



“THE SEAWALL PROTECTS OUR CROWN JEWELS - THE WATERFRONT, VIADUCT AND DOWNTOWN,”
- CONGRESSMAN JIM McDERMOTT

ONCE UPON A TIME, SEATTLE’S PUGET SOUND SHORELINE CONSISTED OF CONTINUOUS INTERTIDAL BEACHES AND UNDISTURBED HABITATS - WHILE WE CANNOT RESTORE THE DOWNTOWN ZONE TO THE ORIGINAL STATE, WE CAN BUILD SEAWALLS THAT SMARTLY RESPOND TO THE ECOSYSTEM AS WELL AS BRING LIFE TO DOWNTOWN WITH A STRONG CONNECTION TO THE WATER. A GOOD EXAMPLE OF THIS IS THE OLYMPIC SCULPTURE PARK, WHICH HAS ACHIEVED SUCCESS IN HELPING THE EXISTING MARINE ECOSYSTEM AS WELL AS BRINGING A WATERFRONT PARK TO DOWNTOWN SEATTLE. CREATING A NATURAL SHORELINE ON ALASKAN WAY, HOWEVER, IS OUT OF THE QUESTION BECAUSE OF BUILDINGS AND UTILITY LINES LOCATED IN THE EARTHEN FILL BEHIND THE BULKHEAD.

STILL, THERE IS AN OPPORTUNITY TO EXPERIMENT WITH SHELVES, FINS, OR STEPS THAT WILL PROVIDE A PLACE FOR VEGETATION TO GROW AND FOR SEA CREATURES TO HIDE. COASTAL URBAN PLANNING ALSO NEEDS TO TAKE SEA LEVEL RISE INTO ACCOUNT BECAUSE ITS EFFECTS WILL BE APPARENT DURING THE TYPICAL REPLACEMENT TIME OF URBAN INFRASTRUCTURE, SUCH AS THE VIADUCT. THE REAL CHALLENGE IS HOW THE DEVELOPMENT OF THE SEAWALL ECOSYSTEM WILL CONNECT THE PERSON TO THE WATERFRONT WHILE BEING INTEGRATED WITH AND SUPPORTIVE OF THE EXISTING ACTIVITIES AND LAND USE PLANS FOR THE VIADUCT AND THE SEATTLE WATERFRONT. THIS INCLUDES KEEPING PUBLIC TRANSIT AND FREIGHT MOBILITY EASILY ACCESSIBLE WHILE AT THE SAME TIME NOT DISREGARDING THE IMPORTANCE OF THE HUMAN’S INTERACTION WITH THE WATER’S EDGE.

RATHER THAN REPLACE THE CURRENT SEAWALL WITH A NEW ONE THAT WOULD BE BOTH COSTLY AND RESULT IN MORE DEGRADED HABITAT, SEATTLE HAS AN OPPORTUNITY TO LINK THE URBAN DOWNTOWN CORE TO THE WATER WHILE REVITALIZING THE ECOSYSTEM THAT WAS DAMAGED BY THE EXISTING VERTICAL SEA WALL. THE ORIGINAL SLOPING INTERTIDAL AREA THAT ONCE EXISTED IN SEATTLE MAY BE ADOPTED IN CERTAIN AREAS OF ALASKAN WAY WHERE SHORELINE FILL IS NOT FEASIBLE. IN OTHER HIGH DENSITY AREAS, LIKE DOWNTOWN, NEW ‘SMART’ SEAWALLS COULD CONNECT THE PEDESTRIAN WALKWAY TO THE WATER AS WELL AS ENHANCE THE SURROUNDINGS OF MARINE SEA LIFE WITH SHALLOW WATER PROTECTED AREAS. WITH THE UPCOMING VIADUCT DECISION LOOMING IN THE NEXT MONTH, THE DECISIONS MADE ON HOW THE SEAWALL IS TREATED WILL AFFECT THE WHOLE CONFIGURATION AND CONNECTION FROM DOWNTOWN TO WATERFRONT.

MY TRAVELS TO EUROPE HAVE GIVEN ME A GLIMPSE INTO THE DEVELOPMENT OF CITIES AMONG THE DEMANDS OF URBAN GROWTH. I WAS ATTRACTED TO THE RELATIONSHIP BETWEEN THE DENSE URBAN FABRIC AND THE PUBLIC/CIVIC SPACES THAT HAVE BEEN PLANNED FOR AND GIVE EACH CITY ITS OWN CHARACTER. HOW CAN SEATTLE TAKE THIS OPPORTUNITY TO MOLD ITS WATERFRONT INTO A SPACE THAT WILL ATTRACT THE PUBLIC, FUNCTION WITH TRANSPORTATION DEMANDS, AND SUPPORT THE NATURAL ECOSYSTEMS? HOW CAN THE NEW SEAWALL ACT AS A STORM WATER EDGE? OR EVEN PRODUCE ELECTRICITY WITH THE USE OF TIDAL FLOW AND SEAWALL DESIGN? THE NEW INTELLIGENT AND BENEFICIAL SEAWALL COULD CHANGE SEATTLE INTO A FOCAL POINT OF URBAN DESIGN AMONG ARCHITECTS AND PLANNERS.

THIS STUDY IS AN EXTENSION OF MY PUBLIC VERSUS PRIVATE SPACE STUDIES THAT I HAVE DONE IN MY PAST TRAVELS AND WHICH HAVE EXTREMELY INFLUENCED MY PERSONAL TAKE ON ARCHITECTURE. THE URBAN DEVELOPMENT AND REVITALIZATION PLAN OF SEATTLE IS ABOUT TO UNDERGO A MONUMENTAL DECISION AND I BELIEVE STUDYING OTHER CITIES CAN HELP MAKE A BETTER DECISION.

VANCOUVER, CANADA

THE SEAWALL IN VANCOUVER IS A STONE WALL THAT WAS CONSTRUCTED AROUND THE PERIMETER OF STANLEY PARK TO PREVENT THE EROSION OF THE PARK'S FORESHORE. WHILE IT IS SET IN A LESS DENSE URBAN SETTING THAN THE SEATTLE SEAWALL, IT STILL PROVIDES GOOD INSIGHT INTO HOW THE PEDESTRIAN CAN BECOME THE CENTERPIECE IN THE HIERARCHY OF DESIGN. THE DISREGARD FOR MARINE HABITATS, HOWEVER, PROVIDES A PRIME EXAMPLE OF HOW URBAN PLANNING NEEDS TO ESTABLISH A SET OF COASTAL GUIDELINES TO HELP OUR SHORES SUSTAIN EXISTING ECOSYSTEMS.

ON THE OTHER HAND, THE OLYMPIC VILLAGE BEING CONSTRUCTED HAS BEEN TURNED INTO A STYLISH URBAN OASIS WITH AN ELEGANT SEASIDE WALKWAY AND SENSITIVE, ECO-FRIENDLY LANDSCAPING. THE NEW ISLAND HABITAT CREATES HOMES FOR A WIDE RANGE OF NATIVE PLANTS AS WELL AS A WETLAND COMPONENT DESIGNED TO RECOVER THE TRADITIONAL NATIVE ECOLOGY OF THE SITE. I INTEND TO LEARN THE CURRENT EFFECT OF THE SEAWALLS ON URBAN DEVELOPMENT AS WELL AS THE ENVIRONMENT.

CONTACT: BECKY TROELSTRA

SYDNEY, AUSTRALIA

ALTERING SHORELINES CAN LEAD TO EXISTING HABITATS BEING FRAGMENTED AND LOST, YET CHANGES TO COASTAL HABITATS ARE LARGELY IGNORED WHEN IMPACTS OF URBANIZATION ARE CONSIDERED. SEAWALLS ARE THE MOST PERVASIVE, AMOUNTING TO A LOSS OF EIGHTY PERCENT OF NATURAL HABITAT. NORTH SYDNEY COUNCIL AND THE UNIVERSITY OF SYDNEY ARE BRINGING TOGETHER EXPERTISE FROM A RANGE OF ECOLOGICAL DISCIPLINES TO PROVIDE NEW OPPORTUNITIES FOR IMPROVED MANAGEMENT OF HABITATS TO BE INCORPORATED IN SEA WALL DESIGN.

AN EXTENSIVE SEAWALL AT MCMAHON'S POINT IN SYDNEY WAS RECENTLY REBUILT TO REVITALIZE THE DAMAGED WALL AND STUDY HOW THE ECOSYSTEMS PRESENT STATE CAN BE REGENERATED. A NEW SANDSTONE FAÇADE IMPLEMENTS DEEP ROCK-POOLS AT DIFFERENT TIDE LEVELS TO RENEW THE PRESENT AQUATIC LIFE.

ALSO, A PART OF AN OLD VERTICAL CONCRETE SEAWALL AT WHITE BAY BECAME UNSAFE AND HAS BEEN DEMOLISHED AND REBUILT. IN ITS PLACE, A NEW STEPPED DESIGN PROVIDES HORIZONTAL SURFACES FOR SEA LIFE TO LIVE, AS WELL AS AN OPPORTUNITY TO BRING THE PERSON CLOSER TO THE WATER.

SYDNEY IS AN IDEAL EXAMPLE OF A DENSELY POPULATED URBAN CITY WITH AN IMMEDIATE CONNECTION TO THE SEA. THEY ARE WORKING TO IMPLEMENT A SET OF COASTLINE GUIDELINES THAT, WHEN FOLLOWED, WILL STANDARDIZE THE USE OF SMART SEAWALLS. I PROPOSE TO TRAVEL TO SYDNEY TO STUDY AND RECORD MY FINDINGS OF THEIR NEW AND OLD SEAWALLS, HOW THEY AFFECT THE ENVIRONMENT, AND HOW THEY CONNECT THE WATER TO THE URBAN FABRIC.

CONTACT: UNIVERSITY OF SYDNEY – CENTRE FOR RESEARCH ON ECOLOGICAL IMPACTS OF COASTAL CITIES



MELBOURNE, AUSTRALIA

MELBOURNE BRINGS THE FOCUS BACK TOWARDS ITS WATERS WITH THE NEW BIRRARUNG MARR PARK LOCATED ON THE NORTH BANK OF THE YARRA RIVER, ADJACENT TO FEDERATION SQUARE. HERITAGE-LISTED ELMS AND NATIVE FLORA ARE BEING BROUGHT RIGHT BACK INTO THE CITY — SOMETHING I BELIEVE CAN ONLY BE A GOOD THING. I PLAN TO DISCOVER HOW THE INTRODUCTION OF THIS PARK HAS AFFECTED THE SURROUNDING BUILT AREA.

BRISBANE, AUSTRALIA

THE FUTURE PORT EXPANSION (FPE) SEAWALL IS ONE OF THE BIGGEST MARINE-BASED PROJECTS UNDERTAKEN IN QUEENSLAND, CATERING FOR RAPID COMMERCIAL GROWTH AROUND BRISBANE’S PORT AREA. THE FPE SEAWALL ALLIANCE HAS DEMONSTRATED THAT IT IS POSSIBLE TO DELIVER SEAWALL UPGRADES AND NEW INFRASTRUCTURE WITHOUT SACRIFICING THE DELICATE ENVIRONMENT. I INTEND TO DISCERN HOW THIS SEAWALL HAS BEEN PLANNED AND EXECUTED AS WELL AS HOW THE CURRENT BUILT ENVIRONMENT IS RESPONDING TO IT.

CONTACT: FPE SEAWALL ALLIANCE



I PROPOSE TO VISIT CANADA AND AUSTRALIA TO STUDY THE CHANGES BEING DONE TO THEIR CURRENT SEAWALLS, AS WELL AS THE AFFECT IT IS HAVING ON THE URBAN DEVELOPMENT AND NATURAL HABITATS. SPECIFICALLY, I WOULD INCORPORATE VIDEO, PHOTOGRAPHY AND HAND SKETCHING TO DOCUMENT MY FINDINGS.

ON MY RETURN AND AS AN EXTENSION OF MY TRAVELS, I INTEND TO MAKE AN EDUCATED PRESENTATION ON THE OPTIONS I FEEL WOULD BENEFIT SEATTLE THE MOST. THIS WOULD BE DONE IN MODEL FORM, BOTH COMPUTERIZED AND BY HAND, AS WELL AS INCLUDE MY TRAVEL PHOTOS AND SKETCHES.

I WOULD PUT FORWARD AN EXHIBITION INCLUDING HARD COPY BOARDS, PHYSICAL MODELS, AND PROJECTED VIDEO THAT WOULD INCLUDE THE FOLLOWING:

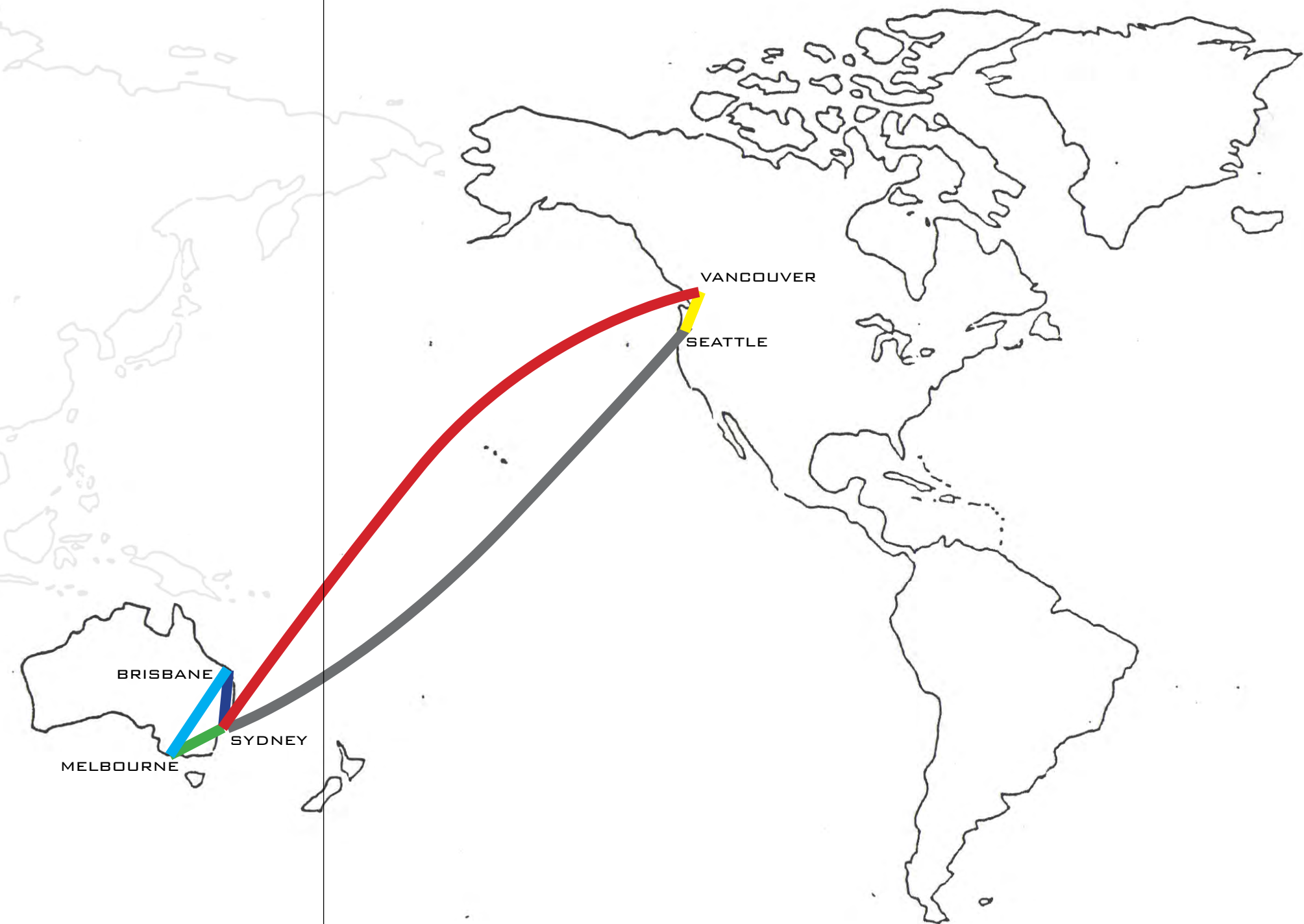
- RENDERED SEAWALL SECTIONS, SIMILAR TO THOSE SEEN HERE, SHOWING THE RELATIONSHIP BETWEEN THE URBAN FABRIC AND THE MARINE ECOSYSTEM, WITH DIFFERENT CONFIGURATIONS AND OPTIONS FOR SEAWALL CONSTRUCTION.
- A LARGE SCALE MODEL, MADE FROM RECYCLABLE MATERIALS, SHOWING THE 3 OPTIONS I BELIEVE WOULD BENEFIT THE SEATTLE WATERFRONT THE MOST.
- PHOTOGRAPHS AND SKETCHES FROM MY TRAVELS, DESCRIBED TO AID IN THE UNDERSTANDING AND CONCLUSION OF THE STUDY.
- A HAND-BOUND BOOK DETAILING THE WHOLE PROCESS FROM RESEARCH TO TRIP TO THE CONCLUSIONS.

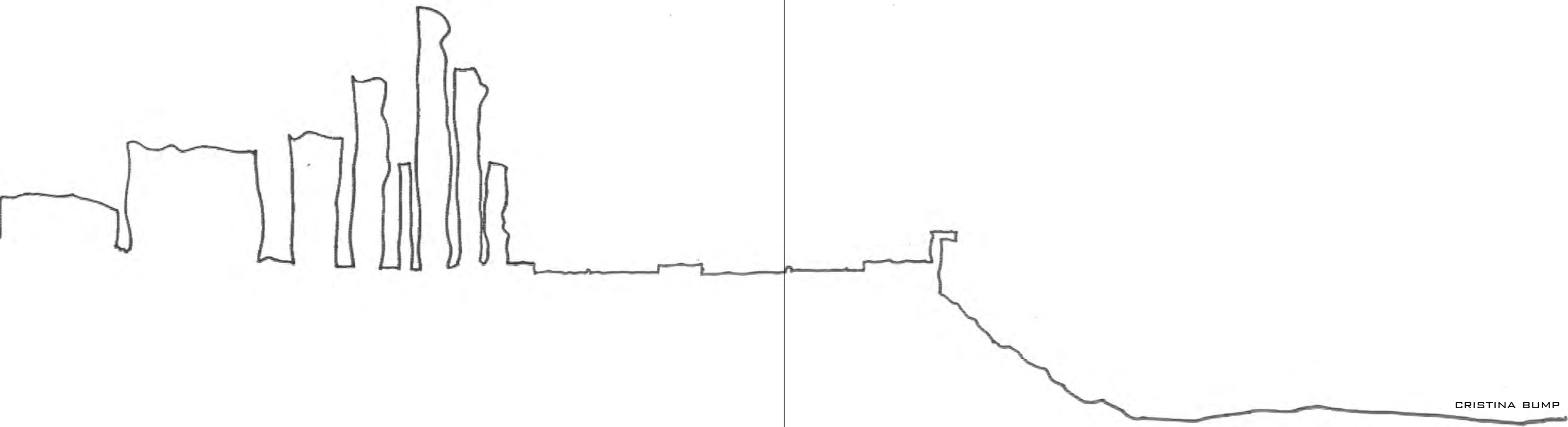
I BELIEVE THE FINAL PRESENTATION WILL FORM ACCURATE FACTS AND CONCLUSIONS THAT COULD HELP THE SEAWALL BECOME AN ATTRACTION AND CELEBRATION IN SEATTLE. ALSO, MY FINDINGS CAN INFORM FUTURE URBAN DEVELOPMENT ALONG THE WATERFRONT BY PROVIDING USEFUL DATA IN REGARDS TO SUSTAINABLE DESIGN CONNECTIONS TO THE SEA.

THE NEW WATERFRONT WILL HAVE THE ABILITY TO INSPIRE MILLIONS OF VISITORS TO RETHINK THE IMPORTANCE OF THE WATER'S EDGE IN THEIR OWN DOWNTOWN WATERFRONT AS WELL AS ALLOW PEOPLE TO ACCESS THE WATER DIRECTLY AND PROVIDE SIGNIFICANTLY IMPROVED AQUATIC HABITAT.



SEATTLE, WA		VANCOUVER, CANADA	
...DRIVE BY CAR/GAS			\$150
...3 DAY STAY			\$250
...FOOD.INNER CITY TRANPORTATION.MISCELLANEOUS			\$100
VANCOUVER, CANADA		SYDNEY, AUSTRALIA	
...FLY BY PLANE			\$800
...5 DAY STAY			\$500
...FOOD.INNER CITY TRANPORTATION.MISCELLANEOUS			\$300
SYDNEY, AUSTRALIA		MELBOURNE, AUSTRALIA	
...FLY BY PLANE			\$70
...5 DAY STAY			\$350
...FOOD.INNER CITY TRANPORTATION.MISCELLANEOUS			\$300
MELBOURNE, AUSTRALIA		BRISBANE, AUSTRALIA	
...FLY BY PLANE			\$90
...5 DAY STAY			\$350
...FOOD.INNER CITY TRANPORTATION.MISCELLANEOUS			\$300
BRISBANE, AUSTRALIA		SYDNEY, AUSTRALIA	
...FLY BY PLANE			\$60
...2 DAY STAY			\$100
...FOOD.INNER CITY TRANPORTATION.MISCELLANEOUS			\$100
SYDNEY, AUSTRALIA		SEATTLE, WA	
...FLY BY PLANE			\$800
...FOOD.INNER CITY TRANPORTATION.MISCELLANEOUS			\$100
SEATTLE, WA			
...MODEL MATERIALS			\$280





CRISTINA BUMP

AIA EMERGING PROFESSIONALS TRAVEL SCHOLARSHIP 2008



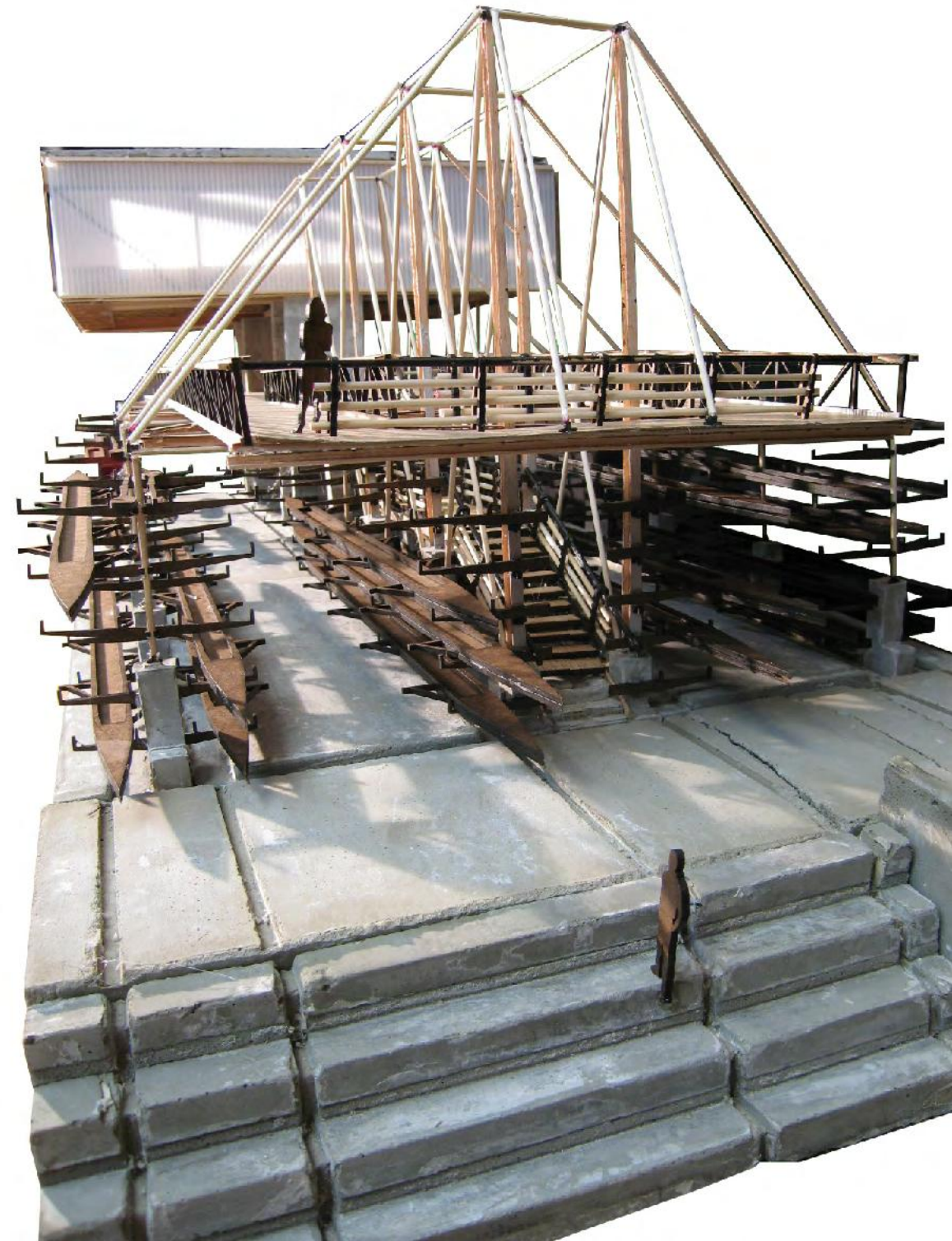
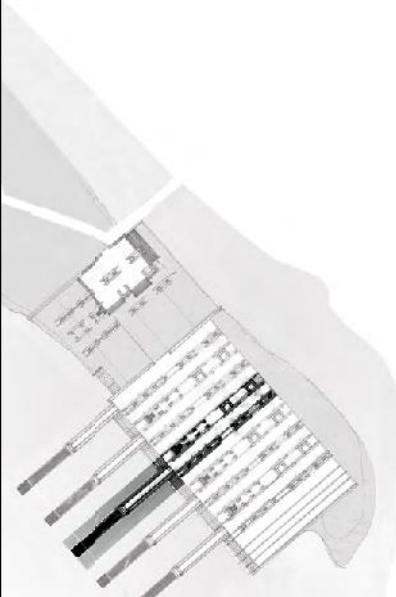
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 TRAVEL SKETCH
 ELIJAH IN FLAMES
 MARBLE FLOOR ETCHING
 DUOMO
 SIENNA, ITALY

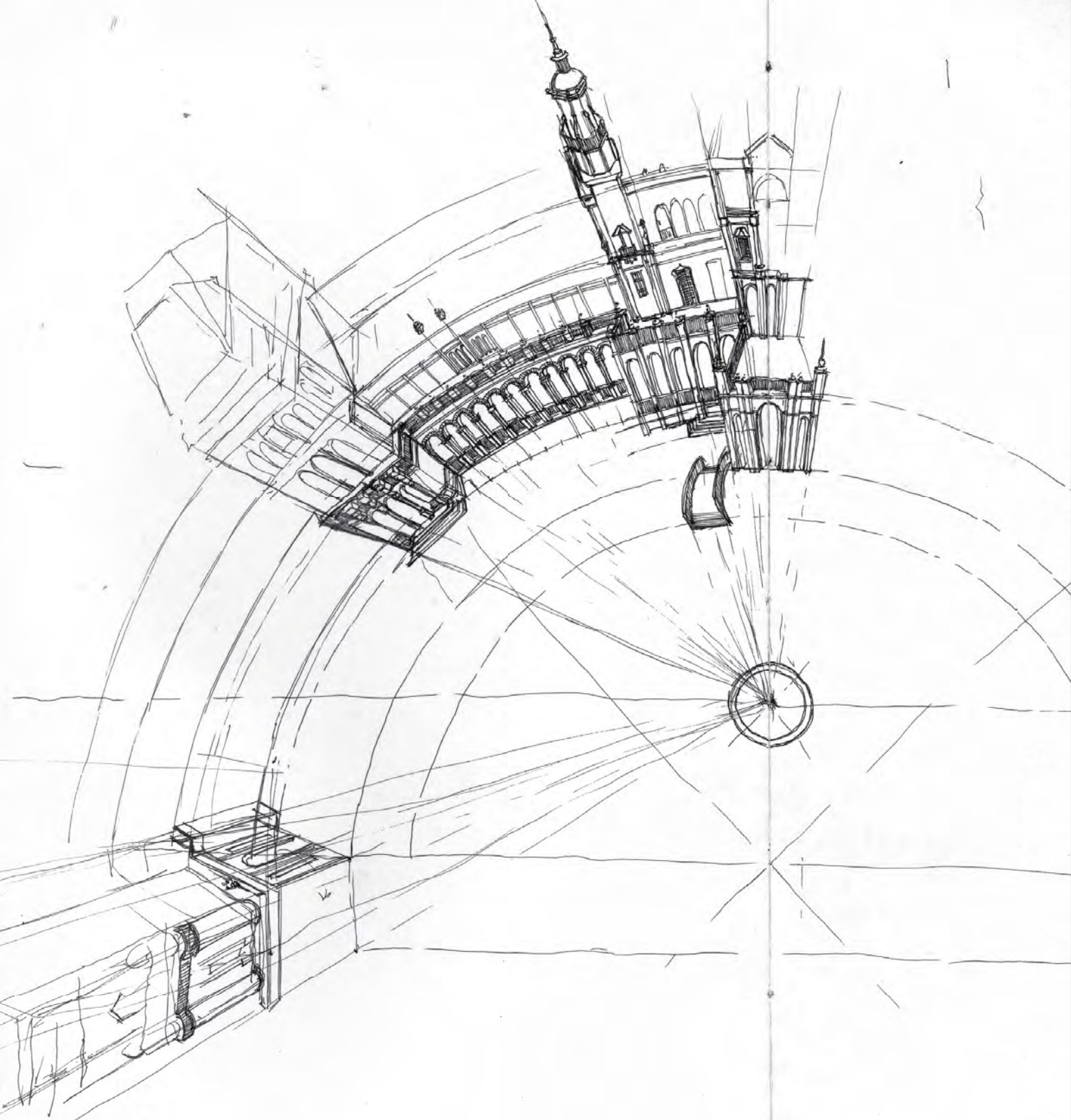
5TH YEAR THESIS PROJECT: > ROWING CLUB ON THE POTOMAC RIVER

THE PROJECT IS A SET OF ACTIONS TO FORM A
 CASUAL RELATIONSHIP BETWEEN
 BOAT, PERSON AND PLACE

THE PROGRAM IS A ROWING BOAT CLUB THAT
 PROVIDES STORAGE/USE SPACE FOR COMPETITIVE AND
 RECREATIONAL BOATERS IN THE WASHINGTON DC AREA

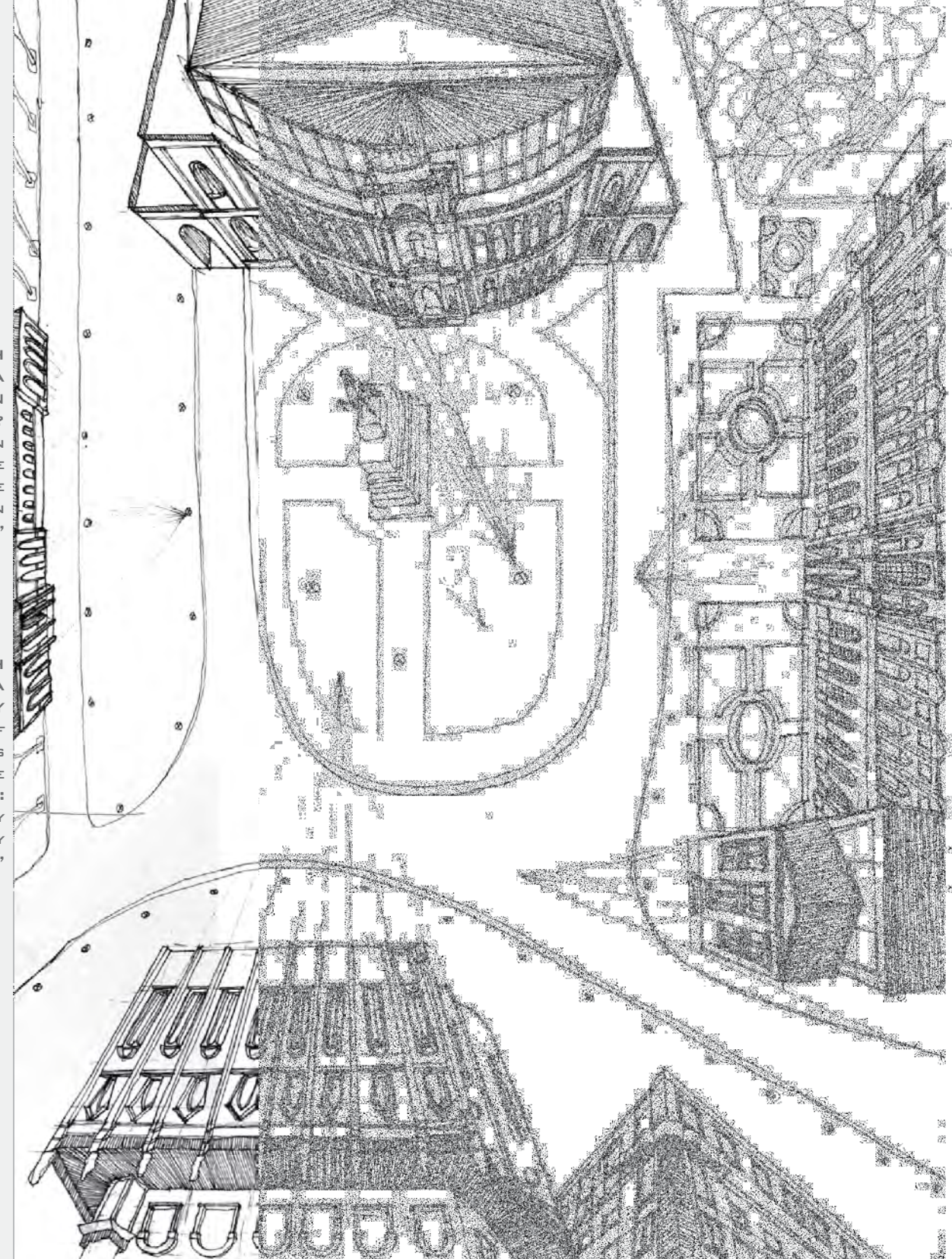
THE PROGRAMME IS TO
 MANIFEST THE UNMEASURABLE FORM
 THAT COMES FROM A ROWING CLUB
 THROUGH A MEASURABLE DESIGN
 SPECIFIC TO SITE AND PERSON





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 TRAVEL SKETCH
 PLAZA DE CATALUNYA
 SEVILLA, SPAIN
 "WHAT IS A PUBLIC SPACE?
 HOW CAN MODERN
 CITIES TODAY REPLICATE
 THE IMPORTANCE
 OF THE PEDESTRIAN
 IN AN URBAN WORLD?"

>
 TRAVEL SKETCH
 DRESDEN PLAZA
 DRESDEN, GERMANY
 "THE ORGANIZATION OF
 PEDESTRIAN VERSUS
 VEHICULAR MUST BE
 LIKE MUSIC:
 IN COMPLETE HARMONY
 WITH HIERARCHY
 AND ORDER"





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MITHUN OFFICE WORK
PHYSICAL MODEL
UCI TELEMEDICINE
IRVINE, CA

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MITHUN OFFICE WORK
PHYSICAL MODEL
200 OCCIDENTAL
SEATTLE, WA





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MITHUN OFFICE WORK
RENDERING
2051 MADISON
SEATTLE, WA

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MITHUN OFFICE WORK
STREET SECTION
STREET HIERARCHY AND
STORMWATER CIRCULATION
DIAGRAM



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 MITHUN OFFICE WORK
 SUN/WIND SECTION
 NORDHEIM COURT
 SEATTLE, WA

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 MITHUN OFFICE WORK
 INTERIOR RENDERING
 PUGET SOUND BLOOD CENTER
 RENTON, WA

