

# 'BATAVIAN CONSTANCY'

THE DEFENCE OF  
AMSTERDAM IN THE  
YEAR OF DISASTER 1672

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Fortified cities and fortresses played a central role in early modern warfare. Virtually all literature on the subject focuses on the design of fortifications and their theoretical rationale, which developed rapidly in seventeenth-century Europe. By comparison, the construction and the use of fortifications and the underlying logistics is a less well-studied topic. In this article, archival material is used to reconstruct the measures taken by the city government to put Amsterdam in a state of defence during the greatest crisis the Dutch Republic ever had to deal with, and their spatial effects. The archival material shows that the condition of the fortification works around the Republic's most important city was not optimal. It also shows that the city

government did everything in its power to bring the fortifications up to standard in a short time, only to partly demolish them again in 1674. In addition to the fortifications around the city, a combination of outposts and inundations at some distance from the city were prepared and towns and villages in the region were reinforced.

## FRENCH EXPANSION

Visitors to the Hôtel des Invalides in Paris are presented with a series of enormous murals in the Salle Turenne, the complex's former dining room, depicting, among other things, Dutch villages and towns captured by the French army in 1672-1673 (fig. 1).<sup>1</sup> The programmatically designed series of battle scenes is a triumphant reminder of the near-successful sub-

▲ Detail of fig. 12, page 14

jugation of the Republic during the *guerre de Hollande*, in which the main prize – Amsterdam – ultimately eluded the French.<sup>2</sup> The merchant metropolis on the river IJ is therefore absent from this series of murals.

Nevertheless, seventeenth-century Paris did host an ‘official’ and monumental city portrait of Amsterdam, de facto capital of the Republic (fig. 2). It was displayed in the Hôtel de Lionne, the residence of Hugues de Lionne, Marquis of Fresnes (1611-1671), minister of foreign affairs under Louis XIV. It had been delivered there by the Amsterdam envoy Coenraad van Beuningen. When he visited De Lionne in 1665 he was received in a spacious gallery, in which ‘several wall panels were decorated with pictures of the most important cities in Europe’. One panel was still empty; in the course of a conversation with the marquis, Van Beuningen sensed that it would ‘not displease him’ to see a painting of Amsterdam hanging there. Van Beuningen was asked to pass on the exact measurements and the mayors subsequently ordered a fine painting. The commission went to Ludolf Bakhuizen, the most prominent marine painter of his day. This precious gift served ‘the accomplishment of due courtesy’.<sup>3</sup> This courtesy was intended to please De Lionne and, through him, the Sun King. By the following year, the painting – in a rolled-up state – was ready to be sent to Paris.<sup>4</sup>

This diplomatic gesture, as is well known, did not have the desired result. In 1667, Louis XIV occupied a

large part of the Spanish Netherlands with an army of 47,000 men. The following year, the Dutch Republic, England and Sweden concluded the Triple Alliance, forcing the French king to sign the Peace of Aachen, which temporarily put a hold on his expansionist policy. But in the following years Louis managed to persuade most of the Republic’s allies to support him. Immediately after signing the Triple Alliance, the English king had secretly consulted Louis and joined France; only a joint fleet could break the Republic’s dominance at sea. In order to render a raid along the Meuse and Rhine rivers possible, Louis secured the support of the Elector of Cologne and the Bishop of Münster. Sweden supported the French king by preventing other Germanic states from blocking a French advance. The ‘considerable military build-up of the State’s neighbours’ led to a reinforcement of the militia of the province of Holland in 1668.<sup>5</sup> In December 1671, the Amsterdam city council decided that ‘the fortifications, all around, that are still defective, should be reinforced immediately, as well as the platforms for positioning the canon’. Two recently abolished companies of soldiers, which had recently been abolished, were reinstated ‘also on account of the circumstances’.<sup>6</sup>

In April 1672, Louis declared war on the Republic; by early June he was standing beside the Rhine at Lobith with an army of 120,000 men.<sup>7</sup> It soon became clear

1. The Salle Turenne in the Hôtel des Invalides in Paris. The walls of this dining room are covered by a series of paintings depicting the towns and villages captured by the French army during the ‘guerre de Hollande’ (Musée de l’Armée, Paris, Dist. RMN-Grand Palais/Caroline Rose)





2. Ludolf Bakhuizen, *Ships on the IJ off Amsterdam*, 1666 (Musée du Louvre, Paris)

that the IJssel Line would not hold; French troops occupied large parts of the provinces of Guelders and Utrecht; one town after another surrendered. On 20 June, Naarden, four hours distant from Amsterdam, fell.<sup>8</sup> The Dutch States army, under the command of William III, had withdrawn to the border area between Utrecht and Holland, where inundations were already being set in motion, effectively making a decisive attack on the Dutch heartland impossible (fig. 3).

#### THE CITY'S FORTIFICATIONS

Shortly before the Year of Disaster, Amsterdam had expanded from the Leidsegracht to the IJ, an area of about 3000 hectares. This area had been fortified in 1662-1663, in accordance with a design outlined in 1660.<sup>9</sup> This gave Amsterdam a defensive wall with a total length of about 7.5 kilometres and 26 bastions (fig. 4). By 1672 most of this 'fourth extension' up to the Amstel had been developed. However, the largest section, east of the Amstel, was still empty, partly due to the decline in building plot sales during the Second Anglo-Dutch War (1665-1667). In 1665, the city council

passed a resolution permitting extensive use of this area for cloth drying frames and bleaching fields, noting that any raising of the land should take account of the planned canals.<sup>10</sup>

In 1665, military engineer Matthias Dögen was hired to inspect the fortification around the fourth extension.<sup>11</sup> From his findings, it is clear that the groundwork on the city walls was largely finished, but all kinds of details still had to be carried out. Dögen's advice was mainly about the placement of artillery, guardhouses and doors and barriers in the gates. He advised against building stone bridges over the Singelgracht (the city moat) and recommended levelling the top of the ramparts and topping them with a sandy path to be covered with a layer of earth to prevent the sand from drifting.<sup>12</sup> Some of this work was not carried out until the Year of Disaster.<sup>13</sup> Overpasses were built above the gates so that the path ran over the entire fortification.<sup>14</sup>

The ramparts, built in part from peat and urban waste, turned out to be an unstable structure: they already started crumbling during construction. It



3. Nicolaas Visscher, map of the Province of Utrecht from 1652 with a handwritten list of the towns captured by the French (Leiden University Library, collection Bodel Nijenhuis)

took a lot of effort to get the wall up to the right height and keep it there.<sup>15</sup> The stability of such a massive earthwork was probably overestimated. On 17 March 1672, it was decided that the ramparts could only be raised using dry earth.<sup>16</sup> On 6 April, this decision was reversed: the bastions outside the dikes were raised with rubbish.<sup>17</sup> Land owned by the city near the Volewijk was excavated to raise the fortification.<sup>18</sup> For the raising of the ramparts north of the Nieuwe Vaart canal, sand was even taken from the recently created cemeteries on the bastions of Haarlem (near Palm-

straat) and Rijkeroord (near Raampoort).<sup>19</sup>

In June 1672, the bastions on either side of the Muiderpoort were still (or again) being raised.<sup>20</sup> In November 1672, the earthwork for the bastions on the east side, between the Muiderpoort and the Weesperpoort, was found to be 'unsatisfactory'. It is not clear whether the fortification was unfinished or already subsiding. The contractors were held responsible for the delay and were fined in accordance with the contract. The city hired day labourers to carry out the work at the contractors' expense.<sup>21</sup>

To prevent the mass of earth from subsiding, construction of a retaining wall on the outside of the bastions and curtain walls commenced in 1667. It was decided to tackle one or two bastions each year, depending on the availability of funds.<sup>22</sup> The bastions near the access roads were given priority. The following year, four bastions were tackled, two at Leidsepoort, one at Utrechtsepoort and one at Weesperpoort.<sup>23</sup> At the end of 1667, authorities considered reinforcing the remaining ten bastions in one go, which the city mason calculated would require 9,776,000 bricks at an estimated cost of 150,590 guilders. In the end, however, they confined themselves to the four previously selected bastions.<sup>24</sup>

In the winter and spring of 1672, work continued on the retaining walls on the west side of the city.<sup>25</sup> In April, 34 additional labourers were hired to speed up the work.<sup>26</sup> In order to build the retaining wall, part of which was under water, the western city canal was (partially) dammed. This remained the case until 10 June, when it was decided to build the brick wall as high as possible and then remove the dams.<sup>27</sup> In October 1672, part of the wall collapsed into the moat and had to be replaced with earthwork and revetments.<sup>28</sup> In early 1673, it seemed as if they were giving up: the remaining part of the earthen walls near the Haarlemmerpoort did not get a retaining wall.<sup>29</sup> However, in the spring of 1673, work resumed and the project was now expected to be completed in six weeks.<sup>30</sup> An idea

– not handed down – had been submitted to put the brick retaining wall in order.<sup>31</sup>

#### TIPPING POINT

Ten days before the fall of Naarden, on 10 June 1672, the town council decided to bring the defences up to full war strength. All city works were halted, except those on the fortifications.<sup>32</sup> Works carried out by day labourers could be stopped immediately, but all masters of works had to dismiss their staff the very next day; only a few minor works, the maintenance of paving and town buildings, and the deepening of the canals were to be continued. For the termination of contracted work, an agreement with the contractors was necessary.<sup>33</sup> On 28 June, 500 diggers were hired on a daily basis to speed up work on the fortification.<sup>34</sup> Twenty-five men were hired to make 1000 wheelbarrows.<sup>35</sup> On 8 July, an inspection of the city wall took place. In consultation with Jan Tim, lieutenant of artillery, it was determined where batteries and cannons should be placed to properly defend the access points.<sup>36</sup>

Eight-foot-wide parapets were erected on the ramparts, starting ‘especially where the attack was most feared’.<sup>37</sup> On 19 June, work on the parapets was intensified.<sup>38</sup> On 2 August, work continued on the parapets on the west side, between Leidsepoort and Haarlemmerpoort, with the help of orphans and another 50 day labourers.<sup>39</sup> On the east side, the work was still not complete at the end of August but the sand path was



4. Amsterdam in 1672 showing the main access roads, the names of the bastions (in black), the gates (in red) and (in bold) the two beren or dams separating the city moat from the IJ (Menne Kosian, Rijksdienst voor het Cultureel Erfgoed)



5. Cornelis Koel, Reinforcement in front of the Haarlemmerpoort in the Disaster Year. A ravelin encompassed the Haarlemmerweg and the barge canal. An elongated fortification along the Spaarndammerdijk guarded the locks in the dike and the brick dam separating the city moat from the IJ. Map from 1674 (Stadsarchief Amsterdam)

6. The ravelin in front of the Leidsepoort. Detail from: *Amstelodamum vetus et novissimum per Carolum Allardt*, 1679 (Stadsarchief Amsterdam)



being laid.<sup>40</sup> In October, Daniel Stalpaert and Jan Hendricksz van den Bergh inspected the path to see what still needed to be done.<sup>41</sup> However, the construction of the parapet led to the subsidence of the Blauwhoofd and the bastion north of the Haarlemmerpoort. The parapets were removed and rebuilt in a lighter form.<sup>42</sup> The pressure on four more bastions also had to be lightened by removing soil from the parapets.<sup>43</sup> In December, orphans were put to work repairing a collapsed bastion on the east side.<sup>44</sup>

A ravelin was constructed outside the Haarlemmerpoort (fig. 5); the piling work was completed on 2 August, after which the shoring was put in place.<sup>45</sup> Then, on the instructions of the architect Adriaan Dortsman, work on a second ravelin near the Leidsepoort (fig. 6) commenced.<sup>46</sup> On 20 October, it was determined that the earthwork on the rampart was largely complete, upon which the foremen were dismissed.<sup>47</sup>

Like the ramparts, the city moat was a subject of constant concern. The two dams separating the city moat from the open water of the IJ, Westerbeer and Oosterbeer, were a source of problems. The section of moat between the Oosterbeer dam and the IJ was not at the required depth: on 26 February 1672, the mud in the city moat was frozen solid and an experiment was carried out to see whether it could nevertheless be removed.<sup>48</sup> In June, the moat between Westerbeer and Blauwhoofd had to be deepened again.<sup>49</sup> On 15 June, Jan Hendricksz van den Bergh, the supervisor of waterworks and groundworks, was again ordered to deepen the city canal in several places, and again near the Oosterbeer.<sup>50</sup> In October, this work was commissioned again.<sup>51</sup> Horse-driven mud mills were now used, as manual labour was clearly not up to the job.<sup>52</sup> At the end of January 1673, the city canal was only 'partly deepened'.<sup>53</sup>

#### MANNING THE FORTRESS

While tensions were rising in the spring of 1672, a number of issues were settled, including the organization of the armed forces. The city militia was divided into neighbourhoods, reflecting the spatial distribution of the different social groups: the officers lived along the canals, the foot soldiers lived in the outer neighbourhoods or in the medieval heart of the city.

One of the problems encountered was also dealt with in treatises on fortification: in order to defend a large city, there had to be enough people to man the ramparts.<sup>54</sup> There were enough people in Amsterdam, but the distribution over the city was very uneven: virtually no one lived east of the Amstel. In the spring, the manpower problems in the new extension were solved. The militia regiments stationed in the new extension, were 'complemented with brave men and purged of weak and impotent soldiers'. A list of all the suitable men

living in the extension was drawn up. Those not already attached were assigned to a regiment, bringing the militia in the new extension up to full strength.<sup>55</sup> A new division into six regiments and 48 companies followed, so that the available manpower was well distributed throughout the city (fig. 7).<sup>56</sup> On 20 June, hundreds of additional musketeers were hired and a week later, four high-ranking officers 'owing to the great circuit of this city'.<sup>57</sup> A large number of city buildings and churches were evacuated to accommodate the military.<sup>58</sup>

The all but uninhabited area to the east also offered an advantage in wartime: there was enough space to allow gunpowder production to take place relatively safely within the ramparts. A number of powder houses were built in the extension, including near the Nieuwe Vaart canal, on Wittenburg and behind the Ashkenazi synagogue.<sup>59</sup> Gunpowder was also stored in the bastions.<sup>60</sup> The Zaagmolenpoort and the Raampoort gates were fitted out as storage for 20,000 pounds of gunpowder each, to a design by Daniel Stalpaert.<sup>61</sup>

#### FIELD OF FIRE

In order to ensure the effectiveness of the city's defences, all kinds of measures needed to be taken around the city: a field of fire had to be created and all connecting routes into the city had to be closed off. Every object behind which enemy troops could take cover, everything that protruded above ground level, had to be removed. Although building outside the city walls was forbidden, there were many exceptions to this rule and enforcement was not always consistent.<sup>62</sup> On 20 June – the day Naarden fell – the town council ordered all buildings, mills and cloth drying frames outside the town to be demolished.<sup>63</sup> When a number of sawmill owners had not yet complied with this order by 30 June the city council threatened to have their sheds 'destroyed and hacked into pieces'.<sup>64</sup> Even the ring dike around the Watergraafsmeer was levelled so that it could not provide cover for French troops.<sup>65</sup> On 11 July, all the trees around the city were cut down.<sup>66</sup> Timber stored in the city moat and the surrounding ditches had to be removed, and all supplies of bricks brought into the city.<sup>67</sup> A month later, paving was removed from access roads and brought to the city.<sup>68</sup>

On 13 June, the authorities considered whether the bridges outside the gates should be demolished immediately. This happened a week later at which time the bridge over the Amstel near Uithoorn was also demolished.<sup>69</sup> The city gates were filled with sand to make them more resistant to enemy artillery.<sup>70</sup> At the Haarlemmerpoort, the Leidsepoort and the Muiderpoort, a rope with a canister was attached, so that the mail could be hauled in when there was no sentry on duty.<sup>71</sup> Ferries were provided to transport people to and fro.<sup>72</sup>



7. Unknown map-maker, Amsterdam divided into 48 militia districts and six regimental districts, 1672 (Stadsarchief Amsterdam)

### DEFENCE OF THE IJ SHORE

In the seventeenth century, the IJ regularly froze over in winter.<sup>73</sup> In June 1672, the defence of the city from the water was organized for the coming winter. At that time, ships were moored in the IJ, between Blaauw-  
 hoofd and Kattenburg.<sup>74</sup> At the beginning of winter, all ships were required to be moored within the 'trees' – the inner harbour area protected by rows of piles and harbour booms – at places designated by the harbour master, thereby leaving a free field of fire. Ships that served in the defence of the city were exempt from this rule. The standing rigging had to be taken down and there had to be water on board to minimize the risk of fire. Additional guardhouses and 'sentry huts' (a smaller type of guardhouse) were built along the line of posts and equipped with bells to sound the alarm in the event of fire.<sup>75</sup> As usual in winter, the militia was required to cut holes in the ice covering the city moat and the IJ and to ensure that they remained open.<sup>76</sup> To that end the city ordered a supply of ice axes, hooks,

shovels, handspikes and ice cleats.<sup>77</sup> There were consultations with the Dutch East India Company and the Admiralty about how to protect the harbour islands and the warehouses on them.<sup>78</sup> They were made responsible for the holes near their sites.<sup>79</sup> When a severe frost set in in December 1672, the militia cut a row of holes in the IJ and a second outer row, in which armed flatboats were placed (fig. 8). 'Today they have started to cut the ice in the IJ in the shape of arches, in the way moats around bastions run, to put in 12 armoured boats that will flank each other,' wrote Amsterdam militiaman Lucas Watering in his diary on 22 December. A week later, the ice in the IJ was once again cut open, the outer row by guild members and orphan boys.<sup>80</sup> The Amstel River was also kept open. Michiel de Ruiter was consulted about a 'cross-section' across the IJ, from Waterland or the Volewijk to Funen.<sup>81</sup> In February 1673, the ice was chopped open across the IJ.<sup>82</sup>





8. Nicolaas van der Heyden, plan for the defence of Amsterdam in the event of a severe frost, 1673 (Stadsarchief Amsterdam)

### INUNDATIONS AND OUTPOSTS

Amsterdam's military strength lay not so much in its fortifications, but in its location in the landscape. The low-lying peatlands and reclaimed lakes around the city could be flooded in a very short time (fig. 9). Amsterdam enjoyed an international reputation of being 'strong and unwinnable' due to its location: 'Amsterdam can be put wide in the water very simply and easily', the Italian merchant Ludovico Guicciardini noted in 1567.<sup>83</sup> Two things were essential here. Firstly, the expert management of the ever-changing hydraulic situation. Secondly, the defence of the elevated dikes and polder roads, which after flooding would remain the only passable connections. The latter obviously had the highest priority during the reinforcement of Amsterdam's defences.

As early as May 1672, when the French army was approaching the Republic, the water level in the Rijnland water board district (hoogheemraadschap) was kept eight inches (20.88 cm) above the usual summer

level. This enabled any inundations to be carried out more quickly.<sup>84</sup> The first inundations were triggered on 13 June by opening the sluices in Amsterdam and removing the lock gates of the Ipenslotersluis in the Diemerzeedijk. This did not have the desired effect, partly because farmers from Amstelveen let the water flow away again by making an opening in the Amstelveenseweg.<sup>85</sup> On 20 June, by which time the Dutch States army had evacuated Utrecht because of the approach of the French troops, drastic action became inevitable. The ring dikes of the Bijlmermeer and Watergraafsmeer polders and the Diemerzeedijk, Amstedijk and Veendijk (Amstelveenseweg) were breached. Flat-bottomed boats were deployed to ferry people across the breaches.<sup>86</sup> Thus, the city was protected on the east and south side. Three days later, the owners of the powder mills on the Overtoom complained to the city authorities that if the water level rose any further, production would come to a halt. It was decided to stop letting in water, but to ensure that



9. Segment of the general map of inundations around Amsterdam in 1672-1673, showing the outposts close to the city (closed circles, see Figs. 10a-f) and other fortifications (Geschiedkundige atlas van Nederland)

the ditches in the polders remained invisible.<sup>87</sup> For an approaching enemy army, wading through the water hoping for the best was not a realistic option, especially not with heavy artillery. On 26 June, the polders west of the city were also inundated by cutting through the Haarlemmerdijk and the sandy path along the barge canal (trekvaart) in the north, and Sloterweg in the south.<sup>88</sup> Seven cuts were made in the ‘low road to Haerlem’ – the towpath along the barge canal; an eighth was dropped, so that the more westerly polders (Oostdorps and Middelveldse polders) were spared inundation.<sup>89</sup> These measures protected the city on three sides. On 27 June, the water level was deemed high enough; engineer Andries Du Mont advised closing the locks in the city at high water. The Haarlem-

mermeer needed to be brought to the same level as the inundated polders around Amsterdam in order to create an integrated water system.<sup>90</sup> On 29 June, it was decided to rehang the lock gates in the Ipenslotersluis and to dam the nearby inundation breach up to high water level in order to prevent further inflow during spring tides or north-westerly winds.<sup>91</sup>

At the beginning of July, the polders of the Ronde Venen near Uithoorn and Mijldrecht were also flooded. On 4 July 1672, the superintendent of the city’s earthworks, Jan Hendricksz van den Bergh, was put in charge of twenty diggers and twenty soldiers, with the order to cut the dikes along the river Drecht. If he managed to reach the lock of the Mijldrecht polder, he was to remove its lock gates. But before they could start,

they had to wait for reinforcements: a company of horsemen and soldiers was sent to Ouderkerk to protect the excavation workers from attacks by farmers from Amstelland. Once the dike breach was complete, Jan Hendricksz was to assess 'the temper of the farmers'. If he thought they would close the hole, he was to leave the twenty soldiers behind to guard the dike and take action against the local population if necessary.<sup>92</sup> Farmers were always compensated after inundations, but in some cases Amsterdam had to impose its will on the rural population, by force if necessary, before the enemy was even in sight. In Mijdrecht, there was a skirmish in which one soldier was killed and three or four were taken prisoner by the farmers.<sup>93</sup> West of the city, farmers had sabotaged the inundation by cutting the Veendijk, so that the water drained away into the Haarlemmermeer lake.<sup>94</sup> The watercourses that drained into the Amstel and Mijdrecht were rendered inaccessible by filling the openings with rows of piles and sunken boats.<sup>95</sup>

On 11 July, it was determined that the level in the Sloterpolder did not need to be raised any further.<sup>96</sup> On 22 July it was decided to open the floodgates again at low tide and to allow the polder mills to pump, so that the level in the inundated polders went down. However, the polders were still marshy.<sup>97</sup> In early August 1672, all of the city's locks had to be closed because the water had 'reached an unusually high level'.<sup>98</sup> At the beginning of September – the rainy season was approaching – the locks were opened in consultation with the stadholder in order to discharge the salt water and keep the polders sodden with rainwater.<sup>99</sup> In this way, they tried to limit the damage to the land. The breaches in the Diemerzee dike near Jaap Hannes and near Muiden were closed off more thoroughly to keep out the higher undiked water in the winter.<sup>100</sup> The breach in the towpath along the Haarlemmertrekvaart barge canal was also closed.<sup>101</sup> So also along the Amstelveenseweg.<sup>102</sup> The cost of these repair works was charged to the polder boards.<sup>103</sup>

#### WATERWAYS AND ROADS

Another problem that had to be solved was the closing and securing of the access roads – both by land and by water – in between the inundations. In June 1672, the possibility of sealing the Nieuwe Vaart canal with palisades was considered.<sup>104</sup> Although it was not deemed necessary at that moment, a heavily armed ship with ten cannons and 36 soldiers was moored near the bastion of Jaap Hannes.<sup>105</sup> The same question arose with respect to the Volkert Douwesgat, east of Zeeburg, and various places along the Kostverlorenvaart canal.<sup>106</sup> The former was indeed closed.<sup>107</sup> So too the Overtoom.<sup>108</sup> On 9 July, all drainage ditches ending in the city moat were closed.<sup>109</sup> A barge loaded with stones,

which could be sunk in the Watergraafsmeer ring canal at any time, was moored in the Nieuwe Diep.<sup>110</sup> In July, all canals running towards the Sticht were palisaded or blocked with sinkers to prevent enemy troops from entering via the Amstel or the Kromme Mijdrecht.<sup>111</sup> On 5 August, danger was scented near the Boerenwetering; this, too, was closed off.<sup>112</sup>

Hans Bontemantel, president of the court and acting sheriff, was ordered to secure the entrances to Amsterdam with armed ships.<sup>113</sup> This could be achieved by coupling several barges together and equipping them with artillery.<sup>114</sup> Armed ships were stationed on the Amstel.<sup>115</sup> They were placed at multiple locations, also further away from the city, where the Bijleveld, Mijdrecht and other rivers flowed into the Amstel.<sup>116</sup> Armed ships were placed on the Kromme Mijdrecht.<sup>117</sup> There was also talk of stationing ships on the Haarlemmermeer and at the Omval.<sup>118</sup> In the winter, armed ships were sent out onto the Zuiderzee.<sup>119</sup>

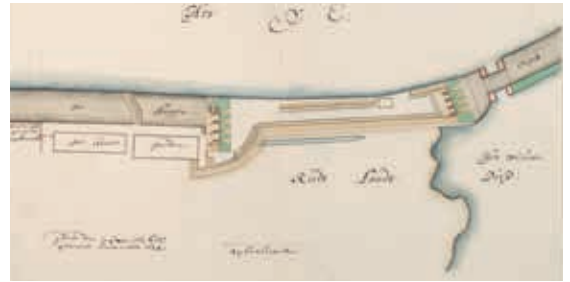
#### OUTPOSTS IN THE IMMEDIATE VICINITY OF THE CITY

From 20 June 1672, small entrenchments, designed by engineer Du Mont, were constructed to defend the 'accesses' and the inundation holes (fig. 10).<sup>120</sup> In total, there were six fortifications on the east and south side of the city, and two outworks on the city wall. On the east side, entrenchments were made on the Diemerzeedijk and the Watergraafsmeer ring dike. On the south side, a group of three closely positioned entrenchments defended the entrances across the Watergraafsmeer ring dike, the Weesperzijde and the Amstedijk, as well as the Amstel River, which was blocked by a row of posts (with a navigation channel). An entrenchment on Amstelveenseweg, just south of Overtoom, also covered the waters of Schinkel and the adjacent road to Sloten.<sup>121</sup> Outside the Haarlemmerpoort a large outwork was constructed that protected both the Spaarndammerdijk and the road and barge canal to Haarlem. To protect the Leidsepoort a ravelin was constructed. In early August, a free field of fire was created outside the gates by demolishing the houses on the Overtoom between the Leidsepoort and the first powder mill and by cutting down all the trees.<sup>122</sup> As early as 11 June 1672, authorities investigated whether the pesthouse near the Overtoom could be converted into 'an entrenchment or fortification' (fig. 11).<sup>123</sup> It was apparently considered unsuitable because it was too far from the canal.

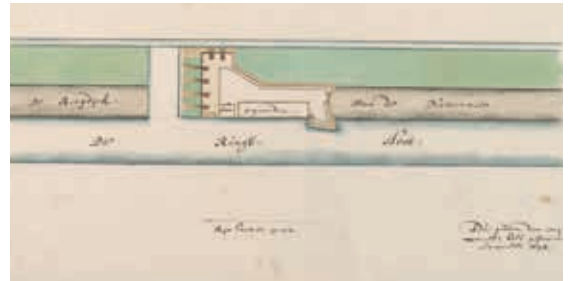
On 26 July, there was talk of halting the construction of the outposts until further notice, but it was decided to finish them anyway according to Du Mont's design.<sup>124</sup> Ships with sand were sent to each of the works.<sup>125</sup> The entrenchments were built step by step. Almost every post acquired a shelter for the militia, a guardhouse that was equipped with beds and resting

10. Six outposts outside Amsterdam, measured and drawn by Cornelis Koel, 1674 (Stadsarchief Amsterdam)

Outpost on the Diemerzeedijk between the Jaap Hannes inn and the Ipenslotersluis



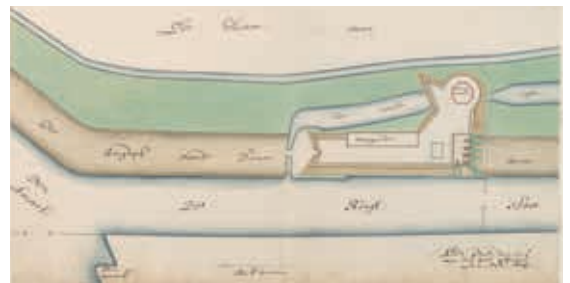
Outpost on the Watergraafsmeer Ringdijk near Nieuwe Diep. The hole in the dike which allowed the Watergraafsmeer to be flooded is clearly visible



Outpost at the junction of the Weesperzijde and the Watergraafsmeer Ringsloot



Outpost on the Watergraafsmeer Ringdijk near the Omval. One of the Watergraafsmeer mills – an excellent vantage point – was incorporated into the outpost



Outpost on the Amsteldijk opposite the one near the Omval. A row of piles with lockable navigation openings blocked the river Amstel. The hole in the dike was resealed in 1673



Outpost between the Amstelveenseweg and the Schinkel. The fortification was built around the 'De Plaets Rojael' inn and the milliner's workshop behind. Left, the flooded area 'Verdroncken Landt'. The hole in the dike was resealed in January 1673 and a bridge facilitated passing traffic



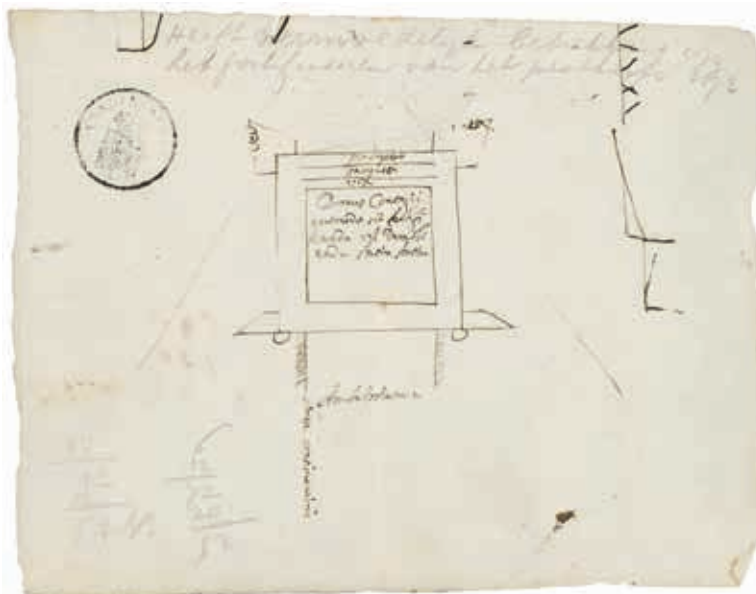
benches.<sup>126</sup> Furthermore, there was a powder house in each defensive work. The garrison consisted of gunners and musketeers. In February 1673, the outposts were occupied by a total of 600 men.<sup>127</sup> Of these, 100 were encamped in the entrenchment on the Diemerzeedijk, while the other posts close to the town had 50 men each.<sup>128</sup> Like the other defensive works, the post on the Overtoom was equipped with artillery. The possibility that this entrenchment might well fall into enemy hands was considered. In the wrong hands this position could cause great damage to the city, which is why only limited calibre cannons were placed there.<sup>129</sup> A note from city engineer Jacob Bosch indicates that these were eight and twelve-pounders.<sup>130</sup> In early November 1672, French troops ransacked Wilnis, Waverveen and surrounding villages. This prompted Amsterdam to also place manned entrenchments in Ouderkerk and on the Voetangel.<sup>131</sup> Already in June, entrenchments had been constructed near Uithoorn and on the Kromme Mijdrecht. Of the two posts at Uithoorn, only the part facing the enemy was constructed at first. In November, when it became clear that a harsh winter would allow a flanking attack across the ice, it was decided to strengthen the rear as well (fig. 12).<sup>132</sup> Even the entrenchments closer to the city were only closed at the rear at a later stage.

After the fall of Naarden, the Vecht became the outer line, the 'front wall' of Amsterdam. The city council endeavoured to bring Muiden, Weesp, the Hinderdam and Nieuwersluis into a state of defence.<sup>133</sup> The city cooperated with Johan Maurits van Nassau, commander of Muiden, and sent not only building materials, diggers, carpenters and administrative personnel, but also the city's masters of works to carry out the works.<sup>134</sup> Later, soldiers were dispatched as well.<sup>135</sup>

#### BACK TO NORMAL

In October 1673, after Naarden had been brought 'under [the] subjection of the state, by God's blessing', the artillery was removed from the outposts and plank crossings opened the way for traffic.<sup>136</sup> All dikes were repaired.<sup>137</sup> In 1674 the outposts were demolished.<sup>138</sup> The materials from the buildings and the wood from the palisades, storm poles, cannon platforms and parapets were auctioned off.<sup>139</sup> The rows of poles in the waterways were removed, so that the Nieuwe Vaart, the Kattenburgervaart, the Amstel and the Ringvaart canals became navigable again.<sup>140</sup>

The Raampoort and the Zaagmolenpoort were reopened in December 1673.<sup>141</sup> Then the guardhouses on the ramparts were demolished.<sup>142</sup> In 1675, a list was made of works that could be demolished. The parapets were removed from the ramparts. The artillery near the access roads remained; the rest was cleared.<sup>143</sup> Earlier, on 30 May 1673, it had been decided to go back

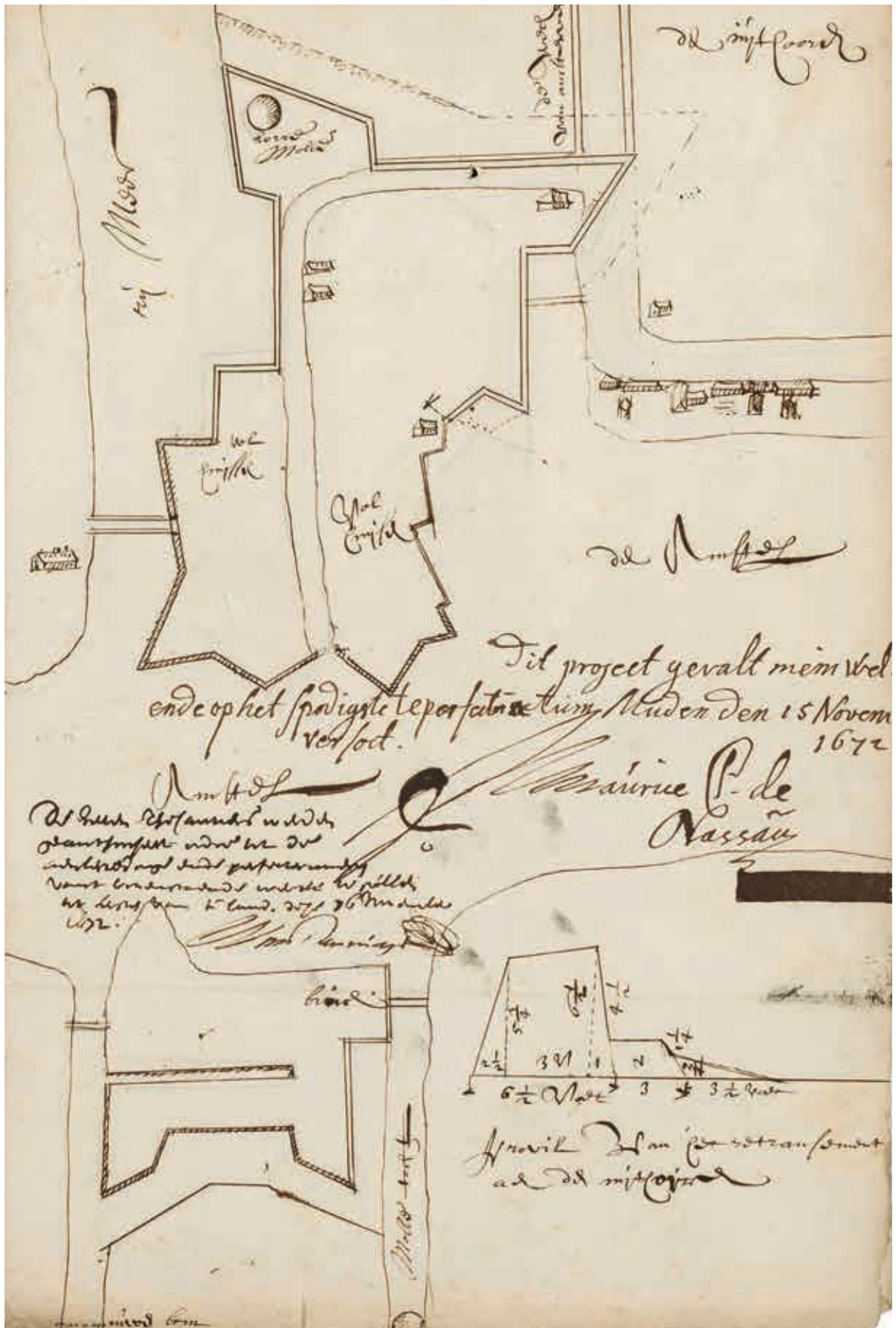


11. Design for the fortification of the Pesthouse near the Overtoom, 1672, with two demi-bastions on the city side and two full bastions on the west side. The inscription states that the building must be *statim statim* ('immediately at once') fortified or demolished. Neither happened (Stadsarchief Amsterdam)

to dealing with the biggest problem facing Amsterdam in peacetime: the quality of the water. All means were employed in the construction of the Amstelsluizen, the lock complex built to ensure that the canals could be flushed with water from the IJ.<sup>144</sup> In this way, the situation in and around the city was normalized relatively quickly. The costs that Amsterdam had incurred for the defence of the Vecht were claimed from the States of Holland.<sup>145</sup>

#### CITADEL OF THE REPUBLIC

The course of events in the Year of Disaster reveals how complex and large-scale the defence of Amsterdam was and what interests were at stake. Amsterdam was an economic superpower, rather than a military one, but managed to successfully deploy that economic power – and the people, resources and materials it brought with it – for the city's defences. As the fourth extension was still under construction, the city had a large organization at its disposal for the planning and execution of public works. A number of large contractors were specialized in various components, such as earthworks or piling. The fortification of the city required continuous maintenance, but it was usually only when there was a threat of war that it was reviewed to see what needed to be done. On 10 June 1672, public works were halted; all resources were needed to ensure that the defences were in proper working order. The administrative and executive apparatus was able to switch focus rapidly when war was imminent, and in no time thousands of workers could be mobilized.



12. Jacob Bosch, design for the completion of the fortification around the village of Uithoorn and for upgrading the hornwork on the east bank of the Amstel, November 1672. The shaded areas were constructed in the summer of 1672. Maurice P[ince] de Nassau (Johan Maurits van Nassau-Siegen, commandant van Muiden) noted: 'dit project gevalt mein wel ende op het spo[e]digste te perfectioneren versoc[h]t' [this project pleases me and should be finished as soon as possible] (Stadsarchief Amsterdam)



13. Map of the Stelling van Amsterdam and attendant forts, as determined in 1880 by the Lower House. The map shows the forts and the inundation holes. The headquarters, based in the Amstel Hotel, are indicated by an orange flag (Nationaal Archief)

Although inundations and infrastructure closures were postponed until the last moment in order to minimize economic damage, when it mattered, they were carried out quickly, flexibly and effectively in order to put the city's defences, which were not normally a priority, in order in a short space of time. The dynamic execution of the inundations demonstrates an ability to respond swiftly to changing circumstances, always with an eye to damage control. After the threat had subsided, the situation returned to normal as quickly as possible: inundated land was drained, infrastructure repaired, and outposts demolished. The urban fortifications fell (literally) back into their normal state of progressive decay.

The direct spatial effects were short-lived. The city walls were once again used for all kinds of non-military functions and became outdated from a military point of view. With the removal of the outposts, all defensive provisions disappeared from the landscape around Amsterdam. The city government apparently trusted the defensive concept that, although not tested offensively in 1672, had clearly proven its deterrent effect. It had also proved to be quick and practical to implement. Two series of blueprints of the seven entrenchments produced in 1674 have been preserved, one of which is in a municipal map book. This shows that the blueprints for such a defence were kept on hand at the Town Hall, ready for the next occasion. This accords with the policy of the States of Holland which, in the wake of the Year of Disaster decided to give the Holland Water Line a more permanent character.<sup>146</sup> The 1672 defence concept served as a model for all later defence lines: the one against the Prussians in 1787, the Krayenhoff Line and the Amsterdam Defence Line, which resulted from the Vestingwet ('Fortifications Act') of 1874 (fig. 13). Due to the increased range of artillery, these lines lay in an ever-widening circle around the capital but were still based on principles that had been applied in 1672. In this respect, the spatial effect of the Year of Disaster should not be underestimated.

But there was another effect in the longer term: the military elaboration of the idea that the survival of the State coincided with that of Amsterdam. This led to the introduction of the concept of Amsterdam as the

citadel of the Republic, later to become the 'national réduit'.<sup>147</sup> In 1672, Amsterdam's already dominant position within the Republic could have been even further reinforced.<sup>148</sup> On 9 June 1672, as the French army approached the border of the Republic, the Grand Pensionary Johan de Witt wrote: 'that if, which God forbid, the enemy should come to take Nijmegen, or should otherwise break through, we ought to take *sedem imperii* in Amsterdam, and also bring the States General and the States of Holland and West Friesland there, with the subaltern colleges dependent thereon, and the whole stock of artillery, weapons, etc., and bring help and assistance from that place, the heart, to all provinces, as much as possible, and under God's mercy to contest this land to the enemy to the last man standing, with Batavian constancy'.<sup>149</sup> In addition to being the economic centre, Amsterdam would also become the residence of all the important administrative bodies of the Republic, at least temporarily. But that did not happen: De Witt was assassinated on 20 August and William III became stadholder of Holland. This put an end to the further concentration of administrative and economic power in Amsterdam. The course of events outlined by De Witt is strikingly similar to that in the second half of the nineteenth century, when Amsterdam was designated a national réduit in the 1874 Fortifications Act.<sup>150</sup> It is certainly possible that the course of events in the Year of Disaster and De Witt's ideas were a starting point: the quote from De Witt comes from the standard 1850 work on the defence of the Republic in the Year of Disaster by J.W. van Sypesteijn and J.P. de Bordes. Both authors were officers in the Corps of Engineers; they did not conduct their research solely out of historical interest: their 'calm and diligent inquiries' provided insight into history in order to 'point out the rocks, which posterity will have to avoid' and 'to make well-founded decisions for the future'.<sup>151</sup> These gentlemen looked to the past in order to be able to apply that knowledge to their own era of technical innovations and changing political relations in Europe. The Dutch Republic was a source of inspiration for the establishment of the nineteenth-century Kingdom of the Netherlands, including from a military point of view.



## NOTES

- 1 The authors wish to thank both peer reviewers for their helpful comments.
- 2 On the representation of the Dutch war see also: Ton Schulte, 'De glorierijke verbeelding van het rampjaar. Adam Frans van der Meulen "en voyage"', in: Erik Kleijn et al. (eds.), *Op weerstand gebouwd. Verdedigingslinies als cultureel erfgoed*, Zwolle/Zeist 2004, 74-83.
- 3 'verscheide vacken waeren verciert met afbeeldingen der voornaemste steden in Europa'; 'niet onaengenaemt'; 'tot ac-complicement van de vereijste civi- teijt'. For the archival record, see: Stadsarchief Amsterdam (Amsterdam City Archives; SAA), 5024, Archief van de Burgemeesters, inv. no. 2, Resoluties Burgemeesters (1649-1698), fol. 155-155vo (3 November 1665). The Hôtel de Lionne, built in 1661 on Rue Neuve des Petits Champs (now Rue des Petits Champs) to the design of the great Louis Le Vau, was described in the eighteenth century as 'famous for its paintings': Thomas Nugent, *The Grand Tour*, Vol. IV, London 1749, 61. The building was demolished in 1827; in our day, Bakhuizen's painting is on display in the Louvre: Boudewijn Bakker and Erik Schmitz, *Het aanzien van Amster- dam. Panorama's, plattegronden en profielen uit de Gouden Eeuw*, Bussum/ Amsterdam 2007, 135-136; E.W. Moes, 'Een geschenk van de stad Amsterdam aan den marquis De Lionne', *Oud- Holland* 11 (1893), 30-33.
- 4 Bakhuizen received no less than 400 ducats for the painting: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 3, Resoluties Thesaurieren, fol. 89 (13 July 1666). It is now in the collection of the Louvre: <https://collections.louvre.fr/en/ark:/53355/clo10063552> (accessed 24 May 2022).
- 5 'considerable toerusting van de naburen van den Staet': Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap, inv. no. 26, Resoluties Vroedschap, fol. 19vo-20 (20 January 1668).
- 6 'de fortificatien alomme daer noch ijts gebreekt aenstonts wierden opgemaekt, alsmede de beddingen tot het planten van 't canon geappropriert'; 'mede bij deses tijts gelegenheit': Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap, inv. no. 27, Resoluties Vroedschap, fol. 173vo-174 (7 December 1671).
- 7 On 6 April 1672, Louis declared war on the Republic. For a detailed analysis of the warfare based on archival sources, see: J.W. van Sypesteijn and J.P. de Bordes, *De verdediging van Nederland in 1672 en 1673*, 's Gravenhage 1850. For greater focus on the situation in Amsterdam, see: A.W. Kroon, *Amster- dam in 1672. Historische schets der "bange dagen"*, Amsterdam 1888. Amsterdam's city archaeologists have been researching remains of the ram- parts: Ranjith Jayasena and Jørgen Veer- kamp, 'De Amsterdamse vestingwerken en het Rampjaar 1672', in: V. van Ros- sem, G. van Tussenbroek and J. Veer- kamp (eds.), *Amsterdam Monumenten & Archeologie* 7, Amsterdam 2008, 91-103; Jerzy Gawronski and Jørgen Veerkamp, *De 17de-eeuwse vestingwerken van Amsterdam. Vijf Archeologische Bege- leidingen en een ivo op zes locaties langs de vestingwerken van Amsterdam (2008-2015)*, Amsterdamse Archeolo- gische Rapporten 98 (2017).
- 8 C.A. de Bruin and W.H. Schukking, *Naarden 1350-1950. De Geschiedenis van een Nederlandse Vesting*, Leiden 1950, 43-44.
- 9 Jaap Evert Abrahamse, *Metropolis in the Making. A Planning History of Amsterdam in the Dutch Golden Age*, Turnhout 2019, 173-174.
- 10 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 3, Resoluties Thesaurieren, fol. 16 (28 February 1665).
- 11 Matthias Dögen or Dögen (1605-1672) came from Brandenburg and was the author of a treatise on fortifications: Matthias Dögen, *Architectura militaris moderna*, Amsterdam 1647. German and French editions of this treatise were also published.
- 12 Stadsarchief Amsterdam (SAA), 5023, Archief van de Burgemeesters: Groot Memoriaal, inv. no. 5, fol. 179-180 (11 November 1665). In 1666 Dögen was paid for his advice: Stadsarchief Amsterdam (SAA), 5024, Archief van de Burgemeesters, inv. no. 17, Dage- lijke Notulen Burgemeesters, fol. 58 (18 January 1666). Not all defects were identified by Dögen: the Outewalerweg – today's Linnaeusstraat – had to be straightened in 1667, so that it could be covered by artillery from the city wall: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 3, Resoluties Thesaurieren, fol. 121-126vo (17 March 1667). That work had not been finished by the end of the year: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 3, Resoluties Thesaurieren, fol. 166vo-168vo (12 December 1667).
- 13 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 58vo (28 June 1672). It was noted that due to lack of sand this path had to be constructed with sawdust. This was decided on 10 August: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 83 (10 August 1672).
- 14 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 3, Resoluties Thesaurieren, fol. 166 (12 December 1667).
- 15 In 1667 it had to be raised again at the Leidsepoort: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 3, Resoluties Thesaurieren, fol. 165 (12 December 1667).
- 16 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 20vo (17 March 1672).
- 17 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 24vo (6 April 1672).
- 18 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 72vo (15 July 1672).
- 19 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 72vo (16 July 1672).
- 20 Stadsarchief Amsterdam (SAA), 5023, Archief van de Burgemeesters: Groot Memoriaal, inv. no. 6, fol. 70vo-71 (22 June 1672).
- 21 They were Otto Jeuriaensz and Dirck de Goyer, two contractors who often carried out large earthworks for the city. Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 104 (1 November 1672).
- 22 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 3, Resoluties Thesaurieren, fol. 121-126vo (17 March 1667); Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 25, fol. 205-205vo (19 March 1667).
- 23 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 3, Resoluties Thesaurieren, fol. 165 (12 December 1667).
- 24 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 26, fol. 21 (28 January 1668).
- 25 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 10 (5 January 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 23vo (5 April 1672).
- 26 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 25 (12 April 1672).
- 27 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 40vo (10 June 1672). On 19 June, the strip of soil in the canal that was needed for the masonry had to be re- moved 'with all the people needed, no matter what' [using all available manpower] ('met alle macht van volck'): Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 3, Resoluties Thesaurieren, fol. 47 (19 June 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 50 (21 June 1672). On 28 June, Adriaan

- Dortsman, architect, received the order to hire as many workers as he considered necessary to carry out this work under his direction north of the Haarlemmerpoort: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 58 (27 June 1672). In September the canal there was further deepened: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 92 (28 September 1672).
- 28 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 97vo (18 October 1672).
- 29 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 178-180vo (31 January 1673); Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap, inv. no. 101, Muniment Vroedschap, fol. 144-146vo (31 January 1673).
- 30 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 138-139vo (11 March 1673).
- 31 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 154 (20 March 1673).
- 32 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 40vo (10 June 1672).
- 33 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 41-43 (10 June 1672).
- 34 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 58 (28 June 1672).
- 35 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 61vo (1 July 1672).
- 36 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 67-68vo (8 July 1672).
- 37 'besonderlijk daer den aenal meest gevreesd werd': Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 41-43 (10 June 1672). The inner face of the brick parapets was reinforced with earth: Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 82 (19 June 1672).
- 38 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 47 (19 June 1672); Stadsarchief Amsterdam (SAA), 5023, Archief van de Burgemeesters: Groot Memoriaal, inv. no. 6, fol. 70vo-71 (22 June 1672).
- 39 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 80vo (2 August 1672).
- 40 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 87vo (31 August 1672).
- 41 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 95 (10 October 1672).
- 42 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 100 (20 October 1672).
- 43 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 119vo (5 December 1672).
- 44 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 122 (31 December 1672).
- 45 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 81 (2 August 1672).
- 46 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 224 (8 August 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 83vo (11 August 1672). It was finished in December after which a guardhouse was built in it: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 120vo (15 December 1672). The casemate near the Leidsepoort was blocked by buildings and had to be cleared: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 58 (28 June 1672).
- 47 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 100vo (20 October 1672). On 22 April 1673, the foremen received an additional reward because they had worked so hard on the fortification: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 143 (22 April 1673).
- 48 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 18vo (26 February 1672).
- 49 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 60vo (29 June 1672).
- 50 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 44vo (15 June 1672).
- 51 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 94vo (10 October 1672).
- 52 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 104 (28 October 1672).
- 53 '... ten dele gediept': Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 178-180vo (31 January 1673).
- 54 See for instance Samuel Marolois' treatise from 1615 (quoted in: Ed Taverne, *In't land van belofte: in de nieuwe stad. Ideaal en werkelijkheid in de stadsuitleg van de Republiek 1580-1680*, Maarssen 1978, 71).
- 55 '... met brave mannen compleet en van alle swacke en impotente schutters gesuijvert': Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 36 (7 April 1672).
- 56 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 45 (3 May 1672).
- 57 '... ter oorsake het groote circuit van dese stad': Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 84 (20 June 1672); Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 109 (27 June 1672).
- 58 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 57 (27 June 1672).
- 59 Several of these powder towers were planned to the east of the Nieuwe Vaart canal, on the building line, on a brick base: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 3, Resoluties Thesaurieren, fol. 47vo (20 November 1665). Another one was built west of the Nieuwe Vaart canal: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 3, Resoluties Thesaurieren, fol. 48vo (4 December 1665); in March 1666 specifications had to be made: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 3, Resoluties Thesaurieren, fol. 65 (6 March 1666). On gunpowder production, see also: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 43 (10 June 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 44 (15 June 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 44vo (15 June 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 44 (16 June 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 46 (16 June 1672); Stadsarchief Amsterdam (SAA),

- 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 46vo (17 June 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 48 (20 June 1672). Another powder mill was built behind the synagogue: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 62vo (2 July 1672). In 1672, the gun-powder shop in the glass factory was still being worked on: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 71 (13 July 1672). The moat around it was deepened: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 72 (14 July 1672). Another powder magazine was built in the Blauw hoofd bastion: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 92 (28 September 1672). On Wittenburg: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 85 (15 August 1672).
- 60 There was discussion as to whether that should be in every bastion or in every second bastion: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 72vo (16 July 1672).
- 61 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 69 (11 July 1672).
- 62 Abrahamse 2019 (note 9), 270-273.
- 63 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 85 (20 June 1672). In July, the houses outside the Leidsepoort had not yet been demolished; demolition was postponed for a while: Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 170-171 (16 July 1672).
- 64 '... te laten ruineren, ende in stucken hacken': Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 61 (30 June 1672).
- 65 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 87 (21 June 1672).
- 66 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 149-150 (11 July 1672).
- 67 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 40vo (10 June 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 43vo (14 June 1672); Stadsarchief Amsterdam (SAA), 5023, Archief van de Burge-meesters: Groot Memoriaal, inv. no. 6, fol. 70vo-71 (22 June 1672). Also all cannons belonging to private owners and the Admiralty that were stored on the city wall had to be removed: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 81vo (6 August 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 138-139vo (11 March 1673).
- 68 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 83vo (11 August 1672).
- 69 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 85 (20 June 1672).
- 70 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 85 (20 June 1672). The Zaagmolenpoort and Raampoort gates and the Bullebaksluis lock followed on 28 June: Stadsarchief Amsterdam (SAA), 5023, Archief van de Burge-meesters: Groot Memoriaal, inv. no. 6, fol. 75 (28 June 1672).
- 71 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 62 (1 July 1672).
- 72 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 123vo (11 January 1673).
- 73 J. Buisman (ed. A.F.V. van Engelen), *Duizend jaar weer, wind en water in de lage landen*, Vol. 4: 1575-1675, Franeker 2006 (second edition), 713-716.
- 74 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 54 (24 June 1672).
- 75 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap, inv. no. 101, Muniment Vroedschap, fol. 118vo-119vo (15 June 1672). New locks were made to the booms on the IJ side: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 45 (16 June 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 48vo (21 June 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 120 (13 December 1672).
- 76 Stadsarchief Amsterdam (SAA), 5023, Archief van de Burgemeesters: Groot Memoriaal, inv. no. 6, fol. 116vo (27 December 1672).
- 77 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 87vo-88 (6 September 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 133-133vo (6 February 1673); Kroon 1888 (note 7), 15-16. See also: Daan Wolfert, *Een ramp voor de Vechtstreek 1672-1673*, Hilversum 2022.
- 78 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 29, fol. 83-84 (29 December 1672).
- 79 Bakker and Schmitz 2007 (note 3), 294 and fig. on 219.
- 80 'Van daagh heeft men begonnen het IJ open te bijten en wert hetselve met bogten in manier als de grafen om bolwerken loopen gemaakt, om daarin 12 uytleggers in te leggen die op mal-kanderen zullen flankeren': Bakker en Schmitz 2007 (note 5), 220 en 293.
- 81 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 29, fol. 84 (29 December 1672).
- 82 Stadsarchief Amsterdam (SAA), 5024, Archief van de Burgemeesters, inv. no. 20, Dagelijkse Notulen Burgemeesters, fol. 1 (6 February 1673).
- 83 '... sterck ende onwinbaar'; '... men kanse behendichlijk ende ghemacklijck seer wijdt ende breedt in 't water setten': Ludovico Guicciardini, *Beschrijvinge van alle de Neder-Landen*, Amsterdam 1612, 211 (original edition: *Descrittione di tutti i Paesi Bassi, altrimenti detti Germania inferiore*, Antwerp 1567).
- 84 To that end, the locks at Halfweg were closed. The council agreed to a temporary closure on condition that Haarlem would only open its locks when strictly necessary for shipping, so that the course of the water would not be altered to the detriment of Amsterdam: Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 49-50 (13 May 1672).
- 85 Van Sypesteyn and De Bordes 1850 (note 7), part II, 87-93 about the inundations near Amsterdam.
- 86 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 104vo (3 November 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 105 (4 November 1672). These were replaced by a small bridge at the Overtoom and the Watergraafsmeer: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 157vo (11 July 1673).
- 87 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 94 (23 June 1672).
- 88 Stadsarchief Amsterdam (SAA), 5023, Archief van de Burgemeesters: Groot Memoriaal, inv. no. 6, fol. 74-74vo (26 June 1672).
- 89 Stadsarchief Amsterdam (SAA), 5023, Archief van de Burgemeesters: Groot Memoriaal, inv. no. 6, fol. 79 (11 July 1672).
- 90 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 110 (27 June 1672).
- 91 Stadsarchief Amsterdam (SAA), 5025,

- Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 124 (29 June 1672).
- 92 'de humeuren van de boeren': Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 63vo-64 (4 July 1672).
- 93 Stadsarchief Amsterdam (SAA), 5075, Archief van de Notarissen, inv. no. 4077, scan 513.
- 94 Kroon 1888 (note 7), 7.
- 95 Van Sypesteyn and De Bordes 1850 (note 7), Part II, 72-73.
- 96 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 150 (11 July 1672).
- 97 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 181-182 (22 July 1672). The breaches were closed; the breach in the Diemerdijk near Jaap Hannes was also closed with piling and planking. This work could withstand the summer water but would not be adequate in winter: Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 212 (6 August 1672). This was solved shortly thereafter: Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 243 (14 August 1672).
- 98 '... buitengemeen [was] gewassen': Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 212 (6 August 1672).
- 99 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 279 (3 September 1672).
- 100 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 279-280 (3 September 1672).
- 101 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 89 (8 September 1672). In December, the breach opened again and the Sloterpolder began to flood again. The polder board was responsible for closing the breach but received material from the city: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 119vo (5 December 1672).
- 102 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 93vo (4 October 1672).
- 103 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 93vo (4 October 1672).
- 104 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 52 (23 June 1672).
- 105 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 97 (24 June 1672).
- 106 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 57 (27 June 1672). For the location, see: Sybrand Fytama, *Christelijke en Stigtelijke Rym-oeffeningen*, Amsterdam 1684, 181.
- 107 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 57vo (27 June 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 58vo (28 June 1672).
- 108 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 61 (30 June 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 63 (4 July 1672).
- 109 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 69 (9 July 1672).
- 110 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 70 (12 July 1672).
- 111 Stadsarchief Amsterdam (SAA), 5023, Archief van de Burgemeesters: Groot Memoriaal, inv. no. 6, fol. 81 (18 July 1672).
- 112 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 207 (5 August 1672).
- 113 Stadsarchief Amsterdam (SAA), 5023, Archief van de Burgemeesters: Groot Memoriaal, inv. no. 6, fol. 69vo (20 June 1672).
- 114 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 81vo (6 August 1672).
- 115 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 81vo (5 August 1672); Stadsarchief Amsterdam (SAA), 5023, Archief van de Burgemeesters: Groot Memoriaal, inv. no. 6, fol. 87vo (5 August 1672).
- 116 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 230 (9 August 1672).
- 117 Stadsarchief Amsterdam (SAA), 5023, Archief van de Burgemeesters: Groot Memoriaal, inv. no. 6, fol. 90 (23 September 1672).
- 118 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 230 (9 August 1672).
- 119 Stadsarchief Amsterdam (SAA), 5023, Archief van de Burgemeesters: Groot Memoriaal, inv. no. 6, fol. 120 (19 January 1673).
- 120 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 84 (20 June 1672). The following day consideration was given to whether dams needed to be built in the city to protect the new extension from flooding: Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 87-88 (21 June 1672). Barges were laid in some of the inundation openings to allow horses and wagons to pass through: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 49 (21 June 1672). For the attribution to Du Mont: Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 185 (26 July 1672). In October, the council discussed whether to claim the costs from the States: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 97 (15 October 1672). In 1675 f 51.079, 16, 0 was charged to the Receiver-General, Mr Marten Paeuw, for fortification works: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 6, Resoluties Thesaurieren, fol. 44-44vo (9 April 1675). In November, city engineer Jacob Bosch was sent to Ouderkerk to build an outpost: Stadsarchief Amsterdam (SAA), 5023, Archief van de Burgemeesters: Groot Memoriaal, inv. no. 6, fol. 106vo (5 November 1672).
- 121 On these outposts, see: Marc Hameleers and Erik Schmitz, 'Zeven kaarten van Cornelis Koel van militaire versterkingen buiten Amsterdam (1674)', *Jaarboek Amstelodamum* 86 (1994), 91-106.
- 122 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 224 (8 August 1672). There were legal pitfalls here: some houses dated from before 1613 and were therefore built legally: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 83vo (11 August 1672). The building materials were stored and valued for the purpose of compensation: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 84 (11 August 1672). Some owners who could prove that their building dated from before 1613 received compensation: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 6, Resoluties Thesaurieren, fol. 95 (21 January 1677).
- 123 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 61 (11 June 1672).
- 124 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 185 (26 July 1672).
- 125 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 86vo (25 August 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 87 (31 August 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 90 (13 September 1672); Stadsarchief Amsterdam (SAA),

- 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 90vo (22 September 1672).
- 126 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 72vo (15 July 1672). A guardhouse for 100 soldiers was built by the Diemermeer Bridge: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 73 (17 July 1672). Resting benches were built into them: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 75vo (20 July 1672). On 4 August, work began on the gunpowder cabinets in the outposts: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 81vo (4 August 1672).
- 127 Stadsarchief Amsterdam (SAA), 5024, Archief van de Burgemeesters, inv. no. 20, Dagelijkse Notulen Burgemeesters, fol. 1 (6 februari 1673). Shortly afterwards, the outposts on the Amsteldijk and the Watergraafsmeer ring dike had to be rebuilt because they had evidently subsided: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 151vo (2 June 1673). Dat gold ook voor de Haarlemmerpoort: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 152vo (6 June 1673).
- 128 Hameleers en Schmitz 1994 (note 121), 95-96.
- 129 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 223 (8 August 1672); Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 237 (12 August 1672).
- 130 Hameleers en Schmitz 1994 (note 121), 96.
- 131 Van Sypesteyn and De Bordes 1850 (note 9), Part II, 73-74; the Voetangel was situated where the Bullewijk, the Waver and the Holendrecht rivers came together.
- 132 Van Sypesteyn and De Bordes 1850 (note 7), Part II, 72-73.
- 133 '... voormuur': Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 130 (1 July 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 87vo-88 (6 September 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 133-133vo (6 February 1673); Kroon 1888 (note 7), 15-16. See also: Wolfert 2022 (note 77).
- 134 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 52 (23 June 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 70 (12 July 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 78vo (25 July 1672); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 98vo (20 October 1672).
- 135 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 328 (10 October 1672).
- 136 'door Gods zegen [...] onder subjectie van den staet': Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 29, fol. 246 (9 October 1673).
- 137 On the financing of the Diemerzeedijk, see: Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 29, fol. 247 (9 October 1673).
- 138 On the outpost near Jaap Hannes: Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 199 (19 June 1674). For other outposts, see: Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 30, fol. 57 (25 June 1674).
- 139 Hameleers and Schmitz 1994 (note 121), 99-101.
- 140 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 200 (22 June 1674); SAA 5039-6 (Resoluties Thesaurieren), fol. 14 (12 November 1674).
- 141 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 29, fol. 292 (4 December 1673). On 22 July 1672, the sawmillers west of the city were promised that the Bullebaksluis lock and the Zaagmolenpoort gate would be reopened as soon as the situation allowed: Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 28, fol. 183 (22 July 1672).
- 142 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 198vo (14 June 1674).
- 143 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 6, Resoluties Thesaurieren, fol. 26vo-28vo (28 January 1675).
- 144 Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 149 (30 May 1673); Stadsarchief Amsterdam (SAA), 5039, Archief van de Thesaurieren Ordinaris, inv. no. 5, Resoluties Thesaurieren, fol. 151vo (2 June 1673).
- 145 Stadsarchief Amsterdam (SAA), 5025, Archief van de Vroedschap: Resoluties, inv. no. 29, fol. 211 (11 September 1673).
- 146 Joep van Hoof, 'Een harnas voor de hoofdstad: De Stelling van Amsterdam in militair-historisch perspectief', in: Paul Vesters (ed.), *De Stelling van Amsterdam. Harnas voor de hoofdstad*, Utrecht 2003, 66-111, here: 68-69.
- 147 Saartje de Bruijn en Wim Klinkert, 'Het politieke decor van de Stelling van Amsterdam', in: Paul Vesters (ed.), *De Stelling van Amsterdam. Harnas voor de hoofdstad*, Utrecht 2003, 24-65, here: 48-49.
- 148 On the dominant position of Amsterdam, see: A.D. Brand, *De wortels van de Randstad. Overheidsinvloed en stedelijke hiërarchie in het westen van Nederland tussen de dertiende en de twintigste eeuw*, (diss.) Delft 2012; R.J. Rutte and J.E. Abrahamse (eds.), *Atlas of the Dutch Urban Landscape. A Millennium of Spatial Development*, Bussum 2016, 186-209.
- 149 '... dat bij sooverre, 't gunt Godt verhoede, den vyandt Nimwegen comt te emporteren, off andersins aldaer door te breecken, wij *sedem imperii* behooren te figeeren binnen Amstelredam, aldaer nevens de staetsgewyse vergaderinge van H.H.M. [de Staten-Generaal] ende H.E.G.M. [de Staten van Holland en West-Friesland], met subalterne collegien daeraen dependierende, alle het voorraet van canon, waepenen, enz., te brengen, ende uyt die plaetse, als het harte, alle de leden, soo veel mogelyck, hulpe ende secours toe te brengen, ende onder Godes genaede den vyandt het landt tot de uytterste man toe met eene Batavische constantie te disputeren': Johan de Witt, Grand Pensionary, to Hiëronymus van Beverningh, 'gedeputeerde te veld' or 'deputy in the field', 9 June 1672, quoted in Van Sypesteyn and De Bordes 1850 (note 7), 83-84.
- 150 Jaap Evert Abrahamse and Menne Kosian, "Als uit- en inlandsch schuim gereet stont in te spatten". De verdediging van Amsterdam van de middeleeuwen tot de Koude Oorlog', *Historisch tijdschrift Holland* 45 (2013) no. 2, 53-64, 94-95.
- 151 'bedaarde en ernstige nasporingen'; 'de klippen aan te wijzen, die het nageslacht zal hebben te vermijden'; 'met grond tot de toekomst te besluiten': Sypesteyn and De Bordes 1850 (note 7), v-x.

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## 'BATAVIAN CONSTANCY' THE DEFENCE OF AMSTERDAM IN THE DISASTER YEAR 1672

JAAP EVERT ABRAHAMSE AND ERIK SCHMITZ

Based on archival research, this article describes the actions taken by the city government to put Amsterdam into a state of defence during 1672, the so-called Disaster Year. Particular attention is paid to the spatial consequences of these measures. In the spring of 1672, the Dutch Republic was attacked by an alliance between France, England, Cologne and Münster. The French army's advance was eventually halted on the border of the province of Holland by dint of flooding the polders. In 1673, the tide of the war turned in the Republic's favour, and hostilities ceased in 1674.

In 1659, Amsterdam had embarked on a series of major urban expansion works between the Leidsegracht canal and the IJ inlet. On 10 June 1672, all city works were halted except those on the fortifications. Priority was given to the restoration of the city wall, which had been weakened by subsidence. Outside the wall, a free field of fire was created, and measures were taken to defend the unfortified IJ shore. The city militia was also reorganized.

From June 1672, a semi-circle of low-lying polders around Amsterdam were flooded by opening sluices and breaching dykes. This was done step by step, in a form of dynamic water management that was constantly adapted to the changing circumstances in or-

der to maximize the defensive potential and to minimize the damage. Waterways were blocked off and defended by armed ships. Six fortifications were built on the higher access roads in the immediate vicinity of the city, often close to one of the inundation openings. These were permanently manned. The city government also arranged for the construction of outposts further away, such as in Uithoorn, which were crucial to maintaining the flooding operations. With the river Vecht acting as the first line of defence – the 'outer wall' of Amsterdam as it were – Muiden, Weesp, the Hinderdam and Nieuwersluis were also reinforced with fortifications.

After the recapture of Naarden in 1673, the first steps were taken to return to normality and in 1674-1675 all temporary fortifications were demolished. All defensive structures disappeared from the landscape around Amsterdam. From this point of view, the spatial consequences seem to have been short-lived. However, the 1672 defence concept served as a model for all later defence lines around Amsterdam, the last one being the Stelling van Amsterdam, or Amsterdam Defence Line, in which the capital city functioned as a 'national redoubt'. In this respect the spatial consequences of the Disaster Year cannot be underestimated.