

**IMPROVING THE QUALITY OF URBAN LIFE IN WATERFRONT AREA  
THROUGH REDESIGNING PUBLIC OPEN SPACE**

Lesson Learned from Rotterdam Waterfront to  
Reclamation Area in Manado, Indonesia

**THESIS**

A thesis submitted in partial fulfillment of the requirements for  
the Master Degree from Institut Teknologi Bandung and  
the Master Degree from University of Groningen

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## ABSTRACT

Public open space has become prominent to be provided in urban development to fulfill people needs and serve benefits through improving the quality of life of citizen. Waterfront area as a part of urban space proved to be an area which could serve a high quality of public open space. This research explores what important aspects to develop a high quality of public open space in waterfront area to improve the quality of life. In order to get a clear understanding, the research examines the provision of public open space in waterfronts area by taking examples from two cities: Rotterdam (the Netherlands) and Manado (Indonesia). Based on the theoretical review and from Rotterdam experiences in public open space (re)development, there are several criteria in developing public open space that could be followed and become a lesson learned for Manado. The criteria are: a) following the guidelines and fulfilling the components of public open space, b) refer to the spatial planning system, regulations and policy of public open space, c) roles of actors who involved in public open space development and d) management of public open space. These criteria are pivotal in developing a high quality of public open space and in redesigning a better public open space than has already existed. Implementing public open space (re)development in Manado could be achieved by good coordination among stakeholders with a good political will by local government. Achieving the exact goals to improve the quality of urban life can help in improving the waterfront area generally which reflects to the city image particularly.

*Keywords: Public open space, quality of life, waterfront area, (re)development, redesigning, spatial planning system, city image.*

## **GUIDELINE FOR USING THESIS**

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This master thesis I wrote is a part of requirement to fulfill my Master Degree from Institut Teknologi Bandung and University of Groningen. The topic about public open space has took my attention due to the existing condition of public open space in Manado as my hometown which is still lack in quality and have complex problems related to the provision and development of public open space. Therefore, the research is aimed to explore the possibility to be a lesson learned from Rotterdam experience in public open space (re)development particularly in waterfront area, which could improve the quality of life in Manado city.

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**Amanda Sutarni Sembel**  
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# TABLE OF CONTENT

<b>ABSTRACT .....</b>	<b>i</b>
<b>GUIDELINE FOR USING THESIS .....</b>	<b>ii</b>
<b>ACKNOWLEDGEMENT .....</b>	<b>iii</b>
<b>TABLE OF CONTENT.....</b>	<b>iv</b>
<b>LIST OF TABLES.....</b>	<b>vii</b>
<b>LIST OF FIGURES .....</b>	<b>viii</b>
<b>ABBREVIATION .....</b>	<b>ix</b>
<b>CHAPTER 1 .....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.1. Background.....	1
1.2. Problem Statement.....	4
1.3. Research Question .....	5
1.4. Research Aims and Objectives .....	6
1.5. Scope of Research.....	6
1.6. Research Structure.....	6
1.7. Research Framework .....	8
<b>CHAPTER 2 METHODOLOGY .....</b>	<b>9</b>
2.1. Research Questions .....	9
2.2. Research Methods .....	9
2.3. Data Collection.....	10
2.4. Literature Review and Theoretical Framework .....	11
2.5. Comparative Case Study .....	11
a. Case Study of Manado Waterfront.....	12

b. Case Study of Rotterdam Waterfront.....	13
2.6. Data Analysis.....	13
2.7. Research challenges and limitations.....	14
<b>CHAPTER 3 THEORETICAL FRAMEWORK.....</b>	<b>15</b>
3.1. Waterfront and waterfront (re)development .....	15
3.1.1. Waterfront phenomenon, issues and problems.....	16
3.1.2. Waterfront redevelopment components .....	18
3.1.3. Planning and policies in waterfront area .....	21
3.2. Quality of urban life .....	22
3.2.1. Definition of quality of life, quality of urban life.....	22
3.2.2. Quality of urban life in waterfront area.....	22
3.2.3. Public open space as criteria to improve quality of life in waterfront area .....	23
3.3. Redesigning of public open space.....	24
3.3.1. Definition and context of public open space .....	25
3.3.2. Issues and dimension of public open space in waterfront area .....	27
3.3.3. Guidelines in developing public open space.....	29
3.3.4. Actors involved in the redesigning of public open space .....	30
3.4. Examples of waterfront redevelopment.....	32
3.5. Criteria in redesigning public open space in waterfront area .....	35
<b>CHAPTER 4 WATERFRONT REDEVELOPMENT AND PUBLIC OPEN SPACE IN .....</b>	<b>40</b>
<b>MANADO CITY, INDONESIA .....</b>	<b>40</b>
4.1. Planning system in Indonesia .....	40
4.2. The city of Manado.....	41
4.2.1. Manado as waterfront area .....	44
4.2.2. Vision Mission and Spatial Planning and Policy in Manado City.....	48
4.3. Public open space in Manado reclamation area .....	50

4.4. Regulation and policy of public open space in Manado.....	52
<b>CHAPTER 5 WATERFRONT REDEVELOPMENT AND PUBLIC OPEN SPACE IN .....</b>	<b>54</b>
<b>ROTTERDAM, THE NETHERLANDS.....</b>	<b>54</b>
5.1. Planning System in the Netherlands .....	54
5.2. The city of Rotterdam.....	55
5.2.1. Waterfront in Rotterdam.....	57
5.2.2. Vision Mission and Spatial Planning and Policy in Rotterdam.....	59
5.3. Public open space in Rotterdam waterfront area .....	62
<b>CHAPTER 6 ANALYSIS AND POSIBILITY TO BE LEASON LEARNED .....</b>	<b>68</b>
<b>FROM ROTTERDAM TO MANADO .....</b>	<b>68</b>
6.1. Comparison between public open space development in Manado and Rotterdam.....	68
6.2. Possibility towards public open space development in Manado.....	76
<b>CHAPTER 7 CONCLUSION AND RECCOMENDATION .....</b>	<b>84</b>
<b>REFERENCES.....</b>	<b>89</b>

## LIST OF TABLES

Table 6.1 The Comparison of Design Guidelines and Components between Rotterdam and Manado.....	71
Table 6.2 Comparison of Criteria in public open space Development between Rotterdam and Manado.....	75
Table 6.3 Positive and Weak Points Influencing Public Open Space Development in Manado.....	78
Table 6.4 General Assessment in Implementing the Criteria of Public Open Space Development in Manado .....	80

## LIST OF FIGURES

Figure 1.1 Kop van Zuid Rotterdam.....	32
Figure 3.2 Abandoibarra waterfront, Bilbao.....	33
Figure 3.3 Central Waterfront, San Fransisco.....	34
Figure 3.4 Baltimore Waterfront .....	35
Figure 4.1 Location of Manado City .....	42
Figure 4.2 D view of Manado Region.....	42
Figure 4.3 Existing Land Use Map of Manado.....	43
Figure 4.4 Manado in 17th century (left) and Manado in the present, shows the Tondano river.....	45
Figure 4.5 Reclamation Area in Manado .....	47
Figure 4.6 Map of land reclamation in Manado waterfront area Cluster A.....	47
Figure 4.7 Existing public open space in the reclamation area .....	51
Figure 4.8 The 16% of land owned by local government on the reclamation area shows by the sign, stated that the land owns by local government of Manado.....	52
Figure 5.1 The location of Rotterdam municipality .....	56
Figure 5.2 City of Rotterdam with its famous Erasmus Bridge .....	56
Figure 5.3 Location of harbor and industrial area along the Nieuwe Maas River .....	57
Figure 5.4 The six clusters of Rotterdam waterfront .....	59
Figure 5.5 Spatial development strategy of Rotterdam city .....	61
Figure 5.6 Public Spaces in Rotterdam.....	63
Figure 5.7 Public Space in Beurstraverse, Rotterdam.....	64
Figure 5.8 Examples of public open space in Rotterdam .....	65
Figure 6 Existing condition in Rotterdam and Manado based on the criteria in public open space guideline.....	82

## ABREVIATION

<b>Term</b>	<b>Description</b>
BPS	Badan Pusat Statistik – <i>Center Statistic Institution</i>
RPJMD	Rencana Pembangunan Jangka Menengah Daerah – <i>Regional Medium Term Development Plan</i>
RTBL	Rencana Tata Bangunan dan Lingkungan – <i>Building and Environment Spatial Plan</i>
RTH	Ruang Terbuka Hijau – <i>Green Open Space</i>
RTNH	Ruang Terbuka Non Hijau – <i>Non Green Open Space</i>
RTRW	Rencana Tata Ruang Wilayah – <i>Regional Spatial Plan</i>
UUPR	Undang-Undang Penataan Ruang – <i>Spatial Planning Law</i>

# CHAPTER 1

## INTRODUCTION

### 1.1. Background

In many cities around the world, waterfront areas has used for various functions; commercial, industry, transportation hubs, housing, recreation, parks and sports activity. Due to the complex and multiple problems such as technology change, waterfront area has taken more attention to authorities in term of urban renewal, historic preservation movement and increase of environmental awareness (Breen & Rigby, 1994). Urban waterfront is an area of cities and towns where land and water meet. From many evidence over decades, waterfront is the most fertile area of planning and development and gives value to urban area and its community (Breen & Rigby, 1994).The development of urban waterfront mainly has been a well-established and interesting phenomenon regarding to urban renewal by bringing 'cities on water' which provide multi-function activities as mentioned. According to Erkok (2009), waterfronts are regarded as a suitable place to adapt changes in achieving a better quality of life. She argued that public open space is one of the public infrastructures needed to fulfill the criteria in achieving the quality of life which contribute to the urban life of citizen.

The function of public open space itself is closely related to the life of cities (Gehl, 2003). There are three important traditional functions of public open space that should be balance side by side in the same place. It functions as meeting place where people can interact with others, market place and connection/traffic space. In recent years, this balance in cities decline by a number of factors such as car traffic, vast development in housing and economy, environmental degradation, and so on. These factors influenced the quality of urban life as a whole. To improve the function of public open space, Gehl said that cities should look through the physical and social dimension which gives big impact to public open space. Physical dimension is about policy and design guideline; and societal dimension concern about the social interactions and activity. If the public open space doesn't require people demand, the people won't come. Therefore, the public open space will be neglected.

Other important function suggest by Carr et al. (1992) which are also become the controller of public domain utilization are: public space has to be design as a respond to public demand; public space has to fulfill people right in access, freedom in action, change, etc; and public space can give

meanings through its culture, history, aesthetic, socio economic for people individually or groups. These functions of public open space are pivotal relates to the quality of urban life and should be manage wisely through coordination among stakeholders who involved in public open space development (Francis, 1989). Good design and management are central in making good public spaces therefore, it is important to understand the role and responsibility of actors who will be involved in public open space development to increase the quality of public open space for public life (PPS; 2012, Francis 1989).

Rotterdam considered as one of the best examples of waterfront redevelopment that has been developed and changed from a city on the harbor to a city on the river (Giovinazzi & Moretti, 2010). Since the eighteen century, Rotterdam waterfront has been redeveloped from port function only to a very different function in the nineteenth century. It was a best example in renovation of port functions and structures in line with revitalization of the city centre which establish new functions and service for public use in the area. The north bank area became an attractive use such as commercial, administration, entertainment and high value housing (McCarthy, 1996). Institutional capacity and innovations in planning through the cooperation between different agencies and community with participating in every decision making process has led to a successful renovation in waterfront with new functions and service. Economic growth and technology can be developed consistent and in accordance to the urban spaces and environmental issues (Giovinazzi & Merotti, 2010). The redevelopment of Rotterdam waterfront has become an integrated urban scale project and developed for public interest social objectives which are strategic to the city and its inhabitants. The redesigning of public open space also has been prepared for buildings and public realm as a connection from city center to the waterfront and in the waterfront area itself. Create a 'compact city' which integrated and balance to one another that redefine the relationship between the urban fabric and the waterfront (McCarthy;1998, van Melik;2008). Public open space has taken an important role which could be a part of the urban fabric that connects places and people and improve the quality of urban life.

Manado city as the capital city of North Sulawesi is experiencing a rapid economic growth through various developments in every sector. The reclamation area has triggered an economic development in Manado represented by many commercial buildings along the reclamation area. Retail shops, restaurants, malls, hotels together with office and services, have changed urban spaces in the city and become an attractive place to visit. Unfortunately, the development in the

reclamation area doesn't take into account the high quality of public open space as one of the indicator of urban space. Public open space has been reluctant and neglected to visit by people because of low quality and not been designed properly (Kussoy, 2011). Important function as the main values that should be provided in public open space has not been fulfilled yet in public open space provision in Manado. Problems such as lack of accessibility, poor design, lack of facilities and elements, unclear role and responsibility of actors who involved in public open space development are some of the constraints that arose which related to the physical and social dimension of public open space. Meanwhile, there are several regulations that have been established due to the provision of public open space. Regulation/policy and guidelines of public open space in Manado should be reviewed in order to evaluate the development and implementation of public open space. Reclamation area which is owned by private sector should be considered in the relation of coordination among private sector and local government. These physical and social dimension of public open space has not been provided sufficiently in Manado. These are important in order to clarify and solve the problems due to achieve a successful public open space to improve the quality of urban life.

Rotterdam has been selected as a case study to be compare with Manado city because both city have similarities in some particular aspect. Beside of the location of both city are near to waterfront area, they also has been recognized as a port city in past decades, even though they are different in size, development history, and function. Other similarities are that Rotterdam has been develop their waterfront for economic development reason and also to attract tourist as their purpose in the vision and mission of city (van Melik, 2008). Same with Manado, which are having vast developement to boost their economic sector as the engine of the city and in the same time relates to the vision and mission of city to attract tourist to come and visit due to increase the economic sector and increase the image of city. Rotterdam has been developed their public open space for a long period in line with the redevelopment of waterfronts area. Public open space has become a top priority for the city in every development in city because of its benefits and function (McCarthy, 2006). A high quality of public open space has been proved succesfull in Rotterdam through its impact to the people who live in the city or to tourist who visit the city. Public open space has been proved in improving the quality of life by giving satisfaction to people in fulfilling people demand in getting interactions with others and having activities as the social dimension that should be provided in a good public open space.

Therefore, through this research, exploration of aspects that influenced the development and implementation of public open space in Manado particularly on the reclamation area will be described thoroughly in order to know what problems and constraints that become the barrier in public open space provision. In the other hand through understanding Rotterdam public open space development and its experience, there could be a lesson learned for Manado in developing a successful public open space to improve the quality of life. By exploring the context of Rotterdam in public open space planning process, components that have been provided, the role of actors involved in public open space development and its management; expected outcome that would be compared and analyzed can give inputs for the implementation of public open space in Manado. Manado city still needs to improve their existing public open space and also the regulation or policy that arrange public open space provision in more detail according to the design guidelines, roles and responsibility of local government and private sector, and the management of public open space.

This research will focus on knowing the concept of developing public open space in waterfronts area to improve the quality of urban life in the surrounding area. There are many projects in waterfront redevelopment which transformed cities to a better quality of built environment and gives huge effect to the political, social and economy of the city. Differs not only in big cities but also medium and small scale cities in all continents, waterfronts regeneration has become a starting point for the regeneration of the city itself to add value as an attractive pole in improving quality of urban life (Gospodini, 2001). Redesigning public open space can be the challenge to improve the quality of built environment by providing a better facilitation to fulfill people demand and improvement for the city. There should be lesson learned from other country to gain the possibility to transfer the concept of public open space development to be implemented in Manado city and Indonesia as a whole.

## **1.2. Problem Statement**

Rapid development in Manado city especially in the reclamation area along the coastal has influence the degradation of public open space in waterfront area. Public open space is one of the indicators that influence the quality of urban life of citizen. A lesson learned from other country could be an alternative of possibilities to transfer the concept and strategy in improving quality of urban life through redesigning a high quality of public open space. The lesson learned will be taken from Rotterdam waterfront redevelopment to Manado city.

### 1.3. Research Question

Based on the problem statement above, the main research question of this study is *what are the main criteria in developing public open space in waterfront area to improve quality of life*. In order to support the main research question, several supporting questions arise:

1. What kind of concept to develop a public open space which can improve the quality of urban life?

This question will be answered by exploring through literature study about public open space and some examples from waterfront redevelopment in several countries.

This question will be developed into several sub questions as follows:

- a. What is the benefit in developing high quality of public open space in waterfront area?
- b. What component should be used in redesigning public open space to improve the quality of urban life?
- c. Who should be involved in the development of public open space in waterfront area?

These questions will be answered also by literature study and through case study in several countries, about waterfront redevelopment especially the development of public open space and the concept of quality of urban life.

2. How is the implementation of public open space in Rotterdam waterfront? What advantage or are there any constraints in the process of development (from planning to the implementation phase)?

This will be answered by exploring information about waterfront redevelopment in Rotterdam, planning system, existing public open space and its development process, roles of actors involved and management in public open space development and the vision and mission of city.

3. How is the implementation of public open space in Manado reclamation area? What problems and constraints arose in public open space provision?

This will be answered by exploring information about the reclamation development and existing condition of public open space in Manado reclamation area, the planning system, brief description about Manado city, and vision and mission of city.

4. What is the possibility to be a lesson learned from redesigning public open space in Rotterdam to develop public open space in Manado in improving the quality of urban life?

To answer this possibility, it will need an analyzed through the criteria determined from the theoretical framework based on the literature review.

#### **1.4. Research Aims and Objectives**

The aim of this research is to get a clear understanding of the importance of public open space and criteria in developing public open space which influenced the success of its implementation. The research will explore and examine the possibility that could be a lesson learned experience in implementing public open space (re)development from Rotterdam to Manado waterfront area.

#### **1.5. Scope of Research**

This research will focus on knowing the ideal concept in developing public open space in urban area especially in waterfronts area to improve the quality of urban life of citizen. This research will explore and describe both Rotterdam and Manado waterfront redevelopment especially in public open space from the planning process until the implementation of the development. Planning process in this research refer to the process of planning the public open space which related to the design guidelines and other related regulations that set out the public open space provision especially in waterfront area. The planning process and implementation of public open space should take into account the quality of life which as one of the important aspect in city. The study area in Manado will be limited on the Manado waterfront area precisely on the Boulevard road (named by local communities) Cluster A, located on Singkil, Wenang, Sario and Malalayang District. This research will be limited on the benefits, components, actors involved and the aspect consider in redesigning public open space that can be a lesson learned to Manado city and Indonesia as a whole.

#### **1.6. Research Structure**

This research divided into six chapters which describe as follows:

##### **Chapter 1 : Introduction**

This chapter consists of background, problem statement, research question, research objective, scope of research and the structure of the research.

##### **Chapter 2 : Methodology**

This chapter will be used to answer the key research question and build data requirement. These methodological analyses will be explained comprehensively in this chapter.

##### **Chapter 3 : Theoretical framework**

This chapter provides theoretical framework of research that explains about public open space, waterfront redevelopment, redesigning, quality of life, the benefits and component in public open space, actors involved in the process of development and lesson learned.

#### **Chapter 4 : The context of case study in Manado**

This chapter will explain and describe about the existence of public open space in Manado, the planning system in Indonesia, Manado city in general, the reclamation area in Manado, vision and mission of the city and the regulation and policy of public open space in Manado.

#### **Chapter 5 : The context of case study in Rotterdam**

This chapter will explain thoroughly public open space regulation and development in Rotterdam, particularly about the planning system in the Netherlands in general, the city of Rotterdam and its waterfronts, public open space in the waterfront area, spatial planning regulation and policy related to public open space, and the actors who involved in the public space development.

#### **Chapter 6 : Analysis for the possibility to be lesson learned of redesigning public open space from Rotterdam to Manado in improving the quality of urban life.**

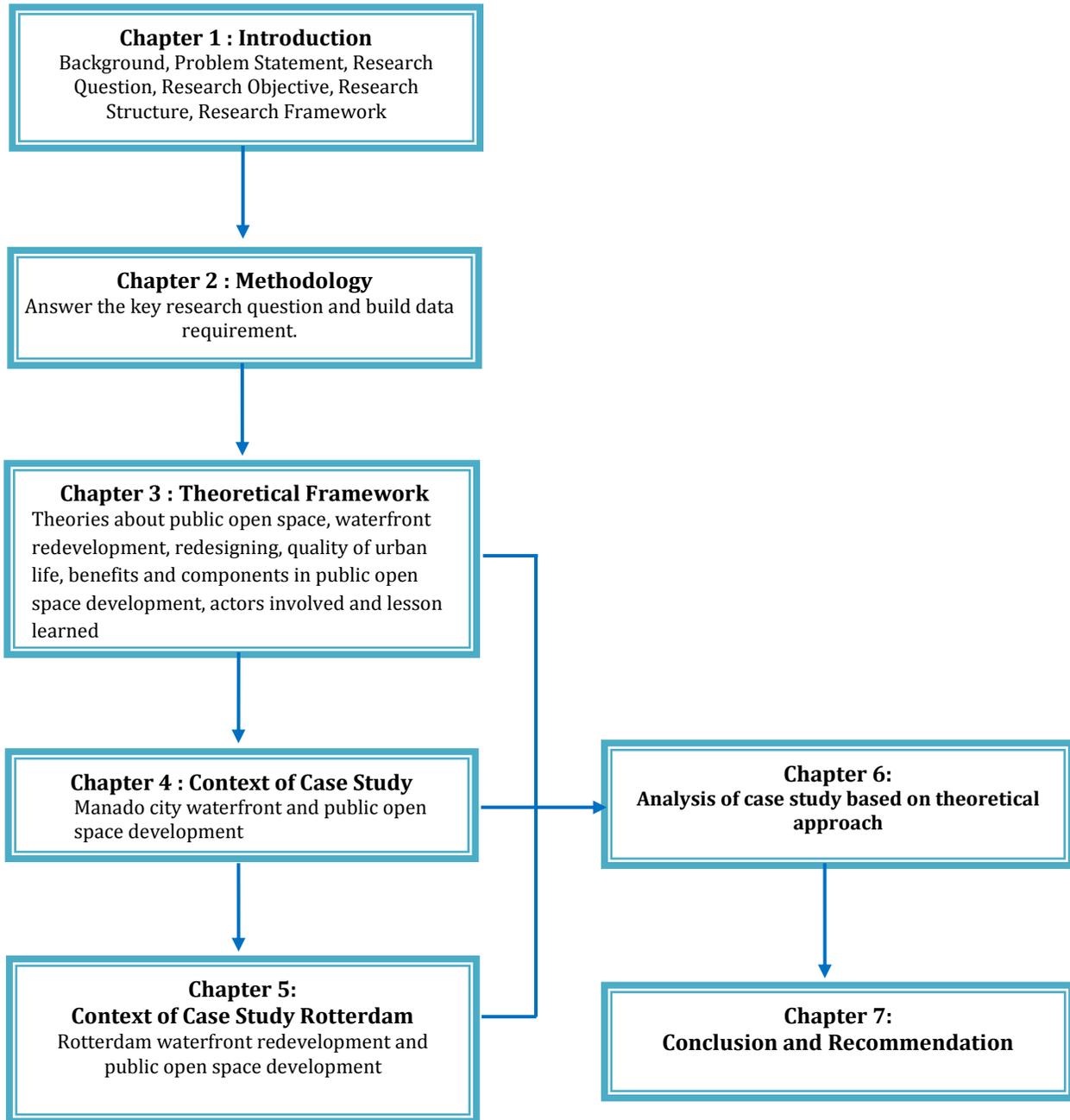
This chapter consists of analysis about ideal concept of public open space development in waterfront area accordance to public demand and urban neighborhood to improve the quality of urban life. The analysis will consider important aspects such as planning system, and other prominent aspects related to public open space such as the components and actors involved in the public space development. Through the analysis, possibility to be a lesson learned about redesigning public open space development that can be implemented in Manado city and Indonesia can be determined.

#### **Chapter 7 : Conclusion and Recommendation**

The last chapter consists of conclusion and recommendation. In this chapter concludes, summaries the research and provides recommendation regards to the development of public open space in improving the quality of urban life.

## 1.7. Research Framework

According to the research structure, the framework of the research is shown as the flowchart below.



## **CHAPTER 2 METHODOLOGY**

This chapter will present the research methods and data collection methods used in this thesis. The purpose of this methodology chapter is to know how to answer the research questions in Chapter 1 and how to conduct this research in order to answer the questions specifically. The research is aimed to explore the main criteria in developing public open space that can improve the quality of life especially in waterfront area.

### **2.1. Research Questions**

Regarding to the research problem in Chapter 1, a main research question arose,

***What are the criteria in developing public open space in waterfront area to improve quality of life?***

Through this question, the research will explore the concept of public open space; by elaborating the benefits of public open space, the important components in developing public open space, and who should involve in public open space development, regards to the role and responsibility in control and management of public open space. To answer the sub questions, a comparative study will be taken to describe the existing condition of public open space from each case study to get the possibility of lesson learned. The case study will be taken from Rotterdam waterfront and Manado reclamation area.

### **2.2. Research Methods**

To answer the research questions, there are some steps that will be conduct through this research:

1. By determining the background of the study in which the explaining why public open space is important for city nowadays and its relation with quality of life in urban area especially in waterfront area. The problems and issues in developing public open space which makes it important to be solved and to what extent the study has chosen Rotterdam and Manado city as the case study to be compare. Moreover, problem statement, research questions, aims and objective of the research, research structure and research framework will be determined.
2. Explain and describe the literature review which has the relevancy with public open space development to build the theoretical framework of this study. This aim for getting a basic understanding about public open space by knowing the definition, benefits, important

components, planning and design guidelines, actors involved and the roles and responsibility of actors in control and management of public open space. At the end, criteria in developing public open space could be developed as a reference from the theoretical framework.

3. Conduct a comparative study by exploring and describing the condition of public open space from both case study, Rotterdam and Manado. This aim to get a better understanding about the process of planning until implementation of public open space development, constraints that arose in the process of development, planning system and regulation of public open space, actors involved and vision and mission of both cities.
4. Analyze the possibility to be lesson learned from Rotterdam experience in public open space development to Manado reclamation area through comparing both cities based on the criteria determined from theoretical framework. This aim to gain what possibility that could be learned from Rotterdam experience by assessing strength and weak points from Manado. This will deliver to what could be learned and implemented from Rotterdam to Manado.
5. At the end of the study, conclusion and recommendation will be deliver in order to impart the study generally and alternative strategies in implementing public open space in Manado particularly.

### **2.3. Data Collection**

This research will collect data from secondary data sources. This data collection will be used for gathering information for theoretical review and for the empirical case study. It is important to get a deep understanding about the definition, guidelines and concept of public open space, waterfront redevelopment, and quality of life. It will be used also to gather data about the existing condition of public open space from case study, Rotterdam and Manado, the planning system and regulations, and vision and mission of both cities. The data will be collected by using significant sources such as books, journals, articles, related publications, theses, and internet sources for theoretical review and case study, and also from government documents, archives and researcher observation. Using multiple sources of data can be the way to ensure consistency of the information collected and ensure the quality of data gathered (Eisenhardt, 2007).

However, this research will also conduct a triangulation method, which is combining several research methods in studying one thing or same phenomenon and have a possibility to overlap or contrary to one another (Jick; 1979, Kennedy; 2009). The secondary data that will be conduct in

this research comes from various sources that might be contrary to one and another but will be examine by taking the most possible data that could be analyze relates and based on theoretical review from the literature. A triangulated approach helps to minimize the bias by only relying on one method. It could be done by combining for instance data collected from government document (i.e. City Spatial Planning) and researcher observation (i.e. photos of existing condition) to help balance out the problem.

## **2.4. Literature Review and Theoretical Framework**

To get a better understanding about public open space development and to know the important components of public open space, this study will explore and describe broadly about public open space, the planning process and design guidelines and actors involved. It will also explore about waterfronts (re)development and public open space in waterfront area, quality of life and its relation to public open space particularly. This will be conduct by finding relevant sources of literature from books, journals, articles, relevant publications, and internet sources. An extensive literature review will also be used as input for analysis. The theoretical framework will be conclude based from the theoretical review as a criteria for developing public open space in waterfront area to improve the quality of life. These criteria will be used to assess the comparison between both case studies that will be described before in each case study chapter. The literature review will answer the question sub questions no 1 in the research question as follow:

- ✓ *What kind of concept to develop a public open space which can improve the quality of urban life?*
  - a. *What is the benefit in developing high quality of public open space in waterfront area?*
  - b. *What component should be used in redesigning public open space to improve the quality of urban life?*
  - c. *Who should be involved in the development of public open space in waterfront area?*

## **2.5. Comparative Case Study**

Comparative case study research can include both quantitative and qualitative comparison of social entities based on many lines of cross national or regional comparison (Mills et al., 2006). The aim of this research method is to search for similarity and variance which often apply a general theory and general process across different contexts, with universal and independent from time and space. Comparative research helps to separate these universal and general patterns to be more specific in each context of case study and reveal the unique aspects of particular entities. This research will use the few-country comparisons which considerably use a qualitative case-oriented approach (Lor, 2011). Case-oriented approach focus on the individual country through its specific history and

context (Ragin;1987 in Lor;2011). This method studies the selected countries/ regions or cities in depth, closer to the data, problems of comparability and concepts, which the result of analyzing have high level of validity. The findings cannot be generalize to be applied to other countries that have not been studied consider for instance limited time and resources.

In this research, two case study have been selected which is Rotterdam (the Netherlands) and Manado (Indonesia). The case study have been selected based on the purpose of study (Ragin;1987 in Lor;2011). The case studies will be compare and analyze in order to find possibilities in transferring concept or strategies as a lesson learned from Rotterdam to Manado in public open space development to improve the quality of urban life. The research will focus on public open space development in Manado and the (re)development of public open space in Rotterdam. The study will explain briefly about the condition/existing of public open space in both cities, exploring the history in planning process, planning system and regulation/policy and the role of actors involved in the development.

Rotterdam has been chosen as a case study because beside it has been famous with its waterfront area but also consider the planning system in Rotterdam, particularly in public open space redevelopment that has a long history and experience (van Melik, 2008). The evidence can be seen from its high quality of public open space especially in the waterfronts area. This is quite similar with Manado city condition where the city located near to the coastal zone, used to be function as port/harbor and still developed its waterfront area on the reclamation land. Other reason is that Rotterdam forms useful examples of city centers that have been upgraded with a central role for public space in the renewal strategy, that connect waterfront areas to inner city in their urban regeneration process (van Melik & Lawton, 2011). This could be an appropriate example for Manado city among other cities which have waterfronts area.

#### **a. Case Study of Manado Waterfront**

This research will review the waterfront and spatial planning in Indonesia in general and specifically the existing of public open space in Manado through exploring the condition of reclamation area in Manado waterfront from the process of planning to implementation. The planning system, regulations and vision mission of the city will also be described. This review is aimed to know to what extent the possibility, constraint, opportunities, and benefit of redesigning public open space can be implemented in order to improve the quality of urban life in Manado. In addition, the method used for describing public open space development in Manado will be

conducted by reviewing secondary data from the City Spatial Agency and Regional Planning Board in Manado, books, dissertation, some related publications and internet source. The study area for this research is the Manado waterfront area, specifically on the reclamation area which is located in the Boulevard Cluster A. The study area covers from Manado Harbour area in the northern part of Manado coastal area to the south part of Manado coastal area on Manado Bahu Mall, which located in four districts: Singkil, Wenang, Sario and Malalayang. Broad explanation about the particular site of waterfronts will be explained in Chapter 4 as the context of case study in Manado.

### **b. Case Study of Rotterdam Waterfront**

This research will review about waterfront redevelopment in Rotterdam, a brief history about the planning process until the implementation, the planning system in the Netherlands particularly in Rotterdam, and the vision and mission of Rotterdam. The review will focus in public open space development in Rotterdam waterfront, the process of planning, components, benefits and constraints. The data will be conduct from study literature through journals, articles, books, dissertation, thesis, related publications, and internet source. The study area for this research will took place in several waterfronts area in Rotterdam particularly along the Maas River, which includes Kop van Zuid (Wilhelmina Pier and Entrepot) on the south side of Rotterdam and Boompjes on the north side of Rotterdam. More detail explanation of the waterfront site will be explained in the context of case study in Chapter 5. Other examples of public open space in the inner city of Rotterdam will also be describe relate to development phases and roles of actors involved in public open space development and management, to get a better understanding and point of view.

Both case study contexts will answer questions no 2 and 4 as follow:

- ✓ *How is the implementation of public open space in Rotterdam waterfront? What advantage or are there any constraints in the process of development?*
- ✓ *How is the implementation of public open space in Manado reclamation area? What problems and constraints arose in public open space provision?*

## **2.6. Data Analysis**

In this research, the case studies will be analyze based on the data collection from both case study context to get a better understanding about the existing condition of public open space, planning system and implementation, vision and mission of city, role of actors involved and management in public open space provision. This aims to identify the similarities and variance in both cities.

Furthermore, both cities will be analyzed based on the theoretical framework that has been determined from the theoretical review in Chapter 3. The theoretical framework consists of criteria in developing successful public open space in waterfront area due to improve quality of life. These criteria will be assess to both cities and will be compare to see which possibilities that could be transfer from Rotterdam to Manado as lesson learned. According to Thacher (2006), a normative case study is appropriate for comparative research method which helps to give improvements to the object of study. In this research improving quality of life through redesigning public open space in waterfront area is the aim of this research and contributes in answering the main question of this research. The findings in the analysis will answer the question of no 4 in the research question as follow:

- ✓ *What is the possibility to be a lesson learned from redesigning public open space in Rotterdam to develop public open space in Manado in improving the quality of urban life?*

## **2.7. Research challenges and limitations**

Some challenges were experienced in the process of writing while developing the research. There are limitations to collect primary data because unable to go back to Manado. Therefore the research based on secondary data, which is collected from internet sources, government documents, journals, dissertations, thesis and related publications. As well as in finding sources for Rotterdam context/case study, the researcher have limitation in language, in which some of the secondary data such as from internet source and archives are in Dutch. Therefore, the researcher is able to conduct the secondary data from both cities through internet sources, books, journal, articles and related publications by taking into account significant information from relevant sources. As mentioned previously in the data collection, the research method was also conducted through a triangulation method which provides data from various resources and combined to overcome bias in secondary data that has been collected. This method is helpful in determining the study especially in analyzing which could define the criteria expected in the research.

## **CHAPTER 3**

### **THEORETICAL FRAMEWORK**

This chapter presents theoretical framework that will be used to answer the research question in Chapter 1 and as a guide to analyze the case study in Chapter 4 and Chapter 5. It will review literature about waterfront redevelopment, quality of urban life, and the redesigning of public open space, by explaining briefly about the benefits, components and actors involved in each context. Through a descriptive explanation, a better understanding about the context of research can be obtained and a direction for analyzing to answer the research questions can be fulfilled.

First the theoretical structure will explain about waterfront in general and waterfront redevelopment particularly, follows by explaining the meaning of quality of urban life and its relation to waterfront. Afterwards, the redesigning of public open space will be discussed according to its process until the implementation. Some examples of waterfront redevelopment which puts the provision of public open space as one of the prominent aspects in urban development will be explore. In this research, the criteria in developing public open space in waterfront area to improve the quality of life will be examined. This will come up as a summary of the theoretical review to become a reference to be analyzed on Chapter 6.

#### **3.1. Waterfront and waterfront (re)development**

Waterfront is a place that integrates land with water and having a natural attraction to people. Waterfront development always refers to any development in front of water and water body as explained by Breen & Rigby (1996), such as a river, lake, ocean, bay, creek or canal. They also considered that waterfront development is not necessarily to be directly fronting the water but may only need to look attach the water. The view to water can still attract people and consider as a waterfront property.

In many cities around the world, waterfront areas has used for various functions; commercial, industry, transportation hubs, housing, recreation, etc. However, due to the complex and multiple problems such as technology change, waterfront area has taken more attention to authorities in term of urban renewal, historic preservation movement and increase of environmental awareness (Breen&Rigby, 1994).

After decades, massive waterfront redevelopment in the 1970's began and accelerated in the 1980's, continuing until the future. Most waterfront redevelopment projects interest in promoting economic development, environmental protection, shoreline access, water quality, recreation use, housing, historic preservation and water sports, which attracts people and become the most visible activities in waterfronts area. Waterfront projects around the world have vary from a wildlife sanctuary to a container port, a planned unified project to a random and uncoordinated development, with multiple owners and participants.

Urban waterfront redevelopment nowadays has contributed in the historical changes of land. Breen & Rigby (1996) said that waterfront redevelopment is the best example of city resilience, about the ability to adapt in changes, to adjust with new technological impacts, to grab opportunities, to forge new images for the city and create neighborhoods for their inhabitants. Mostly succeed but some of them didn't. But still the impact in enriching city's economy and self-image improvement can be seen in most waterfronts over the world.

### **3.1.1. Waterfront phenomenon, issues and problems**

According to Brian & Rigby (1996), there are several factors that led cities to redevelop waterfronts area which also become urban waterfront phenomenon, there are:

- *Environment aspects related to the quality degradation of water, air and landscape is the important issues that emerge.*
- *Preservation of historical sites.*
- *Government financial support.*
- *The need of recreation/leisure by creating more trails, pathways and open spaces.*
- *The expansion in tourism by creating more destinations, one of the efforts through developing waterfront area.*
- *Citizen involvement as an action of public interest to boost the value of urban waterfronts.*

Based on these factors, many waterfronts has been transformed to enrich their quality of urban life by adjusting and adapting in economic changes and cultural circumstances. Some major waterfront transformation that have been done and become an example to other cities like London's Docklands (five thousand acres; a huge size of waterfront redevelopment), the Cardiff Bay in England (2.700 acres), Yokohama Minato Mirai in Japan (460 acres) and Darling Harbour project in Sydney (148 acres) (Brian&Rigby, 1996). These are only a few of many waterfronts redevelopment over the world which shows how the existence of waterfront pivotal since last decades and still occur until

now in many cities. Each waterfront transformation doesn't matter big or small in size or schemes have impacts and symbolic value.

Urban waterfront redevelopment is not only occurred in develop countries but also now impacting developing countries. Several factors such as boosting economic growth and reviving the post-colonial historic cities including urban conservation, tourism development, and Islamic renewal are some of the effort in redeveloping waterfronts area (Hoyle, 2002). These raise a variety of policy issues and problems. Some port cities such as Havana (Cuba), Santos (Brazil), Bombay (India), Dalian (China) and Singapore began to develop their waterfront and consider their urban heritage. These also obtain funding for waterfront redevelopment and urban renewal as a broader context. According to Hoyle (2002), common elements have found from these port cities that emerge in waterfronts, there are: *maintenance or provision of public access to the water's edge, opposition and prevention to inappropriate development in waterfront zones, rapprochement between waterfront zones and urban cores, conservation and sensitive development of green open space and maintenance of the links in the past.*

From several researches, has been found that either developed or developing countries have related issues according to urban waterfront redevelopment. In illustrating the attitudes towards heritage and conservation, both develop and developing countries are willing to offer guidance, expertise and financial support (Hoyle 2002). Reinforcement of historical identity and architectural heritage could be achieve through some points mention below,

- ✓ *Preservation, conservation and renewal of historical fragments of urban space;*
- ✓ *Refurbishment of buildings of character and interest;*
- ✓ *Small scale redesign of open spaces*
- ✓ *Introduction of appropriately historical and archaeological promenades*
- ✓ *Integration of pedestrian public open spaces and other features.*

The emphasis in preservation and conservation of historical sites and provision of public open space are the main points in waterfront redevelopment in most developing countries.

There are also some examples of unsuccessful waterfront redevelopment with some constraint in lack of coordination among stakeholders. Harbour front site at the western half of Toronto's central urban waterfront is a project given by Canadian government which was originally proposed as a waterfront park. In addition, the project has been mandated to independent agency by federal

government to develop a mixed use urban waterfront and accepted by public. However, the project become financially self-sufficient and become more private oriented showed by more high rise building than urban open space such as parks and squares as proposed before. Protest comes from public who claims the demand in urban parks and postpones development (Giovinazzi & Moreti, 2010).

Other issue that immerge in many case of waterfront development relates to accessibility is the development which involves land reclamation (Hudson; 1996 in Al Ansari; 2009). It generally decreases the public access to the waterfront due to the nature of the reclamation itself with poor quality of land fill become a barrier for developing good quality of open spaces. Waterfront developments in land reclamation area generally result from the demand to improve economy of city which in some cases involves commercialization, privatization and commoditization of public spaces that limits public access to those places (Lloyd & Auld 2003: 6; Zukin 1995 in Al Ansari; 2009).

### **3.1.2. Waterfront redevelopment components**

The successful of waterfront redevelopment movement lead to a variety of challenges but should consider as important components to overcome general urban and societal issues. Breen and Rigby (1994:23) explain these components into several points:

#### **1. Location and timing**

The location of waterfront area is a major key to the successful waterfront. Intimate and located near to the central business district becomes a special point in developing waterfront. Timing in redeveloping waterfront affects the economic velocity which related to economy investment provided in waterfront area. To attract investment, public and private developers who take in charge the redevelopment should accelerate the development by taking into account of time consuming. Elected officials also take an important role in their short-range vision according to planning decisions and permit.

#### **2. Public Accessibility**

The public's right to shoreline access considers as the most pivotal aspect in every waterfront redevelopment and frequently discussed among scholar and researcher. Free access to waters was the right to every citizen. Many countries have stated their legal traditions in affirming the public's right to the water. Even public investment has enforced a fully accessible waterfront as a goal in all waterfront projects. These include physical, social and social access which means that public space should be physiologically welcoming.

### **3. *Liability***

Liability is about providing safety to user in open waterfront walkways and parks. Sometime this aspect is neglected; meanwhile water can be a danger and harm to people when barriers such as fences or railings doesn't been provided.

### **4. *Environmental issues***

Man industrial sites located near waterfront area contain toxic substance that should be removed. The impact of this might take time but will give negative and huge consequences to the ecosystem in the future. Other issues about natural disaster such as flooding, hurricanes and tides require special design solutions. This should be taking into account by the design and development community and build sufficient safeguards. Restrictions on building in waterfront area also have to be reinforced in terms of the natural disaster above.

### **5. *Working waterfront***

Changing technology influences the redevelopment of waterfront in term of many installations become obsolete for instance ports, fishing fleets, shipbuilding, waste water treatment plants, concrete terminals, warehouses, etc. Control and legislation on these remaining industrial uses should be considered to avoid errors in land management according to right of ownership of previous land before redevelopment.

### **6. *Waterfront character/use mixes***

Waterfront that has a character makes the area become interesting to visit. Mix use in waterfront areas nowadays happen especially in redevelopment of waterfront. Even though sometime this mix uses has boost the economic growth or provide people demands in various needs, but waterfront should not lose its character and become meaningless (unaesthetic), less of quality and unsecure for people.

### **7. *Design issues***

The role of architects, urban designers and developer sometime doesn't observe the respect of waterfront uses because of the tendency to follow standard forms of building. Designs of building become neglecting water views. Opportunity to reuse historic structure should also put into account.

### **8. *Education/interpretation***

Public areas along waterfronts offer an opportunity to educate people about the social, maritime, cultural and environmental heritage in the area. Waterfront with its shoreline ecology, flora and fauna, becomes a point as an environment education. In the other way, urban waterfront gives opportunity to interpret and portray the area's history to people. By providing

facilities and sites that support education aspect like museum of art, science, maritime; aquariums, outdoor auditoriums, concert facilities, etc, urban waterfront become an enjoyment area for all ages.

## **9. Public spaces**

There are many examples of public spaces in waterfront area because of its important function. Spectacular public spaces mainly provided in waterfront area such as grand plazas and parks or some with amphitheatres and concert shells. Many examples of waterfront redevelopment projects have provide public open space; shows that the provision of public open space in waterfront area is one of the most important aspect to enhance the quality of place.

After several years, through a periodic of time, the research on waterfront develop new concept in waterfront transition but relatively the same purpose with the previous concept. Some, particularly comes out with different points of view which highlight the elements in waterfront redevelopment. In July 2000, Cities on Water in collaboration with Wasserstadt GmbH, Berlin, conducted *10 Principles for a Sustainable Development of Urban Waterfront Areas* which approved by Global Conference on the Urban Future (URBAN 21) (Giovinazzi & Moretti; 2010:58 and Bruttomesso; 2006). These principles have been adopted by several institutions in international level for waterfront redevelopment project as set below:

1. *Secure the quality of water and the environment*
2. *Waterfronts are part of the existing urban fabric*
3. *The history identity gives character*
4. *Mixed use is a priority*
5. *Public access is a prerequisite*
6. *Planning in public private partnership speeds the process*
7. *Public participation is an element of sustainability*
8. *Waterfront are long term projects*
9. *Re-vitalization is ongoing process*
10. *Waterfronts profit from international networking (Giovinazzi & Moretti; 2010:58)*

The ten principles by Bruttomesso (2006) actually are suggestions for waterfront projects especially in public sector to operate and make the new projects more effective and responsive to criteria for improving the quality of urban life. The expectation is to be helpful in any innovative development in urban waterfronts. Therefore, maintaining and enhancing the benefits from the development is a challenge according to Bruttomesso (2006). Due to it, to follow the principles to guide the project is important and recommended to achieve the goal of waterfront development.

In the other hand, innovative concept and approach has been done according to the dynamic of development that has been occurred in every country which become more complex and stratified. The transformation has transforms shapes, structures and uses, new images as a response to social and cultural phenomenon which is rapidly modifying the economic growth, the spatial configuration and the utilization of places (Giovinassi, 2010). Further study of waterfront regeneration still has to be done and consider the principles to keep any development on track for enhancing a better quality environment in urban waterfronts.

### **3.1.3. Planning and policies in waterfront area**

Gordon (1996) through his case study research examines the planning and design of waterfront redevelopment in four cities. He finds that the methods that authorities used to control the quality of waterfront physical environment should consider the phasing strategy, urban design guidelines, developer selection and site management.

Other study case research conducted by Jauhiainen (1995), follows the key concept of waterfront redevelopment by Falk (1992) which is development strategy, adaptive reuse, research and consultation and community partnership. He mention that unfortunately many urban waterfronts development authorities, still doesn't take these elements into account and neglected to learn from previous experiences.

Most waterfront development in develop countries has been in charged by private companies by the control of government authorities. Building high quality public open space gives opportunity to gain cooperation with waterfront redevelopment agencies and developers (Gordon, 1996). However, selection of developer still needed in order to enhance the quality of space and environment. In some cases conflicts between agencies and local government happens because the interest of each parties. As the first party wants to get a flexible changing conditions in planning, while the former needs a guarantee of public benefits. Political and economic concern cannot be served equally in the same time in one kind of planning and design. How to manage this situation is only through an incremental approach suggested by Gordon (1996), in which the best urban design practice should focus to the quality of public space and create general guidelines for building sites. This approach can help the agency to re-allocate or change uses provide in an overall master plan and give guarantee to local government of qualified public realm.

## **3.2. Quality of urban life**

### **3.2.1. Definition of quality of life, quality of urban life**

Quality of life nowadays becomes pivotal in describing citizen satisfaction in different location and activities of daily life. Many studies have been conducted to measure the quality of life in various contexts in the field of planning and development, health, social/economy, and politics. Usually the term quality of life is used to evaluate the general well-being of individuals and societies with standard indicators such as wealth, built environment, physical and mental health, education, recreation and leisure time, and social belonging.

In this study, quality of life will be described through the context of urban planning, particularly related to public open space development in waterfront area. But before, the term quality of life will be discussed by its definition, indicators and the relation to waterfront redevelopment. By understanding these, the importance of developing public open space in waterfront area to improve the quality of urban life could be fulfilled as it expected.

There are many definitions of quality of life depends on in what context it be viewed. In urban planning...*"the desire to improve the quality of life in a particular place or for a particular person or group is an important focus of attention for planners"* (Massam, 2002). Daniëls (1991), who wrote Rotterdam, city and harbour, said that the pillars of a successful policy in environmental planning is the quality of environment, an appealing and differentiated residential and working environment and a well laid out public areas and clean environment. The appeal of a city as a place to live takes an important part for companies to make a decision to establish there. Therefore, there is a distinctive close relation between a good quality of environment and quality of life, which cannot be separated. A good quality of life depends on a good quality of environment and will directly influence the citizen who lives in the environment.

### **3.2.2. Quality of urban life in waterfront area**

Through the evaluation in general, the concept of quality of life addresses the well-being of people, objectively and subjectively Erkok (2009). It is about fulfilling the societal demands for material wealth; social status and physical well-being. The objective conditions such as security, health, spiritual, values, relations with others, work, etc are the indicators that influence people. These will be evaluated and turn into the subjective responses by people and regarded as subjective indicators of quality of life. The perspective of it comes through perception, preference and satisfaction. So the

domains of objective assessment in quality of life are healthy, community, housing, leisure, etc. According to Levent and Nijkamp in Erkok (2009), quality of urban life is the performance level of urban life towards citizen needs which refers to the satisfactory in environmental, social and economic components. They list four aspect of quality of urban life such as the quality of urban ecology and resources, urban environment, urban transport, sustainable cities and the quality of community life.

It can be summarized that the representative indicators of quality of life in cities vary and relate to many aspect such as climate, health, crime, transportation, land use pattern, housing, education, arts, recreation, jobs, cost of living, and environment. The provision of public has become the category which include in one of the indicators mention above. A high quality of public open space contribute in improving the quality of urban life considering that the demand of recreation could be fulfill through the provision of public open space. Especially in urban areas, which land becomes more scare and packed because of urban growth. Therefore, planners should be more aware of people needs and aspirations by identifying and understanding the comprehensive range of aspects which influence the quality of life of citizen (Seik, 2000).

According to Marshall (2001) in Erkok (2009), the urban waterfront provides possibilities to contribute in creating city that can enrich life and influence the ways of living. The main phenomenon that has been observed by architects and urbanist is the conflict between the development of technical facilities and the need for open space at waterfronts (Erkok, 2009). To increase the quality of urban life through projects related to waterfront development is not obviously seen. Among other planning types such as land development regulations, affordable housing program, water provision, transportation and so on, park and open space are also one of the aspect that should be taking into account (Myers, 2007).

### **3.2.3. Public open space as criteria to improve quality of life in waterfront area**

Based on Erkok (2009) study research, there are five quality criteria to determine as the representative of quality of life in cities especially in waterfront area. The criteria are urban space/recreation, housing, cultural environment, land use pattern and infrastructure and mobility. She examine these criteria to several waterfronts regeneration in European cities and found that the use of waterfronts as a part of the quality of built environment is essential to boost economic, social and environment sustainable growth. Various aspects that have been examined for the level of quality of life show some specific issues, general and particular in each case. public open space

includes in one of the several aspects in urban/recreation criteria. Land use pattern, innovative design, control and mobility are some of the issues that arose in waterfront redevelopment which is related to urban open space development. Ozsoy (2007) said that art works and artistic activities in public open space effects the quality of public space in terms of identity, public communications, cultural continuity, aesthetic experience and economic benefits. The availability of public space influences the quality of urban life through the multiple meanings it offers and provide to all level of society.

According to Celniku in EDUCATE Sustainability (2011), high quality of public spaces are benefits for better quality of life, give healthier community, stronger the local economy, and give environmental benefits. In terms of a better quality of life, Celniku stated that public spaces can improve the quality of life by:

- *Providing spaces for social interaction*
- *Encouraging outdoor lifestyle*
- *Fostering a sense of belonging and pride in an area*
- *Manage different transport modes to reduce road accidents and prioritize pedestrians and cyclist*
- *Provide large cross section for people to increase safety*
- *Protecting and promoting the understanding of historical, cultural and archaeological values of places*
- *Providing cultural, social, recreational, sporting and community facilities.*

These aspects above could be the reference in developing a high quality of public open space to improve the quality of urban life.

### **3.3. Redesigning of public open space**

Throughout history, urban public space has played a central role in the social life of cities. It shows by the concerns of people in criticizing the misuse or nonuse of public open space which largely failing to serve people in their intended uses and users (Madanipour, 1999; Francis, 1987). As mention previously, use/misuse/nonuse of public open space becomes one of the dimensions in measuring the success of public open space development. Therefore, many research and study that focuses on the neglected aspects of open space quality also provide social, physiological and economic benefits of urban open space (Francis, 1987). The dimensions of public space describe previously, can help defining a public open space project in guiding its design, management and for

evaluation (Carr et al, 1992). It becomes useful in design and management regards to the social and physical context of a particular place.

This study will explore the theoretical framework of redesigning public open space in order to know what kind of approaches that can be used and what element or factors that should be taking into account to improve public open space particularly in waterfront area. The innovation of design that will be conduct might consider the socio cultural planning in such city which is different in every city. Problem and issues that arise could be varied and should be considered in taking any action to apply such method. Diverse in culture and the dynamic nature of society cannot simply offer a set of rules for good design and management (Carr et al., 1992).

### **3.3.1. Definition and context of public open space**

There are multiplicities of terms and definitions of open space depend to the way that they are valued and viewed. Carr et all. (1992) define public space as the “common ground where people carry out the functional and ritual activities that bind a community.” This definition takes community and social relations into consideration, and correlate the aspect of space that is accessible to the public (include its value and services). Other definition comes from the Scottish Executive Social Research Report, says that public space is an area that is open to all citizens and can include public parks and gardens, streets, town squares and other accessible areas.

Francis (1987) review the expanding of urban open space definition as “publicly accessible which design and built for human activity and enjoyment.” Include in it, parks, neighborhood playgrounds, community gardens, plazas, streets and malls. Francis determines the typology of urban space in two forms: traditional and innovative urban open spaces with their own characteristic. Innovative urban open space as new forms of open spaces, have been develop as a result of dissatisfaction in recreational needs offered by traditional open spaces. This failure has encouraged people to develop their own parks and gardens (Basset, 1979 in Francis, 1987: 81).

According to Al Ansari (2009) in his dissertation research, the definition of any space depends on time and the way it conceived and perceived. Any public space depends on its location; therefore, the expectations, aspirations, production, management and consumption are vary between spaces. He conclude that the location of public open space affect the definition of public open space by its characteristics, rules, roles and ways of management. So, the definition of public open space in waterfront area also depends on where it located, who are the users, and who manage it. Based on

several definitions and opinion from scholars and researchers, Al Ansari lists the key characteristic of public open space which is: access, control, ownership, use, appropriation, disposition and modification. These characteristics can be the base in developing public open space in every place include in waterfront area.

In this study, public open space will be defined related to the location where the study will be taken which is on the waterfront area. This is needed as a tool to understand the physical and social aspect of waterfront and to know the expectation and demand from both providers and users in public open space. It is used also to know and understand the issues related to waterfronts area which is part of this research. According to Francis, the awareness of waterfronts as urban open space has increased, in which many cities is developing waterfront parks and increase public access to waterfront areas. It also provides many opportunities in creating new open spaces with good accessibility to rivers, lakes, bays and ocean fronts.

Other classification of public open space also been stated by Carr et al (1992) based on its formation which is formal and informal public open spaces. Informal is developed by the public without any intervention and formal public open space is planned either by government, private or public. Informal public open space was not formally planned or designed; usually found in outer or periphery urban area which is unused, 'lost spaces', abandon or a leftover structure landscape (Trancik, 1986 in Al Ansari, 2009). This classification is important to distinguish the variety of spaces and how they should be used, in term for planner or designer to develop a formal and high quality public open space by realizing the value of space and environment. Public open space in waterfront area is classified as formal public open space because waterfront area has been developed by private sector with mix use development.

According to the definitions, the function of public open space can be categories in two majors: provision for recreation and other services and conservation for natural values (Maruani & Cohen, 2007). Planning for recreation relates to the parameter of users which addresses from how much, what kind of recreation, location until the size, spatial distribution compatibility, accessibility, visibility and suitability to special needs. It has many values in several aspects such as scenic, psychological, social, educational, and assimilation of values (human and nature). These depend again in where the recreation or open space services needed.

### **3.3.2. Issues and dimension of public open space in waterfront area**

However, through several research studies, there are common issues found related to urban open space that also can be seen as open space dimension through its variety of settings (Francis, 1987:88). These dimensions also provide the components of urban open space, there are:

#### **1. *Use/nonuse/misuse of open space***

Use of open space is one of the dimensions in measuring the success of open space. Vandalize or empty open space implies that the space does not work or need to be redesign and managed appropriately for user. In waterfront areas particularly, physical and visual inaccessibility are prominent problems in term of use and misuse of open space (Gabr, 2004).

#### **2. *Developmental issues***

Considering users of urban open space which vary in different level and ages should be taking into account in developing open space. Again, accessibility always becomes an important factor that couldn't be separated in fulfilling the users need. Different age (children, teenagers or elder people), have different needs which often been ignored in open space planning and design. For instance, elder people feels that parks were designed more for younger people like children and young adults than for the amenities of elderly people.

#### **3. *Safety and security***

Feeling safe and secure is important for users in urban open space. Many efforts in planning and redesigning open space to discourage drug and criminal dealers in order to improve the sense of secure in urban open space. However, these efforts sometime give another impact in social diversity like removing some user groups to another space and create new problems to the space. Woman, children and elderly people are users who feel the unsecure in open spaces relate to criminal issue, traffic speed and playground equipment problems.

#### **4. *Comfort***

Francis said that adequate and comfortable equipment in urban open space influence the satisfaction of users. Comfortable seating, solar access, protection from rain, wind and other climate elements endures the user to stay and enjoy the open space.

#### **5. *Stress***

Open space has become one of the factors that also influence stress of people according to research studies. A nice view to an open space evidently can relieve stress. Means that open space contribute a lot in the aspect of health which supporting the quality of urban life.

## **6. *Aesthetics and perception***

Visual quality is one of the highest priorities in designing open space even though sometime been neglected by user. Aesthetic aspect also in some cases becomes less important. Appreciation on the quality of urban open space is important to avoid degradation of open space design quality.

## **7. *Control and participation***

According to Kaplan (1980) in Francis (1987:91), design and management of urban open space should involve participation and control from users to maintain the quality of open space. This could be the basis of open space successfulness in giving enjoyment for users.

## **8. *Privatization and publicness***

In line with vast developments of various facilities in providing leisure for people in urban areas, privatization also immersed to become an issue related to accessibility. Public access is a critical factor in open space quality. According to Lynch (1981) in Francis (1987:92), the term of accessibility consist of open space rights which include the right of presence, use and action, appropriation, modification and disposition., which stated that people have the right to access to open spaces.

## **9. *Natural systems and environmental quality***

A healthy city life relates to the natural system which consist open spaces. Clean air, water quality and environmental health are some of the components contain in the natural system and should be provide in urban open spaces as well. Developing open spaces should consider the important of ecological diversity through its planning and designing for achieving the balance in ecological process.

## **10. *Economics, benefits and impact***

It cannot be argued that open space give impacts in economy through its value and benefit. The closer to open space area, the higher is the land price in such area. This increases the property value. Especially in waterfront area which has more excess visual, trigger the land price become higher because the variety of land use (commercial use, retail, hotels, malls, housing, offices restaurants, etc). With a high quality of public open space directly influence the value of places, where people attracted more to area which have accessibility to public open space.

## **11. *Public art***

Art is included in many open space projects which require 1% construction for public art (Francis, 1987:94). The existence of art can represent social meaning that could be valued by the public. Art works and artistic activities in public open space serve various characteristics

due to strengthen public relations, creating aesthetic experiences and to support the surrounding environment. It effects to the quality of public space through giving identity, public communications, cultural continuity and economic benefits (Özsoy, 2007).

Transportation issue also can generate problems on other physical elements of urban design such as: land use, building form and massing, circulation and parking, open space, pedestrian ways, activity support and signage (Shirvani, 1985). As stated by Carr et al. (1992), public space is a space in an open urban network that can be reached physically and visually, used as common share in freedom and equality; open for any choices and spontaneous activity. Streets in general, viewed only as transportation in function. Mougton (1992) argue that streets have other abstract role as a facility for people to interact and communicate. So it can be concluded that street is also an open space and used by public which influence the quality of urban life in the city.

All of the components above represent the need of people in public spaces. Places that are not meet people needs will be underused and unsuccessful (Carr et al., 1992). Waterfront area also should consider the above components and deal with certain issue that arose in the development of public open space. The issue in accessibility is the important factor, discussed and related to almost all components of public open space. It means that the provision of public open space should consider not only about fulfilling people needs but also consider the access to public open space physically and visually.

### **3.3.3. Guidelines in developing public open space**

There are many open space guidelines offered by scholars in specific kind of open space locations such as on residential, plazas, playgrounds and other open space guidelines related to patterns (Whyte, 1980; Silverstein, 1977; Cohen et al, 1979 in Francis, 1987). As stated by Carr et al., consider to the dynamic and diverse culture in the society, there will be no general guidelines for a good park, plaza or playground. He said that an appropriate design and management policies can only be determined by understanding the context of users. So, design and management is an endless process in creating human environment and keeping it fit with the expected uses. However, guidelines in design and management still needed as a primary substance for shaping and responding the complex physical environment and culture. Evaluation and redesign of urban open space still needed over time. This has been showed by many cities that redesign the unsuccessful public open space to improve its quality. Even in some cities, design competition has been conduct in order to achieve a better quality of public open space that fulfills people demand (PPS, 2012).

This is one of several efforts that imply that public open space really give an important role in determining the quality of urban life.

Carr et al. (1992) offers a design guideline to achieve the goals and requirements of public open space. There are four main categories he purposed: human needs that should be met, right of use that should be protected, meaning that could be communicated and maintenance requirements. These main guidelines will be defined by setting more specific activities. Meanwhile, through Francis (1987) previous study; suggest an open space requirement for new downtown development by providing clear guidelines and zoning incentives to ensure that a high quality of public open space will be provided. Even the new spaces are becoming privatized but new guidelines can reflect the support from local government for the successful open space. Through these past research and application in several places, the evidence of a high quality public open space has been showed and gives value to the urban life of cities.

A non-profit organization called Project for Public Spaces (PPS), has found the dependence of urban parks on people by evaluating thousands of public spaces around the world since 1975 (Kamel and Abdelwahab, 2006). The organization dedicate in creating and sustaining public places through building communities. Through the evaluation, the organization has established four evaluation key criteria to develop successful public spaces there are:

- a. **Accessibility**; both visual and physical, means that it is easy to get to and get through, and visible both from a distance and up close.
- b. **Uses and activities**; relates to what kind of activity that people can do in the public open space. Having something to do give people a reason to come to a place and return.
- c. **Comfort and image**; includes the perception of safety and secure, cleanliness, thermal, acoustic and visual comfort.
- d. **Sociability**; getting attached to the place, the surrounding, the environment, the community (PPS, 2012)

These criteria above could be consider as a summary from several guidelines offered by scholars and researchers who have similar opinion in defining guidelines for developing successful public open space.

### **3.3.4. Actors involved in the redesigning of public open space**

Actors who involved in the process of public open space development influence to a successful implementation. Zube (1986) in Francis (1987) mention three types of publics involved in public

space development. The “*professionals*,” who are directly involved in public open space development plans and policies, the “*interested public*,” who directly feels the benefit of public space and perceive the plans, and the “*general public*” who do not participate in making plans or policies. Francis (1987) gives a more specific division of publics who involved in public space development. He indentified five distinct groups or publics who have interest in controlling public space, there are:

**1. Users**

Users are those who passively and actively use public spaces, who rely on them but doesn't directly involve in the process of designing and managing public space. This lack of attention to user needs has brought to an eventual demolition in some cases because of ignoring user input and inappropriateness of design.

**2. Nonusers**

Nonusers are those who doesn't become users; people who pass by parks, plaza or atrium by foot, buses and cars but value the public space visually. This is also important but sometime neglected. People perception of places is one pivotal point related to visual elements in landscape quality.

**3. Space managers and owners**

Space manager and owner have an important role and influence public space development. They hire designers and influence their work, and take the responsible in functioning public spaces. Space managers and owners should conditioned public spaces to be comfortable and accessible.

**4. Public officials**

City agencies as public officials are charged in the overall public landscape quality. In this case city agencies could be from the Department of City Planning, Real Estate, Public Works, Parks and Recreation, etc. They should take the responsible for public spaces in developing and maintaining new parks, streets and squares and reviewing proposals for private developers.

**5. Designers**

Designers are those who play the important role in shaping public space. Landscape architects, architects, and urban designers are those who take the responsibility. They should determine the rules of public space; communicate what is allowed and what is forbidden in open spaces.

Another aspect that contributes in giving meaning to public open space is through the direct involvement in the designing or building of a place by public participation. There have been several study and implementation projects of public participation (Francis, 1987) especially in waterfront

projects. For example, stated by Hester (1985) in Francis (1987), that he involved residents in Manteo, North Carolina, in the design and construction of a boardwalk in the waterfront area. This is aim to increase the use of waterfront and greater satisfaction with the project. Giving meaning through involve public participation in public open space provision is one of the concepts of control or people's ability to directly influence their own needs and satisfaction of a place.

Private sectors also have a big contribution in public open development and become a important aspect that should be taking into account by local government. According to Mitchell and Staeheli in van Melik (2008), they said that spaces that are formally owned by state or by public, but that area subject to control and regulation by private interest has become redevelop in term to increase its value and for maintaining or improving the city. It means that private sectors have important role in the development of public open space in urban area. In term of control and management, it would take for a long term in controlling quality in the physical environment during the redevelopment of urban waterfront. Private sectors with coordination with other stakeholders such as architects or urban designer can help in managing and controlling through a systematic approach to facilitate good design to maintain a high quality of public open space (Gordon, 1996).

### **3.4. Examples of waterfront redevelopment**

Rotterdam as one of the big port in Netherland has developed their waterfronts in different kind of scale. Linking the northern and southern side of the city and connect the different social classes in two areas.



Figure 2.1  
Kop van Zuid Rotterdam  
(Source: [www.holland.com](http://www.holland.com))

The new bridge becomes the major symbolic that unite the two communities (Brian & Rigby, 1996). A best example in changing port function and structures in step with the city centre revitalization. It also redefines the relationship between urban fabric and the waterfront; establish new function and service to support public use in the waterfront area. Their excellent capacity of institutional adaptation and innovative planning based on policy coordination among different agencies has brought excellent results (Giovinazzi & Moretti, 2010). Combining economic and technology development inherent with environmental issues and urban spaces is a big credit in developing waterfront area. The case of Rotterdam waterfront redevelopment particularly about public open space provision will be explore and discussed more briefly in Chapter 4 as the study case of this research.

Other example of waterfront transformation that makes a big contribution to public spaces is the transformation of a river port in Bilbao, which extends 20 km from the city to the sea. It transformed the riverbanks into qualified urban spaces and established the most representative functions of the metropolitan area (Giovinazzi & Moreti, 2010). It is a program to revitalize the economic sector and increase the accessibility and utilization of port spaces. This project has been done through coordination among government and stakeholders with responsibility to administer and decide specific uses and zoning classifications, management and future maintenance of areas and structures. With focusing on both short and long term projects, it aimed to make revitalization of the urban fabric by taking into account the city planning as a whole.



Figure 3.2. Abandoibarra waterfront, Bilbao  
(Source: [www.wikipedia.org](http://www.wikipedia.org))

Central Waterfront in San Francisco, is an example of waterfront transformation which today has been transformed from a natural appearance to a man-made landscape (Port of San Francisco, 2012). The transformation happens because of the development of industrial, maritime and residential uses. The San Francisco waterfront conserve and enhance these attributes and improve the physical character where is less adequate in the waterfront plan. The unique characters of the waterfront are rich mixed use activities, variety of public open spaces and views, cohesive historic context and extraordinary natural setting. The design and access elements of San Francisco waterfront plan takes a comprehensive approach to identify how public access and open space and views will be maintained, enhanced and expanded.



Figure 3.3 Central Waterfront, San Francisco  
(Source: [www.http://mas-studio.tumblr.com](http://mas-studio.tumblr.com))

There are three goals to guide the enhancement: reunite the city with the waterfront, create a continuously accessible waterfront from Aquatic Park to Pier 70, and recognize the unique identity of the waterfront's districts. Some of the area has already well established. Other mixed use areas where the development of new spaces and public access, maritime activities and commercial uses is targeted. Baltimore as the capital city of Maryland, a major US east coast port, has been redeveloped their waterfront to increase public access around the waterfront and to restore the city economy. It focuses in commercial purposes but also in tourism by attracting visitors and enhance the local image of the inner city (Craig-Smith;1995 in Lagarense;2011).



Figure 3.4 Baltimore Waterfront  
(Source: [www.daguerre.org](http://www.daguerre.org))

The successful of Baltimore waterfront transformation is through its supporting facilities provided is the area such as convention centre, hotel, office towers, festival marketplaces, science museum, parks, restaurants, tour boats and many more. This could be established by the supports from political leadership and business activities together with the whole community and a major of tourist population in the city.

It is clear enough that the provision of public open space have a big role in urban waterfront redevelopment. The European Union for some waterfront project for example in Zanzibar's Stone Town (Hoyle, 2002), has given an effort in rehabilitate the waterfront road, introduce a pedestrian walkway and other environmental improvements. It means that the external funding not only produce a transforming effect on the functional character of the waterfront and for the setting of historic building in the area, but also on the public open space that are a crucial element in any modern waterfront redevelopment elsewhere around the world.

### **3.5. Criteria in redesigning public open space in waterfront area**

Considering that public open space development is included in waterfront redevelopment as a whole, means that the concept of public open space should follow the principles and guidelines in waterfront redevelopment project. Some aspects such as land use/spatial plan, the process of development, regulation and policy, and actors involved in the development should be taking into

account. As Gordon (1996) explained previously, waterfront redevelopment should consider the aspect below:

1. *Using development plans to control environmental quality*
2. *Physical phasing strategy*
3. *Urban design guidelines*
4. *Building the public realm to a high standard*
5. *Encouraging quality through the developer selection process*
6. *Preserving quality with operational and management practice*

These aspects are important in developing a high quality and successful public open space. Gordon stated that the best urban design practice should focus to the quality of public space and create general guidelines for building sites. Factors mentioned previously in the sub chapters about public open space functions, components, and benefits in each city which is different such as type of waterfront, location and size, and its suitability to special needs should also be consider in every guidelines. The provision of high quality of public open space cannot be avoided due to its benefits in improving the quality of life.

Therefore, based on the literature review in the theoretical framework that have been explained broadly in every sub chapters above, the criteria in redesigning public open space could be define to get a basic theoretical framework. This will be used to assess the existing public open space in each case study, Rotterdam and Manado. The criteria of redesigning public open space can be set out as below:

#### **1. Follow the design guidelines and components of public open space development.**

Design guideline is used to specify how spaces can be designed or improved based on past research (Francis, 1987). Its function is to discover the substantial purposes of change in such existing place, to organize appropriate means of why it should be change, and to guide the construction or reconstruction (Carr et al., 1992). Therefore, public open space development in both cities should follow the design guidelines based on the components or dimension of public open space. Based on the theories of the dimension/components and design guidelines of public open space offered by Carr and Francis, a successful public open space could be achieve by providing four main criteria which has also been evaluated by Project for Public Spaces (PPS, 2012). These could also be the reference and followed as guidelines in providing a high quality of public open space, there are:

- e. **Accessibility**; both visual and physical, means that it is easy to get to and get through, and visible both from a distance and up close. This also relates to the development issue such as considering the user in various level and ages through providing easy accessibility in term of how these user come to the public space (by car or by foot). Therefore parking and convenient public transit are important. Gabr (2004) stated that physical and visual inaccessibility are prominent problems that used to be considered in waterfronts area to overcome the use and misuse of open space. Therefore, redesigning and managing appropriate public open space for users is needed.
- f. **Uses and activities**; relates to what kind of activity that people can do in the public open space. Having something to do give people a reason to come to a place and return. Public space elements is important consider the age of user who will use it and good management of these elements will be a success of high quality of public space. In waterfronts area particularly, elements or facilities to support public open space is an unconditional aspect to be provided because these elements are the alternative reason people come and enjoy the place. Otherwise, people will be neglected to come because fail to fulfill people needs. Providing pathways for people walking, cycling or jogging track along the waterfront area which could give visual access to water or physical access to water's edge, benches or sitting area, playground for children, gardens, public restrooms, signage, etc, are some examples of elements that should be provided in waterfront area (Carr et al., 1992). Special events held in public open space located on the waterfront could be an interesting place to visit because of its supporting scenery. The uses and activities on waterfront area with its supporting elements can give big effects for people to visit and enjoy the place.
- g. **Comfort and image**; includes the perception of safety and secure, cleanliness, thermal, acoustic and visual comfort. Comfort relates to the climate condition which is different depends on the location of waterfront. Shading to avoid too much sun, wind protection and rain shelter are elements that could give comfort for users in public open space (Carr et al., 1992). Overall, all elements should consider comfort for users. These obtain a quality design of public space that will increase the attractiveness of the place. Public art consider important in term of increasing city image to attract people who lives in the city to come and tourist to visit.
- h. **Sociability**; getting attached to the place, the surrounding, the environment, the community. It is the essence of a high quality public space could offer. It is difficult to achieve and sounds utopia but once it can be attained, it becomes an unmistakable feature. A successful

planning and design of public open space is when people who come, use; physically or visually, feel attached to the place and their community. Carr et al. (1992) said that active engagements among people who use the public space are one of human needs that should be met to achieve a successful public space. Therefore, the elements that support the activity of people to interact with each other, mentioned in the uses and activities criteria should be provided.

These criteria will be examined to both case study, Rotterdam and Manado, according to the existing condition of public open space in waterfronts area, either has follow the guidelines and provide the components or still need improvements.

**2. Refer to the spatial planning system, regulation and policy of public open space provision.**

Consider new private development taking place in cities, local governments should provide clear regulations and zoning incentives to ensure that successful open spaces are provided. Although some open spaces are becoming privatized, regulation and policy for socially successful open spaces can reflect the recognition and support for local government and clarity in regulation/policy can be conducted for all interest.

**3. Actors involve in the development of public open space.**

Generally, local government is seen to become the main responsible actor in public open space development (van Melik, 2008). However, investors, developers and other private stakeholders are increasingly involved in the design and management of public open space, which varies by place and period. According to van Melik (2008), the participation of these private sectors range from little involvement until high scale of involvement. Little involvement for instance, the public sector redevelops public space and partly recoups the costs on the private sector. For modest involvement, the private sector is encouraged to actively participate for example, incentive policies or construction preconditions. For the high involvement for instance, private sector take the whole responsibility in a private consortium of public space development.

**4. Management of public open space related to the role of actors involved in public open space management.**

Carr et al. (1992) stated that management in public open space provision is the process of controlling the use of place, and maintaining and adjusting its form in term of changing needs. Private sector involvement in the management of public space has occurred over centuries. Through the increase of private sector involvement in public open space development, at once

influence also the design and management which directly relates to budget available for the quality of the design and management (van Melik, 2008).

The criteria above will be analyzed by comparing both cities, Manado and Rotterdam, in order to get the possibilities of lesson learned from Rotterdam to Manado. Some points from the explanation of definitions and theories will be discussed and reviewed in Chapter 4 and Chapter 5 regarding to the context of each case study. In Chapter 6, each context from both cities will be analyze refer to the existing public open space in Manado and Rotterdam experience in public open space development.

## **CHAPTER 4**

### **WATERFRONT REDEVELOPMENT AND PUBLIC OPEN SPACE IN MANADO CITY, INDONESIA**

This chapter presents the context of case study in Manado, about waterfront redevelopment and public open space provided on it. The context of study will explain and describe the waterfront redevelopment in Manado, followed by the existing of public open space in the city, particularly in waterfront area. This research will also elaborate the problems and constraints occur in public open space development, planning system and policies, and the vision and mission of Manado city. First, the planning system in Indonesia will be described to enhance a better understanding about the general planning system in Indonesia and its regulation connected to the provision of public open space then a broad explanation about Manado city.

#### **4.1. Planning system in Indonesia**

Through the implementation of law No.32/2004, Indonesia planning system becomes a decentralization system in which local government has the authority to regulate their region. Local government can manage their region through implementing an appropriate spatial plan due to the characteristic of the region with cooperation with all stakeholders. However, local spatial plan (Regional Spatial Plan for city or district) still have to comply with the higher tier of spatial plan (Provincial Spatial Plan and National Spatial Plan) as a form of centralisation. It purposed to integrate the spatial plan in Indonesia through a coordination among every level in each regions.

There are several regulations set by central government that has been establish in regulating the provision of public open space. In Law No. 26/2007 about Spatial Planning (UUPR) article 31, stated that there should have clauses for provision and utilization of Green Open Space (RTH) and Non Green Open Space (RTNH). Particularly for the provision and utilization of Green Open Space in urban area, has already been set out in the Ministerial Regulation of Public Works No.5/PRT/M/2008 about Guidelines and Utilization of Green Open Space in Urban Area. Therefore, Guidelines and Utilization of Non Green Open Space in Urban Area has been set out as a reference to local government (region/city) in spatial planning for general planning and detail planning scale, or for more technical scale called Building and Environment Spatial Plan (RTBL).

RTH guidelines (consists of reference for RTH provision, criteria of vegetation in RTH, the rules in planting and managing vegetation, provision of RTH, planning procedure and community role which all are technical guidelines applicable for national scale. According to the guideline, RTH is an elongated/path area, could be in a cluster in an open area, for vegetation either grow naturally or planted. The purpose of the guideline is to maintain the availability of land as a catchment area, create urban planologis aspects through balancing nature environment and built environment that are useful for community interest, and to improve urban environmental compatibility as a means of safe, comfortable, fresh, beautiful and clean urban environment. Meanwhile, RTNH ( is define as open space in urban area which are not categories as RTH; paved area or part of watershed, or any surface that cannot be plantted or porrous. The purpose of RTNH guideline is to maintain the availability of open space with paved area for various activity besides RTH, create balance between nature environment and built environment that could be useful for public interest, and optimalize open space function in urban area as social and culture activity.

Other specific and detail guidelines has been established by the Department of Public Works under the Ministry of Public Works, is the Guideline of Spatial Planning in Reclamation Area No.40/PRT/M/2007. This guideline arrange several important aspect relates to spatial planning in reclamation area such as aspect in social, culture and economy of the area; aspect in movement/mobility, accesibility and transportation; and aspect of public convenience and public space. All regulations about spatial planning from national level to local level in region or city, has been set out based on the Government Regulation of Indonesia No.15/2010 about the Implementation of Spatial Planning which set out the what kind regulations in spatial planning that should be conducted in tha national level and local level (region/city). These regulations mentioned above are the reference and guideance in public open space (re)development in every region and city in Indonesia.

## **4.2. The city of Manado**

Manado city is located on the northern tip of Sulawesi islands and faces on the Manado Bay to the west. As the biggest city in the northern region of the Sulawesi, it borders with Minahasa Utara regency to north and east, Minahasa to the south and Sulawesi water to the west. The size of the whole municipality is 157.26 Km<sup>2</sup> (RTRW, 2010). However, this number is not included with the size of 74 Ha of coastal reclamation which has been done since 1995. The reclamation itself is an interesting topic and will be discussed later. The location of Manado City can be presented on

Figure 4.1. In general, the morphology of Manado city is characterized by the unique nature of Manado which is quite different from other cities in Indonesia.

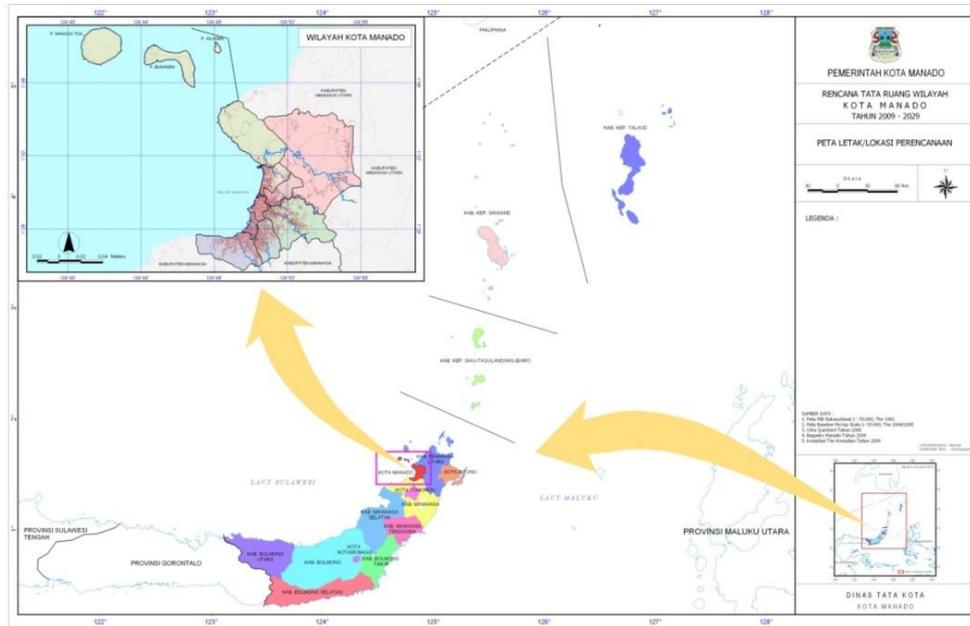


Figure 4.1 Location of Manado City  
(Source: Dinas Tata Ruang Kota Manado, 2010)

Manado has a landscape which can be classified into three main parts; coastal area, slope land and hilly land. The landform condition has much shaped the growth and the development of Manado city. First it grew along the coastal area from north to south then it grew to the higher land following the course of rivers and slope land which penetrate into the steep hilly areas. The landform together with its characteristics also has influenced the development of circulation network.



Figure 4.2 D view of Manado Region  
(Source: Author)

The roads grow in radial pattern following with the development of the city which looks like finger crawling everywhere for suitable areas for settlement. Figure 4.2 shows a glimpse view.

There are approximately 20 rivers in the area of Manado city. But 5 bigger rivers can be identified namely Tondano, Tikala which comes into the Tondano River, Sario, Malalayang and Bailang or Molas. All the rivers give their outlets to the Manado bay. On one hand, the existence of these rivers benefits the dwellers for macro drainage, drinking water and fisheries. On the other hand, the whole area is also prone to flood if uncontrolled growth of the city blockages the course of those rivers. Generally, existing land use in Manado has been much dominated by agriculture and plantation and forest which cover 11.267,35 Ha or 72,65% of the whole area. While developed land for settlement, trade and services sector cover 3329,60 Ha or 21,17% of the city. The existing land use for the whole area of Manado municipality including three small islands is presented on (Figure 4.3). In the last decade the population growth in Manado tended to fluctuate, in general there is an increase of number of population in Manado since 1970.

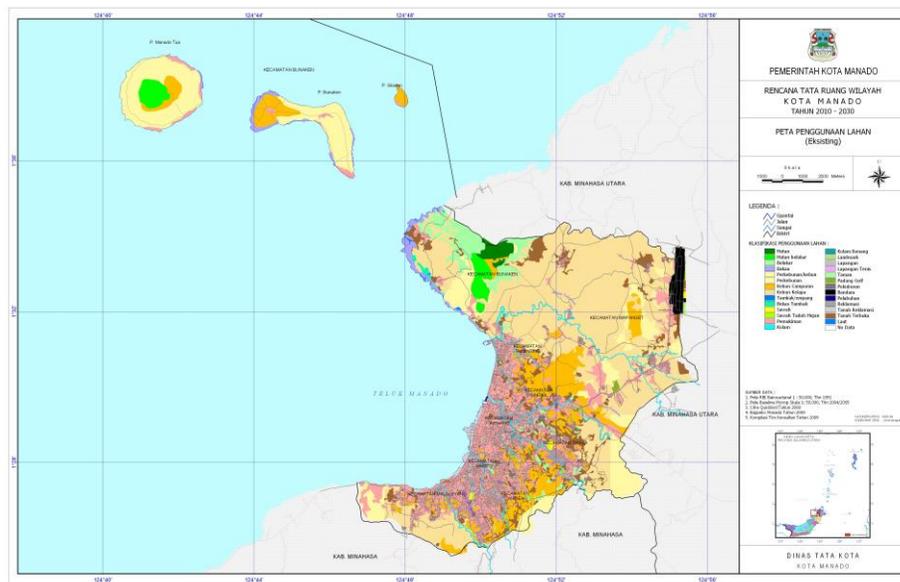


Figure 4.3 Existing Land Use Map of Manado  
(Source: Dinas Tata Ruang Kota Manado, 2010)

The number of population based on Badan Pusat Statistik (BPS, 2011) is 410.481 people. The increase of population number in Manado directly increase the density of population. In 2009, Singkil is the most dense sub district with density number of 152.42 people/ ha, followed by Wenang and Tuminting with the density of 145,24 people/ha and 124,20 people/ha respectively. Wenang, Tuminting and Singkil are all the coastal sub districts of Manado and serving as the central

business area for the whole Manado city. Wenang particularly has been regarded as the starting point of Manado city. The outlet of Tondano River which is the nucleus of Manado city is located in this sub district. Then as the city grows, together with Tuminting to the North and Sario to the south they form the other nuclei of Manado city along the main road. The reclamation area along the coastline which become more develop especially in trade, business and services are located in four sub districts: Tuminting, Wenang, Sario and Malalayang. These areas becomes more dense because most of the people who works in the reclaimed land which has turn to be the CBD (Central Business District) of Manado, tends to live close to this area.

The impact of the reclamation development, influence the economic structure of Manado city. Since 2006 the economic development was dominated by three main sub sectors (trade, services and transportation-communication) which have contributed the most in gross domestic regional product and become the leading aspect for economic activities in Manado city. Those activities has influence the development of the city from time to time. The change of pattern and structure has been much shaped by the location decision of individual or organizations in the area. From the beginning, Manado city grew based on trade activities and port in the region. Beside trade, the government interventions have also played major roles in shaping the change of Manado city. The political decision to choose Manado as the capital of North Sulawesi Province and to make Manado city as an autonomous municipality have added the extent of service sector of the city as a whole.

#### **4.2.1. Manado as waterfront area**

Manado as a capitol city of Sulawesi Utara province is one of several coastal cities in Indonesia that have reclaimed their coastal area. As a main city, Manado has 35% of hilly areas with mixed hilly and flatland topography. This kind of topography stimulates most of the commercial activity, offices, and even settlements to centralize their activity at the coastal area which is in the flat part near and along the coastal line. Not like some other city that reclaimed their coastal area to solve their problem of land-shortage, where land is limited and the number of population increased continuously, Manado have develop land reclamation as the demand for development and infrastructures of housing, commercials and business.

Before describing more further about the existing waterfront area of Manado, a brief history of Manado which previously as a port city should be describe to know the evolution and the development of Manado city as a whole. The early development of Manado City and its surroundings was started from trade activities which occurred around the outlet of Tondano River.

Now the site has been regarded as the CBD of the city with the main activities are Bersehati Market and other trade and services industries. A glimpse situation now for the area can be shown on Figure 4.4, the surroundings of Tondano River. In line with the Indonesian history, Manado city has been well known and visited by overseas traders since 16th century (RTRW, 2010). But the well-recorded histories started since 17th century, particularly in 1623 when Manado has been popular among western traders for its trading commodities such as clove, peper and so on.

After decades, the development in Manado city become rapidly growing in line with the population growth. Manado city not only become the dwelling place for North Sulawesi people but also for other people from various part of Indonesia. They come to Manado and live there mostly for working for instance in trading or service sector or just for other social activities. Those people from various ethnic groups mostly comes from Java, Makasar, Ternate, Gorontalo, Minang, Bugis, etc. Due to the variety of topography, the development of the city doesn't spread evenly.



Figure 4.4 Manado in 17th century (left) and Manado in the present, shows the Tondano river  
(Source: Dinas Tata Ruang Kota Manado, 2010)

People tend to live on flat area rather on hilly areas which is relatively close to the coastal zone or the city centre. By the reason of limited land, development policy of Manado currently tend to pile up the sea through reclamation. Before the reclamation project, the coastal are of Manado was a green area with sand around 10 meters to the sea. The area along the seashore was also recognized as the densest part of the city and absolutely no new development was able to be done. Then in 1991, there was a project to improve the road, known as the boulevard project. The project itself was funded by the national, provincial and local governments (RTRW, 2010). The existence of the boulevard project completely has abolished the whole coastal area along the city of Manado.

Soon after the boulevard project finished, a green project along the side of the road was initiated as a re-conservation initiation. But the project was canceled and pieces of land along the boulevard go to the private ownership that began to develop cafés, restaurants, hotel and pubs. The area turned as the most attractive area for kinds of services and food industries. As these small cafes were growing, the whole area from Kampung Texas to Pantai Bahu began to attract many investors proposing to develop it.

The agenda on land reclamation in Manado was proposed in 1988 by the Manado city local government through the petition of the Minister for Internal Affairs on April 2nd 1988 in order to reserve the right of a state owned land of 176.872 square meters along the coast (Kalalo, 2009). The location for the reclamation development was on the coastal area in Kelurahan Wenang Utara, Kecamatan Wenang, in which according to the petition will be piled up to become state owned land and will be used for developing offices, hotels, recreation and sport facilitation. The Minister for Internal Affairs finally approved the petition through the declaration of Minister for Internal Affairs Decree No: 66/HPL/DA/88 about the Authority to Organize on behalf of the Government of Sulawesi Utara Province (Kalalo, 2009).

Additionally, all the gained land from the reclamation projects should be owned by the government and the further use by private sector will be arranged in a bidding regulation. In fact, the reclamation project itself has been conducted mostly by the private sectors and one of the clausal in the contract that 16% of the gained land will be given to the government for small holders sectors (Kalalo, 2009). This bias process of project implementation has been much criticized but the project was still going on and most of the land now has been developed for big private business such as Manado Mega Mall, Manado Town Square, Boulevard Mall and Bahu Mall (Figure 4.5).

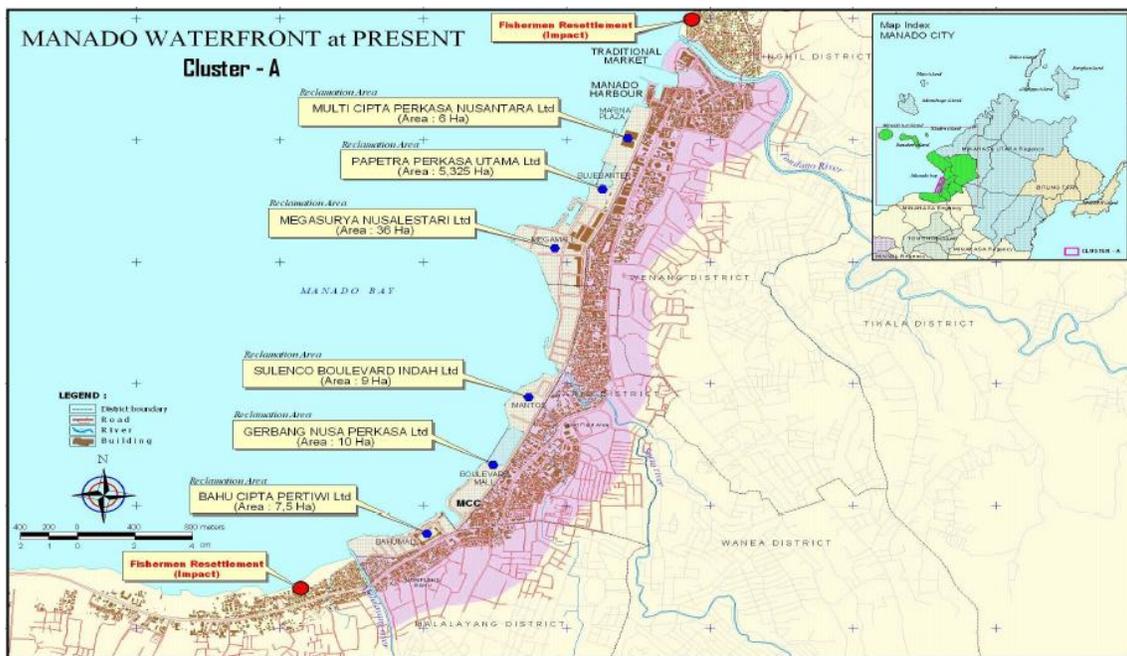


Figure 4.5 Map of land reclamation in Manado waterfront area Cluster A  
(Source: Lagarens, 2011)

Until then, the reclamation project has been handled by private company and still continue until now. In the beginning, the purpose of the project was to create a new concept of Waterfront City as an integrated area of public facilities, services, housing and tourism. It was also aimed to retreat impacts of land abrasion which have caused loss of land around 200-400 m since 1951.



Figure 4.6 Reclamation Area in Manado  
(Source: Author)

Meanwhile, the long term goal is to improve the economic activities by using coastal resources efficiently and productively, human resource upgrading with an environmental friendly concept which in the end would increase local income and prosperity of the society as a whole. But in fact, there has been a diminishing public space in Manado city where people could not enjoy the beach freely right now. Most of the beach areas are under big property ownerships.

Many rejection and contradiction of the project, especially comes from the citizen who live along the coastline, environmentalist, experts and citizen who concern on the effect of the project to the future of environment and habitat in the coastal area. On one hand it aims to prevent abrasion which on the other hand many people also argue that it will cause the loss of marine biodiversity. Local media also makes some news about the rejection of citizen, but the effect doesn't achieve any meaningful result. Additionally, the rejection doesn't been respond seriously by government and people's aspiration faded as time goes by. Meanwhile, the project keeps running until now. There has been some controversial and rejection afterwards during the project but still there is no serious action taken by government. The government shows their effort by ensuring the citizen about the impact of the reclamation development in the future will give a positive influence to the economic growth in Manado city and attract tourist to come to Manado.

The topographical characteristic has shaped most of the commercial activity, offices, and even settlements to be centralized their activities at the coastal area which is more flat, easy to develop and attractive along the coastal line. This condition reflected to the reclamation area which trigger high demand for development and infrastructure of housing, commercial and business in this most agglomerated part of the city.

#### **4.2.2. Vision Mission and Spatial Planning and Policy in Manado City**

Based on RTRW 2010, the vision of Manado city is in step with the city government vision. Determination of the vision refers to the various potentials and resources owned by the city of Manado, particularly in natural resources, human capital, technology, culture, community values and the spirit of citizen. According to the Regional Long Term Plan of Manado 2005-2025, the vision of Manado city is "*Manado as World Tourism*". In this vision, Manado city has established as a world tourism city, which beside the Bunaken sea garden that has been a flagship and worldwide famous, but also improving other city potentials either natural and artificial environments to support the vision.

Proactive efforts, reprotoif and anticipatory in terms of implementationa nd realization of the vision in the future is an absolute requirement to achieve the governemnt objectives for development and community in medium and long term. To elaborate the real vision, the mission of Manado city is formulated. The mission are:

- Achieving good governance by a good, clean and democratic with tourism oriented
- Achieve an empowerment of competitiveness community that supports tourism
- Achieve a sustainable environment that support tourism and tourism oriented.

In order to achieve the vision and mision, therefore a Regional Medium Term Development Plan (RPJMD) of Manado city has been prepared. RPJMD serves as a guidance of the operational development and controlling the acceleration of exixting development. RPJMD is a strategy plan to achieve then developments target over the next five years and fits with the mision of Manado city.

City planning documents are very important in anticipating city's rapid and dynamic growth, therefore in its development; city will be more focused in functional synergic spaces. Thus, the Regional Spatial Planning (RTRW) 2010 of Manado beside refers to the Government Regulation no. 26/2008 about National Spatial Planning, Provincial National Planning of North Sulawesi and other new regulations; it is also the result of the previous Spatial Plan that has been conducted before. The Spatial Plan of Manado 2010 is a document plan to form the Spatial Structure and Utilization Pattern of Urban Space, based on the National Spatial Plan and Provincial Spatial Plan. In general, the technical content in Manado Spatial Plan (RTRW) refers to the Ministry of Public Works regulation no. 17/2009 which consists of: a) the objectives, policies and urban spatial planning strategies, b) plan for urban spatial structure, c) plan for urban spatial pattern, d) establishment of urban strategic area, e) referrals of the use in urban area, and f) urban spatial control provisions (RTRW, 2010). To realize the goal of spatial planning in Manado city, the spatial arrangement of policy is:

1. Implementation of sustainable development in Manado city.
2. An integrated development of tourism in Manado city covers all aspect of functional space.
3. Development of economic activity centers that provide excellent service throughout Manado region and North-Eastern region of Indonesia.
4. Development of social and public facilities that enhance the role and function of Manado city in regional scope.

Manado spatial plan strategy was developed based on the objectives and policies which have been organized previously, so the additional strategy is essentially an elaboration of the goals and policies.

More specific planning regulation set out by City Planning Institution of Manado city is the Detail Spatial Planning of Building and Environment (RDTBL) for Manado CBD area and Jalan Pierre Tendean area. It determines the design concepts/guidelines which consist of general spatial planning and spatial regional planning concepts for priority spatial areas. The priority spatial areas are on Jalan Pierre Tendean (Boulevard area) and Jalan Sam Ratulangi. The detail spatial planning arrange about public space, green area, river front, and neighborhood unit. However, there is no specific detail guideline for reclamation area which is located on the CBD area of Manado.

### **4.3. Public open space in Manado reclamation area**

In Manado city, public open space which function as city park has not provided yet. There are several public open space such as Sparta Tikala with multi function for formal and informal event, local competitions, concert, etc but it doesn't have a clear function neither as a park, a plaza or just an open space that provided by coincidence. Other public open space in Manado namely can be said are football field or outer space as part of a building. In areas with dense settlement, there are no planned public open space but empty underdevelop land which currently be used by local society for having sport (for instance football or badminton). Other existing open space around river banks and shoreline in some part of the city has not function well because it hasn't been planned and organized yet.

On the other hand, the appearance of the new CBD along the coastline on the reclaimed area which has been develop using a super block pattern, has accelerate the process of city economic development (RTRW, 2010). The city center has tend to move to the coastal area and other city activities spread out to new develop areas. This condition beside generating a big multiplier-effect to the economic activity of citizen but also influence the structural form and the spatial pattern of the city as a whole. The Boulevard street as the main street in the reclaimed area become more open and become one of the fronts of the city which is oriented to the sea. People's activities absorbed in the area and indirectly influence the availability of public space as well. There are no appropriate public open space in the reclamation area which has turn to a packed economic activity with all the business, trade and service activities (Kawengian, 2007). The development in this area has resulted lacking of accessibility, physically and visually, and loss of high quality of public open

space (Kussoy, 2011). The existing public open space in the reclamation area is shown on Figure 4.7, according to research observation.



Figure 4.7 Existing public open space in the reclamation area  
(Source: Author, <http://www.scribd.com/doc/59616543/Urban-Analysis>)

The figure above shows the condition of public open space in the reclamation area are still lack of quality where there are not enough supporting elements for a high quality of public open space. Lack of supported pedestrian way with trees that can make people feel comfort to walk through on a long sunny day, lack of gardens and parks furniture, lack of accessibility; physically and visually to the water which blocked by restaurants owned by private, and still lack of aesthetic performance that should be provided in a waterfront area. According to Syafriny (2011), the path ways and sidewalk in Mega Mall on the reclamation area are not designed specifically for walkers. It just

covered by hard surface for vehicles which makes the place become more hot during the day. Some buildings and parking area are still under construction in certain places. Syafriny said that, the respondents of neighborhood felt that the open space in the reclamation area are still insufficient in quality and quantity to meet public demand. Beside limited in function, the quality of environment is poor because of the thermal comfort and cleanliness problems. In addition, public open space on the reclamation area is provided by private who develop the area and by government who owned 16% of the gained land. In fact, neither private or government have not seriously develop these area with a high quality public open space (Kussoy, 2011). It can be shown by the picture below in Figure 4.8, the existing land that used to be developed for public open space by local government.



Figure 4.8 The 16% of land owned by local government on the reclamation area shows by the sign, stated that the land owns by local government of Manado (Source: Manado Projects and Development, 2012)

#### **4.4. Regulation and policy of public open space in Manado**

Public open space in Manado based on Regional Spatial Planning (RTRW) is the provision of green open space, which has been stated according to the directives of Law no. 26/2007 about Spatial Planning. It stated that Green Open Space has to include at least 30% of the city area not included the conservation area, which divided into 20% for Public Green Open Space and 10% for Private Green Open Space. Green Open Space provision and utilization is to ensure several points in term of the availability of space. One aspect that has been pointed out is to ensure the availability of recreation area and sport activity for citizen.

In RTRW (2010), the function of green open space is divided into 2 functions. The main function is for ecology function and other additional function is social and cultural function, economic function and aesthetic function. In social and cultural function, green open space functioned to describe the local culture expression, as a communicative media for the citizen, recreational area and a place and object for education, research, and learning or studying the nature. In the city region, all of the function describe above will be combine in line with the needs, interest and the sustainability of city. Based on the minimum standard requirement of 30% for green open space from the total area of Manado city, therefore the minimum area for green open space in Manado is 4.534,8 Ha. Divided into 20% for public space (3.023,2 Ha) and 10% for private space (1.511,6 Ha). The development of public space are allocated for settlement gardens, sub district gardens/parks, city parks, and other specific functions such as greenbelt, greenways pedestrian, median roads, etc. Additionally, for private space, the development is directed for settlement area, trade and service area, offices, education facilities, health and religious building. The reclamation area which has been build as trade, service and office area are categories as private space but also public space, because the government owned 16% of land on the reclamation area. The total area for green open space in the reclamation area and the city center which both are the CBD of Manado city is about 100 Ha.

## **CHAPTER 5**

### **WATERFRONT REDEVELOPMENT AND PUBLIC OPEN SPACE IN ROTTERDAM, THE NETHERLANDS**

This chapter presents the context of case study of Rotterdam, which explore and describe broadly about its waterfront redevelopment and public open space provided on it. This research will also elaborate the national planning system and policies in Netherland in general and in Rotterdam municipality particularly. The vision and mission of the city and its waterfront development will also be explained in order to know specifically the aim of city for their future development, which will relates to why public open space also important for the quality of urban life. The existing of public open space and some examples of redevelopment waterfronts in Rotterdam and the redesigning public open space will be describe thoroughly to give a better understanding and view.

#### **5.1. Planning System in the Netherlands**

The Netherlands is a unitary state which has three tiers of government: central, provincial and municipal. There are 12 provinces and 458 municipalities in the Netherlands (OECD, 2009). The provinces are responsible for land use planning and physical infrastructure (i.e. planning and building regional roads). Meanwhile, the municipalities are responsible for a wide range of policy sectors such as public transport, housing, local planning, environment, economic development, education, health, etc. In terms of spatial planning policy, the administration of the Netherlands as a decentralized system resolves a contradiction between controls by higher tiers of government with the lower tier of municipalities (McCarthy, 1996). Central government sets the context by making key decision, the provincial governments formulate and adopt regional plans and the lowest tier the municipal government formulate and adopt structure plans and local plans (McCarthy, 1998 & McCarthy, 1996). Thus, the plans made by one tier of government must be approved by the tier above. However, in practice there still a level of negotiation among levels with the provincial government as the mediator and the municipalities remain a high degree of policy freedom (McCarthy, 1998). Flexibility and possibility of plan revision also still be considered.

There are several urban planning phases in Dutch municipalities planning system that revealed in gradual stages (Kibria, 2008). The design phases in urban planning as follow:

- Initiation design phases (visionary plan/structure plan/city vision & plan/redevelopment plan/built up areas, *Programma van Eisen*, etc)

- Zoning plan (*bestemmingsplan*), land use plan
- Master plan (*Masterplan*)
- Urban plan (*Stedenbouwkundig plan*)
- SPvE phase (*Stedenbouwkundig Programma van Eisen*)
- Architectonic quality plan (*Beeldkwaliteitsplan*)
- Temporary and definitive (architectural) design (*Voorlopig en definitief ontwerp*)

The phases of urban planning follow a complex hierarchy and each stage have specific task which determine the goals and objectives in planning and design. This design phases also occur in public open space development.

Recently, the national spatial policy in the Netherlands has evolved significantly. Urban regeneration has been a crucial policy framework through national approaches. 'Growth centers' is one of the approaches as a compact city policy which concentrated the development in existing urban centers (Needham et al., 1993 in McCarthy, 1996). Municipalities played a critical role in developing land through providing services, managing land and offering land to developers. They also give a greater share to private sector in funding the development. Therefore, cooperation between government and private sector consider to be important refer to government policy of 'compact city' to prioritize important urban centers for new growth and encourage local city marketing initiatives (McCarthy, 1998).

## **5.2. The city of Rotterdam**

Rotterdam is the second largest city in the Netherlands and one of the largest ports in the world. Located in the province of South Holland; lies on the west of Netherland and the south of the Randstad. The municipality covered an area of 319 km<sup>2</sup>, which 206.44 km<sup>2</sup> of the area is land. Rotterdam municipality is a part of a larger region which is approximately 1.6 million of total population. Rotterdam municipalities itself have about 600.000 inhabitants from 174 nationalities (CBS, 2012). The location of Rotterdam is shown on Figure 5.1. The city is mostly built behind dikes because large parts of Rotterdam are below sea level. The lowest point in the Netherlands is situated on the east of Rotterdam which is 6,76 meters below sea level. Consist of 14 sub municipalities and divided into the northern part and the southern part by the river of Nieuwe Maas, Rotterdam is connected by several bridges and subway tunnel.

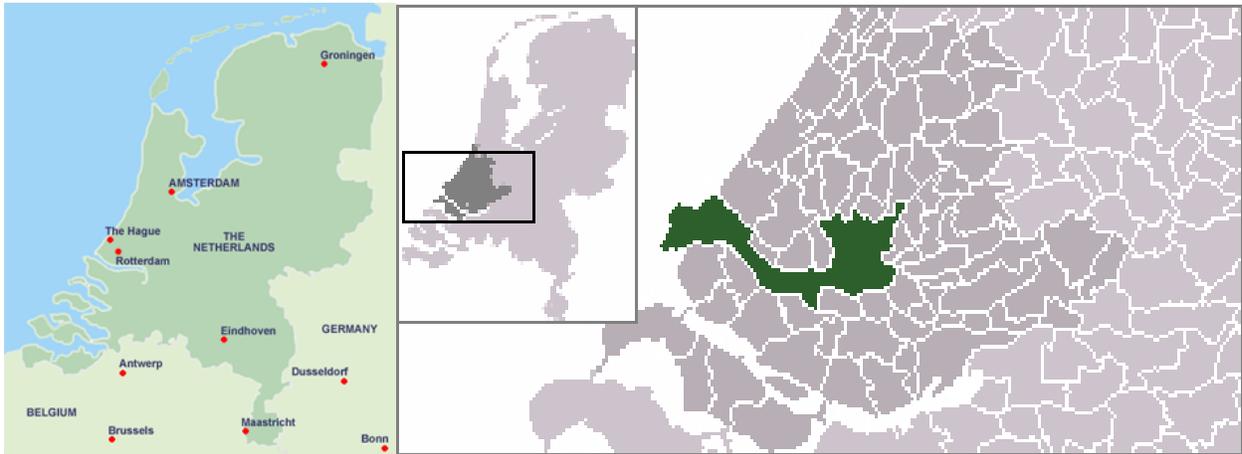


Figure 5.1 The location of Rotterdam municipality  
(Source: [www.wikipedia.org](http://www.wikipedia.org), [www.topnews.in/regions/rotterdam](http://www.topnews.in/regions/rotterdam))

One of the famous bridges is the Erasmus Bridge (Figure 5.2) which is one of the trademarks or icon of Rotterdam city (Buursink;1999, Romein;2005). The bridge has become an important transport link from the South of Rotterdam to be closer to the rest of the city and also serve to help physically unify the city (Doucet, 2012). The city center is located on the northern bank of the Nieuwe Maas but recently the urban development has extended to the southern part of Rotterdam known as *The Kop van Zuid* (“the Head of South” which is the northern part of south Rotterdam).



Figure 5.2 City of Rotterdam with its famous Erasmus Bridge  
(Source: [www.explow.com](http://www.explow.com))

Rotterdam has several harbor area which located along the river until the North Sea (Figure 5.3). Particularly, because of the strategic location which is close to the North Sea, Rotterdam referred as the 'Gateway to Europe' (City of Rotterdam Regional Steering Committee, 2009). It becomes the largest port in Europe and one of the busiest ports in the world. This is based on its location near the mouth of Nieuwe Maas River which leads directly into the center of Europe. Therefore, Rotterdam is a large city with a well-equipped port infrastructure, multi-modal accessibility and as priority transportation for high volume of goods and passengers.



Figure 5.3 Location of harbor and industrial area along the Nieuwe Maas River  
(Source: <http://www.rotterdaminvestmentagency.com>)

The city is known for its architectural heritage and design; shows by its architectural buildings, monument, bridges, and sites with a high quality of design (Buursink, 1999). In the economic sector, the city focuses on three viable economic sectors that have significant share in the overall employment. The three main clusters are port and industrial complex, health care and medical industry, and creative industries in architecture and design sector (OECD, 2009). Measured by employment, major sectors in the city's economy are business, services and trade.

### 5.2.1. Waterfront in Rotterdam

As a most important port in Europe, Rotterdam have experience a decline in port operation like other cities together with economic decline and loss in population on 1970's (McCarthy, 1996). The empirical moment when a massive bomb damage most of Rotterdam port areas in the second World War, urge a necessity in redevelopment especially on the north bank of River Maas which indirectly impact the decline of port on the south bank. The reconstruction was guided by the Basic

Plan of 1946. However, in the nineteenth century the north and south bank have been developed with different function. The south bank land use became more for the middle class housing area and in contrast, the north bank area is for commerce, administration, entertainment and higher value housing (Pinder&Rosing, 1994 in Mc Carthy,1996). Shortly, the port of Rotterdam has transformed into a major logistic node and a mixed use area with diverse urban function. Flagship projects and commercial enterprises, housing and services, modern high rise architecture, shopping zones, museums and various agenda of summer festivals, sport events and other interesting attractions which serve for people leisure and tourism (Romein, 2005). In 2003, according to Romein, the scope for leisure and tourism in regional (for the city and the province of South Holland) increased significantly to 77% of the visits for leisure purposes, paid by people who live in the city and the province. Foreign people is less than 2%, means that the citizen in Rotterdam and surrounding area are attracted to come, visit and use the facilities, and enjoy the leisure in Rotterdam waterfront areas. However, Rotterdam still have to give more effort in persuading tourist to come and stay overnight to enjoy the leisure provided by the city.

Meanwhile, planners and policy makers in Rotterdam realize the potentials of the waterfront for the economic growth of city. The open space and the river area close to the city centre consider as a selling point of Rotterdam (Romein, 2005). Since two decades ago, the government and private sectors starts to redevelop the waterfront area with multi use and multi-function. Since a waterfront development is along project, the development is still conduct until now. As a leap on inner city development, in 1990's the authority imply a new program of waterfront redevelopment called the Kop van Zuid (Head of South), which develop various urban functions on the south bank of River Maas (Romein;2005, McCarthy;1996). In addition, there are six clusters of Rotterdam waterfront include the Kop van Zuid project that located on the waterfront area in Rotterdam city (Figure 4.2.1). Some projects have been done but several are still in construction. The Spatial Plan Rotterdam 2010, through municipal council established the vision of the waterfront: "*Strengthening the national and international competitiveness of the city as a place to live, to work, to shop and to entertain.*" The plan distinguished three strategic areas in the city: Boompjes (the heart of the historic Water City; cluster 3 in Fig.5.4), and two cluster in the Kop van Zuid, Wilhelmina pier (5) and Entrepot (6) (Romein;2005, Van Melik;2008).

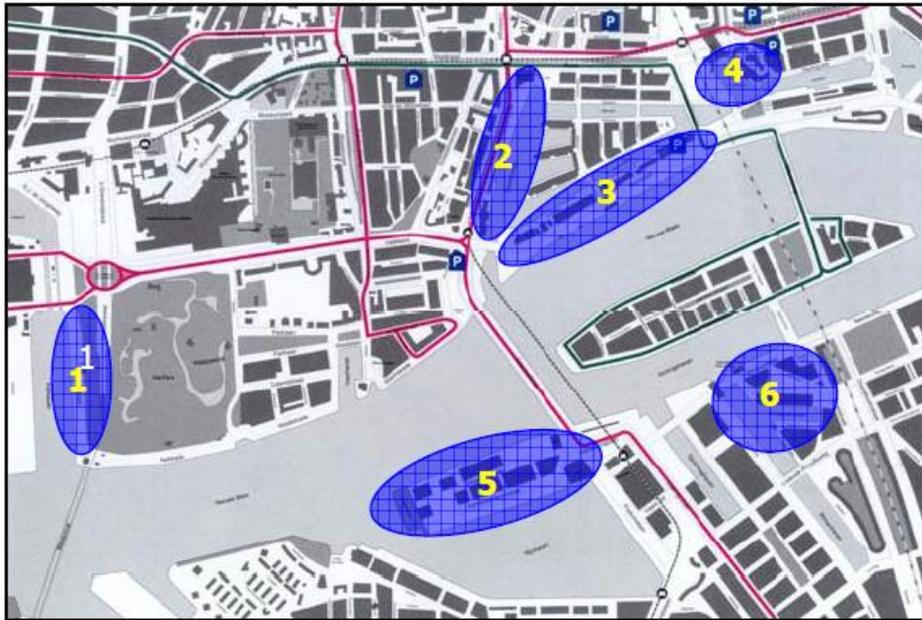


Figure 5.4 The six clusters of Rotterdam waterfront  
(Source: Romein, 2005)

The program for these strategic areas is new residential project, tourism, cultural, entertainment, recreational projects and improvement of the quality of public open space in the waterfront. The last program which focused on public space occurs as a condition to express the ambition of Rotterdam as international place to visit through its good investment and location possibilities. Therefore, the municipality forces Rotterdam to become clean, safe and of high quality (van Melik, 2008). These are to respond the awareness of urban economic through increasing leisure and tourism sector in the waterfront area. Meanwhile, the key issue that determines the leisure and recreational value of the waterfront is about location and accessibility (Romein, 2005). The former is related to the connection to the city center and waterfront area, and the latter is related to external and internal accessibility in waterfront area and among other clusters. Other important key issues are the use of space which refers to the quality of public space and the liveliness and waterfront atmosphere. Rotterdam themes as a high rise architecture and port/maritime city also become a selling point and consider as a key issue which contribute to the spatial planning of city where leisure and services can be develop in the waterfront.

### 5.2.2. Vision Mission and Spatial Planning and Policy in Rotterdam

Facing the coming year's challenge of the city that will grow further, Rotterdam city has been accelerating the development in order to strengthen the city competitive position regionally and

internationally. This is purposed to become more attractive to residents, companies and visitors. In achieving this goal, since 2006 Rotterdam's city council has adopted the vision: '*Rotterdam Gateway to Europe*' to reach the spatial and economic development of the city until 2030 (Gemeente Rotterdam, 2007). This vision is based on two major objectives that becomes the mission of Rotterdam city: strong economy and attractive residential city. The vision of Rotterdam city has been elaborate into *the 'Rotterdam Urban Vision'* on 2007. The municipal executive adopted a spatial strategy which focuses on the social program and economic vision, and visualizes their spatial effects.

In order to achieve the mission, strong urban elements to become the basis of the strategy should be consider. The port is a potential and promising in supporting economic growth sectors, popular residential districts and the modern city centre on the river (Gemeente, 2007). The realization of it in line with the existing area will give a maximum benefits and lead to an efficient use of scarce space in the city. In achieving the strategy, Rotterdam emphasize on two pillars (Stadvisie Rotterdam 2030):

1. *Strong economy*

Creating a strong economy through a transition from an industrial economy to knowledge and services economy based on medical development and creative sectors. Emphasis will be on the innovation in energy consumption and energy production as well as reduction in emission of carbon dioxide. In leisure sector will develop further on the location that already proved successful such as the city centre, Stadionpark and the Zuidplein (Figure 5.5).

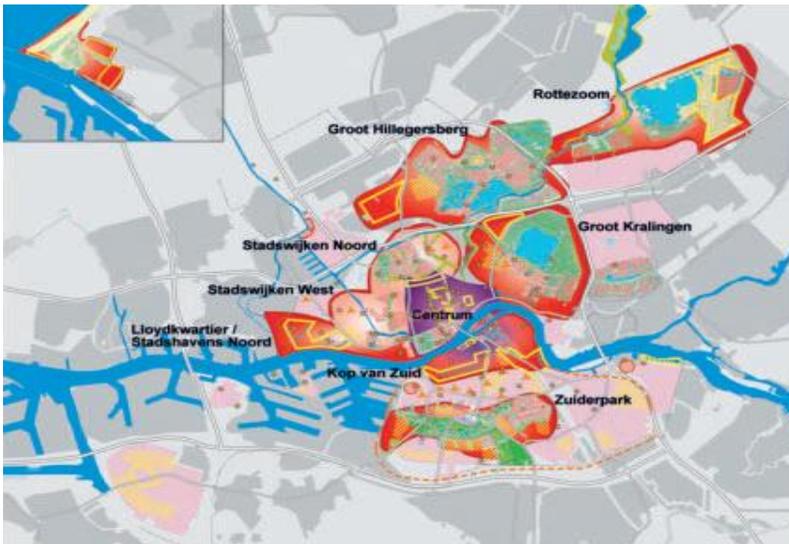
2. *Attractive residential city*

Improve the quality of residential environments through giving more attention to public space and the indispensable facilities (education, child care, social/medical, sports, etc). Top priorities are given to the weaker districts by restructuring and tackling existing housing stock (Figure 5.5).

To fulfill the strategy, several aspects have to be taking into account. High standard public open space is an important condition for creating attractive residential environments either for outer city or in the metropolitan area based on each character of district. Redevelopment of heritage buildings and unique architecture contributes in achieving the process in line with the existing public facilities. New plans are being developed for water management in adapting with climate change and for the improvement of the general quality of environment.



Strategy for a strong economy



Strategy for an attractive residential city

Figure 5.5 Spatial development strategy of Rotterdam city (Source: Gemeente Rotterdam, 2007)

The development of area along the river focuses on three elements: the port, the transformation of port area into urban areas, and an attractive city centre. Especially on the city centre, four strategies are emphasized: increasing the general standard of public space and slow traffic routes, strengthening the quality of life and the identity of various districts in the city centre. There are two important strategy emphasize for each area in Rotterdam city; the strategy for Rotterdam South and the strategy for Rotterdam North (Gemeente Rotterdam, 2007). On the South part, the Zuiderpark and Kop van Zuid will give a new rise in residential environment in the surroundings of water. The strategy will involve a pro-active private housing improvement and an intensive

approach to the hotspot area. For the North part, the approach will be done through making a better use of and enhancing the existing qualities: economic activity and attractive residential environments.

For an effectiveness assessment, Rotterdam council has conducted thirteen areas of developments that are crucial in achieving the objectives of 'strong economy and attractive residential city. They called the project as VIP projects (Gemeente Rotterdam, 2007). To achieve all strategies and projects, Rotterdam city are encourage to apply the 'compact city' policy as a focus in regeneration for a further growth through several efforts. One important aspect is by involving private sectors in coordination with local government to enhance infrastructure investment and mixed use development in term of funding to a broader phase of Dutch urban policy that emphasize entrepreneurialism (Van der Knaap & Pinder, 1992). It is a crucial aspect that should be taking into account consider that Rotterdam have a competitive location for international business and its important point of access (Spaan;1995 in McCarthy;1998).

### **5.3. Public open space in Rotterdam waterfront area**

Rotterdam has been well known with its public space redevelopment since two decades from the early 1990's until 2007 (van Melik & Lawton, 2011), even since early decades when the city still functions as port city, serve almost all shipping trade around the world (Meyer, 1999). Since 1993, improvements in public space start to be planned, triggered by inadequate changes in public space development. During the year, a new plan was presented that aims to improve the quality of the city centre and a coherent management of public space (Municipality of Rotterdam;1993 in van Melik & Lawton; 2011). It focuses on conditioning public space in the city centre of Rotterdam as an international centre of good investment climate. Therefore, the public space should be clean, safe and of high quality.

In the city centre plan of 2008-2020, the municipality formulates the redevelopment plans which aims to create a city lounge in the city centre that functions as a place for inhabitants, companies and visitors to meet, spend time and entertained (Municipality of Rotterdam;2008 in van Malik & Lawton, 2011). It offers more culture, leisure and other opportunities from shopping to street life, to connect neighborhoods through its well-designed public spaces. Regarding to its pivotal function, public space become a central theme in the new city centre plan by the Rotterdam municipality which believes that good public space is the precondition for economic development in the city.

According to it, Rotterdam municipality has arranged public open space provision in the Spatial Development Strategy 2030 called “Connecting City: Public Open Space Vision of Rotterdam City,” (Gemeente, 2007). The document consist of vision and purpose of public open space provision, characteristic of public open space in Rotterdam, structure, dimension, and themes of public space. The vision of public space in Rotterdam focuses on connecting Rotterdam city through public spaces by making good streets and quays which could create attractive network of public spaces. This network aim to connect important buildings and places, attach different living quarters, and create attractive networks that could offer space for meetings of many different cultures. The vision itself have four themes: connecting city, river as urban landscape and recreation, green city and quality in image and use of public space. Meanwhile, the characteristic of Rotterdam public space is a linear structure. 75% of public space consists of streets and waterways and only about 25% are squares and open spaces. The city structure determined by water structure lines: Maas River, Rotte River and the inland. The river takes an important part due to its history and identity of city and also constitutes an important anchor point. This linear structure formed by blocks system which gives easy accessibility for cars, crossing and walking path for pedestrians, and for cycling. The vision of public open space provision of Rotterdam is shown in Figure 5.6 below.

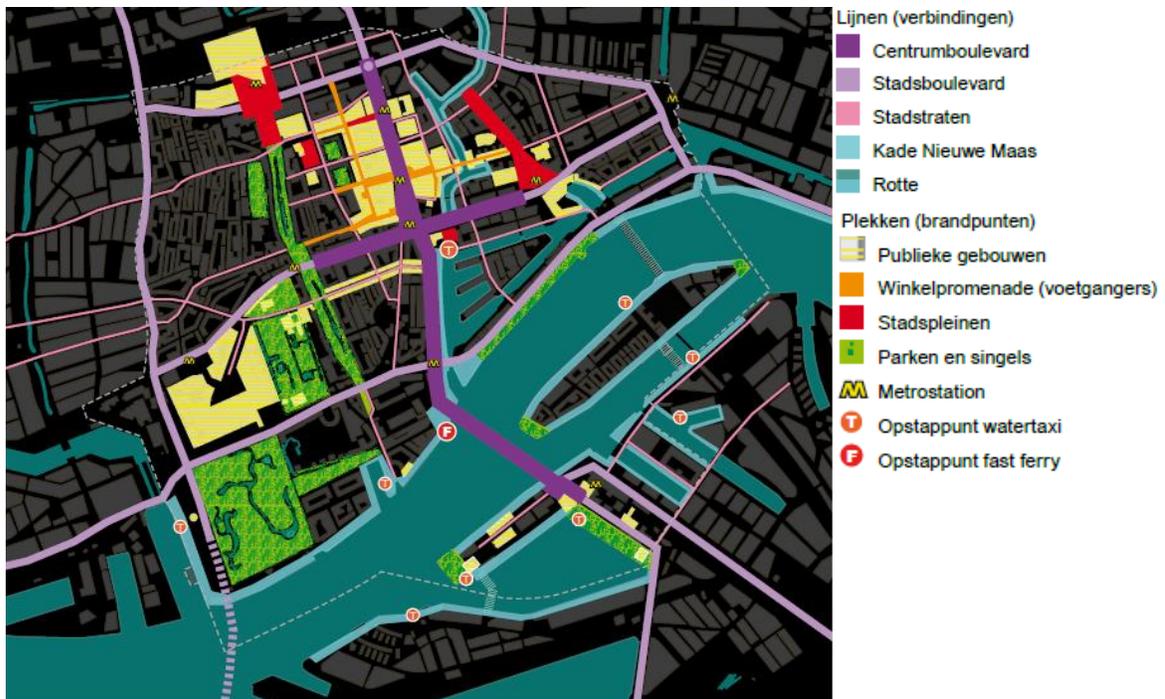


Figure 5.6 Public Space Location in Rotterdam  
(Source: Gemeente Rotterdam, 2007)

Meanwhile, the development of public open space in Rotterdam nearly combined with the real estate development that involve private sector in the redevelopment process. This becomes one of the motives of Dutch private sector involvement in public open space redevelopment. In upgrading the city centre, Rotterdam has been a pioneer in involving private sector through the cooperation between local government and private sector in the development projects. Local government also has actively participated as a private actor by taking the lead in setting up the public-private consortium (van Melik & Lawton, 2011). It means that local government joins and participates in the investment of project, and corporate in the development of public space with public private sectors. One examples of this scheme of cooperation in public space redevelopment between local government and private parties is the redevelopment of Beurstraverse (Figure 5.6). This project include a cooperation with ING Bank and Focas, a retail conglomerate named C&A. Cost, revenues, risks and authority of the project are shared among the local government and the private parties. For daily maintenance and supervision runs by a private management company. This system of cooperation is one of the example of actors who involved in public space redevelopment in term to achieve a better an improved of high quality of public space.



Figure 5.7 Public Space in Beurstraverse, Rotterdam  
(Source: van Melik&Lawton, 2011)

The same condition also appears on the waterfront area, where the area has been redevelop with a mixed use functions, from commercial and business activity to residential and recreational area. The redevelopment of waterfront also indirectly influence the provision of public space on those areas which become more attractive with improve and high quality of public space supported with

its surrounding aesthetically and functionally (Erkok, 2009). According to Erkok through her research, one of the criteria that have been assessed as a series of quality criteria is the quality of open spaces provided in the urban area, especially in Rotterdam waterfronts. In line with Meyer (1999), she found that a quality of open space was prepared with a high quality identification and detail public open space for buildings and public realm. Other project plans related to public open space design also has been laid out in Rotterdam waterfront areas. In 2005, a plan called “Rotterdam Water City 2035” has been established through the 2<sup>nd</sup> Architecture Biennale in Rotterdam. One of the plan suggest innovative design of green roofs and water squares as public open space, where the water squares can temporarily store water when it rains (Erkok, 2009).



Grotekerkplein  
<http://blogrand.de/?cat=>



Green Room, Domestic Monuments#2  
<http://worldlandscapearchitect.com>



Wilhelminapier  
[www.citypeak.blogspot.com](http://www.citypeak.blogspot.com)



Schouwburgplein  
[www.pps.org](http://www.pps.org)



Lijnbaan, Car Free Pedestrian Mall  
<http://econode.blogspot.nl>

Figure 5.8 Examples of public open space in Rotterdam

Until now, several projects related to public space development still being developed, mostly in cooperation between local government and private sectors. Additionally, through the experience of waterfront redevelopment, key factors that have played a role in Rotterdam city in terms of land use planning and regeneration since decades are set below (McCarthy, 1999):

1. *National Government Role*

The national government has played an important role in the redevelopment and regeneration of Rotterdam. It shows by the government emphasis the orientation in land use planning, linked with the 'compact city' policy and encouraged the enhancement to attract tourists and in service uses which give a significant impact on the city. This approach was conducted in order to attract international investors to compensate in the port and industry activity. The policy development of 'city marketing' from the national level also considered as a response to an immediate political circumstance for the evolution of spatial planning in Rotterdam in order to boost the development, where social and economic benefits can be achieved.

2. *Architectural Innovations*

The architectural innovation in Rotterdam has contributed significantly to the city's image in the international level. Enhancement of open spaces with visual arts is one of the important elements that highlight the city through creating a high quality of public domain. However, the emphasis of architectural innovation involved costs as well as benefits.

3. *Cultural Regeneration*

The municipality of Rotterdam in addition has realized the need of cultural regeneration through an approach in creating high profile building projects that related to culture identity or preserve and conserve historical site or building. This is in order to promote festivals and other cultural events that could be conducted in the area of waterfront.

4. *Role of Municipality*

As explained previously, a strong relationship between the city and the port has resulted in an enthusiasm for public private partnership arrangements for development. Therefore the municipality has made an approach to the business interest to enhance the development in the city. In addition the involvement of community also has been taken into account by municipality authority that can help bolstering city development in various sectors.

5. *Policy Transfer*

Many aspects of the approach in redevelopment and regeneration in Rotterdam are a result of policy transfer from other countries. This can happen based on the similarities of an

applied context in term of range of social, environmental, interest and economic regeneration objectives. The perceived success from other country might be a policy transfer to another country. Nevertheless, not all aspect can immediately be transferred.

The approach to spatial planning in Rotterdam municipality has evolved significantly since the Second World War, influenced the spatial policy and its application in waterfront redevelopment, as well as to its public open space. However, still need more innovation and changes in the city reconstruction in order to give positive impact and effects to the society as a whole to always improve the quality of urban life.

## **CHAPTER 6**

### **ANALYSIS AND POSSIBILITY TO BE LESSON LEARNED FROM ROTTERDAM TO MANADO**

This chapter will analyze public open space development in both cities, Manado (Indonesia) and Rotterdam (the Netherlands). The analysis will start with comparing the existing public open space in both cities in order to know the variances in public open space provision, planning and design; and find out the possibility that could be a lesson learned from Rotterdam to Manado. It will be analyzed through the criteria of public open space based on the theoretical framework in Chapter 3. At the end, the possibility to be lesson learned can be imparted from the result of analysis.

#### **6.1. Comparison between public open space development in Manado and Rotterdam**

In this part, comparison between Manado and Rotterdam in public open space provision, regulation and existing public open space will be analyzed. The criteria on redesigning public open space in waterfront area will be analyzed to both cities: Rotterdam and Manado. These criteria based on: public open space components and design guidelines, spatial planning, regulations and policy of public open space, actors involved in public open space development and management of public open space. These criteria will be compared between Manado and Rotterdam as explained below.

##### **1. Design guidelines and components of public open space**

Redesigning of urban space in Rotterdam has been well known since decades, conducted due to the economic decay and port decline which urged the city to be redeveloped, renew, reconstruct and revitalize. The redesigning of urban space was focused on adding architectural heritage and development of new space for enhancing economic activity and lively uses such as leisure, culture, commerce, offices and housing (Gospodini, 2001). Old harbors area like Kop van Zuid, as new focal points for urban development, has also been redesign due to the demand in revitalizing the city in general. The redesigning of public spaces also took place in the city centre of Rotterdam. There are several projects that have been conducted while some are still in construction. Overall, the redesigning of public space in Rotterdam has shown significant development in following the planning and design guidelines (Meyer, 1999). Clear stages of design conducted in public open space planning development which has been set by the municipality of Rotterdam based on the urban planning and design phases in every Dutch planning and design development (Kibria, 2008). The structure and characteristic of public open space also has been defined in the Strategic

Development of Rotterdam municipality which follows most of components determined based on general design guidelines of public open space. The implementation of development has shown significant result through the successful public spaces in the city which serves people demand particularly in improving accessibility, connecting city centre and waterfront areas, and increasing city image. Each area served different function of public space depends on its location (Carr et al;1992, Madanipour;2008), and has its own characteristic comply with components of public space. The functional spatial clustering system in Rotterdam is one of the effective tasks that applicable to the waterfront project. It helps in determining new angels, creating links, creating relationship to adjoin urban districts, the use of water and harbors, and the relevance and design of public space which plays a crucial role in the waterfront redevelopment (Planum, 2001).

All function of public space endeavor citizen amenity and demand in public space through its components and following the design guidelines of public space. However, the development of public open space in Rotterdam also has some constraints in achieving an ideal public space. Different interest among local government and private sectors often arise in the planning process (Meyer, 1999). Not all redevelopment have met the exact requirement of guidelines in terms of these different desires among stakeholders. There are no perfect and precisely adequate criteria that could be fulfill. Each has its advantages and disadvantages. But overall, Rotterdam has been recognized for its high quality public space, well known around the world with its remarkable waterfronts and port city (Giovinassi, 2010).

Manado reclamation area which has been develop into a mixed use area with various function, still lack in providing high quality of public space (Kussoy, 2011). Kussoy said that ironically, developers, private sectors or investors try to find space to be developed for business activity. They assumed that public open space doesn't give much economic benefit and insisted to use it with an excuse to maximize the economic growth of the area. There are many public spaces in the area that are not properly designed and have lack of quality. This resulted to people become neglected to visit and enjoy the public space. There still no specific detail guidelines about public open space development particularly in reclamation area by local government which has already been regulate through the Guideline of Spatial Planning in Reclamation Area set out by the Ministry of Public Works. Therefore the development of public open space in the reclamation area mostly doesn't fulfill the design guidelines in public open space provision. Lack of law enforcement by government seems to be the cuase and should be evaluate due to the provision of public open space which does

not follow the regulations set out from the Ministry of Public Works about RTH and RTNH. This could be shown by the existing public space provided in the reclamation area. The awareness from private sectors and developers who develop the area still lack in developing a high quality of public space. Actors that contribute in the reclamation development area such as planners, urban designers, architects and project managers still not clear yet in terms of roles and responsibility of each actor. It should be noted that all design guidelines set out by central government or local government particularly in waterfront area should fulfill the design guidelines based on the concept of public open space mentioned previously based on the theoretical framework in Chapter 3. According to the analyses of both case study, local government of Rotterdam municipality has determined the design guidelines of public open space provision sufficiently based on central government regulation in public open space provision (Kibria, 2008). Below, the comparison of design guidelines and components categories of public open space between Rotterdam and Manado is shown in Table 6.1.

**Table 6.1**  
**The Comparison of Design Guidelines and Components Between Rotterdam and Manado**

Category	Rotterdam	Manado
<b>Accessibility</b>	<ul style="list-style-type: none"> <li>▪ Most clusters of the waterfront are well accessible by car and urban transit.</li> <li>▪ Mostly has direct connection to the inner city which varies in each cluster.</li> <li>▪ Still need improvement for internal accessibility especially for save promenade walks (motorized traffic).</li> </ul>	<ul style="list-style-type: none"> <li>▪ Accessible by car and public transport but private car has to pay in entering.</li> <li>▪ Have direct connection to inner city, but traffic jam in some areas at particular time.</li> <li>▪ Lack accessibility in inner area, physical and visual access to water, blocked by restaurants owned by privates.</li> </ul>
<b>Uses and activities</b>	<ul style="list-style-type: none"> <li>▪ Provide adequate uses like multifunctional profile such as fun shopping, architectural elements (fountains, sculpture, artistic elements or public art), lively atmosphere, and liveliness on the water (sports, professional shipping for freight and passengers).</li> </ul>	<ul style="list-style-type: none"> <li>▪ Have potentially supporting environment that can foster lively atmosphere but lack of attention in supporting it through good quality of elements (architectural elements, pedestrian, children playground and adequate elements for various age levels).</li> </ul>
<b>Comfort and image</b>	<ul style="list-style-type: none"> <li>▪ Provide important elements for public open space such as park furniture (bench, lighting, signage, etc), convenience facilities (drinking fountains, trash container, etc), appropriate pedestrian and path walks, children play areas, public restrooms, and maintenance equipment.</li> <li>▪ Secured public space in surveillance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Still lack of public open space elements to support comfort. Pivotal elements still need improvements and redesign.</li> <li>▪ Not enough surveillance and strict regulations.</li> <li>▪ Lack of thermal comfort in providing shading elements</li> </ul>

	<p>through providing CCTV and subject to strict regulations, co-operation between civil security guide, the police and private security company, and secure objects for people especially children</p> <ul style="list-style-type: none"> <li>▪ Clean and safety public space as the focus of local government aim in redevelopment waterfront area.</li> <li>▪ Shading elements due to microclimate (trees, shaded sitting, etc),</li> <li>▪ Always maintain the city image in public open space provision to attract people and tourist to come and visit.</li> </ul>	<p>(structural or greenery like trees).</p> <ul style="list-style-type: none"> <li>▪ Lack of visual comfort like gardens.</li> <li>▪ Improvements in cleanliness through people awareness.</li> <li>▪ Positive city image proved by the increase of tourist visits.</li> </ul>
<b>Sociability</b>	<ul style="list-style-type: none"> <li>▪ Can accommodate the engagement; physical and visual, with the environment shown by continuity of views, involvement with nature (opportunities to be closed to plants and contact with water), social spaces for diverse level and age, communication with people, etc</li> </ul>	<ul style="list-style-type: none"> <li>▪ More and less have the social engagement but lack of facilities and elements to support in order to be more attached with the environment in general.</li> </ul>

According to Table 6.1, there are some aspects from Manado public open space condition that has to be improved. This could be done through redesigning public open space that has already existed on the reclamation area. Important components should be taking into account to fulfill the four main categories in providing a high quality of public open space. The involvement of local government, private sectors, developer and stakeholders are important to the success of implementing a good quality of public open space.

## **2. Refer to spatial planning system, regulation and policy of public open space provision**

The redevelopment of public space in Rotterdam municipality has a clear trace and direction of planning system in its history. It shows from the clear stages of development since the Second World War when the city starts to redevelop. Step by step every regulation and policy of redevelopment shows significant changes to the inner city specifically and the whole city includes waterfronts generally. Clear hierarchy in urban planning is one of the aspects that influence the planning system, including the development of public open space. Each project underlines the improvement of public open space as one of the prominent aspect that should be provided (van Melik, 2008). Even for the future plan, through Stadsvisie Rotterdam 2030, beside the main aim to create a strong economy and an attractive residential city, the plan also includes the improvements of public space (Gemeente Rotterdam, 2007). The seriousness of local government can be seen through policies that emphasize the important in improving public space, for instance, investment program for public space on the outside of city centre by the municipality of Rotterdam. It aims to

invest public spaces in the neighborhoods to improve the Rotterdam's image as residential city. The plan emphasize high standard of green public spaces in the city centre (Gemeente Rotterdam, 2007). Quality of public space in the city always remains as top priority by the authority.

In Manado city, local government has set out several regulations related to the provision of public open space as mentioned previously in Chapter 4. Detail regulation set by the local government through the Spatial Planning Institution of Manado city which regulates the detail planning for building and environment (RTBL) in the CBD area of Manado include public open space provision, does not arrange detail planning for waterfront area which is also located on the city center. Through the ministry regulation, there are several regulations set out by the Ministry of Public Works such as the Ministerial regulation no.40/2007 about Spatial Planning Guidelines in Coastal Reclamation Area. This regulation should be the base or guideline in spatial planning in Manado reclamation especially for the detail planning like RTBL. It gives clear regulations about public open space on reclamation area. As mentioned on the City Planning of Manado, that every district has to provide public open space include the reclamation area which mostly located on Singkil, Wenang, Sario and Malalayang district, has not implemented sufficiently. The 16% of land for public open space in the reclamation area owned by local government has not been developed as it should be provided. Public open space owned by private sector around the reclamation area has been developed with low quality components and elements which seemed to be built to fulfill the requirement and regulation without considering these aspects. Strict regulations and law enforcement should be implemented in running the regulations. Meanwhile, the authority should arrange detail planning (RTBL) for waterfront area which is important for public open space development. Controlling and monitoring is also important in public open space planning, designing until the implementation which should be arranged sufficiently. Strict regulation in accessibility and security should be taking into account in term of safety, comfort and increase city image indirectly. Therefore, the planning system, regulations and policy of public open space in Manado should be improved in achieving a successful public open space.

### **3. Actors involved in public open space development**

Rotterdam has a long experience in cooperating with various stakeholders in the development of public open space, especially between local government and private sectors. Rotterdam municipalities has concentrate on urban redevelopment particularly on public space not only in order to be competitive with other cities for business, residents and tourists, but also they feel

necessary to provide due to its function in supporting the city as a whole financially and physically (van Melik, 2008). The role of local government itself still extensive regarding to all redevelopment task for instance, taking the initiative, selecting the design, directing the redevelopment process, financing the redevelopment and maintaining the public space after redevelopment is finished. Mostly, in every redevelopment project, local government is dominant regarding to the process and maintenance. While the construction and decision making powers are shared equally with other stakeholders. Supervisors such as architects and consultancy agencies assisted the local authorities in the redevelopment process but still the local government remained as the responsible actor. Even in the PPP projects, local government still take the main director, even though private sector mainly interested in participating in the public open space redevelopment if the total project (preferably retail) involves new construction rather than only few improvements. This regards to the responsibility of local government in public open space to not be changed much by the involvement of private sector and they also arranged and finance the maintenance. However, the private sector appears to be more involved regard to the design and finance.

From Rotterdam experience, there are four possible effects of private sector involvement: increase in budget for design and management of public space, decrease in free access of public open space, more coherence between public space and the surrounding buildings and redevelopment process of public space become more complicated due to duration time of project if there are many private sectors involved (van Melik, 2008). Urban public space ideally has to be used by and accessible to all. It is the reason why local government does not really relay in involving private sector in the redevelopment of public space. But the other reason, according to van Melik research, is the dismissive attitude of local government that still holds the traditional role. They refuse to mix private involvement and public interest. While, a successful public space redevelopment is not only depend on urban planning by the municipality but also market knowledge. However, there are also lack of required professionalism and pro-business attitude from private sectors which become the constraint to involve in public space redevelopment.

In Manado, because most of the reclamation land owned and developed by private sectors, the development of public open space is under the private sectors responsibility in providing it. Meanwhile, local government also has 16% of land on the reclamation area that should be developed as public space. There is still lack of coordination between local government and private sectors in public open space provision. Both land owned by local government and private sectors

until now have not been developed properly for public open space. Low reinforcement in regulation and policy are the main aspect to be considered that influence the provision of adequate and high quality of public open space on the reclamation area. Manado authority should be stricter in giving sanction to private sectors who neglect to redevelop public open space, and the local government also should run the regulation of public space provision more wisely as stated out in the city planning regulation. Building partnership with private sector is important regards that the reclamation area has been developed by private sector. However, the authority should set out clear regulation and policy about this coordination in order to get equal advantage to both parties. Some points to be consider is setting out responsibility and task upon public open space development in term of planning and designing, constructing, budgeting, maintenance and the management of public open space, which are important due to a successful development and achieving good quality of public open space.

#### **4. Management of public open space related to the role of actors involved in public open space management.**

The management of public open space redevelopment in Rotterdam has been explained in Chapter 5 shows that most redevelopment project of public open space has been taken responsibility by local government. This is regards that most public open space redevelopment is conducted by the local government of Rotterdam from the planning process until the implementation. The involvement of private sector contributes mostly on the construction phase, financing and the decision making. However in some case like the example mentioned in the case study, Beurstraverse is managed and financed by private sector. Most of the project from planning, construction, finance and management are handled directly by the private sector. Local government only takes the responsibility in giving permits and involved in the decision making process correlate with additional regulation and policy.

In Manado, the management of public open space reclamation area is handled by the private sectors. Based on the current condition, the management of public open space in maintaining an appropriate components and elements in the area doesn't show improvement in the existing area. Lack of supporting elements and no control of the used place reflect to the low quality of public open space as it should fulfill human needs. This situation indirectly influences the quality of life of citizen. Good management should be enforced in order to improve the quality of public open space through cooperation between private sector and local government. Strict regulation by local authority again must be implemented due to realize a good management. Based on these criteria,

comparison between Rotterdam and Manado in public open space development can be seen. Table 6.2 will shows the comparison more clearly.

**Table 6.2**  
**Comparison of Criteria in public open space Development Between Rotterdam and Manado**

Criteria	Rotterdam	Manado
<b><i>Design guidelines and components</i></b>	<ul style="list-style-type: none"> <li>▪ Basically has followed the design guidelines through the fulfillment of most component and elements of public open space</li> </ul>	<ul style="list-style-type: none"> <li>▪ Not all components already provide in the existing public open space. Still need more improvements by redesigning public open space.</li> <li>▪ Some area provided for public open space has not been developed yet.</li> </ul>
<b><i>Spatial planning system, policy and regulation</i></b>	<ul style="list-style-type: none"> <li>▪ Have clear hierarchy of planning and design phases for public open space development</li> <li>▪ Sufficiently provided and the development of public open space has followed the regulations set out by local government.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provide clear regulation and policy from central government through the Ministerial regulations</li> <li>▪ There is no specific/detail planning (RTBL)</li> <li>▪ The implementation of public open space is still poor</li> <li>▪ Provision of public open space by local government seems to be neglected and has not been develop seriously.</li> </ul>
<b><i>Actors involved</i></b>	<ul style="list-style-type: none"> <li>▪ Most redevelopment public open space involve private sector.</li> <li>▪ Local government is the main director in every redevelopment project</li> </ul>	<ul style="list-style-type: none"> <li>▪ Private sector owns the biggest area in the reclamation land</li> <li>▪ Local government owns 16% of land in the reclamation area</li> <li>▪ Lack of coordination between private sectors and local government in public open space provision.</li> </ul>
<b><i>Management of public open space</i></b>	<ul style="list-style-type: none"> <li>▪ Mostly managed by local government</li> </ul>	<ul style="list-style-type: none"> <li>▪ Managed by private sectors</li> <li>▪ Lack of responsibility in maintaining and controlling the area.</li> </ul>

According to Table 6.2, there are some criteria has not been fulfill in the provision of public open space in Manado. Many aspects should be implemented in order to improve the quality of public open space related to the quality of life of citizen. Law enforcement is the important aspect that should be implemented by local government. The involvement of public sector has a pivotal role in the provision of public open space from planning, design, decision making process, construction,

financing until the management which should be improved through coordination with local government. Clear division in role and responsibility also should be stated like what Rotterdam has been experienced in their public open space redevelopment. What can be the challenge points as lessons from Rotterdam to Manado is the roles of actors who involved in the public open space redevelopment. The involvement of private sectors and local government will influence the successfulness of public open space redevelopment and indirectly will improve the quality of urban life generally. In the next part will elaborate the possibility towards public open space development in Manado.

## **6.2. Possibility towards public open space development in Manado**

From the discussion in previous part, Manado obviously has different condition of existing public open space compared with Rotterdam. There are several criteria that have not been implemented yet in general. Existing condition of Manado has to be adjusted to implement a good quality of public open space as well as Rotterdam. There are possibilities to implement the criteria in public open space because these criteria can support and also be followed by Manado. Focus on the criteria particularly to certain aspect that suitable with Manado condition will be explain more briefly to know the barriers/constraints in implementing the criteria to develop public open space in Manado.

Manado can take lessons from Rotterdam experiences to help improving the quality of public open space provided in the reclamation area. The history in redevelopment public open space of Rotterdam can be a good example in how Rotterdam faces various changes in the process of redevelopment. The important lesson that can be taken from Rotterdam is the coordination among local government and private sectors and other stakeholders who are involve in the redevelopment process. Step by step phases of redevelopment is also important relate to the role of each actors in every phase. Every phase have a clear division in taking responsibility in the process of planning until the implementation of public open space development. Every actor have their own responsibility, and works thoroughly in order to reach the final goal of project for a successful public open space. The goal is not only to satisfy the local government and private sectors but for fulfilling demand of the community as user and to reach the vision and mission of the city as well. The support from private sectors and stakeholders can be the trigger of successful public open space redevelopment in Manado. Strict regulation from local government also should be implemented to enforce both local governments who are responsible in public open space provision and private sectors. This also leads in following the guidelines of redesigning public open

space. Important components and elements must be considered by adjusting with Manado physical condition and culture. Evaluation and continues improvements in regulation/policy and in its practices should be taking into account for the implementation in improving public open space in Manado. Therefore, redesigning public open space is prominent due to improve the quality of public open space in Manado.

However, Rotterdam also faced some constraints that become a challenge in the process of public open space redevelopment. Reaching agreement sometimes found to be difficult in planning decision according to improve public open space among authority, private sectors and public (van Melik, 2008). Willingness from private sector in business profit oriented sometimes still occurs but does not really become the priority regards to the strict regulation set by local government. Currently, there are several planning and policy documents that partly overlap or contradict one another on the development of Rotterdam waterfront. The authority suggests that the Master Plan for waterfront development should be design at once for a long-term vision. The reason is due to the flexibility of economic, political and social preconditions that may change every year (Romein, 2005). Traditional role still be held by authority in public open space development, where government does not really rely on private sector by taking the main role in public open space provision in term of responsibility and control. The government seems to reduce too much involvement of private sector in public open space (re)development in term of accessibility and budget. It seems that access to open space area become lack because of privatization of several places by private. This are some reason why government does not allowed private sector to involve in all phase of development. According to van Melik, through her research, possibility in involving private sector in public open space in the future still could be expected. Consider the involvement of private sector in every phase (during (re)development and after (re)development) can give positive effect in term to support new innovation and creativity, chance in funding, development in economic sector, and responsibility in managing public open space. Overall the implementation of public open space (re)development has proven through decades, by redeveloping successful public open space in the city. However, these factors could be an evaluation and lesson for Manado to redeveloped public open space in the waterfront area to improve the quality of life.

Referring to the criteria mentioned previously, there could be some strong points that will encourage the realization of public open space redevelopment. This could be conducted by evaluating the existing policies and regulations related to public open space provision in terms of

defining more clear steps such as planning, decision making, designing, construction, implementation, financing and management. Clear rules in following public open space design guidelines also are important to take into account and roles of actors who will be involved in public open space redevelopment. These could be a starting point to support the implementation of public open space redevelopment particularly in redesigning public open space in the reclamation area of Manado. However, there are also some weak points that have to be improved such as there is not enough will from local government in enforcing public open provision.

**Table 6.3**  
**Strong and Weak Points Influencing public open space Development in Manado**

<b>Stong Points</b>	<b>Week Points</b>
<ul style="list-style-type: none"> <li>➤ The availability of existing regulations/policies that could support the development of public open space refers from City Spatial Planning and Ministerial Regulations about land use planning in reclamation area.</li> <li>➤ Potential in developing a high quality of public open space through a supporting quality of environment.</li> <li>➤ A good city image shows by the enthusiasm of people who come to Manado city domestically and internationally.</li> <li>➤ The emergence of public awareness as a demand of a better quality of public open space.</li> </ul>	<ul style="list-style-type: none"> <li>➤ There is no detail planning and design in Manado waterfront</li> <li>➤ There still no enough awareness from local government and private sector to implement the regulation/policy in developing and improving public open space.</li> <li>➤ There is no specific institution that takes responsibility in public open space in term of control and management.</li> <li>➤ Lack of strict regulation for sanctioning according to public open space provision.</li> </ul>

(Source: author analysis)

Lack of control and management from responsible authority has been a dilemma and not sufficiently provided. There is no specific institution assigned by local government to manage and control the existing public space and lack of awareness from private sectors who owns most of the reclamation land to redevelop public open space. Table 6.3 shows some points influencing the public open space development in Manado.

Strong political will and law enforcement should be driven to reduce the week points in order to improve public open space provision in Manado. Lack of coordination between local government and private sectors are some of the constraints beside lack of law enforcement in the regulations derived from local government. Detail planning for public open space in reclamation area (RTBL) should be conducted by determining each step of planning and designing and the responsibility and role of each actor who involved in the planning process until implementation. Local government should determine specific institution that could handle and coordinate the public open space management in order to control and maintain the existing public open space. Therefore, local

government should set out specific regulations according to the role of private sectors and role of government in the involvement of public open space development in term of planning process such as decision making, planning, designing, construction, control and management of public open space.

Moreover, following the guidelines of public open space is also a crucial aspect to develop a good quality of public open space. The components and elements describe in Chapter 3 has proven could improve the quality of life of citizen through the example of some public open space in Rotterdam city. People feel satisfy with the condition of the public open space because of high concern from local government to improve public open space in the city. Good planning and clear process in redesigning public open space has been adopted in every cluster of area. Shows by good connection between inner city and outer city through the existing of public open space in each cluster which give easy accessibility for people to come and go. Providing unique themes in each cluster that support a high quality of public space, influenced the image of city to be more interested by people who lives near the city and for tourist to come and visit.

From these explanations and comparison between both cities, Rotterdam and Manado, there are several differences in public open space development. The differences mainly showed by the process of development and regulations that regulate the provision of public space in more detail. Cannot be doubted that the process of public open space development in Rotterdam is more advanced compare to the process conducted in Manado because Rotterdam has experiencing in redevelopment waterfront and its inner city since several decades. Planning culture in Manado is lack of responsiveness in implementing the regulation with strict sanction which influence to the development of public open space. The planning system in Rotterdam could be a lesson learned for Manado especially in providing clear and detail planning in particular area like waterfront area, which has the potential in increasing economic benefit and city image. Private sectors involvement also in their role and responsibility in public open space development also is an important aspect that should take into account by providing clear regulation due to the coordination among actors or stakeholders. Besides, learning from Rotterdam about the spatial-clustering system in waterfront area to create an integral public open space among waterfronts area in Manado could be consider to be follow. Clear hierarchy in urban planning phases until design are well develop, therefore in Manado every planning system should be coordinate from the general phases of design to a specific/detail planning. The orientation of special thematic (for leisure, entertainment, shopping,

etc) in each cluster can add big value to increase the quality of public open space in Manado waterfront area. This needs more effort from local government by creating relation with private sectors to realize and improve a better quality of public open space and reach the objectives of the vision and mission of Manado city generally. The positive and week points could be the starting point in realizing a high quality of public open space as an important aspect to improve the quality of life by learning from Rotterdam experience.

**Table 6.4**  
**General Assessment in Implementing the Criteria of**  
**Public open space Development in Manado**

<b>Criteria</b>			
<b><i>Design Guidelines and Components</i></b>	<b><i>Spatial Planning, Regulations and Policy</i></b>	<b><i>Roles of Actors</i></b>	<b><i>Management of public open space</i></b>
<ul style="list-style-type: none"> <li>▪ Generally follow the guidelines requirements and adding sufficient components in designing public open space (-)</li> <li>▪ Innovation and creativity in designing public open space (-)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Existing planning regulation and policy of public open space (+)</li> <li>▪ Follow the spatial planning and regulation of public open space (-)</li> <li>▪ Specific regulation/guidelines about the role and responsibility of actors who involved in public open space development (-)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Coordination between local government and private sectors (+/-)</li> <li>▪ Awareness of private sectors and local government in public open space development (-)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Practices in control and management by private sector or local government (+/-)</li> <li>▪ Law enforcement in implementing public open space management (-)</li> </ul>

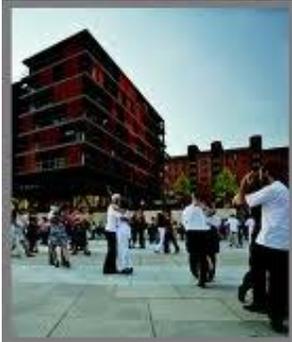
Note: (+): available and quite good; (+/-): available but not good/limited; (-) : not exist/poor condition (Source: Author analysis)

Table 6.4 described some aspect that considerably has been well implemented or still need improvements in developing a good quality of public open space in Manado. The challenges in implementing the development also has to be consider because of the differences between both cities that has been mentioned previously. Public open space development in Manado still can be more improved but still need time to implement a high quality of public open space. Local government should add the provision of public open space as a priority in the spatial planning regulation to achieve the goal in the vision and mission of Manado city. This also has been implemented by Rotterdam municipality to achieve their vision and mission as a strong economy city and a better residential city to live. Public open space provision become the top priority by local government in determining every project in waterfronts area and inner city (van Melik; 2008, Romein; 2005). Public open space redevelopment process in Rotterdam also has taken a long run process until it can achieve a significant outcome. However, the planning process is still running

because waterfront redevelopment in Rotterdam is a long term process and continuously improved (Romein, 2005). An appropriate strategy should be taken in public open space development in Manado to get a maximum outcome of high quality of public open space. The strategic recommendation will be explain in the next chapter as well as the conclusion of the research. Awareness in developing a high quality of public open space is the important thing in order to achieve the goals and support in fulfilling the vision and mission of Manado city in general.

**Figure 6. Existing condition in Rotterdam and Manado based on the criteria in public open space guidelines**

Criteria	Rotterdam	Manado
<b>Accessibility</b>	 <p>Provide clear accessibility (physical and visual) and connection from and to inner city            (Source: <a href="http://www.skyscrapercity.com">www.skyscrapercity.com</a>, <a href="http://www.commonswikipedia.org">www.commonswikipedia.org</a>)</p>	 <p>Inadequate accessibility for vehicles and people inside the reclamation area            (Source: Author)</p>
<b>Uses and Activities</b>	 <p>Elements that support uses and activities on waterfront area            (Source: <a href="http://www.blogrand.de">www.blogrand.de</a>, <a href="http://www.aeccafe.com">www.aeccafe.com</a>)</p>	 <p>Lack for uses and activities because poor of supporting facilities            (Source: Author)</p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Comfort and Image</b></p>	 <p>Public space which gives comfort through supporting elements, public art and events to attract people to visit          (Source: <a href="http://www.urbanisten.nl">http://www.urbanisten.nl</a>, <a href="http://www.archdaily.com">www.archdaily.com</a> )</p>	 <p>Need more elements/components to support comfort and image, no public art provided on the area          (Source: Author)</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Sociability</b></p>	 <p>Provide places for users, individually or groups, to communicate, interact and enjoy the public space          (Source: <a href="http://www.docstoc.com">www.docstoc.com</a>)</p>	 <p>Low quality of public open space reflected to lack in creating social interaction among users          (Source: Author)</p>

## **CHAPTER 7**

### **CONCLUSION AND RECCOMENDATION**

Public open space in various places around the world, in developed or in developing countries, has been proved important to be provided in urban area because recognized successful in fulfilling people needs. Nowadays, the provision of public open space has also been counted as one of the most important public infrastructure in waterfront area. It has been an engine to push economic sector for the city through its function and benefits in increasing city image and relates in improving the quality of urban life. Many benefits of public open space that has been examine by researchers that proven the relation of public open space which influence the quality of life of citizen.

However, there are many issues and problems arise in the provision of public open space in waterfront areas, divers on its location, phase of development, actors involved, control and management and many more. Based on the issue and problems arise particularly in Manado reclamation area, this research aims to explore what criteria that should be followed to develop a successful and high quality public open space to improve quality of life in waterfront area. The degradation of public space in Manado is one of the problems that should be overcome in order to achieve a high quality of public open space and to improve the quality of life. This research conducted to find out what criteria should be fulfill in improving the quality of life through redesigning public open space in Manado. The research has conducted a comparative study from Rotterdam and Manado in order to get a lesson learned from Rotterdam experience in public open space development to Manado reclamation area.

Due to the aim of this research, this research tries to examine and explore public open space provision and development from its planning until designing by studying literature review particularly in waterfront area relates with improving quality of life. Besides exploring the design guidelines and components of public open space, the research also tries to find other relation which influenced the provision of public open space. The research explores the planning system from both case studies, vision mission, actors involved in the planning process until the implementation, the role and responsibility of each actors and the management of public open space. Based on the

literature review, a theoretical framework has created and determines what kind of criteria to develop a successful public open space in waterfront area that can improve the quality of life.

There are four important criteria to develop public open space implementation in order to improve the quality of life in both cities there are: following the guidelines and components in public open space development; refer to the spatial planning system, regulations and policies for public open space provision; the role of actors involved in the development of public open space; and management of public open space. These criteria have to be considered in the process of public open space development or redevelopment especially in term of planning system and regulations before the development will be implemented. Conduct a clear and in detail planning and design of public open space especially for waterfront area is important as a reference in developing a high quality of public open space. This criteria is the most important criteria to be consider because all rules and responsibility according to guidelines, land use planning, roles of actors, control and management are included in those regulations stated by the authority who are responsible in public open space provision. Indirectly these criteria influenced other criteria and will determine the successfulness of public open space development.

Other criteria such as public open space guidelines and components, the role of actors and management of public open space are also important to achieve a successful public open space development. According to Rotterdam experiences, following the guidelines and comply the components of public open space regards to the theoretical approaches mentioned in Chapter 3, has proven in the improvement of public open space in Rotterdam. High quality of public open space through better connection and accessibility between inner city and waterfronts area and improvement in city image which attract more people and tourist to come are some of the real fact of successfulness in public open space redevelopment in Rotterdam. The role of actors, local government, private sectors and other stakeholders take an important factor in the process of public open space redevelopment. Clear regulations and policies by political and business leadership determine the specific role and responsibility for each actor to be implemented. Additionally, the awareness of each stakeholder also takes an important part to run their responsibility in public open space development, not only in the beginning or the in the process of development but until the implementation such as controlling and managing public open space. Therefore, it has been proven that from Rotterdam experiences, all the criteria determine the

successfulness of public open space development, and will be useful in implementing it in every waterfront redevelopment project.

However, Rotterdam also faced some constraints in their public open space development. Long time of achieving agreement in decision making plans and goals become one of the constraints in terms of time. Traditional role by government in taking most of the main responsibility in public open space provision also become the constraint for private sector to innovate and develop with their own creativity. Therefore, there still more expectation in the future that private sector will be more involve in every phase of (re)development public open space projects in Rotterdam. Beurstraverse is one of the successful public open space redevelopment examples that was developed by private sector and become a satisfaction by community of the city and tourists.

The experience from Rotterdam could be a good example for Manado in public open space development. Since Manado reclamation area has owned most by private, therefore it is important to learn the process of development by referring to the regulation and policy of public open space of Manado city and Indonesia in general. The important lesson from Rotterdam is that public open space in Rotterdam is prominent in every area of development (i.e. mix use area, offices, commercial area, residential, recreation area, etc) and the local government sets out clear and detail regulation in term of public open space provision. The awareness of local government and private sector to support public open space development is obvious. Following the guidelines and fulfillment of components that support the quality of public open space are also important to improve the quality of life in the city. Control and management by local government in public open space has been conducted for the improvement of public open space.

The successful public open space redevelopment in Rotterdam could be a lesson learned for Manado which still lack in experience in developing a high quality public open space. Important criteria mentioned previously could be adopted by the local government of Manado to improve the quality of life by improving the existing public open space and developing a better quality of public open space. The positive and weak points of public open space condition in Manado determined in Chapter 6 must be consider. The positive points could be the starting point to improve the quality of public open space in Manado, meanwhile weak points should be develop and improve to be more advance in reaching the exact goals. Need more political will and awareness from all stakeholders to change reach the goals in having a high quality of public open space. It is not an easy task to be

done but high expectation to improve and willingness from all stakeholders are important due to the successful implementation of public open space. Taking lesson from Rotterdam experience could help to improve and change the current condition of public open space in Manado. Improving and developing public open space is not a short term process. As well as Rotterdam, it took a long term to redevelop a high quality of public open space. Need more efforts and patience from all stakeholders in public open space development in term of reaching the goals to improve the quality of life and achieve the vision and mission of Manado city.

In order to achieve these goals, some recommendation could be offer in public open space development and to improve the existing public open space in Manado based on the criteria of public open space development determined previously:

1. In term of following the public open space guidelines which is more practical and technical, local government and private sectors should develop a good coordination among urban designer or architect that will took responsibility in designing public open space, by considering the condition and culture of user in such place where the public open space will be taken. High demand of people and high quality of public open space with its facilitation and maintenance should be consider in term of budget or financial aspect. Important component should be fulfill such as good accessibility (physically and visually), comfort and public elements (i.e. appropriate pedestrian/pathways, parking lots, shading elements like trees or concrete structure, signs, garbage-can, children playground, bench and sitting area, etc.) are the most important aspect that should be provided and fulfill in a public open space area.
2. Local government should establish a distinctive regulation in public open space provision by making clearer and detail rules according to public open space guidelines, roles of actors involved in public open space development before and during public open space (re)development and control and management of public open space after (re)development. More law enforcement through strict regulation and sanction to every party that neglect the rules should be set out as well.
3. Specific institutions should be determined by local government to take the control and management of public open space. This could be easier for local government to manage and control the public open space in Manado city.
4. Involving private sector in public open space (re)development coordinating with local government is not an easy task. Business profit oriented could be the barrier in making

agreement, also in public open space development. Local government should consider for making this agreement precisely by creating a good relationship and an appropriate approach for determining crucial aspect such financing, construction phase and management of public open space. This also will be done by following the regulation stated on the local government regulation and policy.

5. Community participation could be an approach to involve the community in public open space development. By giving local people opportunity to be involve through giving space in the reclamation area for private business and at once could control and manage the public space in the area. This could be an effective way to involve community in public open space management, in order to enforce people to be more responsible with the area they conduct business and having economic benefit from it as well. Again, however, these need a strict regulation and follow the regulation precisely by coordinating with developer and specific institution who takes the responsible for it.

Implementing public open space (re)development in Manado still could be achieved by a good coordination among stakeholders with a good political will by local government. As a starting point, public open space should not have to be a high standard public open space like in developed countries, but at least for the beginning, realizing a good public open space that could fulfill people demand by following the guidelines and rules is an effort to develop more qualifies public open space for the future. Achieving the exact goals to improve the quality of urban life and the vision and mission of Manado city is the important aspect in developing Manado city especially its waterfront area which is a promising area to reflect city image.

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