# A Stakeholder Analysis for Bridges and Quay Wall Renovations Within the Municipality of Amsterdam

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**Abstract**
**The infrastructure of Amsterdam needs renewal. Many bridges and hundreds of kilometers of quay walls are vulnerable and in poor condition. The municipality set up a program to resolve this issue, called 'Programma Bruggen en Kademuren (PBK)'. The program is tasked with investigating, ensuring safety and, if required, providing a fast treatment to ensure the safety of these bridges and quay walls. During this process stakeholder management is done, which has been proven to be a success factor in projects. The goal of this research was to provide a stakeholder overview and advice for changes within the stakeholder management, focusing on, who the stakeholders are, their wishes and how they are involved. This is done using qualitative interviews with participants with an active role in the stakeholder management and/or PBK. This research uses insights gathered during the interviews and available grey literature to create a stakeholder map. Based on the analysis, this research concludes with the advice to involve citizens in an earlier phase in the process.**

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**Keywords**
Stakeholder Management, Stakeholder Mapping, Public Organization, Municipality, Amsterdam, Quay Walls, Bridges

# 1. INTRODUCTION

This research paper is about stakeholder management in 'Programma Bruggen en Kademuren (PBK)', a program set up to ensure the safe use of quay walls and bridges in the city of Amsterdam("Uitleg programma", n.d.). As a part of PBK the UrbiQuay project was set up as a research project to support the efforts within PBK ("Urbiquay", n.d.). This chapter introduces the research project, and the relevance of stakeholder management and outlines the structure of this research paper.

## 1.1 UrbiQuay & LogiQuay

The infrastructure of Amsterdam needs renewal. Many bridges and hundreds of kilometers of quay walls are vulnerable and in poor condition. For this problem within Amsterdam, PBK was set up ("Uitleg programma", n.d.). However, such issues are not just present in Amsterdam, other municipalities are facing similar problems with ageing infrastructure ("Urbiquay", n.d.). To effectively renovate these areas, many aspects need to be considered: when to renovate, where, what needs to be renovated, and how to renovate. To tackle this problem, the Municipality of Amsterdam and AMS Institute, in cooperation with the Ministry of Infrastructure and Water Management have initiated an NWO project. The Urbiquay project focuses on sustainable, innovative solutions relevant to the maintenance, repair, and renewal of civil infrastructure. The project is divided into three parts: LiveQuay, Stability and LogiQuay. This research is to aid in the LogiQuay part, specifically, the planning of the renovations ("Urbiquay", n.d.).

## 1.2 Stakeholder management

In the past authors have stated the extraordinary importance of stakeholders in projects (Littau et al., 2010). Within the project management literature, it is common knowledge that to make a project a success, the interest of the key stakeholders or even all stakeholders should be taken into account (Achterkamp & Vos, 2008). Littau et al. (2010) concluded that from their meta-analysis into stakeholder theory literature that stakeholders are to be considered as an important factor in the project evaluation and project strategy contexts (Littau et al., 2010). It has also been shown that early involvement of stakeholders, so using a proactive approach, can aid in preventing delays in the process (Olander, 2007; Achterkamp & Vos, 2008). Specifically, the example highlighted by Achterkamp & Vos (2008) showed potential issues that can arise when stakeholders are not properly assessed and involved adequately.

## 1.3 Outline of the paper

The first chapter introduced UrbiQuay and stakeholder management. The second chapter introduces the cause of this research, and further elaborates on stakeholder management by providing the theoretical background, the stakeholder overview is made and ends with the research questions. The third chapter explains the research methods and provides an overview of the primary sources. The fourth chapter elaborates on the findings. Firstly, explain the current processes and treatments within PBK. After which the sub-research questions are answered. Using the findings in the fourth chapter and the theoretical framework conclusions are made in the fifth chapter. Noting the key findings and answering the research question. This chapter also discusses the implications, limitations, further research directions and general lessons about stakeholder management. The glossary explains the Dutch terms used in the paper. Certain Dutch terms were not translated to prevent unclarities due to translations.

# 2. RESEARCH GOAL

This chapter provides the problem statement and provides the theoretical background of stakeholder management. Continuing with the sub-research questions and their relation to the general research question, which is also introduced in this chapter.

## 2.1 Problem statement

There are many stakeholders in this project, but an overview is missing (Bosch, 2024). It is unclear which stakeholders there are, which are relevant and how to involve which stakeholders. As highlighted in section 1.2, failing to manage the stakeholders can lead to delays and hinder the overall success of the product. This creates a challenge when creating a renovation planning as it is uncertain if all relevant parties/factors have been considered and handled. Stakeholders can for instance provide insights into potential issues such as hindrance to public transport, limited access to stores and other effects on inhabitants and visitors. The relevance of obtaining such insights was highlighted earlier this year, when, due to renovations houseboat owners had to move which proved to be a challenge due to low bridges ("Megaoperatie om woonboot…", 2024).

There is already (some) knowledge about the different stakeholders, but this is right now scattered (Bosch, 2024). This leads to the following issues within stakeholder management: It is unclear if all stakeholders are known. It is unknown what role stakeholders could have in the project, they could have a positive or negative impact. With that, it is unclear if stakeholders have been involved adequately.

## 2.2 Stakeholder theory

As highlighted in the introduction it is important to be (pro)active in stakeholder management as a project manager. This section further extends the theoretical framework behind stakeholder theory, elaborating on what makes someone a stakeholder, how can stakeholders be compared and how different stakeholders can be engaged. This section ends with how these different aspects of stakeholder theory are linked and can be connected.

### *2.2.1 Origin of Stakeholder theory*

Stakeholder theory is a concept originating from Freeman (1984) and has since then been expanded and developed. It shows the importance of firms creating value for all stakeholders, not just for shareholders (Boyles, 2022). This raises the questions: what is value? What is a 'stakeholder'? In what way can stakeholders differ from each other? And how should stakeholder management be performed?

### *2.2.2 Defining stakeholders*

Freeman (1984) describes the concept of stakeholders as any group or individual who can affect or is affected by, the achievement of a corporation's purpose. This is the first definition of what a stakeholder is (Olander, 2007). However, this definition has also had criticism as it merits everyone to be a stakeholder (Olander, 2007). Littau et al. (2010) showed that there were three recurring definitions of stakeholders in literature: (1) Those that have an interest or stake in the project. (2) Those who can affect or are affected by the project or (3) those who are a combination of the two characteristics. The mentioned definitions of stakeholders lead to an issue; if everyone is a stakeholder of everyone else there is little value added in the use of the stakeholder concept as everyone is a stakeholder and no distinguishment is being anymore (Olander, 2007). This results in the following task: comparing and prioritizing stakeholders. That way (project) managers can prioritize their time and effort on specific stakeholders compared to other stakeholders.

### *2.2.3 Value for stakeholders*

Research has shown that the value provided to stakeholders does not just have to be economical. Mill (1961) made the claim that the perceived value depends on the 'utility' perception of

individuals. Harrison & Wicks. (2013) used the following definition for utility: "The term 'utility' will be understood to reflect value a stakeholder receives that actually has merit in the eyes of the stakeholder", highlighting that stakeholders value can differ per stakeholder and depends on the perceived benefits. Following the basic economic principle that individuals consider the tradeoff between the perceived value they receive and the value of what they give up.

### *2.2.4 Comparing stakeholders*

To determine how the stakeholders are likely to react to project decisions, what influence their reaction will carry and how the stakeholders might interact with each other and the project's managers and professionals to affect the changes for the success of a proposed project strategy. Managers should attempt to identify their significant and legitimate stakeholders (Olander, 2007). The literature's prevailing stakeholder classification model is the salience model of Mitchell et al. (1997) (Achterkamp & Vos, 2008). Salience is described as the degree to which managers give priority to competing stakeholder claims; Mitchell et al. (1997) try to answer the question of how managers choose their stakeholders and how they prioritize among competing stakeholder claims. This is important as managers perceive the various stakeholder groups differently (Achterkamp & Vos, 2008). Stakeholders can be compared on the following criteria:

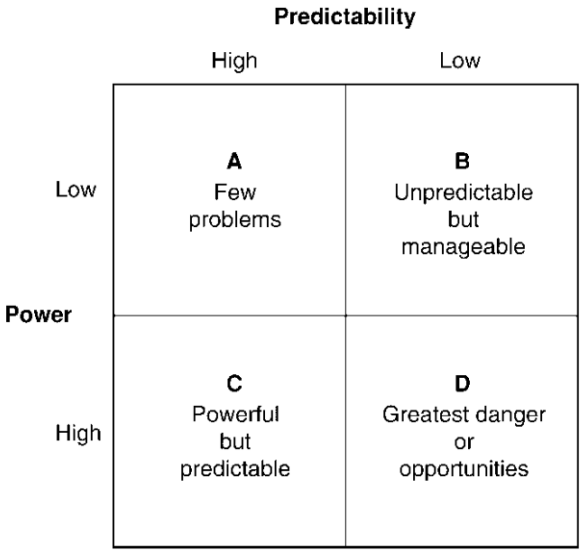
- How ***likely*** each stakeholder group is to enforce its expectations on the project?
- Whether these groups have the ***means*** to do so. This is concerned with the power of stakeholder groups.
- The likely ***impact*** of stakeholder expectations on future project strategies.

After having assessed these three criteria two methods of stakeholder mapping can be done: the power/predictability matrix and the power/interest matrix (Newcombe, 2003).

### *2.2.5 Implications stakeholder mapping*

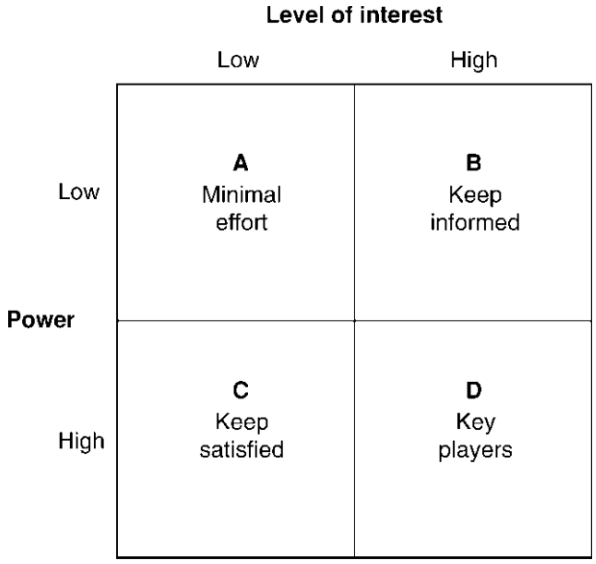
The power/predictability matrix, shown in Figure 1, enables assessing the size of stakeholder problems and Newcombe (2003) provides guidelines as to how to perceive stakeholders in each quadrant. In this research, the matrices are used to assess the alignment of current practices with the prescribed practices by the theory.

**Figure 1** power/predictability matrix (Newcombe, 2003)




The power/interest matrix, shown in Figure 2, provides an assessment of the potential impact on the project. It also provides guidelines as to which type of relationships the project manager will need to establish and maintain with each type of stakeholder group (Newcombe, 2003).

**Figure 2** power/interest matrix (Newcombe, 2003)




By mapping stakeholders in these matrices, insights are developed into how stakeholders should be involved due to their (potential) impact on the project.

### *2.2.6 Changes due to different project stages*

The stakeholders' base of influence is not static. The stakeholder analysis must be conducted and updated during the entire life cycle of the project, with the purpose of gaining knowledge about the potential influence various stakeholders have at different stages of the project (Olander & Landin, 2005). It is easier to plot the two matrices in relation to a specific decision rather than a general case. It must also be realized that the stakeholder maps will vary over time and will be, to a large extent, dependent on the stage the project has reached (Newcombe, 2003). This research focuses on the scheduling phases, so risks being inaccurate if used for other stages.

### *2.2.7 Combining the theories*

As highlighted in section 2.2.1, it is important to provide value for stakeholders as this aids in the success of a project. Value is in this case the perceived utility and this is compared by a stakeholder with what they need to give up. Using stakeholder mapping in the mentioned matrices it is possible to both assess the relevance of stakeholders as well as how to interact with individual stakeholders. By combining these criteria an overview of stakeholders can be made, which contains the relevance of stakeholders and their preferences. This can then be used to facilitate the stakeholder management for a project, the LogiQuay project in this research.

## 2.3 Research questions

The objective of this research is to investigate the stakeholder management for the LogiQuay project. Investigating the current stakeholder management, using the theoretical frameworks and insights from the interviews to make recommendations for improvement.

To do this, the research aims to answer the following questions:

1. Which stakeholders are present within the context of LogiQuay?

2. Which of these stakeholders should be involved when creating the schedule for the renovations?
3. How should these stakeholders be involved?
4. What potential changes to the schedule of the renovations could affect stakeholder satisfaction?

Together these questions intend to answer the main question of this research:

*How can stakeholder engagement be improved in the renovation scheduling for LogiQuay?*

With this information, recommendations can be made as to how to involve which stakeholders and provide considerations when planning renovations in the LogiQuay project. So, that the stakeholder management is done or can be done in a way that aids in the success of the project.

1. Who are the stakeholders?

To assess if stakeholders are adequately engaged, it should be known who the stakeholders are. This is the first step in answering the general research question.

2. What are the wishes of the stakeholders?

Besides knowing who the stakeholders are, knowing their general wishes is required to know if the engagement is adequate. These wishes can both be towards the outcome as well as the process.

3. How are the stakeholders currently involved?

To answer the research question, on how stakeholder management can be improved, it should be known what is already being done.

4. How should stakeholders be involved?

Using Newcombe's matrices a theoretically desired method can be concluded. This together with the current state allows for recommendations, thus aiding in answering the research question of how it can be improved.

# 3. METHODS

This chapter discusses the participants interviewed in this research, the sampling and their relevance to the stakeholder management and/or PBK. Continuing with why a qualitative research approach was used with semi-structured interviews. And explain what other key sources of insights were used to obtain the findings.

## 3.1 Sampling of participants

For the sampling, purposive sampling was used. Meaning, that participants were actively selected based on their involvement in the current process or knowledge about stakeholders. The goal is to interview people involved in the renovations, people within the municipality regarding stakeholders within Amsterdam and potentially (representatives of) stakeholders, to answer the research questions.

Four interviews were conducted to gather the desired insights. Table 1 provides an overview of the function and background of the participants. The interviews were conducted in the order the participants are listed.

**Table 1** overview of research participants

| Participant | Function | Function relevance |
|---|---|---|
| Participant A | Manager within PBK | Experience within PBK and an overview of the processes within PBK. |
| Participant B | 'Omgevingsmanager' | Experience with many professional stakeholders in the process where the treatment a quay wall or bridge gets decided. |
| Participant C | 'Stadsdeelregisseur' | Responsible for issuing permits for work in public spaces on land for one of the seven city districts of Amsterdam. |
| Participant D | 'Gebiedsmakelaar' | The point of contact for inhabitants and business owners for a neighborhood. |

## 3.2 Qualitative interviews

The interviews were semi-structured, with open-ended questions. For each participant, questions were prepared to align their experience with the research goals. The structured part of the interviews ensured relevant topics were discussed. The unstructured aspect allowed for follow-up questions on relevant topics, allowing for insights into topics whose relevance was not known before the interview. The goal of this is to collect information in a way that allows for comparison, needed to map stakeholders in the matrices and at the same time provide flexibility to collect more information if potentially beneficial for other research questions.

## 3.3 Interview relevance to research goals

This session discusses the main research-relevant subjects that were discussed during each interview. The first interview was in person which was valuable as it provided the opportunity to see the actual quay walls and bridges. The other interviews were online as with the travel time planning an in-person interview was not possible.

### *3.3.1 Participant A*

The first interview consisted of a two-hour tour around Amsterdam's canals, allowing for the participant to easily show the canals and explain both general processes within PBK as well as individual cases. The primary insights gathered were around the technical processes in PBK. The monitoring of quay walls and bridges and the potential treatments. Additionally, the interview provided insights into obstacles and policies. It provided an overview of PBK and suggestions on future functions and people to contact.

### *3.3.2 Participant B*

The second interview was a one-hour online interview. The interview focused on the first phase of the renovations, the 'Afwegingen Toekomstbestendig Herstel (ATH)' process. In the first phase the treatment for a wall or bridge is decided, and the 'Besluit Toekomstbestendige Maatregel' (BTM) is made. After this, the renovations enter the 'project phase'. The participant also showed a presentation that is used to explain the 'ATH' process within PBK, providing insights into what information is considered when deciding the treatment for a quay wall or bridge. It also provided insights into which and how parties/stakeholders are involved and or consulted in this phase.

### *3.3.3 Participant C*

The third interview was an online interview of half an hour. More time was planned, but due to delays in a prior meeting, the interview started later. This only hindered the unstructured part of the interview as all planned topics were discussed. The interview provided more insights about the second phase, the project phase. The insights were gathered about the involvement of stakeholders in the second phase and the process of the renovations during this stage.

### *3.3.4 Participant D*

The fourth and final interview was a one-hour-long online interview. This provided insights into the desires of inhabitants and business owners. Additionally, the impact of renovations on inhabitants was discussed. Lastly, the interview provided more insights into the complex structure of the municipality.

## 3.4 Grey literature review

Throughout the interviews, multiple documents were mentioned. These are mainly documents about PBK, policies of the Municipality of Amsterdam and general standardized processes. These documents were publicly available and were researched after their mention in interviews. These documents are a part of the findings and contributed to the gathered insights.

## 3.5 Data analysis

The data analysis is focused on answering the core questions. The purpose of the interviews is to provide more insights about which stakeholders there are, which should be considered and how they should be considered. This is done by using the information from the interviews and if applicable the additional documents to map stakeholders on the power/predictability matrix and the power/interest matrix. The interviews were also about value/utility for stakeholders.

# 4. FINDINGS

This chapter contains the relevant findings of the research. Starting with an explanation of the process within PBK. This is important as each renovation is a unique project but follows a similar roadmap. This needs to be explained first as the stakeholder involvement changes depending on where a wall or bridge is in the process. This is also relevant to explain to answer the sub-research questions as the room for stakeholder influence differs per stage. After this, the stakeholder involvement processes are present within the different stages. Building on this, the sub-research questions can be answered.

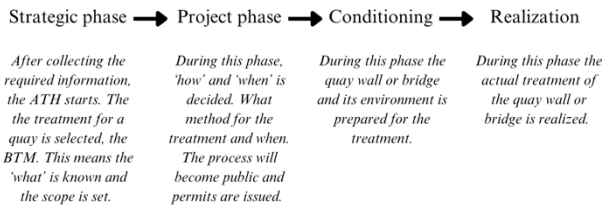
## 4.1 Programma Bruggen en Kademuren (PBK)

PBK was started in 2019. The initial task was to evaluate the durability of quay walls and bridges and ensure treatment if required (Voortgangsrapportage april, 2021). The problem partially originates from the fact that the infrastructure of Amsterdam has foundations built for its use 200 years ago (Participant A). The wooden poles are susceptible to bacterial deterioration ("Een stad op palen", 2023). It was not accounted for that 200 years later heavy loaded trucks would be driving over them to supply stores. PBK was set up to ensure that such vulnerable quay walls and bridges in Amsterdam are safe.

As can be found in the latest progress report, the latest assignment is for 855 bridges and around 212 kilometers of quay walls to investigate, ensure safety and if required provide a fast treatment to ensure safety.(Voortgangsrapportage april, 2023) This is less than originally anticipated ("IPK:... innoveren", 2024). At this moment all bridges have been qualitatively assessed and those flagged as high risk are monitored. This qualitative assessment has not yet been done for all quay walls. However, with satellite data and the use of, a new method, photogrammetry all quay walls are monitored (Voortgangsrapportage april, 2023). A quay wall or bridge needs to be monitored for three years before a treatment can take place, this is a standard set by the municipality of Amsterdam (Participant A). In case the technical necessity can be proven, treatment may be implemented prior to the three years (Participant A).

In total, a quay wall or bridge goes to four stages. The first stage is to assess what the treatment will be. The second stage is the programming, from the start of this stage, a quay wall or bridge becomes a project. The third phase is the conditioning, this is the preparation for the actual treatment and realization is the last phase (Participant B). During this research, the focus is on the first two stages as those are the stages where stakeholder management takes place. The last two stages are the execution of the plans, meaning little to no stakeholder management takes place during these phases.

**Figure 3** visualization of the four stages a quay wall or bridge undergoes in PBK




## 4.2 Potential treatments

In 2018 the Municipality of Amsterdam started 'Innovatiepartnerschap Kademuren' (IPK), a project to develop new methods to treat quay walls. These methods had to be twice as fast, cause fewer disturbances, have a decreased impact on the environment and be executable in the city center of Amsterdam. Additional wishes were that it should cost half as the methods available at the time, be more sustainable and a more tree-friendly method. Before IPK the standard method if a quay wall or bridge was treated was a full renewal. This was expensive, took a long time and was not tree-friendly. Out of IPK have come three methods. 'G-kracht', 'Kade 2.020' and 'Koningsgracht'("IPK:... innoveren", 2024)). With the additions of these methods, there is currently one short-term and four long-term options for a quay wall. The short-term option is to reinforce. The long-term potential plans are regular maintenance, load reduction, renovation and renewal. In case measures are taken it is either to reduce the strain or strengthen the foundation, ensuring that the stress on a quay wall or bridge is in line with what it can safely support (Participant A).

### *4.2.1 Reinforcement*

To buy more time till a quay wall is renovated or renewed a safety construction can be placed inside the canal. This is a wall that is built on the second sand layer. This is twenty meters deep and is stronger than the sand layer where Amsterdam's quay walls and bridges were originally built on (Participant A). They were built on the first layer, which is 12 meters deep. This was done till the 1960's after which the foundations were built on the second sand layer. The first sand layer was and is sufficiently strong to build on, but building the foundation on the second sand layer ensures a sturdier foundation ("De Amsterdamse bodem", 2023). This construction prevents further deterioration of the quay wall, but not without costs. The construction is built at least three meters from the wall, limiting the space in the canal and forcing houseboat owners to move. There have also been instances where one quay wall was reinforced against the opposite wall, whilst effective it no longer allows boats to pass

(Participant A). Additionally, such constructions limit the amount of water the canals can receive in case of heavy rain, something that is and should be considered (Participants A & B).

Bridges can be reinforced with metal beams. This is a short-term measure to allow the bridge to be used but limits the options to pass by water. Some of these constructions block the waterway, whilst others only narrow the passage (Participant A).

### *4.2.2 Regular maintenance*

Choosing the option of regular maintenance means that there will be no changes. Meaning that without any treatment to the quay wall, it is safe for at least the coming thirty years. This obviously is the method that causes the least hindrance to the environment where the quay wall is located (Participant B). As indicated in section 4.1.1, this is possible for more quay walls than initially expected. This is a result of the fact that the wooden poles are in better condition than expected as well as new insights proving that the overall strength of the poles is better than expected (Participant A).

### *4.2.3 Load reduction*

This is another measure that does not include making significant changes to a wall or bridge. Within PBK this is called 'functie herwaardering'. Meaning that its function is changed, in practice this means a load reduction. This is done by either of two options. One option is limiting the weight of vehicles allowed to use the quay wall or bridge. This still allows some vehicles to pass, but only those below a certain weight threshold. It can also be entirely inaccessible by car, in this case only pedestrians and bikes are allowed to use the quay wall or bridge (Participant A). This last option can also be done only for a certain timeframe, such as only allowing vehicles to enter between 07:00 and 11:00 (Participant D).

### *4.2.4 Renovation*

This is an upcoming method for treating quay walls and bridges. It entails maintaining the present quay wall or bridge, but reinforcing it in a way that is not visible from the outside (Voortgangsrapportage april, 2023). One method for this is with 'groutinjectiepalen'. This method is expected to extend the lifespan of a quay wall by at least 50 years (Voortgangsrapportage september, 2022). One of the focus points of PBK for the upcoming future is further developing such methods. Methods that extend the lifespan of a quay wall or bridge for at least 30 years and have relatively little hindrance to the environment (Voortgangsrapportage april, 2023). A side note here is that 30 years is a minimum, in practice, it can have extend the lifespan further (Participant B). This method is also more sustainable compared to renewal as more of the original wall can be maintained (Participants A & B).

### *4.2.5 Renewal*

This method ensures an extended lifespan of at least 100 years. With the development of the three new methods such treatments for quay walls have less of an impact on the environment. Allowing for easier quay wall renewal. In the past, this treatment meant that the trees would always have to be removed and the road would be under construction for a long period (Participants A & B). Despite the IPK methods limiting the costs and decreasing the hindrance of the treatment, renovations are still the most expensive options and are not always able to be performed whilst saving the trees (Participant A).

## 4.3 Stakeholder process within PBK

The first two phases that a quay wall or bridge follows are first explained. This is necessary as the influence stakeholders can have differs per stage. The first stage is the strategic phase and is where the Afweging Toekomstbestendig Herstel (ATH) process takes place. This means that during this stage the treatment for a quay wall or bridge is selected, this decision is the Besluit Toekomstbestendige Maatregel (BTM) (Participant B).

The second phase is the project phase. With the BTM the 'what' is known (Participant D). What will be done with the quay wall or bridge? This sets the scope for the treatment has been set. In case there are stakeholder wishes at this stage that do not fit within the scope, they are not possible (Participant B). The only way to obtain that desired outcome is by pushing the process back to the first stage. Such changes are then achieved by appealing at the 'stadsdeelcommissie' or 'gemeenteraad' (Participant D).

During both stages there are active considerations regarding other logistical constraints, ensuring mobility and accessibility for all parts of the city (Participants A, B & C). These factors are considered during both phases, looking at what role a certain bridge or street has in the mobility of Amsterdam, also keeping in mind other (planned) roadworks (Participants B & C).

### *4.3.1 Strategic phase*

There are multiple perspectives present at the table during the ATH process. There are representatives of 'environment', 'sustainability', 'finance', 'engineering' and 'implementation'. All have direct lines with professional stakeholders. Professional stakeholders mean that they are either representing their field of work or their work is representing a certain group. This group takes six primary considerations and starting from those considerations makes the BTM. The considerations are the 'technical advice', 'key factors', 'implementation advice', 'environment advice', 'sustainability' and 'costs'. These considerations are discussed and out of this discussion comes the BTM. The BTM can be either of the five measures listed in section 4.2 (Participant B). In this phase, the 'omgevingsmanager' is involved. This also means that this stage decides to which extent a street or bridge will be accessible (Participant B).

There has also been a case where during this phase it was discovered that ten years in the future other sewage maintenance was planned. This would mean that the trees would be removed in ten years, this is then also considered when selecting a treatment for a quay wall or bridge. In this case, it resulted in the sewage maintenance being moved forward to align it with the renovation of the quay wall. So that the road would not be inaccessible twice in a ten-year timespan and the management of the trees would be more cost-effective (Participant B).

### *4.3.2 Project phase*

Once the BTM is made, the 'what' is known and the focus shifts towards 'how' and 'when' (Participants C & D). During this phase the stadsdeelregisseur and gebiedsmakelaar have a more active role (Participants C & D). During this stage the scope of the influence stakeholders can have has been set and within those boundaries, stakeholder management is done. During this stage, non-professional stakeholders are involved. However, with the scope set in the previous phase, it might not always be possible for some groups such as citizens and business owners to influence the process (Participant D).

### *4.3.3 Standardizations*

Several standardizations are always utilized in some way during the process. Most of them are present during the second phase. These standardizations whilst limiting the stakeholder influence, allow for a quicker process (Participant A).

#### *4.3.3.1 'Uitvoeringsstandaard'*

This is a document from 2021 which is intended to be the foundation for the implementation of PBK. The document is

dynamic, meaning it can be updated if change is required. It lists multiple key desires for the implementation of PBK. These are: to maintain the safety and beauty of the city, renew public space with participation, adequate prevention and intervention, trees, accessibility of the city, no surprises for houseboat owners and optimizing the purchasing practices. This is a document that overarches all process stages that a quay wall or bridge undergoes in the PBK process ("Uitvoeringsstandaard…Kademuren", n.d.).

#### *4.3.3.2 Puccini*

The 'Beleidskader Puccinimethode, standaard voor het Amsterdamse straatbeeld' is a document outlining the policy guidelines for the way Amsterdam should look like("Inspraak…Puccini, n.d.). This is a method that can and is used to speed up the process. To make changes in public space participation is a requirement However, if the Puccini standards are followed this is not required (Participant A). This breaks with the desire to have participation found in the uitvoeringsstandaard but allows for a quicker and cheaper process. The document is split into two sections: 'Puccini Handboek Groen' and 'Puccini Handboek Rood'. The first handbook is, including an appendix, a 337-page document outlining all standards for flora in Amsterdam. The second one is having the standards for everything related to the infrastructure, this document is 415 pages. Ranging from the materials that can be used to how to maintain them ("Standaard…Puccinimethode", n.d.). This document focuses on the second to fourth stage, so from the project phase onwards.

#### *4.3.3.3 Bereikbaarheid, Leefbaarheid, Veiligheid en Communicatie (BLVC)*

BLVC is the abbreviation for Bereikbaarheid, Leefbaarheid, Veiligheid en Communicatie. This is a process all roadwork in Amsterdam needs to undergo. The BLVC plan explains what will happen, where it will happen, from when to when, what the impact on traffic will be and how it will be communicated. This is done to check if projects sufficiently try to limit the hindrance and inconvenience of a project ("Bereikbaarheid…communicatie, 2016). The assessment of this is done by the 'Werkgroep Werk in Uitvoering' (WWU). Not receiving approval from the WWU means the project can not continue. The WWU consists of amongst others the stadsdeelregisseur, the police, the fire department and public transport. This process is also in the second stage (Participant C).

#### *4.3.3.4 Bomen Effect Analyse (BEA)*

BEA is the abbreviation for 'Bomen Effect Analyse'. This is an analysis of the impact a project will have on the future of the present trees ("Bomen … Nederland", n.d.). This is a standard procedure that is to be fulfilled in the second stage. Not only does it indicate the effect a project will have, but also prescribes how the negative effects can be minimized (Participant A).

## 4.4 Research questions

During the interviews all participants were asked who the stakeholders present were. The generalized list of stakeholders was confirmed by all four participants. There were only differences regarding how narrowed down the identification can be. This is primarily problematic regarding the wishes of stakeholders. As this is not just dynamic (Participant B) it can also be conflicting (Participants B & C). Some citizens might want more parking spots in the city center whilst other citizens might want more greenery (Participant D). These potential conflicting interests within a stakeholder group as well as between groups lead to certain disappointments for one group (Participant B), leading to a need to generalize stakeholders and their preferences to be able to progress as satisfying all desires is not possible (Participants B, C & D).

### *4.4.1 Who are the stakeholders*

From the interviews, the following list of stakeholders came to be. The general stakeholders are citizens, visitors, companies that require the city's infrastructure for work, individuals that require the city's infrastructure for their work, companies that are a part of the city's infrastructure, emergency services and the municipality. The citizens, visitors and individuals who need the city's infrastructure for their work are non-professional stakeholders. The other listed stakeholders are professional stakeholders.

The companies that require the city's infrastructure are commonly companies that are of significant size that they are consulted at earlier stages, compared to the individuals. One such potential company could be a theatre, whilst the individuals can be taxi drivers or small shop owners (Participants B, C & D) Companies that are a part of the city's infrastructure are companies such as GVB, which is the provider of public transport and energy providers (Participant B).

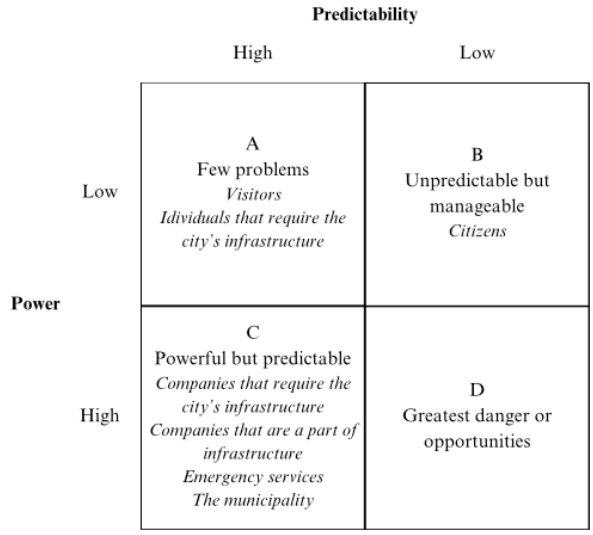
The municipality is the biggest and most complex stakeholder (Participant D). With 19.000 people working for the municipality in different roles this is a very complex stakeholder, but the most involved and powerful in the process as it is the owner of almost all of the quay walls and bridges (Participant A). The power is a result of the role of decision maker in the process as can be seen with the fact that permits for work on land are awarded by the stadsdeelregisseur (Participant C).

Using Newcombe's Predictability/Power matrix the stakeholders can be mapped. This is done for both phases. This is because the matrices differ per phase. With the increased involvement of citizens and individuals that require the city's infrastructure their position in the matrix changes. Strategic phase

The involved stakeholders during this phase are the companies that require the city's infrastructure for work, companies that are a part of the city's infrastructure, emergency services and the municipality (Participant B). The citizens, visitors and individuals that need the infrastructure for their work have little to no engagement during this phase.

The predictability of stakeholders depends on how different their wishes are. Gathering from the interviews all stakeholders but the citizens are predictable (Participants B, C and D). With a main focus on the least hindrance possible. Citizens have a wide range of wishes depending on personal preferences (Participant D). The power in this phase is a result of involvement. During this phase the three mentioned stakeholder groups are minimally informed and involved regarding the process, limiting the power (Participants C & D). This leads to the following matrix:

**Figure 4** power/predictability matrix during the strategic phase

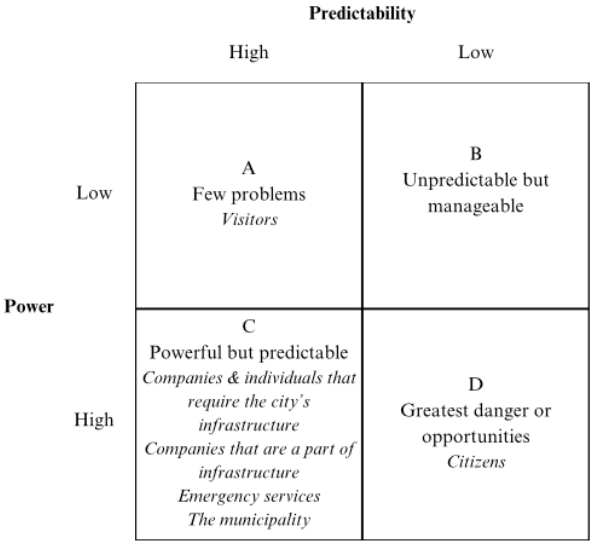



#### *4.4.1.1 Project phase*

In this phase almost all stakeholder groups are present. The citizens and individuals that need the infrastructure for their work are now more involved in the participation (Participants B & D).

With the involved of citizens and individuals that require the city's infrastructure their power increases. This can for instance be done by challenging the issuing of permits, such actions can quickly cause delays and costs (Participant D). As a result, the matrix changes to the following:

**Figure 5** power/predictability matrix during the project phase




### *4.4.2 What are the wishes of the stakeholders*

One of the key conclusions for this is that no answer here is set in stone. The wishes of stakeholders are dynamic and thinking on behalf of others should be avoided (Participant B) During the interviews some general wishes were raised minimal hindrance, livability and good communication (Participants B & D). Minimal hindrance as it ensures as little negative impact of the required treatment. Livability is a general wish which can mean different things for individuals and good communication ensures that people feel taken seriously and can adapt to the coming hindrances (Participant D).

There is one general wish that falls under livability, that is the maintenance of the trees. This something that stood as it was a core wish throughout all plans. This is highlighted in the fact that removing a 'beschermwaardige boom' is only allowed if it has been proven there is no other option.

#### *4.4.2.1 Strategic phase*

As this is the phase where the treatment is decided the value trade-off as discussed in section 2.2.2 is done. What treatments are optional for the quay wall or bridge and what would the impact be of this treatment? The considerations are the 'technical advice', 'key factors', 'implementation advice', 'environment advice', 'sustainability' and 'costs'. With the six core considerations, the value assessment is made. Renewal ensures more long-term safety and potentially provides the option for livability improvements as larger maintenance will result. However, it increases the hindrance (Participant B). There are instances where a quay wall or bridge is of such significant importance to the accessibility of Amsterdam that renewal is not an option as insufficient mobility would be possible (Participants B & C). Communications to stakeholders that are not involved during this stage, the citizens, visitors and individuals that need the infrastructure for their work, are minimally informed and involved. The reason for this is that at this time no clear communication can be given as the treatment is still undecided (Participant B).

#### *4.4.2.2 Project phase*

As highlighted in section 4.3.2 during this phase the how and when are relevant topics, meaning that the wish for minimal hindrance is primarily relevant in the question of when the treatment will take place. Keeping in mind other hindrances in mobility throughout the city and potential individual wishes (Participant D). As it now will be decided how the selected treatment will be implemented, which might open the room for improvements in livability, this is the more prominent topic here than in the previous phase. During this phase, all stakeholders are informed of the process or can if looked for, find out of the process. This can for instance be following the request for a permit being published, these are publicly accessible ("Kennisgevingen en bekenmakingen, n.d.).

### *4.4.3 How are the stakeholders currently involved*

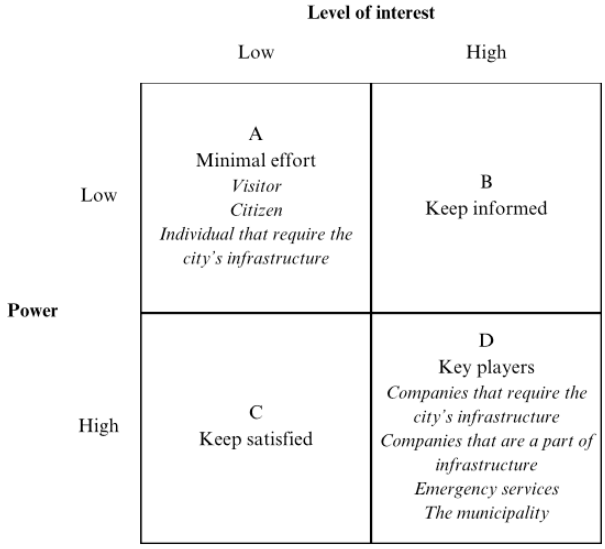
As can be seen in the power/interest matrix there are four levels of stakeholder involvement: minimal effort, keep informed, keep satisfied and key players. Using Newcombe's power/interest matrix stakeholders can be mapped. In this section, they are mapped by how they are involved placing them in the quadrant based on how they are involved, not by their power or level of interest.

#### *4.4.3.1 Strategic phase*

The desires of visitors might be indirectly represented as business owners need visitors to come to their store, but there is no representative of visitors at the discussion table (Participants B & C). Citizens and individuals that need the infrastructure for their work might be represented by a gebiedsmakelaar. However, in the overview of the present parties during the ATH process, there is no direct citizen representative (Participant B) and Participant D indicated that citizen participation only happens during the second phase. The professional stakeholders are primarily represented by the omgevingsmanager during the ATH phase. The municipality is most involved in this stage. With representatives for sustainability, implementation, engineering and finance, in all parts of the municipality.

In the Figure below the stakeholders are mapped according to the type of involvement.

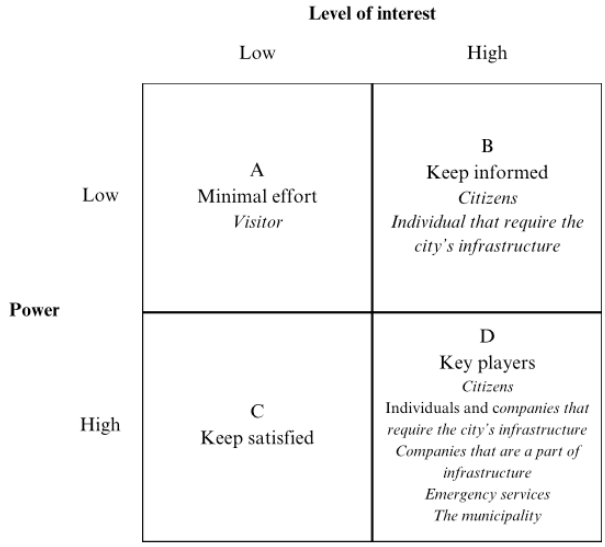
**Figure 6** power/interest matrix filled according to current involvement in the strategic phase




### *4.4.3.2 Project phase*

During the project phase, the involvement of the stakeholders in the key players quadrant does not change significantly. That of the citizens and individuals that require the city infrastructure, does. Once there are concrete plans they are informed (Participant B). At this moment there are two potential options, in case there is room within the scope of the project citizens and individuals that require the city's infrastructure are actively involved and can participate in the decision-making process.

**Figure 7** power/interest matrix filled according to current involvement in the project phase




### *4.4.4 Theoretical stakeholder involvement*

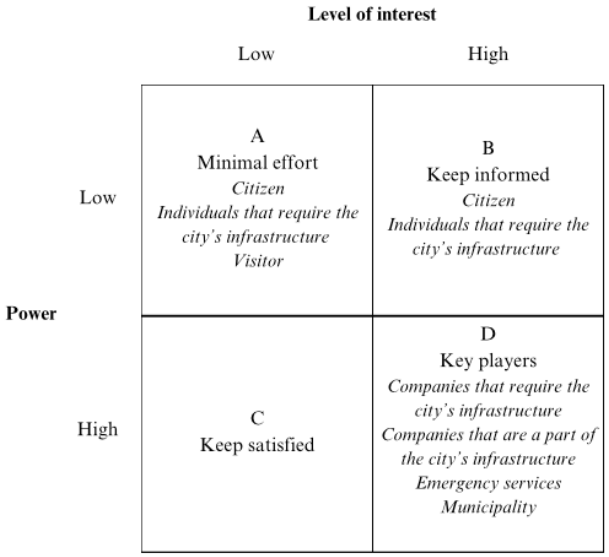
In this section, the stakeholders are mapped according to their level of interest and power. This provides the theoretical optimal stakeholder involvement style.

### *4.4.4.1 Strategic phase*

As explained in section 4.4.1, the visitors, citizens and individuals that require the citizen's infrastructure have little to no power to influence the process and the other stakeholders have more power.

The interest of citizens and individuals is dependent on the potential impact it might have and/or potential value involvement could bring to these stakeholders (Participant D). The power of the other stakeholders is at this stage still not present, but this is a result of not knowing about the process (Participants C & D).

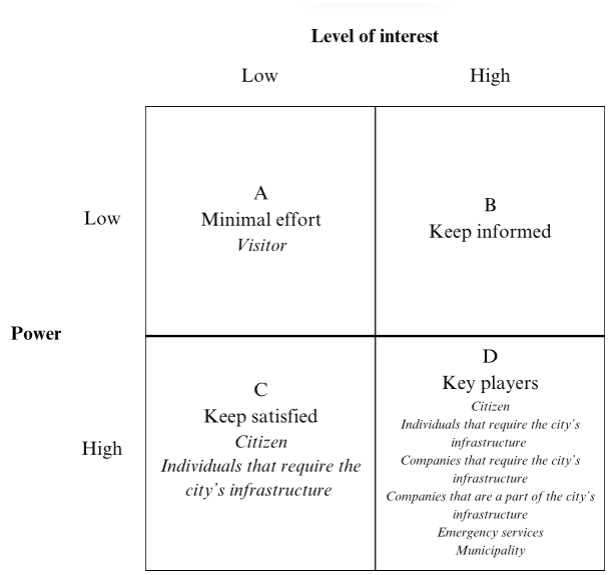
**Figure 8** power/interest matrix filled according to the level of interest and power in the strategic phase




### *4.4.4.2 Project phase*

Because during this stage, the permits for works in the public space are issued, the citizens and individuals are put in a position of power. They have the option to object to such permits, this can be done at the 'stadsdeelcommissie' or the 'gemeenteraad'. This can lead to an increase in costs and delay the process. In some cases, the process is not delayed, but potentially cancelled. This is the case for the Geldersekade. This quay wall was scheduled for renewal, but the permit for this was challenged by the 'Vereniging Vrienden van de Amsterdamse Binnenstad (VVAB)' (Participant D) a citizen union focusing on maintaining the historic traits of the old city center (Participant A). With the additional power obtained the matrix changes to the following:

**Figure 9** power/interest matrix filled according to the level of interest and power in the project phase



# 5. CONCLUSION & DISCUSSION

This chapter analyzes the key findings, answers the research question and notes the implications and limitations of this research, followed by potential future research directions. This chapter ends with general lessons from stakeholder management within PBK. These are lessons that can be used both within the municipality as well as by other organizations with similar processes.

## 5.1 Summary of findings

With the help of interviews, insights were gathered in the process in PBK and insights were gathered about the relevant stakeholders. The situation is very complex (Participant B). With 19,000 people (Participant D) working for the municipality and the many different preferences of citizens and other stakeholders, some generalization is required to continue. The whole process a quay wall or bridge undergoes has four stages, out of which mainly the first two allow for stakeholder management. An overview has been made of the general stakeholders, their wishes, their current involvement and how according to Newcombe's matrix they should be involved.

Within PBK there are five potential treatments for a quay wall or bridge: (1) reinforcement (2) regular maintenance (3) load reduction (4) renovation and (5) renewal. More information about what these treatments entail can be found in section 4.2. The process which a quay wall or bridge undergoes in PBK is 4 stages that run consecutively: (1) The strategic phase (2) The project phase (3) conditioning and (4) realization. For this research the first two stages are relevant as in the strategic phase the treatment is decided and during the project phase, it is decided how this treatment will be done and when. So, the first two stages are most relevant for the stakeholder management.

With the methods developed using IPK, quay walls and bridges are better treatable than before PBK allowing for faster, cheaper and more sustainable treatment. The further development of treatments is a continuous process taking place and will in the future. These new methods are better aligned with the preferences of stakeholders, as they reduce the hindrance and are more tree-friendly and with that provide value.

By answering the sub-research questions a stakeholder overview and mapping were completed.

The stakeholders that were found are citizens, visitors, companies that require the city's infrastructure for work, individuals that need the city's infrastructure for their work, companies that are a part of the city's infrastructure, emergency services and the municipality. These are more generalized stakeholder groups to ensure that analysis can be done.

The general stakeholder wishes are for minimal hindrance, livability and good communication. These are more general wishes and depending on individuals within stakeholder groups may vary, so also for this research question, some generalization is required.

The matrices in section 4.4.1 show that the professional stakeholders are 'powerful and predictable' and are in the current process involved as 'key players'. For the professional stakeholders, this does not change depending on the stage that a quay wall or bridge is in. In section 4.4.4 the stakeholders were mapped based on their characteristics (interest & power) instead of how they are involved. For the professional stakeholders, the current practices are aligned with the theoretically prescribed practices as found in section 4.4.4.

There are however, two stakeholder groups where the current involvement does not align with the theoretically prescribed involvement practices. These are the citizens and the individuals that require the city's infrastructure. Citizens are in the first phase 'unpredictable but manageable' and in the second phase are 'greatest danger or opportunities'. The individuals that require the city's infrastructure change from 'few problems' to 'powerful but predictable'. This is a result of the increase of power in the project phase compared to the strategic phase. However, the power that the citizens and the individuals have is not the power to influence the project to their liking as that is mainly done in the strategic phase, but it is the ability to hinder the project. This can be done by protesting permits, which happens and can delay a project by over a year.

It has been found that the stakeholder preferences align with the theory found in section 2.2.2 as stakeholders make the trade-off between potential additional value compared to the perceived loss of value. A perception that can differ between stakeholders. Combining the information obtained during the interviews with Newcombe's matrices allows for answering the primary research question.

*How can stakeholder engagement be improved in the renovation scheduling for LogiQuay?*

## 5.2 Conclusion

To answer the primary research question, the matrices are filled in in sections 4.4.3 and 4.4.4. To find improvements these figures (6-9) are compared. This way the current process can be compared to the theoretical prescribed practices.

The main differences are found in the involvement of citizens and individuals that require the city's infrastructure.

### *5.2.1 Difference in involvement*

A difference can be found in the current involvement and the theoretically prescribed involvement for citizens and individuals that require the city's infrastructure as shown in the figures 5 and 7. It shows that the two mentioned stakeholders are involved less in Figure 6 than in Figure 8. Figure 8 prescribes additional involvement in the strategic phase, specifically, keeping informed. Informing these stakeholders allows for adaptation to the upcoming hindrance because of the treatment. So increasing the involvement of these two stakeholders from 'minimal effort' to 'keep informed' as it is unclear how much interest there is from individual citizens, at least prevents not doing enough involvement for the power level in the strategic phase.

### *5.2.2 Difference in power*

The stakeholder groups citizens and individuals that require the city's infrastructure shift in power between the two phases. This is potentially problematic when considering the power/predictability matrix. This shows that citizens are plotted in the matrix under 'greatest danger or an opportunity' and the individuals are 'powerful but predictable' for a project as can be seen in Figure 5, these stakeholder groups are not involved in the first and most influential phase of the process. Potentially leading to resistance during the project phase, a phase where they have more power. In research, it was shown that the early involvement of stakeholders, so a proactive approach, can aid in preventing delays (Olander, 2007; Achterkamp & Vos, 2008).

This is a potential cause for the delays and costs that can be caused by these stakeholder groups in the project stage. As theory has shown that early involvement can aid in preventing delays and the two stakeholder groups are minimally involved in the first stage. Earlier involvement of these two stakeholder groups was mentioned as a specific potential improvement by participant D. Not just informing these stakeholders but involving them. With earlier involvement relevant information could be revealed during the strategic phase, allowing for consideration. Additionally, it could reduce resistance in the

project stage as this previously supplied information could have been considered, allowing for both a smoother process as well as potentially a process that provides more value for the stakeholders. This is mainly applicable to the citizens. Whilst for both stakeholders it is important to be aware of the process, the citizens are more unpredictable and because of early involvement is more important. It is more important because due to the unpredictability, it is more difficult for decision makers, for example in the ATH process, to estimate the desires of this stakeholder group. This makes it more likely that this is done incorrectly and can lead to resistance during the process phase, by for example protesting permits.

### *5.2.3 Advice*

The advice follows the theoretically proven benefits of earlier involvement, the identification of citizens as 'greatest danger or opportunity' and the individuals that require the city's infrastructure as 'powerful but manageable' and the insights from the interviews showing resistance causing delays and costs caused by citizens or citizen unions. The advice is to involve citizens and individuals that require the city's infrastructure during the strategic phase. The earlier involvement could be beneficial as both stakeholders obtain more power in the project phase. This is especially important for the citizens stakeholder group as they are less predictable compared to individuals that require the city's infrastructure. Doing this can reduce resistance, improve the perceived value for stakeholders and ensure a smoother, quicker and cheaper process.

## 5.3 Implications

A stakeholder overview has been made for the planning of the treatment of quay walls and bridges in the PBK. This was a gap (Bosch, 2024) that has now been addressed. The stakeholder overview has been combined with the theoretical framework of Newcombe's (2003) to provide advice on potential changes to the stakeholder management, applying the theoretical background to a single case study.

The clear advice is to involve citizens and individuals that require the city's infrastructure in the strategic phase of the process to improve the stakeholder management within PBK and LogiQuay. Doing this can reduce the hindrance, improve the perceived value and ensure a smoother, quicker and cheaper process. Aiding in the overall success of the 'Programma Bruggen en Kademuren'.

## 5.4 Limitations

We used a single case study using four interviews and publicly available grey literature to answer the research questions. All four participants are working for the municipality, and whilst this provided insights into the structure of the municipality, it potentially meant not obtaining other perspectives.

Additionally, it was found that the stakeholder value is individual and dynamic. As a result, general preferences and general stakeholder groups were used.

## 5.5 Further research direction

Further assessment of the experiences of the stakeholder management can be done. A focus on non-municipality employees and/or individual stakeholders could provide new insights. This would gather insights from stakeholders instead of people active in stakeholder management.

Additionally, further research can be done to narrow down the preferences and stakeholder groups. The impact of quay wall renovations affects a houseboat owner differently than a citizen living in a house, potentially affecting the value perception.

## 5.6 General lessons

Stakeholder value is dynamic. This means that involvement should be maintained to ensure that the perceived value of stakeholders aligns with the actual wishes of stakeholders.

A lesson from Participant D was bringing stakeholders together. Allowing stakeholders to together discuss their preferences led to more understanding by stakeholders as it was clearer why certain decisions were made.

Amsterdam is unique in its desire to maintain its 'beschermwaardige bomen'. As can be seen it was one of the key desires listed in the IPK. Additionally, this desire is enforced with policies, dictating under which circumstances a tree can be removed and policies promoting the growth of new trees.

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# 7. REFERENCES

Achterkamp, M. C., & Vos, J. F. J. (2008). Investigating the use of the stakeholder notion in project management literature, a meta-analysis. *International Journal of Project Management*, *26*, 749–757.

Bereikbaarheid, leefbaarheid, veiligheid en communicatie. (n.d.). Gemeente Amsterdam. https://www.amsterdam.nl/verkeer-vervoer/werken-in-de-openbare-ruimte-(wior)/wior-proces/bereikbaarheid-leefbaarheid-veiligheid/

Bomen Effect analyse – BEA - Bomenwacht Nederland. (2016, December 6). Bomenwacht Nederland. https://www.bomenwacht.nl/diensten/bomen-effect-analyse-bea/

Bosch, R. (2024, May 18) Expert interview with PhD student working on LogiQuay, Microsoft Teams meeting.

Boyles, M., (2022, April 26). *How do businesses create value for stakeholders?* Business Insights Blog. https://online.hbs.edu/blog/post/how-do-businesses-create-value

De Amsterdamse bodem. (2023, October 23). Gemeente Amsterdam. https://aandegrachten.amsterdam/de-amsterdamse-bodem/#:~:text=Bouwen%20op%20zand,of%20kademuur%20op%20kunt%20funderen.

*Een stad op palen* (2023, October 30). Een stad op palen - Aan de Amsterdamse grachten. Aan De Amsterdamse Grachten. https://aandegrachten.amsterdam/een-stad-op-palen/

Freeman, R. (1984). Strategic management: A stakeholder approach. Pitman Publishing.

Harrison, Jeffrey & Wicks, Andrew. (2013). Stakeholder Theory, Value, and Firm Performance. Business Ethics Quarterly. 23. 97-125. 10.5840/beq20132314.

Inspraak Beleidskader Puccinimethode. (n.d.). Gemeente Amsterdam. https://www.amsterdam.nl/wonen-leefomgeving/puccinimethode/inspraak-beleidskader-puccinimethode/

*IPK: instensief samenwerken, radicaal innoveren* (2024, April 10). IPK: intensief samenwerken, radicaal innoveren - Aan de Amsterdamse grachten. Aan De Amsterdamse Grachten. https://aandegrachten.amsterdam/ipk-intensief-samenwerken-radicaal-innoveren/

Kennisgevingen en bekendmakingen. (n.d.). Gemeente Amsterdam. https://www.amsterdam.nl/nieuws/kennisgevingen-bekendmakingen/#h3e0d3d56-e525-4fd8-ad72-b5579cf5a7ec

Littau, P., Jujagiri, N.J., Adlbrecht, G., 2010. 25 years of stakeholder theory in project management literature (1984–2009). Proj. Manag. J. 41, 17–29.

*Megaoperatie om woonboot onder brug door te krijgen eindigt met voorbijgangers op het dak*. (n.d.). AT5. https://www.at5.nl/artikelen/224613/nicoles-woonark-onder-brug-da-costakade

Mill, J.S. 1961. *Utilitarianism*. In M. Cohen (Ed.), ***The philosophy of John Stuart Mill***: 321–68. New York: Modern Library.

Mitchell R.K., Agle B.R., Wood DJ. (1997) Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts. Acad Manage Rev 1997;22(4):853–86.

Newcombe, R. (2003). From client to project stakeholders: a stakeholder mapping approach. *Construction Management and Economics*, *21*(8), 841–848. https://doi.org/10.1080/0144619032000072137

Olander, S., (2007) Stakeholder impact analysis in construction project management, Construction Management and Economics, 25:3, 277-287, DOI: 10.1080/01446190600879125

Olander S, Landin A. (2005) Evaluation of stakeholder influence in the implementation of construction projects. Int J Project Manage 2005; 23(4):321–8.

Standaard voor het Amsterdamse straatbeeld: Puccinimethode. (n.d.). Gemeente Amsterdam. https://www.amsterdam.nl/wonen-leefomgeving/puccinimethode/puccinimethode/

Uitleg Programma, (n.d.) Gemeente Amsterdam https://www.amsterdam.nl/verkeer-vervoer/bruggen-kademuren/uitleg-programma/

Uitvoeringsstandaard Bruggen en Kademuren. (n.d.). Openresearch.Amsterdam. https://openresearch.amsterdam/nl/page/76475/uitvoeringsstandaard-bruggen-en-kademuren

*Urbiquay: Urban Bridge and Quay Wall Innovations*. (n.d.). AMS. https://www.ams-institute.org/urban-challenges/resilient-cities/urbiquay-urban-bridge-and-quay-wall-innovations/

Voortgangsrapportage april 2021. (2021, April). Open research Amsterdam. https://https:/openresearch.amsterdam/image/2021/5/12/voortgangsrapportage_programma_bruggen_en_kademuren_april_2021.pdf

Voortgangsrapportage april 2023. (2023, April). Openresearch Amsterdam. https://openresearch.amsterdam/nl/page/95102/voortgangsrapportage-bruggen-en-kademuren-april-2023

Voortgangsrapportage september 2022. (2022, September). Openresearch Amsterdam. https://openresearch.amsterdam/image/2022/10/6/vgr_en_themabijlage_bruggen_kademuren_september_2022.pdf

# 8. APPENDIX

## 8.1 Glossary

| Dutch term | Translation | Explanation |
|---|---|---|
| Afwegingen Toekomstbestendig Herstel (ATH) | Consideration for future-proof recovery | The process found in the strategic phase, here the treatment for a quay wall or bridge is decided. |
| Beschermwaardige bomen | Trees that are worthy of protection | It means that for some trees additional efforts are made to prevent the trees have to be removed. |
| Beleidskader Puccinimethode, standaard voor het Amsterdamse straatbeeld | Policy framework Puccini method, standard for Amsterdam street appearance | This is the policy framework for the Municipality of Amsterdam that prescribes standards for the infrastructure and nature of Amsterdam. |
| Besluit Toekomstbestendige Maatregel (BTM) | Decision future-proof measure | This is the decision made at the end of the ATH, this can be either of the five treatments mentioned in section 4.2. |
| Bereikbaarheid, Leefbaarheid, Veiligheid en Communicatie | Accessibility, livability, safety and communication | This is a method to minimize the hindrance due to works in the public space as well as the way the WWU assesses if this is done sufficiently. |
| Functie herwaardering | Function revaluation | This means that the purpose of a quay wall or bridge is changed. This usually means reducing the weight that it needs to carry by limiting the weight of vehicles allowed on it or allowing only pedestrians and bikes to use it. |
| Gebiedsmakelaar | Area broker | This person is the first point of contact for citizens in an area of the municipality. If there is no designated person for the small business owners, then this person is also the contact person for those people living and working in a part of the city. This is the other way around, the person that contacts the people living in an area if requested for a project. |
| Gemeenteraad | Municipal council | The municipal council is a governing body whose members are elected by the inhabitants of the city. |
| G-Kracht | G-Force | This is new renewal method developed in IPK |
| Groutinjectiepalen | Grout injection poles | This is a new renovation method developed in IPK |
| Innovatiepartnerschap Kademuren (IPK) | Innovation partnership quay walls | This is a program set up in 2018 by PBK to develop new methods to treat the quay walls. |
| Kade 2.020 | Quay 2.020 | This is new renewal method developed in IPK |
| Koningsgracht | King's Canal | This is new renewal method developed in IPK |
| Omgevingsmanager | Environment manager | This person is responsible for consulting the relevant professional stakeholders in the ATH process. The goal is to obtain all the relevant information about the information. |
| Programma Bruggen en Kademuren PBK | Bridge and quay wall program | The municipality of Amsterdam has many bridges and kilometers of quay wall which need to be guaranteed to be safe. To do this, the PBK was set up. |
| Puccini Handboek Groen | Puccini green handbook | The document that contains the Puccini method guidelines for nature in the Municipality of Amsterdam. |

| | | |
|---|---|---|
| Puccini Handboek Rood | Puccini red handbook | The document that contains the Puccini method guidelines for infrastructure in the Municipality of Amsterdam. |
| Stadsdeelcommissie | District committee | An elected body within the municipality of Amsterdam represents the people living in the district and advises the governing body of the city district. |
| Stadsdeelregisseur | District director | This person is responsible for the governing of a city district. |
| Uitvoeringsstandaard | Implementation standard | A document that outlines the general wishes for the implementation of PBK. |
| Vereniging Vrienden van de Amsterdamse Binnenstad (VVAB) | Association of friends of the inner city of Amsterdam | An association of inhabitants of the City of Amsterdam, with a focus of maintaining the classic street appearance. |
| Werkgroep Werk in Uitvoering (WWU) | Working group work in progress | A body within a district in the municipality that uses the BLVC plan to check if events or maintenance in the public space do not cause too much hindrance. Within the WWU, emergency services, public transport, the stadsdeelregisseur and other representatives of city mobility are present. |