



A DESIGN THESIS SUBMITTED TO THE DEPARTMENT OF ARCHITECTURE AND LANDSCAPE ARCHITECTURE OF NORTH DAKOTA STATE UNIVERSITY

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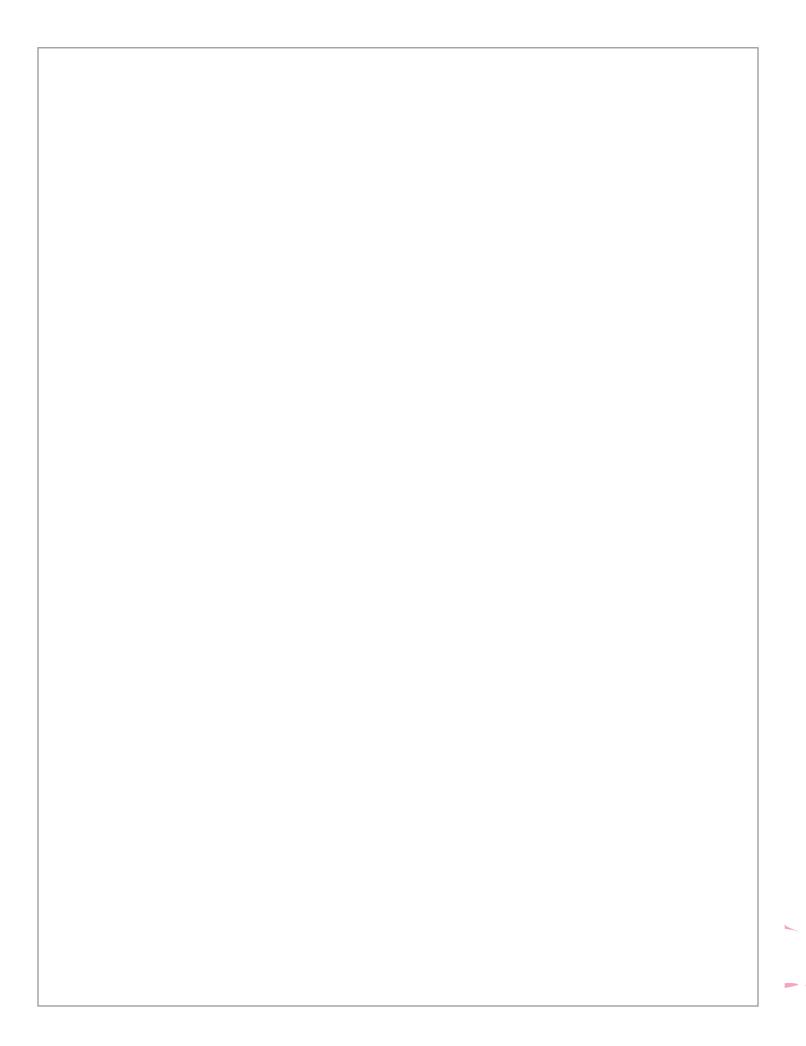
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# **THESIS ARCHIVAL NOTE**

The following thesis project, entitled Play Streets: Integrating Safe and Engaging Play Opportunities for Children into the Streetscape Network of Lowertown, St. Paul, Minnesota, was composed over the course of the 2016-2017 academic school year. The Thesis Program, as contained here, was initiated and completed in the fall semester as a part of the LA 563: Programming and Thesis Preparation course. Supplemental material, including the Thesis Boards and the Thesis Presentation documents, were generated in the spring semester as a part of the LA 572: Design Thesis studio. Any inconsistencies between the different documents, in terms of research and design, should be disregarded per the Evolution of the project across the two semesters.



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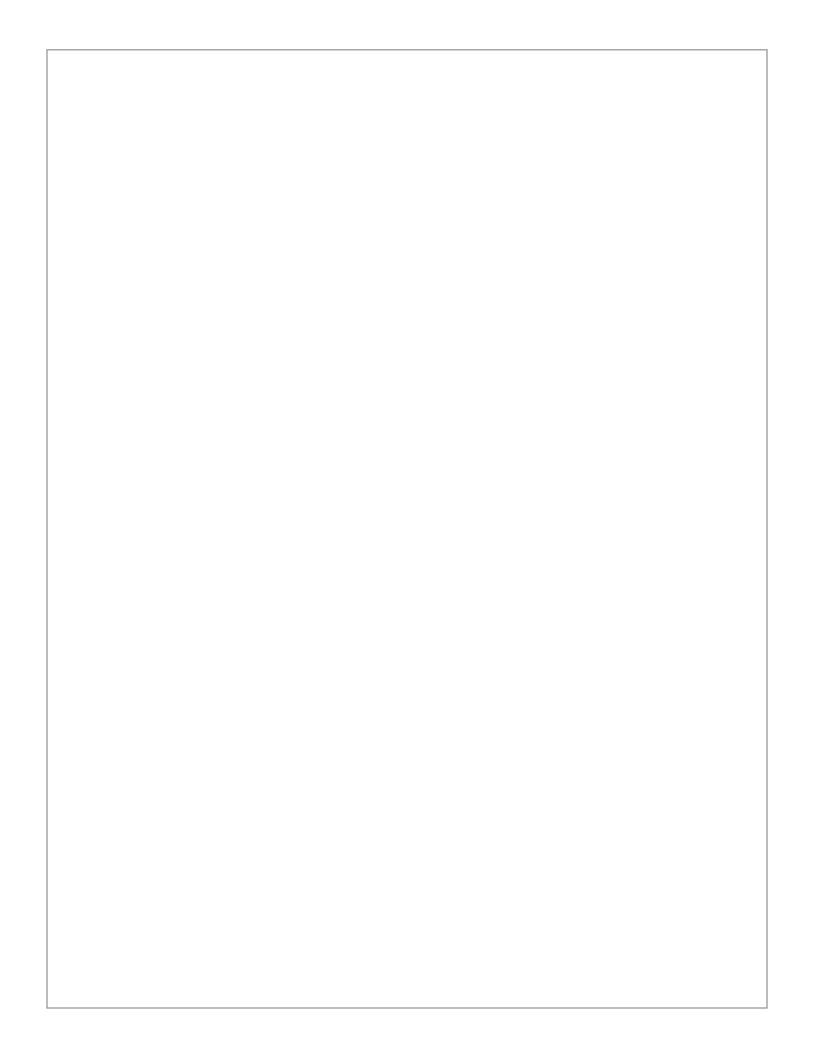
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# Abstract

THE FOLLOWING BOOKLET ADDRESSES THE THESIS IDEA THAT PLAY SHOULD BE INTEGRATED INTO STREETSCAPE DESIGN TO CREATE A MORE INTERACTIVE AND STIMULATING PLAY ENVIRONMENT FOR CHILDREN LIVING IN URBAN ENVIRONMENTS. THE BOOKLET DISCUSSES THE EVOLVING PLAY ENVIRONMENT AND HOW PLAYSCAPE DESIGN HAS REMAINED STAGNANT IN RECENT YEARS AND THAT THE DESIGN PROFESSION MUST ACKNOWLEDGE THAT STEPS MUST BE MADE TO INNOVATE PLAYSCAPE DESIGN WITHIN OUR CITIES. THE RESEARCH METHODOLOGY IS PRIMARILY INTERPRETIVE RESEARCH WITH QUALITATIVE DATA REINFORCING THE FINDINGS AND OBSERVATIONS MADE THROUGH RESEARCH.

# **Thesis Narrative**



## **Connecting the Dots**

DESIGNERS HAVE PLACED LOW PRIORITY ON PLAYSCAPE DESIGN IN URBAN ENVIRONMENTS, PROVIDING CHILDREN WITH "TOKEN" TRADITIONAL PLAYSCAPES SCATTERED AMONGST THE CITY THAT ARE UNDER-UTILIZED BY THE CHILDREN WHOM THEY ARE PROVIDED FOR. OUR UNDERSTANDING OF CHILDREN AND WHAT THEY VALUE IN AN ENVIRONMENT MUST BE ADDRESSED BY DESIGNING OUR URBAN STREETSCAPES TO ACCOMMODATE A LARGELY IGNORED GROUP OF CITIZENS, THE URBANITE CHILD. BASED UPON YEARS OF QUALITATIVE AND OBSERVATIONAL DATA IT IS REVEALED THAT CHILDREN DO NOT PLACE MUCH IMPORTANCE ON THE TRADITIONAL COOKIE-CUTTER PLAYGROUNDS GIVEN TO THEM, INSTEAD THEY PLACE PRIORITY ON THE STREETSCAPES THAT SURROUND THEIR "HOME-RANGE" THAT THEY TRAVEL THROUGHOUT DAILY. BECAUSE OF THIS IT IS NECESSARY THAT DESIGNERS BEGIN LOOKING AT HOW THEY CAN IMPROVE AND EVOLVE THE STREETSCAPE TO CONFORM TO THE NEEDS AND WANTS OF ALL USERS.

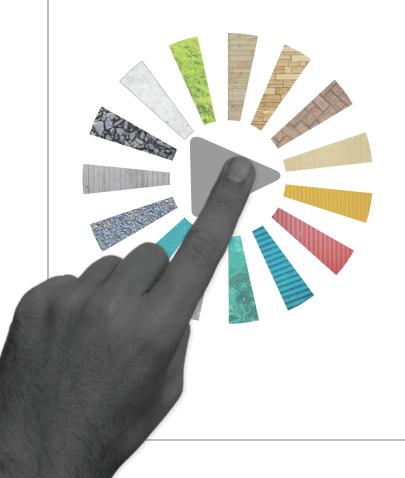
THE IDEAL OF INTEGRATING PLAY AND ACTIVITY INTO THE STREETSCAPE IS IMPORTANT TO THE FIELD OF LANDSCAPE ARCHITECTURE AS STREETSCAPE DESIGN HAS BECOME STALE AND FORMULAIC. THE PREVAILING PURPOSE OF THE STREETSCAPE HAS BEEN TO GET FROM POINT A TO POINT B, BUT NOT MUCH THOUGHT HAS BEEN PUT INTO WHAT A USER CAN EXPERIENCE THROUGH THAT TRAVEL. THE STREETSCAPE IS A LARGE PART OF THE URBAN ENVIRONMENT AND IS GENERALLY GEARED TOWARDS THE ADULT USER, OSTRACIZING THE CHILD USER WHOM SPENDS A GREAT DEAL OF THEIR CHILDHOOD TRAVERSING THE STREETSCAPES. BY INTEGRATING PLAY AND ACTIVITY IN THE STREETSCAPE DESIGNERS CAN CREATE A MORE WHOLESOME AND POSITIVE INTERACTION WITHIN THE CITY AND BENEFIT THE FREQUENTLY IGNORED URBANITE CHILD.

# **Project Typology**

THE PROJECTS TYPOLOGY IS AN URBAN STREETSCAPE DESIGN. STREETSCAPES ARE CHARACTERIZED BY A VIBRANT URBAN SETTING COMPLETE WITH UNIQUE BUILDING FACES ON BOTH SIDES OF THE STREET, BROAD SIDEWALKS, AND STREET TREE PLANTINGS SUITABLE FOR HIGH PEDESTRIAN AND VEHICULAR TRAFFIC. STREETSCAPES ARE GENERALLY USED AS A CORRIDOR WHERE PEOPLE ARE PASSING THROUGH TO GET FROM POINT A TO POINT B. THOUGH THEY CAN BE DESIGNED BEAUTIFULLY AND BECOME A DESTINATION LANDSCAPE ON THEIR OWN, THEY ARE COMMONLY DESIGNED AS A PLACE TO SIMPLY PASS THROUGH. BY INTRODUCING PLAY INTO THE STREETSCAPE DESIGN, THE STREET BECOMES ELEVATED TO A NEW LEVEL OF INTERACTION AND PURPOSE.

# **Goals Of Thesis Project**

THE GOALS OF THE DESIGN PROJECT IS TO RE IMAGINE WHAT URBAN STREETSCAPES CAN BE, AND WHAT PURPOSE THEY SERVE WITHIN THE CITY. THE PROJECT AIMS TO DESIGN FOR A DEMOGRAPHIC THAT HAS BEEN WIDELY IGNORED IN THE CONSTRUCTION OF CITIES, THE URBAN CHILD. BY UNDERSTANDING HOW CHILDREN UTILIZE AND INTERACT WITH THEIR ENVIRONMENT, SPECIFICALLY WITH STREETSCAPES, THE URBAN ENVIRONMENT CAN BE DESIGNED TO BENEFIT THE LIVES AND GROWTH OF CHILDREN.



## **Project emphasis**

THE PROJECT WILL BE COMPRISED OF THE BASIC ELEMENTS OF AN URBAN STREETSCAPE SUCH AS BROAD PEDESTRIAN WALKWAYS, VEGETATIVE BUFFERS, LIGHTING, SEATING, VEHICULAR CIRCULATION, AND SAFE PEDESTRIAN CROSSINGS. WITH A STRONG STREETSCAPE DESIGN THE PROJECT WILL ALSO BRING ATTENTION TO THE LOCAL BUSINESSES AND DEAL WITH CONTRIBUTING TO AN INCREASE IN CONSUMERS IN THE AREA. THESE ARE ALL EXTREMELY IMPORTANT ELEMENTS IN THE FINAL DESIGN OF THE PROJECT AS THEY LAY A STRONG FRAMEWORK FOR THE PLAY ELEMENT IN THE STREETSCAPE DESIGN. THE MOST CRUCIAL PART OF THE DESIGN IS THE INTEGRATION OF PLAY INTO THE STREETSCAPE DESIGN AND RE IMAGING THE STREET AS A PLACE FOR PLAY. THE INTEGRATION OF PLAY INTO THE STREETSCAPE DESIGN DEMANDS THE MOST EMPHASIS AS IT IS TAKING AN ALREADY FORMULAIC APPROACH TO STREETSCAPE DESIGN AND EVOLVING IT INTO SOMETHING NEW AND INNOVATIVE. THE PLAY ELEMENT TAKES THE BASIC STREETSCAPE DESIGN AND ELEVATES IT TO A HIGHER PURPOSE, THEREFORE THE DESIGN PROJECT WILL PLACE THE MOST EMPHASIS ON THE IDEAL OF PLAY.

## **Project Justification**

THE PROJECT IS IMPORTANT AS IT SEEKS TO FIND A SOLUTION TO THE MUNDANITY OF THE TRADITIONAL PLAYSCAPES, WHICH HAVE PLAGUED URBAN ENVIRONMENTS SINCE THE INTRODUCTION OF THE PARK SYSTEM. THE PROJECT INVESTIGATES NEW AND INNOVATIVE WAYS THAT PLAY CAN BE INTRODUCED INTO THE CITY, IN A WAY THAT ALSO TAKES INTO CONSIDERATION WHAT THE URBAN CHILD TRULY WANTS. THE PROJECT IS PARTICULARLY RELEVANT TO THE LANDSCAPE ARCHITECTURE PROFESSION AS IT IS A NEWLY EXPLORED IDEA IN THE EVOLUTION OF STREETSCAPE DESIGN THAT FEW LANDSCAPE ARCHITECTS HAVE CONSIDERED. NOT ONLY THAT BUT INNOVATIVE PLAYSCAPE DESIGN HAS BECOME INCREASINGLY POPULAR AND DISCUSSED WITHIN THE LANDSCAPE ARCHITECTURE PROFESSION, AND IS ON THE RISE TO BECOME THE NEW HOT - TOPIC WITHIN THE PROFESSION. THE PROJECT SHOWCASES THE SKILLS THAT I HAVE LEARNED AS A LANDSCAPE ARCHITECTURE STUDENT AS IT TAKES THE IDEA OF STREETSCAPE DESIGN AND BRINGS A NEW INVENTIVE WAY TO VIEW AND UTILIZE OUR STREETS TO IMPROVE THE LIVES OF

# **Client & Users**

## **Local Government**

THE FIRST CLIENT BECOMES THE LOCAL GOVERNMENT WHOM FUNDS THE PROJECT. BY FUNDING THE DESIGN OF AN INTERACTIVE PLAY STREETSCAPE DESIGN THEY ARE CREATING A MORE ACTIVE AND CHILD FRIENDLY URBAN ENVIRONMENT. BY DOING THIS IT REVITALIZES THE CITY AND ENCOURAGES MORE FAMILIES TO MAKE THEIR HOMES IN URBAN CENTERS AS WELL AS PROVIDES CURRENT FAMILIES LIVING IN URBAN AREAS WITH SAFE, EASILY ACCESSIBLE PLAYSCAPES. WITH INCREASED PEDESTRIAN TRAFFIC THROUGHOUT THE STREETSCAPE LOCAL BUSINESSES PROSPER, COMMUNITIES GROW STRONGER BONDS, AND CHILDREN ARE NO LONGER TREATED AS OUTSIDERS WITHIN THEIR URBAN HOMES.

# **Urban Children**

THE SECOND AND MOST IMPORTANT CLIENT BECOMES THE URBANITE CHILD WHOM HAS BEEN LARGELY IGNORED IN THE DESIGNING OF CITIES. THE PLAY STREETSCAPE BENEFITS CHILDREN AS IT INTEGRATES PLAY INTO THEIR EVERYDAY TRAVEL, CREATING AN IMMERSIVE AND STIMULATING EXPERIENCE.

# **Parents of Urban Children**

THE THIRD CLIENT BECOMES THE PARENTS OF THE URBANITE CHILDREN WHO EITHER LET THEIR CHILDREN NAVIGATE THE URBAN STREETS DAILY, OR THOSE WHO DO NOT IN FEAR OF THE SAFETY OF THEIR CHILDREN. THE PLAY STREETSCAPES BECOME A HIGH PEDESTRIAN TRAFFIC AREA WITHIN THE CITY THAT EASES THE PARENTAL PARANOIA ABOUT THEIR CHILD'S SAFETY OUTSIDE THE HOME. WITH THE INTRODUCTION OF STREETSCAPES THAT ARE FOCUSED ON CHILDREN AND THEIR INTERACTIONS WITH THE ENVIRONMENT PARENTS CAN BE PUT AT EASE KNOWING THEIR CHILD IS IN A SAFE PART OF THE CITY PLAYING.









# **Design methodology**

MY CHOSEN DESIGN METHODOLOGY FOR MY THESIS PROJECT IS THE INTERPRETIVE RESEARCH METHODOLOGY WITH THE ASSISTANCE OF QUALITATIVE DATA. INTERPRETIVE RESEARCH ASSUMES THAT PEOPLE CREATE AND ASSOCIATE THEIR OWN SUBJECTIVE MEANINGS AS THEY INTERACT WITH THE WORLD AROUND THEM. THUS RESEARCHERS ATTEMPT TO UNDERSTAND PHENOMENA THROUGH ACCESSING THE MEANINGS PARTICIPANTS ASSIGN TO THEM. I HAVE DEEMED THIS THE MOST EFFECTIVE FORM OF RESEARCH FOR MY THESIS PROJECT AS THE CURRENT UNDERSTANDING OF CHILDHOOD INTERACTION WITH THEIR ENVIRONMENTS IS LARGELY OBSERVATION AND PERSONAL-EXPERIENCE BASED WITH A FEW QUALITATIVE GIS BASED EXPERIMENTS. BY UNDERSTANDING THE VALUE CHILDREN PLACE ON THEIR ENVIRONMENTS AND HOW THEY PERCEIVE WHAT IS PROVIDED FOR THEM IN THE URBAN ENVIRONMENT | WILL SUCCESSEULLY BE ABLE TO DESIGN FOR THEIR DEMOGRAPHIC. ON TOP OF THE INTERPRETIVE RESEARCH METHODOLOGY | WILL ALSO BE APPLYING THE DESIGN RESEARCH METHODOLOGY TO MY THESIS PROJECT AS MY ULTIMATE GOAL IS TO DESIGN A SOLUTION TO THE

# **Design Documentation**

MY DESIGN PROCESS IS NOT A LINEAR ONE, THEREFORE DOCUMENTING ALL THE WORK THAT I DO WILL BE CRITICAL FOR MY FINAL THESIS PROJECT. THROUGHOUT THE DESIGN PROCESS | WILL HAVE TO MAKE SURE THAT ANY SKETCHES OR WRITTEN WORK WILL NEED TO BE EITHER SCANNED OR PHOTOGRAPHED AND SAVED WITHIN APPROPRIATE FOLDERS ON MY COMPUTER. IN THE INTEREST OF KEEPING ALL MY WORK IN ORDER, I WILL CREATE WEEKLY FOLDERS FOR WORK TO BE PLACED IN SO THAT THERE IS A TIMELINE OF DRAWINGS THAT DO NOT GET MESSED UP AND LOST WITHIN THE LARGER WORK OF THE PROJECT. ASIDE FROM THE WEEKLY FOLDERS OF DESIGN WORK, AT THE END OF EACH WEEK THE FINAL "DELIVERABLE" GOALS WILL BE PRESENTED AND PLACED WITHIN SEPARATE FOLDERS TO KEEP A DISTINCTION BETWEEN PROCESS WORK AND FINAL DELIVERABLE WORK.

# **Projected schedule**

BECAUSE OF MY NON-LINEAR DESIGN PROCESS IT WILL BE IMPORTANT TO HAVE GOALS IN SIGHT AT THE END OF EACH WEEK SO THAT I CAN REMAIN ON TRACK AND NOT LOSE SIGHT OF MY FINAL GOALS. BASED ON THE PROVIDED WORK PLAN AND REQUIRED DELIVERABLES FOR EACH WEEK, I WILL WORK TO COMPLETE A DRAFT OF THE EXPECTED DELIVERABLES ONE CLASS PERIOD BEFORE THEY ARE DUE, SO THAT THEY MAY BE REVIEWED AND REVISIONS CAN BE MADE BEFORE THE FINAL DRAFT IS DUE. THIS WILL ENSURE THAT I STAY ON TOP OF MY WORK, WHILE ALSO ENCOURAGING ME TO WORK HARDER AND IMPROVE UPON WHAT I HAVE DONE.

# **Research Paper**



# The Integration and Implementation of Urban Play through Streetscape Design

WE LIVE IN AN ERA WHERE THE WORLD IS RAPIDLY URBANIZING, WITH NEW CITIES CROPPING UP AND EXISTING URBAN ENVIRONMENTS EXPANDING. THROUGHOUT THIS RAPID EXPANSION DESIGNERS HAVE PAID LITTLE REGARD TO THE URBANITE CHILD, BY ONLY PROVIDING THEM WITH SIMPLE, PRE-FABRICATED PLAYSCAPES SCATTERED AMONGST THE CITY. THESE TRADITIONAL PLAYSCAPES HAVE SINCE BECOME THE STANDARD AMONGST PARKS AND OPEN SPACE ACROSS THE COUNTRY, YET THEY DO NOT ADDRESS WHAT THE DEVELOPING URBANITE CHILD NEEDS. DESIGNERS HAVE PLACED LOW PRIORITY ON PLAYSCAPE DESIGN, YET IT HAS AN IMMENSE EFFECT ON BEHAVIORAL, MOTOR, COGNITIVE, EMOTIONAL, AND SOCIAL DEVELOPMENT OF CHILDREN. CURRENT FINDINGS SUGGEST THAT CHILDREN DO NOT PLACE AS MUCH SIGNIFICANCE IN PROVIDED PLAYSCAPES AS THEY DO THE STREETS AND PATHS IN WHICH THEY TRAVEL EACH DAY. YET THEY ARE ONLY PROVIDED WITH A TOKEN SPACE, COMMONLY A TRADITIONAL PLAYGROUND, AND FORCED TO FIT INTO THE ADULT WORLD.

# Thesis

UNIQUE AND INNOVATIVE PLAYSCAPE DESIGN MUST BE INTEGRATED INTO URBAN STREETSCAPES TO PROMOTE ENGAGING AND ENRICHING ENVIRONMENTS FOR DEVELOPING CHILDREN LIVING IN URBAN CENTERS. ONE MIGHT ARGUE THAT OUR CITIES ALREADY HAVE A PARK SYSTEM FULL OF TRADITIONAL PLAYSCAPES THAT HAVE BEEN SUCCESSFULLY IMPLEMENTED FOR YEARS, YET THIS OMITS THE FACT THAT RECENT RESEARCH HAS DISCOVERED THAT THESE PLAYSCAPES ARE NOT MEETING THE NEEDS OF THE YOUTH UTILIZING THEM. IN GRABOW AND SALKIND'S RESEARCH IT IS STATED THAT "FINDINGS SUGGEST THAT DESPITE CONVENIENT ACCESS, GOOD MAINTENANCE, AND ORGANIZED RECREATIONAL 'PROGRAMS', PARKS ARE GROSSLY UNDERUSED. THE PROBLEM OF THE NON-USE OF EXISTING FACILITIES APPEARS TO BE A SYMPTOM OF THE FACT THAT ONLY RECENTLY HAVE CHILDREN'S NEEDS BEEN UNDERSTOOD TO BE AN IMPORTANT FACTOR IN ENVIRONMENTAL DESIGN" (GRABOW & SALKIND 1976).

As the city and urban environment evolves PLAYSCAPE DESIGN HAS STAYED STATIC AND STERILE IN NATURE, WHICH REFLECTS AN ATTITUDE OF INDIFFERENCE AND LAZINESS IN THE URBAN DESIGN PROFESSION TO FULLY UNDERSTAND CHILDREN AS A SOCIAL GROUP. IN THE RESEARCH PAPER DEFINING AN AGENDA FOR THE GEOGRAPHY OF CHILDREN: REVIEW AND PROSPECT, THE AUTHORS ASSERT THAT

"Several studies reveal that children who are old enough to go outside their home unaccompanied spend a lot of time on the pavements, streets and other areas of their immediate neighborhood, through the course of their daily transactions these places become colonized by children and converted into their home bases" (Matthews, H., & Limb, M. (1999)).

CHILDREN ARE SPENDING A LARGE PORTION OF THEIR PLAYTIME ON THE STREETS, AND AS SUCH OUR STREETSCAPES SHOULD REFLECT THAT IN DESIGN. ESPECIALLY RELEVANT TO URBAN ENVIRONMENTS WHERE PARKS ARE NOT ALWAYS ACCESSIBLE TO YOUTH, OUR STREETS SHOULD BECOME A SAFE AND ENRICHING PLAY SPACE TO GROW AND LEARN.

# Children as a Marginalized Group in Society

WHEN ONE THINKS OF MARGINALIZED MEMBERS OF SOCIETY MOST PEOPLE DO NOT INITIALLY THINK OF CHILDREN AS A GROUP SUFFERING FROM MARGINALIZATION. YET CHILDREN'S LACK OF POWER AND CONTROL IN MANY PUBLIC AREAS IS SELDOM ACKNOWLEDGED BY ADULTS IN THEIR URBAN DESIGN. ON ONE HAND ADULTS CREATE PANICS ABOUT "STRANGER – DANGER" YET ON THE OTHER HAND THEIR URBAN PLANNING RESPONSES CAST CHILDREN INTO UNSUPERVISED AND SEGREGATED AREAS TO PLAY. IN THE PAPER DEFINING AN AGENDA FOR THE GEOGRAPHY OF CHILDREN: REVIEW AND PROSPECT, IT'S STATED THAT

"Playgrounds, no matter how novel and stimulating, are conceived by adults to isolate and contain children within public spaces and, in so doing, contribute to a process of childhood ghettoization" (Matthews, H., & Limb, M. (1999)).

THIS CREATES A DISCONNECTION BETWEEN CHILDREN'S NEED FOR FREEDOM WITH SECURITY AND PARENTS DESIRES FOR CLOSENESS WITH VISIBILITY WHEN THEIR CHILD IS AT PLAY. AS A RESULT OF THESE ISOLATED AREAS PROVIDED FOR CHILDREN TO PLAY IN, CHILDREN LEARN TO OPERATE WITHIN THE FRAMEWORKS OF THE ADULT WORLD, GATHERING IN AREAS SUCH AS STREETS, STREET CORNERS, AND COMMERCIAL AREAS. THIS PERCEIVED INFRINGEMENT ON THE ADULT WORLD BY CHILDREN IS SEEN AS THREATENING AND AS SUCH. ADULTS DESIGN TO KEEP CHILDREN OUT OF THESE SPACES. INEVITABLY THIS MEANS CHILDREN ARE POORLY INTEGRATED INTO THE PHYSICAL WORLD OF ADULTS, THOUGH THEY ARE FORCED TO INHABIT THAT VERY WORLD AND CARVE OUT THEIR OWN CULTURE WHERE LITTLE IS PROVIDED FOR THEM.

# A Child's Mobility and Parental Concerns

OVER THE PAST FEW DECADES THE MOBILITY AND NATURE OF CHILDHOOD HAS VASTLY CHANGED DUE TO PARENTAL CONCERNS AND ANXIETIES OVER PERCEIVED SAFETY IN OUTDOOR ENVIRONMENTS. IN THE ARTICLE FREE RANGE KIDS? USING GPS-DERIVED ACTIVITY SPACES TO EXAMINE CHILDREN'S NEIGHBORHOOD ACTIVITY AND MOBILITY THE AUTHORS STATE THAT

"CONTEMPORARY LANDSCAPES OF CHILDHOOD HAVE CHANGED SO DRAMATICALLY FROM PREVIOUS GENERATIONS AS TO NECESSITATE NEW CLASSIFICATIONS OF CHILDHOOD PLAY EXPERIENCE" (LOEBACH, J. E., & GILLILAND, J. A. (2016)).

THE VERY DEFINITION OF CHILDHOOD HAS CHANGED IN RECENT GENERATIONS EVEN THOUGH WE ARE STILL PROVIDING THE SAME COOKIE-CUTTER PLAY ENVIRONMENTS. THIS HIGHLIGHTS THE DIVIDE BETWEEN ADULTS AND CHILDREN WHEN IT COMES TO UNDERSTANDING THE CURRENT GENERATION OF CHILDHOOD MOBILITY.

THERE HAS BEEN A RECENT INFLUX IN RESEARCH THAT HAS AIMED TO MAP OUT AND EXPLAIN HOW CHILDREN BEHAVE, INTERACT, AND MOVE THROUGH THEIR SURROUNDINGS. MANY OF THESE STUDIES HAVE UTILIZED GPS AND GIS MAPPING TECHNIQUES IN AN ATTEMPT TO CREATE VISUAL REPRESENTATIONS OF A CHILD'S PERCEIVED AND EXPERIENCED ENVIRONMENT. ALONGSIDE THESE MAPPING TECHNIQUES RESEARCHERS COMMONLY ASK THE STUDY GROUP TO DRAW MAPS, JOURNAL THEIR DAILY EXPERIENCES, AND RANK PLACES THEY DEEM IMPORTANT IN THEIR DAY TO DAY LIFE. ALL OF THESE RESEARCH METHODS PROVIDE A QUANTITATIVE POOL OF DATA THAT ALL POINT IN THE SAME DIRECTION, CHILDREN DO NOT NECESSARILY VALUE THE PLACES THAT ADULTS PROVIDE FOR THEM. THOUGH THIS FACT IS TRUE, IN THE RESEARCH STUDY THE HIDDEN STRUCTURE OF CHILDREN'S PLAY IN AN URBAN ENVIRONMENT STATES THAT

"IT IS NAÏVE TO CONCLUDE THAT CHILDREN WHO RESIDE IN URBAN SETTINGS DO NOT USE THE FACILITIES PROVIDED FOR THEM IN THEIR DAILY ACTIVITIES. IT IS ALSO NAÏVE, HOWEVER, TO CONCLUDE THAT THESE SAME CHILDREN DO NOT CREATE THEIR OWN 'HIDDEN STRUCTURE' OF PLAY (BOTH INDIVIDUAL AS WELL AS IN GROUPS) IN AN EFFORT TO MASTER THEIR ENVIRONMENT." (GRABOW & SALKIND 1976).

TO EMPHASIZE THIS, GIS MAPPING RESEARCH DONE BY PAMELA WRIDT IN HER STUDY, A QUALITATIVE GIS APPROACH TO MAPPING URBAN NEIGHBORHOODS WITH CHILDREN TO PROMOTE PHYSICAL ACTIVITY AND CHILD-FRIENDLY COMMUNITY PLANNING DISCUSSES THE TREND IN URBAN PARK USAGE AMONGST TEN AND ELEVEN YEAR OLDS. HER FINDINGS REVEAL THAT THOUGH CHILDREN OCCASIONALLY USE PROVIDED PUBLIC PARKS, THEY GENERALLY ONLY USED THEM WHEN A PARENTAL FIGURE WAS PRESENT AND SUPERVISING THEM IN THEIR PLAY. INSTEAD THE CHILDREN EMPHASIZED THAT THEY PLACED MORE IMPORTANCE ON THE TRIP TO AND FROM THE PUBLIC PLAY SPACES AND VALUED THEIR TIME NAVIGATING THE STREETS. THESE SAME CHILDREN ALSO EXPRESSED A DESIRE FOR BETTER STREETS AND SIDEWALKS IN THEIR NEIGHBORHOODS THAT CONNECTED PUBLIC SPACES TOGETHER. MODERN STUDIES ON CHILDHOOD MOBILITY THAT INCLUDE CHILD INVOLVEMENT AND OPINION HAVE A COMMON THEME THROUGHOUT; CHILDREN WANT MORE FREEDOM AND BETTER STREETSCAPES THAT CAN SAFELY ACCOMMODATE THEM AND THEIR PLAY.

PERHAPS ONE OF THE BIGGEST CHALLENGES MODERN CHILDREN ENCOUNTER IN THEIR STRUGGLE FOR FREEDOM AND FLEXIBILITY IN THEIR PLAY ENVIRONMENTS IS THE EVER INCREASING PARENTAL SAFETY CONCERN. HISTORICALLY CHILDREN HAD A LARGER RANGE OF MOBILITY IN THEIR PLAY, AS THE ATTITUDES OF PAST ERAS ALLOWED CHILDREN MORE FREEDOM IN HOW THEY TRAVERSED AND EXPLORED THEIR ENVIRONMENT. TODAY'S YOUTH ARE NOT FORTUITOUS ENOUGH TO BE AFFORDED THE SAME FLEXIBILITY IN EXPLORATION AND PLAY. THIS IS ESPECIALLY APPARENT WHEN ONE LOOKS AT STATISTICS ON HOW MUCH FREEDOM AND MOBILITY CHILDREN ARE AFFORDED IN THEIR DAY TO DAY LIVES.

STATISTICALLY YOUNG BOYS ARE ALLOWED MORE OPPORTUNITY AND PRIVILEGE IN THEIR PLAY, WITH PARENTS ALLOWING THEM TO ADVENTURE NEARLY TWICE THE DISTANCE GIVEN TO YOUNG GIRLS. THIS IS PRIMARILY DUE TO THE PARANOIA OF YOUNG GIRLS BEING VULNERABLE IN THE WORLD AND UNABLE TO PROTECT THEMSELVES AND NAVIGATE OUTSIDE OF THE IMMEDIATE HOME. THOUGH CHILDREN'S RANGE OF EXPLORATION HAS VASTLY SHRUNK SINCE PAST GENERATIONS, PARENTAL SURVEYS HAVE INDICATED THAT THEY WOULD ALLOW THEIR CHILD MORE FREEDOM IF THEY KNEW THE PLACES THEY WOULD BE TRAVELING WERE SAFE AND WELL POPULATED. IN THE SURVEY DO PARENTAL PERCEPTIONS OF THE NEIGHBORHOOD ENVIRONMENT INFLUENCE CHILDREN'S INDEPENDENT MOBILITY? A COMMON FINDING WAS THE FACT THAT

"ATTRACTIVENESS OF NEIGHBORHOOD STREETS AND PRESENCE OF OTHER PEOPLE 'TALKING AND DOING THINGS TOGETHER' WERE ALSO ASSOCIATED WITH CHILD INDEPENDENT MOBILITY" (MITRA, R., FAULKNER, G. E., BULIUNG, R. N., & STONE, M. R. (2014)).

IN THE INTEREST OF PROVIDING CHILDREN A LARGER RANGE OF EXPLORATION THAT OLDER GENERATIONS POSSESSED, URBAN PLANNERS MUST CONSIDER THE CONNECTIONS, ENVIRONMENTS, AND URBAN PATHWAYS THAT CHILDREN MUST TRAVERSE ON A DAILY BASIS, AND DESIGN SO THAT THEY PROVIDE A SENSE OF SECURITY AND SAFETY. BY DOING THIS PARENTAL ANXIETY ABOUT POTENTIAL DANGERS IN THE URBAN ENVIRONMENT WILL BE MITIGATED. BY ADDRESSING PARENTAL FEARS CHILDREN ARE ALLOWED A LARGER RANGE OF INDEPENDENT MOBILITY IN THE URBAN ENVIRONMENT.

## Integration of Play into the Urban Environment & Community involvement

WHAT THE URBAN ENVIRONMENT TRULY LACKS IS THE IMPLEMENTATION OF CREATIVE AND STIMULATING PLAY ENVIRONMENTS THAT INTEGRATE INTO THE STREETSCAPES AND PEDESTRIAN PATHWAYS. RECENTLY IT HAS BEEN ACKNOWLEDGED BY DESIGNERS AND RESEARCHERS THAT THE NOTION OF WORK AND PLAY BEING SEPARATE ENTITIES MUST COME TO AN END TO CREATE A MORE IMMERSIVE AND DYNAMIC URBAN COMMUNITY. IN THE ARTICLE PLAY IN THE CITY: PARKOUR AND ARCHITECTURE THE AUTHORS ASSERT THAT "PLAY IS A POWERFUL POSITIVE FORCE, BENEFITING THE ARCHITECTURE THAT SUPPORTS IT, AND THE INHABITANTS THAT EXPERIENCE IT. IT IS PHYSICALLY POSSIBLE TO PLAY ANYWHERE IN THE CITY, BUT OFTEN PLAY BRINGS OUT CONFLICT BETWEEN COMPETING DESIRES AND FEARS SURROUNDING THE PUBLIC REALM. THE DESIGN OF BUILDINGS AND CITIES CAN MEDIATE THIS CONFLICT, REMOVING BARRIERS TO OUR WELLBEING AND EXPRESSING THE HIDDEN URBAN TERRAINS OF DESIRE AND FEAR." (RAWLINSON, C., & GUARALDA, M. (2011)).

TO CREATE THIS IDEAL URBAN ENVIRONMENT IN WHICH PLAY IS ENCOURAGED IN ALL ASPECTS OF THE ARCHITECTURE, DESIGNERS MUST CONSIDER HOW THEIR BUILDINGS, STREETS, AND OTHER VARIOUS BUILT AMENITIES CAN BE USED FOR BOTH WORK AND PLAY. THERE MUST BECOME A FLUIDITY BETWEEN THE TWO IN DESIGN, ALLOWING FOR BOTH PROFESSIONAL FUNCTION, YET ALSO LEAVING ROOM FOR INTERPRETIVE PLAY.

AN APT, BUT PERHAPS NOT COMPLETELY SUCCESSFUL, EXAMPLE OF INTEGRATING PLAY INTO THE URBAN STREETSCAPE IS SAN FRANCISCO'S IMPLEMENTATION OF "PLAY STREETS" A MONTHLY EVENT WHERE CERTAIN STREETS ARE SHUT DOWN AND PLANNED GAMES AND EVENTS TAKE PLACE FOR THE COMMUNITY'S YOUTH. SURVEY OF ADULT OPINION STRESSED THAT THE EVENT STRENGTHENED THEIR BOND WITH THE COMMUNITY, AND HELPED CREATE A SAFER SETTING FOR CHILDREN TO PLAY. THOUGH WELL INTENTIONED, THE INVOLVEMENT OF OLDER KIDS QUICKLY DIMINISHED AS THE ATTENDEES BECAME YOUNGER CHILDREN (TEN YEARS OR YOUNGER) ACCOMPANIED AND CHAPERONED BY A PARENTAL FIGURE. ULTIMATELY THE "PLAY STREETS" MOVEMENT LOST ITS APPEAL ON CHILDREN BECAUSE OF THE CONSISTENT ROLE ADULTS PLAYED IN CONTROLLING THEIR PLAY BEHAVIOR AND REGIMENTING IT. SAN FRANCISCO'S "PLAY STREETS" ULTIMATELY SUPPORTS THE IDEAL AND NOTION THAT PLAY NEEDS TO BE FULLY INTEGRATED INTO URBAN DESIGN, SO THAT IT NO LONGER BECOMES A CHAPERONED AND REGULATED ACTIVITY BY ADULT PARTICIPANTS, AND BECOMES A MEANS FOR CHILDREN TO LEARN AND EXPLORE THEIR CITIES.

## Conclusion

UNIQUE AND INNOVATIVE PLAYSCAPE DESIGN MUST BE INTEGRATED INTO URBAN STREETSCAPES TO PROMOTE ENGAGING AND ENRICHING ENVIRONMENTS FOR DEVELOPING CHILDREN LIVING IN URBAN CENTERS. WITHOUT DESIGNERS ACTIVELY WORKING TO IMPROVE UPON THE URBANITE CHILD'S ENVIRONMENT, CHILDREN BECOME A SECONDARY CITIZEN IN THEIR OWN HOMES. UNABLE TO FULLY EXPERIENCE, GROW AND LEARN IN THEIR ENVIRONMENTS DUE TO POOR DESIGN. UNDERSTANDING THAT URBAN CHILDREN NEED ACCESS AND ENRICHMENT WITHIN THE CITY WILL HELP STRENGTHEN AND ENFORCE COMMUNITY TOGETHERNESS BY CREATING A SYSTEM IN WHICH TODAY'S YOUTH CAN TRAVERSE THEIR ENVIRONMENTS WITH THE KNOWLEDGE THAT THEY ARE SAFE IN DOING SO, AND WITH PARENTAL ANXIETIES ABOUT SAFETY PUT AT EASE. THROUGH CAREFUL STUDY OF A CHILD'S MOBILITY WITHIN THEIR CITY, AND THEIR PROVIDED PLAY FACILITIES, A NETWORK OF UTILIZED PATHS AND STREET CORRIDORS WILL EMERGE, AND THROUGH THIS A NETWORK OF PLAY AND INCLUSIVENESS IN THEIR OWN HOME CITY.

# **Annotated Bibliography**

#### GRABOW, S., & SALKIND, N. J. (1976). THE HIDDEN STRUCTURE OF CHILDREN'S PLAY IN AN URBAN ENVIRONMENT. THE BEHAVIORAL BASIS OF DESIGN, I. RETRIEVED FROM

#### HTTP://WWW.BRIKBASE.ORG/SITES/DEFAULT/FILES/EDRA0 7-VI-GRABOW-164-171.PDF

COMPILING THE DATA OF A STUDY DONE ON CHILDREN'S PLAY HABITS WITHIN AN URBAN ENVIRONMENT, THE STUDY UTILIZES MAPPING TECHNIQUES IN WHICH ELEMENTARY AGE CHILDREN MAP OUT THEIR DAILY ROUTES, AND AREAS WHICH THEY DEEMED OF IMPORTANCE. THE RESULTS SHOWED A DISPARITY BETWEEN WHAT ADULTS THINK IS IMPORTANT TO CHILDREN IN THEIR OUTDOOR ENVIRONMENT AND WHAT WAS ACTUALLY SEEN AS IMPORTANT BY THE KIDS. THE RESEARCH ILLUMINATES AREAS OF CONCERN WHERE DESIGNERS ARE NOT PROVIDING ADEQUATE ENVIRONMENTS FOR CHILDREN, AND INSTEAD PROVIDING THEM WITH AREAS THAT ARE UNDER-UTILIZED BY THEIR DEMOGRAPHIC. THE RESEARCH POSES THE QUESTION "WHAT IMPLICATIONS DO THE FINDINGS HAVE FOR PLANNERS/ARCHITECTS IN TERMS OF CREATING INTERESTING AND FACILITATIVE ENVIRONMENTS FOR YOUNG CHILDREN"?

#### HASSEN, N., & KAUFMAN, P. (2016). EXAMINING THE ROLE OF URBAN STREET DESIGN IN ENHANCING COMMUNITY ENGAGEMENT: A LITERATURE REVIEW. HEALTH & PLACE, 41, 119–132.

HTTPS://DOI.ORG/10.1016/J.HEALTHPLACE.2016.08.005

THE LITERATURE REVIEW WAS CONDUCTED TO GAIN A BETTER UNDERSTANDING OF WHAT ASPECTS OF STREET DESIGN INFLUENCE COMMUNITY ENGAGEMENT, EITHER POSITIVELY OR NEGATIVELY. THE RESEARCH FINDS 16 OVERARCHING THEMES AND TOPICS AMONGST STREET DESIGN DISCUSSION: WALKABILITY, URBAN FORESTRY, AGE-FRIENDLY FEATURES/AGING IN PLACE, ART, AND HERITAGE CONSERVATION ARE AMONG SOME OF THE THEMES DISCUSSED AS WELL AS MATERIAL USAGE AND ACCESSIBILITY TO TRANSPORT, RESOURCES, AND FACILITIES. THE FINDINGS OF THE ARTICLE ARE IMPORTANT IN FACILITATING AND PROMOTING HEALTHY URBAN ENVIRONMENTS AS WELL AS IMPROVING UPON THE CURRENT STATE OF OUR URBAN STREETSCAPES BY HELPING TO BETTER UNDERSTAND THE LINKS BETWEEN STREET DESIGN AND COMMUNITY ENGAGEMENT.

Jack, G. (2010). Place Matters: The Significance of Place Attachments for Children's Well-Being. British Journal of Social Work, 40(3), 755–771. https://doi.org/10.1093/bjsw/bcn142

DRAWING ON RESEARCH FROM FIELDS SUCH AS HUMAN GEOGRAPHY AND ENVIRONMENTAL PSYCHOLOGY THE ARTICLE CONSIDERS THE ROLE IN WHICH PLACE ATTACHMENT AFFECTS CHILDHOOD DEVELOPMENT. THE AUTHOR PARTICULARLY HIGHLIGHTS CHILDREN WHOSE LIVES ARE INFLUENCED BY POVERTY AND OTHER FORMS OF INEQUALITY AND DISADVANTAGE, AS WELL AS A TREND IN PARENTAL FEAR OVER CHILD SAFETY IN THEIR IMMEDIATE ENVIRONMENT WHICH RESULTS IN THEIR INDEPENDENT ACCESS BECOMING LIMITED. THE ARTICLE IS A CRITIQUE OF CURRENT TRENDS IN CHILDHOOD INDEPENDENCE AND POSES ISSUES THAT MUST BE ADDRESSED IN OUR COMMUNITY PLANNING IF CHILDREN ARE TO DEVELOP PLACE ATTACHMENT.

#### LOEBACH, J. E., & GILLILAND, J. A. (2016). FREE RANGE KIDS? USING GPS-DERIVED ACTIVITY SPACES TO EXAMINE CHILDREN'S NEIGHBORHOOD ACTIVITY AND MOBILITY. ENVIRONMENT AND BEHAVIOR, 48(3), 421–453.

A STUDY THAT EXAMINES THE NEIGHBORHOOD ACTIVITY SPACES OF NINE - THIRTEEN YEAR OLD CHILDREN FROM SEVERAL SCHOOLS IN LONDON, CANADA OVER A PERIOD OF SEVEN DAYS UTILIZING GPS TRACKERS. THROUGH ANALYSIS THE RESEARCHERS EXAMINED THE INFLUENCE OF INDIVIDUAL, PERCEPTUAL AND ENVIRONMENTAL FACTORS ON NEIGHBORHOOD USE AND TRAVEL. EVALUATING THE DATA REVEALS CHILDHOOD MOBILITY IS INCREASINGLY AFFECTED BY SURROUNDING ENVIRONMENTS WITH COMMERCIAL AND AGRICULTURAL LAND PROMOTING A LARGER AREA OF MOBILITY AND EXPLORATION. THE MORE OPPORTUNITIES A CHILD IS GIVEN TO LEARN AND NAVIGATE NEW SETTINGS AND SITUATIONS, THE MORE KNOWLEDGE THEY GAIN OF PLACE, AND DEEPEN THEIR PLACE ATTACHMENT TO THEIR HOME RANGE. BY PROVIDING ENGAGING AND UNIQUE ENVIRONMENTS IN URBAN DISTRICTS, DESIGNERS ARE PROMOTING THE GROWTH OF CHILDREN.

# Matthews, H., & Limb, M. (1999). Defining an agenda for the geography of children: review and prospect. Progress in Human Geography, 23(1), 61–90.

THE ARTICLE CONCEPTUALIZES CHILDREN AS A NEGLECTED SOCIAL GROUPING UNDERGOING VARIOUS FORMS OF SOCIO SPATIAL MARGINALIZATION AND CONTENDS TO DEFINE AN AGENDA FOR THE GEOGRAPHY OF CHILDREN THROUGH SEVEN GENERIC PROPOSITIONS WHICH DEAL WITH DIFFERENT ASPECTS OF A CHILD'S RELATIONSHIP WITH THEIR PHYSICAL AND BUILT ENVIRONMENT. THE ARTICLE STRESSES THAT MOST PLACES ARE DESIGNED TO REFLECT ONLY ADULT VALUES AND USAGES, AND THAT DESIGNERS MUST NOW LISTEN TO THE VOICES OF CHILDREN AND BEGIN TO INCLUDE THEM INTO THE DESIGN PROCESS BEYOND JUST SIMPLY ACKNOWLEDGING THEM. RELEVANT TO MODERN URBAN STREETSCAPE DESIGN, THE ARTICLE ENCOURAGES AND PROVIDES MEANS IN WHICH CHILDREN CAN BE ACTIVE MEMBERS WITHIN THE DESIGN PROCESS, ESPECIALLY WITHIN STREETSCAPE DESIGN WHICH HAVE BECOME CULTURAL GATHERING GROUNDS FOR CHILDREN WHOM MUST PAVE THEIR OWN SPACES WITHIN AN ADULT-CENTRIC WORLD.

#### MITRA, R., FAULKNER, G. E., BULIUNG, R. N., & STONE, M. R. (2014). DO PARENTAL PERCEPTIONS OF THE NEIGHBORHOOD ENVIRONMENT INFLUENCE CHILDREN'S INDEPENDENT MOBILITY? EVIDENCE FROM TORONTO, CANADA. URBAN STUDIES, 51(16), 3401–3419. HTTPS://DOI.ORG/10.1177/0042098013519140

THIS STUDY MAKES AN IMPORTANT CONTRIBUTION TO AN EMERGING LITERATURE ON CHILDREN'S MOBILITY AND PHYSICAL ACTIVITY BY SURVEYING VARIOUS PARENTS OF DIFFERING DEMOGRAPHICS ON THEIR CHILD'S MOBILITY AND INDEPENDENCE WITHIN THEIR NEIGHBORHOOD. THE SURVEY REVEALED A CHILD'S INDEPENDENT MOBILITY WAS DEPENDENT ON AGE, SEX, HOUSEHOLD INCOME, LANGUAGE SPOKEN AND PARENTAL TRAVEL ATTITUDES AS WELL AS "STRANGER DANGER" PARANOIA. THE ARTICLE IS USEFUL AS IT HIGHLIGHTS KEY ISSUES IN CHILD MOBILITY THAT CAN BE ADDRESSED THROUGH STREETSCAPE DESIGN. ULTIMATELY THE STREETSCAPE DESIGN SHOULD ENHANCE THE SOCIAL ENVIRONMENT ALLOWING FOR AUTONOMOUS TRAVEL FOR ALL CHILDREN BY ADDRESSING PARENTAL CONCERNS AND IMPROVING UPON PERCEIVED SAFETY IN AN AREA.

# RAWLINSON, C., & GUARALDA, M. (2011). PLAY IN THE CITY: PARKOUR AND ARCHITECTURE. RETRIEVED FROM HTTP://EPRINTS.QUT.EDU.AU/42506

THE STUDY JUSTIFIES AND EXPLORES THE IDEA OF URBAN PLAY INTEGRATED INTO THE CITY, STATING THAT PLAY IS PHYSICALLY POSSIBLE ANYWHERE IN THE CITY, BUT OFTEN BRINGS OUT CONFLICT BETWEEN COMPETING DESIRES AND FEARS SURROUNDING THE PUBLIC REALM, MAINLY WORK VS. PLAY ATTITUDES. THE ARTICLE SUGGESTS THAT ARCHITECTURALLY THE DESIGN OF BUILDINGS AND CITIES CAN MEDIATE THIS CONFLICT BY DESIGNING FOR BOTH REALMS AND CREATING A MORE CO-OPERATIVE URBAN ENVIRONMENT, IMMENSELY RELEVANT TO STREETSCAPE DESIGN, THE STREET IS A MEDIUM THAT CONNECTS BOTH PEDESTRIAN TRAFFIC AND ARCHITECTURAL DESIGN. THROUGH THOUGHTFUL DESIGN THE STREETSCAPE CAN BE USED TO EMPHASIZE THE IDEA OF PLAY AND ACTIVITY WITHIN THE CITY, AND CREATE A HARMONIOUS RELATIONSHIP WITH THE BUILT ENVIRONMENT, REVEALING NEW WAYS TO PROMOTE INTERACTION AND PLAY.

#### VALENTINE, G., & MCKENDRCK, J. (1997). CHILDREN'S OUTDOOR PLAY EXPLORING PARENTAL CONCERNS ABOUT CHILDREN'S SAFETY AND THE CHANGING NATURE OF CHILDHOOD .PDF. SCIENCE DIRECT, 28(2), 219–235. HTTPS://DOI.ORG/I0.1016/S0016-7185(97)00010-9

THE PAPER EXPLORES THE EXTENT TO WHICH PARENTS CONSIDER THAT THERE ARE ADEQUATE PUBLIC FACILITIES AND PLAY OPPORTUNITIES IN THEIR NEIGHBORHOODS FOR THEIR CHILDREN AND ADDRESSES HOW THE NATURE OF CHILDHOOD IS CHANGING. THE FINDINGS CONCLUDE THAT MOST PARENTS BELIEVE THAT THEIR CHILDREN DO NOT HAVE SUFFICIENT PUBLIC PLAY FACILITIES, AND THAT CHILDREN DO NOT WANT THE PLAY FACILITIES PROVIDED FOR THEM. THIS HIGHLIGHTS A MAJOR DISCONNECT BETWEEN WHAT THE COMMUNITY IS PROVIDING FOR CHILDREN AND WHAT THEY REALLY WANT. THE ARTICLE IS USEFUL AS IT EMPHASIZES THE NEED TO BECOME MORE INNOVATIVE WITH OUR DESIGN FOR CHILDREN. IF CHILDREN DO NOT SEE VALUE IN WHAT IS CURRENTLY PROVIDED FOR THEM THEN PERHAPS IT IS TIME TO MOVE BEYOND THE OLD IDEALS OF "PLAY" AND BEGIN PROVIDING NEW AND UNIQUE OPPORTUNITIES TO CONNECT AND INTERACT WITH THEIR ENVIRONMENT.

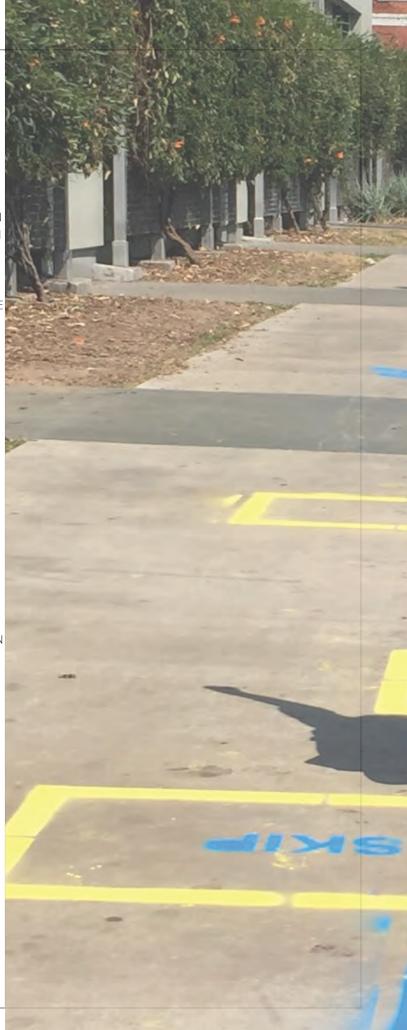
#### WRIDT, P. (2010). A QUALITATIVE GIS APPROACH TO MAPPING URBAN NEIGHBORHOODS WITH CHILDREN TO PROMOTE PHYSICAL ACTIVITY AND CHILD-FRIENDLY COMMUNITY PLANNING. ENVIRONMENT AND PLANNING B: PLANNING AND DESIGN, 37(1), 129–147. HTTPS://DOI.ORG/10.1068/B35002

WRIDT'S STUDY OFFERS INSIGHT INTO THE MIND OF A CHILD BY USING QUALITATIVE AND PARTICIPATORY GIS MAPPING TECHNIQUES ALONGSIDE CHILDREN AGES TEN - ELEVEN. THE STUDY SHEDS LIGHT ON WHAT KIDS THINK, FEEL, VALUE, KNOW, AND CARE ABOUT IN THEIR NEIGHBORHOOD AND HOW DO THOSE PERCEPTIONS AND BEHAVIORS RELATE TO THEIR PHYSICAL ACTIVITY. THESE METHODOLOGIES THAT ENGAGE CHILDREN IN AN ACTIVE DIALOGUE ABOUT THIS TOPIC OFFER INSIGHT INTO EFFECTIVE PLANNING, DESIGN AND HEALTH INTERVENTIONS PREVIOUSLY OVERLOOKED BY ADULT PROFESSIONALS. A MAJOR FINDING IN WRIDT'S WORK WAS THE NEED FOR AN INTERVENTION IN STREETSCAPE DESIGN AND SIDEWALK PRESENCE. THE STUDY SHOWS HOW GIS MAPPING CAN BE USED TO BETTER UNDERSTAND SPATIAL CONNECTION AND WHAT NEEDS TO HAPPEN IN BETWEEN THOSE SPACES, SPECIFICALLY AT THE STREET LEVEL. THE ARTICLE PROVIDES FRAMEWORK FOR FURTHER RESEARCH IN SITE ANALYSIS.

ZIEFF, S. G., CHAUDHURI, A., & MUSSELMAN, E. (2016). CREATING NEIGHBORHOOD RECREATIONAL SPACE FOR YOUTH AND CHILDREN IN THE URBAN ENVIRONMENT: PLAY(ING IN THE) STREETS IN SAN FRANCISCO. CHILDREN AND YOUTH SERVICES REVIEW, 70, 95–101.

#### HTTPS://DOI.ORG/I0.1016/J.CHILDYOUTH.2016.09.014 THE STUDY EVALUATES A COMMUNITY

MOVEMENT KNOWN AS "PLAY STREETS" IMPLEMENTED IN SAN FRANCISCO, WHERE SECTIONS OF STREETS ARE CLOSED OFF ON THE WEEKEND AND PLANNED ACTIVITIES ARE PROVIDED FOR CHILDREN. THE FINDINGS SHOW THAT PLAY STREETS OFFERED IMPORTANT RECREATIONAL AND COMMUNITY BUILDING OPPORTUNITIES AS WELL AS NEIGHBORHOOD SAFETY AWARENESS. ALTHOUGH PLAY STREETS WAS IMPLEMENTED TO PROVIDE MORE RECREATIONAL SPACE FOR YOUTH AND CHILDREN, THE INVOLVEMENT OF ADULTS QUICKLY DIMINISHED YOUTH INVOLVEMENT, AND THOSE WHO DID PARTICIPATE WERE CHAPERONED BY A PARENTAL FIGURE. THE STUDY EXPOSES THE NEED FOR CHILDREN TO BE GIVEN INDEPENDENT MOBILITY IN THEIR PLAY, AS ADULT INTERVENTION CREATES A DECLINE IN ACTIVE PARTICIPATION. THE ANALYSIS OF PLAY STREETS HIGHLIGHTS THE DISCONNECT IN COMMUNICATION BETWEEN ADULT AND CHILD, AND FURTHERS THE NARRATIVE THAT PLAY NEEDS TO BE INTEGRATED INTO EVERYDAY STREETSCAPE DESIGN, RATHER THAN BEING A CHAPERONED EVENT A WEEK.









## Project Name: SUNEDAN SENSORY PARK Location: MITCHELL PARK, AUSTRALIA Designer: WAX DESIGN

Narrative:

THE FINDINGS IN ANALYZING SUNEDAN SENSORY PLAYSCAPE ARE IMPORTANT TO MY FUTURE THESIS DESIGN AS THE PARK IS A STUNNING EXAMPLE OF THE SUCCESSFUL USE OF COLOR, MATERIAL, TOPOGRAPHY AND LINES TO CREATE A SIMPLE YET ENGAGING PLAY ENVIRONMENT.

THE PARK IS PARTICULARLY SUCCESSFUL IN ITS USE OF COLOR TO PROMOTE EXPLORATION AND INTEREST. THE DESIGNERS UTILIZE COLOR PSYCHOLOGY TO CREATE INTRIGUE AND ENERGY THROUGH THE COLOR SCHEME.

THE PLAYSCAPE AIMS TO ENGAGE ALL THE SENSES AS CHILDREN EXPLORE AND PLAY WITHIN THE OUTDOOR "ROOMS". SOME AREAS ENCOURAGE DIRECT MANIPULATION THROUGH ART, WHILE OTHERS STIMULATE THE SENSE OF TOUCH AND SIGHT THROUGH CREATIVE AND COLORFUL SURFACES. ACOUSTICS WITHIN THE ROOMS CREATE A PERSONAL CONNECTION WITH PLAYSCAPE AND INSPIRE CHILDREN TO MAKE THOUGHTFUL CHOICES AS THEY PLAY.

TOPOGRAPHY THROUGHOUT THE SITE CONSISTS OF GENTLE SLOPES AND INCLINES THAT PROVIDE RESISTANCE AND CHALLENGE AS CHILDREN RUN AND WALK AROUND THE SITE, FORCING THE USERS TO THINK ABOUT HOW THEY WILL MOVE THROUGHOUT THE SITE AND HOW THEY WILL NAVIGATE THEIR PLAY ENVIRONMENT.

THE SITE SHOWS THAT LESS CAN BE MORE WHEN IT COMES TO PLAYSCAPE DESIGN AS IT OPENS A CHILD'S MIND TO CREATIVITY AND ENCOURAGES THE USER TO MAKE CHOICES WITH HOW THEY WILL INTERACT WITH THE LANDSCAPE, WITHOUT THE LANDSCAPE EXPLICITLY SAYING HOW TO.

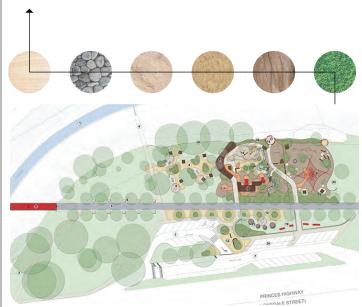


# Project Name: Dandenong Regional Park Location: Dandenong VIC, Australia Designer: ASPECT Studios Narrative:

THE PLAYSCAPE USES ORGANIC AND FLOWING SHAPES THROUGHOUT. THERE IS NO VISIBLE PATTERN IN THE PLAN AND IS REFLECTED IN THE FINAL DESIGN AS A VERY FLUID AND ORGANIC PARK. THE USE OF SUCH SEEMINGLY RANDOM ORGANIC SHAPES IS TO TRY AND EMULATE THE FORMS ONE WOULD FIND IN NATURE. BECAUSE OF THIS AS YOU VIEW THE PLAYSCAPE YOUR EYE DOES NOT SEEM TO FOLLOW A PATTERN, YET IT IS DRAWN INTO THE PLAYSCAPE BY THE NON-LINEAR AND ORGANIC LINES.

THE MATERIAL USAGE IN THIS PLAYSCAPE IS MOSTLY NATURAL AND ORGANIC MATERIALS SUCH AS SAND, ROCK, GRASS, AND WOOD. BECAUSE OF THIS THE PLAYSCAPE IS EASILY MANIPULATED BY THE CHILD, AND THE EXPERIENCE CHANGES WITH THE WEATHER. BECAUSE OF THIS THE PLAYSCAPE IS MORE REMINISCENT OF THE OUTDOORS AND NOT THAT IT IS BUILT BY MAN. IT ALLOWS CHILDREN TO SHAPE THE WAY THEY PLAY.

THE DANDENONG PARK REGIONAL PLAYGROUND IS A SUCCESSFUL EXAMPLE OF A NATURALISTIC PLAYSCAPE, AS IT ALLOW ITS USERS TO MANIPULATE AND INTERACT WITH NATURAL MATERIALS, SOMETHING NOT MANY PLAYSCAPES ALLOW FOR. BECAUSE OF THIS THERE IS A HIGHER DEGREE OF INTERACTION AND CREATIVE PLAY BECAUSE THE PLAYSCAPE DOES NOT TELL YOU WHAT TO DO WITH IT BASED ON IT'S MATERIALS AND FORM. IT PROMOTES IMAGINATIVE PLAY AND IS MORE CONDUCIVE TO LONGER PERIODS OF PLAY DUE TO IT'S FORM AND MATERIAL CHOICE.





# andenong Park Regional Analysis



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# Project Name: Los Trompos (Spinning Tops) Location: High Museum of Art, Atlanta, Georgia Designer: Hector Esrawe & Ignacio Cadena Narrative:

Los Trompos is interesting as it is an installation art piece that essentially turns an open lawn space in a bustling plaza space through the use of the 'spinning tops' and the way they are placed. On a much larger scale they are placed how one would imagine outdoor tables at a cafe would be placed, with room to meander in between each 'spinning Top' but also close enough to create a sense of togetherness.

THE SITE IS INTERESTING IN THAT IT HAS MULTIPLE FUNCTIONS EVEN THOUGH IT IS QUITE A SIMPLISTIC THEME. THE 'SPINNING TOPS' FUNCTION AS BOTH AN AREA FOR PEOPLE TO REST AND COMMUNICATE WITH ONE ANOTHER, YET ALSO FUNCTIONS AS A FAST-PACED INTERACTIVE PLAYSCAPE AS PEOPLE SPIN ON THE TOPS. THE SITE ACCOMMODATES BOTH USES THEREFORE NOT OSTRACIZING THOSE WHO WANT TO PARTICIPATE BUT NOT FULLY.

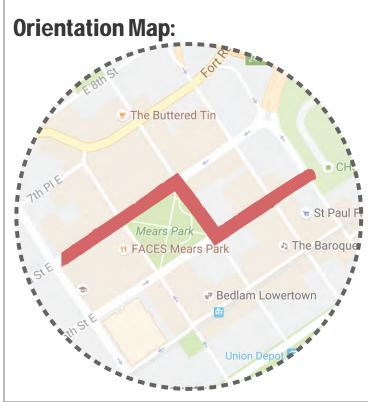
LOS TROMPOS IS A GREAT EXAMPLE OF AN INSTALLATION ART PLAYSCAPE. THE 'SPINNING TOPS' DON'T TAKE OVER THE SPACE BUT WORK IN HARMONY WITH THE LAWN AREA TO CREATE AN INTERACTIVE PLAZA SPACE. THIS IS IMPORTANT FOR MY FUTURE DESIGN AS IT SHOWS HOW SCULPTURAL PLAYSCAPE PIECES CAN BE INTEGRATED INTO AN AREA TO ELEVATE IT TO A NEW LEVEL WHILE STILL RETAINING THE CHARACTER OF THE AREA.

# Site Analysis Location: Lowertown, St. Paul, Minnesota

### Location: Lowertown, St. Paul, Minnesota Narrative:

Located in Bustling Lowertown St. Paul, the site encompasses the streets surrounding mears park, the St. Paul farmers market and CHS baseball field. The streetscape is nestled amongst local businesses and restaurants where there is a high pedestrian density. The site is also in close proximity to the children's science museum, a school, the bus hub, and to an extensive system of biking trails alongside the Mississippi river. All contributing to a high concentration of foot traffic and children traversing the site at all times of the day.

THE SITE IS NOT ONLY CHOSEN DUE TO IT'S PROXIMITY TO SO MANY WONDERFUL AMENITIES BUT ALSO FOR THE RICH HISTORICAL ARCHITECTURE THAT SURROUNDS THE STREETSCAPE THAT DRAWS IN A LARGE CROWD OF PEDESTRIANS WHICH CONTRIBUTES TO THE PERCEIVED SAFETY OF THE SITE.









# **Building Typologies Analysis &** Perceived pedestrian Traffic

THE BUILT TYPOLOGY OF THE SITE SHOWS THAT 50% OF THE BUILDINGS ARE RESIDENTIAL & MIX USE RESIDENTIAL AS WELL AS BEING IN CLOSE PROXIMITY TO A SCHOOL IN CENTRAL LOWERTOWN, ST. PAUL. THIS IS RELEVANT TO THE FUTURE DESIGN AS IT STRENGTHENS THE IDEAL OF CONNECTING A CHILD'S HOME-RANGE AND MOST TRAVELED PATHWAYS WITH PLAY AND EXPLORATION.

THE BUILDING TYPOLOGY ALSO GIVES INSIGHT INTO THE TYPES OF PEDESTRIANS WHOM FREQUENT THE SITE. WITH THE PRESENCE OF A SCHOOL AS WELL AS BEING 50% RESIDENTIAL IT CAN BE ASSUMED THAT A MAJORITY OF TRAFFIC COMES FROM LOCAL RESIDENTS WHO LIVE IN THE AREA.

IT ALSO GIVES INSIGHT INTO THE PEOPLE WHO WILL BE VISITING THE SITE. WITH THE PROXIMITY OF CHS FIELD, THE CHILDREN'S MUSEUM, PERFORMING ARTS CENTERS, AND THE BUS HUB IT CAN BE ASSUMED THAT THERE WILL BE A HIGH AMOUNT OF VISITING CHILDREN ON THE SITE AND THE SURROUNDING AREA.



# **Character Analysis**

LOWERTOWN ST. PAUL TAKES PRIDE IN IT'S INDUSTRIAL HERITAGE AND FLAUNTS IT THROUGH CHOICE IN MATERIALS AND SHORTER BUILDING HEIGHTS. BUILDING EXTERIORS ARE RED - TAN BRICK, WITH LARGE GLASS WINDOWS AND THESE MATERIAL THEMES ARE REFLECTED IN THE CHOICE OF WALKWAY HARDSCAPE. BUILDING HEIGHTS DO NO EXCEED 7 STORIES IN THE SITE, CREATING A COMFORTABLE, HUMAN SCALE TO THE NEIGHBORHOOD AREA.

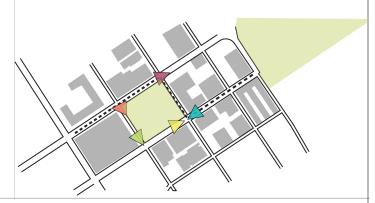
UNDERSTANDING THE CHARACTERISTICS OF THE SITE IS EXTREMELY IMPORTANT TO CREATE A COHESIVE AND FITTING DESIGN FOR THE ENVIRONMENT. BY STUDYING THE CHARACTERISTICS I WILL BE ABLE TO DESIGN THAT WILL WORK IN HARMONY WITH IT'S SURROUNDINGS AS LOCAL ZONING CODES REQUIRE THE USE OF MATERIALS THAT CREATE COHESIVENESS AND HARMONY THROUGHOUT LOWERTOWN, ST. PAUL.

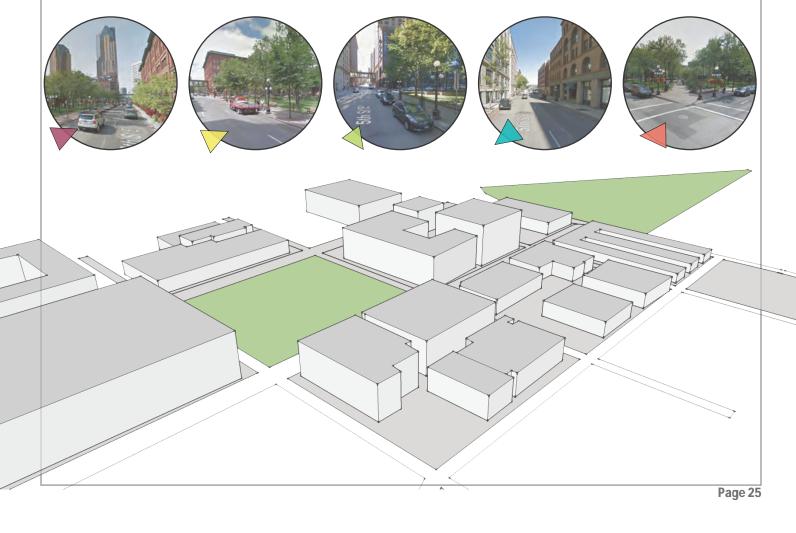


# **Character & View Shed Analysis**

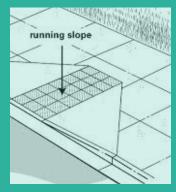
## **View shed Analysis**

VIEWS THROUGHOUT THE SITE ARE RELATIVELY OPEN AND STRAIGHTFORWARD WITH NO AREAS THAT ARE "TUCKED AWAY" OR HIDDEN. THIS IS IMPORTANT TO CONSIDER WHEN DESIGNING AN AREA FOR PLAY AS IT CREATES A SAFER ENVIRONMENT FOR EVERYONE PASSING THROUGH THE SITE. THE FUTURE DESIGN SHOULD NOT CREATE AREAS OF LIMITED VISIBILITY, OR THE DESIGN WILL RISK ATTRACTING CRIME TO THE SITE.





# St. Paul, Minnesota Streetscape Zoning Codes



Curbs You must provide curb ramps PEDESTRIAN WALKWAY CROSSES A CURB.

SURFACES RESIST DEFORMATION, ESPECIALLY BY EXPERIENCED BY A WHEELCHAIR

#### Sec. 74-112. - Preservation program.

SETBACK-SITING. THERE SHOULD BE NO MAJOR VARIATION IN SETBACK FROM THE BUILDING LINE. MINOR VARIATIONS FOR BAYS AND ENTRANCES ARE PERMISSIBLE. THE PROPORTION OF BUILT EDGE TO OPEN SPACE SHOULD PRESERVE THE PLANE OF THE STREET WALL, PARTICULARLY ALONG THE STREETS FACING Mears Park and the Farmer's Market.

#### Sec. 63.115. - Landscaping and plant | Sec. 106.01. - Obstruction. materials.

REINFORCE THE URBAN FOREST BY PRESERVING HEALTHY MATURE TREES WHERE POSSIBLE AND PLANNING FOR A CONTINU-OUS CANOPY OF TREES AT MATURITY IN AREAS ADJOINING PUBLIC STREETS OR PARKING LOTS. FOUNDATION SHRUBS SHOULD BE SPACED CLOSE ENOUGH TOGETHER TO FORM A SOLID MASS AT MATURITY.

SIDEWALK CAFé EXEMPTIONS. ANY RESTAURANT THAT IS LICENSED UNDER CHAPTER 331A OF THE LEGISLATIVE CODE, MAY APPLY TO THE DEPARTMENT OF SAFETY AND INSPECTIONS FOR A SIDEWALK CAFÉ LICENSE AND A RIGHT-OF-WAY OBSTRUCTION PERMIT TO EXPAND THE OPERATION OF THAT RESTAURANT ONTO A PART. AND ONLY THAT PART, OF THE PUBLIC SIDEWALK DIRECTLY IN FRONT OF THE PROPERTY UNDER THE CONTROL OF THE LICENSED PREMISES (HEREAFTER REFERRED TO AS SIDEWALK CAFé).

UNLESS WAIVED, ALL UTILITY FACILITIES, INCLUDING, BUT NOT LIMITED TO, GAS, ELECTRIC POWER, TELEPHONE AND CATV CABLES, SHALL BE LOCATED UNDER-GROUND AND WITHIN THE STREET OR ALLEY RIGHT-OF-WAY.

Ο

Sec. 69.503. - Utilities.

MINIMUM PLANT SIZES (AT TIME OF PLANTING): MEDIUM AND LARGE TREES\*-21/2-INCH CALIPER.

Small trees—6 to 8 feet OVERALL HEIGHT.

Shrubs—15 to 18 inches OVERALL HEIGHT.

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### New street and landscape improvements, lighting, street furniture and signs should be compatible with the character of the historic district. The historic urban pattern of grid-plan streets should be retained and enhanced in improvement projects.

Accessibility to visually impaired PEOPLE WITH VISUAL IMPAIRMENTS SHOULD HAVE ACCESS TO THE SAME INFORMATION AS SIGHTED PEDESTRIANS WHEN PEDESTRIANS, IT IS IMPORTANT TO PROVIDE INFORMATION FOR EXAMPLE, AN INTERSECTION THAT CONTAINS A RAISED AUDIBLE PEDESTRIAN SIGNAL WOULD BE MORE ACCESSIBLE

#### Protruding objects

OBJECTS THAT PROTRUDE ABOUT 6.7' ARE GENERALLY IMPAIRMENTS. HOWEVER OBSTACLES THAT PROTRUDE

#### Sec. 74-112. - Preservation program.

LANDSCAPING AND STREET FURNITURE. WHEN LOTS ARE USED FOR GREEN SPACE OR PARKING, A VISUAL HOLE IN THE STREET "WALL" MAY RESULT. LANDSCAPE TREATMENT CAN ELIMINATE THIS POTENTIAL PROBLEM BY AVOIDING A WALL OF ENCLOSURE FOR THE STREET. TRADITIONAL STREET ELEMENTS OF THE AREA, SUCH AS GRANITE CURBS, SHOULD BE PRESERVED. NEW STREET FURNITURE SHOULD COMPLEMENT THE SCALE AND CHARACTER OF THE AREA.

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ALL LIGHTING IN ALL DISTRICTS USED FOR THE EXTERNAL ILLUMINATION OF BUILDINGS SHALL BE PLACED AND SHIELDED SO AS NOT TO INTERFERE WITH THE VISION OF PERSONS ON ADJACENT HIGHWAYS OR ADJACENT PROPERTY, ILLUMINATION OF ANY OTHER OUTDOOR FEATURE SHALL BE MAINTAINED STATIONARY AND CONSTANT IN INTENSITY AND COLOR AT ALL TIMES WHEN IN USE.

Sec. 63.116. - Exterior lighting.

#### Sec. 63.210. - Bicycle parking.

BICYCLE PARKING REQUIRED. BICYCLE PARKING SHALL BE PROVIDED ACCORDING TO THE GREATER OF THE FOLLOWING:

OUTDOOR BICYCLE PARKING SHALL BE VISIBLE FROM THE PUBLIC RIGHT-OF-WAY OR FROM INSIDE THE BUILDING. WITH A USE OF RIGHT-OF-WAY PERMIT FROM THE CITY ENGI-NEER, BICYCLE PARKING MAY BE LOCATED IN THE PUBLIC RIGHT-OF-WAY.

SUBSTITUTION FOR REQUIRED MOTOR VEHICLE PARKING. BICYCLE PARKING MAY BE SUBSTITUTED FOR UP TO TEN (10) PERCENT OF MINIMUM OFF-STREET PARKING REQUIREMENTS. FOR THE PURPOSE OF CALCULATING A SUBSTITUTION, TWO (2) SECURE BICYCLE LOCKERS ARE THE EQUIVALENT OF ONE (1) PARKING SPACE; FOUR (4) SPACES IN A SECURE BICYCLE RACK ARE THE EQUIVALENT OF ONE (1) PARKING SPACE.

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BIKES LANES MINIMUM 5' WIDE

MINIMUM 4' WIDE UNOBSTRUCTED PEDESTRIAN SIDEWALK MAINTAINED AT ALL TIMES

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# **Problem Statement**

# **Function**

THAT CHILDREN ARE SPENDING A DECREASING AMOUNT OF TIME OUTDOORS PLAYING UNSUPERVISED, AND ARE SLOWLY LOSING THEIR FREEDOM OF PLAY WITHIN URBAN ENVIRONMENTS. THEREFORE THE CITIES STREETSCAPE DESIGN SHOULD REFLECT THE NEEDS OF ITS YOUNGER CITIZENS AND FOSTER ENGAGING AND ENRICHING INTERACTIONS THAT WILL ULTIMATELY PROVIDE CHILDREN WITH AN OUTLET TO PLAY WITHIN THE CITY.

BECAUSE OF THE DIVERSITY PRESENT IN URBAN ENVIRONMENTS THE DESIGN SHOULD FACILITATE A SENSE OF PLACE AND STRONG COMMUNITY TIES.

TO COMBAT PARENTAL CONCERNS ABOUT SAFETY, URBAN STREETSCAPE PLAY SHOULD CREATE SAFE ENVIRONMENTS WITH A HIGH LEVEL OF PEDESTRIAN ACTIVITY AND UNOBSTRUCTED VIEW SHEDS TO FACILITATE A SENSE OF SAFETY AND COMMUNITY.

# Economy

BECAUSE THE STREETSCAPE DESIGNS BUDGET WILL FALL TO THE LOCAL CITY GOVERNMENT, WHOM OBTAIN THEIR FUNDS FROM TAXES, THERE MUST BE ACTIVE WORK DONE TO ENSURE THAT THE COMMUNITY IS WILLING TO HELP PAY FOR THE DESIGN SO THAT HIGH QUALITY MATERIALS CAN BE UTILIZED WITHIN THE DESIGN AND ENSURE LESS REPAIR COSTS FOR WEAR AND TEAR OF CHEAPER MATERIALS.

## Form

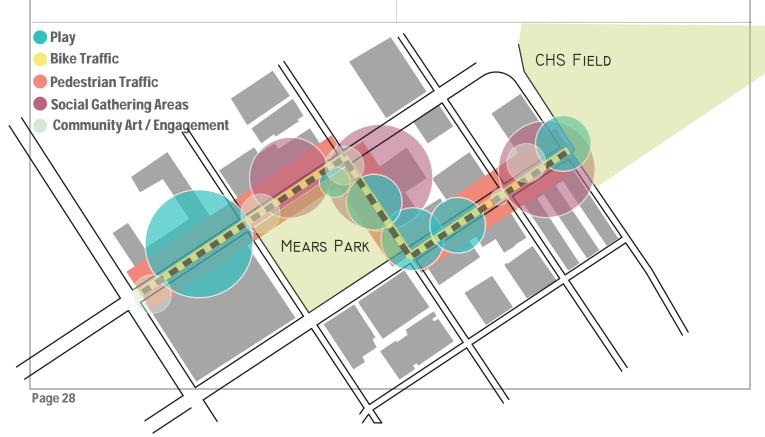
THE DESIGN MUST AIM TO UNITE A QUARTER MILE OF STREETSCAPE INTO A COHESIVE AND FLOWING DESIGN. MATERIALS, VEGETATION, TEXTURES, AND COLORS MUST CREATE CONTINUITY THROUGHOUT THE SITE TO FORM A SENSE OF PLACE.

THE DESIGN MUST CAPTURE THE ESSENCE AND SPIRIT OF THE SURROUNDING URBAN ENVIRONMENT, TO CREATE HARMONY WITH THE LARGER SCALE.

# Time

BECAUSE OF THE CONSTANTLY CHANGING NATURE OF CHILDHOOD THE DESIGN MUST BE ADAPTABLE AND MALLEABLE. A STATIC DESIGN HAS ALREADY FAILED ITSELF BY THE VERY NATURE OF CHILDHOOD.

DUE TO THE DESIGNS GREAT POTENTIAL TO CREATE A BOOMING AND ACTIVE RETAIL CORRIDOR AS WELL AS A PLACE FOR PLAY, THE DESIGN SHOULD CONSIDER THE LIKELIHOOD OF EXPANSION IN FUTURE YEARS AND SET THE FRAMEWORK TO EASILY BE INTEGRATED AND SPREAD THROUGHOUT THE CITY.



# **Program Elements**

# **Space List**

	Function	People	Capacity	No. Of Un	its Width	Net area Sq. Ft
Lower town St. I	Paul, MN, Streetso	cape				
	Paved Sidewalk	Varies			18'	13,744 Sq. Ft
	Retail Space				1 2'	3,436 Sq. Ft
	Plant Buffer				1 2'	3,436 Sq. Ft
	Subtotal				12'	20,616 Sq. Ft
	Driving Lanes			1	1 12'	20,616 Sq. Ft
	Parking				19'	15,462 Sqrt
	Bike Lane				14'	6,872 Sq. Ft
	Subtotal				25'	42, 950 Sq. Ft
	Play areas	Varies	Varies		8 Varies	Varies
	Cross walks				15 6'	72 Sq. Ft
	Seating			4	25 Varies	10 Sq. Ft
	Lighting				25	2 Sq. Ft

SIDE WALKS SHOULD BE EXPANDED TO ACCOMMODATE HIGHER ACTIVITIES OF PEDESTRIAN ACTIVITY, AND DRIVING LANES SHOULD BE REDUCED TO SINGLE LANE ONE WAYS TO SLOW TRAFFIC AND PUT LESS EMPHASIZE ON VEHICULAR TRAFFIC.

PLAY AREAS CAN NOT HAVE A DETERMINED SIZE YET AS THEY DO NOT HAVE A FORM YET AND AIM TO BE INTEGRATED THROUGHOUT THE WHOLE STREET.

# Land Use Requirements

		People	Gross Landscape Area	Landscape Footprint	GAC
	Land Use Area		Phase 1		
	Streetscape	People			
	Sidewalk		5,000 27488 Sq. Ft	1/4 Mile	30%
	Retail Space		5,000 6872 Sq. Ft	1/4 Mile	10%
	Plant Buffer		0 6,872 Sq. Ft	1/4 Mile	10%
	One Way Roads	Varies	41,232 Sq. Ft	1/4 Mile	50%
	Bike Lanes		2,000 13,744 Sq. Ft	1/4 Mile	20%
	Cross Walks	Varies	144 Sq. Ft	1/4 Mile	1%
	Play Areas	Varies	Varies	1/4 Mile	Projected 80%
Subtotal			7550 127,276 Sq. Ft		
		Parking	Count		
	Parallel Parking		50 30,924 Sq. Ft	1/4 Mile	40%
	Handicap Parking		5 1,800 Sq. Ft	1/4 Mile	19
Subtotal			55 32,724 Sq. Ft		

PEDESTRIAN ORIENTED AMENITIES ARE PROJECTED TO DOMINATE THE SITE, DUE TO THEIR SIZE IN RELATION TO THE ROADS.

PLAY AREAS ARE PROJECTED TO TAKE UP 80% OF THE FOOTPRINT, THOUGH THIS CANNOT BE CALCULATED UNTIL FURTHER INVESTIGATION AND PRELIMINARY DESIGN OCCURS.

# **Program Elements**

# **Area Summary**

			People	Vol of Ped Activity	Weekday
	Landscape Area Su	mmary	Phase 1		
	Paved Sidewalk		Varies		1,000
	Retail Space		Varies		1,000
	Plant Buffer			0	0
	One Way Roads		Varies	Varies	
	Parking		Varies	Varies	
	Bike Lanes		Varies		500
	Cross Walks		Varies		1,000
Subtotal					
	Play Areas		Varies		1,000
	Seating			4	500
	Lighting				
Subtotal					
Vol of Ped	Activity Weekend	Net Area	Net Gross	Gross Landscape Area	
	, I			·	
	5,000	13,744 Sq. Ft	0.5	27,488 Sq. Ft	-
	5,000	3,436 Sq. Ft	0.5	6,872 Sq. Ft	
	0	3,436 Sq. Ft	0.5	6,872 Sq. Ft	
Varies		20,616 Sq. Ft	0.5 4	41,232 Sq. Ft	
Varies				· · · ·	
		15,462 Sq. Ft	0.5	30,924 Sq. Ft	
	2,000	15,462 Sq. Ft 6,872 Sq. Ft			
			0.5	30,924 Sq. Ft	
Subtotal		6,872 Sq. Ft	0.5 0.5	30,924 Sq. Ft 13,744 Sq. Ft	
Subtotal	5,000	6,872 Sq. Ft 72 Sq ft	0.5 0.5	30,924 Sq. Ft 13,744 Sq. Ft 144 Sq. Ft	
Subtotal	5,000 5,000	6,872 Sq. Ft 72 Sq ft 42,950 Sq. Ft	0.5 0.5 0.5	30,924 Sq. Ft 13,744 Sq. Ft 144 Sq. Ft 85,900 Sq. Ft	
Subtotal	5,000 5,000	6,872 Sq. Ft 72 Sq ft 42,950 Sq. Ft Varies	0.5 2 0.5 2 0.5 2 0.5 2	30,924 Sq. Ft 13,744 Sq. Ft 144 Sq. Ft 85,900 Sq. Ft Varies	
Subtotal Subtotal	5,000 5,000	6,872 Sq. Ft 72 Sq ft 42,950 Sq. Ft Varies 10 Sq. Ft	0.5 2 0.5 2 0.5 2 0.5 2 0.5 4	30,924 Sq. Ft 13,744 Sq. Ft 144 Sq. Ft 85,900 Sq. Ft Varies 20 Sq. Ft	

VOLUME OF PEDESTRIAN ACTIVITY IS APPROXIMATED BASED ON POPULATION AS WELL AS SURROUNDING AMENITIES AND LOCAL STUDIES DONE ON WEEKDAY ACTIVITY VERSUS WEEKEND ACTIVITY. WEEKEND ACTIVITY SKY ROCKETS TO AN APPROXIMATE 5,000 AS CHS FIELD IS DIRECTLY OFF THE SITE AS WELL AS THE LOCAL FARMER'S MARKET. WEEKDAY TRAFFIC IS GENERALIZED AS STUDENTS, WORKERS AND FAMILIES LIVING IN THE AREA.

# **Plan for Proceeding**



## **Research Direction**

SINCE THE PRELIMINARY RESEARCH HAS BEEN DONE IN THE RESEARCH PAPER AND ANNOTATED BIBLIOGRAPHY IT IS NOW MY RESPONSIBILITY TO FURTHER MY UNDERSTANDING OF THE HABITS OF CHILDREN IN URBAN ENVIRONMENTS THROUGH MORE RESEARCH. THIS INCLUDES TAKING A DEEPER LOOK AT THE SITE LOCATION AND TRYING TO UNDERSTAND HOW A CHILD MAY NAVIGATE THROUGH THE SITE SO THAT I CAN DEVELOP A DESIGN PLAN THAT WILL BE SUCCESSFUL.

# Plan for design methodology

MY PLAN FOR IMPLEMENTING THE INTERPRETIVE DESIGN METHODOLOGY WITH THE AID OF QUALITATIVE DATA WILL PREDOMINANTLY COME FROM OBSERVATIONAL RESEARCH ARTICLES THAT HAVE STUDIED THE INTERACTIONS AND LIVES OF CHILDREN AND HOW THEY INTERACT WITH THEIR ENVIRONMENTS. THIS INCLUDES ANY QUALITATIVE GIS RESEARCH THAT HAS BEEN DONE TO BETTER UNDERSTAND THE HABITS AND INTERACTIONS OF CHILDREN IN THEIR HOME ENVIRONMENTS. BY BECOMING FAMILIAR WITH THE COMMON PATTERNS FOUND IN THE CURRENT DATABASE OF RESEARCH I WILL BE ABLE TO APPLY IT TO MY DESIGN SITE.

# Plan for documenting design process

- >Scanning all drawings & Written Work >Creating weekly progress folders
- >PUT DATES ON ALL WORK TO DOCUMENT CHRONOLOGY OF PROJECT
- >Photographing all models at various Stages

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