

ATELIER REHWALDT [<u>A</u>-PARK] DRESDEN, sustainability Mgr. VERONIKA TOMEK [AT2K] LS 2022_2023





Relationships Alaunplatz is a square in the Äußere

Alaunplatz is a square in the Äußere Neustadt district of Dresden. It is located between Kamenzer Straße and Tannenstraße, as well as Bischofsweg. Alaunplatz is connected to Albertplatz via Alaunstrasse, which gave it its name, and borders the bar district of Äußere Neustadt to the north. Line 13 of the Dresden tram has a stop there called "Alaunplatz, or modern named A-park.





Klima

Floods



Water absorption

Terrain





Geologie

Mostly ice-age fluvial sediments characterise most of the ground in Dresden. There are aeolic sediments as well, though on the southern and southwestern part of the city. Alaunpark is situated in the area of river sediments, bordering with Granite grounds of Dresdner Heide. The ground is composed from river sediments, carried in by Elbe river as well as Preissnitz, which leaves Dresdner Heide and flows int Elbe. The groundwater level is approx. 10 - 20 meters below surface. The fountain on the northern side used to be fed by a natural spring.

Blue line - ground water isohypse Green area - ground water level below 5 m underground







Analysis

Actual zoning Nowadays there are some zones in the park, that are functioning quite fine, and some that could do better. The "marketplace" provides space for food trucks and local markets, but there are a few places to eat what you buy there. There are a few tree stumps in the central field, and a few randomly placed trash bins. The playground near the nursery is quite used, only missing some place to sit. The former exterior stage with a gazebo is quite neglected, two table tennis tables serve their purpose only occasionally. The bouleplatz is used more frequently, as it is closer to the city and more accessibble. The community garden is quite dis-organized, from wild planting of whatever plants are available to guerrilla knitting on free places.

Analysis conclusion Apart from the water management system, I propose some changes in use of the Alaunpark. Adding more places to sit and enjoy the food which you buy at the market or bring your own. Organising the community garden using geodome greenhouses, which can also be used as a place for meeting and educating people.



Aesculus hippocastanum Gleditsia triacanthos



Robinia pseudoacacia



Crataegus monogyna

Plants

Maple (Acer platanoides) Oak (Quecus robur) Accacia (Robinia pseudoacacia) Three-spined woodpecker (Gleditsia triacanthos) Chestnut (Aesculus hippocastanum) Crane bird (Sorbus aucuparia) Hawthorn fences (Crataegus)



Quercus robur



Acer platanoides



Sorbus aucuparia



lawn

Analysis



treshing roads



pawed area



concrete



asphalt

Covers

Treshing roads Pawed area Asphalt Concrete





SWOT

STRENGHTS

- DIVERSITY OF SPACE
- SEPARATE SPACES
- SMALL TRAFFIC
- HISTORY
- AVIABILITY

OPPORTUNITIES

- PLACE FOR LOCAL
- PLACE FOR EVENTS
- PASSAGE CYCLE TRAIL
- VARIABILITY

WEAKNESSES

THREATS

- FAILURE
- POOR ARRANGEMENT
- DESTROYED MOBILIAR
- NO ACCES TO WATER
- SUMMER DROUGHT
- SUMMER BUSYNESS

- DANGER AT NIGHT
- RISK OF VANDALISM
- NOISE
- UNSUSTAINABILITY





Concept

Central field can get quite arid in the summer days. My primary aim was to improve water management using newly built well in the northern part of the park. Irrigation system is powered by solar energy. There are placed new reservoirs with wolume of 450 000 litres wich is sufficant for watering the park. My design also includes irrigation pits which are holding the water in a gravel reservoir, planted with water-loving plants and bordered by low walls, they can be used for sitting. Park zoning is functional, stays common, except use the slope for water reservoir fountain, wich creates new water element dominant. Norhern side of the park will be used for sewing new meadow picnic place and youngsters, and is connected with playground zone.

PARK MODIFICATIONS

- Build new well
- Solar systen powering whole park
- Construction of drip irrigation system at the center of the park
- Sowing of resistant turf
- Construction of irrigation pits for water retention, filled with absorbent and planted with water sustainable plants framed by a wall. Rounded by fresh water.
- Renewing/rebuilding of treshing roads
- Drinkng places
- Toilets around the park
- New mobiliar



The main view axis is left to price the space and grandiosity of the park





park water irrigation scheme

Irrigation of the park is possible thanks to ground water level, as it is feasible to drill a new well in the area of the park. This well with waterworks will supply water for the whole park. Everything is powered by solar array placed in the northeastern area, facing southwest. The water and irrigation pits will change the microclimate in whole park. This will be done by supplying the water to the drip irrigation and keeping it in the park. Solar panels are a part of computer driven system, which controls the amount of water supplied to the park and regulates the water flow in the system. Water is collected from the paved surfaces as well, the surfaces are inclined towards the larger trees.



Depressed places filled with absorbent soil, planted with moisture-loving plants. A low stone wall built on a side, with naturally flowing profile, serves as a place for rest and relax

WATERING PITS



plant examples





Lysimachia clethroides



Lythrum salicaria





purpureum



Rudbeckia fulgida



Rudbeckia fulgida



Achillea millefolium



Deschampsia caespitosa





Newly built on the northern slope, fed with a nearby well. Water flows down the slope from one basin to another and disappearson the lower side into the watering system accumulator. The irrigation system is fully automatically controlled by the amount of sun received by the solar panels, thus adjusting the amount of water needed for irrigation, the water is also purified along the way by aquatic plants, fish and other animals. The fountain thus complements the missing water feature in the park, which keeps the park green and fresh on summer days. Wooden and stone bridges allow for crossing the water safely or just for relaxing on the bank. The water tanks could be supplemented by lights in a case.





plant examples



Hottonia palustris



Lemna minor



Nymphaea alba Scirpus lacustris









Meadow

By sowing meadow mixtures in the park, we limit the movement of people through the exposed parts of the park. This reduces water evaporation and changes the microclimate in the park.

Meadows attract insects and bees. Bee hives can be located in the northern part of the park. Bees are an important part of the planet's ecosystem. The meadow lawn creates a visual contrast to the intensive lawn, which is mowed regularly and is used for the movement of people. Blooms from spring to autumn. Among other things, the costs of maintaining the park will be reduced.

bedrník větší (Pimpinela major) – 0,5 čekanka obecná (Cichorium intybus) – 1 čičorka pestrá (Securigera varia) – 1,5 divizna černá (Verbascum nigrum) -0,2 hlaváček letní (Adonis aestivalis) – 1 hlaváček roční (Adonis annua) - 1 hořec křížatý (Gentiana cruciata) - 0,1 hvozdík kartouzek (Dianthus carthusianorum) - 1,5 hvozdík kropenatý (Dianthus deltoides) – 0,5 hvozdík pyšný (Dianthus superbus) – 0,1 chlupáček oranžový (Pilosella aurantiaca) - 0,1 chrastavec rolní (Knautia arvensis) -1,5 chrpa čekánek (Centaurea scabiosa) – 2 chrpa modrá (Centaurea cyanus) - 1 jetel luční (Trifolium pratense) – 2,5 kmín kořenný (Carum carvi) - 5 kohoutek věncový (Lychnis coronaria) – 1 kopretina bílá (Leucanthemum vulgare) – 3,5 kosatec sibiřský (Iris sibirica) – 2 koukol polní (Agrostemma githago) – 5 kozíbrada východní (Tragopogon orientalis) - 0,5 kravinec španělský (Vaccaria hispanica) – 2 len vytrvalý (Linum perenne) – 1 mák polní (Papaver argemone) – 0,5 mák vlčí (Papaver rhoeas) – 0,5 merlík všedobr (Chenopodium bonus-henricus) – 0,5 mrkev obecná (Daucus carota) – 2 oman vrbolistý (Inula salicina) - 0,2 orlíček obecný (Aquilegia vulgaris) – 0,5 ostrožka stračka (Consolida regalis) - 0,5 ostrožka východní (Consolida orientalis) - 2 pilát lékařský (Anchusa officinalis) – 2 plamének celolistý (Clematis integrifolia) – 0,5

prvosenka jarní (Primula veris) – 0,5 řeřicha chlumní (Lepidium canpastre) - 0,5 řimbaba chocholičnatá (Tanacetum corymbosum) - 2 silenka dvoudomá (Silene dioica) – 4 silenka nadmutá (Silene vulgaris) - 3 silenka nící (Silene nutans) - 3 silenka širolistá bílá (Silene latifolia) – 1 sléz velkokvětý (Malva alcea) - 4 smolnička obecná (Viscaria vulgaris) - 0,5 starček bludný (Solidago erraticus) – 0,2 svízel svřišťový (Galium verum) – 2 šalvěj hajní (Salvia nemorosa) – 2 šalvěj luční (Salvia pratensis) – 2 šťovík kyselý (Rumex acetosa) - 1 třezalka tečkovaná (Hypericum perforatum) – 1 tužebník obecný (Filipendula vulgaris) – 0,5 úročník bolhoj (Anthyllis vulneraria) – 3 vičenec ligrus (Onobrychis viciifolia) – 6,3 zvonek širokolistý (Campanula latifolia) - 0,2 zvonek okrouhlolistý (Campanula rotundifolia) - 0,3



PICNIC PLACES BOULEPLATZ PLAYGROUND MARKET GEODOME COFFEE DRINKING WATER **NEW TOILETS MOBILIAR**



COFFEE ONE this small cafe with a toilet and changing table is available to parents near the playground so they don't have to run away from the children. Of course serves everyone.



COFFEE TWO this cafe is located in the quietest part of the park, which is not used much nowadays, it restores the old pavilion and provides seating in the shade next to the new fountain.



PLAYGROUND je nyni hezky fungujicim mistem pro deti ruzneho vek, navrhuji dalsi propiójeni smerem do zadni casti parku, vcetne vysazeni louky, stromu a piknikoveho mista.



GEODOME the new community geodome greenhouses are used for growing vegetables even in the winter, or for children to learn about nature, you can spend time here both in winter and in summer.



PICNIC PLACES the magic of the picnic lawn resist in its regular maintenance and quality heavy lawn, which is irrigated by drip irrigation.



BOULEPLATZ is a new active place where people of different ages meet, the improvement of this element is to sow meadows and improve the surface



MARKET it is a place where you can find something to eat every day or there are markets there. Its improvement will be a change of surface and the addition of park benches and tables in the shadows of the trees.



MOBILIAR beautiful yellow lacquered benches and tables for lunch or sitting, the combination of sheet metal and wood is easy to maintain, in a similar spirit scythes for waste will be placed here.



NEW TOILETS the reconstruction also includes new toilets, which should be located at an accessible distance from all places in the park and also next to the children's playground.



DRINKING WATER an important part of the park is drinking water, which should be accessible at several points in the park.

