST HAND, I FEEL THAT I HAVE A BETTER VIEW OF THE POSSIBLE RESOLUTION TO THE PROBLEM.

WITH STUDENT DEBT EVER INCREASING, AND HOUSING OPPORTUNITIES STAYING SOMEWHAT CONSTANT, A NEW ALTERNATIVE MEANS OF RESIDENCY FOR RECENT GRADUATES IS IN AN UNSEEN DEMAND. I PERSONALLY BELIEVE THAT ONCE THIS PROJECT GAINS Foothold, POPULARITY WILL GROW AND YOU WILL SEE NUMEROUS EXAMPLES OF THIS ACROSS THE COUNTRY.

WITH MY PLANS TO RELOCATE OUT OF THE MIDWEST POST GRADUATION, I AM FINDING THE CONSTANT STRUGGLE OF LOCATING AFFORDABLE HOUSING IN A CITY IN WHICH I AM UNFAMILIAR WITH. WITH THIS NEW TYPOLOGY I THIS ISSUE WOULD BECOME A THEME OF THE PAST.

PROJECT JUSTIFICATION

WHY CONDUCT THIS STUDY?

I HAVE A DESIRE TO PAY OFF MY LOANS AGGRESSIVELY IN AS LITTLE AS 3 YEARS POST GRADUATION. WITH THIS NEW TYPOLOGY MY FINANCES WOULD BE ABLE TO SHIFT IN MY FAVOR TO HELP REACH THIS GOAL WITHOUT NEGATIVELY IMPACTING MY LIFE IN OTHER AREAS.

LOOKING PAST THE FINANCIAL BENEFITS OF THIS STUDY, THE SOCIAL BENEFITS CAN ALSO BE SEEN AS JUSTIFIABLE. IT CAN BE DIFFICULT FOR MANY TO FIND FRIENDS IN A NEW CITY, AND FIND THEIR PLACE OF BELONGINGS ONCE MOVING. WITH THIS TYPE OF PROJECT SOCIAL INTERACTION WOULD INCREASE BETWEEN RESIDENTS, ALLOWING FOR THESE FRIENDSHIPS TO BE FORMED.

PROJECT JUSTIFICATION - STUDENT DEBT LEVELS

GIVEN THAT THIS TYPOLOGY IS FOCUSED TOWARDS RECENT GRADUATES AND YOUNG PROFESSIONALS, IT'S WORTH LOOKING INTO THE CURRENT ECONOMIC TRENDS FOLLOWING THESE TYPES OF INDIVIDUALS. STUDENT DEBT IS INCREASING AND RENT IS ONLY GETTING MORE EXPENSIVE, ALL WITH SALARIES BARELY INCREASING AT A RATE UNAPPROPRIATED WITH INFLATION.

70% OF STUDENTS HAVE DEBT
\$37,000 AVERAGE DEBT
\$380/MONTH FOR 10 YEARS
\$840/MONTH FOR 4 YEARS

WITH OVER %70 OF STUDENTS OWING MORE THEN \$37,000 IN STUDENT DEBT, AND OVER \$1.4 TRILLION TOTAL, THE PROBLEM WITH STUDENT DEBT IS ONLY GETTING WORSE. THESE NUMBERS MIXED WITH A 4.25% INTEREST RATE WILL CAUSE STUDENTS TO PAY AN AVERAGE OF OVER \$45,000 FOR THEIR EDUCATION. ON A 10 YEAR PLAN WITH 4.25% INTEREST YOU CAN EXPECT TO PAY UPWARDS OF \$350/MONTH+ FOR THAT 10 YEAR PERIOD. IF YOU WISH TO PAY OFF YOUR LOANS AGGRESSIVELY THAT NUMBER BUMPS UP TO \$840/MONTH+ FOR 4 YEARS. THIS NUMBER CAN BE UNOBTAINABLE FOR MANY, AND CAUSE STUDENTS THE NEED TO CUT COSTS IN OTHER PARTS OF THEIR LIVES, SUCH AS RETIREMENT FUNDS.

PROJECT JUSTIFICATION - RECENT GRADUATE INCOME

RECENT GRADUATES MAKE WAGES ACROSS THE BOARD, WITH CERTAIN MAJORS BEING MUCH LOWER ON THE SCALE THEN OTHERS, IT CAN BE EASY TO SEE WHY THE PROBLEM OF PAYING OFF LOANS CAN BE SO DIFFICULT FOR MANY.

<u>MAJOR:</u>	<u>SALARY (2016)</u>
ENGINEERING	\$64,891
COMPUTER SCIENCE	\$61,321
MATH AND SCIENCES	\$55,087
BUSINESS	\$52,236
AGRICULTURE	\$48,729
HEALTHCARE	\$48,712
COMMUNICATIONS	\$47,047
SOCIAL SCIENCES	\$46,585
HUMANITIES	\$46,065
EDUCATION	\$34,891

NUMBERS SUPPLIED BY WWW.MONEY.COM (POPPICK, 2015)

PROJECT JUSTIFICATION - BUDGETING AND SPENDING

CITIZENS HAVE BROAD SPENDING HABITS ACROSS THE BOARD DEPENDING ON THEIR NEEDS AND PREFERENCES IN LIFE, BUT FOR THIS WE WILL LOOK AT A TYPICAL SPENDING PATTERN FOR A RECENT GRADUATE. MAKING THAT AVERAGE OF \$51,000/YEAR (OR A NET PAY OF APROX. \$42,500, OR \$3,540/MONTH).

EXPENSES:	COST/MONTH
HOUSING: 25-35%	\$1200
INSURANCE: 10-20%	\$354
FOOD: 10-15%	\$431
TRANSPORTATION: 10-15%	\$300
UTILITIES: 5-10%	\$177
SAVINGS: 10-15%	\$300
ENTERTAINMENT: 5-10%	\$177
CLOTHING: 5%	\$177
PERSONAL: 5-10%	\$177
LOANS: 5-10%	\$247

PERCENTAGES SUPPLIED BY WWW.THEBALANCE.COM (LAKE, 2019)

PROJECT JUSTIFICATION - BUDGETING AND SPENDING

AND WITH THIS TABLE HERE WE CAN SEE THE GENERAL PROBLEM WITH CURRENT SPENDING HABITS. GIVEN THIS IS THE AVERAGE SO SOME RECENT GRADUATES WILL BE MAKING MORE AND MANY WILL BE MAKING LESS, EVEN SO MONEY IS TIGHT.

SO HOW CAN WE MOVE THIS BUDGET AROUND IN ORDER TO MEET THAT \$380/MONTH OR \$840/MONTH PAYMENT ON LOANS?

WHILE YOU CAN MOVE AROUND ON CERTAIN BUDGETS THE TOP SPENDERS ARE ALWAYS LIVING EXPENSES AND LOANS? ON THE TABLE RENT IS LISTED AT \$1200 AS THAT IS ABOUT THE HIGHEST POSSIBLE AMOUNT THAT ONE CAN AFFORD FOR RENT IN THAT INCOME LEVEL, AND GIVEN THE CURRENT HOUSING CRISIS YOU ARE MOST LIKELY GOING TO PAY SOMEWHERE IN THAT RANGE IN AN URBAN CENTER.

IF THE HIGHEST COST IS BROKEN DOWN IT FREES UP MONEY IN OTHER PORTIONS. IF RENT WAS LOWERED BY 20%, YOU COULD PUT AN EXTRA \$240 PER MONTH INTO LOAN PAYMENTS BRINGING THE TOTAL UP TO \$487/MONTH WHICH IS WITHIN THAT THRESHOLD MANY AIM FOR.

THAT IS EASIER SAID THEN DONE THOUGH, AS IT CAN BE VERY DIFFICULT TO FIND RENT WITHIN A HIGHER DENSITY CITY FOR LESS THEN \$1,000.

PROJECT JUSTIFICATION - BUDGETING AND SPENDING

NOW WHAT IF IT WAS POSSIBLE TO CUT THE HIGHEST COST BY A SIGNIFICANT AMOUNT, SUCH AS 40%, FINDING HOUSING WITHIN A HIGH DENSITY CITY FOR \$720/MONTH WITHOUT GIVING UP LOCATION, SAFETY, OR AMENITIES MAY SEEM IMPOSSIBLE, BUT WITH THIS PROPOSAL, COULD BE DO-ABLE. AND WITH THESE SAVINGS YOU COULD INCREASE LOAN PAYMENTS UP TO \$727/MONTH, ALLOWING YOU TO PAY OFF YOUR DEBT AT DOUBLE THE SPEED AS THE AVERAGE RECENT GRADUATE.

WITH THIS INCREASED PAYOUT, BY THE TIME YOU DEVELOP SOME EXPERIENCE AND SENIORITY IN YOUR FIELD. YOU WILL BE MAKING MORE AND HAVE THE MONEY TO PROPERLY INVEST INTO YOUR FUTURE, WITHOUT BEING TIED DOWN BY LOAN PAYMENTS.

THESE NUMBERS CAN BE VERY CONCERNING, AS THIS IS THE AVERAGE THERE ARE A LARGE PERCENTAGE OF RECENT GRADUATES MAKING LESS THEN THIS AMOUNT. FOR THEM THIS NEW HOUSING TYPOLOGY MIGHT NOT BE SEEN AS A WAY TO GET AHEAD IN LIFE, BUT INSTEAD NEEDED TO BREAK EVEN.

PROJECT JUSTIFICATION - BUDGETING AND SPENDING

FOR EXAMPLE, LETS LOOK AT AN EDUCATION MAJOR WHO DECIDES TO MOVE TO A LARGER CITY TO WORK. EDUCATION, BEING ONE OF THE LOWER PAYING MAJORS, DESPITE ITS NEED IN SOCIETY, IS A FIELD WHERE MANY STRUGGLE TO BREAK EVEN. A RECENT EDUCATION MAJOR MAKES AN AVERAGE OF \$34,981 (POPPICK, 2015). YOUR NET PAY WOULD BE AROUND \$29,700, OR \$2475/MONTH.

<u>EXPENSES:</u>	<u>COST/MONTH</u>
HOUSING: 25-35%	\$723
INSURANCE: 10-20%	\$247
FOOD: 10-15%	\$247
TRANSPORTATION: 10-15%	\$272
UTILITIES: 5-10%	\$123
SAVINGS: 10-15%	\$147
ENTERTAINMENT: 5-10%	\$123
CLOTHING: 5%	\$123
PERSONAL: 5-10%	\$123
LOANS: 5-10%	\$347

NUMBERS SUPPLIED BY WWW.MONEY.COM (POPPICK, 2015)

PROJECT JUSTIFICATION - BUDGETING AND SPENDING

HERE THE PROBLEM CAN BE SEEN WITH FURTHER IMPORTANCE THEN A RECENT GRADUATE MAKING THAT \$51,000/YEAR RATE. EVEN WITH PRICE CUTS ACROSS THE BOARD A RECENT EDUCATION GRAD STRUGGLES TO BREAK EVEN. IN A LARGER CITY FINDING OPTIONS TO RENT FOR \$723/MONTH IS VERY DIFFICULT. AND WITH THE EXPENSE OF REMOVING SAVINGS AND OTHER NECESSITIES, THIS IS NOT A WORTHWHILE PLAN.

WHILE THIS COULD BE EVIDENCE THAT WE NEED TO TAKE A CLOSER LOOK AT EDUCATORS COMPENSATION, THAT IS NOT THE OVERALL FOCUS OF THIS STUDY. WITH THIS NEW CO-COMMUNITY HOUSING DEVELOPMENT, RECENT EDUCATION GRADUATES WOULD BE ABLE TO AFFORD HOUSING WITHOUT GIVING UP SAFETY OR LOCATION/AMENITIES AS MENTIONED PREVIOUSLY.

PROJECT JUSTIFICATION - JUSTIFYING THE INVESTMENT

GIVEN THE EXPLANATION OF STUDENT DEBT PREVIOUSLY COVERED, IT CAN BE SEEN WHY THIS TYPE OF TYPOLOGY COULD BE JUSTIFIED FINANCIALLY SPEAKING. THE USA IS TRILLIONS IN DEBT AND UNLESS SOMETHING IS DONE TO START CORRECTING THIS PROBLEM WE ARE ONLY CONDEMNING OUR FUTURE GENERATIONS. A START OF REMOVING STUDENT DEBT IS A FANTASTIC WAY TO START THIS LONG TERM RESOLUTION. WITH THIS CO-COMMUNITY HOUSING TYPOLOGY, RECENT GRADUATES WOULD BE ABLE TO GET A HEAD START ON THEIR LOAN PAYMENTS AND BE ABLE TO GET A JUMP START ON THEIR FUTURE ECONOMIC GOALS.

UNLESS SOCIETY AS A WHOLE MAKES AN EFFORT TO FIX THIS PROBLEM, WE WILL NEVER REACH OUR GOAL AND ARE ONLY CONDEMNING OUR FUTURE GENERATIONS FURTHER. AT WHAT POINT ARE WE PAST A TIPPING POINT THAT RESULTS IN A COLLAPSE IN THE US GOVERNMENT? ACTIONS MUST BE TAKEN NOW INSTEAD OF JUST IGNORING THE PROBLEM WHILE WAITING FOR A SOLUTION TO FIND ITSELF.

PROJECT JUSTIFICATION - JUSTIFYING THE INVESTMENT

THIS PROJECT COULD BE FUNDING BY EITHER A GOVERNMENT PROGRAM VIA STUDENT AID OR BY PRIVATELY FUNDED INVESTORS.

GIVEN THE TRADE OFF FOR SQUARE FOOTAGE FOR A HIGHER NUMBER OF UNITS, THE OVERALL REVENUE GENERATED FROM THE PROJECT WOULD BE ON PAR WITH OTHER DEVELOPER BASED PROJECTS. WITH THIS I FEEL THAT IT WOULD NOT BE DIFFICULT TO FIND POTENTIAL INVESTORS TO MAKE THIS RESEARCH A REALITY.

WHEN IT COMES TO A GOVERNMENT FUNDED PROGRAM, CERTAIN LIMITATIONS WOULD NEED TO BE SET FOR THE OCCUPANTS AND AT WHAT INCOME LEVELS THEY ARE LIMITED AT, HOW LONG THEY MAY RESIDE, HOUSEHOLD LIMITS, ETC. WITH THIS I FIND THAT A GOVERNMENT FUNDED OPERATION MAY NOT BE IN THE BEST INTEREST OF CREATING A DIVERSE COLLECTION OF RESIDENTS FROM ALL BACKGROUNDS CREATING A UNIQUE CULTURE WITHIN THE CO-COMMUNITY HOUSING COMPLEX.

PROJECT JUSTIFICATION - CURRENT RESIDENTIAL UNITS:

SO WHAT ARE THE UPSIDES AND DOWNSIDES OF CURRENT RESIDENTIAL UNITS WITH A CLOSER PROXIMITY TO A CITY CENTER?

PROS:

- HIGHER WALK ABILITY
- BETTER COMMUNITY AMENITIES
- MORE DESIRABLE UNITS
- SENSE OF ACCOMPLISHMENT IN LIFE
- BETTER ACCESS TO COMMUNITY EVENTS
- HIGHER SAFETY RATING
- SENSE OF PROFESSIONALITY.

HIGHER WALK ABILITY

HIGHER WALK ABILITY CAN BE ONE OF THE HUGE DECIDING FACTORS WHEN CHOOSING WHERE TO LIVE. HIGHER PRICED UNITS ARE GENERALLY IN MORE DESIRABLE LOCATIONS, WHILE UNITS WITH A LOWER WALK ABILITY SCORE MAY REQUIRE YOU TO DRIVE TO TAKE PUBLIC TRANSIT TO ANY SORT OF COMMUNITY HUB. THE ABILITY TO LIVE SOMEWHERE WITH A SHORT COMMUTE AND HIGH WALK ABILITY IS A HUGE BENEFITS.

PROJECT JUSTIFICATION - CURRENT RESIDENTIAL UNITS:

BETTER COMMUNITY AMENITIES

A HOUSING OPTION'S NUMBER AND QUALITY OF COMMUNITY AMENITIES CAN BE SEEN AS A HUGE BENEFICIAL FACTOR WHEN DECIDING ON WHERE TO LIVE/JUSTIFYING COST. FACILITIES SUCH AS AN EXERCISE ROOM, 24 HOUR CONCIERGE, POOL AND SPA, COMMUNITY GATHERING SPACES, OUTDOOR GRILLING AREAS, ETC. ARE ALL GREAT THINGS TO KEEP IN MIND WHEN DECIDING ON WHERE YOU WANT TO RESIDE.

MORE DESIRABLE UNITS

THE LEVEL OF TRIM AND THE DESIRABILITY OF A UNIT CAN BE HUGE FACTORS ON WEIGHING IN ON RENT COSTS. GENERALLY SPEAKING MANY RESIDENTS WILL JUSTIFY HIGHER LIVING COSTS IF THE UNITS THEMSELVES EXCEED THEIR STANDARDS. OPTIONS SUCH AS GRANITE COUNTER TOPS, WALK IN SHOWERS, HIGHER AMOUNT OF NATURAL LIGHT, PATIOS, HIGHER CEILING HEIGHTS, ETC. SEEN AS JUSTIFIABLE COSTS.

PROJECT JUSTIFICATION - CURRENT RESIDENTIAL UNITS:

SENSE OF ACCOMPLISHMENT IN LIFE

A SENSE OF ACCOMPLISHMENT CAN BE SEEN AS A MAIN FACTOR INTO MANY OF OUR DECISIONS IN LIFE, WE WANT A NICER APARTMENT BECAUSE WE ARE AT A STAGE IN OUR LIFE WHERE WE THINK WE DESERVE SUCH. THERE IS NOTHING WRONG WITH AN INDIVIDUAL MAKING 6 FIGURES LIVING IN A LOWER QUALITY RESIDENTIAL BUILDING, HOWEVER GENERALLY SPEAKING YOU WILL SEE THAT THAT'S NOT THE CASE. ONE WANTS TO RESIDE IN A NICER DWELLING UNIT BECAUSE THE WANT THAT SENSE OF ACCOMPLISHMENT IN LIFE.

BETTER ACCESS TO COMMUNITY EVENTS

A HIGHER LEVEL OF ACCESS TO COMMUNITY EVENTS IS A GREAT FACTOR TO CONSIDER WHEN CHOOSING WHERE TO LIVE. THE ABILITY TO MEET NEIGHBORS AND OTHER LIKE MINDED INDIVIDUALS WHEN MOVING TO A NEW CITY CAN BE A HUGE BENEFIT. AND WHEN AN APARTMENT OR OTHER HOUSING SITUATION IS LOCATED CLOSER OR EVEN PARTAKES IN SUCH EVENTS, MANY PEOPLE CAN JUSTIFY THE COSTS.

PROJECT JUSTIFICATION - CURRENT RESIDENTIAL UNITS:

HIGHER SAFETY RATING

A HIGHER SAFETY RATING CAN BE A TREMENDOUS FACTOR WHEN JUSTIFYING COST. THE SENSE OF SAFETY ANYWHERE CAN BE WELL WORTH PAYING THE EXTRA MONEY. WITH LOWER COST UNITS YOU GENERALLY WILL FIND THEY ARE EITHER LOCATED IN LESS SAFE AREA OR THAT THE UNITS CAN ATTRACT BAD ATTENTION. MANY WILL JUSTIFY SPENDING HUNDREDS MORE EVERY MONTH AS NOT TO FEAR FOR THEIR SAFETY WHEN THEY GO HOME AT NIGHT.

SENSE OF PROFESSIONALITY

A SENSE OF PROFESSIONALITY MAY BE A LESSER SEEN SIDE OF LIVING IN A HIGHER END DWELLING, AND DEPENDING ON THE PERSON IT MAY OR MAY NOT BE OF IMPORTANCE. FOR MANY, WHEN ENTERTAINING GUESTS OR CLIENTS, IT'S BEST TO PUT ON THE BEST EXAMPLE AS TO REFLECT YOUR WORK ETHIC AND QUALITY OF WORKMANSHIP. IF YOU HAVE YOUR EMPLOYER OVER (OR THE IN-LAWS), IT CAN BE WORTH THE MONEY TO BE ABLE TO SHOW A SENSE OF PROFESSIONALITY IN WHERE YOU RESIDE.

PROJECT JUSTIFICATION - CURRENT RESIDENTIAL UNITS:

AND WHAT IS THERE AS FAR AS DOWNSIDES TO THESE HIGHER COST OPTIONS OF HOUSING.

CONS:

- COST - HIGHER PERCENTAGE OF MONTHLY INCOME
- ABILITY TO FURTHER DECORATE
- GENTRIFICATION - LACK OF DIVERSITY AND CULTURE
- FORMALITY OF LIVING
- HIGHER SENSE OF COMPLEXITY

COST

COST, THE TERRIBLE FACTOR THAT EVERYONE TENDS TO THINK ABOUT FIRST. HOW MUCH CAN I AFFORD? WHAT CAN I FIT INTO MY BUDGET? COST IS THE MAIN DECIDING FACTOR WHEN DECIDING WHERE TO LIVE AND UNFORTUNATELY, FORCES US TO MAKE THE FINAL DECISION. WITH ALL THE BENEFITS THAT A HIGHER END RESIDENTIAL HOUSING OPTION HAS, THE COST CAN MANY TIMES BE OUT OF REACH FOR SOME USERS, SUCH AS THAT RECENT GRADUATE.

PROJECT JUSTIFICATION - CURRENT RESIDENTIAL UNITS:

ABILITY TO FURTHER DECORATE

THIS FACTOR CAN BE OF LITTLE THOUGHT TO SOME, BUT OF VITAL IMPORTANCE TO OTHERS. WHILE SOME MIGHT NOT SEE THE ABILITY TO FREELY PAINT THEIR APARTMENTS OR HANG ART AS AN IMPORTANT THINK TO DECIDE UPON, SOME MIGHT FIND THIS AS A FIRST BASIS FOR DECIDING WHERE THEY WOULD LIKE TO RESIDE. AND FRANKLY, MOST HIGHER END UNITS ARE OVERLY STRICTER ABOUT WHAT YOU CAN AND CANNOT DO WITH YOUR OWN SPACE.

GENTRIFICATION - LACK OF DIVERSITY

DIVERSITY, OR THE MIX OF CULTURES THAT MAKE UP A COMMUNITY CAN BE A HUGE FACTOR THAT MANY LOOK FOR WHEN MOVING TO AN URBAN CENTER. WITH MANY OF THE NEW DEVELOPMENTS GOING UP, A SENSE OF GENTRIFICATION CAN BE SEEN TO STRETCH ACROSS THE REGION OF SAID CITY. FOR SOME THIS MAY BE A DEAL BREAKER, AS THEY WANT TO EXPERIENCE ALL THE CULTURE A CITY HAS TO OFFER.

PROJECT JUSTIFICATION - CURRENT RESIDENTIAL UNITS:

FORMALITY OF LIVING / HIGHER COMPLEXITY

THE FORMALITY OF LIVING, HOW DO YOU GO ABOUT PAYING RENT? OR RE E SIMPLE CONVERSATION WITH THE LANDLORD LIVING AT THE END OF THE HALL IS A BETTER SERVICE THEN HAVING TO FILE A FORM WITH THE COOPERATE OFFICE OF YOUR BUILDING'S OWNER. IT ALL DEPENDS ON THE TYPE OF INDIVIDUAL BUT FOR SOME THE HIGH FORMALITY OF HIGHER END UNITS MAY DRIVE SOME AWAY. COMPLEXITY CAN COME IN MANY FORMS BUT FOR MANY IT'S HOW YOU GO ABOUT GETTING INTO YOUR UNIT, DO YOU HAVE A KEY CARD OR A PHYSICAL KEY? DO YOU NEED TO PASS A DOORMAN ON THE WAY IN EVERY TIME YOU ENTER OR DO YOU RARELY SEE ANOTHER SOUL WHEN LEAVING YOUR UNIT? THESE ARE ALL IMPORTANT FACTORS TO CONSIDER, AND MANY MIGHT FIND THAT THESE DOWNSIDES ARE REASONING ENOUGH TO FIND A LOWER END UNIT TO RENT.

HISTORICAL/SOCIAL CONTEXT - DWELLINGS THROUGH HISTORY

INDUSTRIAL REVOLUTION:

SO HOW HAVE DWELLINGS LOOKED LIKE THROUGHOUT HISTORY? WHAT TYPE OF HOUSING SITUATION WERE YOUNG PROFESSIONALS LIVING IN THROUGHOUT HISTORY?

LET'S START BACK IN THE INDUSTRIAL REVOLUTION, AS THIS IS WHEN MANY INDIVIDUALS LEFT THEIR LIVES IN SMALLER POPULATION AREAS TO MAKE THEIR WAY INTO CITIES TO WORK IN FACTORIES. DURING THESE TIMES IT WAS COMMON PLACE FOR HOUSING AND WORK CONDITIONS TO BE DANGEROUS, HAZARDOUS, AND SUB PAR. THE POCKETS OF THE WEALTHY WERE LINED WHILE THE WORKING MAN SUFFERED AT HIS BENEFIT. WITH POPULATIONS EXPLODING DUE TO THE INCREASE OF PRODUCTIONS, HOUSING SYSTEMS BECAME MORE AND MORE CROWDED, AND IT WAS NOT UNCOMMON FOR AN ENTIRE FAMILY TO LIVE IN ONE ROOM.

INEXPENSIVE ROW HOUSES WERE COMMON PLACE IN INDUSTRIAL SUPER CENTERS, AND WHILE THESE CHEAPLY BUILT HOMES LACKED VITAL BASIC FEATURES, WEALTHY BUSINESS OWNERS WOULD USE THEM AS A SOURCE OF PROFIT FOR THEIR COMPANIES. (GRUNCH, N.D.).

HISTORICAL/SOCIAL CONTEXT - DWELLINGS THROUGH HISTORY



FIGURE 61 | INDUSTRIAL REVOLUTION ROW HOUSING | WWW.HISTORYCRUNCH.COM

DUE TO THE LACK OF VITAL BASIC FEATURES SUCH AS RUNNING WATER, AIR CIRCULATION, OR SANITATION, THESE SLUM LIKE ROW HOUSES WERE DISEASE RIDDEN AND HYGIENE WAS ALWAYS LOW. THIS POLLUTION WOULD BE SPREAD INTO THE SURROUNDING CITY MAKING THESE AREAS TERRIBLE PLACES TO LIVE.

DESPITE THESE DRAWBACKS, THESE TIGHT NEIGHBORHOODS CAN BE SEEN AS THE BACKBONE FOR MANY CULTURAL NEIGHBORHOODS THROUGHOUT THE UNITED STATES TODAY.

HISTORICAL/SOCIAL CONTEXT - DWELLINGS THROUGH HISTORY

IT WAS NOT UNTIL WORKERS RIGHTS WERE PASSED IN THE MID 1800S THAT LIVING CONDITIONS SLOWLY STARTED TO IMPROVE. HOWEVER THESE CONDITIONS WOULD LAST UNTIL THE MID 1900S.

IT WAS NOT UNTIL 1901 WHEN NYC PASSED THE NEW YORK STATE TENEMENT HOUSE ACT. THIS ACT BANNED THE CONSTRUCTION OF MANY OF THE SLUM LIKE STRUCTURES THAT MADE UP A MAJORITY OF THE HOUSING OPPORTUNITIES WITHIN THE CITY. (SOCIAL WELFARE HISTORY PROJECT, 2018) WITH THIS LAW BEING PASSED, NEW CONSTRUCTION WOULD BE REQUIRED TO HAVE FEATURES SUCH AS OUTWARD FACING WINDOWS, VENTILATION, FIRE EXISTS, REST ROOMS, ETC.

AFTER THE NEW YORK STATE TENEMENT HOUSE ACT PASSED, CONDITIONS SLOWLY STARTED TO IMPROVE, AND MANY NEW LAWS WERE BEING PUT INTO PLACE.

HISTORICAL/SOCIAL CONTEXT - DWELLINGS THROUGH HISTORY

SOME OF THESE LAWS THAT WERE ENACTED TO HELP THE HOUSING SITUATION IN THE USA INCLUDE:

1926: NEW YORK LIMITED DIVIDEND HOUSING COMPANY ACT - THIS PROVIDED THE COUNTRY'S FIRST SIGHT AT AN AFFORDABLE HOUSING SYSTEM.

1934: THE FEDERAL HOUSING ADMINISTRATION IS FORMED - INSURES MORTGAGES FOR HOMES/MULTI FAMILY HOUSING

1937: HOUSING ACT OF 1937 - CREATES PUBLIC HOUSING FOR LOW INCOME INDIVIDUALS

1942 - THE EMERGENCY PRICE CONTROL ACT IS ENACTED - THIS CREATED A FEDERAL RENT CONTROL TO PREVENT PRICE GOUGING.

1944 - GI BILL GOES INTO EFFECT POST WWII - THIS ALLOWS FOR VETERANS TO PURCHASE HOMES IN THE USA.

1968 - THE FAIR HOUSING ACT IS ENACTED - THIS PREVENTS DISCRIMINATION IN HOUSING/ LENDING IN THE USA

1974 - THE HOUSING AND COMMUNITY DEVELOPMENT ACT OF 1974 - THIS ENACTS THE SECTION 8 HOUSING PROGRAM IN THE USA.

HISTORICAL/SOCIAL CONTEXT - DWELLINGS THROUGH HISTORY

1982: RONALD REGAN CREATES THE LOW INCOME TAX CREDIT - THIS WAS A PRIMARY SOURCE OF FUNDING WHEN IT CAME TO LOW COST HOUSING, AND STILL IS TO THIS DAY.

2007: HOUSING MARKET CRASH - MILLIONS OF HOMES FORECLOSED UPON.

2012 - OBAMA ENACTS THE RENTAL ASSISTANCE DEMONSTRATION PROGRAM - THIS TRANSITIONS PUBLIC HOUSING INTO PRIVATE SECTION 8 HOUSING

ALL CONTENTS SUPPLIED BY (151 YEARS OF AMERICAS HOUSING HISTORY, 2018)

AND WITH THIS LIST OF ENACTMENTS WE CAN SEE A TREND, AT FIRST MANY LAWS ARE BEING CREATED TO IMPROVE THE QUALITY OF DWELLING FOR MANY HOUSING SYSTEMS, WHILE NEARING MORE RECENT YEARS MANY LAWS ARE ENACTED TO FOCUS UPON LOW INCOME INDIVIDUALS. WHILE THESE ARE OF VITAL ROLES WITHIN OUR SOCIETY, SECTION 8 HOUSING GENERALLY REFERS TO THOSE WHO HAVE LOWER OVERALL ANNUAL INCOME THEN A MAJORITY OF THE POPULATION. AND WITH MY STUDY AN OVERALL INCOME IS NOT THE PROBLEM, IT'S THE HIGH AMOUNT OF DEBT ASSOCIATED WITH AN INDIVIDUALS INCOME LEVEL. WITH THIS I AM FINDING IT BEST TO BE FOCUSING THIS PROJECT IN THE PRIVATE SECTOR RATHER THEN THROUGH GOVERNMENT SUBSIDIZED PROGRAMS.

HISTORICAL/SOCIAL CONTEXT - DWELLING SIZE THROUGHOUT HISTORY

THROUGH RECENT HISTORY THE AVERAGE SIZE OF HOMES IN THE USA HAS BEEN INCREASING AT A CONSTANT RATE.

IN 1920, A STANDARD HOUSE IN THE USA HAD AN AVERAGE SQUARE FOOTAGE OF 1,048 SQFT, TODAY THAT NUMBER IS OVER 2,650 SQFT. (EDITORS, 2016). AT THIS RATE HOMES WOULD BE AT OVER 3,200 SQFT IN 2050. THESE NUMBERS HAVE REASONING BEHIND THEM, WITH THE EVER INCREASING GDP OF OUR COUNTRY, MORE AMERICANS CAN AFFORD LARGER HOUSES, AND THEY ARE REAPING THE REWARDS. BUT WHAT ABOUT FOR TODAY'S YOUNGER GENERATIONS? WE ARE NOT MAKING NEARLY AS MUCH AS OUR PARENTS DID WHEN THEY WERE OUR AGE, AND AT OUR RATE OF DEBT WE WILL NOT BE ABLE TO AFFORD HOMES THAT LARGE WITHOUT NEEDING TO CUT BACK IN OUR PARTS OF OUR FINANCIAL LIVES.

AND WHILE THESE NUMBERS MAY REFER TO OVERALL HOME SIZES THROUGHOUT HISTORY INSTEAD OF APARTMENT SIZES, THE RATE OF CHANGE CAN BE SEEN. TODAY, AMERICANS ARE OCCUPYING LARGER UNITS THEN THEY HAVE BEEN IN RECENT DECADES. WHILE THIS ISN'T AN ISSUE IF YOU WISH TO, THERE SHOULD BE AN OPTION FOR THOSE OF US WHO DO NOT REQUIRE THIS AMOUNT OF SPACE, AN EXCEPTION TO THE INDUSTRY STANDARD.

HISTORICAL/SOCIAL CONTEXT - DWELLING SIZE THROUGHOUT HISTORY

AT THE TOPIC OF HOUSING SIZES IT'S WORTH NOTING MINIMUM SIZE REQUIREMENTS OF MODERN APARTMENTS. CARMEL PLACE WHICH IS A PROJECT OUT OF NYC THAT I COVERED IN ONE OF MY CASE STUDIES HAD TO BYPASS NEW YORK'S REQUIREMENTS OF MINIMUM UNIT SIZE.



FIGURE 62 | CARMEL PLACE LIVING ROOM | [HTTP://NARCHITECTS.COM/WORK/CARMEL-PLACE/](http://narchitects.com/work/carmel-place/)

UPON READING INTO THIS I FOUND THAT NYC DOES NOT HAVE BUILDING STANDARDS FOR APARTMENT SIZES, HOWEVER IT DOES HAVE STANDARDS WHEN IT COMES TO USABLE SPACES (BEDROOMS, REST ROOMS, ETC.). THE MINIMUM SIZE OF 400 SQFT WAS REMOVED IN 2016 TO ALLOW FOR DEVELOPERS TO DEVELOP MICRO APARTMENTS (FONTAN, 2018)

HISTORICAL/SOCIAL CONTEXT - DWELLING SIZE THROUGHOUT HISTORY

IT IS HOWEVER WORTH NOTING THAT THIS MINIMUM UNIT SIZE OF 400 SQFT IS STILL IN PLACE WHEN BUILDING AFFORDABLE HOUSING, SECTION 8 HOUSING, SENIOR HOUSING, AND DEVELOPMENTS IN CERTAIN AREAS. THIS IS TO PREVENT THE SLUM LIKE CONDITIONS BEING BUILT FOR THOSE WHO CANNOT AFFORD ANYTHING ELSE.

I FIND THAT THIS CLAUSE IN THE AGREEMENT TO BE INCREDIBLY IMPORTANT, AS I HAVE BEEN TRYING TO FIGURE OUT HOW THIS NEW TYPOLOGY WOULDN'T CREATE AN EXCUSE FOR DEVELOPERS TO ABUSE THIS SYSTEM FOR LOW INCOME FAMILIES.



FIGURE 63 | MICRO APARTMENT EXAMPLE | [HTTPS://JORGEFONTAN.COM/MICRO-APARTMENTS-MINIMUM-APARTMENT-SIZE-NYC/](https://jorgefontan.com/micro-apartments-minimum-apartment-size-nyc/)

HISTORICAL/SOCIAL CONTEXT - DWELLING SIZE THROUGHOUT HISTORY

UPON SOME INDIVIDUAL STUDIES ON MY OWN TIME, I CAME UPON AN INTERESTING ARTICLE COVERING THE USE OF DIFFERENT TYPES OF BATH TUBS WITHIN HOMES. WHILE THIS MAY SEEM LIKE AN ABSTRACT IDEA THIS IS A GREAT LOOK INTO HOW AN INDIVIDUAL USES THEIR HOME. A BATH IS AN ACTIVITY THAT MANY USE AS A WAY TO RELAX, AND TAKING A LOOK AT HOW INDIVIDUALS FIND WAYS TO RELAX IN THEIR HOMES IS A GREAT INSIGHT INTO THIS STUDY.

TAKING A BATH IS A GREAT WAY MANY INDIVIDUALS FIND TO RELAX AFTER A STRESSFUL DAY, AND THAT MANY HOME OWNERS FIND A TUB TO BE A NECESSARY IMPLEMENT INTO ANY HOME.

ACCORDING TO THE ARTICLE, IN RECENT YEARS INDIVIDUALS SPEND AS MUCH AS 2.4X AS MUCH ON MASTER BATHROOMS THEN THEY DO ON LIVING ROOMS (PUNIEWSKA, 2019). THIS CAN BE SEEN AS HOW AN INDIVIDUAL USES THEIR HOME NOW A DAYS. YEARS AGO ONE MAY ENTERTAIN FRIENDS BY HAVING THEM OVER FOR DINNER OR ENTERTAINING THEM IN THEIR DINING ROOM OR LIVING ROOM. TODAY MANY MAY ENTERTAIN GUESTS OUTSIDE OF THE HOUSE, OR BY DOING OTHER ACTIVITIES. INSTEAD OF USING THEIR HOMES FOR ENTERTAINMENT, IT COULD BE SEEN FROM THIS ARTICLE THAT MANY USE THEIR HOMES AS AN ESCAPE AND A PLACE TO RELAX INSTEAD OF A PLACE TO ENTERTAIN.

HISTORICAL/SOCIAL CONTEXT - DWELLING SIZE THROUGHOUT HISTORY

THIS HOWEVER SHOULD NOT BE TAKEN WITHOUT CONTEXT, AS IN THE ARTICLE IT ALSO LINKED TO ANOTHER PUBLICATION THAT WAS COVERING MANY INDIVIDUALS DITCHING BATHTUBS FOR WALK IN SHOWERS, AS TO CREATE THE ILLUSION OF SPACE WITHIN THEIR SMALL APARTMENTS (KRASNY, 2017) A SHOWER CAN FILL THE NEED OF A BATH TUB THOUGH, WITH MANY OF THE FEATURES THAT THEY ARE BEING BUILT WITH NOW A DAYS. HEATED FLOORS, MULTIPLE SPRAYERS, ETC. ALL CREATE AN ALMOST SPA LIKE EXPERIENCE FOR USERS TO RELAX IN THEIR HOMES. MANY FIND THEIR HOMES AS THEIR SAFE SPACES TO RETREAT TO AFTER A STRESSFUL DAY, INSTEAD OF A PLACE TO DEFINE THEIR PERSONALITIES WHEN ENTERTAINING OTHERS.



FIGURE 64 | SHOWER WITHIN A SMALL BATHROOM |
[HTTPS://WWW.NYTIMES.COM/2017/12/26/REALESTATE/REPLACING-TUB-WITH-SHOWER.HTML](https://www.nytimes.com/2017/12/26/realestate/replacing-tub-with-shower.html)

HISTORICAL/SOCIAL CONTEXT - HOW ARE PEOPLE DWELLINGS USED

SO WITH THAT EXAMPLE OF BATH TUBS BEING USED WITHIN HOMES AS A PLACE OF RELAXATION, HOW ELSE ARE HOMES BEING USED TODAY? FOR THIS EXAMPLE I FIND IT IMPORTANT TO LOOK AT EXAMPLES FROM AN URBAN CENTER, AS HOMES BEING USED IN RURAL NORTH DAKOTA MAY BE USED VERY DIFFERENTLY THEN THAT OF A HOME IN NYC. THEY ARE ALL A PLACE OF DWELLING, BUT EXCEPT FOR SLEEPING AND BATHING, WHAT ELSE DO INDIVIDUALS DO IN THEIR HOMES?

THE FIRST FACTOR THAT MUST BE ASSESSED IS HOW MANY PEOPLE YOU WISH TO LIVE WITH. IF YOU HAVE A SPOUSE OR A ROOM MATE, MORE SPACE IS NEEDED. IF YOU HAVE MORE THEN ONE OCCUPANT <500 SQFT MAY BE HARD TO MANAGE, AS EVERYONE NEEDS THEIR OWN INDIVIDUAL SPACE. HOWEVER IF YOU ARE ALONE, LESS THEN 500 SQFT CAN BE MANAGEABLE. NOW WITHIN THAT 500 SQFT WHAT TYPES OF SPACES WOULD YOU TYPICALLY FIND? HERE A SIMPLE FLOOR PLAN FOR A 500 SQFT APARTMENT IS SEEN. NOTICE THE DIFFERENT AREAS DESIGNED FOR DIFFERENT TASKS. EACH APARTMENT HAS A BATHROOM, A KITCHEN, A BEDROOM OR SLEEPING AREA, AND A LIVING ROOM.

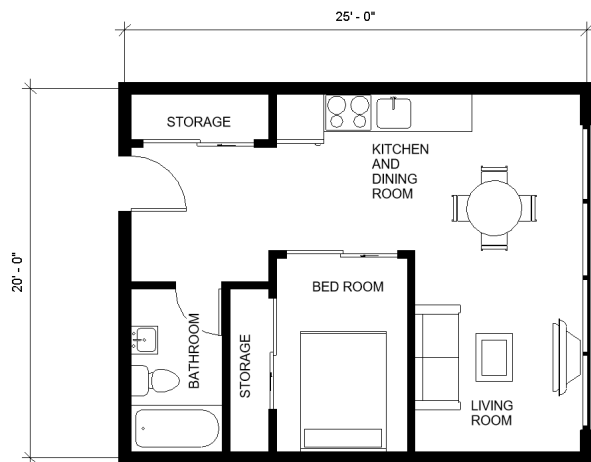


FIGURE 65 | 500 SQFT APARTMENT | DJV

HISTORICAL/SOCIAL CONTEXT - RELATION TO SOCIAL TRENDS/ DEVELOPMENTS WITHIN SOCIETY

RECENTLY, NEWER GENERATIONS HAVE AVERTED FROM PREVIOUS TRENDS FOLLOWED BY OUR PARENTS, AND THOSE BEFORE US. THE IDEA OF LESS IS MORE, ALONG WITH TRADING MORE MATERIAL POSSESSIONS FOR EXPERIENCES HAS BECOME WIDE SWEEP ACROSS THEN NATION. TODAY'S YOUNG PROFESSIONALS HAVE WIDELY DIFFERENT SPENDING HABITS FROM OUR PARENTS BEFORE US, SO WE NOT CREATE A HOUSING CONDITION THAT MEETS THOSE VALUES. WITH THESE IDEAS AND LIFESTYLES IN MIND. I STRIVE TO DESIGN A NEW TYPE OF TYPOLOGY THAT ALLOWS FOR TODAY'S NEW GENERATION TO EXCEL IN THEIR EVERY DAY LIVES AND HELP MEET BOTH PERSONAL AS WELL AS FINANCIAL GOALS IN THEIR LIVES.

OLDER GENERATIONS DO NOT FACE THE SAME TYPE OF OBSTACLES IN LIFE. PROBLEMS SUCH AS SOCIAL ACCEPTANCE, STUDENT LOANS, AND INDIVIDUALISM ARE WHAT DRIVE TODAY'S SOCIETY. SO LETS CREATE A SYSTEM THAT SEES THESE PROBLEMS AND HELPS CREATE A SOLUTION

SITE CONTEXT/ANALYSIS - SITE LOCATION

NASHVILLE

NASHVILLE IS THE CAPITAL OF TENNESSEE, AND HAS A TOTAL POPULATION OF OVER 650,000 PEOPLE. GIVEN IT IS ONE OF THE NATION'S FASTEST GROWING METROPOLITAN AREA, THAT NUMBER WILL KEEP RISING. DEVELOPMENT WITHIN THE CITY IS EXPLODING, WITH OVER 2 DOZEN TOWER CRANES IN THE CITY AT THIS MOMENT. TO THIS I FOUND THAT NASHVILLE WOULD BE THE PERFECT LOCATION TO SOURCE MY PROJECT OUT OF, GIVEN THE RISING COSTS OF LIVING AND LIMITED OPTIONS FOR RECENT GRADUATES. NASHVILLE COMES IN AT TENNESSEE'S MOST POPULATED CITY WITH MEMPHIS COMING IN 2ND, IT IS BUILT ALONG THE CUMBERLAND RIVER AND IS ONE OF THE MUSIC CAPITALS OF THE USA.

THE SITE CHOSEN FOR THIS PROJECT IS LOCATED NEXT TO A MAJOR INTERSECTION IN DOWNTOWN NASHVILLE. THE ORIGINAL SITE WAS MEANT TO BE PLACED WITHIN THE ROUNDABOUT AS WELL AS TAKING UP A 1 ACRE PLOT DIRECTLY NEXT TO THE ROUND ABOUT. HOWEVER UPON EXAMINATION IN PERSON, IT WAS DEEMED THAT BUILDING WITHIN THE ROUNDABOUT CARRIED NO BENEFICIAL VALUE. IT WOULD ONLY CREATE PROBLEMS WITH CONGESTION AND LINES OF SITE INTO THE CITY.



FIGURE 66 | DOWNTOWN VIEW OF NASHVILLE | DJV

SITE CONTEXT/ANALYSIS - SITE LOCATION

ORIGINAL SITE LOCATION

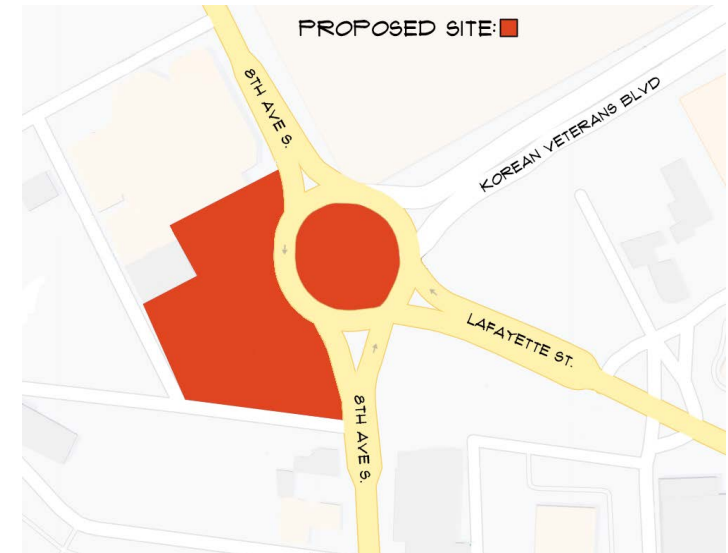


FIGURE 67 | OLD SITE PROPOSAL | DJV

NEW SITE LOCATION

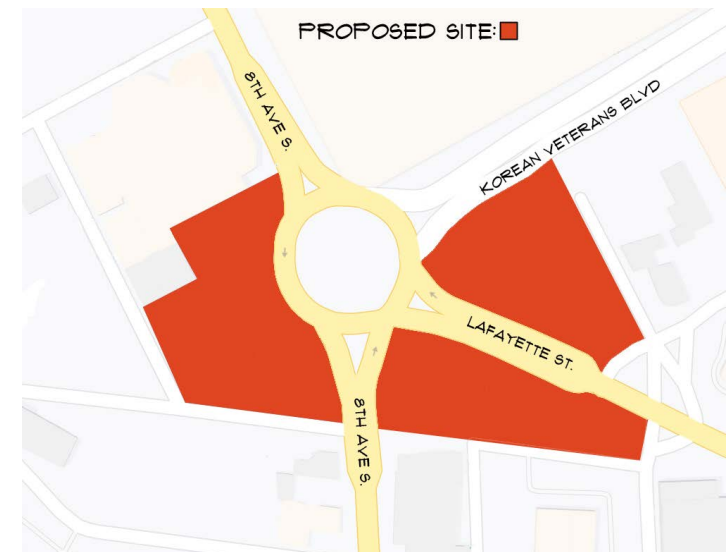


FIGURE 68 | NEW SITE PROPOSAL | DJV

SITE CONTEXT/ANALYSIS - SITE LOCATION

WITH THE ADDED LAND ON THE SITE, CONSTRUCTION WILL BE EASIER AS THERE IS DIRECT ACCESS TO THE SITE LOCATED OFF THE MAIN ROADS INTO THE CITY, AND NO MAJOR STREETS WILL NEED TO BE CLOSED DOWN. LOCATED TO THE NORTH OF THE SITE IS THE NASHVILLE CONVENTION CENTER, AND JUST WEST IS THE WESTIN HOTEL. TO THE EAST AND WEST ARE AREAS CURRENTLY BEING REDEVELOPED, AND IT IS ESTIMATED THAT WITHIN 10 YEARS EVERYTHING AROUND THE SITE WILL BE REDEVELOPED WITH MULTI USE DEVELOPMENTS. ALL BUILDINGS IN THE FIGURE BELOW THAT ARE NOT LABELED WILL MOST LIKELY BE DEMOLISHED WITHIN THE NEXT 10 YEARS.

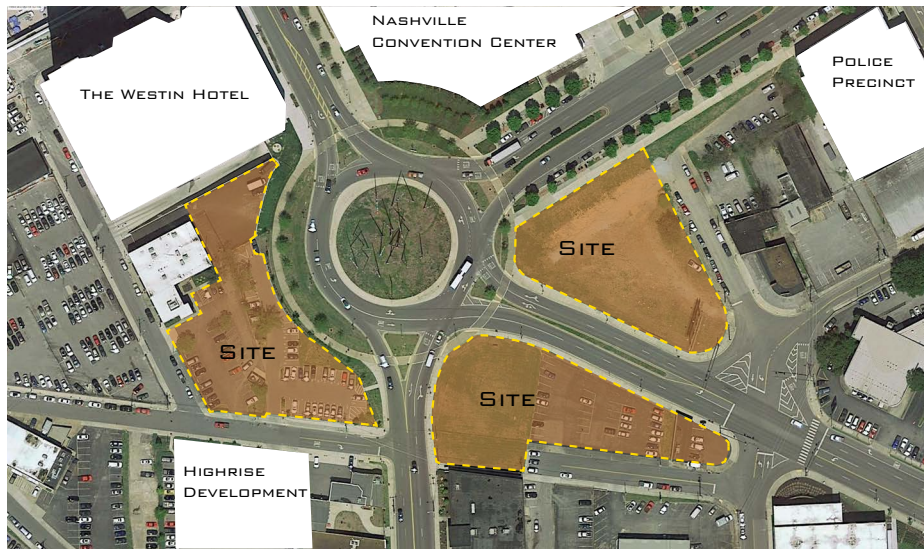


FIGURE 69 | SITE OVERVIEW 1 | DJV

SITE SIZES - 1 ACRE EACH - 3 ACRES TOTAL

LOCATED JUST SOUTH OF THE SITE IS A HIGH-RISE DEVELOPMENT THAT WAS JUST STARTING CONSTRUCTION ON FOUNDATIONS WHEN I WAS PERFORMING MY SITE VISIT. IT IS PLANNED TO BE 25 STORIES HIGH.

SITE CONTEXT/ANALYSIS - SITE LOCATION

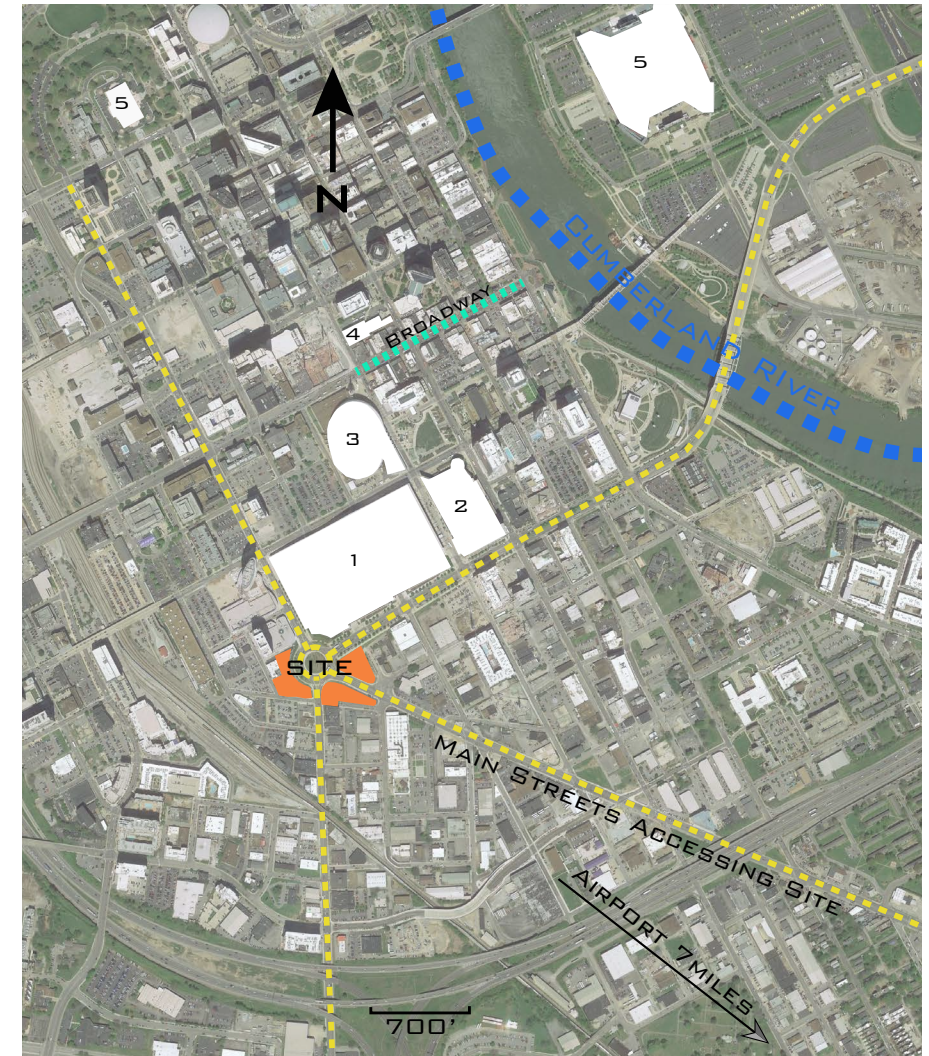


FIGURE 70 | SITE OVERVIEW 2 | DJV

LISTED STRUCTURES

- 1 MUSIC CITY CENTER
- 2 COUNTRY MUSIC HALL OF FAME
- 3 BRIDGESTONE ARENA
- 4 THE GRAND OLE' OPRY
- 5 STATE CAPITOL
- 6 NISSAN STADIUM

SITE CONTEXT/ANALYSIS - SITE ANALYSIS

ANALYSIS

HERE A FEW OBSERVATIONS ABOUT THE SITE AS IT SITS ARE OBSERVED, NOTICE THE SECONDARY ROADS OFF OF THE ROUNDABOUT, AND HOW THE SITE CAN BE ACCESSED FROM. DUE TO THIS CONSTRUCTION WILL NOT NEED TO CLOSE DOWN ANY PRIMARY ROADS DURING MOST OF THE PROCESS.

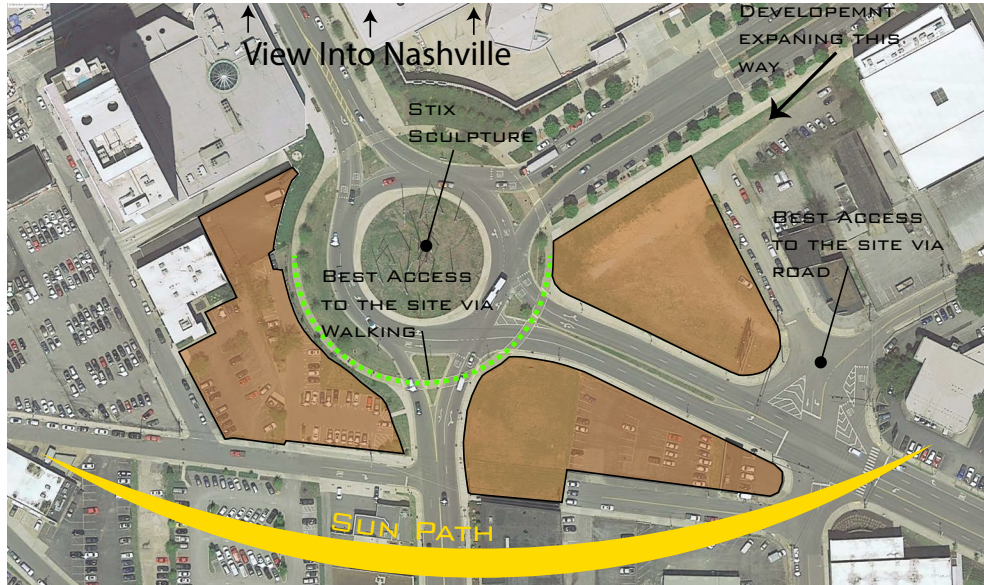


FIGURE 71 | SITE ANALYSIS | DJV

SITE CONTEXT/ANALYSIS - WEATHER

NASHVILLE HAS A FAIRLY MODERATE TEMPERATURE, THE HIGHS AND LOWS CAN BE SEEN HERE:

MONTH:	LOW (F.):	HIGH (F.):
JANUARY	27.9	45.6
FEBRUARY	31.2	51.4
MARCH	39.4	60.7
APRIL	47.1	69.8
MAY	56.7	77.5
JUNE	65	85.1
JULY	69.5	88.7
AUGUST	68	87.8
SEPTEMBER	61	81.5
OCTOBER	48.6	71.1
NOVEMBER	39.5	59
DECEMBER	31.5	49.4

"CLIMATE FOR NASHVILLE, TENNESSEE." CLIMATE IN NASHVILLE, TENNESSEE, [HTTP://WWW.RSSWEATHER.COM/CLIMATE/TENNESSEE/NASHVILLE/](http://www.rssweather.com/climate/Tennessee/Nashville/).

WIND SPEEDS THROUGHOUT THE REGION VARY BETWEEN 6-10 MPH.

THEY DIRECTION OF THE WIND ARE AS FOLLOWS, HOWEVER THERE IS A CONSTANT RATE OF WIND DIRECTION IN CORRELATION TO THE TIME OF THE YEAR. THE DIRECTION HAPPENS THROUGHOUT THE YEAR.

- NORTH: 30%
- EAST: 15%
- SOUTH: 40%
- WEST: 15%

SITE CONTEXT/ANALYSIS - SITE BOUNDARIES/ZONING

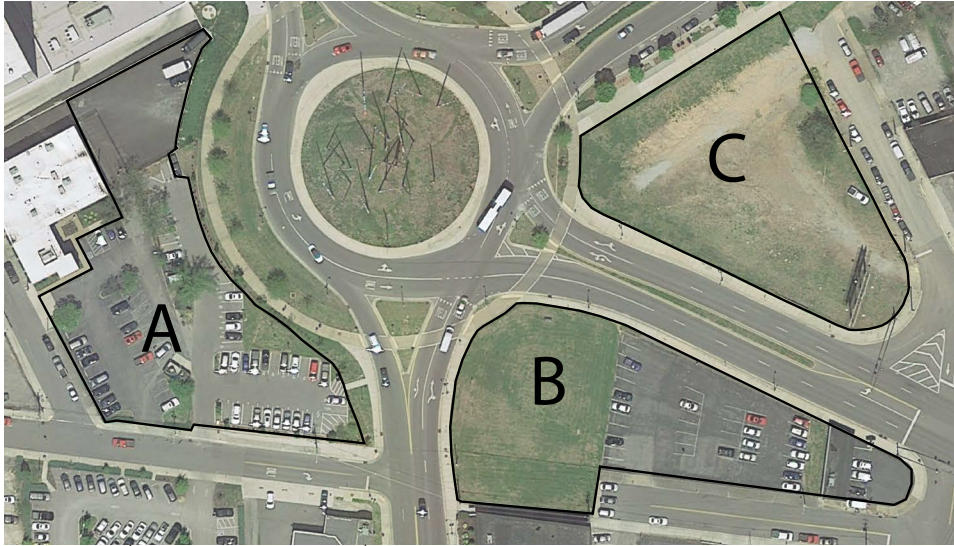


FIGURE 72 | SITE ZONING AREAS | DJV

SITE A - 1 ACRE

ADDRESS: 800 LEA AVE, NASHVILLE

PARCEL ID: 09310002500, 09310002400,
09310003400

SITE B - 1 ACRE

ADDRESS: 410 8TH AVE S, NASHVILLE

PARCEL ID: 09310007000, 09310006700,
09310006600, 09310006500

SITE C - 1 ACRE

ADDRESS: 0 8TH AVE S

PARCEL ID: 09310049400, 09310049100,
09310007300, 09310007200,

SITE CONTEXT/ANALYSIS - SITE LOCATION - SURROUNDING CONTEXT

RESTAURANTS:

THE SITE IS LACKING IN RESTAURANTS AND OTHER CONSUMER BASED BUSINESSES, GENERALLY SPEAKING MOST OF THAT ATTENTION IS FOCUSED AROUND THE BROADWAY PART OF THE DOWNTOWN AREA.

CONVENTION CENTER:

THE SITE IS LOCATED WITH CLOSE PROXIMITY TO THE MUSIC CITY CENTER, WITH THIS PROXIMITY THE SITE SEES QUITE A BIT OF TRAFFIC FROM CONVENTIONS

SURROUNDING POCKETS OF DEVELOPMENT:

SURROUNDING THE SITE ARE A NUMBER OF SMALL PATCHES OF DEVELOPMENT, INCLUDING THESE THERE ARE A GROUP OF RESTAURANTS AND BARS ALL OWNED BY THE SAME COMPANY ABOUT 3 BLOCKS EAST OF THE SITE, THESE TYPES OF COLLECTIONS SEEM TO BE REPETITIVE THROUGHOUT THE CITY.

BROADWAY:

BROADWAY, WHICH IS ABOUT .6 MILES FROM THE SITE, IS THE HUB OF ALL NIGHTLIFE IN THE CITY, THE STREET IS FILLED WITH DIFFERENT BARS, STORES, AND ENTERTAINMENT. MOST FOOT TRAFFIC IN THE DOWNTOWN AREA IS FOCUSED AROUND THIS PART OF THE CITY.

SITE CONTEXT/ANALYSIS - INFORMATION ON THE SITE:

PUBLIC TRANSPORT:

THE TOPIC OF PUBLIC TRANSPORT SHOULD BE BRIEFLY COVERED IN THIS STUDY. NASHVILLE HAS NO TYPES OF PUBLIC TRANSPORT EXCEPT FOR A BUS SYSTEM THAT MANY RESIDENTS DON'T FIND VERY USEFUL. BECAUSE OF THIS MOST RESIDENTS TEND TO EITHER DRIVE OR BIKE/WALK, WITH UBER/LYFT BEING VERY COMMON. THERE HAS BEEN TALKS OF A LIGHT RAIL SYSTEM BEING BUILT TO TRANSPORT RESIDENTS TO THE AIRPORT, BUT THAT HASN'T GAINED MUCH TRACTION AND IS YEARS OUT OF COMPLETION.

QUALITY OF LIGHT:

NASHVILLE HAS FAIRLY HEALTHY WEATHER THROUGHOUT THE YEAR, WINTERS CAN GET SNOW, BUT IT GENERALLY DOESN'T STAY. WITH THIS THERE TENDS TO BE OVERCAST QUITE A BIT OF THE TIME, OTHER THEN THAT THE SKIES ARE FAIRLY CLEAR.

HUMAN CHARACTERISTICS/SITE CHARACTER:

EVEN THOUGH THE SITE IS BUILT WITHIN CLOSE PROXIMITY TO A FEW QUITE SIZEABLE STRUCTURES, THE HUMAN FEEL TO THE SITE IS VERY INTERPERSONAL. DUE TO SETBACKS AND THE OVERALL STYLE OF SURROUNDING ARCHITECTURE, THE SITE IS VERY COMFORTING. THIS IS ONE OF THE PRIMARY REASONINGS FOR CHOOSING THIS SITE. THE SCULPTURE WORK IN THE CENTER OF THE ROUNDABOUT CREATES A FOCAL POINT FROM MULTIPLE VIEWPOINTS AROUND THE CITY.

SITE CONTEXT/ANALYSIS - VIEWS FROM THE SITE

LOCATED JUST NORTH OF THE SITE IS BOTH THE WESTIN HOTEL AS WELL AS THE MUSIC CITY CENTER NASHVILLE CONVENTION CENTER. THESE TWO STRUCTURES HAVE A VERY RECOGNIZABLE FIGURE TO THEM, AND SHOULD BE EXPRESSED IN THE DESIGN OF THE FINAL STRUCTURE.

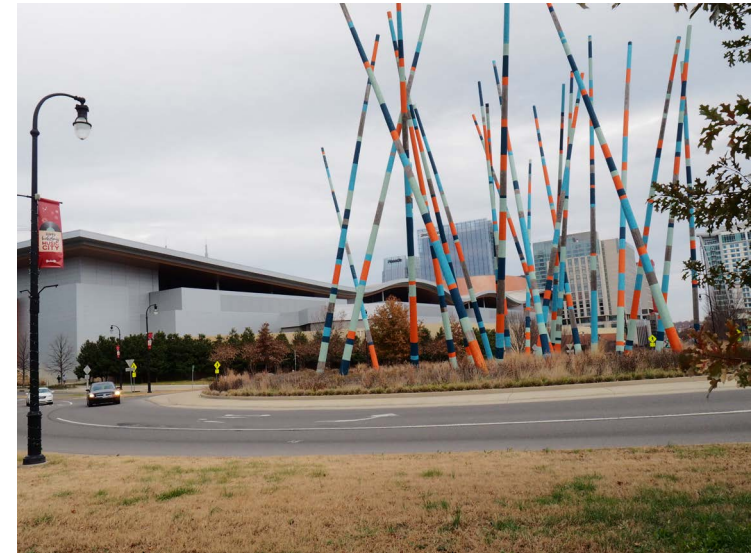


FIGURE 73 | SITE PHOTO LOOKING EAST | DJV

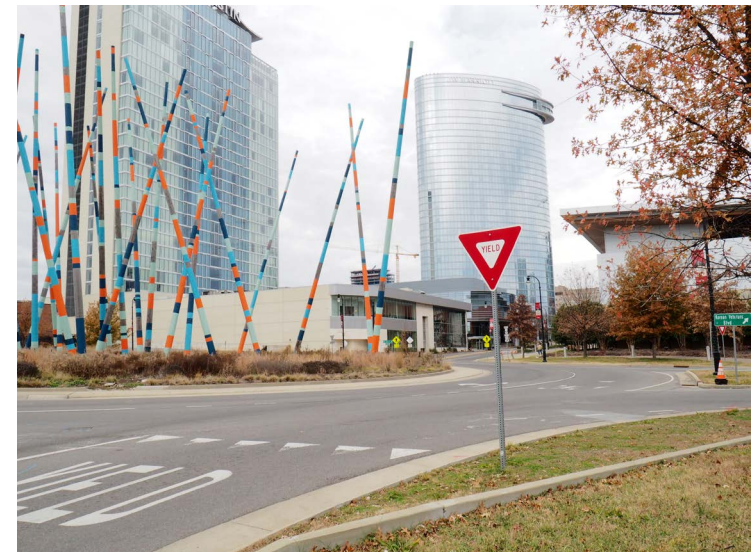


FIGURE 74 | SITE PHOTO LOOKING NORTH WEST | DJV

SITE CONTEXT/ANALYSIS - VIEWS FROM THE SITE

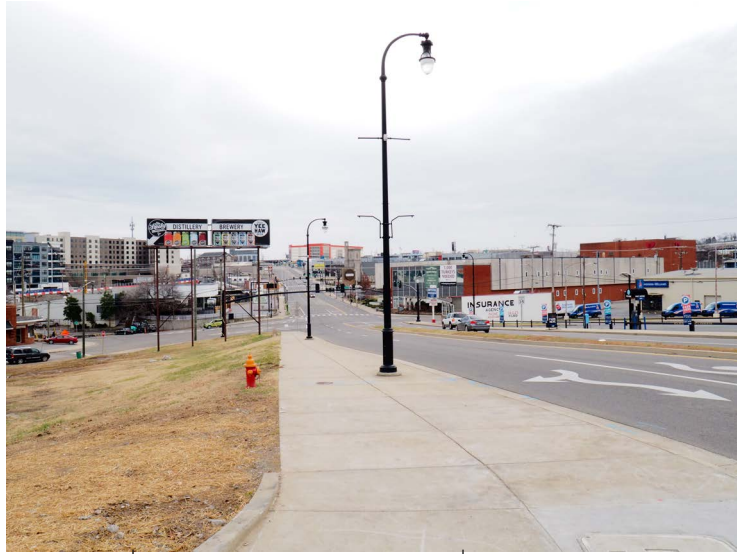


FIGURE 75 | SITE PHOTO LOOKING SOUTH | DJV



FIGURE 76 | SITE PHOTO LOOKING SOUTH - AERIAL | DJV

SITE CONTEXT/ANALYSIS - VIEWS FROM THE SITE



FIGURE 77 | SITE PHOTO LOOKING EAST 2 | DJV



FIGURE 78 | SITE PHOTO LOOKING NORTH | DJV

SITE CONTEXT/ANALYSIS - PEDESTRIAN CIRCULATION

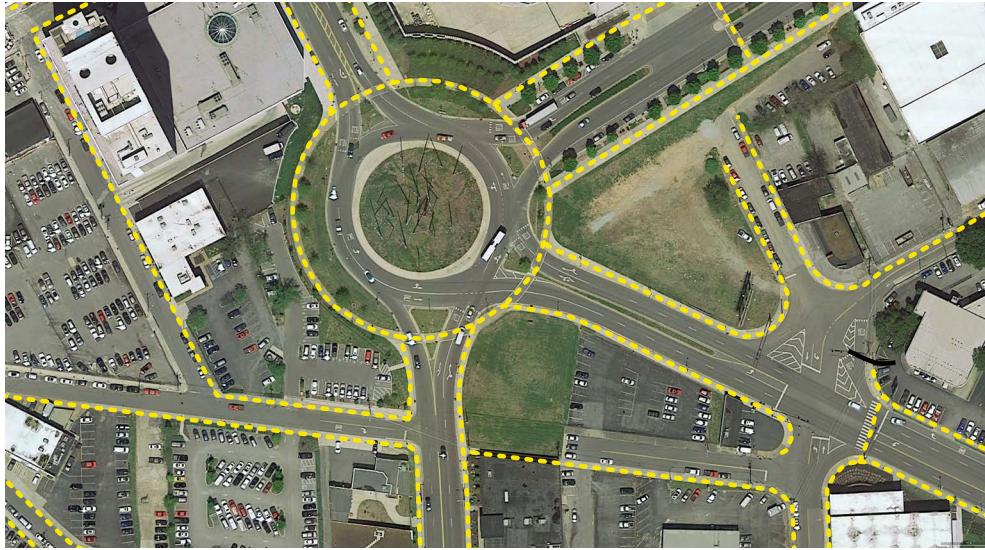


FIGURE 79 | SITE CIRCULATION | DJV

PEDESTRIAN MOVEMENT - AS SEEN IN YELLOW

PEDESTRIAN CIRCULATION ON THE SITE IS COVERED BY THE YELLOW DASHED LINE. CIRCULATION IS FAIRLY CONSTANT YET NOT AS HEAVY AS OTHER PART OF NASHVILLE, AS THIS AREA IS NOT YET AS DEVELOPED AS OTHER DISTRICTS OF THE CITY. HOWEVER DUE TO THE HIGH AMOUNT OF DEVELOPMENT IN THE CITY IT IS PREDICTED THAT THIS AREA WILL SEE A HEIGHTENED AMOUNT OF CIRCULATION IN LATER YEARS.

GIVEN THAT THERE IS A CONVENTION CENTER LOCATED JUST NORTH OF THE SITE, DURING CONVENTIONS AND OTHER EVENTS FOOT TRAFFIC FROM VISITING GUESTS WILL INCREASE.

THERE IS A SETBACK FROM THE ROUNDABOUT OF ABOUT 30', THIS IS SAFETY MEASURE TO PROTECT PEDESTRIANS FROM THE HIGH TRAFFIC SURROUNDING THE SITE.

JAYWALKING:

JAYWALKING IS LEGAL IN NASHVILLE, SO CROSSWALKS ARE MORE OF A SUGGESTION. IN A NUMBER OF AREAS THROUGHOUT THE CITY, THERE ARE UNIQUE CROSSWALKS THAT GO DIRECTLY DIAGONAL THROUGH A 4 WAY INTERSECTION.

SITE CONTEXT/ANALYSIS - VEHICULAR TRAFFIC

VEHICULAR CIRCULATION

VEHICULAR TRAFFIC AROUND THE SITE IS HEAVY, YET CONSTANT. DUE TO BEING A ROUNDABOUT, CARS ARE IN CONSTANT MOTION FOR MOST OF THE TIME AROUND THE SITE. DESPITE THIS PEDESTRIAN TRAFFIC HAS LITTLE ISSUE TRAVERSING THE SITE.

VEHICULAR TRAFFIC PASSES THROUGH THE SITE AT AN AVERAGE RATE OF 960 CARS/HOUR. THESE NUMBERS EXPAND DURING RUSH HOUR, BUT DUE TO THE TIME OF MY SITE VISIT I WAS NOT ABLE TO VIEW THE SITE DURING THESE HOURS.

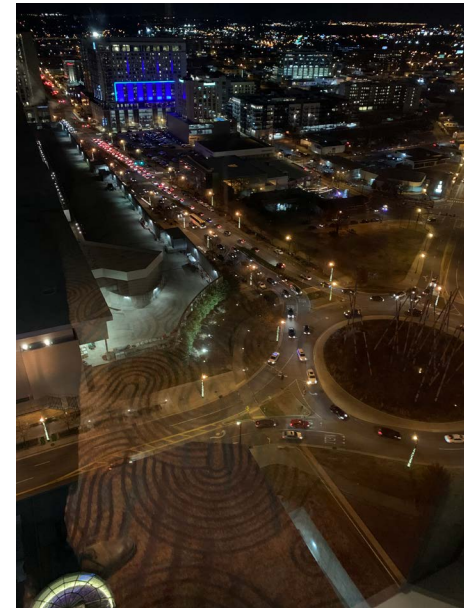


FIGURE 80 | SITE DURING A HOCKEY GAME | DJV

DURING EVENTS DOWNTOWN, IT WAS OBSERVED THAT POLICE CLOSE 8TH AVE S. TO REDIRECT TRAFFIC FROM THE BRIDGESTONE ARENA TO KOREANS VETERANS BLVD.

SITE CONTEXT/ANALYSIS - DEMOGRAPHICS

DEMOGRAPHICS:

NASHVILLE IS A SOMEWHAT DIVERSE CITY, SEEN HERE IS A BREAKDOWN OF THE DEMOGRAPHICS.

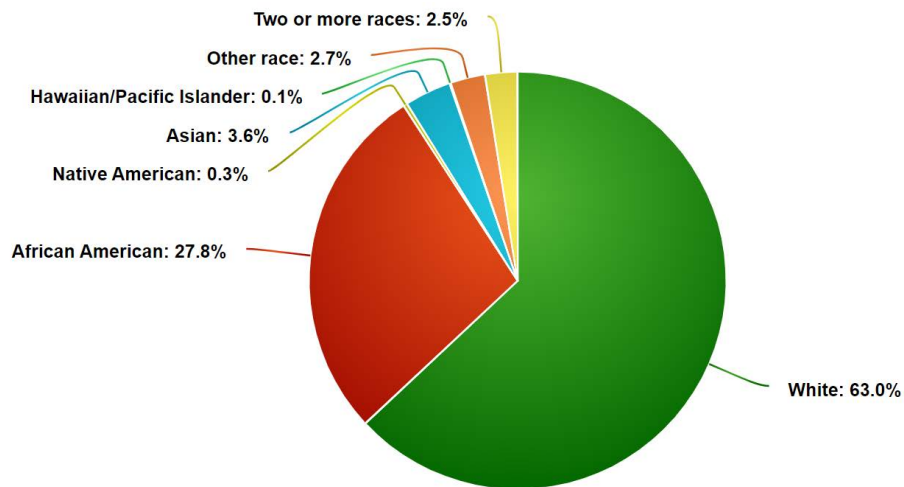


FIGURE B1 | DEMOGRAPHICS CHART | NUMBERS SUPPLIED BY [HTTP://WORLDPOPULATIONREVIEW.COM/US-CITIES/NASHVILLE-POPULATION/](http://WORLDPOPULATIONREVIEW.COM/US-CITIES/NASHVILLE-POPULATION/)

- **AVERAGE INCOME PER PERSON: \$35,830**
- **MEDIAN HOUSEHOLD INCOME: \$52,858**
- **PERCENTAGE OF CITIZENS WITH A BACHELORS DEGREE OR HIGHER: 38.43%.**

NUMBERS SUPPLIED BY [HTTP://WORLDPOPULATIONREVIEW.COM/US-CITIES/NASHVILLE-POPULATION/](http://WORLDPOPULATIONREVIEW.COM/US-CITIES/NASHVILLE-POPULATION/)

PERFORMANCE CRITERIA - OVERVIEW

THE **PERFORMANCE CRITERIA** OF THE SPACE, OR DECIDING HOW WELL THE SPACE IS USED IS VITAL WHEN CONFIGURING THE INITIAL SCHEMATIC DESIGN OF THE TYPOLOGY. SOME OF THE FACTORS THAT WILL BE EXAMINED ARE AS FOLLOWS:

- **SPACE ALLOCATION**
- **ENERGY CONSUMPTION**
- **ENVIRONMENTAL PERFORMANCE (LUMINOUS, THERMAL, ACOUSTICAL ENVIRONMENTS, ECOSYSTEM BALANCE)**
- **BEHAVIORAL PERFORMANCE (USAGE PATTERNS)**
- **PSYCHOLOGICAL IMPACT (AESTHETICS, SENSORY DE COMPLIANCE)**
- **COST**
- **SUMMARY OF CRITERIA**

PERFORMANCE CRITERIA - SPACE ALLOCATION

SPACE USED THROUGHOUT THE PROJECT IS OF VITAL IMPORTANCE, THROUGH THIS EARLY DESIGN DECISIONS CAN BE MADE. IT WAS CHOSEN TO CREATE THREE DIFFERENT MATRIX'S AS THESE FACILITIES WOULD OPERATE INDIVIDUALLY FROM EACH OTHER. A COMBINED MATRIX DIAGRAM IS ALSO AVAILABLE.

RESIDENTIAL SPACE

SPACE:	SQFT/EACH	AMOUNT
MICRO APARTMENTS	200-350	300-400
MULTI PERSONA APARTMENTS	350-500	50
LAUNDRY FACILITY	350	10
24 HOUR GYM	1000	2
SHARED REST ROOMS	200	20
SHARED KITCHEN	500	45
SHARED LIVING SPACE	500	45
OUTDOOR SPACE	1000	3
RESIDENT STORAGE UNITS	20	300
POOL AND SPA AREA	1500	1
LOBBY AREA	1000	2
BUSINESS CENTER	600	2
RECORDING STUDIOS	600	4
BIKE REPAIR/STORAGE	2000	1

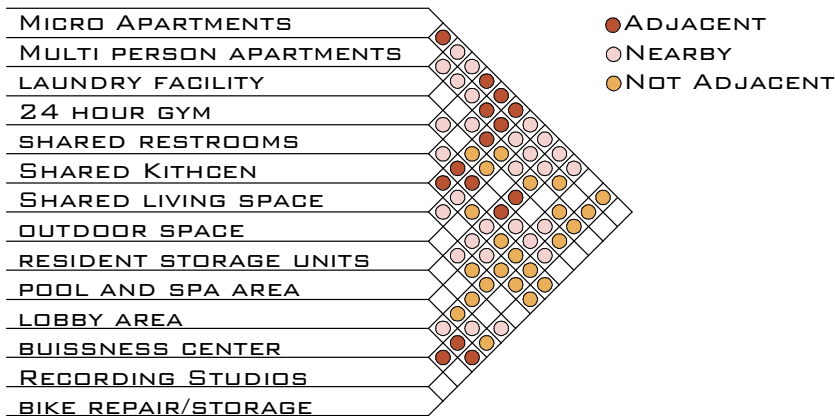


FIGURE 82 | RESIDENTIAL MATRIX DIAGRAM | DJV

PERFORMANCE CRITERIA - SPACE ALLOCATION

RETAIL/MIXED USE SPACE

SPACE:	SQFT/EACH	AMOUNT
RETAIL STORES	500-1500	30
ATRIUM/CIRCULATION SPACE	10,000+	1
PUBLIC REST ROOMS	1,000	4
MEETING SPACES	1000	2
RECORDING STUDIOS	1000	3
OUTDOOR SPACE	10,000+	1
EATING AREA	5,000	1
PERFORMANCE AREA	3,000	2
FOOD COURT STALLS	750	15

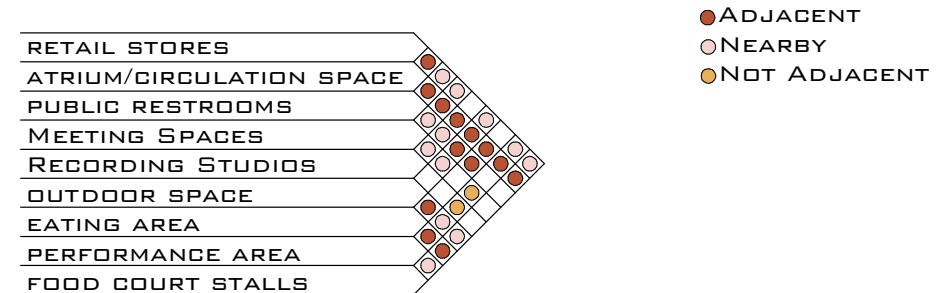


FIGURE 83 | RETAIL/MIXED USE MATRIX DIAGRAM | DJV

PERFORMANCE CRITERIA - SPACE ALLOCATION

SUPPORT SPACES

SPACE:	SQFT/EACH	AMOUNT
PARKING	10,000+	1
BIKE STORAGE	2,000	1
MOTORCYCLE PARKING	1,000	1
BUS STOP	500	1
UBER/LYFT PICKUP	500	2
RESIDENTIAL ENTRANCE	600	2
MECHANICAL	5,000	1
FACILITY SERVICES	2,000	1
SPRAY DOWN BAY	400	1
REST ROOMS	500	2
CIRCULATION SPACES	5,000+	1
RETAIL ENTRANCES	700	3

● ADJACENT
○ NEARBY
○ NOT ADJACENT

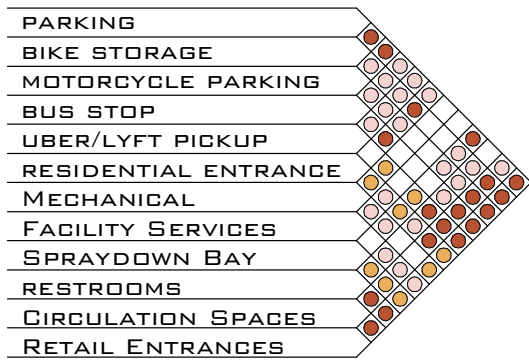


FIGURE 84 | SUPPORT SPACES MATRIX DIAGRAM | DJV

PERFORMANCE CRITERIA - SPACE ALLOCATION

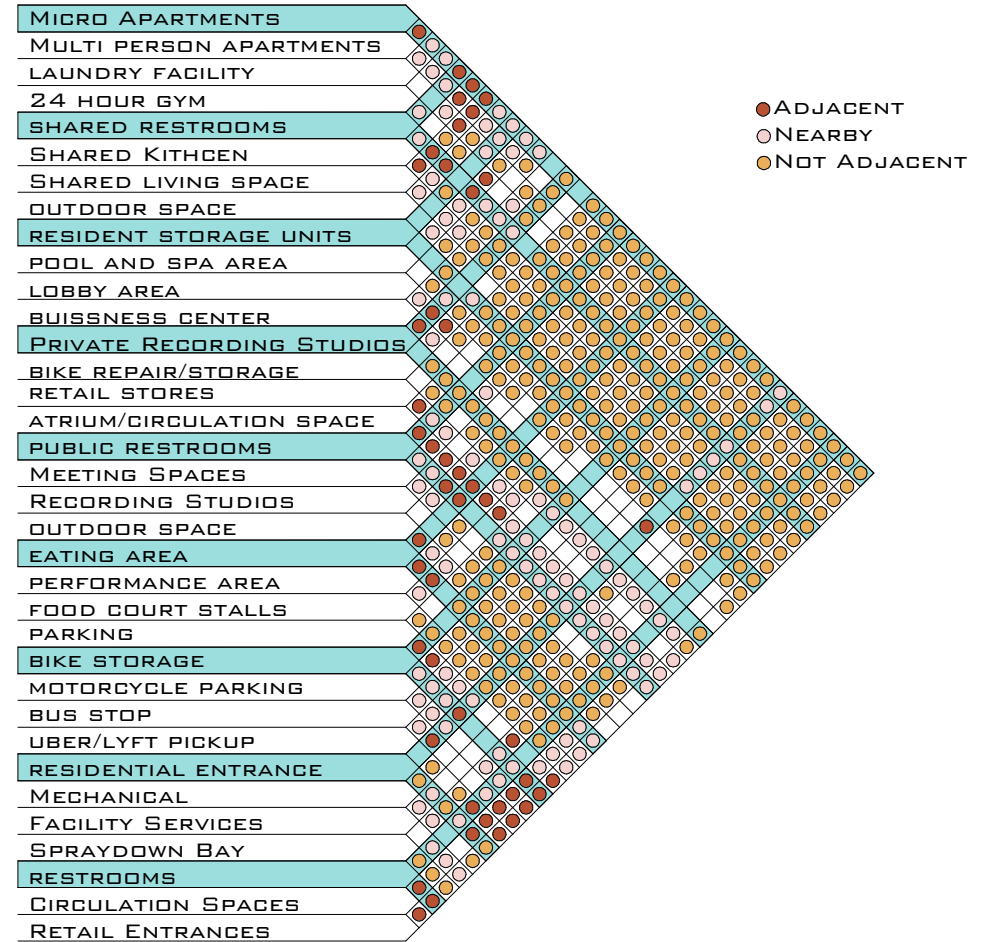


FIGURE 85 | COMBINED MATRIX DIAGRAM | DJV

PERFORMANCE CRITERIA - ENERGY

ENERGY CONSUMPTION AND ENVIRONMENTAL PERFORMANCE

DUE TO NASHVILLE'S GEOLOGIC LOCATION, SOLAR IS A STRONG SUITABLE USE OF ENVIRONMENTAL FRIENDLY ENERGY ON SITE. BESIDES THAT, A NUMBER OF PASSIVE SYSTEMS WILL BE INCORPORATED INTO THE DESIGN TO HELP HEAT/COOL THE SPACE NATURALLY.

AS MANY MATERIALS AS POSSIBLE WILL BE USED THAT CAN EITHER BE REFURBISHED OR RECYCLED DURING CONSTRUCTION, AS TO CUT DOWN ON CONSTRUCTION WASTE. OPERABLE AC/HEAT SYSTEMS MAY NOT BE THE BEST USE OF HVAC FOR THIS PROJECT, AS AFFORDABLE COSTS ARE A HUGE FACTOR. WITH THAT HAVING A CENTRALLY CONTROLLED SYSTEM REGULATING HEAR/COOLING WILL CREATE HIGHER EFFICIENCY AND LOWER COST OVERALL TO OPERATE THE STRUCTURE. SYSTEMS WILL BE IN PLACE SUCH AS SMART COOLING THAT WILL TURN OFF AC SYSTEMS DURING THE DAY WHEN A UNIT IS EMPTY, AND REACTIVATE ONCE THE OCCUPANT IS HOME. INDIVIDUAL COOLING PREFERENCES WILL BE UP TO THE RESIDENT VIA CEILING FAN OR SOME OTHER SORT OF INDIVIDUAL COOLING SYSTEM.

TO NASHVILLE'S CLIMATE, EXTERIOR SPACES TO BE USED FOR CIRCULATION AND SUCH WILL BE RESEARCHED FURTHER, AS TO CUT DOWN ON THE AMOUNT OF SPACE NEEDED TO BE INSULATED/HEATED. CUTTING DOWN ON CIRCULATION SPACES ON THE INTERIOR WILL GREATLY EFFECT OVERALL COST OF OPERATION FOR THE STRUCTURE.

PASSIVE COOLING SYSTEMS VIA WATER FEATURES AND PLANTING WILL BE RESEARCHED FOR THE SHARED EXTERIOR SPACES, AS TO CUT DOWN ON OVERALL COOLING COSTS.

PERFORMANCE CRITERIA - BEHAVIORAL PERFORMANCE

BEHAVIORAL PERFORMANCE

BEHAVIORAL PERFORMANCE IS OF GREAT IMPORTANCE, AND FINDING USAGE PATTERNS OF SPACE IS OF VITAL IMPORTANCE WHEN DESIGNING A TYPOLOGY WHICH IS USED 24 HOUR PER DAY. FINDING SOLUTIONS SUCH AS USING RETAIL CIRCULATION SPACES AS RESIDENTIAL CIRCULATION SPACES AS THEIR PEAK TIMES WILL NOT CORRELATE, FINDING WHAT TIME PEOPLE GENERALLY USE THE OUTDOOR MEETING SPACES, RECORDING STUDIOS, ETC. WILL CREATE QUITE A FEW OPPORTUNITIES

WITH THE IDEA OF A SPACE THAT IS FULLY USED 24 HOURS PER DAY, EFFICIENCY AND COST JUSTIFICATION COULD INCREASE BY AS MUCH AS 50% (12 HOUR AT NIGHT WHEN MANY STORES ARE CLOSED). WITH THIS, SCHEMATIC DESIGN WILL BECOME OF GREAT IMPORTANCE IN THE OVERALL DESIGN PROCESS.

ONE OF THE MAIN DRIVING FORCES OF THIS THESIS IS THE IDEALOGY THAT SOME SPACES ARE ONLY USED FOR 50% OF THE TIME, AND REMOVING THAT INEFFICACY COULD CREATE COST SAVINGS THAT WOULD JUSTIFY CUTTING PRICES OF RENT

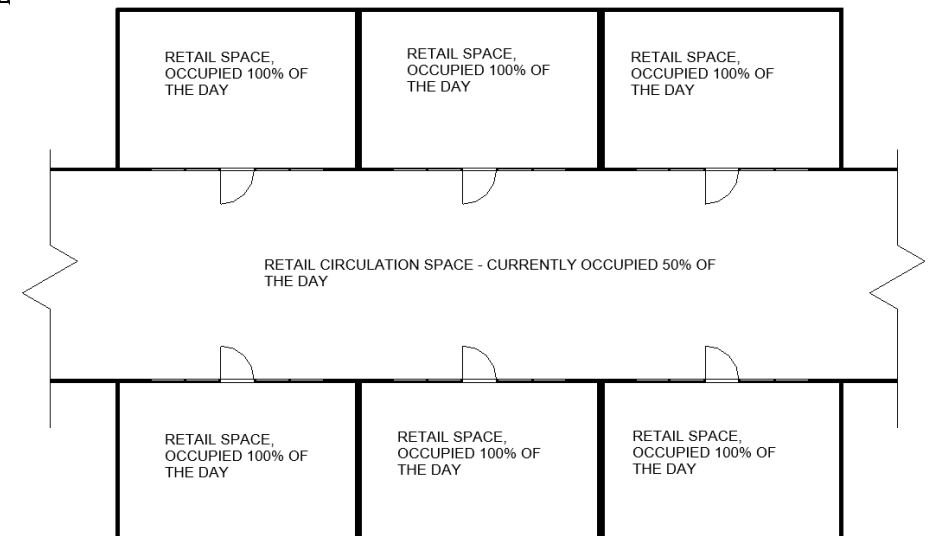


FIGURE B6 | RETAIL INEFFICIENCY EXAMPLE | DJV

PERFORMANCE CRITERIA - PSYCHOLOGICAL PERFORMANCE

DUE TO THE NATURE OF THE PROJECT, AND GIVEN THE IDEA OF SMALLER RENT ABLE SPACES, THE USERS PSYCHOLOGICAL FEELINGS THROUGHOUT THE BUILDING ARE OF VITAL IMPORTANCE. FINDING A GOOD BALANCE OF HECTIC CITY LIFE AND RELAXING RESIDENTIAL LIFE IS VITAL IN THE EARLY STAGES OF DESIGN. GIVEN THAT MANY SPACES ARE GOING TO BE COMBINED, MANY PEOPLE WON'T WANT TO HAVE TO GO THROUGH A MALL EVERY TIME THEY WANT TO GO HOME AT NIGHT DUE THE AMOUNT OF FOOT TRAFFIC AND PSYCHOLOGICAL EFFECTS IT HAS ON YOUR MOOD. WITH THIS, FINDING ALTERNATIVE SOLUTIONS TO RELAXING THE USER ON SITE WILL BE OF GREAT FOCUS IN THIS PROJECT.

PERFORMANCE CRITERIA - COST

GIVEN COST IS ONE OF THE DECIDING FACTORS WHEN CHOOSING WHERE ONE RESIDES POST GRADUATION, FINDING THE BEST SOLUTION TO CREATE LOW COSTS FOR RENTERS WHILE INCREASING REVENUE FOR THE REST OF THE BUILDING IS OF GREAT IMPORTANCE. OBTAINING RENT WITHIN THAT \$500-\$750/MONTH RANGE WILL REQUIRE SOME INTERESTING LOGICAL THOUGHT. USING PERFORMANCE TECHNIQUES COVERED BEFORE SUCH AS LIMITING INDOOR SPACE, REMOVING WASTED SPACE, ETC. ARE ALL FANTASTIC WAYS TO HELP DRIVE THE NUMBER DOWN FURTHER.

SOLUTIONS SUCH AS A SYSTEM WHERE A RESIDENT CAN HAVE MONEY TAKEN OFF OF THEIR RENT IF THEY DO NOT HAVE A CAR PARKED IN THEIR SPOT FOR A PORTION OF THE DAY, AS TO ALLOW FOR THE BUILDING TO SELL OUT THAT SPOT FOR A FEW HOURS EVERY DAY WILL ALL BE LOOKED INTO. ONLY THROUGH THOROUGH CRITICAL THINKING WILL THESE GOALS BE ABLE TO BE ACHIEVED.

PERFORMANCE CRITERIA - SUMMARY

THROUGH A NUMBER OF INTERESTING TECHNIQUES, A SMALL PORTION OF EFFICIENCY CAN INCREASE HERE, AND THERE. WITH THIS MIND SET CUTTING DOWN ON UNUSED SPACE AND DRIVING DOWN COSTS TO RENT CAN BE OBTAINED. GREEN SYSTEMS WILL BE IMPLEMENTED TO CREATE LOWER OPERATING COSTS, SUCH AS SOLAR AND PASSIVE COOLING SYSTEMS. SCHEMATIC PLANNING WILL BE ACHIEVED TO CUT DOWN ON UNUSABLE SPACE. STUDIES ON LIGHT AND COLOR WILL HELP ACHIEVE AN IDEAL PSYCHOLOGICAL PERFORMANCE FACTOR THROUGHOUT THE SPACE, TO FIND THAT RELAXATION THROUGH CHAOS.

DESIGN SOLUTION



FIGURE 87 | RENDERING FROM NORTH VIEW | DJV



FIGURE 88 | 1 BED UNIT | DJV



FIGURE 90 | VIEW FROM DECK ON WEST WING | DJV

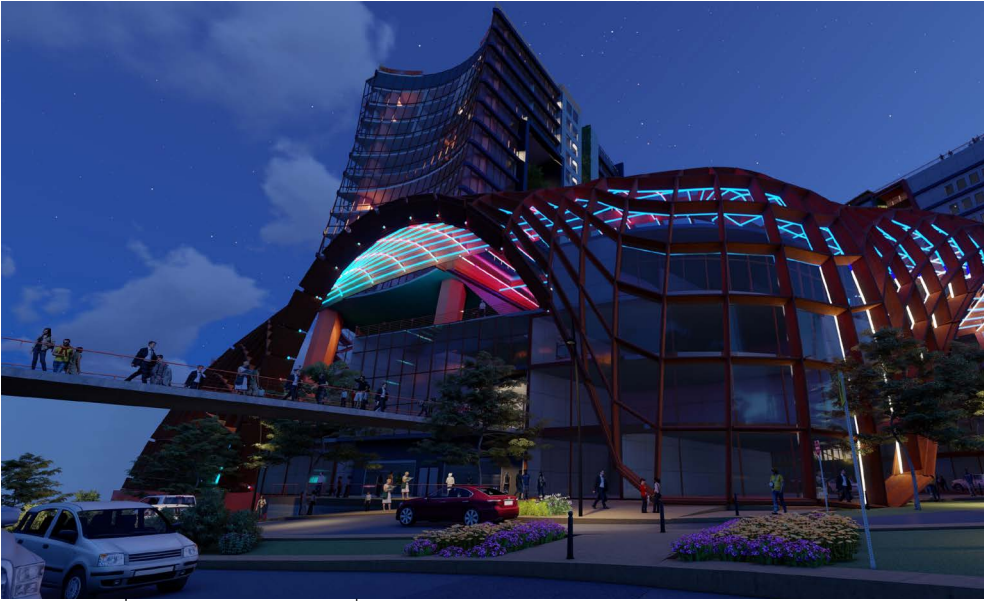


FIGURE 89 | EAST WING EXTERIOR | DJV



FIGURE 91 | VIEW FROM 3RD FLOOR FOOD COURT | DJV

PROCESS DOCUMENTATION THE SITE

THE PROCESS OF THIS PROJECT WAS HEAVILY REFLECTED ON THE FINANCIAL NEEDS OF NASHVILLE, ALONG WITH THE MIXED USE COMPLEX. SCHEMATIC DESIGN WAS THE FIRST STAGE OF DESIGN TO CREATE THE HIGHEST AMOUNT OF USABLE STREETFRONT IN THE BUSY DOWNTOWN AREA OF NASHVILLE. IT WAS CHOSEN TO CUT DOWN ON THE AMOUNT OF PUBLIC PLAZA SPACE ON THE STREET LEVEL AS THE 4TH FLOOR DECK SPACE WOULD ALLOW FOR MORE THEN ADEQUATE PUBLIC PLAZA SPACE AS AN OFFSET. GIVEN FINANCIAL UNDERSTANDING WAS A DRIVING POINT OF THIS DESIGN, CREATING A SPACE WHICH WAS BOTH FUNCTIONAL AND ARTISTIC, WHILE EQUALLY BEING LUCRATIVE FOR IT'S USERS AND TENNANTS WAS OF UPMOST IMPORTANCE.

CREATING A RESIDENTIAL TOWER ON EACH BLOCK WAS DECIDED, AS TO EQUALLY SEPEARATE THE SPREAD OF BOTH VEHICULAR, AS WELL AS PEDESTRIAN TRAFFIC ON THE SITE. FOR THIS SECTION I HEAVILY REFERED TO PAST CASE STUDIES ON THE AMOUNT OF SPACE ALLOCATED FOR EACH USE, AND WHAT A MIXED USE COMPLEX WOULD LOOK LIKE TRAFFIC WISE 24 HOURS PER DAY.

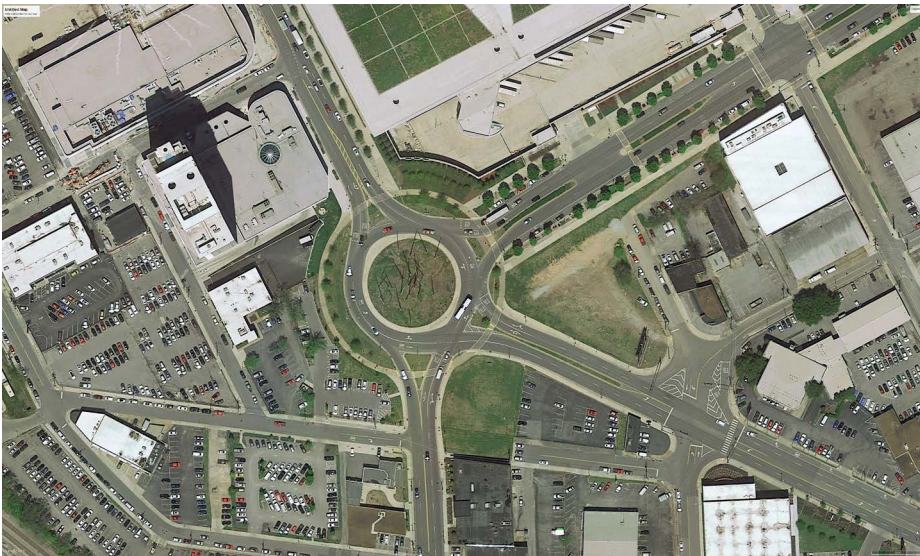


FIGURE 92 | SITE PHOTO | DJV

PROCESS DOCUMENTATION THE SITE - FORM DEVELOPMENT

FORM DEVELOPMENT - STAGE ONE

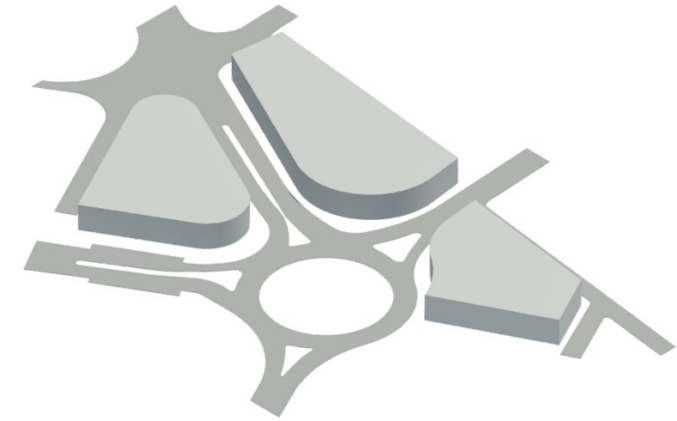


FIGURE 93 | PROCESS STAGE 1 | DJV

MEETING THE NEEDS OF THE STREET LEVEL.

IN ORDER TO USE THAT HIGH LEVEL OF STREETFRONT SPACE AS STATED EARLIER, WITH THE HIGH OFFSET OF PLAZA SPACE ON THE SKY DECK AREA WAY FROM TRAFFIC. IT WAS DECIDED TO TAKE THE GENERAL FORM OF ALL 3 BLOCKS AND RAISE THEM UP TWO STORIES. THE DECISION REMOVE PLAZA SPACE ON THE GROUND FLOOR WAS INFLUENCED BY THE HEAVY LEVEL OF TRAFFIC THE ROUNDABOUT SEES. HAVING CARS CONSTANTLY DRIVE AROUND THE SITE IN A CIRCULAR MANNER WAS NOT A PEACEFUL SCENE, AND TO OFFSET SAFE INDOOR SPACE WITH UNUSABLE OUTDOOR SPACE DID NOT FEEL LIKE AN ADEQUATE TRADE OFF.

PROCESS DOCUMENTATION THE SITE - FORM DEVELOPMENT

FORM DEVELOPMENT - STAGE TWO

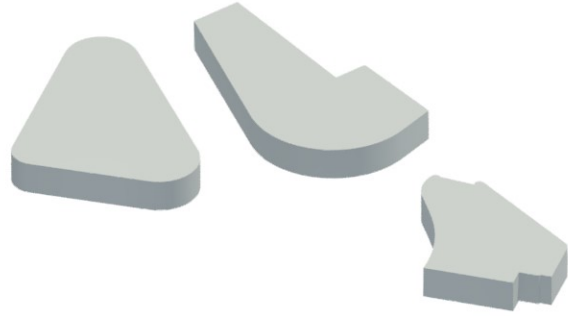


FIGURE 94 | PROCESS STAGE 2 | DJV

NEGATING SPACE BACK FROM THE STREET FRONT.

THE NEXT STAGE IN DESIGN WAS TO CREATE A BETTER STREETFRONT EXPERIENCE FOR THE USERS. THIS ENTAILS CREATING ACCESS FOR EGRESS, PARKING, AND PRIMARY ENTRANCES LOCATED BACK FROM THE PRIMARY FACADE OF THE STRUCTURE.

PROCESS DOCUMENTATION THE SITE - FORM DEVELOPMENT

FORM DEVELOPMENT - STAGE THREE

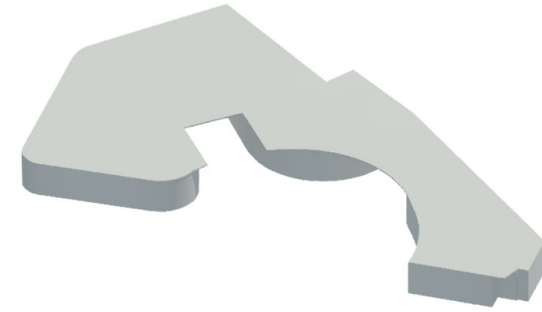


FIGURE 95 | PROCESS STAGE 3 | DJV

TO CREATE AN EXPERIENCE ABOVE NASHVILLE.

AS SPOKEN ABOUT PREVIOUSLY, IT WAS DEEMED INEFFICIENT TO CREATE A SENSE OF PEDESTRIAN BASED URBAN CONTEXT ON THE GROUND LEVEL AS THE SITE IS LOCATED ON THE BUSIEST ROUNDABOUT IN NASHVILLE. BECAUSE OF THIS, A DECK STRUCTURE ON THE 4TH FLOOR WAS FOUND TO BE A GREAT USE OF SPACE. THIS WOULD ALLOW THE RESIDENTS OF NASHVILLE TO USE THE SPACE AS A PARK LIKE COMPLEX, WITHOUT THE REMOVAL OF PRECIOUS REAL ESTATE, WHILE BEING AWAY FROM THE HECTIC CITY TRAFFIC.

PROCESS DOCUMENTATION THE SITE - FORM DEVELOPMENT

FORM DEVELOPMENT - STAGE FOUR

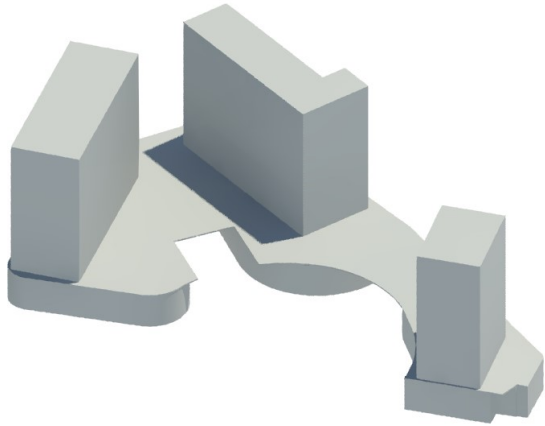


FIGURE 96 | PROCESS STAGE 4 | DJV

RAISE RESIDENTIAL MASSES UP FROM THE CITY BLOCKS.

THE FOLLOWING STEP, AS SPOKEN ABOUT BRIEFLY BEFORE, WAS TO CREATE ONE RESIDENTIAL TOWER PER BLOCK OF THE SITE. THIS WAS TO EVENLY SPACE OUT THE TRAFFIC AND ACCESS TO THE SITE, AS TO REMOVE CONGESTION TO ONE PARTICULAR ENTRANCE OR AREA. THREE TOWERS WERE CHOSEN AS THERE ARE BOTH 3 CITY BLOCKS, AS WELL AS 3 DIFFERENT TYPES OF RESIDENTIAL HOUSING UNITS. THE LEFT WILL BE A CONDOMINIUM, THE CENTER WILL BE CO LIVING, AND THE RIGHT WILL BE STANDARD APARTMENTS. BOTH THE CONDOMINIUM AND APARTMENT UNITS WILL BE MODULAR TO THE FACT THAT THEY ARE BUILT ON THE SAME GRID PATTERN AS THE CO LIVING FACILITY, AND THUS CAN BE RETROFITTED TO THE NEEDS OF THE CLIENT.

PROCESS DOCUMENTATION THE SITE - FORM DEVELOPMENT

FORM DEVELOPMENT - STAGE FIVE

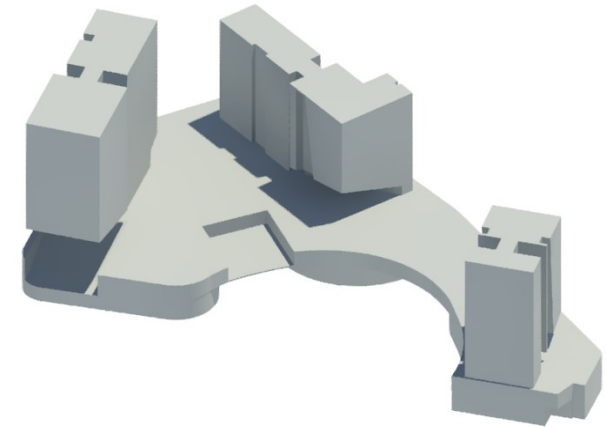


FIGURE 97 | PROCESS STAGE 5 | DJV

TO CREATE A UNITY BETWEEN THE 3 TOWERS,

THE NEXT STEP WAS TO BREAK UP EACH FACADE IN ORDER TO CREATE AN ENGAGING IDENTITY OF EACH TOWER, AS WELL AS TO DRAW UNITY BETWEEN THE THREE. THIS WAS DECIDED BECAUSE AS THEY SIT INDEPENDENTLY, AND HAVE DIFFERENT USES, THEY ARE ALL LOCATED WITHIN THE SAME COMPLEX AND SHOULD REFLECT A COMMON DESIGN AESTHETIC.

OVERHANGS WERE ADDED AT THIS STAGE INCREASING USABLE SPACE ON THE 4TH FLOOR SKY DECK AREA, ONE NOTICEABLE OVERHANG IS ON THE LEFT MOST STRUCTURE, WHERE SPACE FOR A THEATER HAS BEEN CREATED. THESE OVERHANGS WILL BE SUPPORTED VIA LARGE COLUMNS, SO NO MAJOR CANTILEVERS WILL BE BUILT.

PROCESS DOCUMENTATION THE SITE - FORM DEVELOPMENT

FORM DEVELOPMENT - STAGE SIX

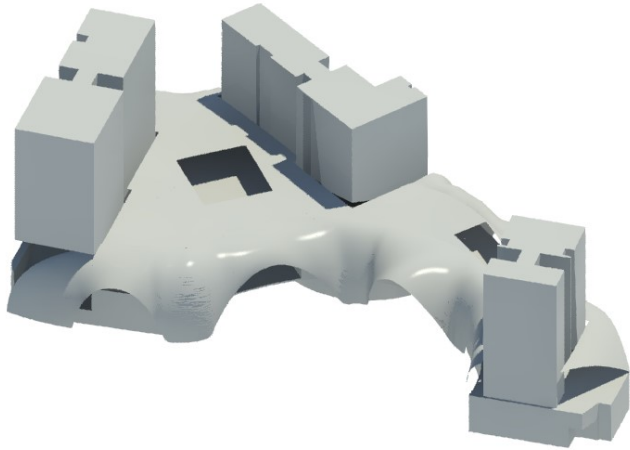


FIGURE 98 | PROCESS STAGE 6 | DJV

TO CREATE PROTECTION FROM THE ELEMENTS, AND TO TIE THE STRUCTURE TO THE GROUND.

NEXT, THE DECISION WAS MADE TO CREATE A TYPE OF WING ROOF THAT WOULD COVER THE OUTDOOR DECK AREA. THIS WAS CHOSEN TO BOTH SHELTER THE USERS FROM HARSH SUMMER HEAT, AS WELL AS RAIN/SNOW IN THE COLDER MONTHS. AS WELL AS TO VISUALLY TIE THE STRUCTURE TO THE GROUND, ALLOWING YOUR EYES TO MOVE UP THE STRUCTURE FROM THE STREET FRONT.

PROCESS DOCUMENTATION COMPLEX USAGE

COMPLEX USAGE

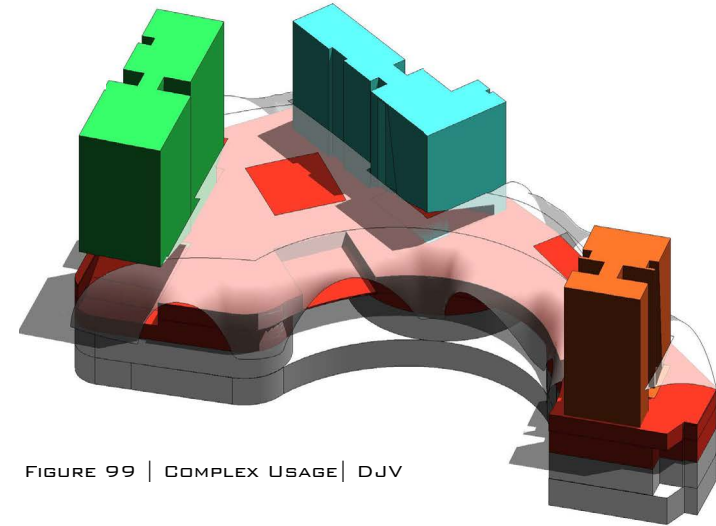


FIGURE 99 | COMPLEX USAGE | DJV

- **CONDOMINIUMS:**
144 UNITS / 145,000 SQFT
- **REVOLUTION2 CO-LIVING:**
369 BEDS / 133,500 SQFT
- **APARTMENTS:**
100 UNITS / 66,180 SQFT
- **COMMERCIAL MIXED USE SPACE:**
377,000 SQFT / 50+ STORES
- **PARKING:**
478,640 SQFT / 1,279 STALLS

PROCESS DOCUMENTATION CONCEPT SKETCHES

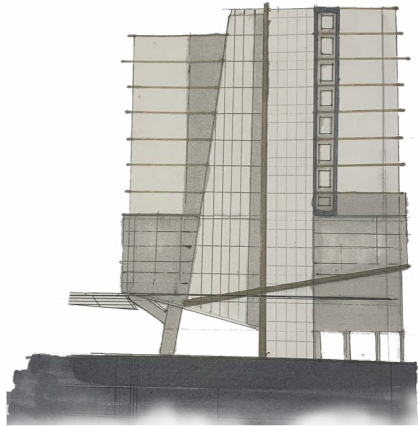


FIGURE 100 | CONCEPT SKETCH - APARTMENTS | DJV

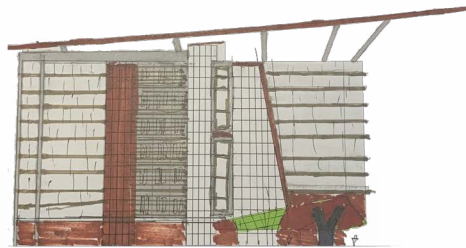


FIGURE 101 | CONCEPT SKETCH - CO-LIVING | DJV



FIGURE 102 | CONCEPT SKETCH - CONDOMINIUMS | DJV

PERFORMANCE ANALYSIS - RESPONSE TO THE SITE

SITE RESPONSE - PLAN CONTEXT



FIGURE 103 | MACRO SITE PLAN | DJV

1. MUSIC CITY CENTER
2. COUNTRY MUSIC HALL OF FAME
3. BRIDGESTONE ARENA
4. BROADWAY
5. GRAND OLE' OPRY



FIGURE 104 | DOWNTOWN NASHVILLE | DJV

PERFORMANCE ANALYSIS - RESPONSE TO THE SITE

SITE RESPONSE - PLAN CONTEXT



FIGURE 105 | MICRO SITE PLAN | DJV

FOR THE FULL SITE CONTEXT, THE IDEA WAS TO FRAME THE STIX SCULPTURE IN THE CENTER OF THE ROUNDABOUT, ALONG WITH THE REST OF NASHVILLE. GIVEN THIS COMPLEX WOULD ACT AS A HUB OF ACTIVITY FOR ALL DEVELOPMENTS SOUTH OF THE SITE.

THIS ACTION CAN BE VISUALLY SEEN HERE, AS THE COMPLEX WRAPS AROUND THE ROUNDABOUT, ALLOWING ADEQUATE SIGHT LINES INTO THE CITY FROM MULTIPLE POINTS THROUGHOUT THE MIXED USE COMPLEX.

DEVELOPMENT IN NASHVILLE IS EXPANDING AT AN EXTREME RATE, EVERYTHING SOUTH OF THE SITE COULD BE DEVELOPED INTO HIGH RISE STRUCTURES IN AS LITTLE AS 10-15 YEARS

PERFORMANCE ANALYSIS - RESPONSE TO THE SITE

SITE RESPONSE - COLOR SCHEME



FIGURE 106 | STIX COLORS | DJV

THE COLOR SCHEME CHOSEN FOR THE LIGHTING, ALONG WITH THE REST OF THE COMPLEX GAINED INSPIRATION FROM THE COLORS OF THE STIX SCULPTURE



FIGURE 107 | DECK VIEW | DJV

THE THEME OF NASHVILLE



FIGURE 108 | CONCERT VENUE | DJV

GIVEN NASHVILLE IS KNOWN THROUGHOUT THE WORLD AS THE HOME OF COUNTRY MUSIC, IT ONLY SEEMED FITTING TO INCLUDE AN OUTDOOR PERFORMANCE SPACE TO BRING SOME OF THAT CULTURE INTO THIS NEW SPACE.

LEVEL ONE

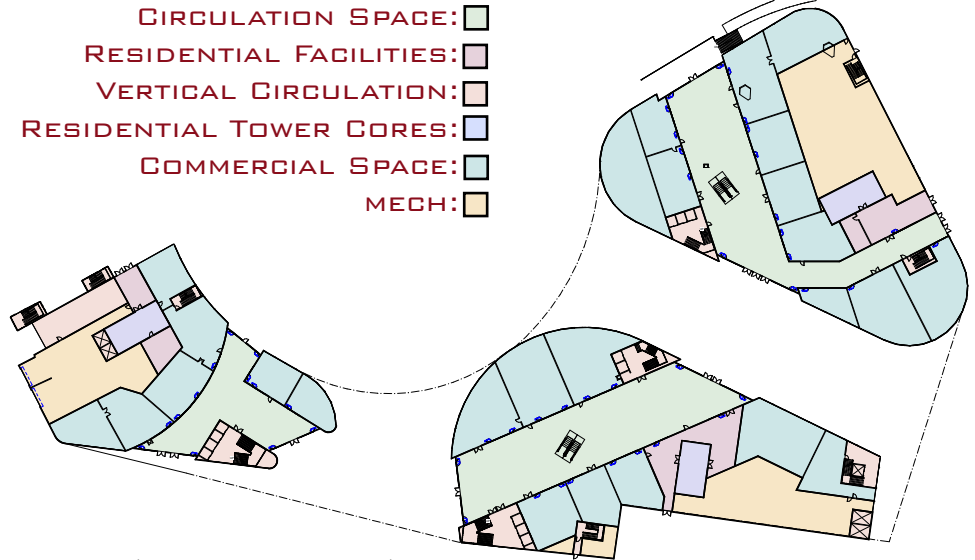


FIGURE 109 | LEVEL 1 FLOOR PLAN | DJV

LEVEL TWO

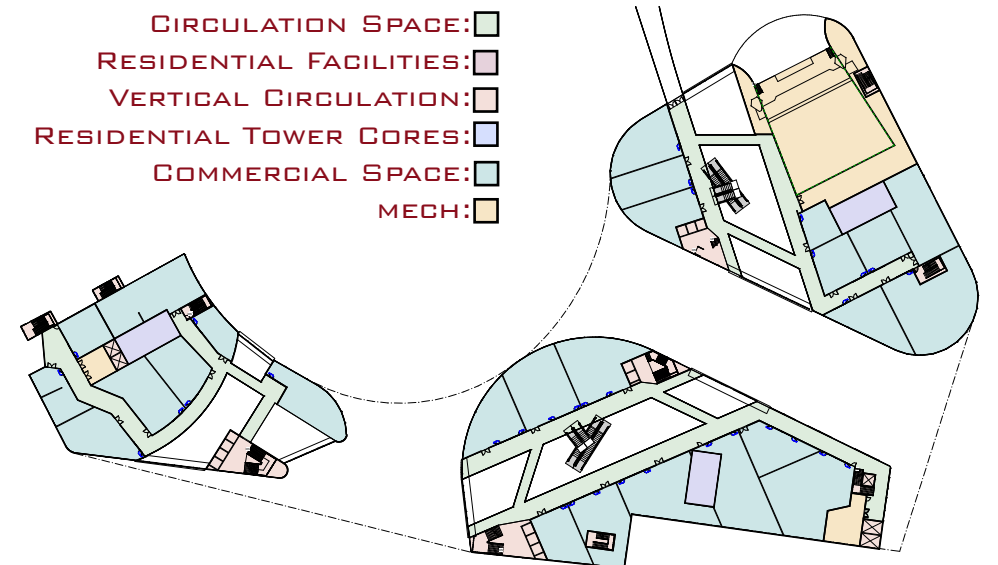


FIGURE 110 | LEVEL 2 FLOOR PLAN | DJV

PERFORMANCE ANALYSIS - RESPONSE TO THE TYPOLOGY RESEARCH

LEVEL THREE

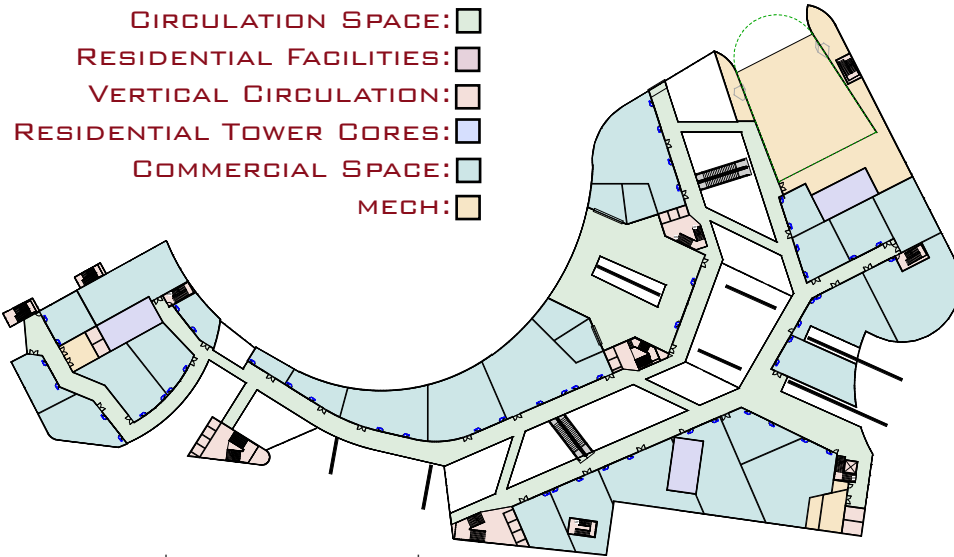


FIGURE 111 | LEVEL 3 FLOOR PLAN | DJV

LEVEL FOUR

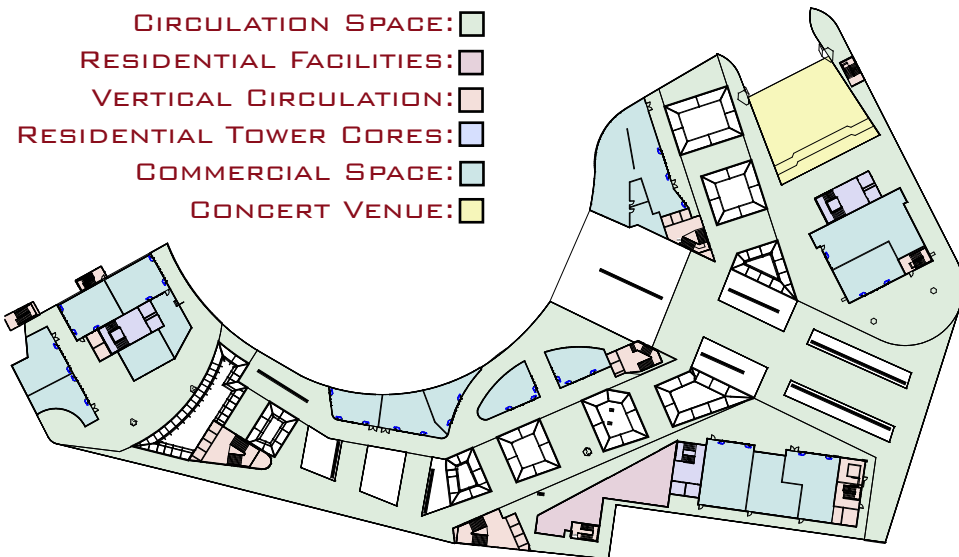


FIGURE 112 | LEVEL 4 FLOOR PLAN | DJV

PERFORMANCE ANALYSIS - RESPONSE TO THE TYPOLOGY RESEARCH

LEVEL - PARKING

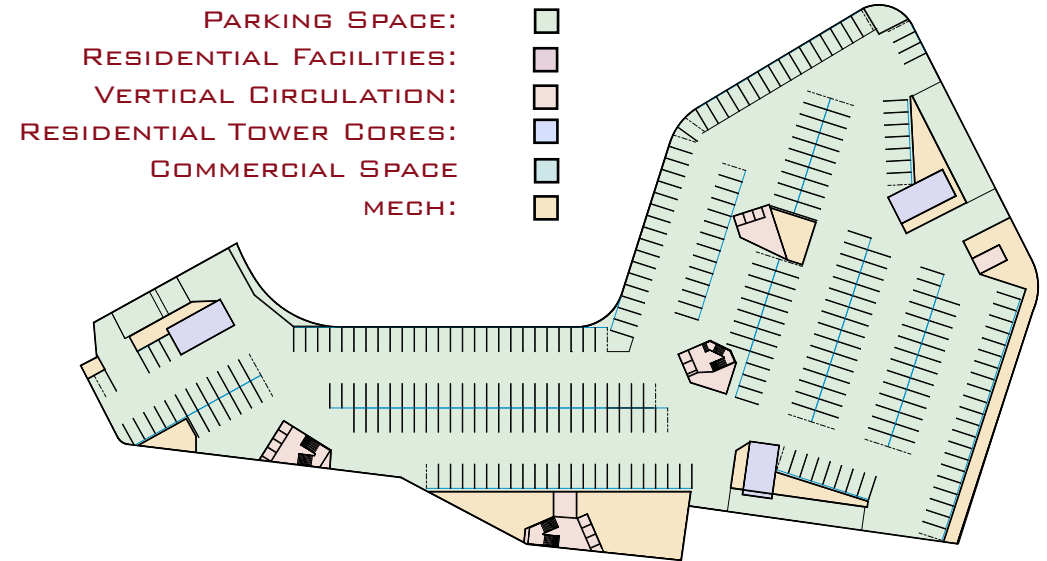


FIGURE 113 | LEVEL PARKING FLOOR PLAN | DJV

LEVEL SEVEN - CO LIVING SPACE

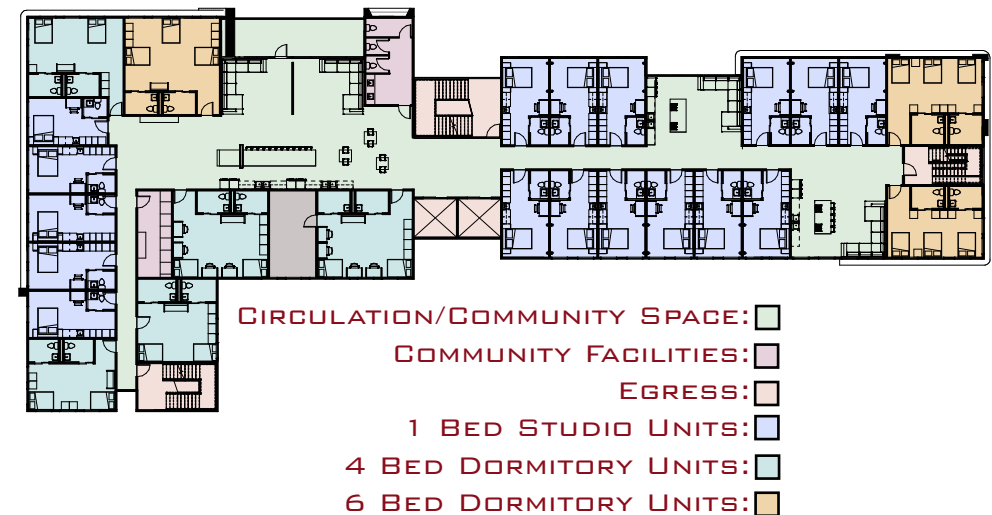


FIGURE 114 | LEVEL 7 CO LIVING PLAN | DJV

SECTION CUT

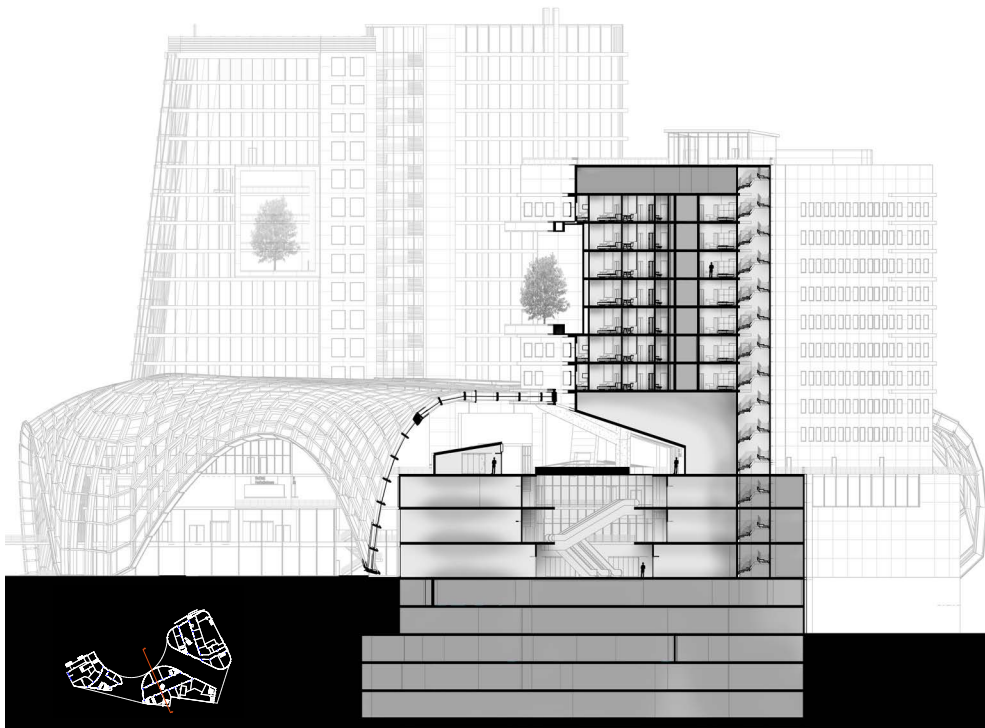


FIGURE 115 | SECTION CUT | DJV

EAST ELEVATION

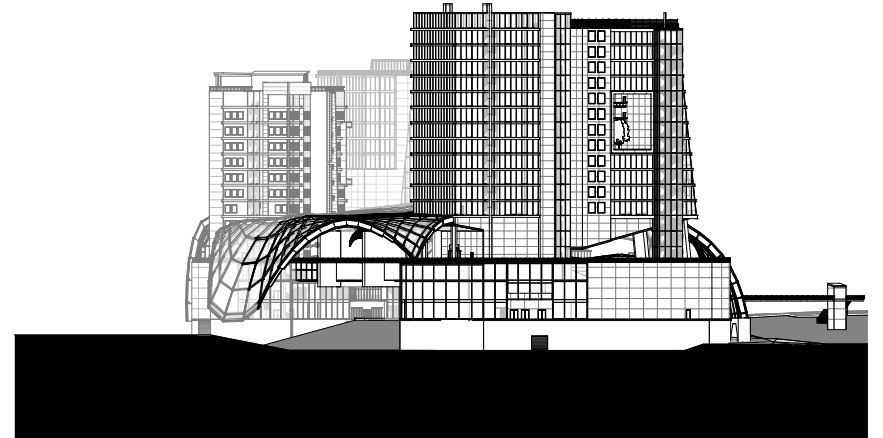


FIGURE 116 | EAST ELEVATION | DJV

WEST ELEVATION

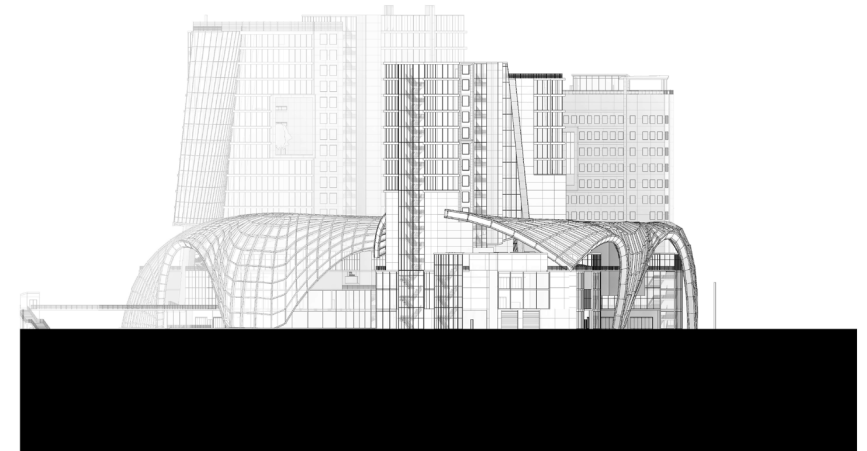


FIGURE 117 | WEST ELEVATION | DJV

PERFORMANCE ANALYSIS - RESPONSE TO THE TYPOLOGY RESEARCH

NORTH ELEVATION

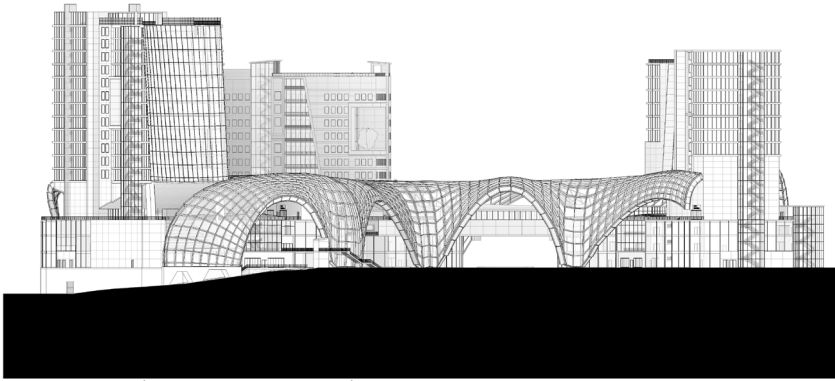


FIGURE 118 | NORTH ELEVATION | DJV

SOUTH ELEVATION

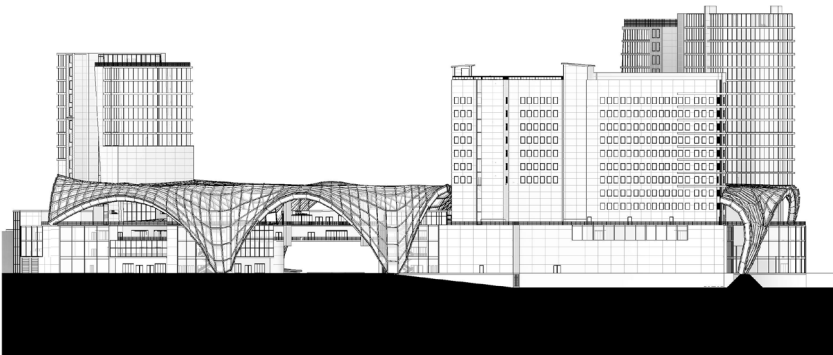


FIGURE 119 | SOUTH ELEVATION | DJV

PERFORMANCE ANALYSIS - RESPONSE TO THE TYPOLOGY RESEARCH

STRUCTURAL ELEMENTS

1. **CAST IN PLACE CONCRETE COLUMNS** - SUPPORTS ALL FLOORS, LEFT BARE TO GIVE AESTHETIC UNITY BETWEEN THE COMPLEX'S SPACES
2. **PRECAST CONCRETE SECTIONS AND BEAMS** - USED IN ALL PARKING SPACES AND SUB GROUND LEVEL AREAS
3. **STEEL BEAMS** - USED IN ALL LEVELS ABOVE THE GROUND FLOOR - LEFT PAINTED IN FIRE RETARDANT PAINT TO GIVE INDUSTRIAL RUSTIC FEEL AND UNITY TO THE SPACES
4. **CAST IN PLACE CONCRETE DECKING** - LEFT BARE ON THE UNDERSIDE TO GIVE UNITY THROUGHOUT THE SPACES
5. **EXTENDED STEEL FRAMED ROOF STRUCTURE** - PAINTED IN A BRONZE COLOR, CREATES UNITY OVER THE 4TH FLOOR SKY DECK, THIS STRUCTURE IS TIED INTO EXTERIOR STEEL BEAMS CONNECTED TO ALL TOWERS.

STEEL FRAMED ROOF STRUCTURE

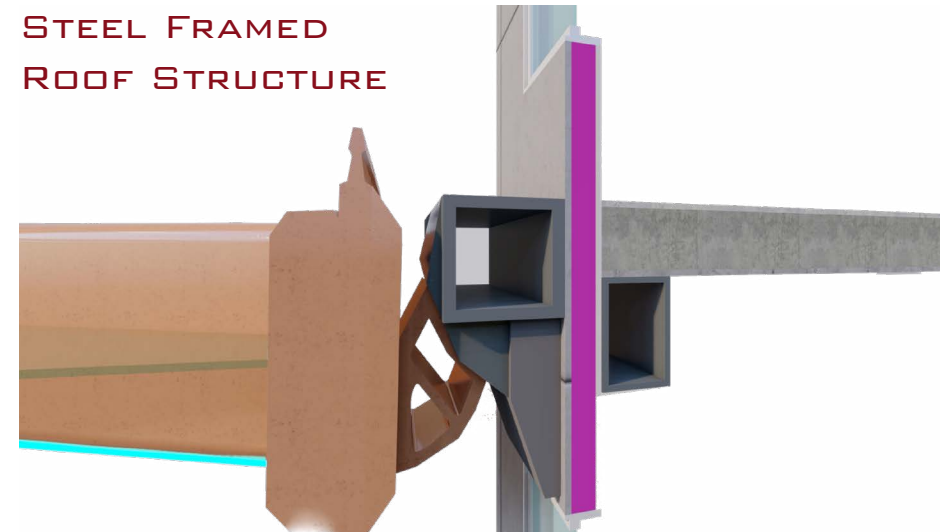


FIGURE 120 | STEEL ROOF DETAIL | DJV

CO LIVING - FLOOR SECTION - STRUCTURAL COMPONENTS

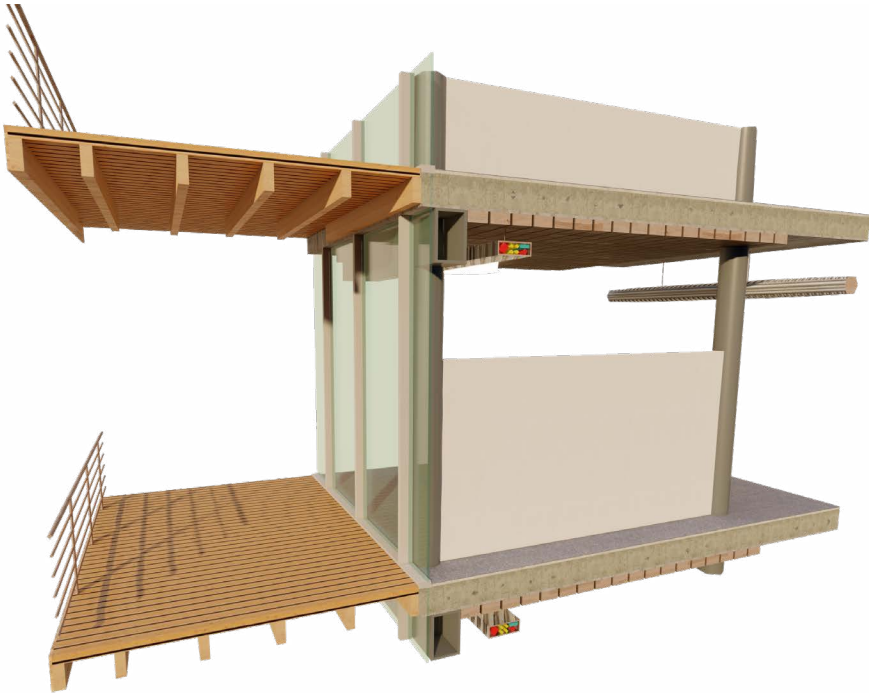


FIGURE 121 | STRUCTURE DETAIL | DJV

THIS PROJECT IS MADE UP OF A CAST IN PLACE CONCRETE MEMBERS, WITH A COMBINATION OF EXPOSED STEEL BEAMS ON MANY OF THE SPACES ABOVE THE GROUND FLOOR. GIVEN THAT EACH OF THE THREE TOWERS IS SET AT A SEPARATE ANGLE THEN THAT OF THE COMMERCIAL COMPLEX, A NON UNIFORM COLUMN LAYOUT IS NEEDED. ONE EXCEPTION OF THIS IS THE TOWER CORES, WHICH EXTEND FROM THE TOP OF THE STRUCTURE ALL THE WAY TO THE BASE OF THE PARKING GARAGE.

1. LOCATING THE AMBITIONS AND NEEDS OF YOUNGER GENERATIONS

THIS WAS BROUGHT FORTH BY CREATING A CO LIVING SPACE IN WHICH OCCUPANTS CAN SAVE MONEY BUY GIVING UP PERSONAL PRIVATE SPACES FOR PUBLIC SHARED SPACES, TO CREATE INTERACTION BETWEEN RESIDENTS WITH THIS DESIGN.

2. FINDING ALTERNATIVE USES FOR SPACE TO CREATE COMMUNITY INTERACTION THROUGHOUT THE DAY

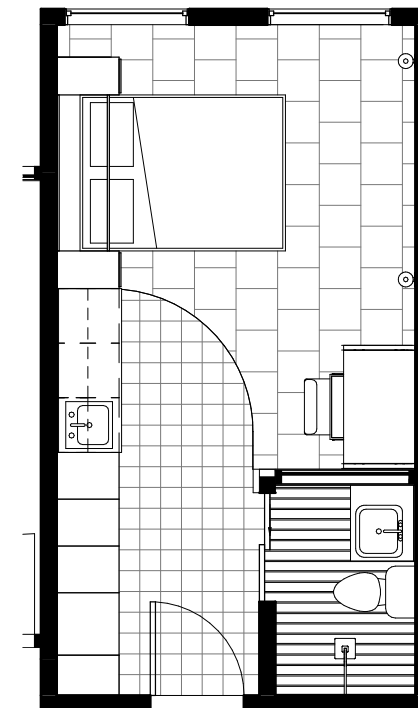


FIGURE 122 | STUDIO PLAN | DJV

HERE, A STANDARD 1 BED UNIT CAN BE OBSERVED, THERE ARE NO SINGLE USE SPACES IN THIS UNIT. THE ENTRY WAY SERVES AS THE CIRCULATION FOR THE CLOSET SPACE AND ENTRANCE INTO THE BATHROOM. THE LIVING ROOM MAKES UP THE BEDROOM, THE SHOWER MAKES UP THE ENTIRETY OF THE BATHROOM, AND SO ON. EACH SPACE HAS BOTH A PRIMARY AND ALTERNATIVE USE.

PERFORMANCE ANALYSIS - RESPONSE TO GOALS AND PROJECT EMPHASIS

3. UNDERSTAND THE WORKING RELATIONSHIP BETWEEN INDIVIDUALS RESIDING TOGETHER

THIS WAS DECIDED, BY CREATING A SEPARATION FROM PUBLIC AND PRIVATE SPACES. IT WAS DEEMED THAT CERTAIN ACTIONS WERE BETTER SUITED FOR PRIVATE SPACES, SUCH AS OFFICES AND REST ROOMS, WHILE FACILITIES SUCH AS THE KITCHEN WOULD BE BETTER SERVED AS A COMMUNITY SPACE.

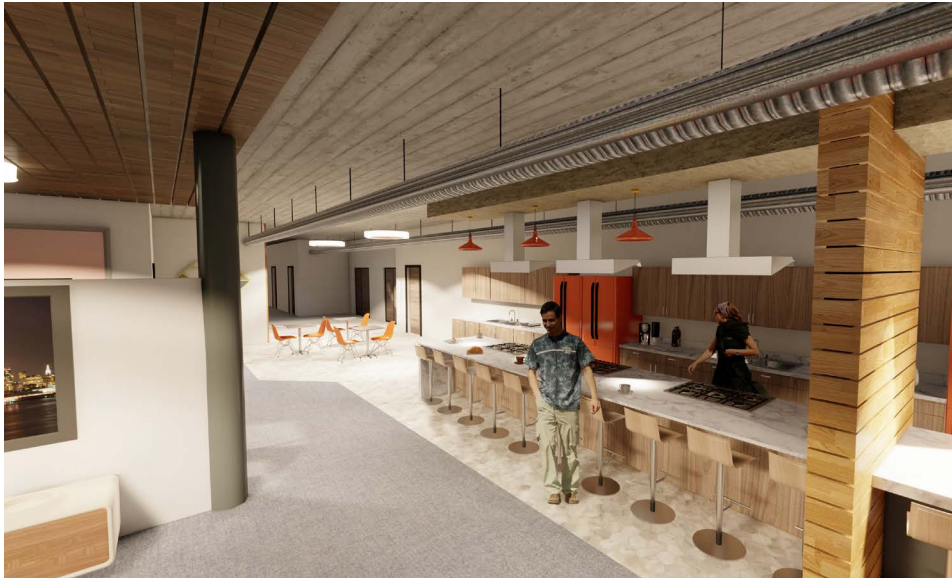


FIGURE 123 | CO LIVING KITCHEN | DJV

PERFORMANCE ANALYSIS - RESPONSE TO GOALS AND PROJECT EMPHASIS

4. CREATE ALTERNATE USES OF THE PROJECT BESIDES ITS PRIMARY RESIDENCY USE.

THE GOAL OF FINDING ALTERNATIVE USES FOR THE PROJECT WAS COMPLETED BY CREATING A MIXED USE COMPLEX IN WHICH THE RESIDENCY SITS, THE COMPLEX IS IN USE BY A VARIETY OF USERS 24 HOURS PER DAY.

5. ALL IDEAS MUST BE FEASIBLE IN TODAY'S SOCIETY, THIS REFERS TO BOTH COST AND PRACTICALITY.

THIS GOAL WAS MET, AS ALL SPACES ARE UNIFORM AND ARE REALISTIC IN TERMS OF BUILD-ABILITY.

6. FIND ALTERNATIVE MEANS OF DWELLING FOR THE IDEAL USER.

THIS GOAL REALLY MAKES UP THE ENTIRE NETWORK OF THE PROJECT, WHILE CO LIVING IS A FANTASTIC IDEA FOR MANY OF THE RESIDENTS OF THIS COMPLEX, FRANKLY THE UNDERLYING IDEA MAY NOT BE THE BEST FIT FOR CERTAIN PERSONALITIES. BY CREATING THAT OFFSET BETWEEN PRIVATE AND PUBLIC SPACES, THIS COMPLEX FITS THE NEEDS OF A GENERAL BASE OF OCCUPANTS.

PERFORMANCE ANALYSIS - RESPONSE TO GOALS AND PROJECT EMPHASIS

CREATING AN INVITING LIVING SITUATION, WITHIN A COMMUNITY OF LIKE MINDED PEOPLE.



FIGURE 124 | CO LIVING GAME ROOM | DJV



FIGURE 125 | STUDIO UNIT | DJV

PERFORMANCE ANALYSIS - RESPONSE TO GOALS AND PROJECT EMPHASIS



FIGURE 126 | STUDIO UNIT | DJV



FIGURE 127 | STUDIO UNIT | DJV

PERFORMANCE ANALYSIS - RESPONSE TO GOALS AND PROJECT EMPHASIS



FIGURE 128 | STUDIO BATHROOM | DJV



FIGURE 129 | STUDIO BED | DJV

PERFORMANCE ANALYSIS - RESPONSE TO GOALS AND PROJECT EMPHASIS



FIGURE 130 | CO LIVING COMMUNITY SPACE | DJV

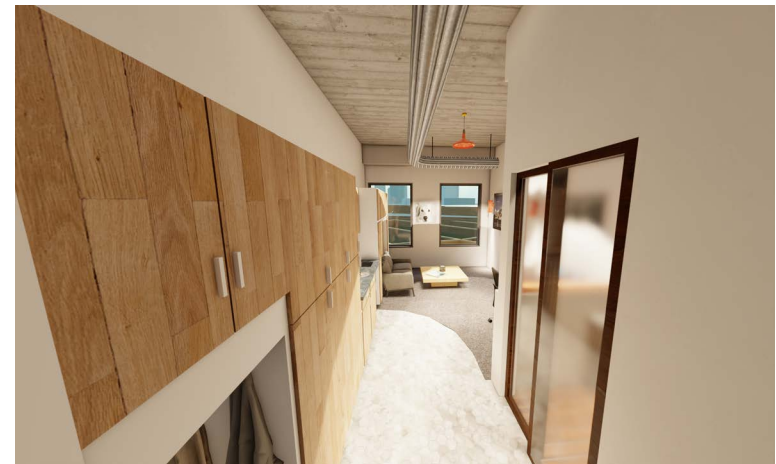


FIGURE 131 | STUDIO UNIT | DJV

CRITIQUE OF APPLIED RESEARCH METHODS USED IN THE THESIS PROJECT

WHAT TO CHANGE?

THROUGHOUT THE PROJECT, I WENT TO IN DEPTH LENGTHS TO CONSIDER ALL POSSIBILITIES FOR THE DESIGN SOLUTION. THROUGH LOOKING AT EXISTING EXAMPLES OF RELEVANT WORKS, FINDING SPACE SAVING DESIGN IDEAS, RESEARCHING ECONOMIC IMPACTS OF STUDENT LOANS/ LIVING ACCOMMODATIONS, ALONG WITH RESEARCHING REGULATIONS ON THE HOUSING MARKET AND THE HISTORY OF SAID REGULATION. FINDING THE PERFECT SOLUTION SEEMED OBVIOUS, HOWEVER THE SUBJECT I FEEL I FELT SHORT ON PERTAINED TO SEEING THIS FROM A REAL ESTATE AND DEVELOPER POINT OF VIEW. I THINK LOOKING BACK IF I WERE TO CHANGE MY APPROACH, I WOULD HAVE SEEN ABOUT INTERVIEWING A MIXED USE DEVELOPER OF A METROPOLITAN AREA, AND RUN THEM BY THE SITUATION. SEEING HOW THEY WOULD RESPOND TO THESE CHALLENGES, COULD HAVE GREATLY CHANGED MY ENDING PROJECT. AS MANY OF THE CRITIQUE'S HAD SAID DURING MY PRESENTATION, THE LINK BETWEEN THE PRIVATE RESIDENCIES, AND THE PUBLIC COMMERCIAL SPACE WAS FAIRLY WEAK IN TERMS OF RELEVANT USES. SIMPLY JOINING TWO SPACES TOGETHER, BECAUSE THE THOUGHT THAT THEY HAVE BEEN REPEATED ELSEWHERE, MAY NOT HAVE BEEN THE BEST WAY TO GO ABOUT THIS SITUATION. IN AN ALTERNATE PROJECT, CHANGED WOULD HAVE BEEN MADE.

PHOTOGRAPH OF THE PROJECT INSTALLATION



FIGURE 132 | PRESENTATION BOARD | DJV

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2ND YEAR

FALL 2015 | CINDY URNESS

TEA HOUSE | MOORHEAD, MN
DESIGNING WITH CONCEPT AND PURPOSE

SPRING 2016 | JOAN VORDERBRUGGEN

MONTESSORI SCHOOL | FARGO, ND
EARLY EDUCATION CENTER WITH ALTERNATE LEARNING

DWELLING | CRIPPLE CREEK, CO
COMPACT DWELLING CONSTRUCTED WITH PROGRAMMING
AND PASSIVE SYSTEMS IN MIND

3RD YEAR

FALL 2016 | REGIN SCHWAEN

VISITOR CENTER | COOPERSTOWN, ND
VISITOR CENTER FOR AN IGBM LAUNCH CENTER

CONSERVATORY | FARGO, ND
ADDITION TO THE PLAINS ART MUSEUM, GREENHOUSE AND
CONSERVATORY

SPRING 2017 | MARK BARNHOUSE

APPARED ELECTRONICS FACTORY | FARGO, ND
ELECTRONICS FACTORY ADDITION, INDUSTRIAL DESIGN

SANFORD SAME DAY SURGERY | FARGO, ND
HEALTHCARE DESIGN WITH CIRCULATION AND EFFICIENCY
IN MIND

4TH YEAR

FALL 2017 | BAKR M. ALY AHMED

HIGH RISE | SAN FRANCISCO, CA
CAPSTONE PROJECT DESIGNED WITH MIXED USE AND
OUTDOOR SPACES IN MIND

SPRING 2018 | PAUL H. GLEYE
STUDY ABROAD - MIXED USE APARTMENT
COMPLEX | BRUSSELS, BELGIUM
MIXED USE RESIDENCY TO BRING INDUSTRY INTO
NEIGHBORHOOD

5TH YEAR

FALL 2019 | BRITTANY DAWSON

CIVIC CENTER | FARGO, ND
TAKING A CLOSER LOOK AT THE NEEDS OF DOWNTOWN
FARGO

DANE VONASEK

DANE VONASEK IS A 5TH YEAR MASTERS STUDENT WITH PLANS TO GRADUATE IN MAY 2020. HE HOPES TO MOVE OUT OF THE MIDWEST TO EITHER NASHVILLE, NYC, OR TEXAS.

DANE HAS A PASSION FOR SIMPLISTIC RESIDENTIAL DESIGN AND HOPES TO WORK INTERNATIONALLY ONE DAY.



FIGURE 133 | THE AUTHOR | DJV

END