Thesis Title
Development opportunities for the new waterfront in south side of Kungsholmen in terms of tourism and recreation. an urban design approach to vibrant urban waterfront development in Stockholm.

Name of the author: Mohammed Anisur Rahman

Degree Project SoM EX 2010–46
Master Program Urban Planning and Design

Stockholm 2010
KTH, Department of Urban Planning and Environment
Division of Urban and Regional Studies
Kungliga Tekniska högskolan
Thesis Title

Development opportunities for the new waterfront in south side of Kungsholmen in terms of tourism and recreation: an urban design approach to vibrant urban waterfront development in Stockholm.

Case study

Integrated waterfront development of south side of Kungsholmen, a proposal for connecting Kungsholmen water front with the City Centre.

Stockholm, December 2010
Mohammed Anisur Rahman
Urban Planning and Design,
Royal Institute of Technology (KTH)
Contents
Acknowledgements
Abstract
Introduction
Objectives & Goals of the study
Hypothesis
Study Approach and Methodology
Chapter 1
1. Problem formulation
   1.1 What is missing, lacking in the site area
   1.2 Why it is perceived as a problem:
      1.2.1 Importance of tourism now a day.
      1.2.2 How is other country earning money from this factor?
   1.3. How is existing site now in terms of waterfront recreation?
      1.3.1. Empirical investigation, overall site analysis
      1.3.1.1 Architecture and Urban Landscape Design
      1.3.1.2 Mixed-Use Waterfront
      1.3.1.3 Streets, Pedestrian and Bicycle route
      1.3.1.4 Seasonal activities
   1.4 Questioner Analysis
      1.4.1 Discussions and Conclusion
Chapter 2
2. Research question.
   2.1 The Vision for the proposal.
   2.2 Goals of the Vision
      2.2.1 Create multiple destination and their connections.
      2.2.2 Use activities to connect destinations
      2.2.3 Use Alternative travel options
      2.3.4 Enhance economic vitality
Chapter 3

3. Literature search and investigation.

3.1 International Case Studies
   3.1.1 Rheinuferpromenade (River Rhine Promenade)
   3.1.2 Circular Quay
   3.1.3 Ribeira District,
   3.1.4 People's Park,
   3.1.5 Aker Brygge Harbor front

3.2. Criteria of good quality waterfront recreation space
   3.2.1 Location
   3.2.2 Function
   3.2.3 Accessibility
   3.2.4 Attraction
   3.2.5 Sense of Place
   3.2.6 Integration
   3.2.7 Visual Appropriateness
   3.2.8 Environmental Quality

Chapter 4

4. Application of the Design Guidelines to Kungsholmen Waterfronts
   4.1 Proposal Recommendation
   4.2 Conceptual Plan Proposal
   4.3 Proposed Master Layout Plan of Kungsholman waterfronts
      4.3.1 Detail 01
      4.3.2 Detail 02
      4.3.3 Detail 03
   4.4 Proposal Consideration

BIBLIOGRAPHY
Acknowledgement

I would like first of all to thank my supervisor Jerker Söderlind. He has given me considerable guidance and support throughout my research studies and has taught me many subjects.

This thesis was an enjoyable work to complete for many ways. It was pleasure to be able to complete such a research with the support of all my UPD teachers, their help made it easy to finish this task.

I would also like to thank all of my classmates of UPD for their coordination, help and support during my study period.

Most of all, I would like to take this opportunity to thank my parents and my family for supporting my decision to continue studying and for their continuous dedication and encouragement during my entire study in Sweden.
Abstract

This paper aims to discuss the potentiality of tourism and recreation in Stockholm by developing its waterfronts. Waterfronts neighbourhood of south side of Kungsholmen has been taken as a case study which has lots of potentiality to develop in terms of tourism and recreations. Urban waterfront planning and redevelopment is currently a civic interest which consists of both challenges as well as opportunities. It has adapted different significant in different urban cultures. Waterfronts by the side of Kungsholmen are unique and valuable resources of Stockholm. However, most of the waterfronts recreation grounds are not well designed and located or not properly linked with the nearby tourist destinations. The goal of the study is to create good quality recreation space along the waterfronts of the south side of Kungsholmen and connect them with the central tourist spots of Gamlastan. The study has done through literature reviews of overseas examples to formulate the performance criteria that help to evaluate the existing quality of waterfront recreation development and to formulate the urban design guidelines. The study will take a macro level study on the entire waterfronts area.
Introduction

Peoples are naturally drawn to water, hence the importance of waterfront. To demonstrate the significance of waterfront, in the classic phrase, American anthropologist Loren Eiseley said, “If there is a magic on this planet, it is contained in water, water is a fundamental attraction in all cultures and among all classes of the people, from Alaska to Argentina. It is a favorite location for all celebration and ceremonies, for evening picnics on beaches of Bahrain, religious rites on the Ganges River in Benaras, for dragon boat race in Shanghai, and for New Years oceanfront offerings for the goddess Eimanja in Brazil. Whether for ritual of recreation, people seek the water edge”.  

And Craig-Smith and Fagence (1995) also states, “Each community is and must remain for its own sake, unique and distinctive in its character, history, economy, and political leadership. When well- designed and executed the waterfronts venues around the globe respond to this instinct and create schemes that grow from and reflect the spirit and aspirations of the city they are meant to enhance. The success of the new urban waterfronts signals, then, a basic desire not only to get to or near the water but to live, work and play in and to be part of healthy, stimulating cities”.  

Redevelopment on the urban waterfronts for commercial and recreation purposes is one of the typical characteristics of the many major waterfront cities. However, most of the waterfronts in the world are mainly use for a wide range of functional uses such as cargo handling area, ferry pier and typhoon shelter, and only small portion are devoted to public open space for recreation and tourism purposes.

Craig-Smith and Fagence (1995) states, “The principal purposes of waterfront redevelopment include the achievement of public access to waterfront, improvement of the image of derelict waterfront areas, and the achievement of economic regeneration by breathing new life into such areas”.

Stockholm was much build because of its waterways. The city is generally known as a Beauty on Water, or Venice of the North. Unfortunately its waterfront side is not much developed as it could be. To improve the city’s quality of life and environment; waterfront recreations and amusements play a very important role. It will also support the city's economic foundation, and attract private investment.

Kungsholmen waterside neighborhood will be redeveloped with recreation, leisure and tourism in mind. People always like to live in tourist area because tourist area has shorter distance to the shops and other public services then those living in similar areas lacking in tourism. This prove that tourist industry always play significant role or growth and development in many areas. At the same time, the industries produce job opportunities, business development, entrepreneurship, service and employment in other areas and industries.

Objectives & Goals of the study

This study deals with the waterfront developments through the perspective of tourism and recreation and investigates the waterfront development through the available research examples in the world to formulate the design criteria as a theory of urban waterfront design guideline of Kungsholmen waterside.

The basic objectives are

- What should be the 'Design Approach' for urban waterfronts development in Kungsholmen at present recreational context?

---

• What kind of 'Urban Design Guidelines' is essential for urban waterfront development that will balance the commercial and community interest, public and private interest?

• To identify the key issues to be addressed in the design and development of urban waterfront.

• It also aims to identify the weaknesses of existing waterfront neighborhood in terms of tourism and recreation.

• To improve the connection of waterfront neighborhood with the other tourist destination of central Stockholm.

**Hypothesis**

With the direction of proper urban design principles and approach for waterfront areas a vibrant, attractive, and accessible waterfront area will be generated in south side of Kungsholmen. Also, the same urban design principles and approach is hoped to be applicable to other urban waterfront areas in the context of Kungsholmen which share similar situations. Some hypotheses are proposed which need to be answered on the research that existing design natures of waterfront recreation amenities are not fully satisfactory.

**Study Approach and Methodology**

Initially, an overview of urban waterfront developments in Kungsholmen and analysis of the site will be applied to identify the problem of existing site in terms of tourism and recreation issues. Site analysis, questionnaire, short discussion of related waterfront neighborhoods is used as tools to formulate the problem.
To address the design issues, first, literature review on urban design principles of waterfront areas will be applied to establish an urban design framework. Second, the case study of relevant examples will be analyze to test the application of the urban design frameworks and images the possible achievement. Third, the established urban design framework will be introduced to the chosen site through the vision of the study. Finally, the urban design principles and approach will be summarized and propose a design recommendation for the study site.

**Flow chart of major tasks**

1. **Problems identification.**
   - Formulation of concepts.
   - Aims, objectives & methodology.

2. **Design frameworks and research questions.**
   - Established urban design frameworks.
   - Introduces a vision of the study.

3. **Theoretical frameworks**
   - Case studies and Literatures review
   - Review of overseas case studies.
   - Development of theoretical frameworks

4. **Application.**
   - Application of the design guidelines.
   - on the selected water front area.
Chapter 1

Problem formulation

1.1 What is missing, lacking

Existing south part waterfront area is the most valuable area of Kungsholmen in terms of location and visual appropriateness towards city and lake water (Fig 1.1.A1–Fig 1.1.A7). City hall is situated in its south east corner, is the most viewable place and only tourist destination and public gathering space. Tourist usually do not go further along the lake side because there are no further destination like, beautiful water front landscape, recreations space or parks. It seems waterside are not well designed, it is kind of ignored and left over urban place. But it is clear that this area do not stretching any people.

There is very nice view from neighborhoods to towards the lake and other parts of the city but there are few places from where visitors can relax and enjoy the beauty of the water and city.
Unplanned parking, power station, stone workshop, restaurants makes visual obstacle towards the lake. Similarly those structures are destroying the beauty and nature of the area. In the same way it is not good setting to have such kind of structure in any valuable water fronts. Water front apartments are getting more or less view of the lake and city but still there is opportunity to give lake view to other neighborhoods of the area. As a whole view towards the city and water from neighborhood, it’s not good and well defined.

If we think the accessibility of Kungsholmen, it is good and well connected with the city by all the way. But accessibility of south side waterfront and city hall is not well accessible and distinct from the inner city. Train line and highway connections Centralbron of north south make visual and physical barrier to reach there (Fig 1.1, B1–Fig 1.1.B3).

Only one tourist destination has not connected with other tourist destination properly. City hall is the most important architecture of the site area. It is one of the top ten viewable spot in terms of tourist interest. Every year huge number of
tourists all over the world comes to visit city hall. It is one of the ionic buildings of Stockholm. City Halls physical connection with other tourist spot like Gamlastan, Kings Palace or City Centre is not well defined as it is visually. Visitors cannot reach city hall by following visual linkage from old town, they have to take another way to reach there. In total City hall has confusing pedestrian link with the city.

American Urban Designer Ethen Kent said in his website PPS, “The waterfront should be one of the main destinations in any city, not a place to pass through in a car. Raised freeways, wide roads, and parking lots dominate waterfront views, cutting people off from what should be a wonderful public asset”\(^4\). Existing parking condition of the study area is lower standard (Fig 1.1.C1–Fig 1.1.C6) and all streets of south side are dominated by street parking. The site area is seems to be waterfront parking then water front neighbourhood. Half of the entire street Norr Mölajarstrand is occupied by neighbourhood parking or tourist bus parking. All these parking activity created barrier to reach people to the waterfront easily.

---

\(^4\) http://www.pps.org/waterfronts/info/waterfronts_articles/waterfronts_gone_wrong
1.2 Why it is perceived as a problem

To demonstrate the important of tourism Ann Breen & Dick Rigby (1996) said, “Our global culture today desire more open space for recreation and physical activities. With the rise of middle class and changing labor patterns in many countries, many people enjoy more leisure time. More time and more mobility have caused an expansion of tourism in general, and the emergence of what has come to be called cultural tourism and eco tourism each with its own nuances. These related factors add up to a market for sophisticated installations along water bodies that combine areas of the open space and leisure with shop, cafes and restaurants, and provide culture as well as recreational attractions. These establishments cater not only to local residents and traditional tourist but also to visitors from nearby areas, the regional tourist.\(^5\)

1.2.1 Importance of tourism now a day\(^6\)

Tourism is a rising industry. From 1950 to 2005, the international tourists flow has grown from 25 millions to 805 millions, which accounts for an annual growth of 6.5%. The latest report on global tourism shows a growth of 2% of international tourists and arrivals reaching 924 millions in 2008.

The tourism industry in Sweden is not developing in the same speed as other regions in the world, and tourism is contributing less significant to the Swedish economy than the other countries. According to Nutek, the Swedish Agency for Economic and Regional Growth, (the public authority in Sweden for statistical data about tourism industry in Sweden), Sweden’s gross domestic product (GDP) has a lower percentage, 2.9% consisting tourism compared to other countries, e.g. Spain has 11%; Norway has 4.7% of GDP that consists of tourism. However, the tourism industry has been growing in terms of its importance in Sweden.


Comparing to the neighboring countries, Norway, Denmark and Finland, Sweden has the largest share of foreign tourism (Nutek, 2008). Therefore, Sweden has a leading position in the tourism industry within the Scandinavian region.

Regarding actual revenue generated, leisure and business tourists spent over SEK 215 billions in Sweden during 2006. Tourism industry has provided employment more than the total numbers employed in Sweden by the eleven major companies including Volvo AB and Ericsson. Therefore, tourism is becoming more influential in Swedish context.

There are many indications that Stockholm will continue to develop as a tourist destination. It has a lot to offer – long stretches of beaches, a magnificent alpine world, open water, vibrant metropolitan environments, a rich cultural life, a vital cultural landscape and exciting historical settings. The city has a clean nature, a well-developed infrastructure and the fantastic opportunities that the right of common access offers. There are a lot of place to arrange conferences, meetings and events. It is perceived as being safe and secure. These are qualities that can be utilized to develop a tourist destination.

The importance of the tourist industry to Sweden

- The tourist industry had a turnover of SEK 172 billion in 2004.
- The tourist industry generated SEK 48.5 billion in export income in 2004.
- The tourist industry employed over 127 000 people in 2004.
- The tourist industry is the only exporting industry that generates revenue from VAT. In 2004, SEK 7 billion was generated in VAT revenue from foreign visitors.

1.2.2 How is other country earning money from that factor?
Tourism has become a popular global leisure activity. In 2008, there were over 922 million international tourist arrivals, with a growth of 1.9% as compared to
2007. International tourism receipts grew to US$944 billion (euro 642 billion) in 2008, corresponding to an increase in real terms of 1.8%.

The development of high-end tourist amenities and visitor attractions, in combination with an aggressive overseas marketing campaign, Dubai is rapidly increasing in popularity as a holiday destination.

Dubai city is always creating new things to attract people. The city is also attracting a lot of business in the lucrative MICE [meetings, incentives, conferences and exhibitions market]. The Dubai World Trade Centre, with its massive Exhibition Halls alongside is a fantastic facility for business conferences, right next to the luxury hotels of Sheikh Zayed Road etc inviting people all over the world.

Outstanding world-class engineering waterfront projects, such as Palm Jumeirah; Palm Jebel Ali; Palm Deira; Dubai Marina; Burj Dubai Tower; Al Burj Tower and The World islands are also attracting thousands of extra tourists to Dubai and creating tremendous global interest in the emirate.

Tourism is vital for many countries also, such as Egypt, Greece and Thailand, and many island nations, such as The Bahamas, Fiji, Maldives and the Seychelles, due to the large intake of money for businesses with their goods and services and the opportunity for employment in the service industries associated with tourism. These service industries include transportation services, such as airlines, cruise ships and taxis, hospitality services, such as accommodations, including hotels and resorts, and entertainment venues, such as amusement parks, casinos, shopping malls, various music venues and the theatre.

1.3 How existing case study create problem?
In this chapter I discuss mainly the existing problem of Kungsholmen in terms of tourism and waterfront recreation and how Kungsholmen waterfronts connect with city center is. I have done some empirical investigation and site analysis to demonstrate the problem.
1.3.1 Empirical investigation, overall site analysis.

1.3.1.1 Architecture and Urban Landscape Design

Existing Lakeside building typology is called Functionalist buildings; Elevations are same as city’s other parts building (Fig 1.1.D1-Fig 1.1.D2). Some apartments have balcony towards south side to get lake view, building are not design to maximize water view. Almost all apartment buildings are 9 storied towards lakeside, and ground floors are used for commercial purpose and upper floors are residential. Functionalist buildings along the southern waterfront Norr Mölkarstrand has no special design in the facade of the buildings to get lake view.

There are some green belts on the lake side but those green are not well designed and not connected other green belt of the area and not correlated with each other (Fig 1.1.E1-Fig 1.1.E8).
The existing walking and cycle path beside the shoreline are not well designed; has grown up spontaneously. The public amenities like benches, deck, and platform, garden are not enough and not efficiently designed and located. Entire lakeside waterfront design developed spontaneously day by day and has no correlation with each other. Municipality has establish some extra structure like restaurant, power station etc without respecting waterfront and nature of the area for having money.

1.3.1.2 Mixed-Use Waterfront
Kungsholmen contain a diversity of commercial, residential and recreational functions. It is working as a viable and sustainable neighbourhood but not popular public destination. Entire Kungsholmen developed as a residential neighbourhood but its location, accessibility and waterfront view from neighbourhood forcing to make these areas as a mixed use waterfront
destination. According to PPS research, “Commercial and residential development plays an important role in a lively waterfront when integrated with a range of public uses”. Employments, recreations public and cultural activities are developing in Kungsholmen spontaneously. But still Kungsholmen has lacking of public uses to been a successful waterfront district.

1.3.1.5 Streets, Pedestrian and Bicycle route
Existing neighborhood street are dominated by cars and parking, making barrier to reach there easily (Fig. 1.1.F1). There are pedestrian and bicycle route but not well defined and interesting. Waterfronts are significantly enhanced when they can be accessed by means other than private vehicles. Walking and biking are another important part of the transportation mix; transportation mixes create waterfronts area vibrant and trouble-free accessible.

If promenades feature like pedestrian and bike lanes are unhampered by cars or parking pilot; then people are more at no difficulty to reach, and the full size of waterfront activity can flourish.

7 http://www.pps.org/waterfronts/info/waterfronts_articles/worst_waterfronts
1.3.1.6 Seasonal Events

Study area is not a place of any activities or event. Great waterfronts are the places that are full of people, day and night. They are the sites of festivals, markets, fireworks displays, concerts and other high-energy Gatherings. Kungsholmen is dominated by residential area and much residential development limits its diversity of waterfront uses and prevents 24 hours activities. Waterfront programming should take rainy-day and winter activities into account, and amenities should provide protection from stormy weather. Waterfront that can succeed in year-round conditions will gather the benefits of greater economic activity and higher attendance at public facilities.

1.4 Questioner Analysis

I have done some questioner analysis surveys by the inhabitants of the area and I sent it to twenty people in different places. There are the results. The questionnaire is attached as an appendix in the end. The result is as follows.

1. You are residents of
   1. Kungsholman
   2. Tourist
   3. Other neighbors of the city

2. How often do you have a walk in Kungsholman Waterfront?
   1. Every day
   2. Every week
   3. Monthly
   4. Seldom

3. Why do you come in Kungsholman Waterfront?
   1. Jobs or works
   2. Passing
   3. Eating or Shopping
   4. Recreation(Walking, Jogging, Fishing, Boating)
   5. Residents
4. Which season do you like best in Western Harbor?
   1. Spring
   2. Summer
   3. Autumn
   4. Winter

5. Which part do you like most in Kungholman?
   1. City hall
   2. Waterfront streets and parks
   3. Boating
   4. Clam and quietness of the area
   5. Beach

6. Which part you don’t like in Kungsholman?
   1. Streets parking
   2. Water side Highway
   3. Waterside Structure
   4. Calm and quietness of the area

7. Do you think that public amenities is enough here?
   1. Yes
   2. It can be improved
   3. No
08. Does the road and path through the space invite people from inner-city where they actually want to go?
   1. Yes
   2. No

09. Can people use a variety of transportation option, such as bus, train, car, bicycle, etc, to reach the place easily?
   1. Yes
   2. No

10. Does the space function for people with special needs
    1. Yes
    2. No

11. Can you see the space from a distance?
    1. Yes
    2. No
12. Can you easily walk to the place? For example, do you have to scurry between moving cars to get to the place?
   1. Yes
   2. No

Graph 1.4.2

13. Does the place make a good first impression?
   1. Yes
   2. No

14. Are there more women than men?
   1. Yes
   2. No

15. Are there enough places to sit? Are seats conveniently located? Do people have a choice of places to sit, either in the sun or shade
   1. Yes
   2. No

16. Are people taking pictures? Are there many photo opportunities available?
   1. Yes
   2. No
17. Do vehicles dominate pedestrian use of the space, or prevent them from easily getting to the space?
   1. Yes
   2. No

18. Is it used by people of different ages all times?
   1. Yes
   2. No

19. Are people in groups? Are they talking with one another?
   1. Yes
   2. No

20. Are there choices of things to do?
   1. Yes
   2. No
21. Is this a place where you would choose to meet your friends? Are others meeting friends here or running into them?
   1. Yes
   2. No

22. Do people seem to know each other by face or by name?
   1. Yes
   2. No

23. Do you bring your friends and relatives to see the place with pride?
   1. Yes
   2. No

24. Do you want any activity in winter and night?
   1. Yes
   2. No
1.4.1 Questioner Discussions and Conclusion

Question 1 to 7 are more general questions. From this survey I got that, this study area is dominated by neighbor then tourist; have less public amenities for walking and recreation. Street parking, waterside structure, calm and quietness are problem according to some peoples. For tourist and neighbors and to make this area effective, more public amenities and leisure recreations are needed.

Question 08 to 12 is more related to accessibility and visually. Many people agree that Kungsholmen waterfronts don’t have good connection and visibility. We can judge the accessibility of a place by its connections to its surroundings, both visual and physical. A successful public space is easy to get to and get through; it is visible both from a distance and up close. To make this project vibrant, it is necessary to propose a connection of waterfront with the City Center and different mode of transportations and visibility with the city.

Question 13 to 17 are mainly associated with comforts and images of an area. Whether a place is comfortable or popular its depends on safety, cleanliness, and
the availability of places to sit. Give a variety of option to sit where they like is important. All these things create a good image and it is key to its success.

Question 18 to 20 is related with uses and activities. I got negative impression of the site from these question, different activity and choice of things to do and public participation can solve these problems. Uses & Activities are the basic building blocks of a place. Having something to do, gives people a reason to come, to a place and return. When there is nothing to do, a space will be empty and that generally means that something is wrong.

Question 21 to 24 focused on social issue mainly. Developing a tourist destination in the water front area will bring people from city center and other destination. Community place, parks, shopping etc are places where people like to meet each other, feel comfort. Sociability is a difficult quality for a place to achieve. When people see friends, meet and welcome their neighbors, and feel comfortable interacting with strangers, they have a tendency to feel a stronger sense of place or attachment to their community.
Chapter 2

Research question

2.1 The Vision for the Proposal

“New tourism friendly water fronts”

Ann Breen & Dick Rigby (1996) states the quality of waterfronts, “There is a quality about water which call to the most deep-rooted and atavistic part of our nature. In the deep canyons of our cities, water, along with fire, trees and the almost hidden sky above, are the elements which can still tie us to our primitive past. Of all these, water and fire evoke the most direct responses. Fire in the city is dangerous, negative and evil, while water is the positive and life-giving, the element from which we all have come. The wildness and exuberance of water stirs us with its qualities of nonconformity and vigor.”

People are inherently drawn to water. Hence, the importance of waterfront development. Waterfronts provide an excellent opportunity place to live, enjoy art, recreate, shop, or relax by the water. Waterfront areas provide multiuse activities; improve social interaction and a sense of community.

Ann Breen & Dick Rigby (1996) states, “Waterfront redevelopment and expansion is, in short, the best current example globally of the resilience of cities, of their ability to adapt to changed circumstances, to adjust to new technological impacts, to seize opportunities and to forgo new images for themselves, as well as to create new or altered neighborhoods for their inhabitants.”

Stockholm is the Sweden’s largest city, rapidly growing metropolitan region on all its side. Stockholm is famous for its water side, known as a Venice of the north. It is a city is build upon 14 islands, surrounded by Lake Mälar and the

---

Baltic Sea. City has stunning view from its water side. Every year huge number of tourists comes to see its beauty, natures and water. By developing or redeveloping city’s some water front, it can increase more tourists from all over the world.

In this case study, I am working on integrated waterfront development of south side of Kungsholmen.

Vision of this project is to transform the waterfront side into a series of sustainable, mixed-use, urban precincts integrated with green parks, waterfronts activity, employment and recreation. South side of Kungsholmen area will be connect to the waterfront parks, ferries wheel, new type of recreation amenities and with a new atmosphere. This area will be available for almost all the year round, available to everyone by car, bike or foot. Old tourist destination like Gamlastan will be connected with new tourist destination. New connecting structure will artfully and sustain ably integrate with the old build environment. This proposal of connecting Kungsholmen waterfront with city centre will help the waterfront area to redevelope for explore and enjoy for tourist recreation and business.

2.2 Steps of the vision

2.2.1 Create multiple destinations and their connections.
An effective way to structure a vision process is to set a goal of creating destinations along the entire waterfront. This focuses on destinations, rather than "open space" or parks. When any destinations has been identified, then nearby residents, businesses, community organizations and other stakeholders begin to define the uses and activities they want to see at each place. Ideally, any destination can create various and related activities, ensuring that no single use will predominates. Such as London Eye has created a destination where there was none before.
Each destination should be incorporated into a vision for the waterfront as a whole. The key is to achieve continuity, especially when it comes to the pedestrian experience. A walk-able waterfront with a wide variety of activity along it will successfully connect destinations, allowing each to strengthen the others.

To achieve continuity a walk-able waterfront with a wide variety of activity along it will successfully connect destinations, allow each to string then the others. Creating these connections is a fascinating challenge that entails mixing uses (such as housing, parks, entertainment and retail) and mixing partners (such as public institutions and local business owners).

**2.2.2 Use activity to connect destinations**

According to PPS, “Passive areas where people can sit or stroll are successful when they connect to destinations where more activities are available, forming a diverse whole”\(^{10}\). By developing integrated waterfront development, site area will be connected with surrounding area visually and commercially and recreationally. Tourism activity will be spread out Gamlastan to City hall, City hall to Rökåmbshov. Entire area will be connected with surrounding city in terms

\(^{10}\) http://www.pps.org/waterfronts/info/waterfronts_articles/waterfronts_gone_wrong
of its commercial and recreational activity. Some public activity like shops or parks could be used to connect destinations.

As of PPS study, “Passive open space polishing a damper on the inherent vibrancy of waterfront, the world's best waterfront parks use as connective tissue, using them to link major destinations together”\(^{11}\).

### 2.2.3 Use alternative travel options

Waterfronts are dramatically enhanced when they can be accessed by means other than private vehicles. Walking and biking are another important part of the transportation mix, and many of the best waterfront promenades feature pedestrian and bike lanes. Unhampered by cars or parking pilot, people are more at no difficulty, and the full breadth of waterfront activity can flourish. Waterway can be used as an alternative travel route for transfer people one place to another, like SL Passenger’s boat. Tourist are fond of travelling waterway. This area may turn as a traffic hub by developing a passenger’s boat terminal towards other destinations.

### 2.2.4 Enhance economic vitality

By creating surroundings attractive for commercial opportunities and businesses, including water-related recreation and activities, research and development, goods and service establishments, and educational and cultural facilities.

---

\(^{11}\) http://www.pps.org/waterfronts/info/waterfronts_articles/turn_waterfront_around
Create waterfront area as a most interesting and playful of the site, by building something is necessary and interesting for all ages of people or tourist. Example like public market (example: Camden market, UK), outdoor fish market in the harbour (Example: Bergen fish market, Norway) so on.
Chapter 3
Literature search and investigation

3.1 International Case Studies

The following spots are well-known as the best waterfront public spaces around the world. Even though it is remarkably rare to find any waterfront place that succeeds as a whole, although there are some notable elements in all successful waterfront places. In general in following waterfronts places I considered how well it connects by foot to the rest of the city and sustains a variety of public activities in multiple areas, how they work separately as an individual destinations along the water and how they attract people in the waterfront area.

3.1.1 Rheinuferpromenade (River Rhine Promenade)

River Rhine
Düsseldorf, Germany

Location and Background
This is one of the significance waterfront development area in Germany, is one of the most successful, vibrant waterfront transformations anywhere else in Europe. The Promenade designed in the banks of the Rhine, and district known as Old town, Carlstadt and Unterbilk. The Rhine was built in 1900, at that time there was two level, lower level used for handling of shipping traffic and the others facilities and upper level used as a Promenade. After second world war entire promenade transformed as a multilane highway which separate the Rhine with the inner city. In 1990s this multilane highway, the most important north-south connection has been placed in 1928 meters underground tunnel. The cars are completely displaced from the area and the lower level, a former port area, and the parking area of 1000 car, has now become a large open space, pedestrians, cyclists and place for skaters and streets performers. The design implemented the architect Niklaus Fritschi, B. Stahl and G. Baum. They were

http://de.wikipedia.org/wiki/Rheinuferpromenade
inspired by the historical design of the architect John Radke from the year 1900. Thus, the separation into an upper and a lower ground yard has been maintained. On the Upper Yard was carried out the erection of 120 seats and the planting of 600 plane trees that line the avenue. This separates a walk and a bike path from each other. The remaining elements of the historic waterfront experience, such as the Pegeluhr or large terraces, have been incorporated into the plans. In October 1997 the Rhine Promenade adds another attraction, The Rhine Bridge over on it. Science then The Rhine promenade is becomes popular destination of the visitors and neighbors.

Main features of Rheinuferpromenade
Access and Linkage
The areas along the Rhine promenade are now reserved primarily for pedestrians and cyclists. North–south vehicular traffic runs in a tunnel to make car access very limited and restricted in the area. Many people nearby use the space, for example office workers and employees of nearby government buildings. The promenade itself is largely pedestrians, for the cyclist is on the upper yard parallel to the plane trees designated a cycle path (Fig 3.1.1A7). There is a subway/tram station nearby.
Public Amenities

Seating on benches under plane trees, clean and well-maintained, safe and no vehicles in sight. Asphalt surface and railings on the Lower Rhine Shipyards.

Uses and Activities

Lower level entirely paved which is used by skateboarders, inline skaters and cyclists. Several simple and temporary restaurants, beer bar, (Fig 3.1.1A1, Fig 3.1.1A4) gardens with colorful awnings in front have been integrated into the flood wall (permanent structures are not allowed due to flooding). The upper level has two continuous rows of plane trees with benches in between.

The southern stretch is wider and has a sloping lawn down to the river (Fig 3.1.1A5). The northern stretch is more urban and features a re-Designed square (Burgplatz) with steps down to the river (Fig 3.1.1A6). This is the place where people congregate in summer, sitting on the steps and watching the ships on the river pass by. Open-air-cinema in summer, sunbathing, and occasional public events (markets, exhibitions, concerts.

Sociability

Vibrant and active water front project, without doubt this is a meeting and celebration place. Popular destination for visitors and locals’ people. People of different ages are come here for different purpose. There is lot of things to see and to do.
Design evaluation.

The simplicity, boldness and consistency of waterfront design seem to be the reasons for the success.

The neighboring area, Düsseldorf is post-war “Old Town” is Germany. It is the largest and most vibrant nightlife area. The new promenade now allows for extension of the evening and night-time activities straight to the river. Thereby, the scheme creates new connections from the city centre to the river. The whole stretch of waterfront is almost completely Pedestrian Street now (Fig 3.1.1A7).

It is also important to point out, that the scheme manages to extend the promenade southwards under appalling expressway bridge, the architects have placed a modern new theatre building right under the bridge to cheer up the dark uninviting space and to encourage passers-by to go forwards. The new waterfront is lined with residential and office buildings – most of them were in place already before the promenade was created.
3.1.2 Circular Quay  
Sydney, Australia

**History & Background\(^{13}\)**
Circular Quay is one of the famous waterfront area and a national focal point. Circular Quay is the transport hub of Sydney Harbor, gradually built up at the side of Sydney Cove. Circular Quay was originally used for shipping and slowly developed into a transport, leisure and recreational centre. Circular Quay was originally known as “Semi-Circular Quay”, this being the actual shape of the quay. The name was shortened for convenience. The Circular Quay railway station was opened on the 20th January 1956 and the elevated Cahill

\(^{13}\) [www.sydneyarchitecture.com/ROC/QUA.htm](http://www.sydneyarchitecture.com/ROC/QUA.htm)
expressway was opened on the 14th March 1958. Circular Quay is a focal point for many community celebrations, for both its historic significance as the birthplace of the Australian nation, and for its closeness to the Sydney icons of the Sydney Opera House and the Sydney Harbor Bridge. It is one of the main celebration points for the New Year's Eve and Australia Day fireworks displays. Circular Quay is also the home of Sydney's Museum of Contemporary Art and soon the City Library, in the historic Customs House. It is a public space connecting transit, pedestrian and civic elements.

**Main features of Circular Quay**

**Access and Linkage**
Circular Quay is a major Sydney transport hub, with a large ferry, rail and bus interchange. The Cahill Expressway is a prominent feature of the quay, running from the east, over the elevated railway station to join the Sydney Harbor Bridge in the west. It is located on the northern edge of the Sydney central business district on Sydney Cove, between Bennelong Point and The Rocks. A majority of downtown commuters live across Sydney Bay and use ferries to travel to work. With its aesthetic, practical and efficient qualities, the Quay functions as an effective transition space between the docks and the downtown. Circular Quay is made up of walkways, pedestrian malls, parks and restaurants.

**Public Amenities**
Both locals and tourists alike delight in the comfortable and well-maintained space that the Quay provides. Small cafes and restaurants serve light lunches to office workers, who also make use of the benches and walls situated along the Quay. Tourists and families are attracted spectacular views, and details of landscape. On the east side of Circular Quay are its many restaurants and stylish boutiques, along with the large Dendy Cinema. On the western side of Circular Quay is the famous Rocks area with a number of quaint shopping arcades and pretty restaurants.
Uses and Activities

Under white canvas sail canopies, more than 150 stall set up for hawking everything from food to jewelry to souvenirs, to indigenous arts and crafts. Most popular tourist destination uses as a recreation and commercial space. This is the place for New Year celebration and streets performers.

Fig. 3.1.2 A5, Source. http://en.wikipedia.org/wiki/Circular_Quay_New_South_Wales
Fig. 3.1.2 A6, Source: PPS website, (www.pps.org)
Fig. 3.1.2 A7, Source: PPS website, (www.pps.org)

Sociability

Whether peoples are walking the Bay, waiting for a hotdog, or shopping from pedestrian mall, peoples share the experience with the peoples next to them and feel connected to them, as well as to people who have shared the experience before. While direct interaction between strangers is common, for the most part people enjoy watching view and others, being watched and merely participating in the vital social life.

Design evaluation

Site location is a critical factor. Locations immediately adjacent to city cores has a greater chance of success, than sites in more peripheral areas, and Circular Quay lies to the west of the central business district, and is in a location central to the major tourist routes of the central city area.
One end of the Quay connects to Jorn Utzon's famed Sydney Opera House, and the other with The Rocks, an area that constitutes Sydney's historic "original village." Ferries, subways, trains and buses arrive and depart from the Quay, making it a transportation hub for commuters, tourists and others.

It also serves as a pedestrian connection among some major tourist attractions, and has services along its length oriented both to tourists as well as locals. Fresh produce stands and food shops selling fish, bread, meats, and wines, etc.

Tourists and local people are attracted spectacular views of surroundings, and details of landscape design and street shopping.

3.1.3 Ribeira District
Porto, Portugal

Ribeira means in Portuguese "Minor River" or a river with little flow of water. It is also a word for the oldest part of Oporto, a place where the city was born and developed due to trade in the river mouth.

This is the historical district of Ribeira, part of the São Nicolau parish. The Ribeira district spreads alongside the Douro River, and used to be a centre of intense commercial and manufacturing activity since Middle Age. The alluring district of Ribeira is made up of medieval streets and sleazy alleyways. It is a collapse but fascinating place, ending at a riverfront square ("Praça da Ribeira"). Nowadays, Ribeira is a tourist area with many bars, tourusty restaurants and terraces, particularly in its main square, Praça da Ribeira. It is the site of different kinds of shop like fish, bread, meat and other goods. The area gained a pavement made of spatial stone slabs.
In the mid-18th century the city needed new urban improvements to provide for the swift flow of goods and people between the Ribeira neighborhood and other areas of Porto. There was a square enclosed on its north, west and east sides by buildings with arcades, and south side of the square was enclosed by the mediaeval walls of Porto. These walls were turned down and opened the square to the river. Nowadays the Ribeira Square is a favorites waterfront spot for tourists and neighbor. This waterfront place is simple, compact and attractive, and has the flexibility to support a wide variety of activity. Most of the public area has been redesigned with contemporary materials and recreation and leisure amenities. The new design features are very attractive, functional, and in no way affected, serving as a sort of flexible platform for activities and supporting a range of gathering options for groups. Children play, pub and cafes, elderly friends talk and leisurely walk. Automobiles pass through on a narrow channel with a low curb, so that drivers move through the space with less priority than pedestrians.
3.1.4 People's Park
Islands Brygge, Copenhagen, Denmark

It is a harbor front area in central Copenhagen, Denmark, located on the north-western coast of Amager. The neighborhood is noted for its waterfront park. Located in a former dockland area, the park has retained a number of features from the area's industrial past, including unused railway tracks and an abandoned railway car used as an exhibition space, while an old ship hull turned upside-down serves as an idiosyncratic bandstand and pavilion. The park is also the location of the Islands Brygge Cultural Centre and the Islands Brygge Harbor Bath.

This simple and authentic park has grown organically with new activities and amenities with users' needs. It is one of the most popular places in Copenhagen to enjoy good weather and the quayside serves as an esplanade popular with strollers. Apart from swimming at the harbor bath, the park also contains facilities for a number of other sports. These include facilities for skateboarding and street basket as well as beach volley and a playground. The park is also home to many open air concerts, either performed at the bandstand or a variety of other locations. In the city most of high design waterfront is virtually empty of active public destinations, this small, recent addition stands in total contrast. For its success six more are going to be developed in the near future.
3.1.5 Aker Brygge Harbor front

Oslo, Norway

A former industrial zone converted into a vibrant waterfront district. The wide promenade of Aker Brygge runs lined with cafes, restaurant, Festival Square and cruise boats. For winter use there are interior walkways, protected pockets and attractive indoor space and a plaza within the project is animated with outdoors cafes in good weather. Major roadway in a tunnel about 7 kilometers running beneath the site and the adjoining city hall plaza. This tunneling feature made entire area a car free zone. There is pedestrian link with the numerous and prominent area. Most of building has shops on the first level, office space at the intermediate level, and apartments on the top with spectacular views of the harbor. A parking garage runs beneath the project and has 1600 spaces. This area is visually unified, its building are different in color and scale. For the public, the streetscape is free–flowing and inviting; the space has a feeling of intimacy, and there are numerous passageways through and between buildings. A view of Oslo bays never far away, and along the quay a handsome forty-foot–wide walkway steps down to the water.

Aker Brygge (the Aker River) is now a vibrant and densely packed new district. By adaptive re-use all industrial buildings were converted into high–end boutiques and that kind of stuff. Its public promenade is one of the best–used public spaces anywhere, an area for strolling that has become the focal point of the harbor and the entire city of Oslo. Tourists and locals alike enjoy the cafes,
playgrounds, seat able steps, engaging public art, floating restaurants, and small fishing boats that sell their catch at the dock.

3.2 Criteria of waterfront recreation space

In the last few years there have been various attempts to evaluate the actual performance of waterfront recreation spaces from the user's point of view. An understanding of the purposes of public places and their use by people is essential. Successful public space always creates strong connections between the places the user’s personal lives. They should relate to their physical and social background. Although culture, topography, climate, history are individual for each place, there is much to learn. From any similar waterfront case study it is possible identify the elements that support it to vibrant.

Based on the review of the five overseas case studies and questioners survey of 20 people eight criteria have been found for the successfulness of waterfront recreation spaces: location, function, attraction, integration, sense of place, accessibility, visual and environmental quality.

3.2.1 Location

According to Craig-Smith, “Site location is a critical factor. Locations immediately adjacent to city cores have a greater chance of success than sites in more peripheral areas. He also stated that The normal sequence of development is occurs first in areas most accessible, generally nearest to the Central Business District, moving out to the next sites as these become 'ripe' through increasing demand and rising property values”\(^{14}\).

Since PPS research, “Though often dilapidated, today's Waterfront Should not be viewed as liabilities, but rather as opportunities to re-Envision public space. By

changing how waterfront are used and managed, they can become vibrant places and symbols of the cities and towns where they are located\textsuperscript{15}.

In view of the five overseas experiences, location of waterfront side, that is close to or properly linked to major urban activities center are very important for the successfulness. And consider the location of the study area which is closely located to the center urban activities of Stockholm; have possibility to flourish as an active waterfront district in terms of its location.

3.2.2 Function
Roger Trancik stated, “The quality judgment of how well a space designed comes from its functional meaning and from how well its physical shape accommodates social needs”\textsuperscript{16}. Indeed, the successfulness of any waterfront development depends on how well it functions on different levels and at different time. A place that do not meet people's needs or that serve no important functions for people is not a successful place. And S. Carr, M. Francis, L.G. Rivlin & A. M. Stone also stated, “Image enhancement is one of the main functions in most waterfront recreation projects as public spaces (especially waterfront spaces) often come to symbolize the community and the larger society or culture in which it exists”\textsuperscript{17}. Symbolic values can be used in the design of a public place to enhance its meaning. Improvement in social life is the second major function. The various designs of recreation spaces should cover many aspects of human performance. The degree of water dependency is dependent on the waterfront's location and urban context. Also, suitable water–related commercial activities can play an important role in preserving and increasing waterfront vitality. Those overseas case studies emphasized its own function and economic growth, in which all the development based on, the new directions for water–related uses and creating and inviting atmosphere to extend the functions of the areas.

\textsuperscript{15} http://www.pps.org/waterfronts/info/waterfronts_approach
\textsuperscript{16} Roger Trancik (1986), Finding Lost Space: Theories of Urban Design.
\textsuperscript{17} (S. Carr, M. Francis, L.G. Rivlin & A. M. Stone, 1992)56
3.2.3 Accessibility

Benjamin Fried stated, "I want to see wide avenues, broad access, with view corridors so you feel a visceral connection to the waterfront from downtown"\(^{18}\). An ideal public place is characterized by the level of accessibility to an enormous variety of services, facilities and people. The ability to enter a place is basic to their use. A simple way of conceptualizing access is in terms of its three major components.

First is physical access. Physical access deals with the location, linkage and design of entrance. Recreation space should be located where it is easily accessible from other areas. Besides, the entry to the space should be easily accessible in order to facilitate the potential users. In designing the recreation spaces, streets in the surrounding area should close to traffic, creating a large pedestrian network. Small shops and boutiques provide lots of people in the neighborhood street and create lively pedestrian flow.

Ethen Kent wrote on PPS website, “The edges of a public space also play an important role in making it accessible; a row of shops along a street, for instance, is more interesting and generally safer to walk along than a blank wall or an empty lot. Accessible spaces are conveniently reached by foot and, ideally, public transit, and have a high parking turnover”\(^{19}\).

Additionally, visual access or visibility is important in order for people to feel free to enter a place. Clear visibility seems to be particularly important in judgments of the safety of a place. Ethan Kent also said, “One can easily judge the accessibility of a place by noting its connections to the surroundings--including the visual links. A great public space is easy to get to, easy to enter, and easy to navigate your way through. It's arranged in a way so you can see most of what is going on there, both from a distance and up close”\(^{20}\).

A final type of access is symbolic access, which clearly convey the message that the place is available for use and is mean to be used.

---

\(^{18}\) http://www.pps.org/waterfronts/info/waterfronts_articles/waterfronts_gone_wrong


Various nonhumans’ factors also are related to this symbolic access. Certain facilities or design elements may act as reminder regarding the type of people who are desired. These three types of access – physical, visual, and symbolic – frequently interact, and can present a strong or ambiguous picture of who is free to enter a space and who has control over 'the right of access.

3.2.4 Attraction
For economic development, public recreation and civic identity urban waterfronts are unique in their potential to provide diversified opportunities. The specific reasons drawing people to public areas reflect many aspects of life, especially urban life. An attractive recreation spaces always provide opportunities for relaxation, entertainment, and social contact. People can discover new things and learn from others.

According to PPS Ethen Kent said, "Even well-designed and maintained waterfronts that provide excellent public access may not necessarily fulfill their potential as gathering places. If there are no special places that draw people, then the intrinsic vibrancy of waterfront gets squandered."21

Providing for active recreational needs is a main aspect of public place design. Active engagement represents a more direct experience with a place and the people within it. Discovery is another reason for people's presence in public spaces and represents the desire for inspiration.

Ethen Kent express on PPS website, “Creating popular destinations doesn't mean relying on big projects. Rather, it involves layering smaller attractions that work together. A small boat dock, a restaurant, and a playground, if combined the right way, can all build off each other and enliven a waterfront much more than any single use ever could."22

21 http://www.pps.org/waterfronts/info/waterfronts_articles/waterfronts_gone_wrong
22 http://www.pps.org/waterfronts/info/waterfronts_articles/waterfronts_gone_wrong
These five overseas case studies, waterfront recreation spaces attract users because they offer special recreation opportunities and at the same time provide splendid views. Green spaces with wide pedestrian promenades always characterize the attractiveness of the waterfront spaces. These waterside walkways help to capture the ambience of waterfront activities and as a means to link up key areas of urban activities.

### 3.2.5 Sense of Place

In assessing the quality of waterfront recreation space, it is include not only the physical characteristics of the place in which people live but also the social qualities of that environment – the sense of community and neighborhood. What it is that makes a space become a place? Gorden Cullen stated in his book 'The Concise Townscape, 1961, "Concerning place...it is an instinctive and continuous habit of the body to related itself to the environment, this sense of position cannot be ignored; it becomes a factor in the design of the environment"[^23].

Place always have a story to tell. Some of these stories are historical stories, owned by the entire population. Others are personal stories. For one person, a tree may become a sacred site. A continuously used public space with its many memories can help one's to fix a personal story. By the buildup of overlapping memories of individual and shared experience, a place becomes holy to a community.

Image enhancement is normally an implicit goal of most producers of public space. A space that is comfortable and looks inviting is expected to be successful. A sense of comfort includes perceptions about safety, cleanliness, and the availability of places to sit. People are drawn to places that give them a choice of

places to sit, so they can sit at various times of day or be either in or out of the sun. A lack of seating is the reason for ruined of good places.

3.2.6 Integration

A vibrant waterfront development also depends on the degree of integration with the adjacent activities of the neighborhoods. An appropriate spatial perspective requires that the urban waterfront should be viewed as an integral part of the entire urban activities that surrounds it. Current waterfront redevelopment cannot be understood in isolation from the city.

Ethen Kent wrote about the integration, “This is the most important quality for a place to achieve—and the most difficult. When a place becomes a favorite spot for people to meet friends, greet their neighbors, and feel comfortable interacting with strangers, then you are well on your way to having a great place”\textsuperscript{24}.

A range of activities are the fundamental building blocks of a great place. Having something to do, gives people a reason to come to a place and return. When there is nothing interesting to do, a space will sit empty. That's the best measure that something is wrong. A carefully chosen range of activities will help a place attract a variety of people at different times of the day. A playground will draw young kids during the day, while basketball courts draw older kids after school and band concerts bring in everyone during the evening.

3.2.7 Visual Appropriateness

Most waterfront recreation spaces attract users because they offer splendid views. A well waterfront district protects and improves its visual quality; the design should fit with the scale and character of the site to achieve a visual control. By architectural construction and the landscape design, the visual qualities can generally be enhanced in any waterfront area.

\textsuperscript{24} http://www.pps.org/info/newsletter/august2005/august2005_what_makes_place_great?referrer=newsletter_contents , What Makes a Place Great? By Ethen Kent
People are attracted to public spaces by various physical features. In general, buildings with innovative design and striking appearances are being positioned around the waterfront to serve as major landmarks. People's attraction to natural features also supports a public life. Vegetation, street trees, and gardens are highly valued parts of cities. Visual and physical contacts with the natural environment can relief people from the stresses of daily life.

### 3.2.8 Environmental Quality
Successful waterfront development should enhance the natural beauty of the physical landscape and at the same time protecting the natural environment from any pollution. In most waterfront recreation project, the goal of environmental enhancement is closely related. Besides, the desire for clean water and quality living environment also one of the components of good waterfront design. Sometimes, the design of recreation space also incorporates with the pollution reduction measures. Furthermore, the creation of waterfront trail and the widespread tree planting is general associated with waterfront projects.

**Chapter 4**

**Application of the Design Guidelines to Kungsholmen Waterfronts**

**4.1. Proposal recommendations**

**Location**
- Promote the waterfront activities at strategic locations. -Identify key location with major water views and create activity nodes and destinations where possible

**Function**
- Provide diversified opportunities for different functions (economic development, public enjoyment and civic identity).
- Promote the waterfront front vitality both day and night.
- Promote the water-related uses as far as possible.
• Design the shoreline to optimize the visual and functional value. Activities must be grouped so they will function in relation to each other.

Attraction
• Maximize the amenity value of sites with good natural settings.
• Promote mixed use development with public oriented activity.
• Create focal points and activities nodes.
• Promote retailing and leisure activities to the water edge.

Integration
• Avoid mismatched development in terms of water view, form and scale.
• Promote land-use continuity by improving linkage system.
• Promote harmony in the visual relationships and transition between the new and existing development.
• Promote integration of waterfront recreation areas with adjoining land uses in terms of pedestrian, access and landscape design frameworks.

Sense of Place
• Protect the waterfronts historic value.
• Significant historical structures and landmarks should always preserve or conserve.
• New developments or major improvement works should complement with the old urban fabric and the street identity and special characteristic should preserve or retain.

Access
• Enhance physical access at various levels.
• Promote visual accessibility.
• Safe and pedestrian dominated street enhance the physical and psychological accessibility.
• Multi functional pedestrian access is recommend with diverse variety of experiences.
**Visual Quality**

- Maximize the amenity value of the waterfront.
- Promote visual interest of waterfront outlook in terms of land use, built form and landscape treatments.
- Avoid objectionable views.
- Pedestrian oriented promenade with look out points or view corridor should promote to be capitalized the beauty of waterfront.
- Physical layout and build form should allow maximum waterfront views.
- Special location of vertical elements such as buildings or sculptures always has great visual impact and may act as points of reference or landmarks.
- Horizontal elements such as special designed paving pattern may create visual interest.
- A particular paving material throughout a series of spaces would provide continuity and sometimes used to define the direction and hierarchy of spaces.
Fig. 4.2 Conceptual Plan

Destination 1
City hall, Improve Pedestrian access path.

Destination 2
Water related activity, New travel route by ferry, Waterfronts hotel for enjoy Water and lit up surroundings public place.

Destination 3
Ferris wheel

Access point

Waterfront promenade with enough public amenities and parks.
Fig. 4.2 A Perspective view of conceptual waterfront promenade with enough public amenities and waterfront landscape. And view of water and city hall. Source: Drawn by Author.
4.3 Proposed Master Layout Plan of Kungsholman waterfronts

Destination 1
- City hall, Improve Pedestrian access path.

Legends
1. Striking Paving path
2. City hall connecting path plaza
3. Bridge
4. City hall
5. Green Space
6. Tourist shop
7. Pier
8. Alternative travel route
9. Open plaza
10. Waterfront hotel
11. climatic corridor
12. Ferries wheel complex

Destination 2
- Water related activity,
- New travel route by ferry,
- Waterfronts hotel for enjoy
- Water and lit up surroundings public place.

Destination 3
- Ferries wheel
4.3.1 Design evaluation for destination 01

Pedestrian connecting path

![Pedestrian connecting path diagram](image)

Fig:4.3.A Source: eniro.se, Illustration by Author.

From survey, site analysis and interview, I got that there is a connection missing between city hall and the city center. Always visitors follow orange path to go city hall, and they use small back door to get inside. City hall has nice front facade with vast entry towards lake side and it is not interesting and excited to get back door for such a nice grand architecture. For explore its view and attraction, it is need an easy and simple connection with the city. In my proposal, I am suggesting a pedestrian connecting path along the blue line. (Fig. 4.3.A)

In the layout plan below (Fig. 4.3C and Fig. 4.3.B) I illustrate a proposal a Pedestrian linkage from Old town to city hall with enough public amenities, shops. Used some special textured horizontal elements as a paving pattern which is unique, and create visual interest for users. And these paths beneath Centralbron invite people from inner-city where they actually want to go.
A particular paving material like black and white tiles (Fig. 4.3.3) throughout a series of spaces would provide continuity and sometimes used to define the direction and hierarchy of spaces. It will also create an image of two connections.

No fence or railing in the waterside, created option of physical touch of water. (Fig. 4.3.4).

Transparent Luminous Plastic public bench (Fig. 4.2 A3) and pave tiles in some part will make glow at night, will make entire place interesting and attract people. Luminous plastic made of by adding photo luminescent pigment into the plastic and photo luminescent pigment made of phosphoresce, that has the ability to absorb energy from almost any light source (sunlight, fluorescent, incandescent) and then to emit light when ambient darkness occurs.
In fig 4.3.5, I made an illustration of my proposal, connecting path of two destinations. I redesigned entire plaza with same facilities as it has before. An addition I did some interesting landscape, fountain, lighting, plantations, seats and one wooden bridge connection.
In fig 4.3.6, is more close-up view of the entire plaza. Different type of paving material, landscaping, shops, fountain etc will increase user interests.
Fig 4.3.7 and fig 4.3.8 are another two views from different point.
Above three figures are illustrations of the plaza, showing the relation of the objects and the scale and uses.
Fig. 4.3.12 is the construction detail of the wooden bridge. Height and length of the underpass of the bridge will be same as existing underpass. Entire bridge will be constructing in different module and each module has two parts. Lower portion is made of hollow iron box to make it floating, and upper portion is wooden bridge module. During the freezing time it can be move and possible to reuse it again.
4.3.2 Design evaluation for Destination 02

In my proposal, destination 02 is located in kungsholmentorg waterfront side. Now a day, the waterfront area is occupied by some small industry, patrol pump and summer restaurant. There are very little public amenities to enjoy the waterfronts. So I am proposing one international waterfront hotel to lit up economic and commercial value of this area and similarly this is a good location for a area where you have good view of city hall, lake and proposed ferries wheel. This place could be a hub of alternative travel route to visit city by water. Vast open plaza in the waterfront area will get sunlight all the year round; Public amenities, parks, steps to the water etc are the main key things to enjoy the water. A row of tourist shops along the streets is interesting for tourist and forces them forwards to city hall. Low Curb Street is safer for public and passing the car. Wooden deck, pier also designed for boating, jogging and fishing.
Above three illustrations are proposed waterfront predominate of Kungsholm. Shops, Public amenities, stair plaza for relax etc are key points of the design.
Above three illustrations are showing spatial paving path connecting all destinations from city center to ferries wheel.
4.3.3 Design evaluation of Destination 03

Visual connection of other destination always draws people from one
destination to another destination. Fig. 4.3.2A is existing view from City hall and
Fig. 4.3.2B is last destination of my case study. Visual linkage is important to
connect the destinations. The wealth of uses around the London Eye has created
a destination where there was none before\textsuperscript{25}.

\textsuperscript{25} http://www.pps.org/waterfronts/info/waterfronts_articles/turn_waterfront_around
So I proposed a ferries wheel to structure my vision process, creating this type of destination along the waterfront will draw people from city hall to Ralambshov. Now a day there is only have summer activities some field sports and sunbathe, beach activity and boating. Adding this kind of recreation will bring people all the year round, it is technically possible keep the Ferris wheel cars weather proof. Ferris wheel this focus on destinations, rather than "open space" or parks,
enables a genuine community-led process to take root. Interesting landscape, shops, tree, steps towards water will merge with the existing atmosphere and will be a popular destination and public space.
4.4 Proposal Consideration

Proposed location of automated underground parking garage

After redevelopment of entire waterfront area, it is one of my design challenges to make place for car. I am proposing 3 points for automated parking lot for the neighborhoods. Though I haven’t worked in detail of circulation path.
In my proposal I have redesigned Waterfront Street in terms of recreation and tourism, I added more leisure amenities and public places so that people can connect each other to enjoy and explore water several way. One more thing I want add is make a kind of shopping street parallel with the waterfront. Tourism and retail activity are extremely linked because shopping with visiting is an attraction for refreshments. Now a day there are some commercial activities in the ground floor of the adjacent waterfront buildings. I want to modify these shops and want to add a weather proof corridor (fig.4.3.6) to connect groups of these shops. In my proposal automobiles will pass through on a narrow channel with low curb to get less priority then pedestrians (fig.4.3.6 S, fig.4.3.6.S2). Attractive shop fronts, open plaza in fronts of the shop where they can take their coffee or foods, street entertainments, all are important to tourists.
Appendix.

Questioner

Hello! My name is Mohammed Anisur Rahman, from Bangladesh. I’m a Master student of UPD (Urban Planning and Design) KTH. This questionnaire is related to my final thesis. Please answer following questions. Thank you!

1. You are residents of
   4. Kungsholman
   5. Tourist
   6. Other neighbors of the city

2. How often do you have a walk in Kungsholman Waterfront?
   5. Every day
   6. Every week
   7. Monthly
   8. Seldom

3. Why do you come in Kungsholman Waterfront?
   6. Jobs or works
   7. Passing
   8. Eating or Shopping
   9. Recreation(Walking, Jogging, Fishing, Boating)
   10. Residents

4. Which season do you like best in Western Harbor?
   5. Spring
   6. Summer
   7. Autumn
   8. Winter

5. Which part do you like most in Kungsholman?
   6. City hall
   7. Waterfront streets and parks
   8. Boating
   9. Clam and quietness of the area
   10. Beach

6. Which part you don’t like in Kungsholman?
   5. Streets parking
   6. Water side Highway
7. Waterside Structure
8. Calm and quietness of the area

7. Do you think that public amenities is enough here?
   4. Yes
   5. It can be improved
   6. No

8. Does the road and path through the space invite people from inner-city where they actually want to go?
   3. Yes
   4. No

9. Can people use a variety of transportation option such as bus train, car, bicycle, etc, to reach the place easily?
   3. Yes
   4. No

10. Does the space function for people with special needs
    3. Yes
    4. No

11. Can you see the space from a distance?
    1. Yes
    2. No

12. Can you easily walk to the place? For example, do you have to scurry between moving cars to get to the place?
    1. Yes
    2. No

13. Does the place make a good first impression?
    1. Yes
    2. No

14. Are there more women than men?
    1. Yes
    2. No

15. Are there enough places to sit? Are seats conveniently located? Do people have a choice of places to sit, either in the sun or shade
    1. Yes
    2. No
16. Are people taking pictures? Are there many photo opportunities available?
   1. Yes
   2. No

17. Do vehicles dominate pedestrian use of the space, or prevent them from easily getting to the space?
   1. Yes
   2. No

18. Is it used by people of different ages?
   1. Yes
   2. No

19. Are people in groups? Are they talking with one another?
   1. Yes
   2. No

20. Are there choices of things to do?
   1. Yes
   2. No

21. Is this a place where you would choose to meet your friends? Are others meeting friends here or running into them?
   1. Yes
   2. No

22. Do people seem to know each other by face or by name?
   1. Yes
   2. No

23. Do you bring your friends and relatives to see the place with pride?
   1. Yes
   2. No

24. Do you want any activity in winter and night?
   1. Yes
   2. No
References:

Books.


Article.

Webpages.
http://www.pps.org/waterfronts/info/waterfronts_articles/waterfronts_gone_wrong

http://www.pps.org/waterfronts/info/waterfronts_articles/worst_waterfronts

http://www.pps.org/waterfronts/info/waterfronts_articles/waterfronts_gone_wrong

http://www.pps.org/waterfronts/info/waterfronts_articles/turn_waterfront_around

http://de.wikipedia.org/wiki/Rheinuferpromenade

www.sydneyarchitecture.com/ROC/QUA.htm

http://www.pps.org/waterfronts/info/waterfronts_approach

http://www.pps.org/waterfronts/info/waterfronts_articles/waterfronts_gone_wrong


69