

COLIN MATTHES

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PROJECT DESCRIPTION

Water plays a key role in Milwaukee's history, identity, and economy. Architecture amplifies that role and is integral to cities and cultures that display a symbiotic relationship with water. This project (currently untitled) is designed to draw attention to and increase the intentional coexistence of water and architecture in Walker's Point. It will highlight existing ways water and architecture are combined, while visualizing new ways to consider architectural relationships to water. Our current conceptions are out of date and too simplistic for the 21st century.

The project can be broken down into three parts:

COLLABORATION

I will begin by collaborating with scientists, architects, and community members to aggregate information about water specific architecture in Walker's Point and develop visionary ideas for our future.

DRAWING

This research will inform a diagrammatic drawing designed to communicate a holistic visualization of the relationship between water and architecture in Walker's Point. The drawing is ink on paper, but more importantly a scalable graphic. The graphic will be printed as an oversized poster, for use in classrooms, community centers, public spaces, etc. The graphic will also be produced as a mural sized image (potentially digital, print, or drawing) at UCC-Acosta or nearby.

WORKSHOP

In UCC-Acosta classes we will use this research and drawing to visualize and design graphics related to architecture and water. Six or more of these graphics will be selected by the class for neighborhood installation. Likely installed similar to a sign about parking restrictions, these hand-rendered youth graphics will be produced and installed using the language of official city signage.

This project will involve collaboration with scientists, architects, and community members. UCC-Acosta youth will lead the graphic image and signage part of this project. Graphic sign markers, a mural sized graphic, and a poster will be produced.

Watermarks Project Budget

\$3000 - Artist Fee

\$1500 - Scientist and architect consultation fees

\$1800 - Production of signs (vinyl cutting, sign blanks, installation)

\$420 - 250 22x28in posters

\$1200 - Production of mural sized image

\$7,920.00

WATERMARKS DESIGN CONCEPTS

1. Scalable Diagrammatic Drawing
2. UCC-Acosta Youth Led Graphic Signage Project

SCALABLE DIAGRAMMATIC DRAWING

This drawing will be rendered in a style similar to the drawings in this document. A graphic combination of image and text.

* The use of the word CHOPPER AS SLANG FOR Helicopter is Korean War Military Slang From 1951

FLYING A CHOPPER

(HELICOPTER NOT A FLYING MOTOR CYCLE)

FIRST IT IS GOOD IDEA TO UNDERSTAND THE BASIC PARTS OF A CHOPPER

THE COOL THING ABOUT A CHOPPER IS YOU CAN TAKE OFF AND LAND IN VERY TIGHT QUARTERS. IN TERMS OF FLIGHT VEHICLES IT IS HARD TO BEAT FOR SMALL SPACES AND STEALTH STORAGE. IF A SITUATION IS FUCKED, A CHOPPER IS ONE OF THE BEST WAYS TO REMOVE YOURSELF FROM THAT SITUATION (ALMOST EVERYTIME)

A TYPICAL CHOPPER HAS FOUR FLIGHT CONTROL INPUTS

1. the CYCLIC STICK
2. the COLLECTIVE LEVER
3. the ANTI TORQUE PEDALS
4. THROTTLE

IN THE COCKPIT

gauges and stuff

THROTTLE
The throttle is usually a twist grip mounted on the collective lever. This controls the power of the engine. The throttle also just the rotor speed, and it needs to produce lift.

FOOT PEDALS (ANTI-TORQUE PEDALS)
These control the direction that the nose of the chopper points by changing the tail rotor blade pitch. - INCREASING OR REDUCING TAIL ROTOR THRUST AND MAKING THE NOSE YAW IN THE DIRECTION OF THE APPLIED PEDAL.

THE COLLECTIVE LEVER
The collective lever usually is located on the left side of the pilots seat. - IT changes the pitch angle of all the main rotor blades at the same time (collectively) and independent of their position. - In level flight this cause a climb or a descent. - If the chopper is pitched forward it will increase speed as it also ascends. - used to adjust power through rotor blade pitch. - IN HOVER FLIGHT used to adjust side height/vertical speed.

THE CYCLIC STICK
- is usually located between the pilots legs (looks like a joystick). - it cyclically changes the pitch angle of the rotor blades. - The pitch (or feathering) angle of the rotor blades changes depending on their position as they rotate around the hub (all blades pitch at the same point in the cycle).

TERMS
cyclic - occurring in cycles.
YAW: the axis you use to turn left or right.
AXES: plural of axis.
Angle of Attack: the angle between the reference line and the oncoming flow.
Side-slip Angle.

THREE FLIGHT CONDITIONS (most)
HOVER - most challenging, requires most control.
FORWARD FLIGHT - similar to a fixed wing aircraft.
AUTOROTATION - A descending maneuver where engine is disconnected from rotor. The rotor blades are driven by upward flow of air through rotor mast connected to rotor hub.
THREE AXES USED IN FLIGHT (THE ANGLES OF ROTATION OF VEHICLES FROM THE CENTER OF MASS).

ROLL AXIS
PITCH AXIS
YAW AXIS

EDITORS NOTE: AFTER STUDYING THIS DRAWING I WOULD RECOMMEND TAKING A FLYING LESSON BEFORE BOING IT ALONE.

AFTER ~~_____~~ A RUN IN WITH A FEW BLACK BEARS IN NORTHERN WISCONSIN - I DECIDED TO LEARN ABOUT GRIZZLY BEARS ON OUR WAY TO YELLOWSTONE. SPECIFICALLY

Surviving a GRIZZLY attack

7. FIGHTING A PREDATORY GRIZZLY BEAR

SPRAY IS YOUR BEST WEAPON (LEARN TO USE IT) FIGHTING IS A LAST RESORT - STICKS + ROCKS CAN BE AIMED FOR THE BEARS EYES AND NOSE
 * ONE STRIKE TO A BEAR YOU DIE, BE DEFENSIVE AIM FOR EYES + NOSE
 PUNCHING IS STUPID
 * NEVER PLAY DEAD WITH A BLACK BEAR OR POLAR BEAR

1. IF YOU HAVE A RUN IN WITH A BEAR IT IS IMPORTANT TO KNOW WHAT SPECIES YOU ARE DEALING WITH
 GRIZZLIES ARE BROWN BEARS AND ARE BIG (WEIGH UP TO 500-1500 LBS) BUT GRIZZLIES ARE MUCH LARGER THAN BLACK BEARS AND ARE MUCH BIGGER IN SIZE
 GRIZZLY BEARS ARE BROWN BEARS AND ARE BIG (WEIGH UP TO 500-1500 LBS) BUT GRIZZLIES ARE MUCH LARGER THAN BLACK BEARS AND ARE MUCH BIGGER IN SIZE

2. BE PREPARED
 CARRY BEAR SPRAY AND KNOW HOW TO USE IT.
 (I DID NOT DO THIS) LEARN ABOUT BEAR BEHAVIOR AND FOOD HABITS

3. PREVENT SURPRISES
 BY HIKING IN GROUPS (PREFERABLY WITH A SLOW PERSON YOU DON'T LIKE) MAKING NOISE IN AREAS WITH POOR VISIBILITY (EVEN THOUGH MAKING NOISE CAN SOMETIMES MAKE GRIZZLIES CURIOUS)
 - BE ALERT - SEE A GRIZZLY ASAP!

4. IF YOU COME ACROSS A BEAR (GRIZZLY) TRY TO DETERMINE IF THE BEAR IS BEHAVING DEFENSIVELY OR IS PREDATORY

5. THE NEXT TIME YOU ENTER A WOODS OR A FREQUENT PARK CROSS BY A FREQUENT PARK VISITOR WHO WILL IN AN ATTACK GRIZZLY BEARS ARE BROWN BEARS AND ARE BIG (WEIGH UP TO 500-1500 LBS) BUT GRIZZLIES ARE MUCH LARGER THAN BLACK BEARS AND ARE MUCH BIGGER IN SIZE

FOR A DEFENSIVE ATTACK:
 (OFTEN DURING A SURPRISE ENCOUNTER) HOPEFULLY THE GRIZZLY WILL RUN OFF. IF NOT IT MAY MAKE A SERIES OF BLUFF CHARGES. WILL GO BACK ON THE BACK OF THE BEAR. GROWLS AND HAIR STANDING UP. HEAD AND NECK ARE INDICATORS OF ATTACK. IF THE BEAR ATTACKS, IT WILL BITE THE TOP OF YOUR HEAD AND MAKE A PAW SWIPE WHILE SMASHING YOUR SCAPAL WITH INCREASED SEVERITY. GRIZZLIES DO NOT PLAY DEAD. GRIZZLY BEARS ARE BROWN BEARS AND ARE BIG (WEIGH UP TO 500-1500 LBS) BUT GRIZZLIES ARE MUCH LARGER THAN BLACK BEARS AND ARE MUCH BIGGER IN SIZE

5. TIPS IF BEAR (GRIZZLY) ATTACKS - DON'T PANIC!
 MAKE YOURSELF APPEAR AS LARGE AS POSSIBLE. WITHOUT REMOVING YOUR BACKPACK. BUT NEVER TAKE YOUR EYES OFF THE BEAR IN GENERAL. MAKE NOISE - TO HOPEFULLY SCARE THEM AWAY. THIS MAY JUST MAKE THEM CURIOUS AT NIGHT SHINING LIGHT IN THEIR EYES CAN TEMPORARILY BLIND THE BEAR.
 - DON'T RUN, HIDE (in anything flimsy) OR CLIMB a TREE - THESE MOVES MAKE YOU PREY. IF YOU DO CLIMB A TREE CLIMB FAST HIGH, AND HOPE THE BEAR DOES NOT CLIMB AFTER YOU OR KNOCK THE TREE DOWN.
 - DEAL WITH A GRIZZLY CHARGE AS CALMLY AS POSSIBLE, STAND YOUR GROUND, BE STILL AND HOPE IT IS A BLUFF CHARGE. WHILE PREPARING FOR ATTACK - GATHERING STICKS, PEPPER SPRAY etc. A BEAR MAY MAKE A SERIES OF BLUFFS - THE BEAR MAY TIRE AND LEAVE YOU ALONE SLOWLY BACK AWAY BETWEEN TIPS.
 - TRY TO STAY UP HILL FROM A GRIZZLY



GRIZZLY BEARS ARE BROWN BEARS AND ARE BIG (WEIGH UP TO 500-1500 LBS) BUT GRIZZLIES ARE MUCH LARGER THAN BLACK BEARS AND ARE MUCH BIGGER IN SIZE

BREAKING A HORSE

* Which really means being able to mount and ride a horse

BREAKING A HORSE WAS THE BEST FORM OF MILITARY TRANSPORT UNTIL THE INTERNAL COMBUSTION ENGINE, SO FOR MOST OF HUMAN HISTORY HORSES WERE THE BEST OF HUMAN TRANSPORT

THERE ARE 5 STAGES

1st - GAIN THE HORSE'S TRUST

IDEALLY YOU WILL HAVE BEEN WORKING WITH THE HORSE SINCE THE HORSE WAS A SPEND TIME WITH YOUR HORSE (THEY ARE PREY ANIMALS AND SPOOK EASILY). GROOMING IS A GOOD WAY TO DO THIS. PATIENCE AND TIME ARE IMPORTANT - MAKE SURE EACH STEP OF THIS PROCESS BECOMES HABIT BEFORE MOVING TO THE NEXT STEP. ALWAYS END EACH STEP ON A SUCCESS, LIKE IN MOST THINGS - END ON A HIGH NOTE

SIDE NOTES

SAFETY: A HORSE CAN DESTROY YOU - BEST TO STAY WHERE A HORSE CAN SEE YOU. - LEFT SIDE NEAR HEAD IS BEST. WHEN MOVING AROUND HORSE, RUN YOUR HAND ALONG ITS SIDE AND TOWARDS IT. ALSO NEVER STAND BEHIND (HORNS) DIRECTLY IN FRONT OF OR SIT BY YOUR HORSE

2nd HALTER BREAKING

ONCE YOUR HORSE IS USED TO YOUR HANDS FOR A FEW DAYS ON HIS HEAD AND NECK YOU ARE READY TO HALTER BREAK. FOR A FEW DAYS LET THE HORSE SEE AND SMELL THE HALTER - ONCE YOU FINALLY GET IT ON LEAVE IT ON THE HORSE FOR A FEW DAYS. A HALTER IS SOMETIMES USED INTERCHANGEABLY WITH A BRIDLE. A BRIDLE IS USED BY SOMEONE RIDING THE ANIMAL WHERE A HALTER IS MORE FOR LEADING AND TIGHTENING TYING A HORSE UP. -> They are basically the same for our purposes though.



THIS IS A HALTER. The halter introduction is a success. ONCE you have the horses mouth in the mouth part is called the bit. Introduce slowly (a few minutes at a time) - add a sweet and sticky substance to make it work better (molasses or honey, etc.)

3rd LONGING

is training with a rope - basically leading the horse with a rope - use the largest circle you can when you start by lining up with the horse for 10 minutes in each direction while showing them you are in charge. your body language - eventually getting your horse to follow your lead. Part of this process should be teaching your horse to follow commands. Starting with "HALT" and "WALK". Remember to hold your space and always show you are the leader. If your horse tries to impose on your space - put pressure ON the horses ribs (about a foot behind the shoulder). This is disciplining a horse. The horse needs to be taught to respond to pressure - stand in front of the horse with the lead - pull the lead horse in the head would do to - disciplining a horse. The horse needs to be taught to respond to pressure - stand in front of the horse with the lead - pull the lead away from horse and they should move their head in that direction.

CONTROL YOUR TEMPER:

NEVER HIT, YELL, OR THREATEN THINGS AT YOUR HORSE. THIS WILL SCARE IT AND BREAK TRUST. A LOW "SHHH" SOUND IS A GOOD WAY TO LET THEM KNOW THEY ARE DOING SOMETHING WRONG. REWARDS - POSITIVE REINFORCEMENT MAKES WONDERS!

4th SADDLE BREAKING

Over the course of a week or two. If the horse gets stressed - remove the stirrups and leathers can help with this. Then, put on back for a few minutes at a time. Do this several times. TIGHTEN THE GIRTH a little by little EACH DAY. NEVER GET THEM USED TO STIRRUPS - Longe with all this of and only introduce one new element at a time.

LOW MOVEMENTS - NOT FAST

CANTER - A HORSE CONTROLLED JOG (between 10-17 mph and slower than a gallop)

COMMANDS - use single word commands. Keep them consistent with each command. Distinct!

DUH - Like humans each horse is different. Adjust accordingly. ALWAYS CALM A SCARED HORSE BEFORE MOVING ON.

5th MOUNTING THE HORSE

STAND ON A GENTLE post or something ABOVE THE HORSE'S EYE LEVEL. -> SLOWLY LOWER YOUR WEIGHT (or that of a more experienced rider) ONTO THE BACK OF THE HORSE. -> ONCE THE HORSE ACCEPTS THE WEIGHT REMEMBER TO STROKE AND REWARD HIM. THEN, SLOWLY AND GENTLY PLACE YOUR FEET IN THE STIRRUPS. (one at a time) -> best to have someone else to do this while the horse can see (and be calmed by) you. * ALSO IF THE HORSE STARTS BUCKING YOU ARE NOT THE ONE ON THE GROUND. ONCE THIS WORKS SLOWLY VIBRATE THE HORSE WITH THE REINS ON ITS BACK. GENTLY INTRODUCE PRESSURE ON THE REINS AND VOICE COMMANDS. NOW IT IS TIME FOR YOU TO MOUNT YOUR HORSE. -> This can be dangerous - Especially the first time. (be sure you are not alone) - slowly mount your horse - start by only staying on a few steps then dismount. slowly build up the time you are in the saddle.

* MONGOL ARMIES WERE MADE UP OF LARGELY HORSE ARCHERS - GROOMING UP WITH HORSES AS A MAJOR PART OF THEIR LIFESTYLE CONTRIBUTED TO THEIR MILITARY DOMINANCE - even when outnumbered, their brilliance ON horseback as well as creative thinking helped them overcome new challenges.

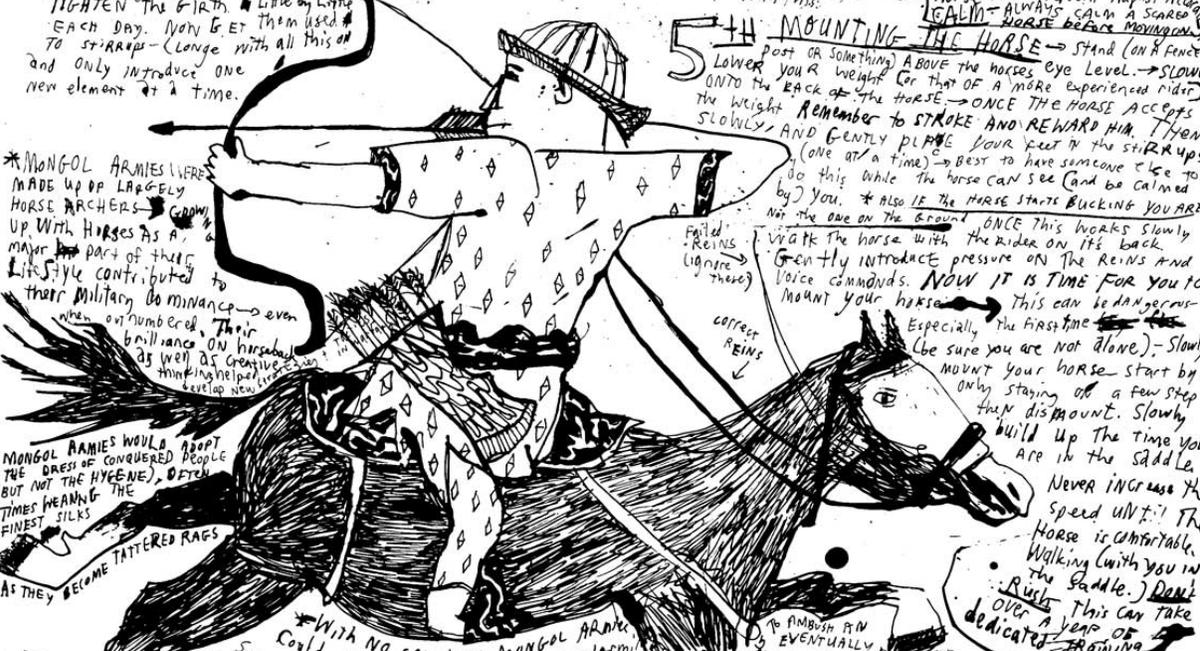
* MONGOL ARMIES WOULD ADOPT THE DRESS OF CONQUERED PEOPLE (BUT NOT THE HYGIENE), OFTEN TIMES WEARING THE FINEST SILKS AS THEY BECAME TATTERED RAGS.

With NO CAVALRY MONGOL ARMIES could cover great distances at amazing speeds - All soldiers travelling into the mountains made the army appear much larger. They supply train - became the mongols need of no supplies.

NEVER INCREASE THE SPEED UNTIL THE HORSE IS COMFORTABLE. Walking (with you in the saddle.) Don't rush. This can take over a year of dedicated training.

* MONGOL HORSE ARCHERS WOULD TIME THE RELEASE OF THEIR ARROW AT THE EXACT MOMENT ALL 4 OF THE HORSE'S FEET WERE OFF THE GROUND.

THEY WOULD ALSO FAKE RETREAT PICKING OFF THE ENEMY WHILE PURSUING.



EATING INSECTS AND MOLLUSCS

* INSECTS ARE ONE OF THE MOST IMPORTANT SURVIVAL FOODS

EATING INSECTS DOESN'T SOUND GOOD TO MOST PEOPLE, BUT → THEY ARE EXCELLENT SURVIVAL FOODS AND HIGH IN PROTEIN AND FATS

MOLLUSCS

SNAILS MAKE EXCELLENT FOOD BUT YOU MUST STARVE THEM FOR AT LEAST 24 HOURS BEFORE EATING

(TO ENSURE THEY EXCRETE THEIR POISONS)

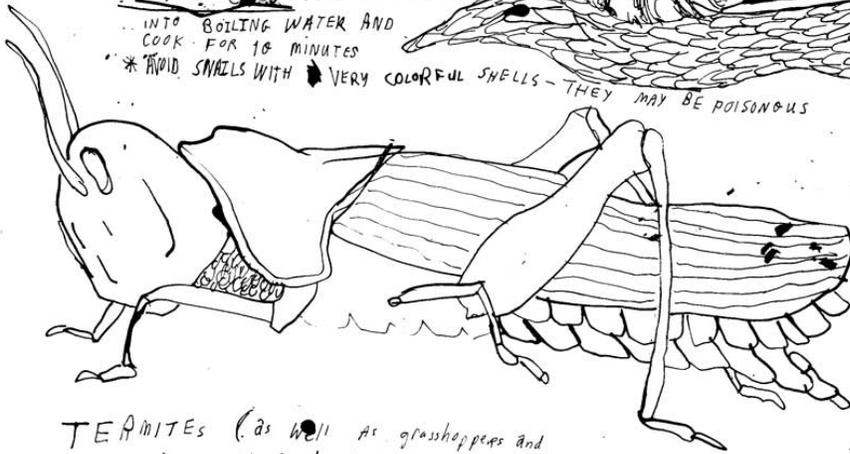
TO COOK: PUT THEM (LIVE)

INTO BOILING WATER AND COOK FOR 10 MINUTES

* RAPID SNAILS WITH VERY COLORFUL SHELLS - THEY MAY BE POISONOUS



* NOTE: IF YOU SUFFER FROM SHELLFISH ALLERGIES AVOID EATING INSECTS



GRASSHOPPERS (and CRICKETS)

ARE GOOD FOOD SOURCE. YOU CAN KILL THEM BY STRIKING WITH A LEAFY BRANCH BOILED OR ROAST, BUT FIRST PULL OFF LEGS, WINGS, AND ANTENNAE

← THEY ARE EASY TO PICK OFF GRASS STEMS AT DAWN

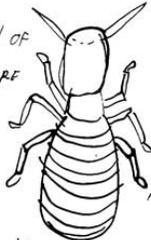
TERMITES (as well as grasshoppers and crickets) provide good levels of protein and sexual termites even provide a nice level of fat.

TERMITES ARE TASTY AND NUTRITIOUS, EASY TO PREPARE (They can be cooked by almost any method, just remove wings and legs first) and can easily be captured in large volumes.

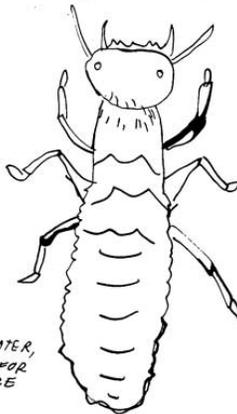
TECHNIQUES: FOR A MUD TERMITE

NEST: PUSH A LONG THIN STICK INTO THE SIDE OF THE NEST - AGGRESSIVE TERMITES WILL LARV ON THE PULL STICK OUT AND CAPTURE THESE TERMITES.

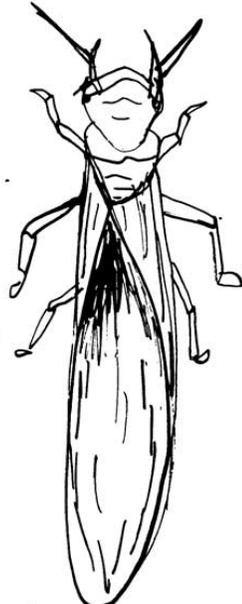
OR YOU CAN SMASH OFF A PIECE OF THE NEST, DROP IT IN WATER, AND JUST WAIT FOR THE TERMITES TO RISE TO THE TOP FOR CAPTURE



WORKER TER MITE



"NON-SEXUAL" TERMITE



"SEXUAL" TERMITE

* OTHER TOP NOTCH EDIBLE INSECTS INCLUDE:

CICADAS (they are the loud bugs), ANTS (you need to cook them first), MOTHS, and BUTTERFLIES



* ALMOST ALL AQUATIC INSECTS ARE EDIBLE - AND ARE QUITE PALATABLE.

* EDIBLE, BUT LESS TANTALIZING INSECTS ARE THE SLIMELY TASTING ONES INCLUDING GRUBS, WORMS, LEECHES, AND BEETLE LARVAE → SWALLOW WHOLE OR GRIND INTO PASTE AND COOK UNTIL CRISPY.

AVOID: BRIGHTLY GLORED INSECTS, BUGS COVERED IN FUZZ, DISEASE CARRIERS (LIKE MOSQUITOS, TICKS, AND FLIES, BUGS THAT EMIT A STRONG ODOR AND SLOW MOVING INSECTS THAT DO NOT SEEM TO GIVE A DAMN ABOUT PREDATORS (PROBABLY POISONOUS)

GOOD PLACES TO LOOK FOR INSECTS INCLUDE UNDER ROCKS, BEHIND LOOSE BARK, IN DECAYING STUMPS, AND IN SEED PODS. OR IN BIG MOUNDS OF DIAT



This image shows an example of the diagrammatic drawing installed as a public mural in Walker's Point.

UCC-ACOSTA YOUTH LED GRAPHIC SIGNAGE PROJECT

A few examples of potential locations, designs, and subjects for this project. These are rough sketches.





GREEN ROOF



this roof-top garden grows...
provides...
drainage...
square feet
of lease space...

