Northwest Aluminum, The Dalles, Oregon USA

Technische Universität München

Charrette for Future Use of Northwest Aluminum
28th April - 2nd May 2008

Exhibition relating to the Charrette at the Discovery Center, The Dalles

Master Theses at the Chair of Landscape Architecture and Planing,
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The Charrette took place in the context of the research project:
„Development of repertoires for analysis and methods for reintegration of former industrial sites in urban functioning space shown in case studies in Germany and the United States“.

The project is launched by the German Federal Ministry of Education and Research BMBF in the context of the main focus of the funding program „Research for the Reduction of Land Consumption and for Sustainable Land Management“ REFINA for short.
It is part of the bilateral cooperation ‘Brownscape Design - Innovative design of habitats’ of BMBF and US-EPA .

Freising, March 09

The picture on the cover shows the silos of the Northwest Aluminum Mill seen from the rooftop of the production rooms

Prof. Peter Latz
Project Management
Research Team
Technical University of Munich

Foreword Prof. Peter Latz

The aluminum works North West Aluminum in The Dalles in Oregon, USA is the focus of the second case study during which a design Charrette for change and after use of the works on this site was performed.

The result of this Charrette stays ambivalent.
All participants emphasize the importance of the expansion of perceptions and the significance of defined visions, even if the since 1986 closed works will presumably be demolished down to the ground level. Nevertheless, the ownership, city and Port of The Dalles support the execution of the Design Charrette for the change and after use of the works.
Analog to the German case study of the mine Westerholt, the Charrette consisted of a round table and a design workshop.
The results of the Charrette are shown on pages 45-98 of the report.
The site itself, the content preparation and the process of the procedure are also documented in the brochure together with text descriptions and photos presenting the character of the site as well as the atmosphere of the Charrette week.
The documentation is being completed by the diploma and master dissertations which were compiled during the Charrette under the title “North West Aluminum - Design Concepts to Reuse” and where all solutions were developed out of the asset.

That this fascinating square is also able to play a special role in the use of the sub construction is shown by the developed alternatives. Into the existing frame were integrated not only producing industry and services but also aspects as music, leisure or sports. Restrictions have a more formal character like the assignation, to use this area explicitly as industrial site and to submit all existing spacial qualities to this kind of use.
By contrast, the drafts of a mixed use of the site emphasize the performance of the impressing and well seen building square as an icon.

Foreword Douglas MacCourt

Member, US German Bilateral Working Group
Moderator and Legal Counsel, Northwest Aluminum Site

Bringing industry, government and local citizens together to forge a vision for reuse of large scale industrial sites like the Westerholt coal mine and the Northwest Aluminum Company smelter requires collaboration, expertise and commitment to sustainable development. The Design Charrette for Northwest Aluminum produced truly remarkable results – not only in terms of innovative designs – but also of a transferable process that demonstrated the value of international cooperation.

The importance of the Northwest Aluminum site and its reuse cannot be understated. As the largest employer in The Dalles, Oregon USA for over 40 years, the landmark site occupies a unique part of the local identity and economy. From the regional and state perspective, the site has critical strategic importance as an industrial resource because of its location along the state's only major east-west interstate highway, its access to the Columbia River, its existing infrastructure investment and its job growth potential.

Each design concept created in the Charrette captured the site's iconic past and produced new models for reinterpreting the site's history for future uses. Taking on a task that is often difficult for citizens of a single community, it is a tribute to the process that design teams from halfway around the world reached consensus on strategies to enhance the value of the natural and human environments at the site.

In addition, each design reflected a process where diverse stakeholder participation turned competing interests into a design advantage. New opportunities were identified for integrating job creation, economic growth and natural features of the site that simply would not have been possible without the special structure of the Charrette and the professional disciplines represented in the working groups. In short, the work of the interdisciplinary design teams matches the best of the architectural, regulatory, environmental and business community.

At a more global level, the general goal of the project was accomplished: to develop a comparative understanding between the US and Germany of the planning and design concepts that can be applied to sites like Northwest Aluminum, and replicated at sites around the world. The Charrette results are consistent with Oregon's goal to create and grow a policy and regulatory framework for industrial reuse that promotes both sustainability and business.

A special thanks to Rebekka Gessler and Matthias Lampert of TUM who organized the Charrette; and to Peter Latz and the graduates of TUM, whose vision inspires us all.

Doug MacCourt
Attorney, Partner
Ater Wynne LLP

Northwest Aluminum Company is the owner of the US project site, a primary aluminum smelter in The Dalles, Oregon. The project is part of an international cooperation between the Technical University of Munich (TUM), the German Federal Ministry of Education and Research (BMBF), and the US Environmental Protection Agency through the US Bilateral Working Group entitled "Brownscape Design – Innovative Configuration of Living Environments."

Contents

Contents

Northwest Aluminum

The Site

The former Northwest Aluminum Mill is unique within the Columbia River Gorge. It is situated in the city district of The Dalles on a flat plateau close to the Columbia River shore. The site is about 454 acres big, but only some central parts of the whole area were used during the production process. The huge area is separated from the town by railway tracks and the interstate 84 on the west. The east is enclosed by 2nd street and separates the site and the Port area of The Dalles.

Being established in 1954 the site was closed in 1984, opened again for a year and since then remained as relict without any use. The loss of 600 jobs had a big impact on the surrounding city and its inhabitants.

It has been forbidden area for public until now. As a consequence the site was not a part of the city for its citizens. In the future it is important that the site is setting a positive image for the town so that the acceptance by the community will arise.
The huge dimensions of the site hold an enormous potential for innovative reuse. Its impressive characteristic appearance, especially when you are entering the city from the interstate in the north, could make the complex of former Northwest Aluminum an icon for the city.
Furthermore future interaction with the city would be a big task. For example the option to connect the city to the areal and the river would be an aim.

Aerial View of the site

Northwest Aluminum

The site of Northwest Aluminum is an Icon in the flat areas of The Dalles and the Columbia River Gorge

View to the site from the residential hillside in the south

Northwest Aluminum

In winter 2007/08 the demolition of the buildings, that are surrounding the core hall-complex, had begun. Due to a nesting owl the deconstruction process of the core production halls stopped in spring 2008, but will be proceeded after the breeding season of the owl.

Therefore planning processes with the asset of reuse of the whole complex are under pressure. Probably the design has to be modified on the purpose of keeping the minimum of the old structure to guarantee to safe the spirit and the history of the area. The design that enables this asset can be the focus for this task.

View to the site from the North

Part I

Charrette

Documentation of the Charrette 28th April - 2nd May 2008
for reuse of the Northwest Aluminum Mill

Site selection and Organization of the Design Charrette

First of all, we had to identify an adequate location in the United States to carry out the Charrette as an essential part of the second case study.

Criteria for the definition of the location were not only the following demands to the location extracted from the hypotheses of the research project as there are:

- due to the change in structure, industry locations are going obsolete and areas become released
- the closure is already fact respectively is planned for the near future
- the industry location is situated within an urban context
- the identity of the location is not yet destroyed, i.e. the important constructional structures are still available

Besides of the demands to the location itself, cooperation partners on-site had been an indispensable prerequisite for the performance and success of the project in the U.S. A. Cooperation partners, who knew all information on potential locations and had the necessary contacts to the owners.
This was the only way to ensure the necessary willingness of the owners to cooperate and to achieve the integration of important responsible parties into the participation process.

During the workshop in Stuttgart in 2007, the implementation of the research project into the bilateral German-American cooperation “Brownscape Design - Innovative Design of Habitats” lead to the contact to Doug MacCourt, a long-year member of the group. He helped to identify the location North-West Aluminum that could be used as working location for the second case study and the performance of the Charrette.

At this point, we want to thank Doug MacCourt for his kindness and whole-hearted cooperation, not to mention the true American hospitality that made this cooperation not only a most successful but also an extremely pleasant one.

Organization

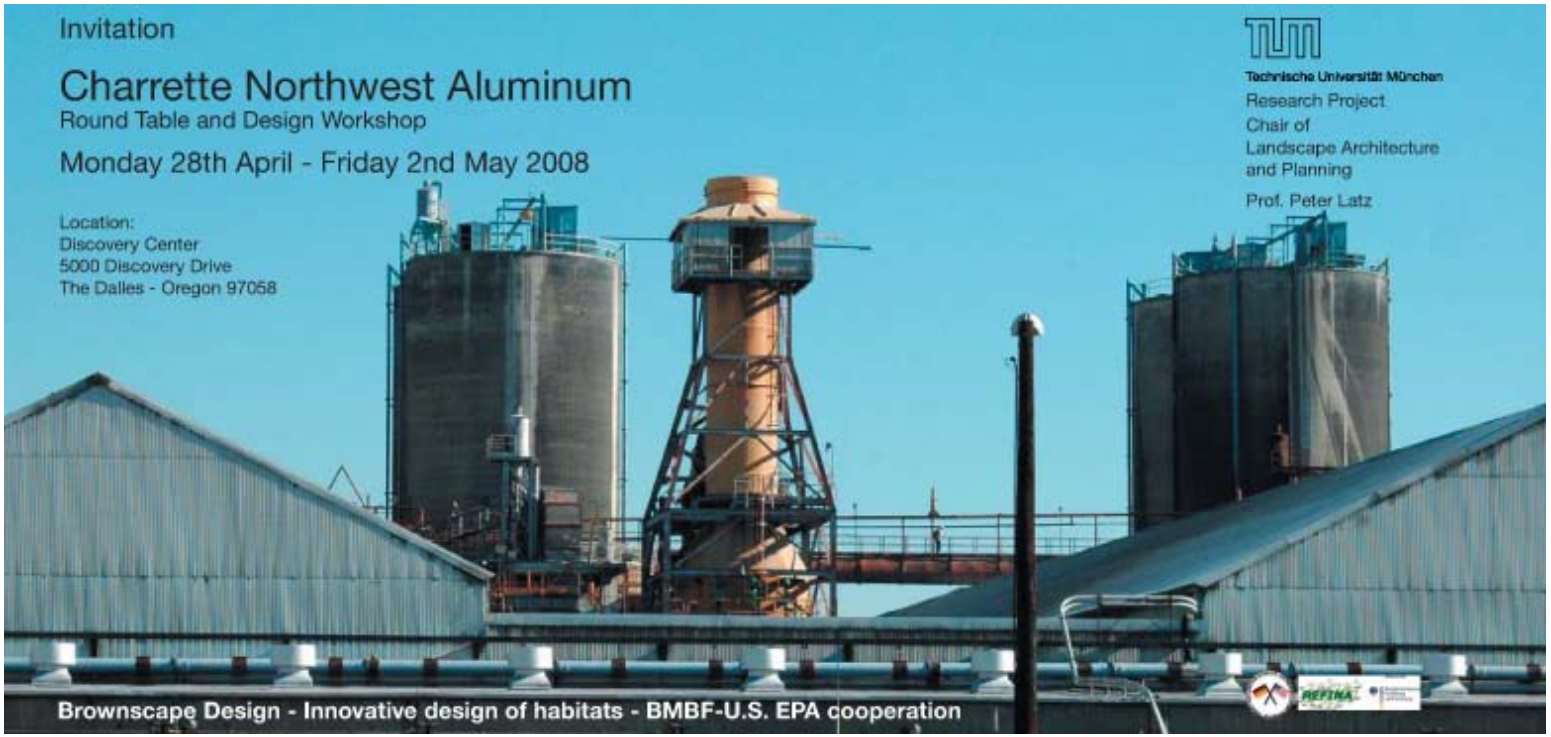
Rebekka Gessler
Context Management
Research Team
Technical University of Munich

Doug MacCourt
Member of the Bilateral Working Group
Attorney, Partner
Ater Wynne LLP

Matthias Lampert
Organization and Administration
Research Team
Technical University of Munich

Charrette Announcement
In March 2008 the Charrette Northwest Aluminum in the Dalles was announced by the research team of the Technical University of Munich.

Charrette
The planning method Charrette - the name stems from the French word “Cart” - is a dynamic working process with public character.
This innovative strategy was developed to get hold of the complex problems of urban development within very short time.



Invitation card Charrette

Structure Design Charrette

Special Structure of the Design Charrette

The Design Charrette consists of two parallel workshops with different tasks and different methods of operation: The „Round Table“ and the Design Workshop.
The functional separation, developed by the research team, ensured that each group was able to proceed according to its own particular professional techniques.

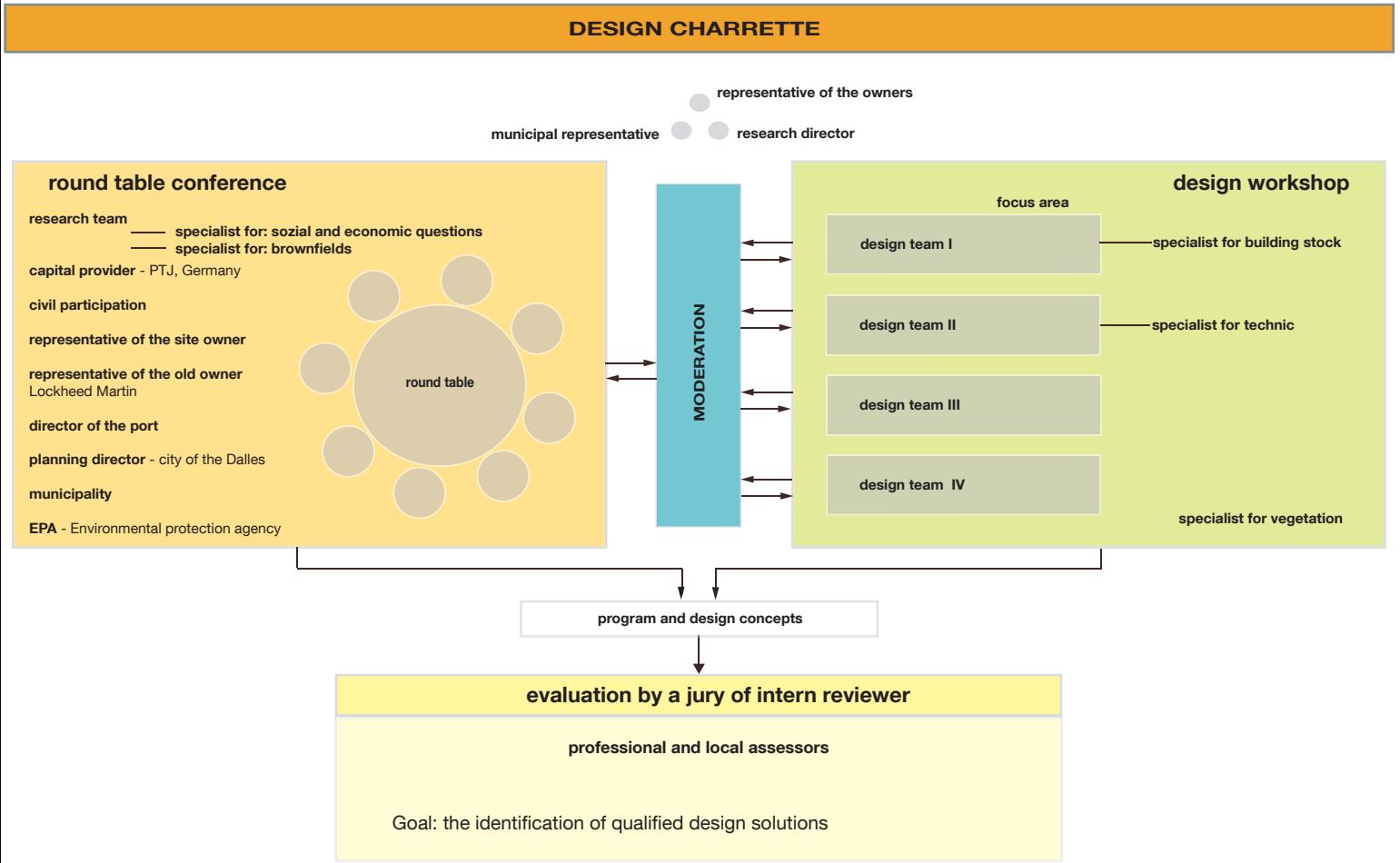
„Round Table“
The ‘round table‘, comprising the owner, representatives of the city concerned and local citizens, proceeded to develop programmatic concepts.

Moderator
The moderator mediated between the two workshops.
He guides communicative processes between the „Round Table“ and the Design Groups, which played a substantial part in improving the workflow.

Design Workshop
The Design Workshop was made up of planners from various professions. The interdisciplinary teams drew up spatial concepts.
Ideas and programs put forward at the „Round Table“ were immediately implemented and incorporated into spatial concepts at the Design Workshop. The resultant spatial consequences were made visible, so that they could be evaluated and discussed.
Any corrections that were required in the drawings were carried out straight away.

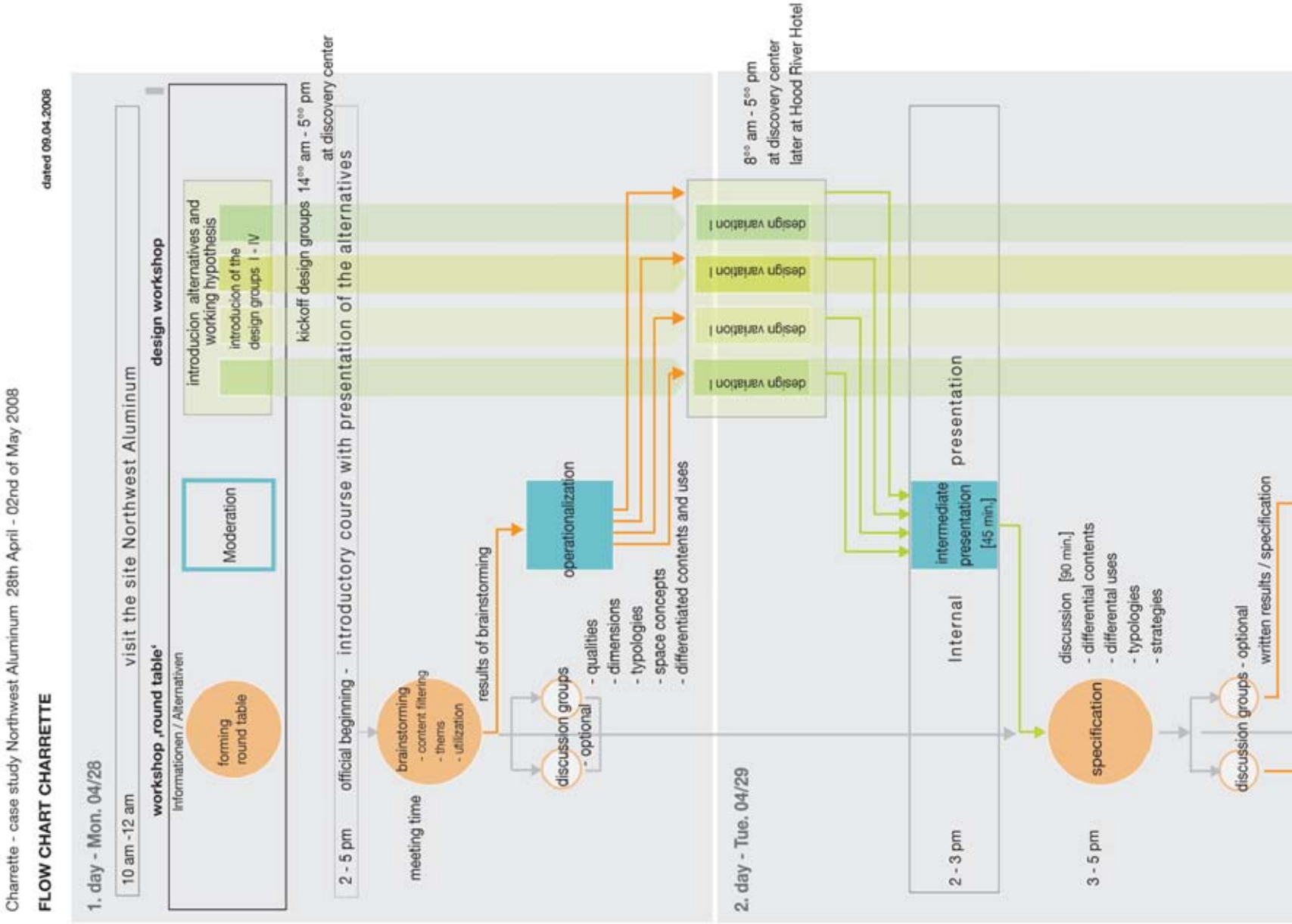
Jury
The results of the work executed by the „Round Table“ and the Design Groups were assessed by the jury in public.
The jury consisted of professionals, representatives of the city council and the owner.
The aim of the assessment procedure is to acquire a number of alternative action concepts, which explains why no scores were awarded.

Round table conference and design workshop as parallel operations

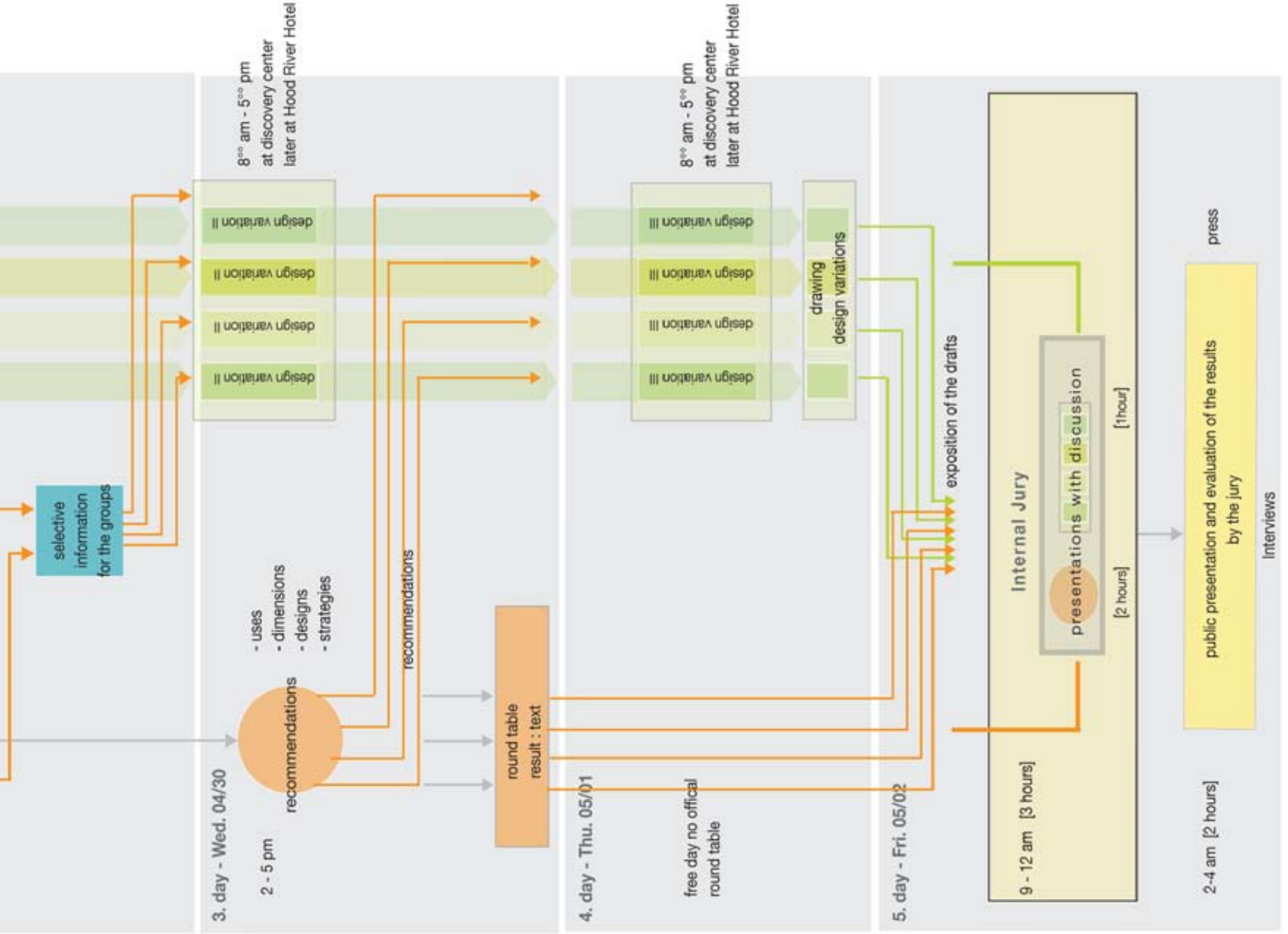


Structure of the Charrette

Flow Chart Design Charrette



Flow Chart Design Charrette



Flow Chart

Functional Alternatives

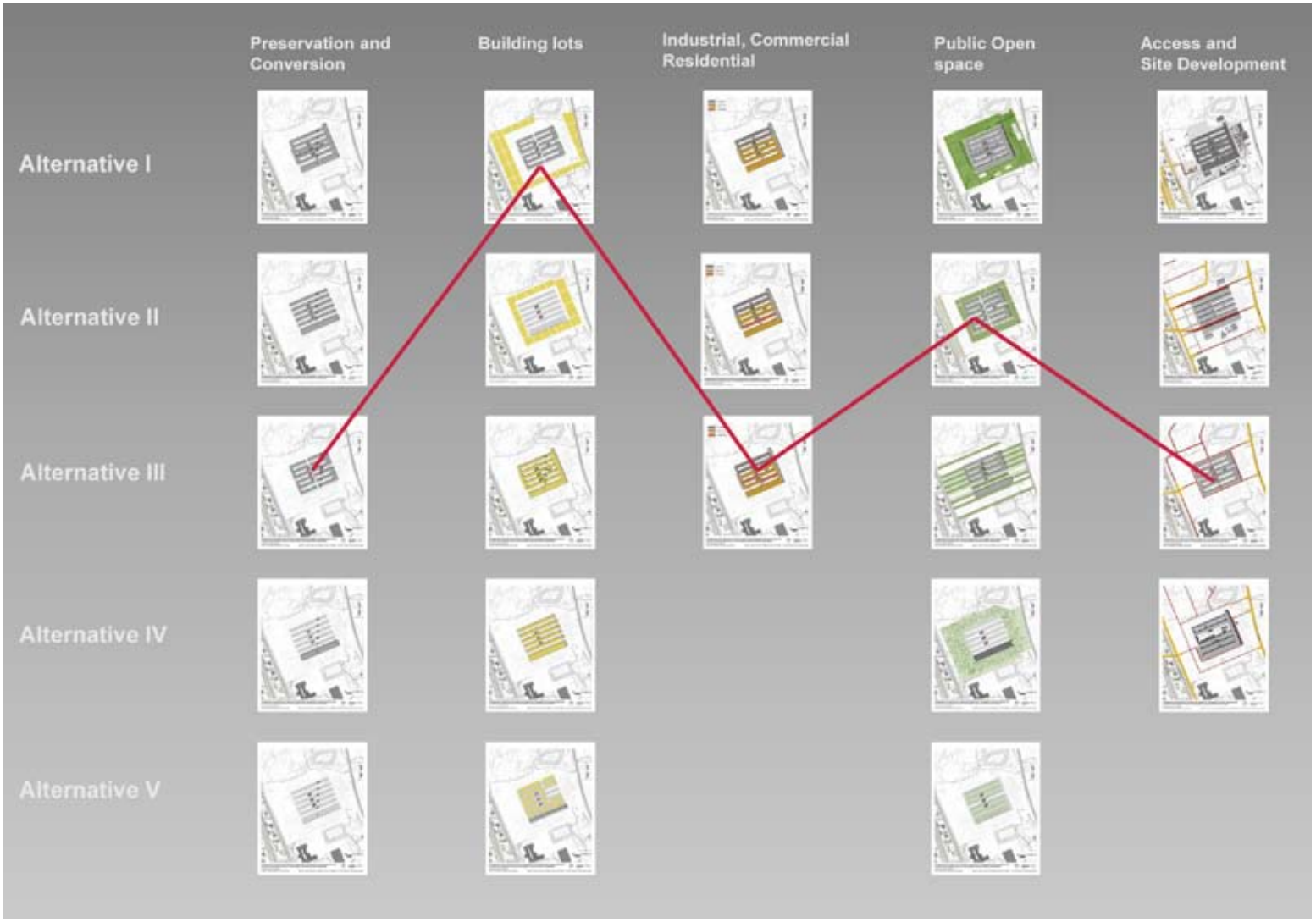
Prior to the design Charrette the research group drew up between three and five different spatial alternatives for each of the parameters of relevance to the planning:

- **Preservation and Conversion**
- **Building Lots**
- **Mixed Used:**
  Industrial-Commercial-Residential
- **Public Open Space / Green Structures**
- **Access and Site Development**

The design alternatives were derived from decomposing the contents of existing master theses “Design concepts to reuse“ on master plan level.

Important parameters of relevance for the planning process, which did not form part of the fundamental concepts behind the decomposed work, were added by the research team.

The abstraction of the planning layers was carried out in two directions:
Firstly, functional alternatives were derived, prepared and depicted in the form of diagrams.
Secondly, criteria for assessing the individual design alternatives were derived from them.
The design alternatives for the different parameters can be coupled with one another, at will. This produces a whole row of combination options.



Before coupled, the alternatives have been assessed by the derived criteria

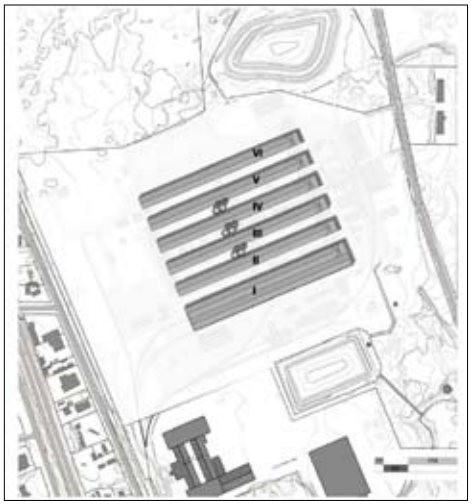
Combination of Alternatives

Presentation and Operationalization of Information

Combination Options of Functional Alternatives

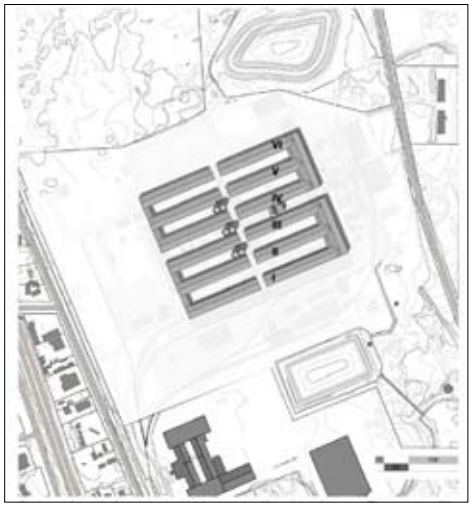
The intention is to enlarge the variety of alternatives for each parameter and to combine the most suitable single solutions to integrative designs concepts. Thereby, new and innovative design solutions will be created.

Possible Combination Option I

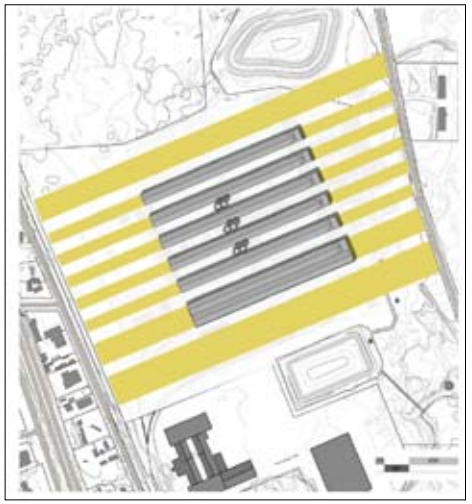


Preservation of the production halls I-VI

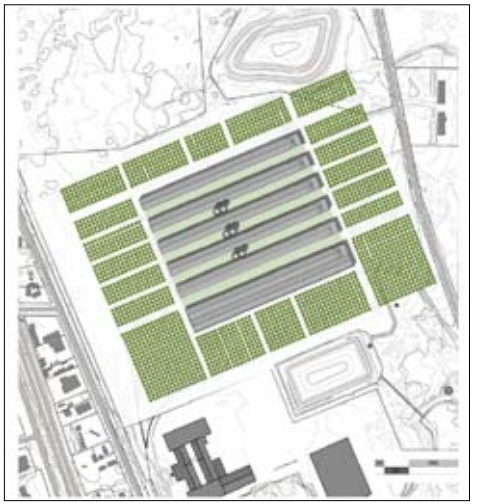
Possible Combination Option II



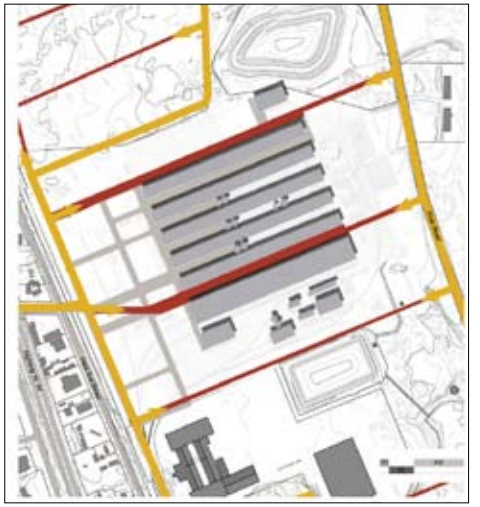
Cut-out north-south and east-west



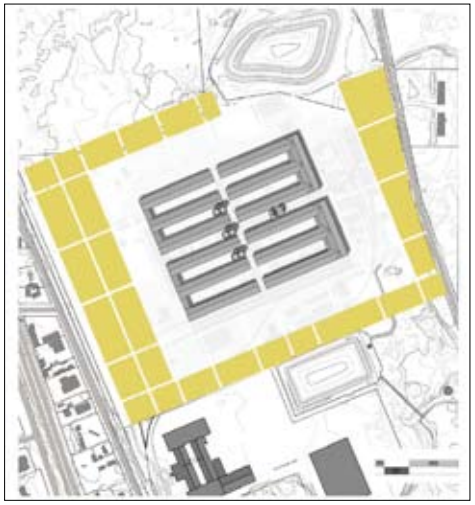
Building lots in prelongation of the hall structure



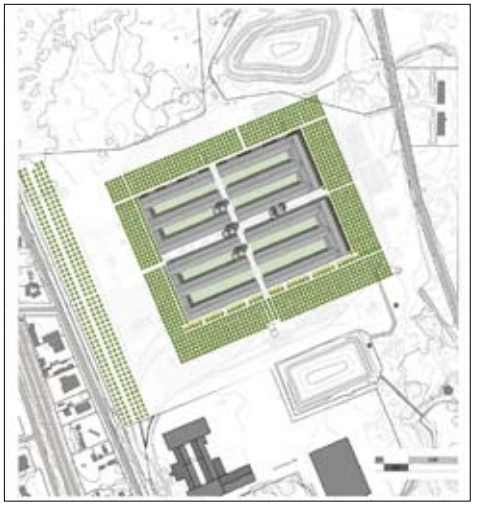
Tree blocks



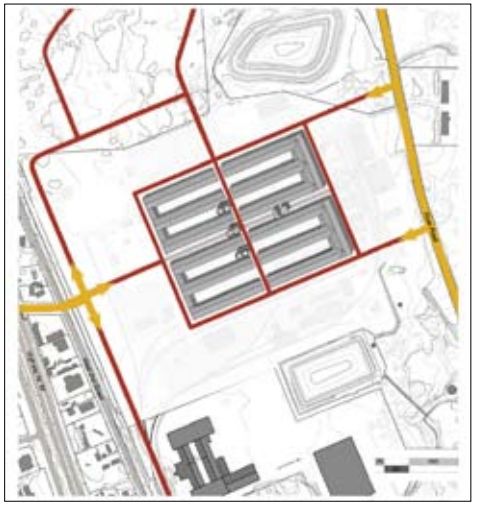
East-west street pattern



Building lots along the site‘s border



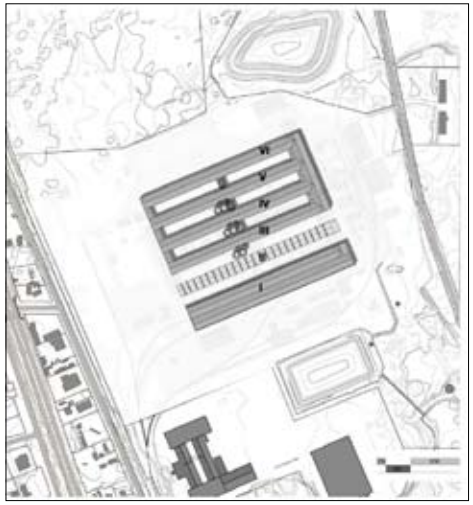
Tree frame



Enclosing north-south street pattern

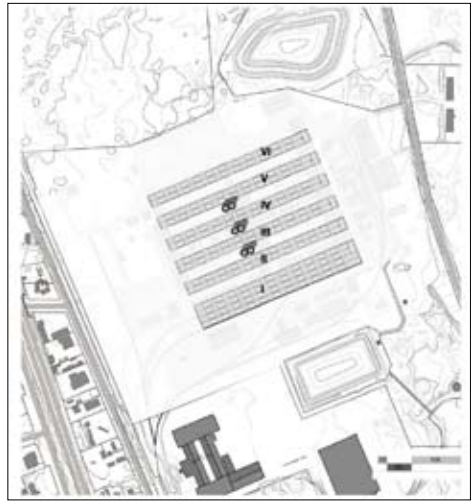
Further Combination Options

Possible Combination Option III

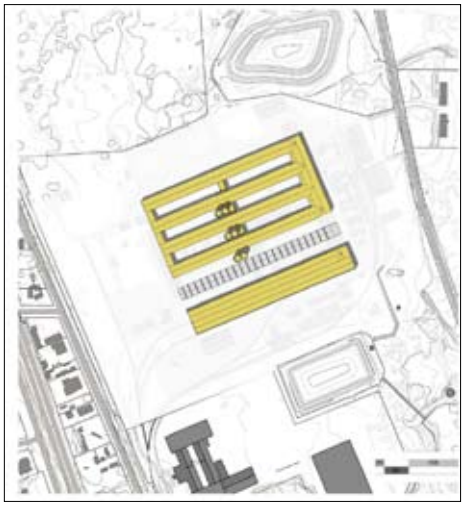


Dismantled hall II

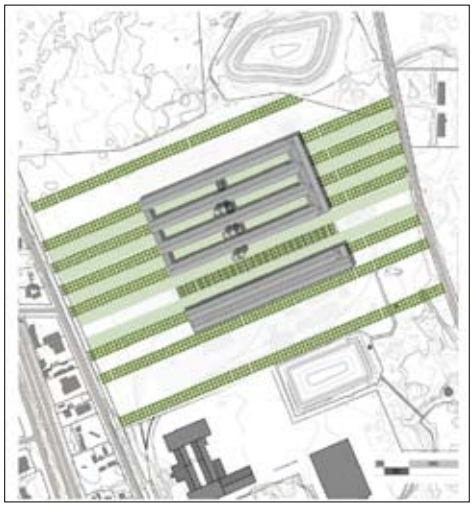
Possible Combination Option IV



Preservation of the basement structure

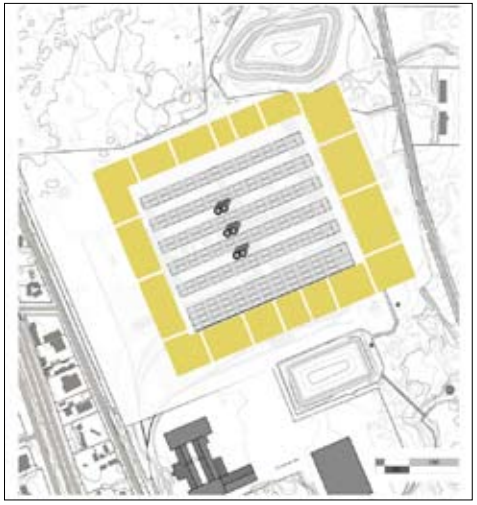


One hall dismantled

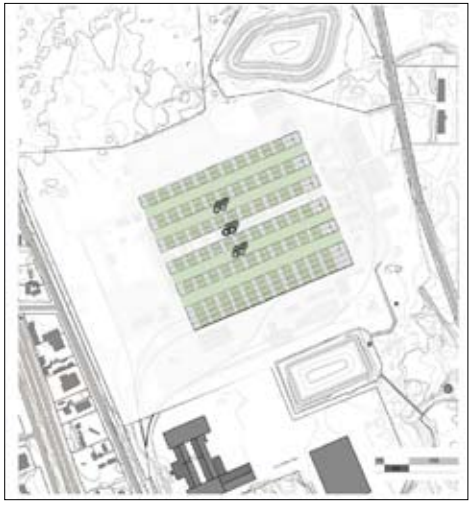


Tree stripes

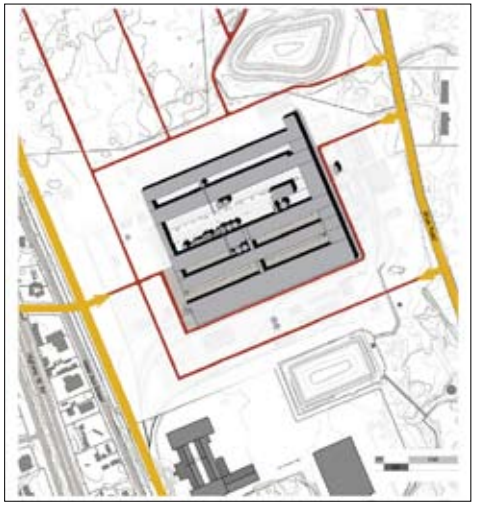
East-west street pattern



Building lots surrounding the basement structure



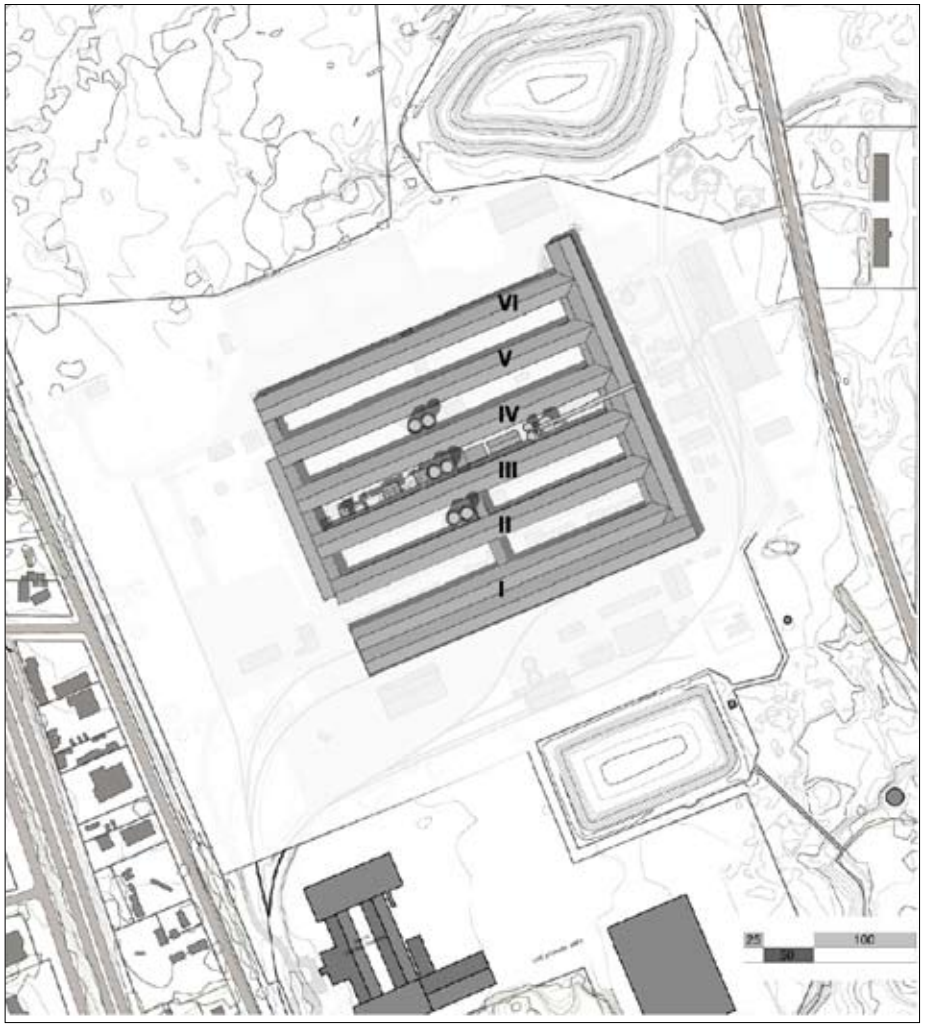
Former basement structure and courts become open spaces



Access from River Road and „New“ Second Street

Further uses of the preserved production halls

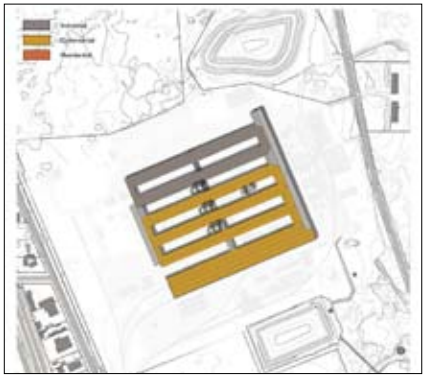
Manufacturing industry, services and housing are the three main classes for further use of the former production halls.
They can be combined in many different ways.
(Compare the alternatives on the right).



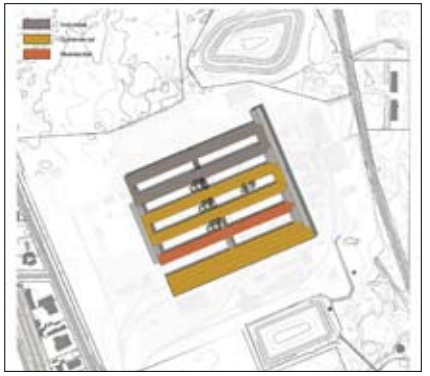
Preservation of the production halls I-VI

Several combination options of mixed use

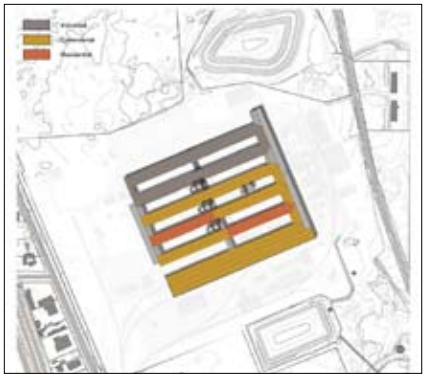
Mixed use
- Industrial and Commercial



Mixed use
- Industrial, Commercial and Residential



Mixed use within the halls



Industrial

Commercial

Residential

Constraints

- EPA
Federal Environmental Protection Agency

- Superfund
Federal Environmental Protection Agency (EPA) cleanup program

- RCRA
Federal hazardous waste management program

Closed Solid Waste Landfill

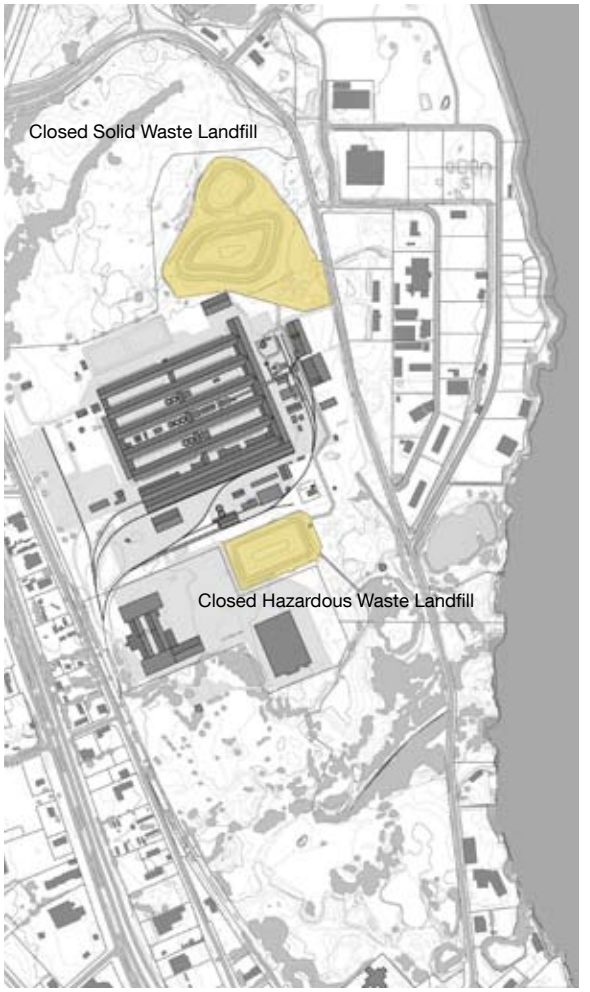
Closed Hazardous Waste Landfill

Site Contamination

The waste materials of the former aluminum production and contaminated soil were deposited into two landfills on the site.

The remedial action at the site was done under EPA CERCLA and DEQ RCRA regulations.
Both landfills are regularly surveyed by the EPA officials. The responsible party and owner, Lockheed-Martin, the former Martin Marietta Aluminum Co. is responsible for the observation and liable for hazards which could be posed by those structures.
The site was delisted from National priorities list (NPL) in 1996 and the final post-closure permit for the landfills was issued in 2000.

Today, the landfills are considered to not pose any risk for the environment and there is no obvious need to remove them. The removal could potentially be advantageous for the marketing of the site.



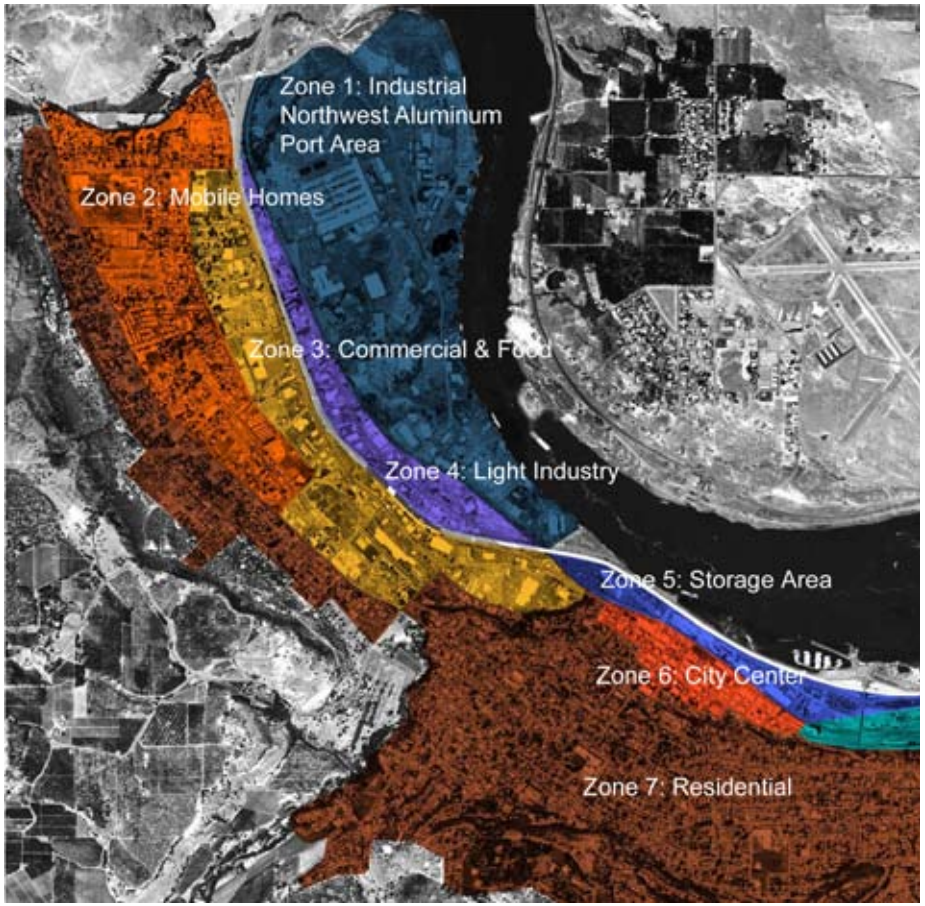
Landfills on the site

Zoning

Ordinances for zoning, planning and subdivision are the key laws enforced by local government that regulate type and intensity of land use in specified areas within a community.

In The Dalles the uses of the areas are defined in
- Residential Zone
  that is concentrated on the northern hillside, due to the better climatic conditions
- Commercial Zone
  situated on the flat Columbia River plateau
- Industrial Zone
  also on the flat land close to the river.

The area of Northwest Aluminum is zoned as „employment-based“ land, which includes industrial (and business) use.
Other uses can also be located, but under specific circumstances. As for the UGB - Expansion justification one 50-acres site is still needed rezoning will be difficult.
For example residential use of the site would be complicated because of the zoning and because there are big competing projects being developed in other parts of the town.



Zoning in The Dalles

Workflow Charrette

28-04 until 02-05-2008 Discovery Center, The Dalles

Opening Charrette

The flow chart on the right shows the coordination between the Round Table and the Design Workshop. On the base of the time management of the working procedure interfaces between the Round Table and the Design Workshop were defined.

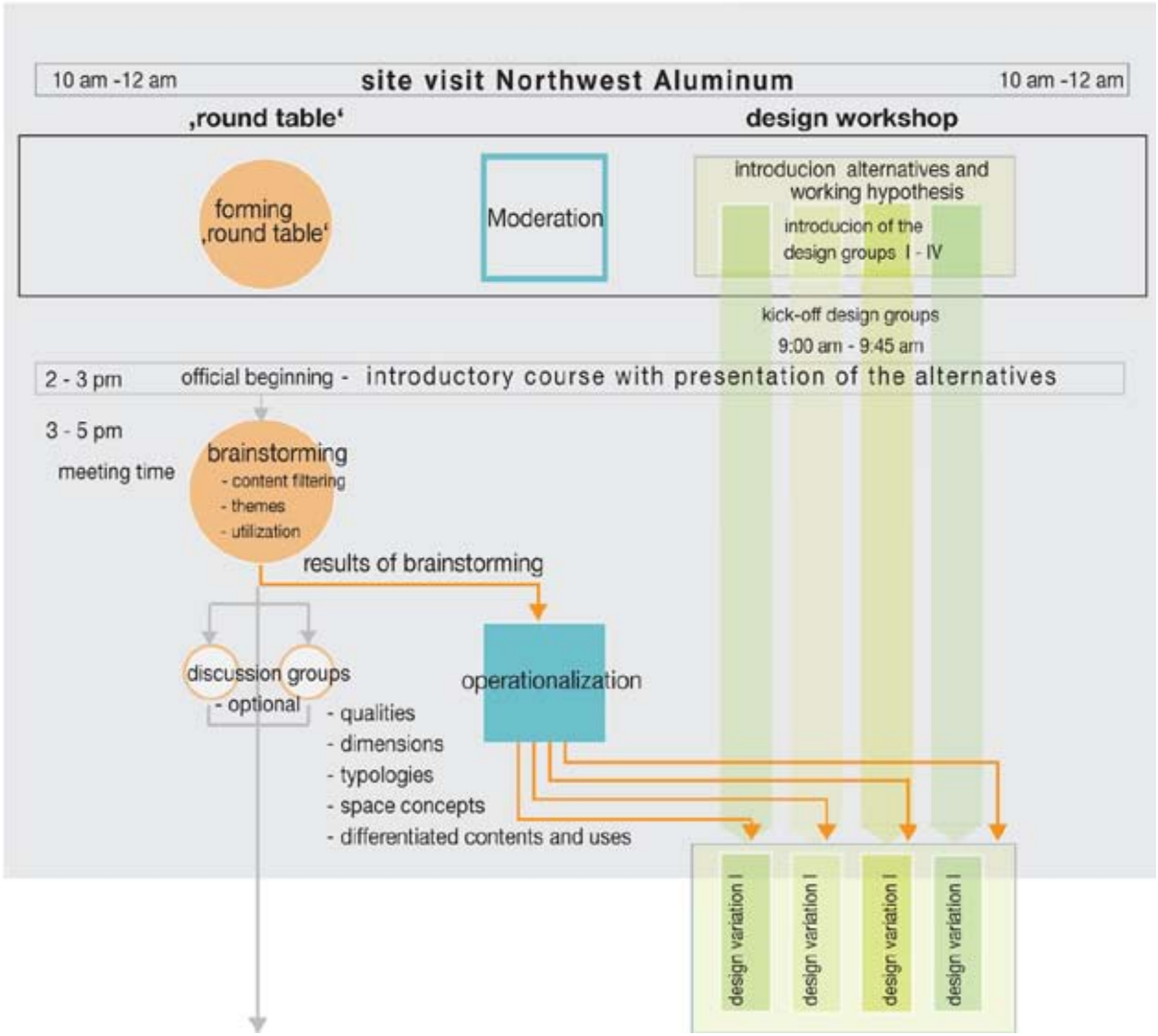
The Charrette started with a site visit. The members of the Design Teams got an introduction to the complex by site manager of Northwest Aluminum. After the inspection of the physical assets of the Aluminum Mill the participants could establish a relationship to the area and the task of the Charrette.

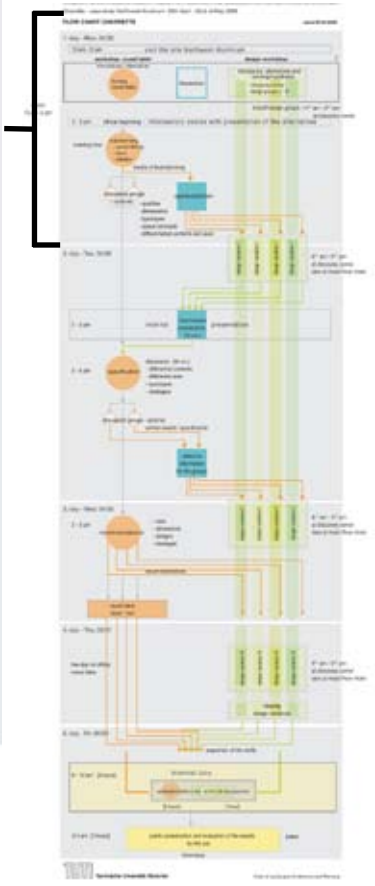
A official introduction opened the Charrette. There all participants were introduced to each other and informed about
- the planned workflow of the Charrette
- the approach and methods
- the alternatives and combination options
- the constraints
- the task and first hypothesis.

The explanation of the morphology of the already prepared functional schemes, developed by the research team, was an important aspect. It gave instructions to the design teams how to handle them. In the end the members of the Round Table introduced themselves and informed about the part they are playing in this context.

Flow Chart:

First day - Opening Charrette





Workflow Charrette

28-04 until 02-05-2008 Discovery Center, The Dalles

Site Visit

Participants of the Design teams are visiting the site

Introduction

"The existing building complex is an icon which can be improved by the form of its surroundings."

Peter Latz, 28th April 2008

Doug MacCourt is moderating the introduction

Introduction in the beginning of the Charrette

Round Table in Session

The Round Table

The Round table is a stakeholders group that has the task to discuss aspects that are of interest for the owners and the citizens and to develop programmatic concepts. Their focus lies on the topics of the appearance and look of the site and the purpose the site offers for public.

How do we expect the site to benefit the town ?

Three major factors:

- Economical viability
- New image of the town
- Accessibility

Round Table in session

Round Table in Session

Members of the Round Table are representatives of:

- City of The Dalles
- Northwest Aluminum
- Oregon Department of Environmental Quality (Oregon DEQ)
- Oregon Economical and Community Development Department (Oregon ECDD)
- Port of The Dalles
- United States Environmental Protection Agency (US EPA)
- Citizen of The Dalles
- Contractor of Lockheed-Martin

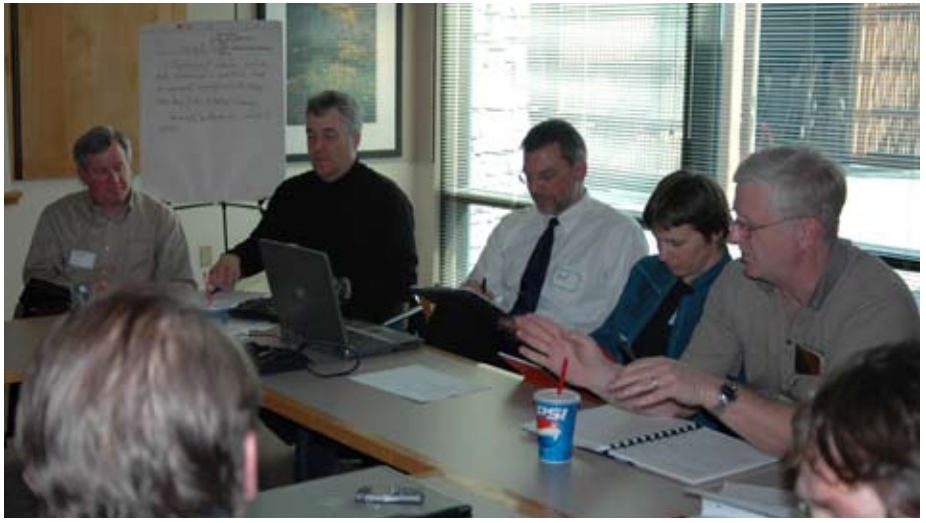
Members of the Stakeholders Round Table in discussion

Dan Durrow is marking the River Trail in the card

Verle Hansen is explaining the basement structure of the halls

Round Table in Session

Prof. Peter Latz in discussion with the members of the Round Table



The participants of the Round Table are discussing the various questions, expectations and strategies for the site.

Themes of the Round Table

Aspects of the Transition
- The goal of the owner is to meet the clean-up standards
- Question, if the water rights should be kept
- Industrial Certification Process is under way (lowers the regulatory risk for a potential purchaser)
- (the city builds a cruise-ship dock right now)
- A master plan would be greatly appreciated
- Infrastructure on the site will be done by developer, public utilities off the site need to be provided by the community

What buildings should remain?
- (Some of the) Icon-structure might remain redevelopment could make use of the unique smelter-building
- More contamination inside the buildings than underneath (they need to be cleaned out anyway)
- Some people are very skeptical about the look and the image

Types of use
- “employment-based” land includes industrial and businesses, other uses can also be located (if …)
- Big asset: access to the river, barge traffic is cheaper and environmentally better (bulk, big parts (wind-turbines)?
- Diversification of businesses, creation of jobs, re-employment of the people from the community
- UGB-Expansion justification: one 50-acres site is

still needed
- The port strives for about 6 jobs per acre (rationale: capital investment, number of jobs, what jobs? and others)

And - what should be planned?
- space for siting of “more flexible-size” businesses is needed
- Reserve land for special river access for the future (don’t block the river-access)
- Tying the site to the land on the other side of the freeway would be nice
- Create an access to the river trail
- There could be a market for “flex-space”, “Start-up” business space
- Business-space could be developed where is now Green-space
- Save remnants of the natural and cultural areas wherever you can find them?
- Show the skeptics the potential beauty of the existing building
- Preserve the storm-water pond near the river
- People friendly and open-spacy, shade in the summer and wind-protection
- Possibility to develop in phases

Dan Durrow is explaining relevant topics in the Round Table session

Carolyn Sanco in discussion

Moderation

Role of the Moderation

The task of the moderation is to communicate the results of the discussions of the Round Table to the Design Teams so that the designers can integrate this in their concepts. At the same time he has to transfer planning ideas of the design teams for the members of the Round Table. This communicational process happened during several so-called feedback loops. Mediating between two groups and integrating two completely different working methods is a challenge. But by supervising the interactive and iterative communication process, the effectivity of the Charrette can be improved.
Members of the bilateral moderation team were Doug MacCourt and Kai Steffens.

Moderator team Doug MacCourt and Kai Steffens

Design Workshop

The Design Teams were staffed with students of the University of Oregon, USA and young professionals, who are former students of the Technical University of Munich, Germany.
Planners from USA and Germany lead the Design Teams and contributed them with their knowledge.

The interdisciplinary and bilateral teams developed spatial design concepts for the site.
During the design workshop several feedback loops enabled a intensive interchange between the design teams and the Round Table.
The instant input enabled strategies for the handling of estate development as well as information's of spacious complexities to flow directly into the draft variations.
Due to the repeating interdisciplinary cooperation, new aspects were constantly adapted and design concepts were modified.

Discussion of different design visions

The Design Teams are developing design concepts for reuse of Northwest Aluminum

Feedback Loop - Round Table and Design Teams

„Feedback-Loop“

The Design Teams were presenting their preliminary design visions and discussed them with the members of the Round Table. These communicative processes between the Round Table and the Design Groups was guided by moderation.

There were two of this so-called feedback-loops that helped to integrate the programmatic recommendations and ideas of the Round Table into the visual and artistic concepts of the Design Teams.

Informal presentation of the Design teams

Feedback loop Round Table and Design Teams

Members of the design teams are explaining their preliminary concepts to the Round Table

Closing Charrette

The flow chart on the right shows the program of the last day of the charrette. There the results of the Round Table and the designs developed by the Design Teams were presented to the public.

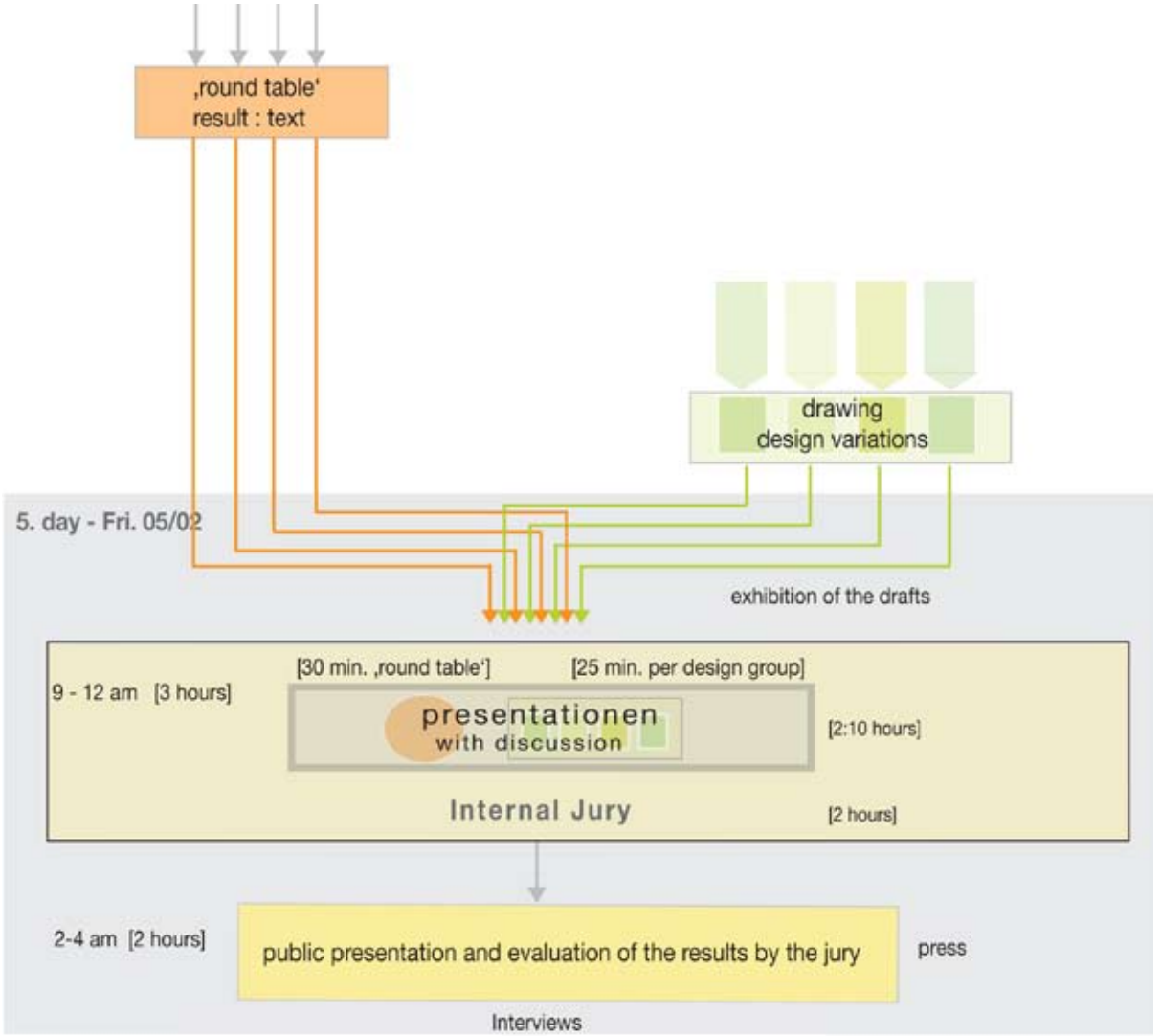
Furthermore the jury evaluated and presented the four different design solutions. No ranking of the designs was done, as the aim was to develop alternative concepts and identify qualified design solutions.

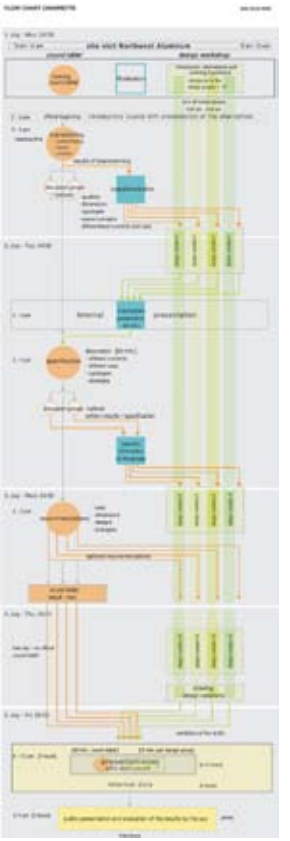
- **Internal Jury**
  1. Internal presentation of the design solutions by the design teams
  2. Discussion of the design solutions by the jury

- **Public Presentation:**
  1. Presentation of the program of the Round Table by the speaker of the Round Table
  2. Public presentation and evaluation of the design solutions by the speaker of the jury

Flow Chart:

Last day - Closing Charrette





Members of the Round Table

Alan Carey
Environmental Expert
Lockheed-Martin,
former owner of site

Dan Durrow
Director Community and Development/Planning
City of the Dalles

Dr. Verle Hansen
Architect and Wildlife Planner - US EPA
Member of the Bilateral Working Group

Kai Steffens
Dipl. Geologe
Probiotec GmbH Germany
Moderator and Speaker of the Round Table

Maike Hauschild
Capital provider
Project Management Jülich (PtJ), Germany

Andrea Klaas
Executive Director
Port of the Dalles,
Speaker of the Round Table

Galen May
Environmental Manager
Northwest Aluminum

Holger Mrosek
Department Economy of Planning and Building
University of Wuppertal
Germany

Carolyn Sanco
Business Development Officer
Oregon ECDD

Bob Schwarz
Project Manager
Oregon Department of Environmental Quality
DEQ

Scott Hege
Design Structures
Citizens of The Dalles

Ken Shump
Principal Hydrogeologist,
CH2M HILL's Environment and Energy Systems Business Group

Public Presentation Round Table

Presentation of the Results of the Round Table by Andrea Klaas and Kai Steffens

Presentation Round Table
by Speakers Kai Steffens (Probiotec) and Andrea Klaas (Port of The Dalles)

(Text version of the audiotape - Content unchanged)

Kai Steffens:
Hello, good afternoon. My name is Kai Steffens for those of you who are here for the first time this afternoon. Very warm welcome! We would like to give you a very brief introduction on what is going on here, because that might help to understand what is on the poster which are around the room, and which will be introduced to you later by our friend Verle Hansen from US EPA. As head of the jury or as the speaker of the jury – that's the right word I guess. I would like to give you a brief introduction, that this is a design workshop what you see here is the tail end, it is actually the roll-out of the results to the public. And this is why we are more than happy that you choose to join us today, because this is a very important part to communicate the results, of a workshop like this, to the public and to the people who should have an opinion on that at a later point in time, when it settles in the minds when you had some time to consider what is on the posters and think about it if you like it or not. This is a very important part. So this communication step out of the workshop from the drawing board to the public, this is what is happening here this afternoon and we are very happy that you are here.
This design workshop went on for four days now – we started on Monday with blank paper, pencils and a lot of ideas. It was a tremendous amount of work being done the last days, and it was a kind of fusion reaction, this is when you put two agents together and you get more than the sum of it, which is kind of fun to see and kind of fun to experience especially from my perspective being a sort of outside person just helping on some technical issues.
We are dealing with the issue of transition of pre-used sites; usually these sites are industrial sites which are prepared for further use which should be as beneficial for the public as it can be.
So this is an issue which is worldwide being dealt with, especially in Germany. Some of you might know that Germany is having a problem with space, because it is running out of open space. What we name "the consumption of open space" for settling and traffic is quite large given the absolute size of Germany. There is a big political discussion on how this consumption of open space can be reduced. There is a research program going on, which holds about 22 million euros being sponsored by the German government. The German government is here represented by Maike Hauschild. On the table over there is a brochure on the research program. If you want to pick one copy, please do so, there are more here. They have some information on the broad variety of projects which are being sponsored by the German government represented by three departments, headed by the ministry of research and development. The ministry of research is also funding the work of

Kai Steffens speaker of the Round Table presents the results and recommendations of the stakeholders Round Table

Public Presentation Round Table

Andrea Klaas, representing the Port of The Dalles and speaker of the Round Table sums up the wishes and questions of the participants

the German partners in this design workshop which is the Technical University of Munich.
The US side is represented by the University of Oregon in Eugene which is mostly handling the efforts and costs and the expenditures themselves which is more than we could ever expect and we would like to thank you already now for doing that.

In this international program we have two sites. One of them is in Germany, it is a former coal mine named Westerholt and the other one is obviously here in The Dalles, the former NWA smelter. These two sites are handled in a similar way to try and test an innovative effort of developing potential design solutions for sites like that.
This flow chart here shows how this innovative process was being designed and is being tested in these two design workshops. If you could see it from the back you would see that it has three columns: one is the Round Table which is a stakeholders group whose task it is to discuss what this site should do for the public and the community and how this site should look like. The second column is a moderation of the stakeholders group which has the task to communicate the results of the discussion into the design teams. The third column comprises the design teams themselves who are coming up with innovative design. The idea of this separation between the stakeholders group and the designers is to prevent that the stakeholders discuss with the designers all day long and the designer's are don't have time to draw anything. It is giving people time and space to think and consider what the stakeholders have told them what they would like to see and really draw something and that is – what I learned the biggest progress – in doing these innovative Design Charrettes: there is a visual result. And this is what we see here. We see here how the designers put the opinions, the wishes, and the desires in terms of what the site should do for the public in drawings.
This round table had three sessions. Andrea Klaas, representing the port of the Dalles, and I, we would like to sum up what we talked about in these sessions and what was the presetting for the designs that you see here, or actually the questions that the stakeholders asked the designers. This is the groups and institutions that were represented in this "Round Table" of stakeholders: City of the Dalles, NWA, Oregon Department of Environmental Quality, Oregon Economical and Community Development Department, Port of the Dalles, United States EPA, City of the Dalles, and a contractor to Lockheed – Martin who is the responsible party for a cleanup that has been done a couple of years ago.

Here are our recommendations that have come out of the discussions of the round table. Verle Hansen helped us to put the task of this "Round Table" into one guiding question and that is: "How do we expect this site to benefit the town?" we decided to structure it in three major topics.
These are: the economic viability, the new image of the town and the accessibility. We would like to show you what we have here.

Andrea Klaas – Port of the Dalles:
We going to go through this kind of quickly so most of what you are going to hear are the main bullet

points: we want this land to be employment based, we want to make sure that there is efficiency with the use of the land, we want the design to be clean and friendly, a diversification of businesses so it can combine different types and sizes of businesses, and we want the whole site and the development to really combine variability and flexibility against the types of businesses and the whole site has been developed over time.
We also wanted a master plan because we knew that this would be helpful to both, the current owner of the site as well as to the city of the Dalles, so that provisions could be made today for development in the future.
As reflected here we wanted the project to be structured and based on phase development.
NWA was a very large energy user, in it's past using 170 Megawatts of energy so we wanted this facility this new design to really look at the environment. How can it be energy saving? What can be done to make an environmentally sound setting out there. And then we also wanted the outcome to be businesses that supply living wages to folks in the region, that the jobs would be save, sustainable, and that the businesses themselves would be sustainable.

Kai Steffens:
Redeveloping an industrial site is always a chance to change the image of the town. This is what we asked the teams to do, and this is to consider that the site is image setting for the city and the entire community, and the look from the freeway is crucial in talking about how this site appears to people who see it for the first time.

The other point that is crucial is the look from the community, so there should be a visual connection between these two entities the community's, the town center and the site itself. The landscaping was considered one essential aspect. That is not by chance, but because Peter Latz is the Professor of the chair of Landscape Architecture and Planning at the Technical University of Munich.

Andrea Klaas:
We wanted to give some questions to the students and the design teams: the site and the buildings do they have unique characteristics? It is part of the history of the town it was built in the 50s. Many people worked there over generations. There is a very historical component to that.

Presentation by Andrea Klaas

Public Presentation Round Table

How can this history be made recognizable?
Is the big building a unique icon? And I would tell you that in the “Round Table” discussions there was a wide variety of opinions. Many people in the community were of the opinion that there was nothing that should be saved of the building and the facility out there. Other people were saying: “well, maybe there is something that could be saved representing the past?” and the last one: what should be kept? And how could its character and size be remembered without impeding the design and flexibility that we thought was so important in the redesign of this facility.

Kai Steffens:
Taking the risk of repeating myself. It was quite a process in Germany to convince people that cutting off the roots of the industrial history by tearing down what by now looks old and ugly is not the right way of handling history. So it might be worth to think about keeping stuff that is a part of our personal history, too.
Without the NWA-site maybe it would have been impossible to build an Apollo space ship, or aluminum parts for cars, or even to produce cans for soft drinks. All this belongs to this kind of site and all this belongs to our personal history. So this reflects the idea and the way we handle our personal history. It is really worth a thought: should we keep it, and if - how should we keep it.
Another, more practical aspect is the accessibility of the site. The Round Table asked the designers to provide solutions how the community could be more attractively connected to the river using this site, and how the design can tie the site closer to the town center. This will be important because a new development should be evaluated in terms of, how it would effect the existing parts of town. To keep in mind that there should be a new connection is a good idea. The practical focal point is clearly the access for cars but it should also provide access for bikes and pedestrians. And the design should of course maintain multi-modal transportation options, which are in this case road access, train access and access to the river for potential future barge loading and unloading.

Andrea Klaas:
If you look at the topography of this city you can see that the interstate 84 is really cutting off the city from this industrial site. As we are looking down onto the site there is the question what can you see that ties back the community visually? This was basically transportation corridors and pedestrian pathways.

Kai Steffens:
So this is the questions of the stakeholders, or the people who know a lot about the site, the surroundings, the town, their lives and their expectations of how to keep and preserve their history.
Ok, you heard the questions in words. On the walls you have the answers in drawings. And because this is a charrette we need to have a jury, the jury has taken a look at the posters and it is now up to Verle Hansen, an architect and planner from his background, who is now with EPA and did a tremendous amount of work on sustainable development and how this can be put in live in our society.

Summary

Economical Viability –1-

The site is zoned as “employment-based” land which includes industrial (and business) use; other uses can also be located (under specific circumstances).
The efficiency of land use must be sufficient for light industrial purposes and be able to attract investors.
A people-friendly lay-out and design sells.
Diversification of businesses types, creation of jobs, and re-employment for the people from the community is desired.
Newly designed business spaces must allow for variability and flexibility.

Economical Viability –2-

A master plan would be greatly appreciated; it should be valid for the adjoining properties too.
The project should be structured in phases.
Energy saving buildings, use of renewable energy and an environmentally sound setting are selling points of increasing importance.
Living wage, safe, sustained, and stable jobs in an environmentally sound setting are desired.

New image of the town

The site is setting the image for the town and the community.
The look from the freeway is essential for the perception of the town.
The look from the community is essential for the acceptance of the design and should be considered.
The landscaping is considered to be one essential supporting aspect for the shift of appearance.
The site and the building have unique characteristics.
It is part of the history of the town.
How can this history be made recognizable?
Is the big building a unique icon?
What should be kept and how could its character and size be remembered in the design without limiting the efficient land-use and flexibility for development?
(Minority Vote)

Accessibility

The community should be more attractively connected to the river.
The design should tie the site to the town-center.
Road access must be efficient with provisions for pedestrians and bicycles.
The design should maintain multi-modal transportation options.

Members of the Jury

Dr. Verle Hansen
Architect and Wildlife Planner
US EPA

Prof. Peter Latz
Chair of Landscape Architecture and Planning
Technical University of Munich

Galen May
Environmental Manager
Northwest Aluminum

Chris Zukin
Planning Commission
City of The Dalles

Public Presentation and Evaluation by the Jury

Jury member Dr. Verle Hansen is explaining the design solutions

Public is listening to the presentation and evaluation of the design concepts

Members of the Round Table and the Design Teams are listening to the presentation

Public Presentation and Evaluation by Head of the Jury Dr. Verle Hansen (US EPA)

(Text version of the audiotape - Content unchanged)

Thank you very much, my name is Verle Hansen, I am with EPA. In case that scares you, I am not in the regulatory part of this research. The reason that I am here is that many of us have realized that there must be a new way of protecting the environment rather than cleaning up after the facts. So there are some of us who try to find out how we can solve environmental problems during the planning process, so we don't create those problems in the beginning.

My background is I am an architect and planner and I don't presume to be the only one in this jury, there are others, and I expect them to chime in when they feel that I have neglected something.

Public presentation of the design concepts done by the design teams by jury member Dr. Verle Hansen

Public Presentation and Evaluation by the Jury

The speaker of the jury is summarizing the results

I think the jury was overwhelmed with all the presentations, there is an awful lot of work here, that represents several different ways of thinking.
I think we and the groups are acknowledged that we haven't explored all options, there are probably a lot more options that need to be looked at, but there are four concepts the groups came up with and that deserves some attention and we'll go through these one at a time. I am sorry we'll also jump around a bit because something I am talking about on that one also refers to another one and vice versa.

I think they all did several things. All of them try to use the land in a productive way, to increase the land use and the job base of the community.
They also tried to use this site to strengthening the city and tried to relate it more to the urban area. Also making it a connecting element between the river and the area here. That's a very tough task and all the groups had trouble with this, because there is a rail road and an interstate that go right through here separating the community from the river and it was often very difficult to deal with that and some of the groups addressed that fairly well.
The other thing that this project was to do is to look at changing the image of this community. When people come around here traditionally they see the aluminum plant and say: well that is the image of The Dalles, we don't particularly like that. So let's see if we can change that image to somewhat. Some of the things that some of the groups did more successfully than others, this interchange right here. Some of the groups dealt with changing the image of this which is understandable because it was the predominant thing we had to address, but there is an opportunity to change the image out here which we should probably address a bit more than we have.

There are constraints with in this project we have two important landfills here we also have some ponding here and it is interesting none of the groups addressed the ponding as part of the design solution. I don't know why that was, but that is something that we might want to look at in the future.
Predominantly open space was incorporated in the plans and a very intense industrial area in this area and more commercial out here.
These landfills were used in various ways you'll see in some of the other projects where these were used as observation points having a little trail up to the top, standing there and having a look at the surroundings. Or they were used as a work of art meaning actually an artist would be signed a task of saying how do you take this and making an asset to the community rather than liability.
(...)

And I think all the groups should be commented on some fantastic and hard work and it was a joy to see all these projects and I think the jury does agree on that. Thank you.

Design Team I

Günther Lipkowsky
Architect
Germany

Eric Carr
Student
University of Oregon
USA

Shannon Eldrege
Student
University of Oregon
USA

Margret Gaeding
Doctoral candidate
Department Landscape Architecture/Technique
University of Kassel
Germany

John Gonzalez
Student
University of Oregon
USA

Genevieve Middleton
Student
University of Oregon
USA

Sophie Lueg
Dipl. Ing.
Landscape Architecture
Germany

„Northwest Aluminum Industrial Park“

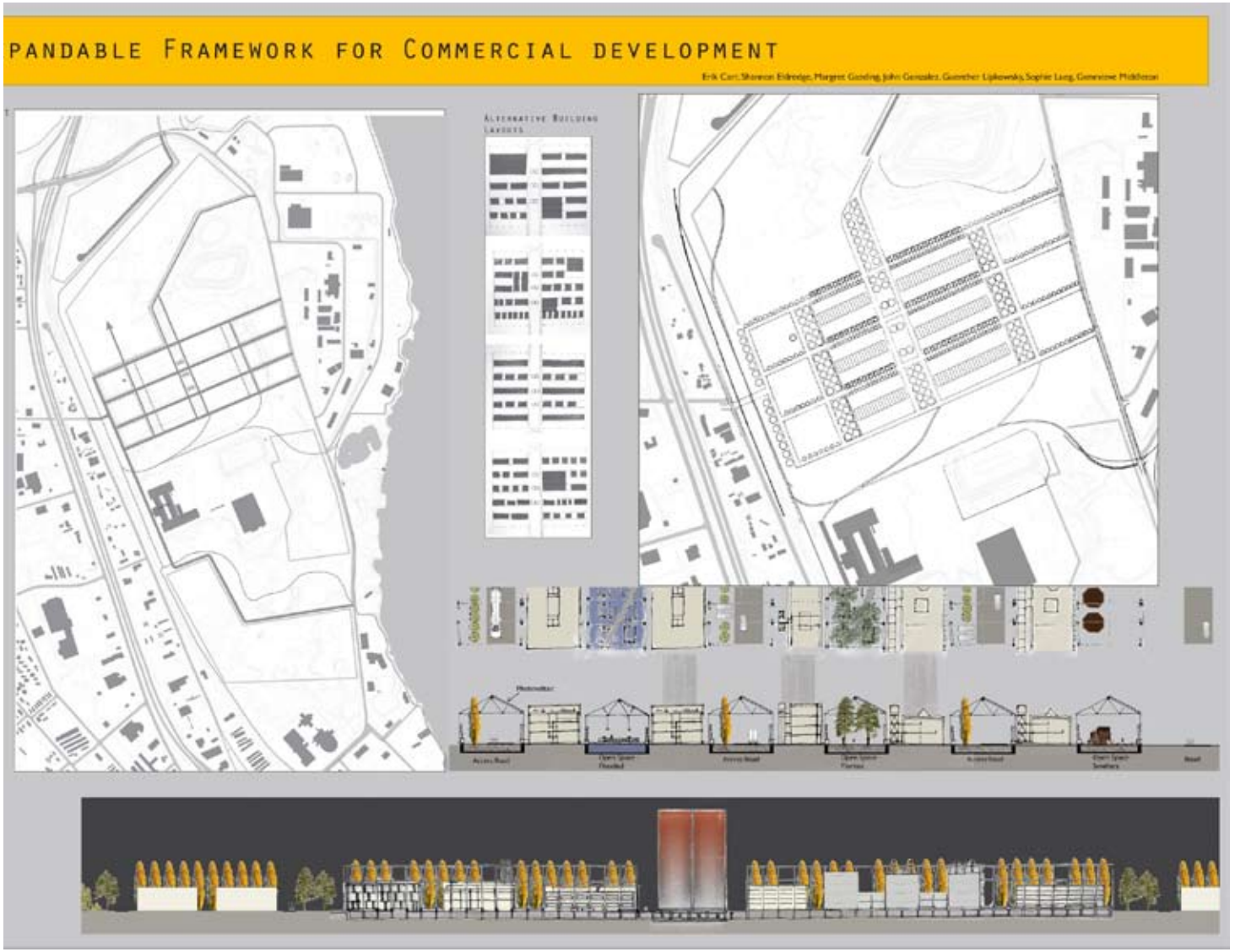
Design Concept I

Description by the Design Team I

The objective of our design is to give the site and the surrounding area more value. Regarding environmental value, practical value, aesthetic value, and even “mental” value, a sharper image. This finally will result in increasing economic value.

Environmental value will be improved by cleaning up the site and by meeting the highest standards when changing existing facilities or adding new facilities. Practical values will be improved by optimizing accesses, distribution and disposal.

The site has excellent traffic conditions, direct access to the interstate freeway and railroad, a nearby local airport and a possible access to the river (for barge traffic). Road access is now mainly provided over West 2nd Street. For the future, River Road shall be the backbone of the street system (perhaps with an underpass under the railroad in the south of the area).



Master Plan - Design Team I

„Northwest Aluminum Industrial Park“

Design Concept I

Site plan

The central element of this design will be the core structure of the former Aluminum smelter. If all systems will work as planned, an up-grading for the site and adjacent areas will take place.

Buildings for “traditional“ industrial and commercial businesses which are based upon the consumption of power and natural resources are of unpredictable size, form, access needs, parking, infrastructure and so on. They can best be developed on the new tax lots on the NWA site, which are surrounding the perimeter of the large old building structure.
They will find easy access and a clear and simple orientation. The roads are clearly marked by accompanying trees and lay in between greenbelts. Due to

Transportation / Green Corridors

Tax lots

the shapes of the proposed future tax lots, the owner can market the sites which allow a great variety in the lay-out of new of buildings for investors and developers.
These sites will benefit from high quality landscaping which is close to the native character and morphology of the land.

“New” industries based upon knowledge and creativity find a more extraordinary site within the buildings of old Northwest Aluminum. They should be sited there because a building lot like this is unique.

Its outer shape, the footprint of the mill, the five “halls” formed by a sequence of frames and the 120 feet high silos represent not only a landmark, but they are also an attractor for industries, commercial businesses, and firms with a more innovative approach to their business.
Within this structure they find a clear visual orientation and an optimized outer environment. These are attractive conditions for recruiting the best of “human resources” and offering there the employees a healthy working environment.

Phasing plan

Central core structure

„Northwest Aluminum Industrial Park“

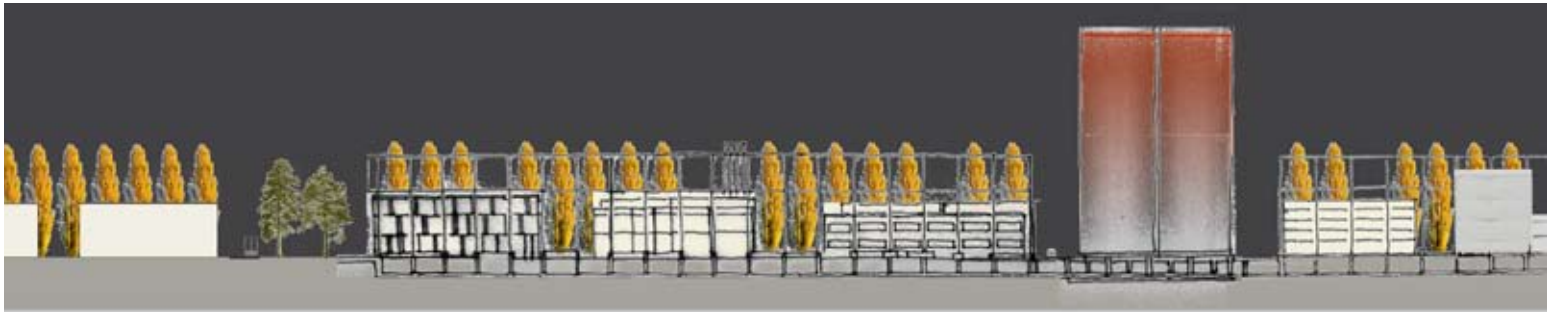
Design Concept I

Inverse use of buildings and open space

The new buildings are sited in the former courtyards between the “halls”. They can be developed without restrictions caused by existing foundations, pipelines and so on. But normally they should not exceed 65 feet in width, to fit in between the pillars of the frames. Additionally this maximum size would allow for natural lighting in the new buildings and help to save electrical energy. The length of the buildings would be completely flexible.

Preservation of historical footprint

The steel structures (50 frames each) which form the inner framework of the five cell halls will be cleared from sidings and roofing and are now forming the new open spaces of the complex. These new open spaces add an extra value for the workspace inside the new buildings. The spaces which are not used as access roads will be quiet but exciting court yards and motivating places for informal meetings, discussions, or just for being well and relaxing.



Going south on interstate 84 the first visual impression of NWA is the view of the landfill north of the central building. Today this landfill is a fenced restricted area and a symbol of poison. We try to re-define this landfill into a more positive symbol by transforming it into a piece of art. Using colored concretions of clay it could be “painted” in the way, Oregon’s Painted Hills are.

Finally it would be a future task for a land-artist. The fence will remain but be softened by planting low-rise shrub. Now the fence has to prevent people from getting in contact with poison. Later the fence will protect a piece of art from people. It is a much more friendly point of view of the same thing and even more honest than hiding a landfill under plants and trees.

Landfill:

- Iconic figure
- Not an interactive landscape
- Land Art: Sculptures, Geologic edge
- Barrier of rock outcrops, shrub steppe, Vernacular planting

Landfill as a piece of Land Art

Public Presentation and Evaluation by Head of the Jury Dr. Verle Hansen (US EPA)

(Text version of the audiotape - Content unchanged)

This group really has made a point of taking the landfills and making those into a sculptural asset for the community rather than a liability for the community. They look at the landfills from an artist‘s point of view. That really makes a strong statement that the community would love rather than something they don‘t like.
This is taking examples from ‚Painted Hills‘ area to say. Why don‘t those become painted hills ant they are proposing that you can that by taking different

Dr. Verle Hansen, head of the jury, explains the new building structure in the former courtyards

colors of clay and mixing them in there so that they become ‚painted‘.

This team has also taken the existing production halls. They have broken them up in-between so that there is now sort of a boulevard around both sides of the silos.
They are utilizing the silos - the jury really liked the silos to be used for something. They were using them for water-circulation, -storage, water supply. And that kind of thing would be really valuable to try to incorporate into some of the other plans.
They included the silos in their boulevard, so these become very strong sculptural elements and you can see them from any point of view. In the evening or night time you have lighting on those, that really makes those stand out and beautiful in their own right.

This team is taking the skin off of all the production halls, but left the structure there, so that you get the complete feeling of the former dimensions – well, not the complete feeling, but your mind then says: „Oh, I have enough here that I can really reconstruct this in my own mind and I can see the magnitude of what the scale of these things really were.
They developed between the old building structure, in the former courtyard areas, that become the space of new development. This gives you the option of developing multiple different sizes of development projects. You could develop smaller ones here and larger ones out here and in these perimeter areas easily.
Roads, landscaping with water-features and stuff like that were put in the foundations of the old buildings. So the kept structure is still visible and therefore you really are having a good idea of the former Aluminum mill.
Additionally, the remaining structure is fitted with a photovoltaic system on the south side, generating energy for the function of this area.
And also then by having the photovoltaic panels up there, they become a shade structure for all of the activity on the ground. Shade is of major importance here for any outside activity in summer.

Circulation I think was a really good point in this one, and access to the river of course was important, a park was important

I think, even though this team is the only one that kept most of the structure of the existing buildings, it was one that I think the jury really had liked, because it created lots of opportunities for creating new development within and also for the solar collectors.

Design Team II

Prof. Wigbert Riehl
Department Landscape Architecture/Technique
University of Kassel
Germany

Darcy Anders
Student
University of Oregon
USA

Michel Hinnenthal
Dipl. Ing.
Landscape Architecture
Germany

Barbara Knapp
Student
University of Oregon
USA

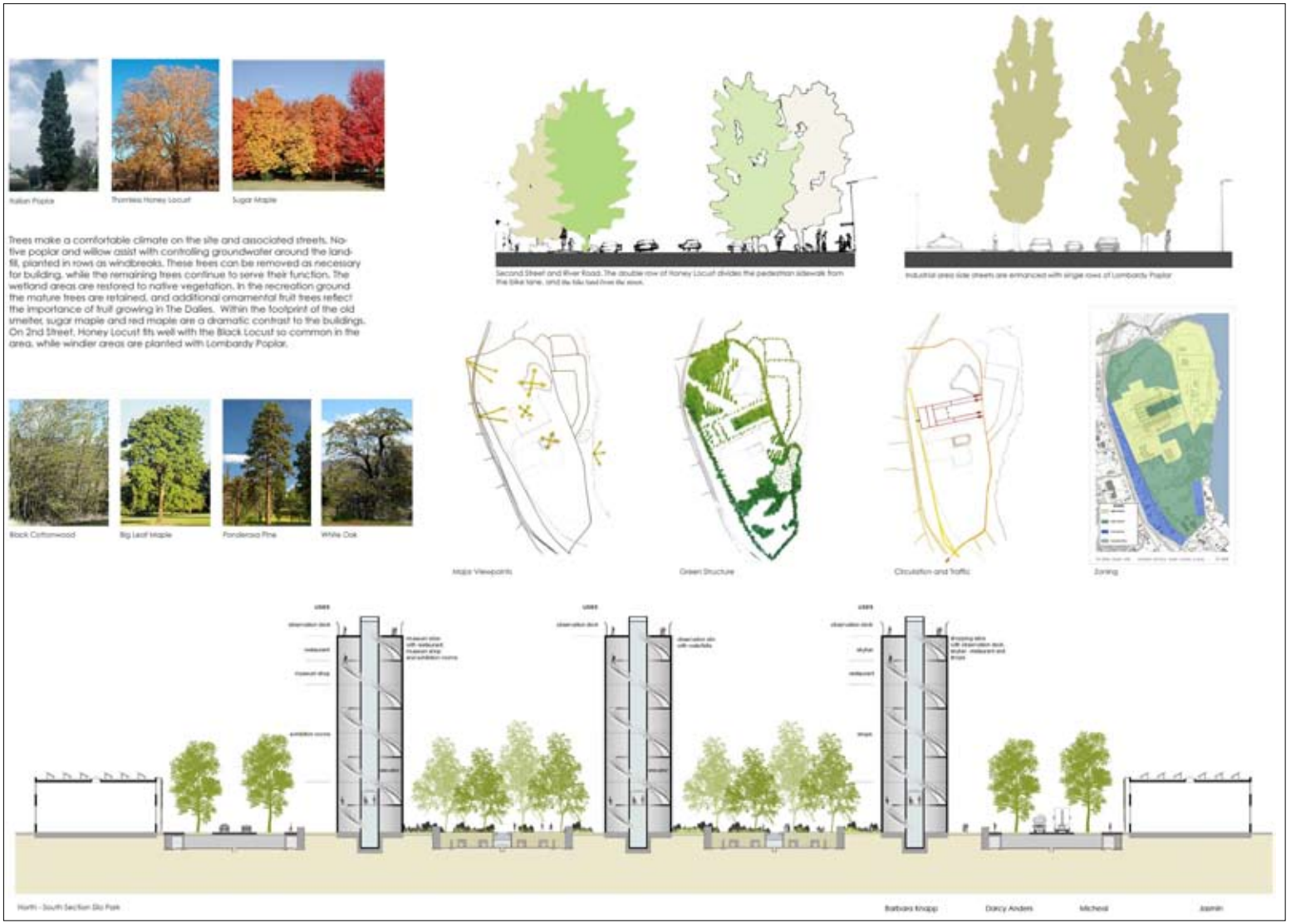
Sam Sabin
Student
University of Oregon
USA

Jasmin Truk
Dipl. Ing.
Landscape Architecture
TU Munich
Germany

Schuyler Warren
Student
University of Oregon
USA

„The Dalles Technology Corridor“

Design Concept II



Master Plan - Design Team II

„The Dalles Technology Corridor“

Design Concept II

Site plan

Description by the Design Team II

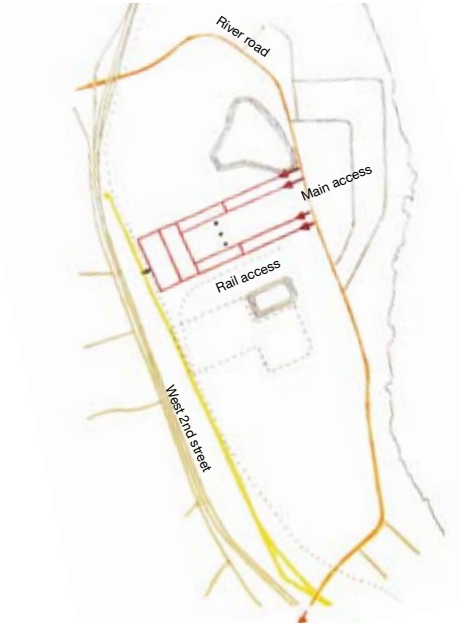
The Dalles has a unique beauty of landscape as well as infrastructural amenities that can be used to create growth and economic opportunities for its citizens. The redevelopment of the former Northwest Aluminum CO. site provides The Dalles a chance to take the lead and create a model for social, economical sustainability for cities.

Design Concept
All buildings of the site will be completely demolished. Only the silos and the foundations will be preserved and integrated in the new concept.
We believe that new and future industries will not need old buildings. Instead they require new and innovative structures. The left over materials from demolition will be reused within the site. The site itself and the nearby will be flexible, able to adapt to a variety of uses and scales.

1. Connection and Traffic
Connecting The Dalles and the site is important for the future development.
In order to create identification for the people who work there and the people of The Dalles, we intend to generate a more open border between industry and the city, and to create a new traffic concept for the city and its business.
Aspects of this concept are
- Lowering the freeway in order to create visual links to the site
- Create traffic zones which improve the experience for all groups (pedestrians, bicyclists, drivers, etc.)
- Increase and ease access for all vehicles

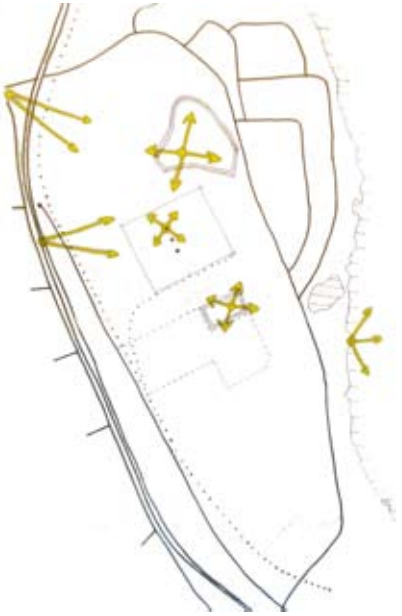
2. Vegetation
Vegetation is the “architecture of open space”. It gives structure and it creates different rooms in open spaces – for example, ecological areas, social areas, etc.
There are three types of vegetation on the site:
Native grasslands and riparian zones, open lawns and parkways along the movement corridors will be elements of the design of the site.

- Native vegetation exists primarily at the north and South borders
- There are parkways along all streets
- The vegetation becomes more formal near Structures
- The vegetation creates special places with different uses
- Selected plants and special types of planting, as Populus, Prunus, Pinus, Malus and Pears will be used
- The vegetation structures the traffic zones for walking, biking, parking, driving, etc.
- The vegetation will give shade and create a positive influence on the microclimate
- All plants will be supplied with irrigation-systems, because average precipitation is only 200 mm
- The vegetation will contribute to the overall health of the site and its inhabitants



Circulation and traffic


Green structure

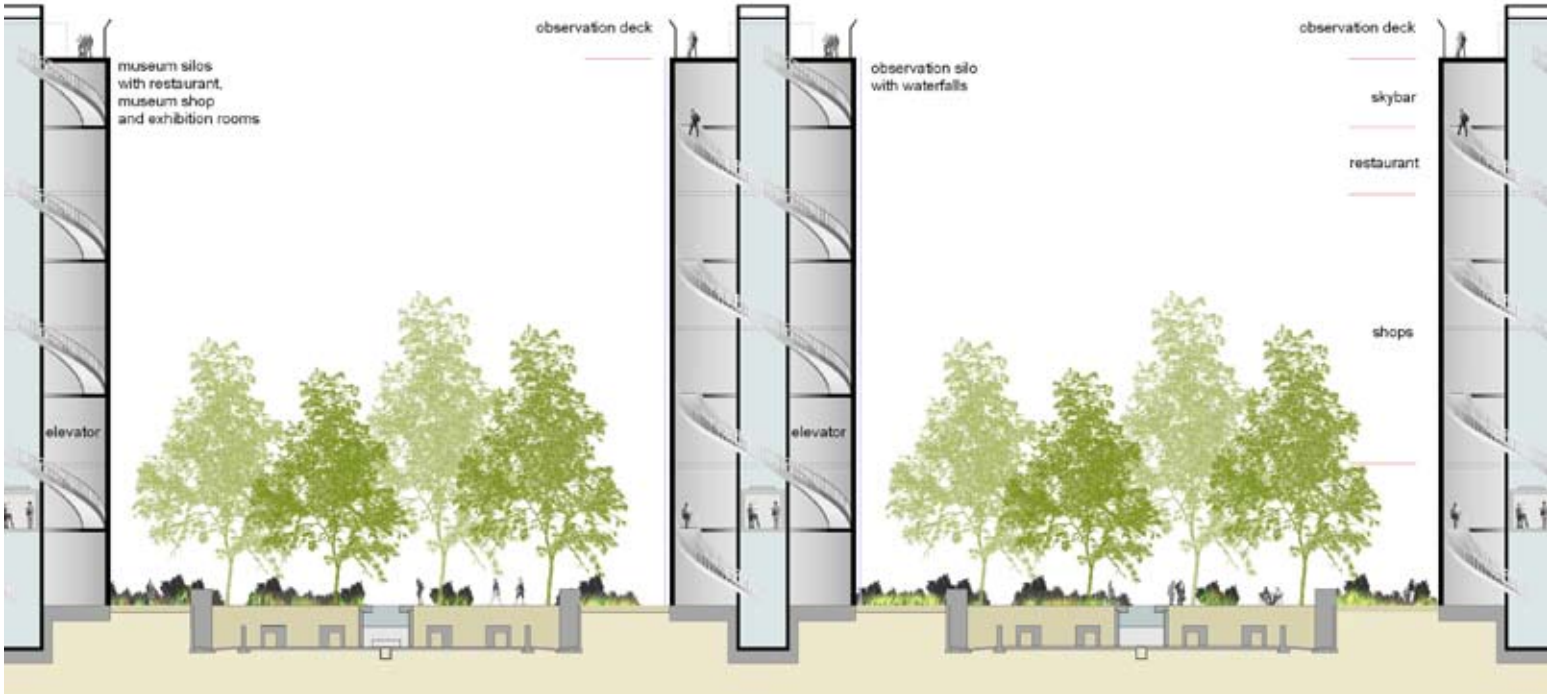

View points

„The Dalles Technology Corridor“

Design Concept II

3. Buildings and Types of Use, Open Spaces
An environment which fosters the creation of jobs in the future technologies and the diversification of business will be established. The main intention is to generate a mix of business, in use and architecture. Future technology and business need modern architecture with energy efficient buildings, flexibility in design, and greater integration with the environment. The old buildings will be completely demolished, except for the foundations and the silos, which are preserved as the main identification feature of the site.

The buildings will incorporate parametric design which will become the identification for the site and its new occupants. Very important is to encourage the inclusion of solar and photovoltaic industries, nanostructure and biotech industries, etc.
Therefore the cooperation with regional entities, such as universities, government agencies, and investors, will be integral to the success of this scheme.
All buildings will have green roofs and photovoltaic, or solar cells, taking advantage of the 300 days of sunshine per year.



Green Heart of the Industrial park

The silos will be reconditioned and recreated as art galleries, museum of the industrial history with view points and observation deck. Exhibition rooms, cafes, restaurants, a sky bar and shops could be inside them too.
One silo could be used for indoor-sports and health-clubs to connect with outdoor recreation areas.
All silos will serve as the infrastructure for the site, and all the other buildings will be for business. The new uses inside the silos encourage varied usage of the site in general.

4. Water and Recreation
Different water features in the remaining of the foundation around the silos will be developed, in order to improve the climate in the area.
The water for these, as well as the water for irrigation is taken from the Columbia. All water systems will recirculate water with pipes and pumps.
Furthermore an access to the river is planned. It will be an attraction for the people working on the site and also for tourists.
A new recreation area will be established, built on the old one in the west of the area, with tennis, baseball, biking, hiking, and open spaces which create opportunities for field sports and recreation. These outdoor facilities work hand in hand with the indoor sports areas in the silos.
A system of promenade and boardwalks connects the recreation areas. This path-system is the connecting system of the whole area, which connect indoor and outdoor sports, active and passive recreational activities.
The new viewpoints at the landfills will support these concepts. The top of them is reached by boardwalks and stairs, which are constructed without foundation, resting upon the landfill’s surface.

5. Phasing Strategy
The first and most important investment is in establishing the vegetation, because it will require the longest time to reach significant height. After the vegetation has been matured, the completed area acquires a friendly character.

1. Phase:
The development of the core area close to the buildings of the Northwest Aluminum site is the first task. Establishing the streets, the infrastructure they need, and the vegetation along the streets, the place at the silos incl. the water features, the buildings along the axis of the smelter’s footprint, will provide future development.

2. Phase:
Buildings for light industry will be developed to the north and west of the core area.

3. Phase:
Industrial buildings to the south of the core area and commercial along the West 2nd Street corridor and the southern part of River Road will be settled.

Phasing

Public Presentation and Evaluation by Head of the Jury Dr. Verle Hansen (US EPA)

(Text version of the audiotape - Content unchanged)

Zoning map

On this panel (compare the illustration in the left marginal column) - you can see the form of the existing plant as in here with the silos in here – they have added redevelopment on both sides, access from both sides – similar to the other one.
This a little bit misleading from this diagram: That is not the only commercial area that would be proposed. This diagram shows that this area right in here would also become industrial space. And this would be built as industrial space in the future, too.

This group is taking the landfills and providing a trail and viewpoint up to the top of those. As Galen said: there is a pretty good view from up there. So it might be a very nice thing.
You can see that they also developed a green space beside the landfill in the north of the complex. This is a re-vegetated buffer but probably that is going to be commercial area.

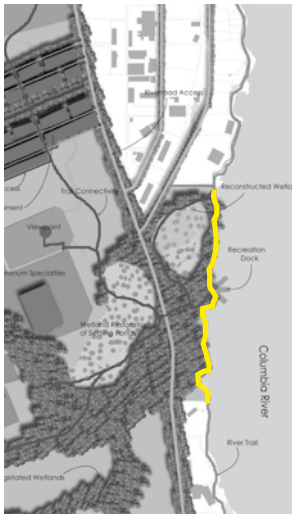
There were several things that the jury really liked. They liked this attribute of taking the trail down to the board walk right along the river (compare the plan in the right marginal column). Apparently there is very little access to the river in this area and a lot of the access that you have is up on top of the cliff, so actually taking people down to the area might be a really valuable thing and if you would do that, there are other options that you might include. For example, you might provide boat landing stages for boaters up and down the river to bark there and maybe come up in this area and have lunch at a café in this area or enjoy the parkland or boat planes can land on the river here so you might provide a place where boat planes can dock there, too.

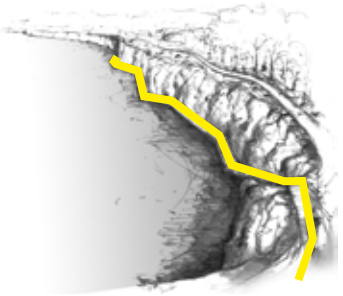
One of the things that the jury missed was the diversity of uses and design concepts for the silos. I know it is expedient to design one of the silos and just duplicate it rather than showing different uses – which the team probably really meant to do. But because there is probably only need for one tower for observation you probably would not want to develop observation towers in all of them or even more than one.
So there was a concept of how can we use the silos – if we want to maintain more than one or two or up to six of these silos, then we really need to justify the uses of those.
There are lots of ways that you could and we came up with a couple of them. One of them would be a climbing wall on one of them, which would be a lot of fun, it is very popular these days. And I noted that the city of Montreal has an old agrarian silo building that they converted into an echo-chamber, so you can speak into a microphone and then you can listen to what your voice does in that echo-chamber and it is really a lot of fun for adults and kids like me.

One of the things that the jury liked, was that the character of some of these examples of modern architecture would be wonderful in this context. But some of the suggested industrial kinds of buildings are not appropriate.
However, there is an opportunity to take some of the existing structures and take the aluminum skin off and then glass those in, so that you can have trees growing inside in winter-time and create that greenery for people to enjoy year round.
You could provide lighting of different kinds in those kind of things, so that when you came around the curve here and got that first image you would say: „Wow, I want to visit that place.“
So there are tons of those kinds of opportunities that exist if you take this one step further.

I think having the trail access throughout here was an important thing.
Another important aspect of this plan was that it retained the rail-access, because the rail-access is so difficult to obtain now. The jury was very reluctant to see any of that go and would like to utilize it as much as possible.
And in fact, what none of the teams really looked at – at least they did not illustrate it – was a concept for actually using those rail-lines.
This building right here for example is already set up for recirculation and recycling and because in a sustainable society every material has to become a resource for future use and we have lots of waste material that needs to be recycled. That could become a real use for that [building], especially since all the material now usually gets shipped off to China for recycling and then comes back to us as something else.

Peter Latz noted the other day that this area could also be looked at in terms of how you might have some transparent production. I don‘t know, if any of you have read Anthony Giddens ‚Third way‘, but he notes in there, how production might be in the future, where instead of going to a store and buying clothes, you go to a store and pick out what you want and it shows you an image of yourself in that cloth and then, within a few hours it automatically is manufactured for you. And that kind of open production could be incorporated there, especially if you have raw materials from here, bordering the new transparent production and new kind of retail. That kind of concept is not shown here, but it is certainly one that should be looked at.





River trail down at the water

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„Remembrance - The Green Footprint of Past Industry“

Design Concept III

Description by the Design Team III

(Text taken from the poster)

Northwest Aluminum – Transforming the essential Structure

The Dalles entrance is marked by two remarkable structures:
From the east: the dam - From the west: Northwest Aluminum
These unique landmarks clearly define The Dalles.

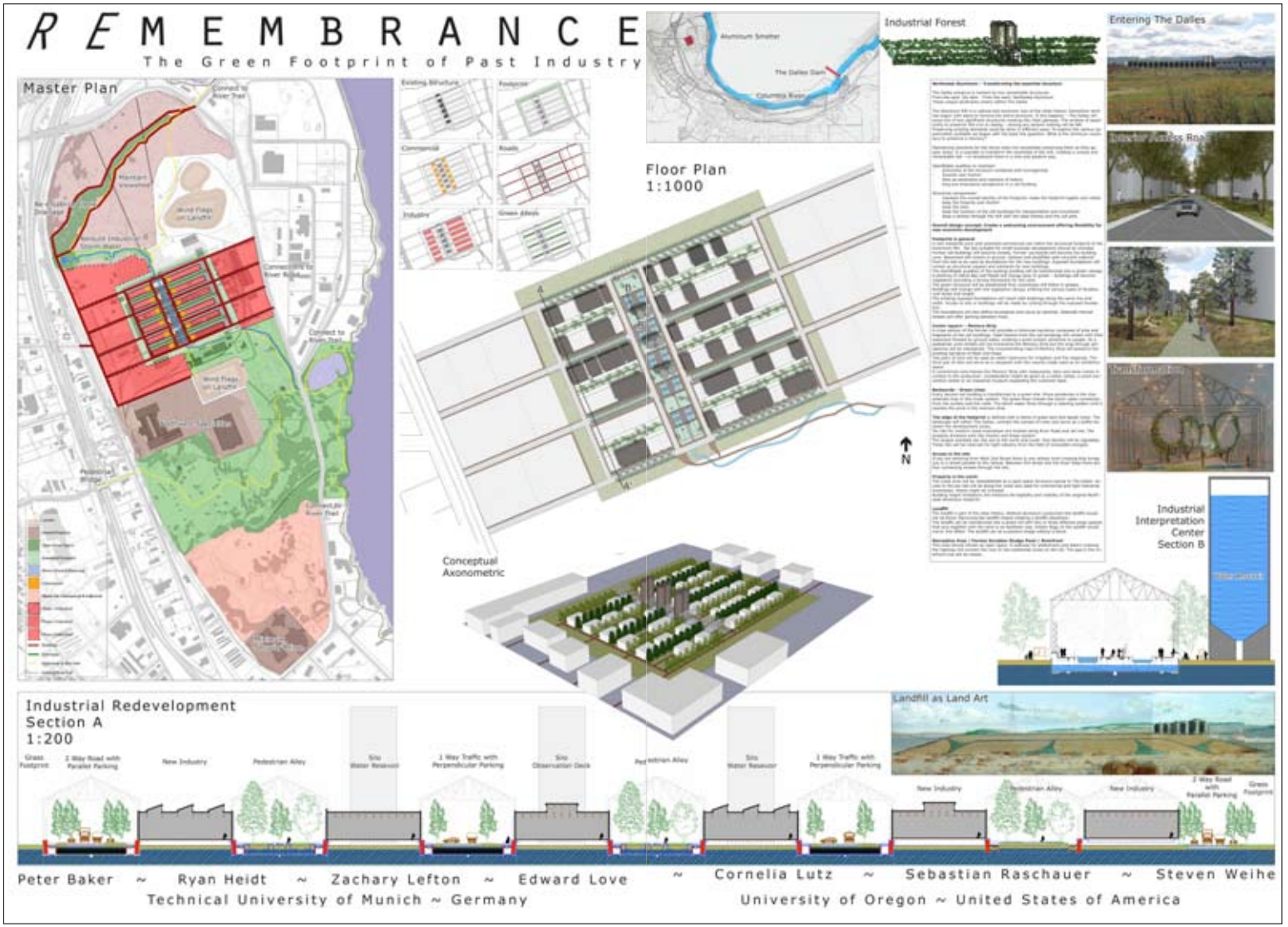
The Aluminum Mill is a cultural and economic icon of the cities history. Demolition work has begun with plans to remove the entire structure. If this happens The Dalles will loose one of two significant structures marking the cities gateway. The window of opportunity to preserve this icon is closing – lacking any actions nothing will be left.
Preserving existing elements could be done in different ways. To explore the various opportunities available we began with the base line question: What is the minimum necessary to preserve a memory? Maintaining elements for the future does not necessitate preserving them as they appear today. It is possible to transform the essentials of the mill, creating a unique and remarkable site – to reinterpret them in a new and positive way.

Identifiable Qualities to maintain:

- dimension of the structure combined with homogeneity
- linearity and rhythm
- Silos as landmarks and markers of history
- long and impressive perspective in a cell building

Structural Components:

- maintain the overall identity of the footprint, make the footprint legible and visible
- keep the linearity and rhythm
- keep the silos
- keep the function of the cell buildings for transportation and movement
- keep a section through the mill with the steel frames and the cell pots



Master Plan - Design Team III

„Remembrance - The Green Footprint of Past Industry“

Design Concept III

Site plan

Overall design concept: Create a welcoming environment offering flexibility for new economic development

Access to the Site
If you are entering from West 2nd Street there is one railway level crossing that brings you to a street parallel to the railway. Between this street and the River Road there are four connecting streets through the site.

Property in the North
The creek area will be reestablished as a open space structure typical to The Dalles. Access to the tax lots will be along the creek and used for commercial and light industrial businesses. Hotels might be included. Building height limitations will reinforce the legibility and visibility of the original Northwest Aluminum footprint.

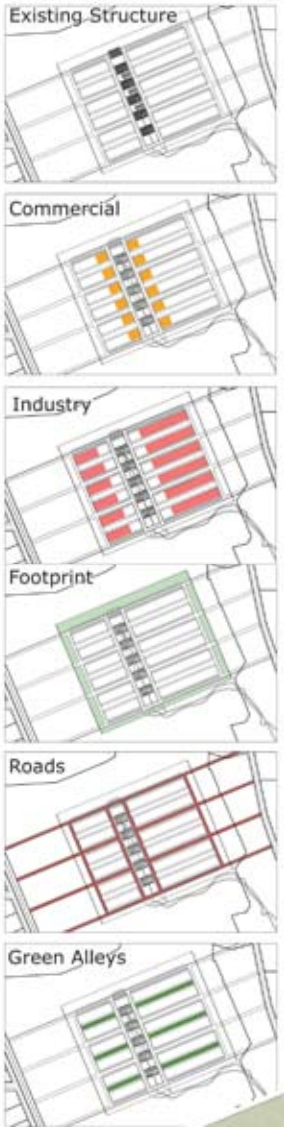
Property in the North

Footprint in general
A new industrial zone with potential commercial use within the structural footprint of the Aluminum Mill. Tax lots suitable for small business development should be included. Former cell buildings will become streets. Former courtyards will become the building zone. Basement will remain in ground, cleaned and backfilled with recycled material from the site to be used as foundations for the new buildings. Exposed foundations will remain as structural support and elements for new buildings.
The identifiable qualities of the existing building will be transformed into a green canopy.
A planting of native Big Leaf Maple will change grey to green – buildings will become vegetation providing a strong framework for the zone. The green structure will be established first, businesses will follow in phases. Buildings will change with the vegetative canopy unifying the various types of facades, roof styles and length. The existing exposed foundations will result with buildings along the same line and width. Access to lots or buildings will be made by cutting through the exposed foundation. The foundations will also define boundaries and serve as benches. Sidewalk framed streets will offer parking between trees.

Green Footprint

„Remembrance - The Green Footprint of Past Industry“

Design Concept III



Concept Schemes

Center square – Memory Strip
A cross section of the former mill provides a historical narrative composed of silos and fragments of the cell buildings. Steel frames from the cell buildings will remain with their basement flooded by ground water, creating a pond system attractive to people. As a pedestrian zone streets will not transverse the Memory Strip but the long through perspective will be maintained. The circumscribing road of Memory Strip will preserve the existing narrative of West 2nd Road.
Two pairs of silos will be used as water reservoirs for irrigation and fire response. The third pair of silos will serve as a viewpoint with the volume inside used as an exhibition space.
A commercial zone frames the Memory Strip with restaurants, bars and show rooms in context to the production. Consideration might be given to a visitor center, a small convention center or an industrial museum expanding the customer base.

Backyards – Green Lines
Every second cell building is transformed to a green line. Pinus ponderosa is the characteristic tree in this linear system. The green lines include the storm water connection from the surface and the roofs. The storm water flows through a cleaning system until it reaches the pond in the memory strip.

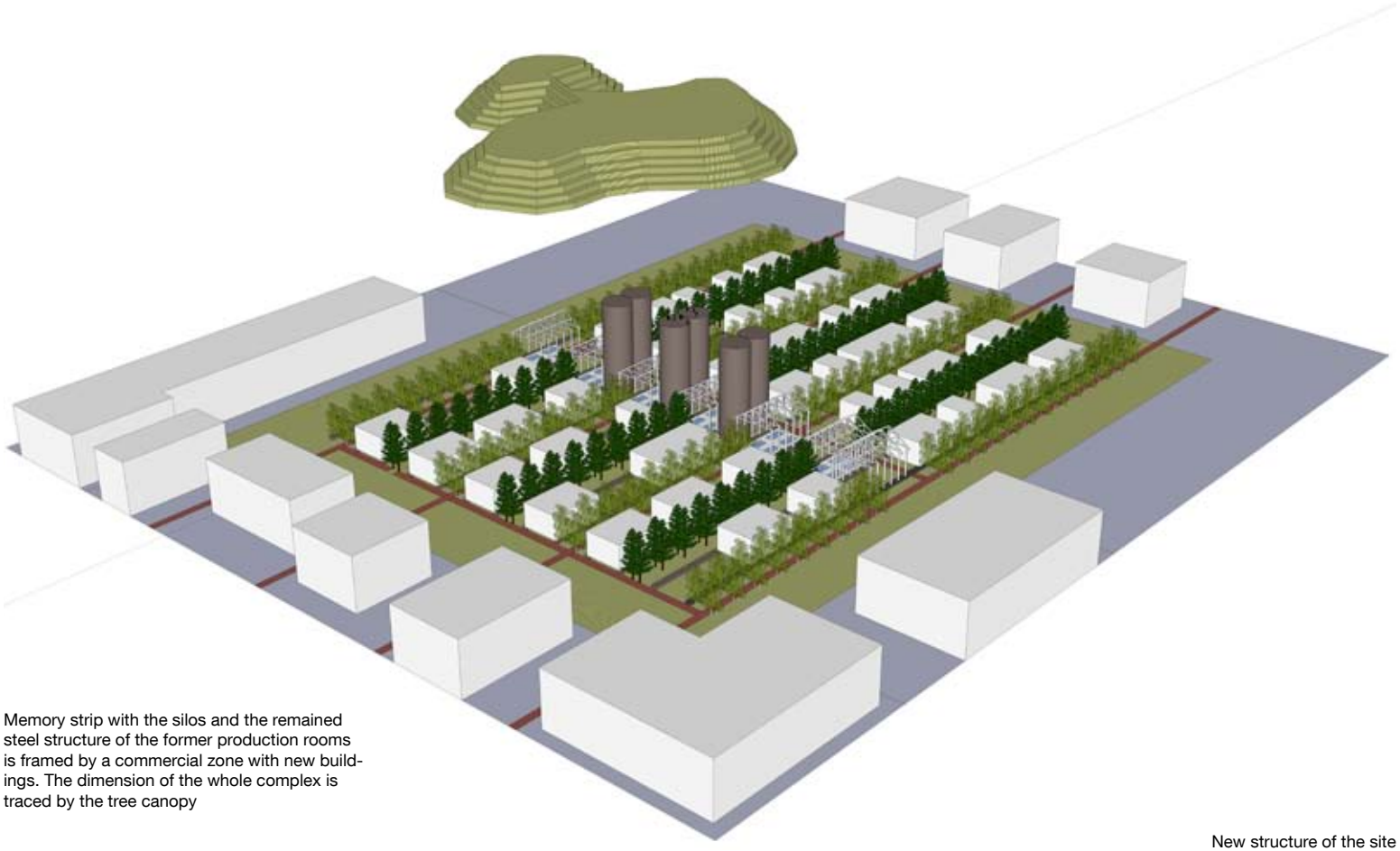
Footprint - Edge
The edge of the footprint is defined with a frame of grass land and basalt rocks. The landscape will reflect The Dalles, contrast the canopy of trees and serve as a buffer between the development zones. Tax lots for medium sized-businesses are located along River Road and rail line. The property divisions echo the rhythm and linear system. The largest available tax lots are to the north and south. Size density will be regulated. These lots will be reserved for light industry from the field of renewable energies.

Landfill
The landfill is part of the sites history. Without aluminum production the landfill would not be there. Removing the landfill means creating a landfill elsewhere. The landfill can be transformed into a green hill with two or three different grass species that acts together with the wind in an aesthetic way. Artistic flags on the landfill would mirror this effect. The landfill can be a positive image without a fence.

Recreation Area / Former Scrubber Sludge Pond / Riverfront
This area should remain as open space. A walkway for pedestrians and bikers crossing the highway will connect the river to the residential zones on the hill. The gap in the riverfront trail will be closed.

„Remembrance - The Green Footprint of Past Industry“

Design Concept III



Memory strip with the silos and the remained steel structure of the former production rooms is framed by a commercial zone with new buildings. The dimension of the whole complex is traced by the tree canopy

New structure of the site

Public Presentation and Evaluation by Head of the Jury Dr. Verle Hansen (US EPA)

(Text version of the audiotape - Content unchanged)

This group planned two main access routes to the site of the former aluminum smelter. One is the River Road in the east of the area and the other a new road in the west that runs parallel to West 2nd Street and the railroad.
They have also create a main area around the six silos.
What this plan has done is, that it has taken the bulk of this linear buildings down using the space as landscaping and circulation areas. With the exception, that they have kept small parts of each of the production halls with the silos between. This is really the remnant of the plant, and it does have possibilities to create a new image to this area. You can see it on the axonometric (compare page 83). They are leaving only the structure of the building. It is a clear steel structure without a siding or a roofing so you can see through it.

They are using the landfill as some kind of artistic statement, I think this is probably just a preliminary suggestion of what might be, not what would be.

And you can see they have kept the foundations of all the buildings so you can see the extent of the plant without the aluminum plant actually being there.
And then they actually developed new buildings within the old courtyards. In the pink and orange colored area they create a lot of commercial space (compare site plan page 80).

The area on the perimeter accessible from both sides would be larger industrial areas that would be available. If necessary further industrial and commercial zones can be developed in the north and the south of the area.

This group did not keep any commercial in the former recreation area and the wetland zone, but the jury felt like this green space is a very important asset to the community, and always has been an asset to the community. It probably needs to be retrained as something that is usable to the community. And it does the other thing it helps to reconnect this whole area to the strengthening of the community.

Dr. Verle Hansen explains the new footprint of the site

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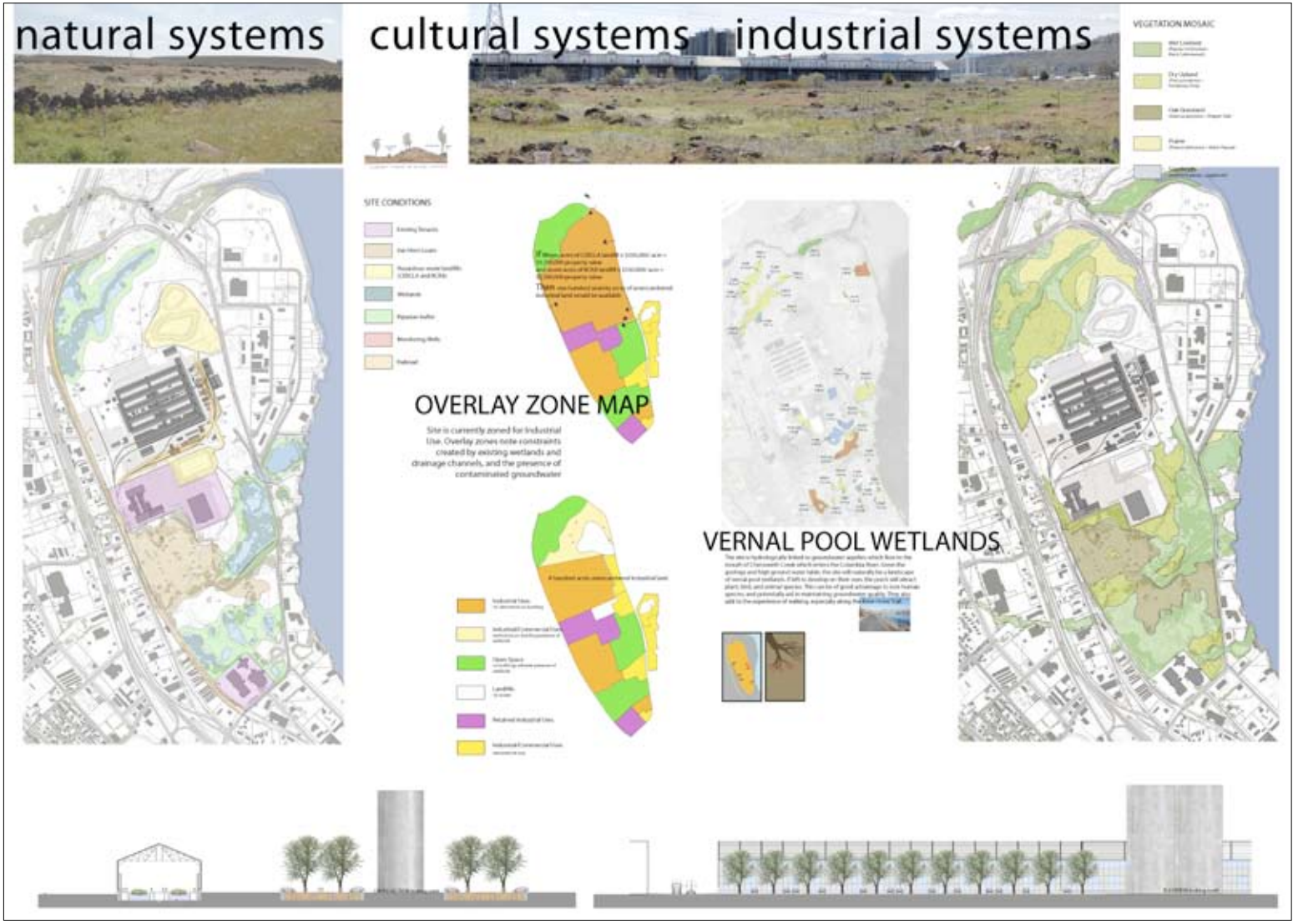
„Natural Systems Cultural Systems Industrial Systems“

Design Concept IV



Master Plan - Design Team IV


URBAN TRAIL
If the entire site were planted with saplings now
then in time a tree plantation would grow, providing a green landmark for The Dalles
as parcels were sold and developed, trees would be removed and new buildings
ild rest in a green setting.
Entrance to THE DALLES
PARKING COURT
Museum of the Cold War
GREEN TRAIL

„Natural Systems Cultural Systems Industrial Systems“

Design Concept IV

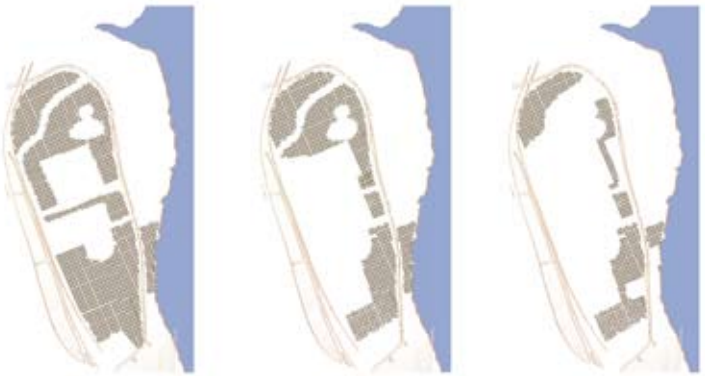
Site plan

Description by the Design Team IV

(Text version of the audiotape - Content unchanged)

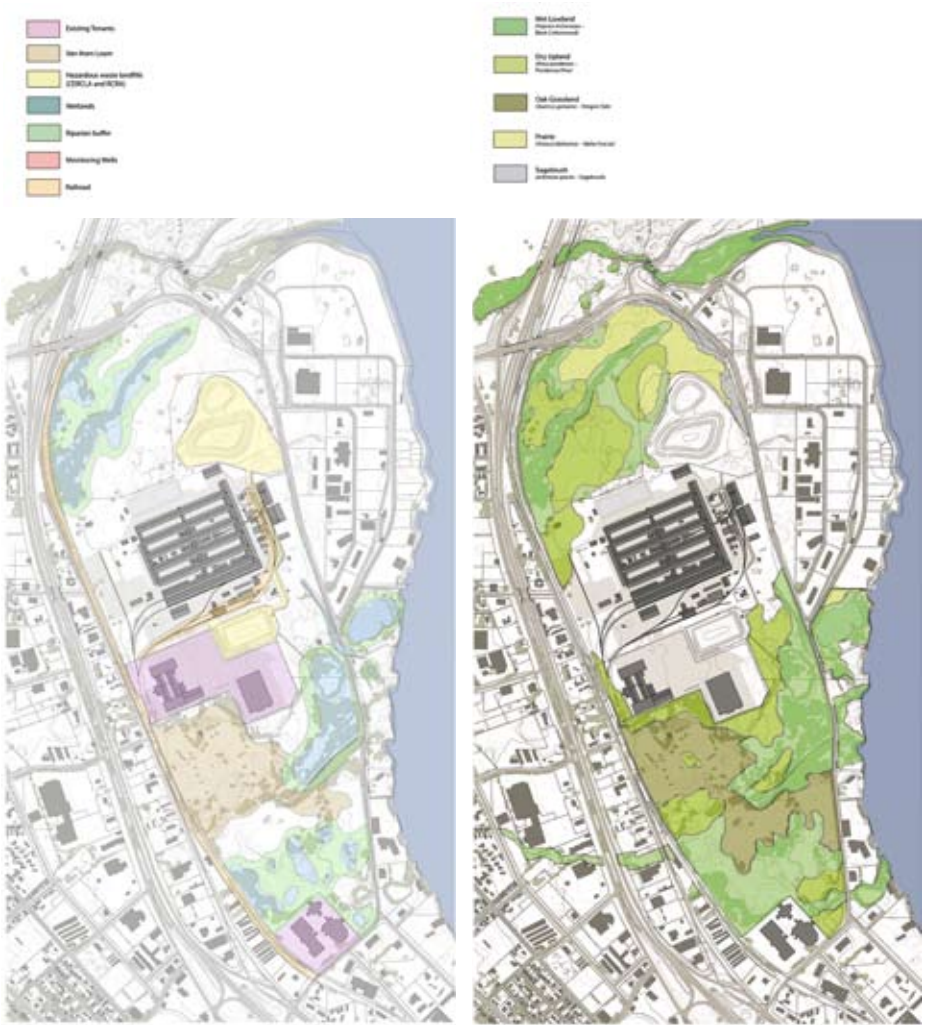
Concept

(….) this is not really a title: the natural systems, cultural systems, industrial systems, but more of a mantra, something to remember as we are going along. Because it is this idea of systems and the connections between things and the need of systems to link and dialog with one another that we think is really essential on this site. Walking through the plots, one of the first things we wanted to start off with were understanding the constraints on the site, understanding what the influences were that not only are on the surface, but were below and above and near and far. We do believe very strongly that the cultural history of the place is essential to understanding what The Dalles is, where it has been and where it is coming from.



If the entire site were planted with saplings now then in time a tree plantation would grow, providing a green landmark for The Dalles and as parcels were sold and developed, trees would be removed and new buildings would rest in a green setting.

So as we started with the restraints, the constrains here. This developed into a vegetation map. A vegetation mosaic that is playing off a couple of ideas. We looked at what the soil, what the climate was telling us and how the planting might actually respond to that. So there are (green marked) wetland types of areas, the wet lowlands and poplars. There are (olive green colored) the higher, dryer areas for the ponderosa pines which you can actually see – all the plants I think right out off this door. Prairie, bunch grasses down in that kind of rocky fields around and the front up here and on the richer soil, becoming more of that oak-woodland, oak-grassland.
So the second thing that this does: if you start of looking at this, this relates to the ecological well-being and also to the community well being, it then becomes possible to begin tracing this green up into the city and looking at it, there is actually a couple of vacant lots, looking at this plan right now. So they really are part of a previous stream(?).



Site conditions

Vegetation mosaic

„Natural Systems Cultural Systems Industrial Systems“

Design Concept IV

Text taken from the poster

Museum of the Cold War

The northernmost building of the Northwest Aluminum complex is retained. It is programmed as a narrative of the site and its relationship to the Cold War it is an unparalleled opportunity to experience the scale of manufacturing within the place that made it possible.

This time line begins with the construction of The Dalles Dam and the original Harvey Aluminum facility. It continues through the involvement of the Environmental Protection Agency (EPA) in 1984 and to the closure of the plant in 2004. The hazardous waste landfills on the site extend the story of the Cold War as the site owner maintains a treatment system for cyanide in leachate.

We propose to use the existing pot liner basement containers within the building as rhizoltration pools. Leachate from CERCLA landfill is first treated with glucose, and then directed to a series of pools. Plants are specially selected to take up cyanide from the water. The plants are eventually removed to an o-site hazardous waste facility, and the water will be free of cyanide.

Museum of Cold War

Maple Grove in front of the museum

Vernal Pool Wetlands
The site is hydrologically linked to groundwater aquifers which ow to the mouth of Chenoweth Creek which enters the Columbia River. Given the geology and high ground water table, the site will naturally be a landscape of vernal pool wetlands. If left to develop on their own, the pools will attract plant, bird, and animal species. This can be of good advantage to non-human species, and potentially aid in maintaining groundwater quality. They also add to the experience of walking, especially along the River Front Trail. So one of the ideas is, to find ways that people are integrated into the industrial uses... We have actually run a lot of paths with close proximity to these industrial buildings and who says that industrial buildings have to be unsightly ore something that is unattractive? We are trying to just expose them for what they are and treat differently.

Vernal pool wetlands

Public Presentation and Evaluation by Head of the Jury Dr. Verle Hansen (US EPA)

(Text version of the audiotape - Content unchanged)

The primary approach that this team used in this project is one that looks at things from a systems point of view. They have been going back to the history, the geological and the biological history of the area and looked at what the role of this property was in history and then tried to make decisions based upon of what the future land-use is, based upon: How can we reconnect the site to its natural heritage? – it is not only natural heritage, but also cultural heritage and industrial systems as well. By looking at it from that point of view, they are looking at backing into the area. They are observing from that, what land is available then for industrial or commercial uses.

The Jury very much liked the fact that these natural areas were retained and the especially liked the fact that maybe you can look at vacant pieces of land or open spaces between buildings in the surrounding community and begin to pull those areas up into the existing community and use them as connecting elements, too.

One of the main concepts of design for this project is a system of phasing development and this phasing of development is recognizing that we are not going to go from a building that is being taken down or spent land uses to new land-uses and new productivity. That will not be instantaneous. We are probably going to phase in over time. And because we do not have any idea of what companies might want to move in here or settle here, this team recommended that you start with phase one in creating a mosaic landscape, using a lot of native and non native plants.

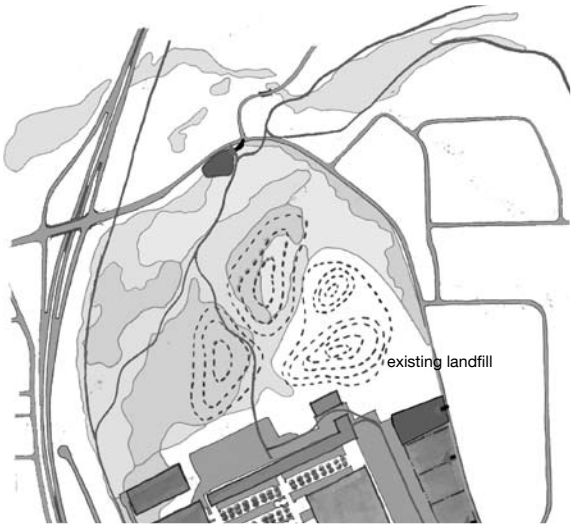
It is really an orchard kind of place. And orchards are very much part of the landscape around here, so it is a very natural kind of thing to consider here. The idea, if you restore the planting area, then you have an opportunity to look at the site as a welcoming beautiful area in itself, but then when someone comes in to develop, you naturally then would curb out of this natural landscape area to create a new place. And over time, depending on how long that takes, you could even establish a landscape that starts to dictate or to direct, what kinds of building or development proposals you might want to put on this landscape.
I think the jury felt like that this was a really fantastic approach and actually it may have a secondary marketing kind of benefit, too, because it seems like in this country we have a passion for wanting to developing on the best green space we have. If you create a really nice green space, you might just encourage somebody to come in and say: „Oh wow, I want to build in there!“

There was an emphasis to have a historical museum on the site to kind of commemorate the aluminum in-

dustry here in the northwest. As you know they are all leaving or being torn down. So we feel as part of our culture. It was a 60 or 70 year impact and we need a lot of reminders of what it was.
This [proposal] does save a primary building on the north.

One other thing the jury liked about this: There is an existing landfill here and another over here, but they have actually included another hill area here to sort of balance that out and create a new kind of visual block between the approach coming in from the west and north to the existing buildings and to this landfill as well. So this gives some opportunities to create a different gateway.

Some of these building areas actually looked too big and they probably will not be near that size and this seemed to be a compromise from the jury‘s point of view and a compromise that does not get you very far, because whatever you include in industrial buildings here you could easily put in here, so that probably would detract you here without getting you anything and you would actually take away from that green space here which the jury felt was very important.



Hill area composed of the existing landfill and new hills

„Rethinking Industrial“

The Dalles Chronicle 01.05.2008

CONCEPTUAL DRAWINGS and computer models surround Prof. Leslie Ryan during a design charette at the Columbia Gorge Discovery Center focusing on redevelopment of Northwest Aluminum industrial land. The effort is a partnership between the Technical University of Munich and the University of Oregon focusing on brownfield redevelopment. Andrea Klaas, Port of The Dalles executive director, looks on.

Rethinking Industrial

Design students from Germany and Oregon team to examine Northwest Aluminum

■ By KATHY GRAY
of The Chronicle

"Green ribbons" for industrial employee relaxation and tourism, chemical-filtering ponds in aluminum potlines, and Superfund site as art are just a few of the ideas local stakeholders heard from an international group of students examining design ideas for the Northwest Aluminum industrial site.

PUBLIC EVENT

Landscape design students will present their ideas for redevelopment of the Northwest Aluminum site at 2 p.m. Friday at the Columbia Gorge Discovery Center.

The group will present its ideas to the public at the Columbia Gorge Discovery Center on Friday, between 2 and 4 p.m.

Master's thesis landscape architects from the Technical University of Munich joined forces this week with landscape architecture and design students from the University of Oregon to reimagine the site for future redevelopment.

The project germinated as a result of an international brownfields conference held in Oregon several years ago. Noted landscape architect and designer Professor Peter Latz attended the conference. Latz shared the master's thesis process German students take to pick two old industrial sites and design visions for their future use, explained Andrea Klaas, executive director of the Port of The Dalles, who has been involved with the process since last year.

The students are working on a former mine in Germany along with the Northwest Aluminum site.

This is the German students' second visit to The Dalles to consider the industrial site. They also made a preliminary visit last fall. The Munich university is Germany's center for landscape architecture.

This week, the group of 14 students and professors is working with 16 University of Oregon students under the instruction of Professor Leslie Ryan.

The group started work Monday with introductions and a roundtable discussion. By Wednesday, conceptual drawings lined the Discovery Center meeting room. They provided fodder for design charettes — design workshops with local and state stakeholders, including employees from Northwest Aluminum, city planners, port officials, state Department of Environmental Quality and federal Environmental

See INDUSTRY, Page A5

A DESIGN STUDENT displays one computer-generated concept for redevelopment to a group of local stakeholders on Wednesday, as well as landscape design students and teachers from the the Technical University of Munich and the University of Oregon.

Kathy Gray photo

„We’re far enough away from that now to actually be able to look at a couple of designs.“

Visiting professor Leslie Ryan,
The Dalles Chronicle,
1st May 2008

„Rethinking Industrial“

The Dalles Chronicle 01.05.2008

The Dalles Chronicle

PROFESSOR PETER LATZ, left, noted landscape architect and designer from the Technical University of Munich, consults with students Wednesday on plans for rethinking Northwest Aluminum industrial property in The Dalles. The project is a cooperative effort between the Munich university and the University of Oregon.

Kathy Gray photo

Industry

Continued from Page A1

Protection Agency, among others.

"All the stakeholders discuss the possible future of the site," Matthias Lampert, who serves as ground staff for the research project, and is a lecturer at the Munich university.

The stakeholders offered comments about the various ideas presented by several different student groups.

"One of the things this group, and Prof. Peter Latz promotes is the idea that there are industrial icons throughout the world and it's nice to retain something of these facilities, because they were part of their past," Klaas said.

That may be easier in Germany, where facilities often include rich red brickwork, than at Northwest Aluminum with its large, grimy metal buildings, Klaas noted, adding that students have nonetheless come back with interesting concepts.

"Maybe we keep the silos and skeltons of the buildings that used to be there, but we incorporate them so their more like gardens, or maybe plant vegetaion that outlines the footprint of the building.

"They've come up with a lot of pretty creative ideas."

Roundtable discussions have yielded parameters and guidelines related to industrial use, transportation, green space and community gateway appearance that have guided the design process, Klaas noted.

Ideas were met with varying degrees of enthusiasm during the charettes.

Klaas, for example, expressed some reservations about keeping the Lockheed Martin superfund site intact as art.

"Any company coming to look at this area will do environmental research," Klaas noted. "Some may decide not to come to the community because of that — even if it is art."

The concept of including a Cold War museum as part of the redevelopment met with a polite, yet noncommittal response. Ryan suggested one of the potlines could be retained for the purpose.

"We're far enough away from that now to actually be able to look at a couple of designs," Ryan said, suggesting it could provide cultural and tourism opportunities.

Stakeholders appeared intrigued by an idea to create filtering ponds within one potline, to remove chemicals from the surrounding landscape, but questioned how such environmental efforts would be paid for.

Students explained that estimated costs to clean up the Superfund site approached $25 million and perhaps Lockheed Martin, the site's owner, could be negotiated with to fund the alternative measures.

The ideas presented at the charettes will be distilled and refined for presentation at public Friday's event

Press release „The Dalles Chronicle“ about the Charrette with announcement of the presentation of the concepts

„One of the things this group, and Prof. Peter Latz promotes is the idea that there are industrial icons throughout the world and it's nice to retain something of these facilities because they were part of their past.“

Andrea Klaas, Executive director of the Port of The Dalles, The Dalles Chronicle, 1st May 2008

Part II

Exhibition

Northwest Aluminum - Special Places

Exhibition Charrette

Operationalization of Informations and Working Supplies

Exhibition of general alternatives for the future of site developed by the research team

In order to supply the members of the Design Charrette with information and impressions of the site a exhibition took place parallel to the Charrette.

Panels with maps and pictures of special places of the site where presented in the rooms of the Design Charrette.
They gave impressions of important aspects of the site, like construction of the production halls and the courts, landscape elements, the connection to the Columbia River, Landfills, impressions of the site from outside, etc.

Furthermore Alternatives developed by the research team were shown.
The exhibition gave information about the work of the research group. With this exhibition their analysis and the site survey were edited and operationalized for the Charrette.
All participants of the Charrette could inform themselves during the whole week and discuss different aspects of the site.

Panels give impressions of important aspects of the site.

Exhibition of the panels in the rooms of the Charrette

View from Outside / Landmarks

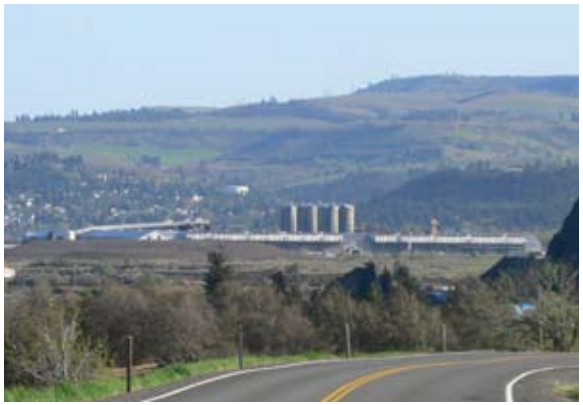
Operationalization of informations and working supplies

The complex seen from the north

View from Outside / Landmarks

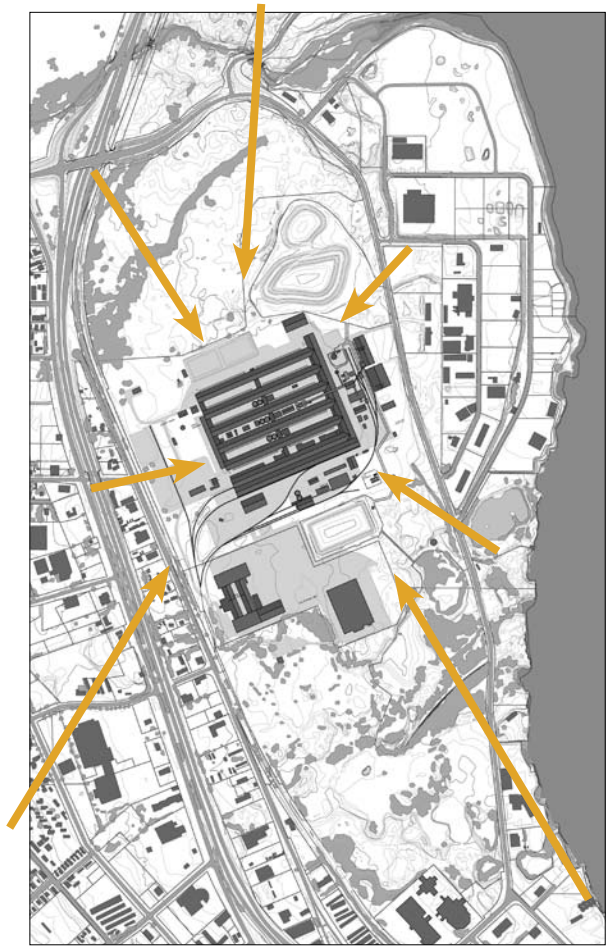
The site of Northwest Aluminum is an Icon within the plateau of the Columbia River Gorge. The consistent design and the strict organization of the hall-complex makes the site unique.

It comes into sight from several viewpoints and directions. Furthermore the view of the site is the entry to the city coming from the north.



The complex seen from the north

View from the hillside in the south



Viewpoints

Panel ‚View from outside'

View from Outside / Landmarks

Operationalization of informations and working supplies

The complex seen from the River Park in the south

View from Outside / Landmarks

Northwest Aluminum is visible from great distance and can be interpreted as a landmark itself or parts of it can be.

Especially the silos are visible from almost every point in town. They can be an image giving factor for the area and the city.

The complex seen from the north

View from the Great Pond area

Panel ‚View from the north'

Panel ‚Landmarks'

Entrance Area

Operationalization of Informations and Working Supplies

Panel ‚View from the South-West'

Panel ‚Entrance Area'

The impressive complex seen from the entrance area

Entrance

The site can only be entered by a entrance in the west that crosses West 2nd Street and the railway track.
Therefore the site is cut off of the urban area.

Additionally the site has a railway track that is connected to the national rail system.

Panel ‚Entrance NWA'

Entrance area Northwest Aluminum

Entrance area Northwest Aluminum

View over the railroad

View from West 2nd Street across the railroad

Production Halls

The site of Northwest Aluminum is dominated by the great hall complex. It is structured in six halls, which are connected by three alleyways.
The halls are about 300m long, 25m wide and 18m high. They are arranged in serial structure and are built in a very simple industrial construction method with steel frame construction and massive armored concrete bases.

Strict geometric array of the production halls

Repeating array and design of halls and Silos

Panel ‚Halls'

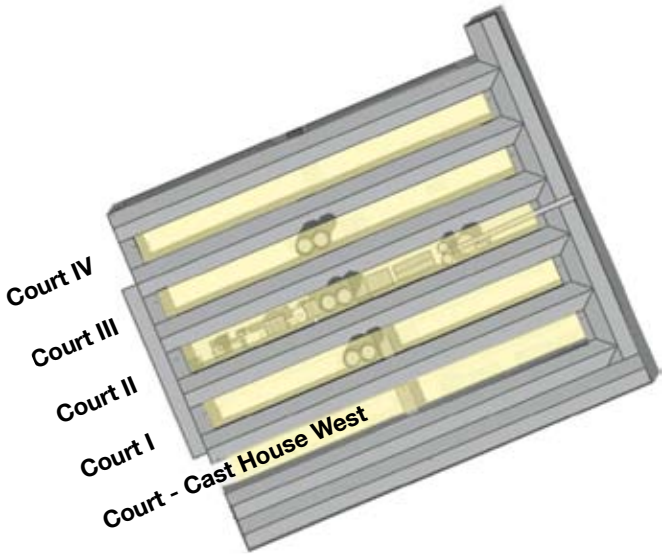
Halls coated with profiled or corrugated sheets

Half length of a production hall as seen in a courtyard

Courtyards

Operationalization of informations and working supplies

View form above into a courtyard - (Court I view from east)



Courts

The complex of the six halls and the alleyways enclose ten courtyards each of ca. 145m length.

They contain technical and infrastructure elements like the ventilation system, dry scrubbing system, footbridges and smaller well shops.

In three courtyards a pair of two huge silo towers is located.
They are built of massive armored concrete were used to store ore aluminum and contribute it.
The silos with its 36m height and a diameter up to 15m have an unique aspect. They can be interpreted as outstanding landmarks, that are symbols for the site.

Silos in the courtyard

Poster „Courts with Silos“

Courtyards

Operationalization of informations and working supplies

Court - Cast House West

Open Court on the west side of the Cast House

Court II

Dry-Scrubbing-System in the courtyard II West

Court III

Silo in Court III West

Production Halls - Inside

Operationalization of informations and working supplies

Former production rooms with reduction cells

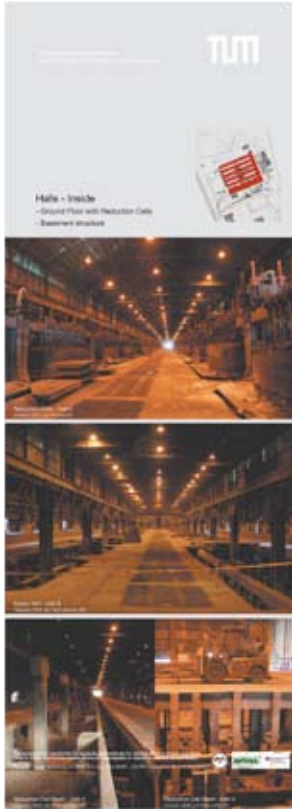
Basement structure seen from the ground floor

Production Halls - Inside

The structure of the building complex arises from the serial production use. Functionally it is divided in five production halls and the cast house.
In the production halls two lines of reduction cells were running parallel through the whole room. By the end of 2007 almost all reduction cells have been demolished and removed out of the foundation structure of the halls.

All halls are built of steel girders on concrete bases. The girder construction is coated with profiled and corrugated sheets, protecting the machines inside by weather influences. The basement is built up with cast and reinforced concrete. With its height of about 3m it can be used as a full story.

Its huge dimensions and the remains of the former production process makes the site a fascinating object.



Panel ‚Halls - Inside'

From the Roof Top

Operationalization of informations and working supplies

Silos seen from roof top in Courts between the lines of the production rooms

From the Roof Top

Entering the roof, you can get an impression of the huge dimensions of the production halls. There the vast length of the halls is visible, as well as the repetitive sequel of the buildings.
From top of the silos you have a fantastic view over The Dalles and the scenic landscape of the Columbia River Gorge. Therefore reusing some of the silos as viewpoints would be an option.

Silos seen from roof top

From the Roof Top

Operationalization of informations and working supplies

View over the roof of the production halls to the area of google

Dry-scrubbing-system and silos in the courtyard

Panel ‚Courts from above'

From the Roof Top

Operationalization of informations and working supplies

View to the town

View into the surrounding from the top of the roof - to the Interstate 84 and the residential area on the hill

View to the Columbia River and the surrounding hills on Washington State

Landscape Elements

Operationalization of informations and working supplies

Wetland vegetation with shrubs and trees

Savaged park landscape with meadows and lawn

Basalt rock fields

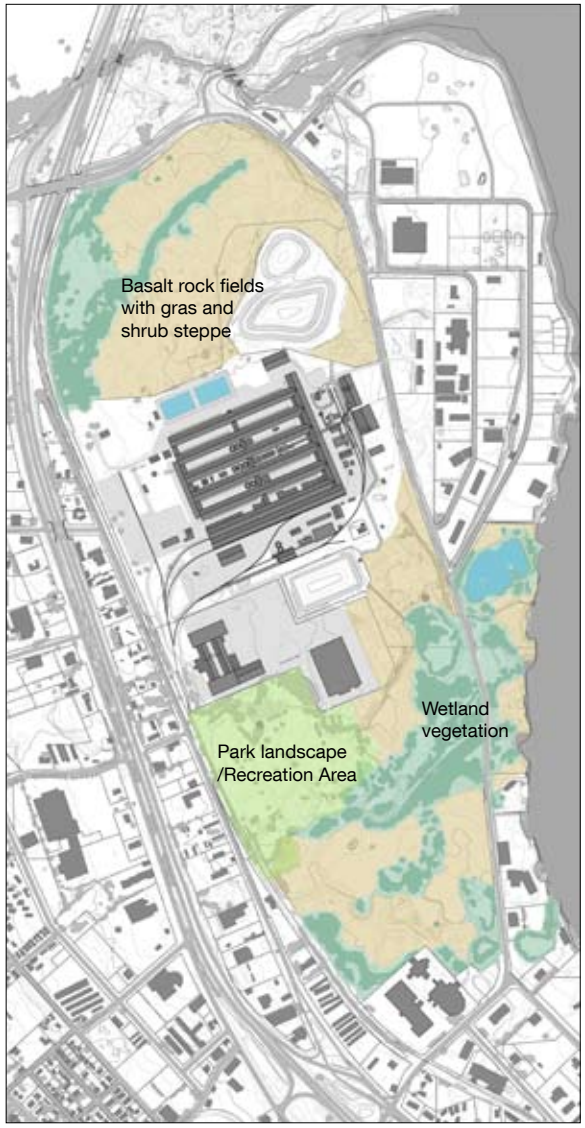
Gras land

Landscape Elements

The landscape in the area of the site consists of several dominant elements, besides the core structure of the Gorge with the Columbia River and the surrounding hillside.
Basalt fields with shrub and gras steppe and wetland vegetation form an interesting wild vegetation type.

Apart from that the existing savaged park vegetation is not of natural origin but is as well an inspiring element.

Shrub steppe



Vegetation Areas

Panel ‚Landscape Elements'

Recreation Area

Operationalization of informations and working supplies

Panel ‚Recreation Area
- Clubhouse area relicts‘

Children playground left to succession

Meadow landscape in the Recreation Area

Remaining of the former basketball field

Planted trees in the former Recreation Area

Recreation Area

The former Recreation area with golf course, basketball fields, tennis courts and children playground was established for the workers of the Aluminum Smelter.

Nowadays the area is left to succession in large parts and the buildings and equipment is rundown. Nevertheless it still offers beautiful and attractive landscape areas.

Park Landscape in the Recreation Area

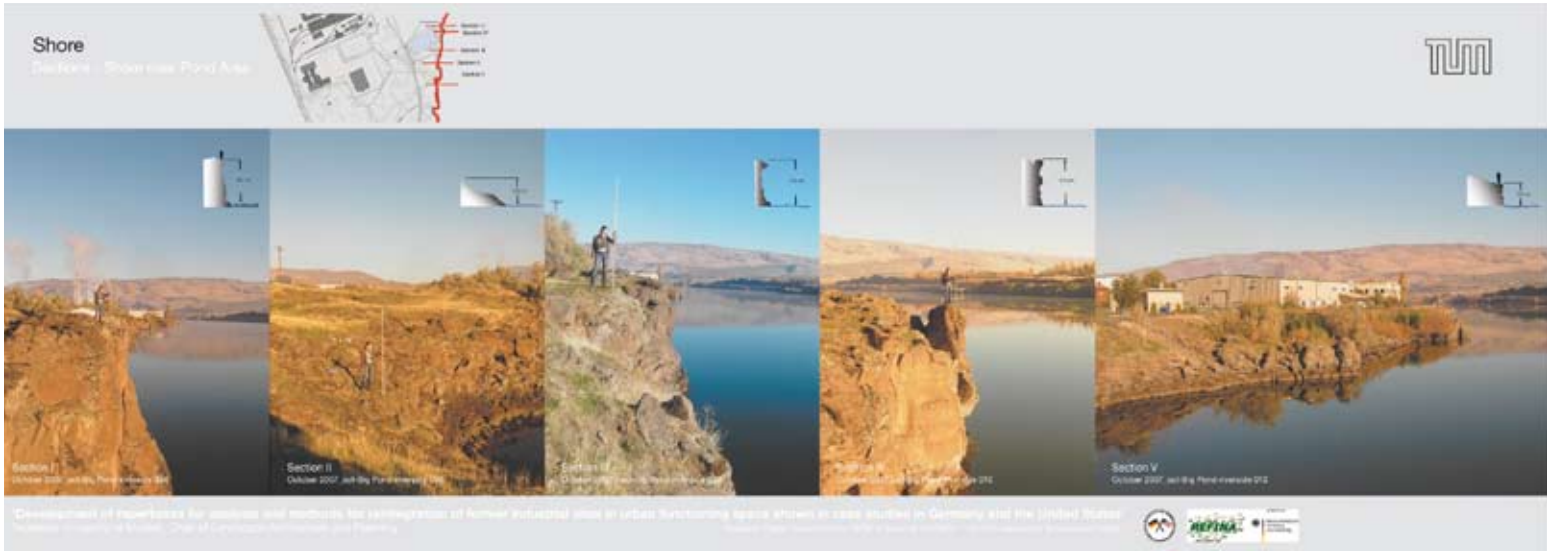
Soft rolling hilly landscape with major trees

Panel ‚Recreation Area'

Panel ‚Recreation Area
- Landscape'

Columbia River Shore

Operationalization of informations and working supplies



Panels ‚Recreation Area - Columbia Riverside' and ‚Shore'

Columbia River Shore

The river shore is an impressive landscape element and is of great relevance for the region. The shore and the accompanying river trail are connected to the site only in a small area close to the Great Pond. To strengthen the connection between the river, the site and the city is important.

Shore with River Trail

Columbia River shore line

Panel ‚Columbia River Shore'

Steep shore

Bay with sand bank

Great Pond

The Great Pond, which is situated close to the Columbia River Shore, used to be part of the water circulation system of Northwest Aluminum.

In case of a storm surge water could be collected there. Furthermore not fully cleared water was pumped in there, in order to clear it by retention and to avoid contamination of the Columbia River.

Panel ‚Great Pond'

Great Pond with non-lined path

View over the Great Pond to the site

Great Pond

River Trail

The River Trail runs 9,5 miles from the River Park in The Dalles to the Columbia Gorge Discovery Center. It offers nice views to the River and the landscape and provides possibilities for walking, cycling, running, and skating.

Next to the Great Pond Area the trail does not continue close to the course of the river, but runs along River Road.
In general the trail snakes a lot along industrial buildings and not very attractive gapping spaces.

River Trail in the Port Area

River Trail in the old Industrial Area

Panel ‚River Trail'

Non-lined River Trail near the Great Pond

River Trail in the old Industrial Area

Landfills and Scrubber Sludge Ponds

Operationalization of informations and working supplies

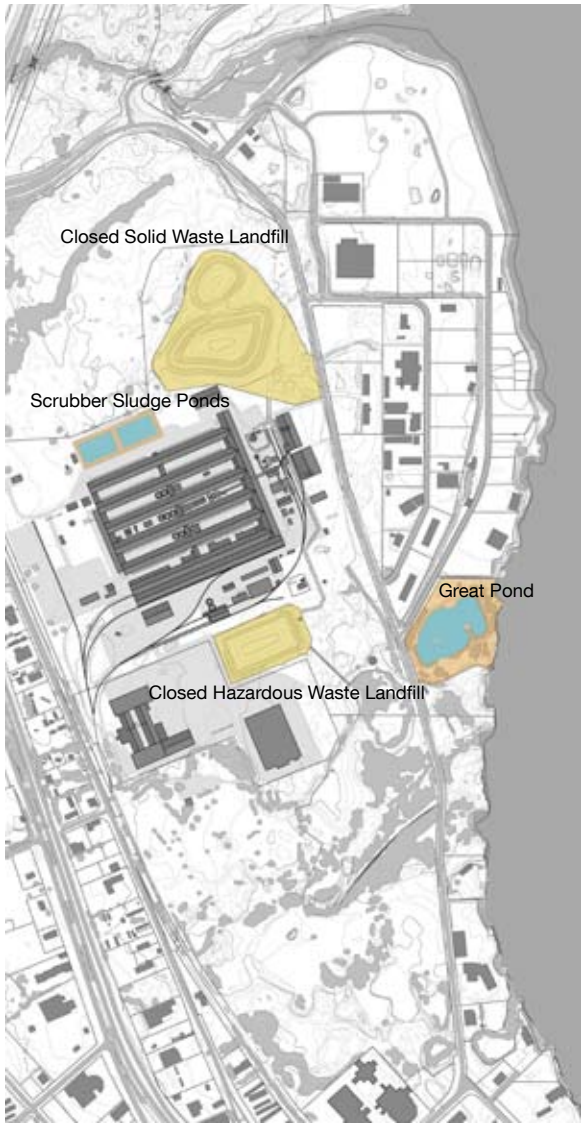
Landfill in the north of the complex

Landfills and Scrubber Sludge Ponds

The site has two landfills that are the only higher elevations on the site. There contaminated soil of the area was locked in. Both landfills are guarded by a fence and not open to public.
The two Scrubber Sludge Ponds were used to filtrate and clear the water used in the production process. After clarification the water was pumped into the river or if there was still the risk of contamination into the great pond for further retention.

Landfill and Scrubber Suldge Pond in the north of the complex

Landfill in the south of the complex



Landfills and Scrubber Sludge Ponds on the site

Panel , Landfills and Scrubber Sludge Ponds‘

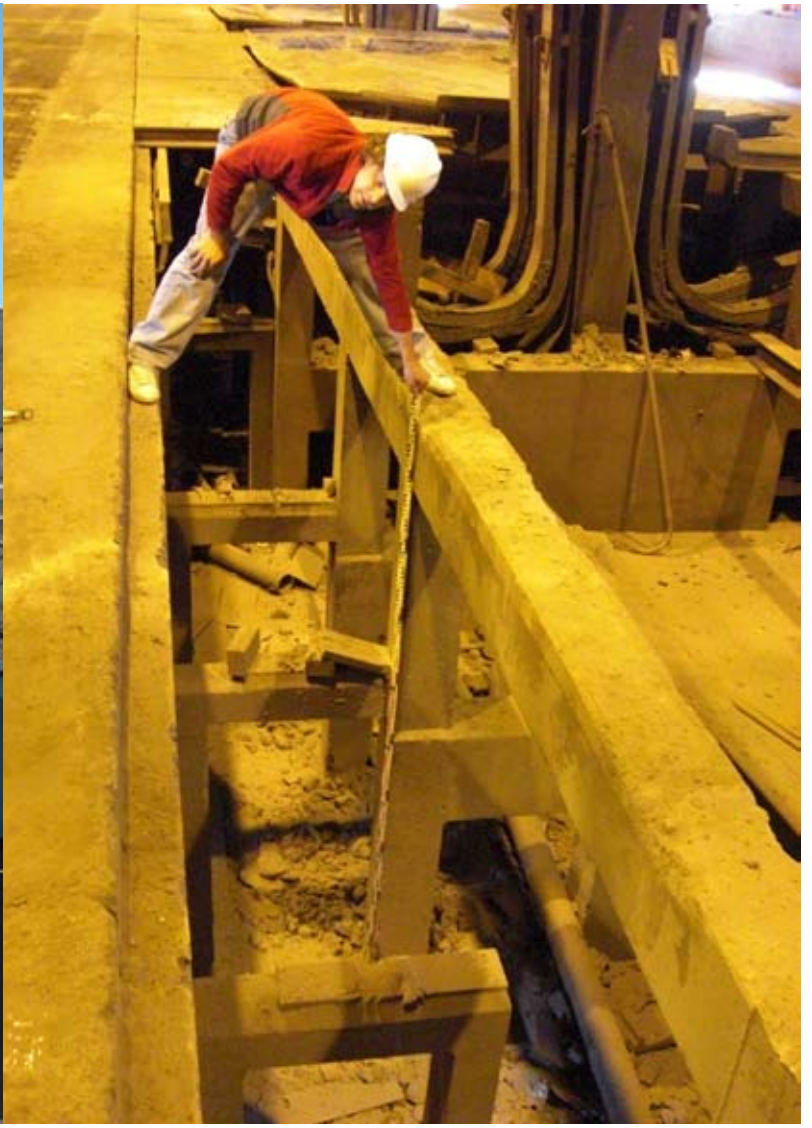
Part III

Master theses

Northwest Aluminum - Design Concepts to Reuse

Design concepts for reuse of the existing site on master plan base

Diploma and Master thesis, winter term 2008
Chair of Landscape architecture and Planning
Technical University of Munich



Architectural survey of the construction of the halls and the courtyards

Site Survey

The creative development of design alternatives is preceded by a detailed inventory and analysis of the location.
Every long term project at the Chair of Landscape architecture and Planning starts with a site survey done by the students.

Important for the work with the site is the understanding of the complex surrounding as well as the structure of the site itself. Therefore the first step in the planning process was to have a closer look at the site and its organization.
The detailed architectural survey of the buildings from the inside and the outside was the basis for a detailed analysis and the development of design concepts to reuse the site. Documented and evaluated analysis results are directly implemented into the design process.

Documentation and analysis of the Columbia River shore on the site

Documentation and analysis of the area

Site Survey

Meetings with Andrea Klaas and Dan Durrow

Galen May, Environmental Manager of Northwest Aluminum and accompanying the recording of the location, informed about procedures of the aluminum manufacturing and the buildings on this site.

To get further information on planning contexts, procedures and development aims, and to complete the results of the recording of the location there had been meetings with Dan Durrow, Director of Community Development and Planning and Andrea Klaas Director of the Port of The Dalles.

Galen May, Environmental manager of Northwest Aluminum and Prof. Peter Latz

Group picture at the end of the site survey, October 07

“Mixed Use Concept”

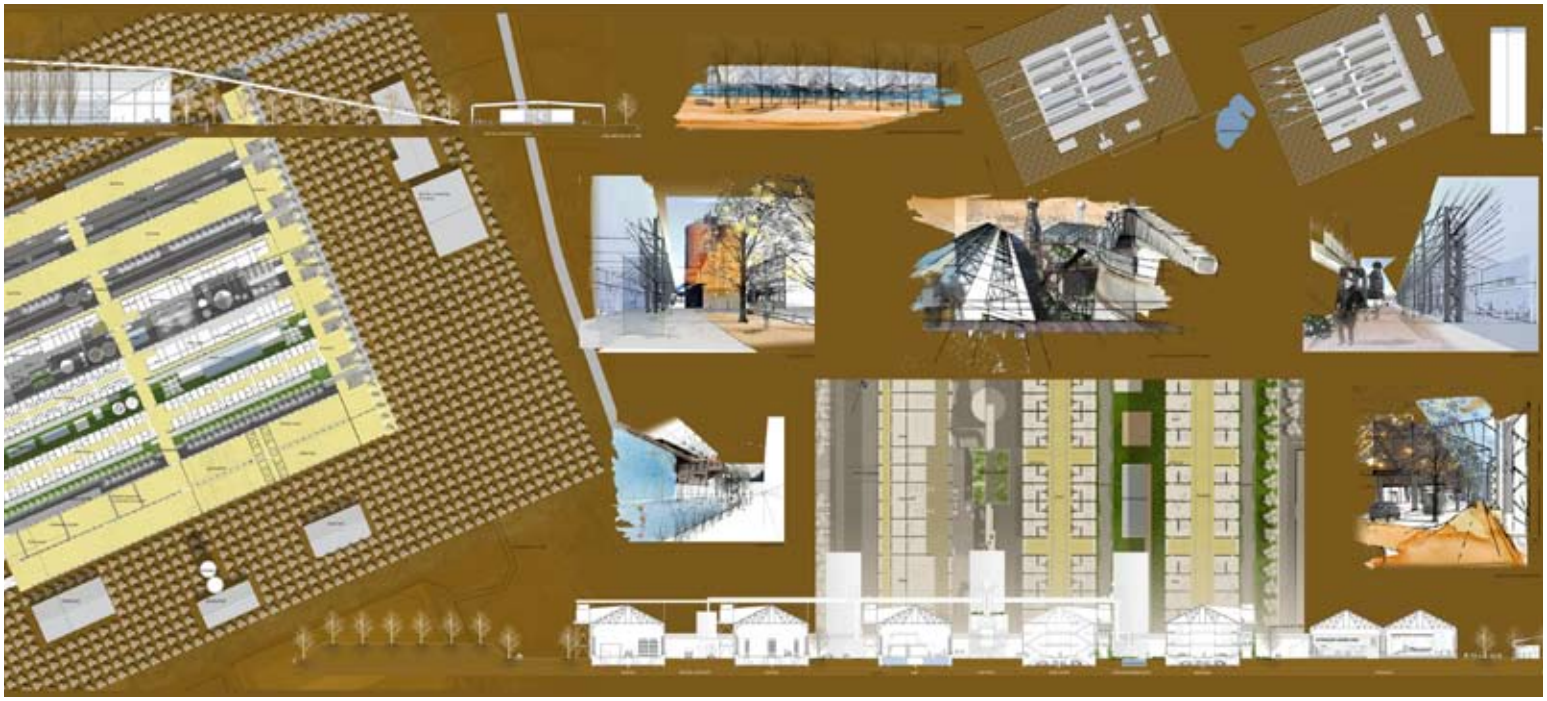
Visions - Scenarios - Strategies

„Mixed Use Concept“

Visions - Scenarios - Strategies

Design Project
Winter term 2007/08

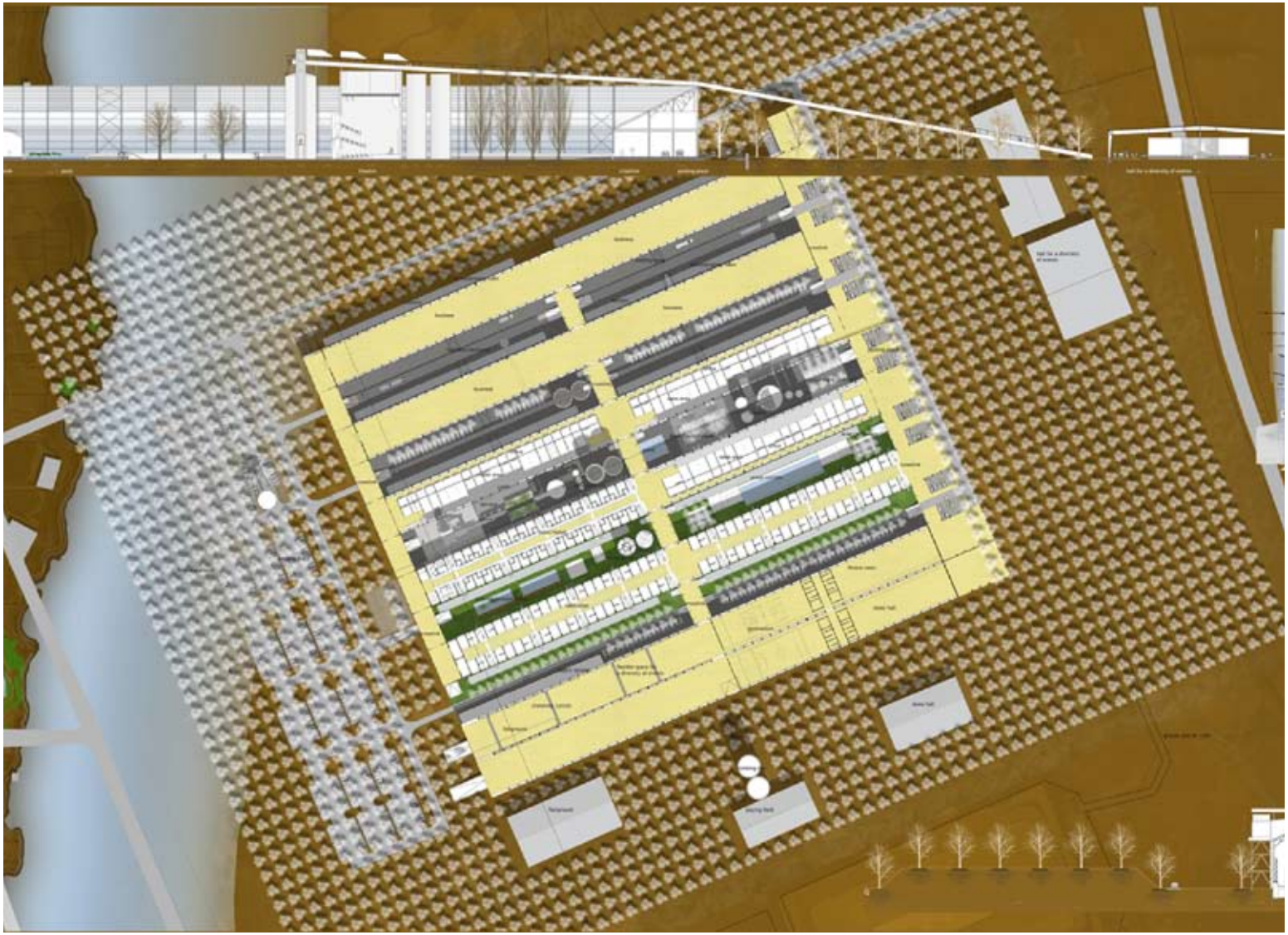
Design concept by:
Tobias Behr
Philipp Hodapp



Master Plan

„Mixed Use Concept“

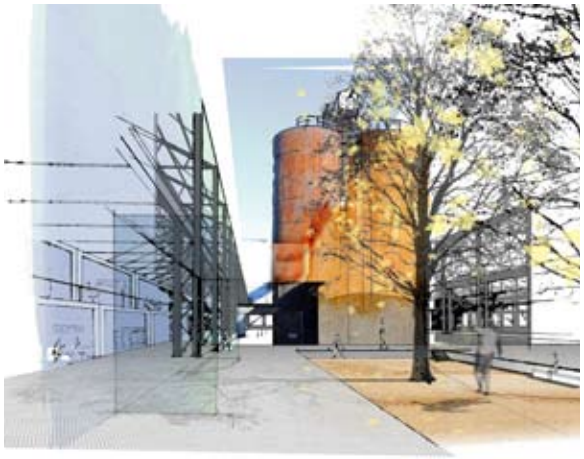
Visions - Scenarios - Strategies



Floor plan, original scale 1:500m

Cherry Grove

The site is going to be developed as an additional city center for The Dalles. The reuse-concept tries to establish a combination of mixed uses. The complex is enclosed by a grove of Prunus mahaleb, that generates a more balanced climate and makes the new center a separate and introverted place, so that there’s even the possibility of near industrial development. The reuse of the halls is done by using different construction methods. House-in-house concepts are planned for the shopping center, whereas the construction of the hotel and housing-complex is integrated in the steel beams. For the sports and event double-hall, flexible rooms can be generated by movable curtain walls on the existing crane way.



New urban court in the shopping area

Cross section and Floor plan of the site

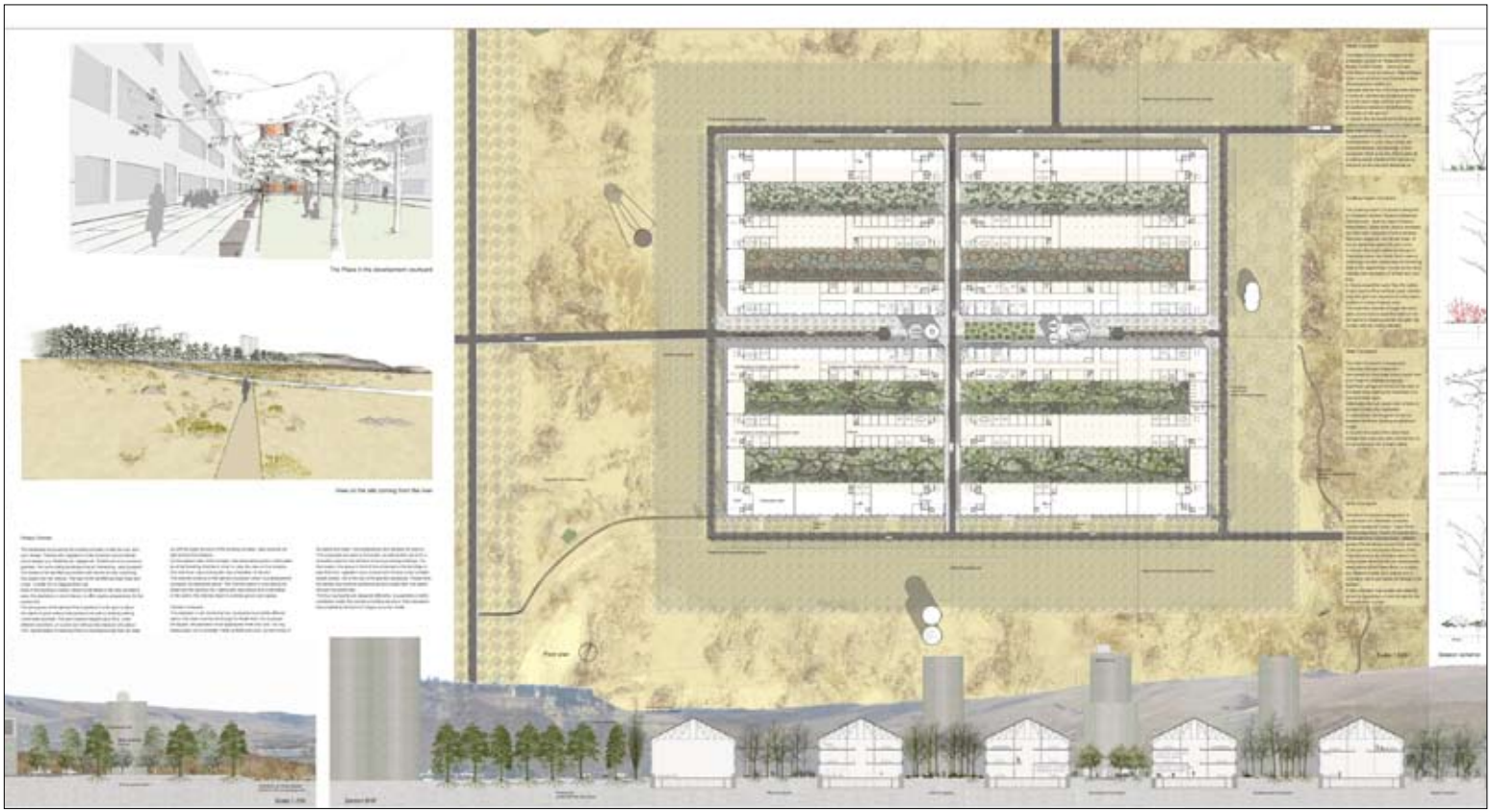
„Arborville“

Visions - Scenarios - Strategies

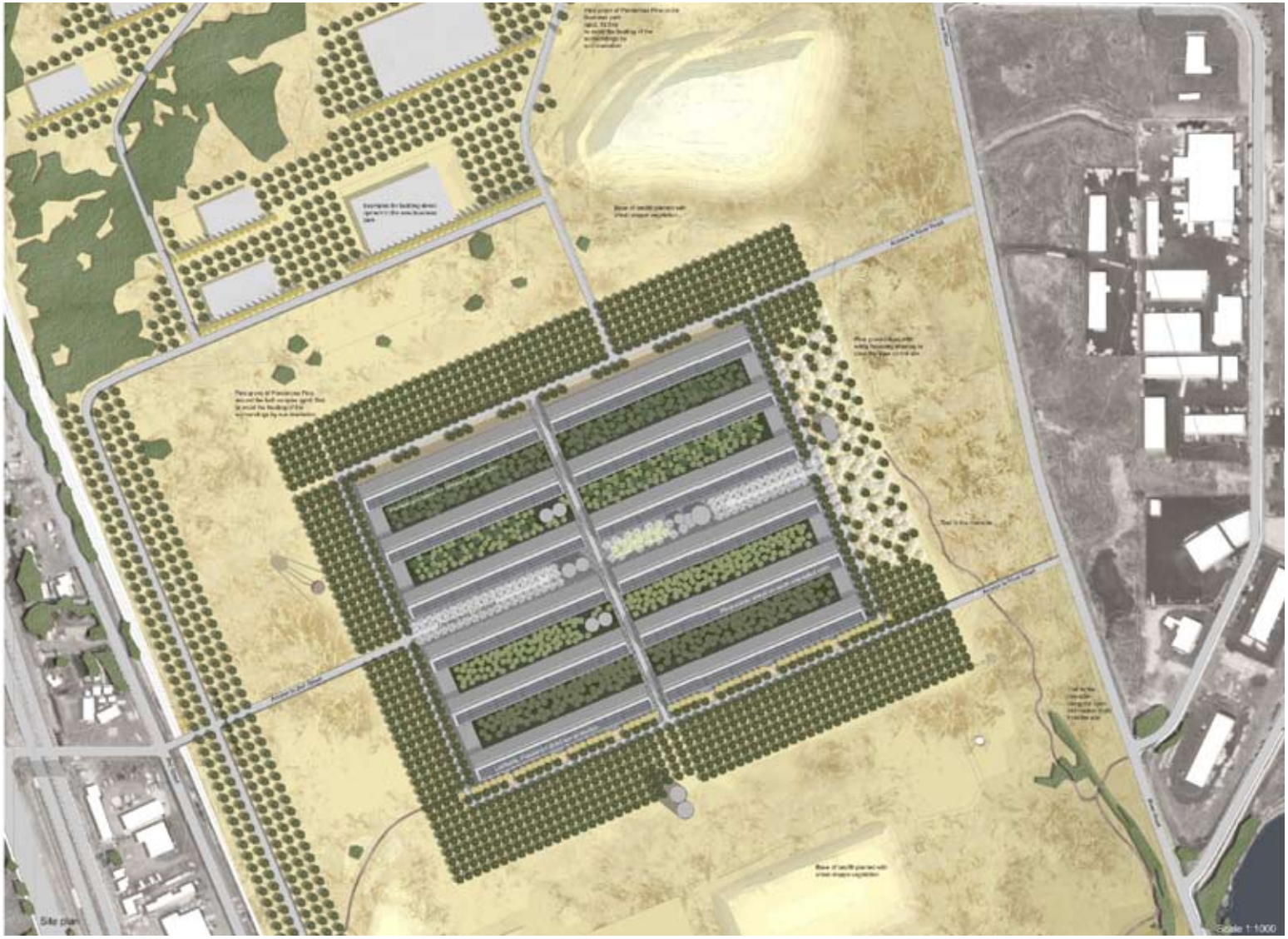
„Arborville“

Master Thesis
Winter term 2007/08

Design concept by:
Sophia Lueg



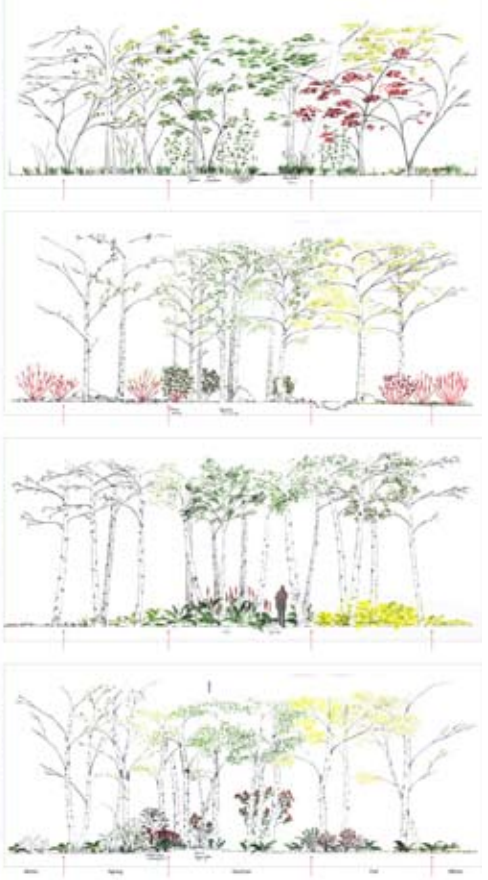
Master Plan



Floor Plan, original scale 1:1000m

Oregon Habitat Planting Courtyards
The design idea aims to create a comfortable working space based on passive or energy optimized systems. Based on these constructional considerations, the idea of using plants to shade the buildings and surroundings arose. The plantation in the courtyards must settle different claims to create a fresh and cool recreation area for the workers in the surrounding buildings and the public.
The remaining four courtyards are designed differently. Each plantation has a habitat to be found in Oregon as a role model.

Plaza in the development court in the middle of the complex

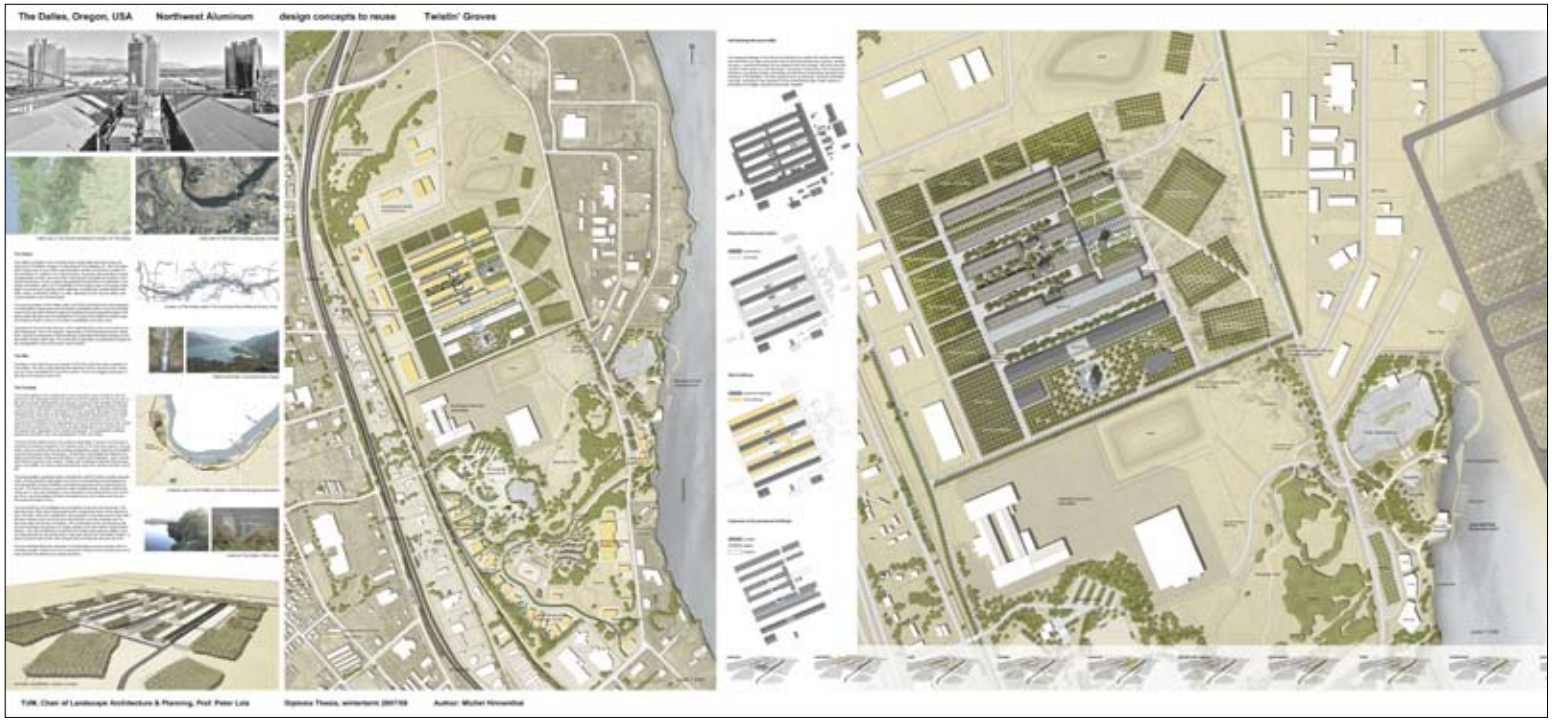


Planting scheme for the courts

Cross section through the courts

„Twistin Groves“

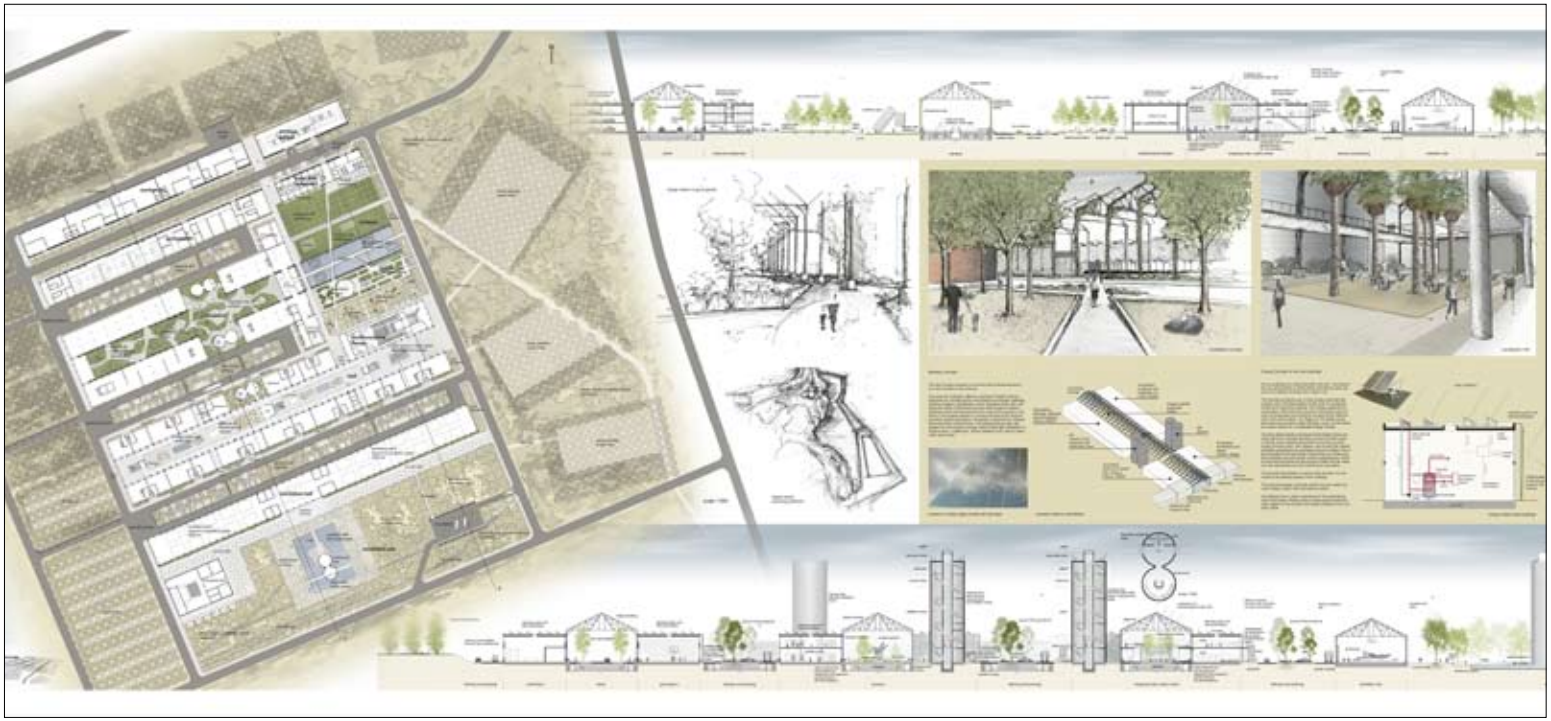
Visions - Scenarios - Strategies



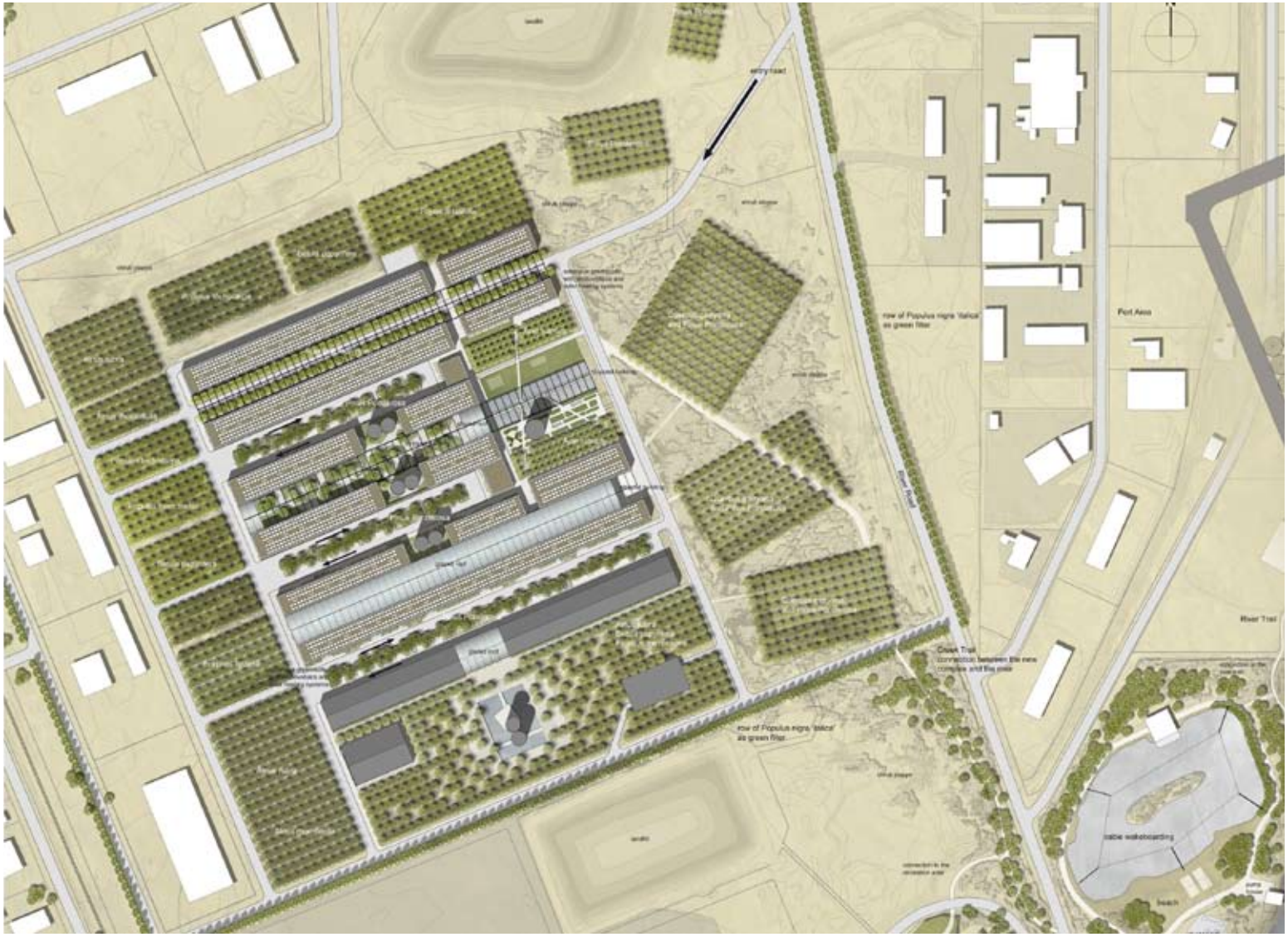
„Twistin` Groves“

Master Thesis
Winter term 2007/08

Design concept by:
Michel Hinnenthal



Master Plan

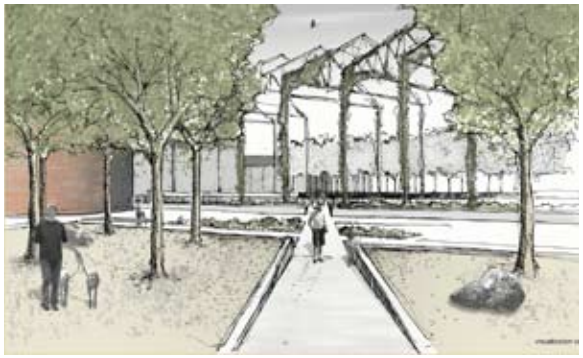


Floor Plan, original scale 1:1000m

Inverse Development

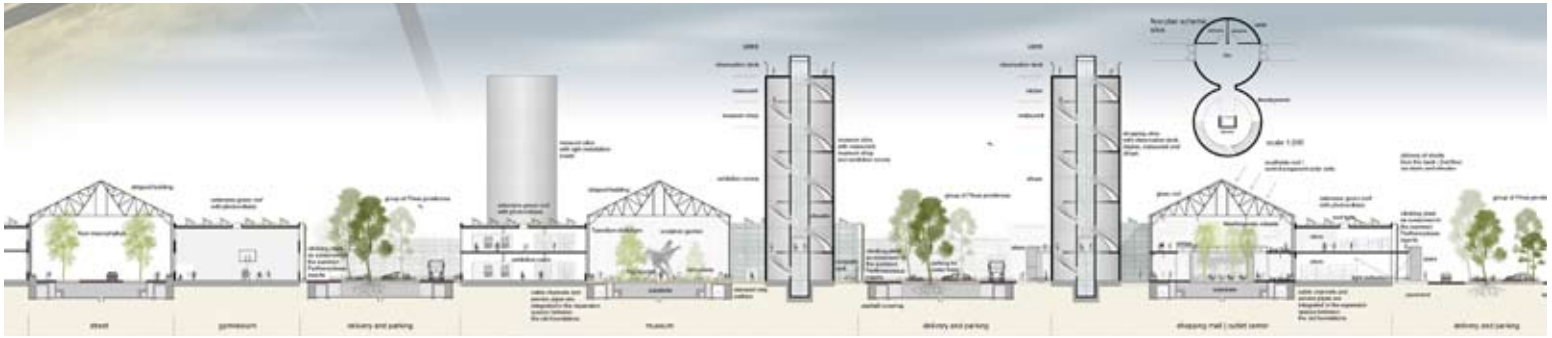
The new structure of the site is directly influenced by the old structure of the Aluminum Mill.
Every second hall is demolished and new buildings are constructed in the former courtyards. The old building structures form the new free spaces and the former courtyards now are the buildings. The combination of the old structure and the new buildings should give an image change to the site without losing identification.

Isometric visualization of the design concept



Campus at the new entrance in the east

Plaza inside the mall



Cross section with stripped halls and new buildings in the courts

„Northwest City“

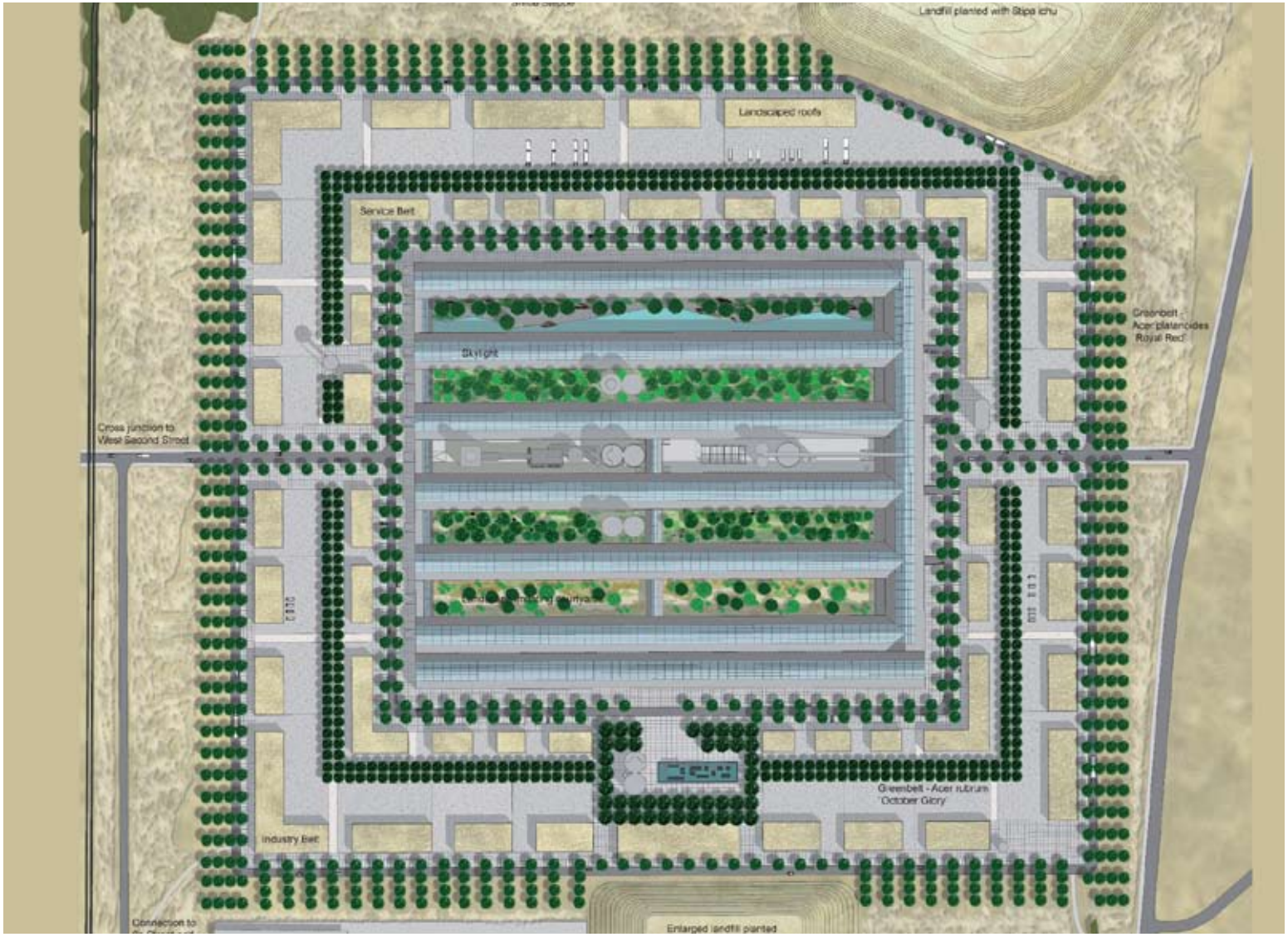
Visions - Scenarios - Strategies

„Northwest City“

Master Thesis
Winter term 2007/08

Design concept by:
Sebastian Raschauer

Master Plan



Floor Plan, original scale 1:1000m

Green Heart of a New City

The design concept is to create a new urban structure surrounding the former aluminum plant while preserving the halls of the smelter, including the very internal courtyards, as the inner heart of the city.
The courtyards that are meant to be the green open spaces for the new city, are divided into four different themes, which reflect the dominating landscapes of Oregon as the major internal areas: Coastal beach, Rainforest, Montane mixed Conifer Forests, Shrub Steppe .

Rainforest court

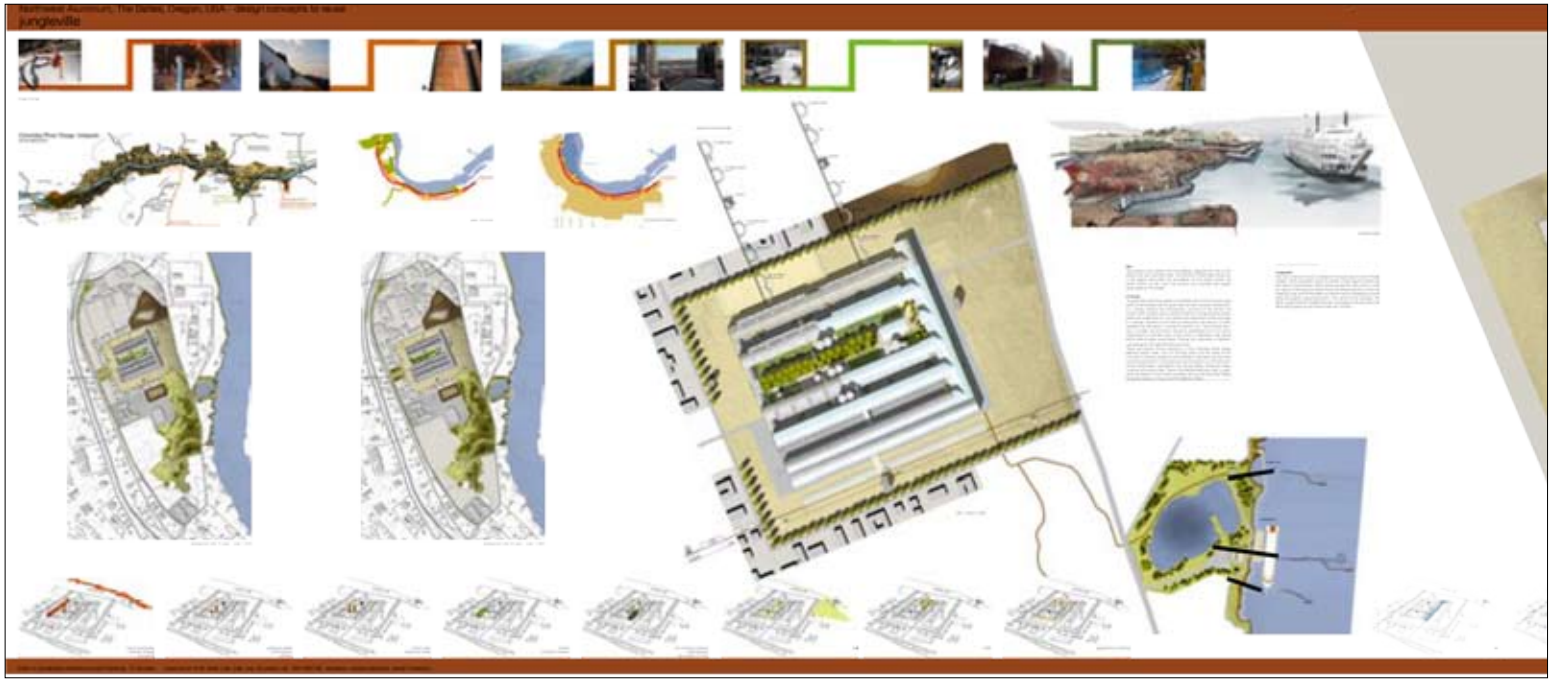
Axonometric projection of the new urban structure

Court with water element relating to the costal beach

Cross section

„Jungleville“

Visions - Scenarios - Strategies



„Jungleville“

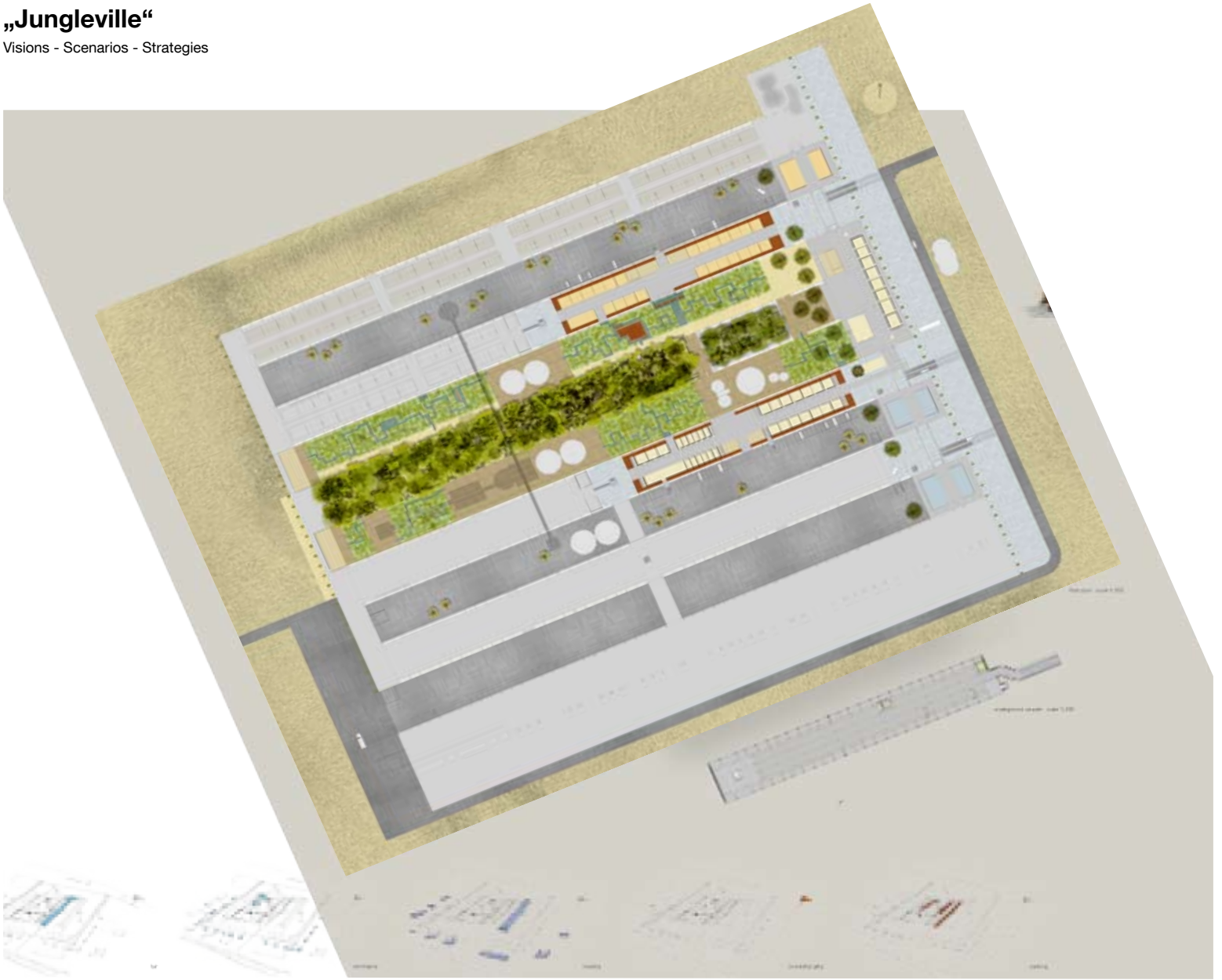
Design project
Winter term 2007/08

Design concept by:
Hannes Banzhaf
Jakob Trzebitzky

Master Plan

„Jungleville“

Visions - Scenarios - Strategies

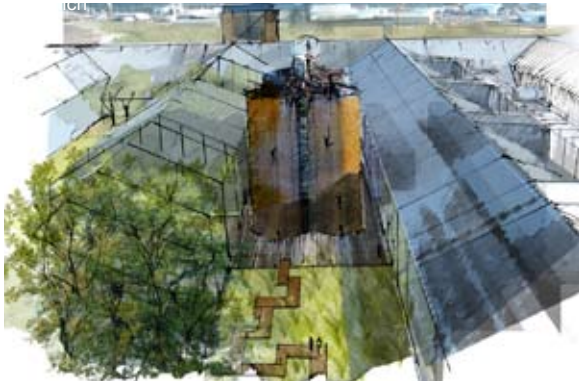


Floor Plan, original scale 1:500 m

New green court with ferns and jungle vegetation

Jungle Courts

The site is going to be reused as the new tourism center of the region Columbia River Gorge. According to the touristic use of the halls with museums, sport facilities, fair, shopping mall, hotel etc. an appropriate open space is developed. A green inner center for the complex is created. It consists of fern gardens and jungle vegetation, which relates to the native vegetation in Matsumoto, Japan. There the temperature graph is similar to the one in The Dalles. But in consequence of a much higher precipitation rate the climate is very different, causing the growth of a different vegetation. This type of vegetation is quoted to create an interesting comfortable open space for the visitors.



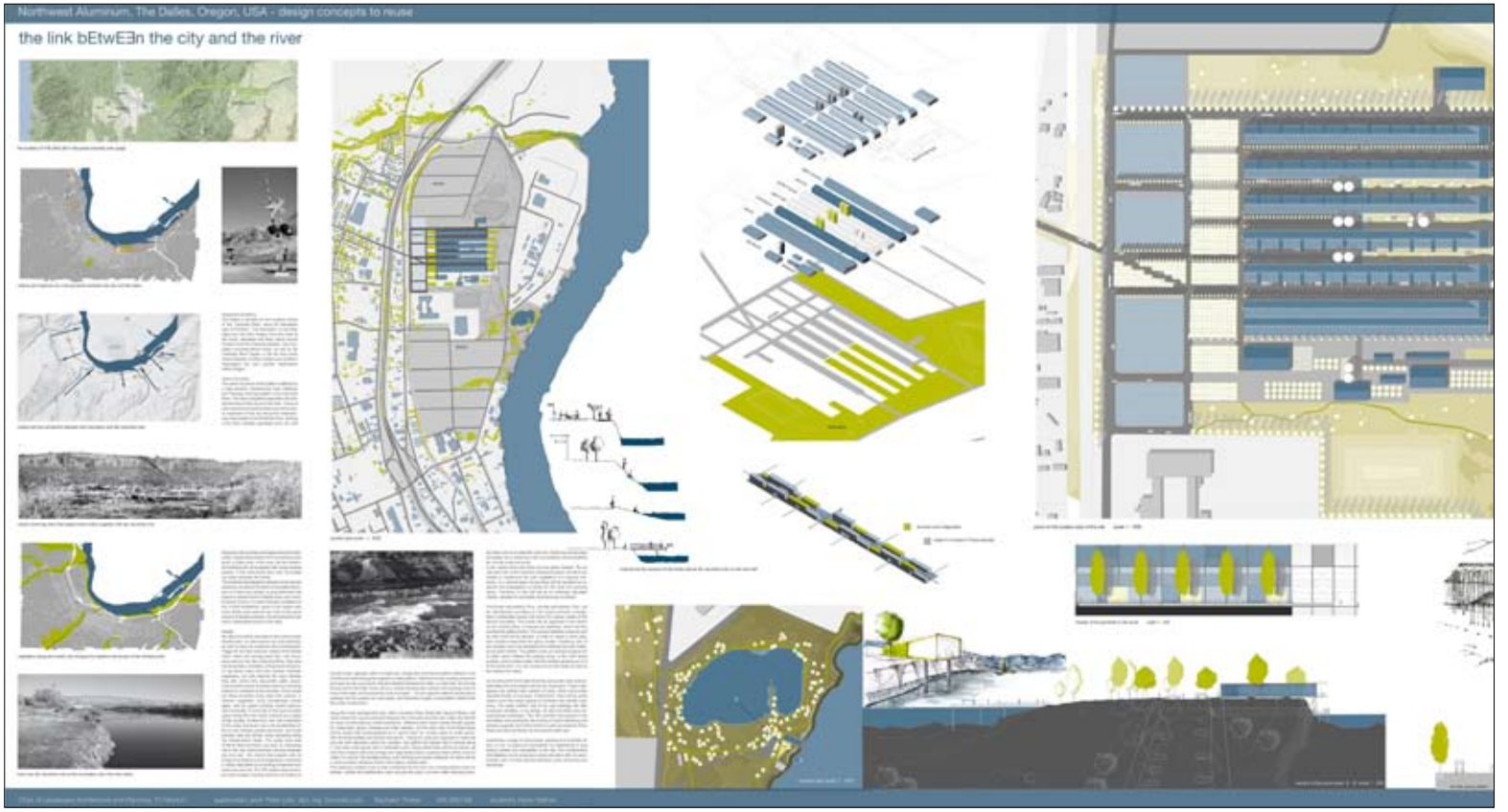
View from the silo to the green center

Artificially watered jungle vegetation

Cross section

„The link between the city and the river“

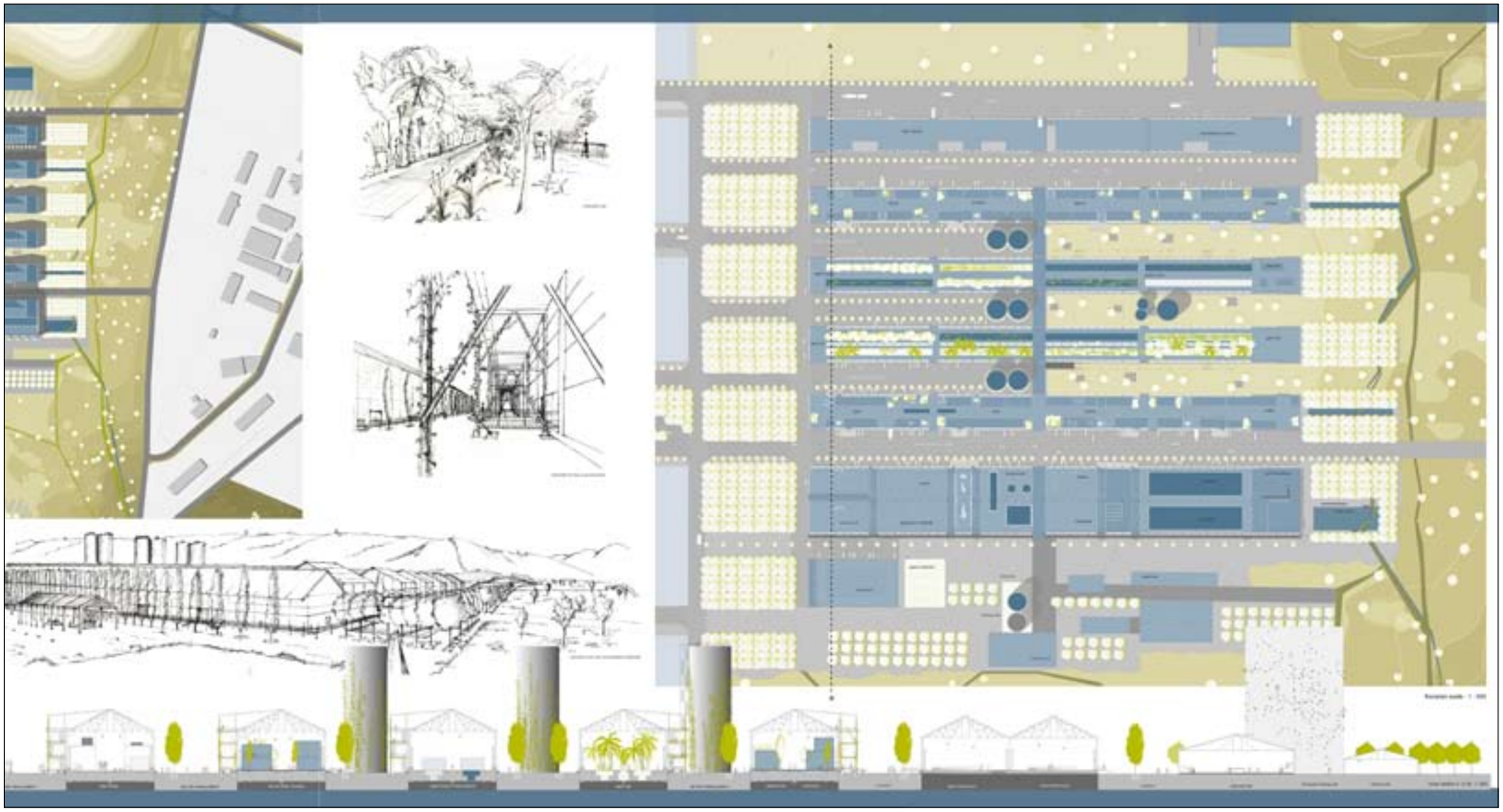
Visions - Scenarios - Strategies



„The link between the city and the river“

Bachelor Thesis
Winter term 2007/08

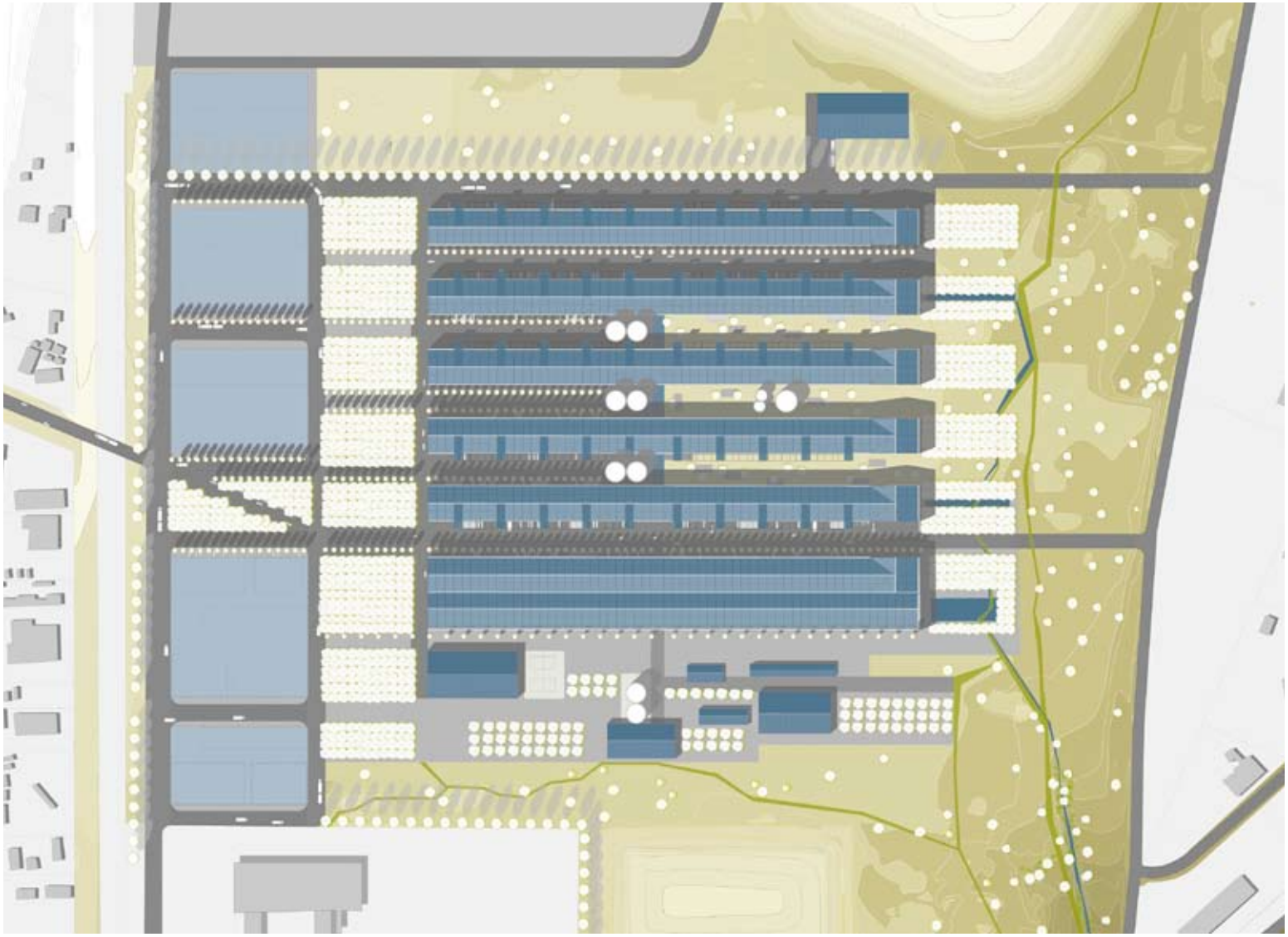
Design concept by:
Hans Vollmer



Master Plan

„The link between the city and the river“

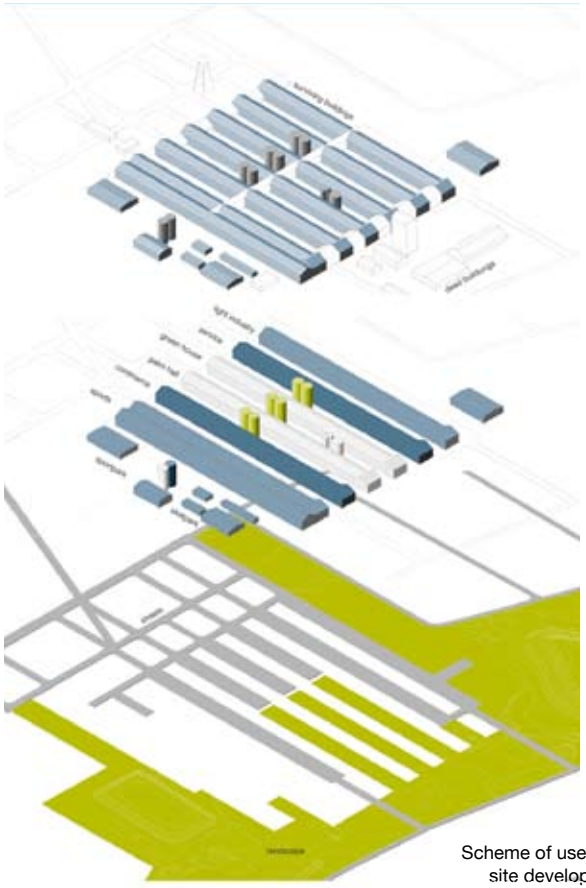
Visions - Scenarios - Strategies



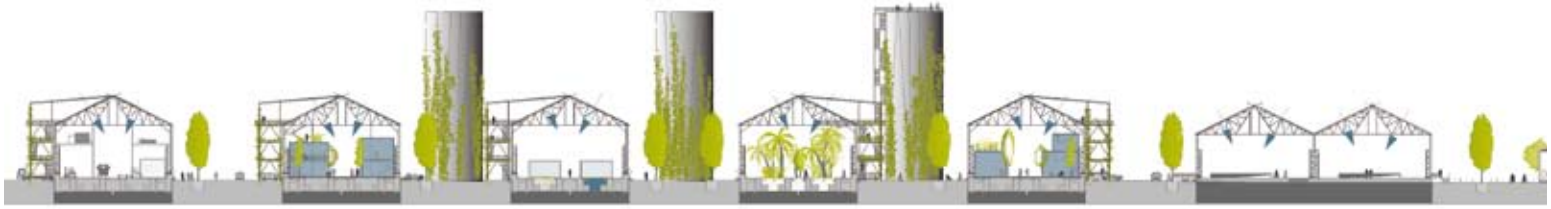
Floor Plan, original scale 1:1000m

„The Link between the City and the River“
The central hall complex with its longitudinal orientation is being interpreted as a binding component between river and city. On the city facing side of the halls, there will be a simple development system with parking areas in front of the halls. On the opposite side the landscape is seeping into the opened up court yards, and therefore connects the complex with the surrounding. Furthermore the reuse of some halls for indoor sports connect the complex functionally with the surrounding. The spacious outdoor area is also connected to the river via a multi-purpose track for skaters, cyclists and pedestrians, that runs past the pond and then meets the river trail. Besides a commercially used hall, a green house with facilities for research and propagation of plants for the local fruit growing sector, will be installed.

Palm hall



Scheme of uses and site development



Cross section

„Green Spine“

Visions - Scenarios - Strategies

„Green Spine“

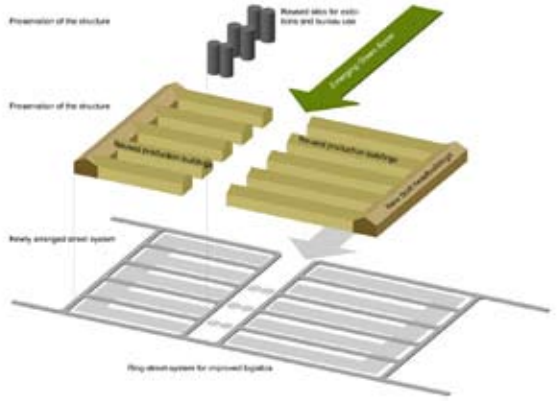
Master Thesis
Winter term 2007/08

Design concept by:
Fabian Heck

Master Plan

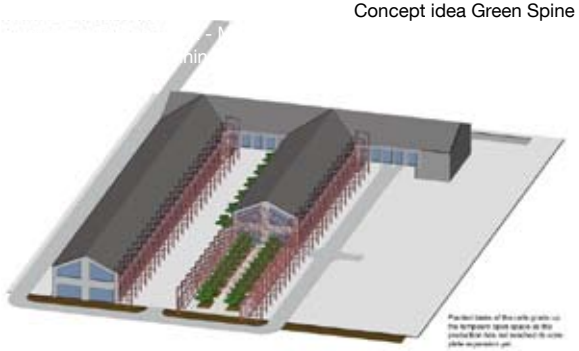
Floor Plan, original scale 1:1000m

Flexible Structure in Old Forms
The complex is kept in its size and structure. But the halls can grow and shrink in a flexible form that is given by the girders. The flexible building structure can easily react on changes of required space of companies. Partly unused parts of the former halls will be used as temporary open space canopied by the preserved girders. This system stretches out to the center of the hall complex, where the green spine of the complex can be found. Here again the girders are going to be conserved and vegetated.

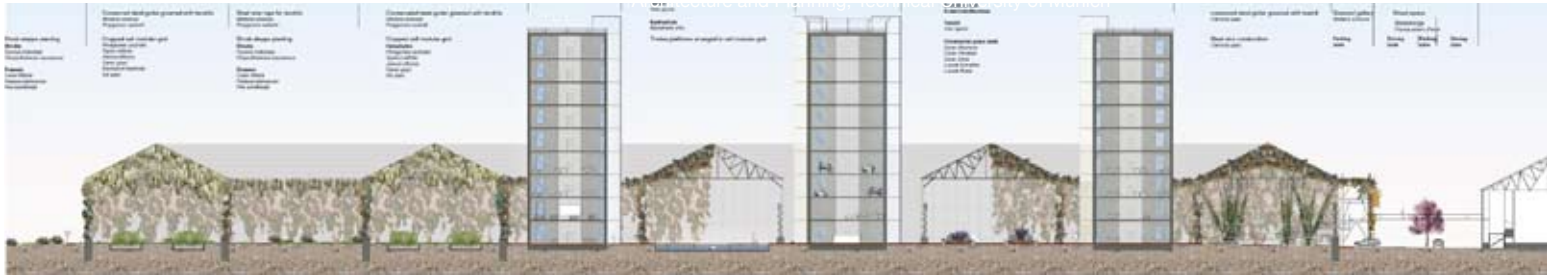


Concept idea Green Spine

Ornamental grass square with view to exhibition silo



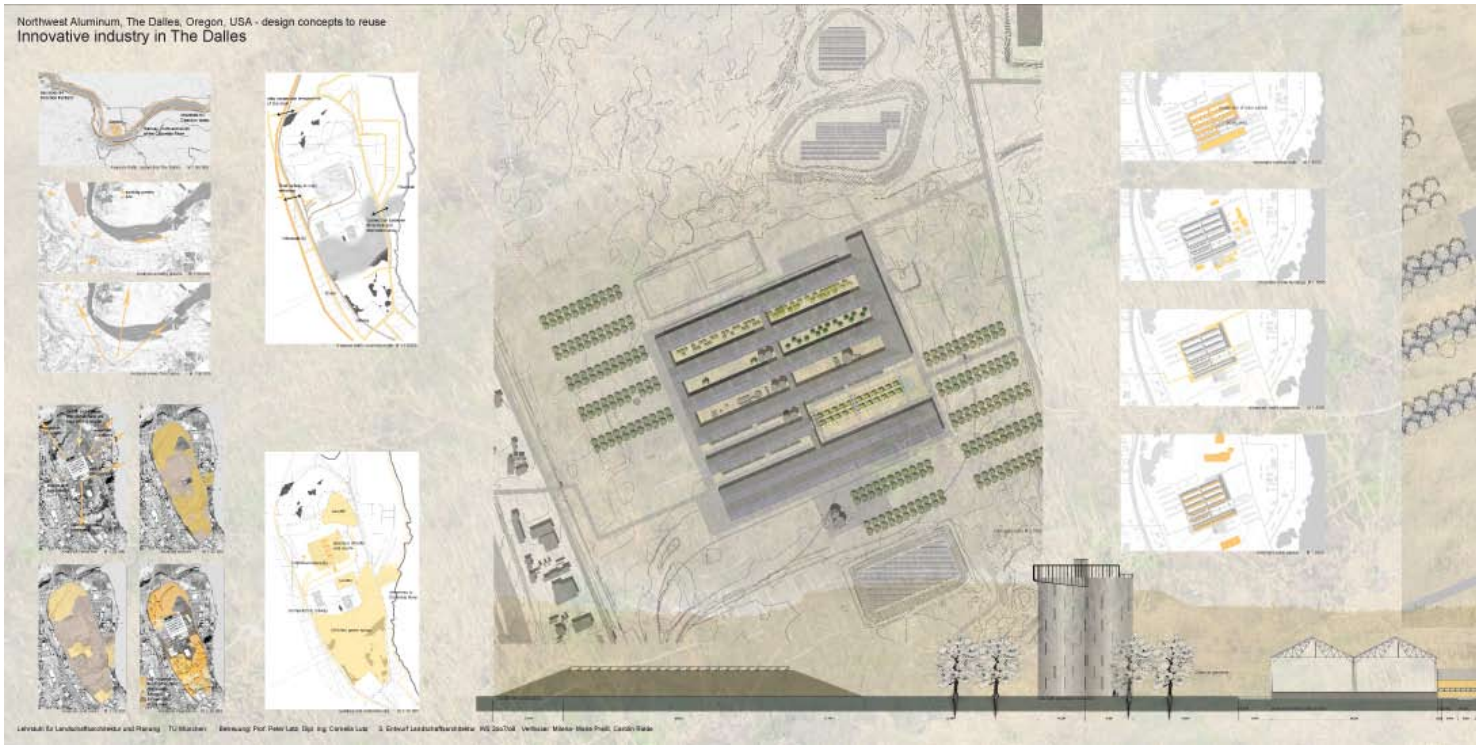
Concept idea hall with minimum expansion



Cross section Green Spine

„Innovative Industry in The Dalles“

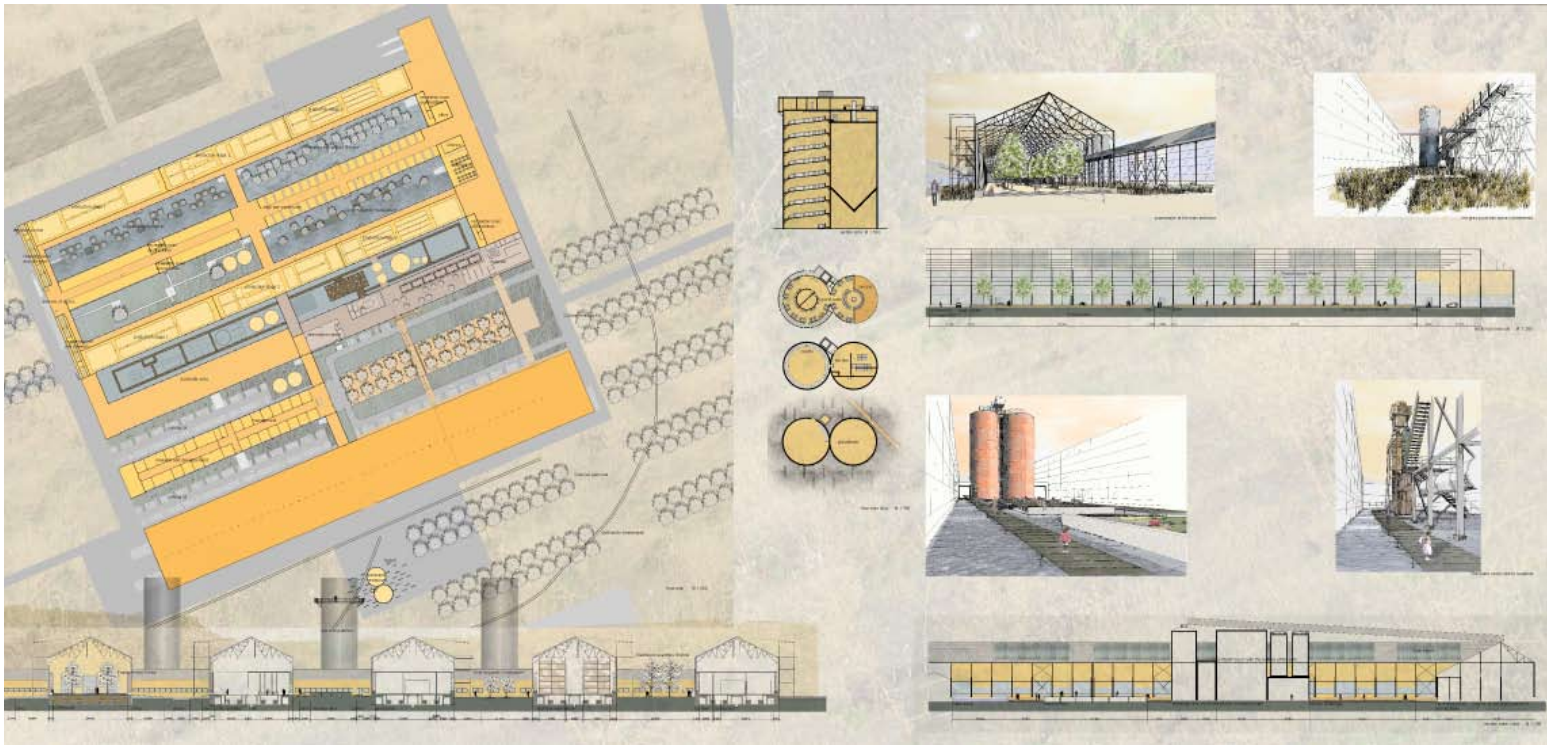
Visions - Scenarios - Strategies



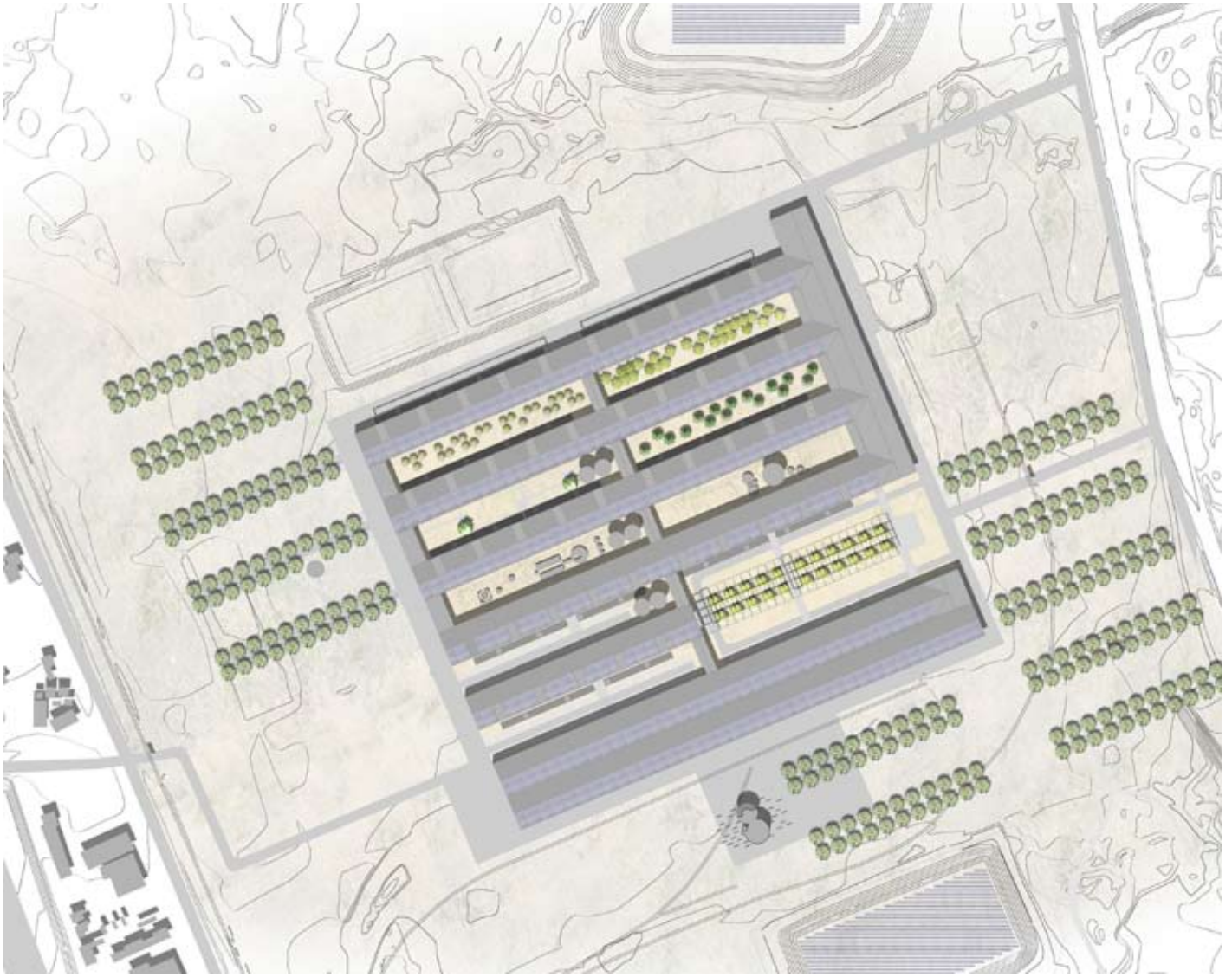
„Innovative Industry in The Dalles“

Design project
Winter term 2007/08

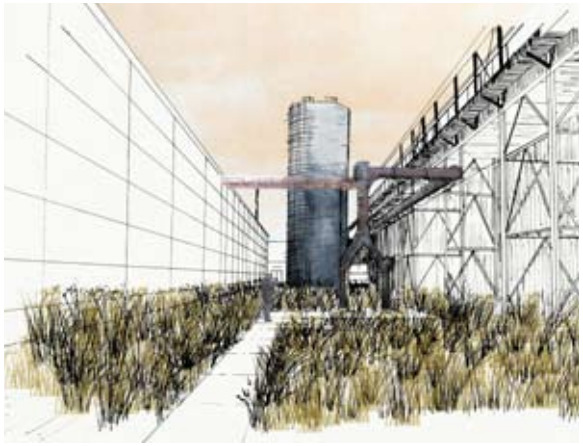
Design concept by:
Milena-Marie Preiß
Carolin Riede



Master Plan

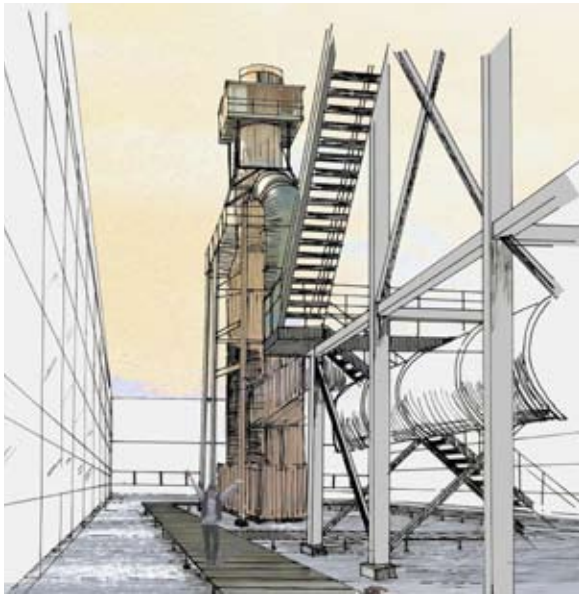


Floor Plan, original scale 1:1000m

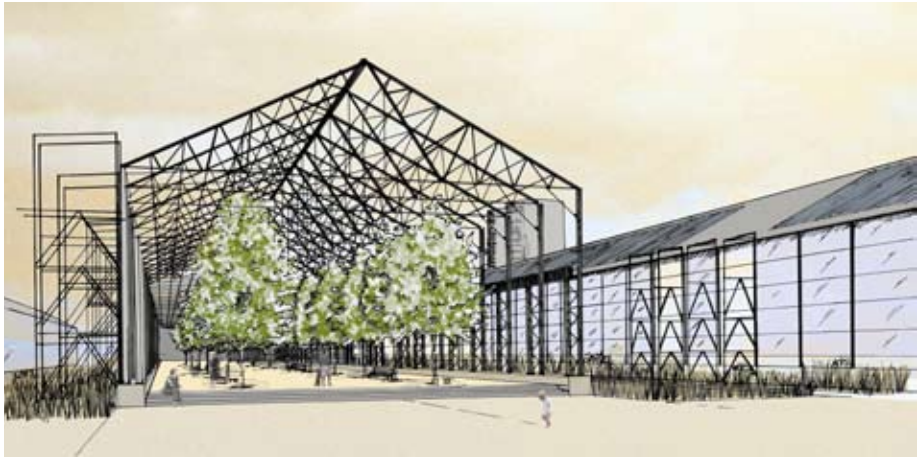


The grass court with old industrial relicts

„Innovative Industry and Minimalist Design“
The structure and the shape of the halls will be preserved and the complex will be changed to an innovative industrial site for production of new energy technologies as solar panels. Additionally a information center and a museum are established.
The courts and their uses are adapted at the uses inside the halls. There are representative public ones, which include two water filled courts and a big entrance area with a stripped hall that becomes a planted promenade. The private courts offer contemplative space for the employees. Their minimalist design differs by planting trees with different unique aspects and by installing different wide surfaces, as grassland or rocky darkish basalt ground.



The water court with view to the former dry-scrubbing system



Promenade at the main entrance

Summary

By dialogues between representatives of the owner community, the city, the port, the environmental office EPA, the department of environmental quality, and the citizens at the round table as well as the work of the design team, it was possible to develop new aspects for the location and to show them in drafts.
Perspectives for the possibility of post and re-utilization of existing structures on old industry locations could also be demonstrated by the drafts for the case study.
Even in the U.S.A., a post and re-utilization of existing constructional structures within this range still is unusual, but in the sense of a sustainable handling of resources not only desirable but also socially necessary.
This was valued as a great benefit by all participants, even though at the location itself these results had not been able to effect changes of the existing planning and implementation conclusions on this level, and the halls were removed.
A further participation of the public under inclusion of important groups and stakeholders would have not only strengthened the relevance of the round table topics but also effected an expansion of the topic spectrum.
An especial relevance within the Charrette had the cooperation on university level.
Therefore, both universities the University of Oregon, Eugene and the TUM had already dealt in the run up to the Charrette by different ways of working with the location.
During the Charrette, there was an effective and lively intercultural exchange in the design teams consisting of German students and young engineers, basing on the previous knowledge.
Not only the different approaching and working methods for the global problem of the re-integration of old industry locations was theoretically discussed, but also strategies and design concepts for the location were collectively developed.
Together with the long term projects shown during the Charrette, which had been developed in advance at the chair of landscape architecture and planning at the TUM, a comprehensive pool of alternatives of high quality was established.

Figures

The picture on the cover shows the Icon of the Dalles - the former Northwest Aluminum Mill

Master Thesis Sophie Lueg


Site plan
Scale 1:1000