

(Suhr 1842)

FJORD CITY FIRE STATION

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FIRE PROTECTION

Fire protection and Fire Departments

The Norwegian Directorate for Civil Protection (DSB) in Tønsberg has the overall responsibility for fire safety in Norway. The municipalities are responsible for extinguishing preparedness, i.e. the fire brigade.¹ The Fire department is also responsible for preventive work aimed at owners and users of buildings and other fire objects. Owners and users have the responsibility for the fire protection, so that fire safety is satisfactory.²

There is a separate law dealing with fire protection, the "Fire and Explosion Protection Act". The Law aims to protect the life, health, environment and material values against fire and explosions, hazardous substance accidents and dangerous goods and other acute accidents, as well as unintended incidents.³ Any individual has a duty to prevent and limit the damaging effects of fire, explosion and other accidents, and notify emergency centre.⁴

The fire service's social mission

As mentioned in the explanation about fire protection, the fire brigade has the main responsibility for the "active" fire protection strategies within the "Fire and Explosion Protection Act".

The fire Department's statutory duties are:5

- 1) Implement information and motivation measures in the municipality on the risk of fire, fire hazards, fire protection measures and behaviour in case of fire and other acute accidents
- 2) Carry out fire prevention supervision
- 3) Performing accident prevention tasks in handling of hazardous materials and in the transport of dangerous goods by road and rail
- 4) Performing specific preventive and emergency preparedness tasks in war and crisis situations
- 5) Be battle group in case of fire
- 6) Be emergency response force in other acute accidents where it is determined by the basis of the municipality's risk and vulnerability analysis
- 7) On request, provide efforts in the event of fire and accidents in sea areas within or outside the Norwegian territorial border
- 8) Ensure chimney sweeping and supervision of heating systems

Brann- og eksplosjonsvernloven 2002:§9

² Wikipedia 2018

³ Brann- og eksplosjonsvernloven 2002:§1

⁴ Brann- og eksplosjonsvernloven 2002:§5

⁵ Brann- og eksplosjonsvernloven 2002:§11

Urban development related to fire protection - from wooden town to "Kvadraturen"

Fire preparedness was a service that was established in many cities to limit fire in densely built wooden houses. Old city of Oslo, constructed in 1050 by Harald Hårdråde, was essentially a dense settlement of tared wooden houses built in one or two floors. The city's six churches, a couple of monasteries, bishop's castle and the royal court were the only exceptions. The settlement was highly flammable, and if the fire broke out then it was difficult to extinguish.

In Magnus Lagabøte's Oslo City law from 1276, organized fire protection is mentioned for the first time. The law said that all the landlords had the duty to have filled water tanks, ladders and fire pecs standing available. In case of fire, the citizens should quickly help with the tools. In addition to the citizens' preparedness, the city would at all times be patrolled by 6 men as a combined fire and police guard. Despite the duties of Lagabøte's City law, Old Oslo burned completely or partly down 12 times in 500 years. After the big fire in 1624, it was decided that the city center should be moved to Akersneset, under Akershus fortress walls, due to security in war. This part of town is found today and is called Kvadraturen (the Square), due to the rectangular quarters.

When the new Oslo (then Christiania) was built on Akersneset, fire protection strategies were used in relation to distance and materials. To prevent the spread of fire, the streets in Kvadraturen had a width of 15 meters, which was unusually wide for its time. King Kristian introduced a masonry force as a fire prevention measure against the tarred wooden houses. Citizens with wealth, should build in masonry, while regular citizens should build in unwalled timber. Building in masonry was not a Norwegian building practice. Because this construction method was very costly, people defied the Fire Protection Act and built illegally in wood.

A big fire at the docks broke out 10th. October 1708. 60 Sea houses and storage sheds, as well as 40 residential buildings, burned down. This fire was the reason for the king to introduce a fire scheme 24th. February 1714. The scheme gave detailed regulations on the construction methods, fire service and fire tools. The log houses that were built illegally before the fire was replaced with houses built in unwalled timber. More fire-resistant mural materials were prevailing in the cityscape. Stortorvet Guest House is the only surviving example of a building in the Kvadraturen with a wall-walled facade listed under the brickwork of the 1700 century.¹

In 1767, a fire scheme was introduced for all Norwegian cities. This fire scheme was the basis for the arrangement of the fire brigade that we have in Norway today. This fire scheme was first relieved by the "Fire Act of 1908".²



(Schia & Keller 1994: s. 61)
Dense wooden buildings under fire in 1308. Farm owners provide tools and extinguish fire, according to duty from Lagabøter's bylaw



(Hjørnet Kirkegt.- Prinsensgt 1895)
A masonry building with two adjoining log houses in Prinsen gate 22, illustrates that citizens defied King Kristian's masonry force during the construction of new Oslo at Akersneset.



(Roede 2016:s. 88)
Stortorvet's inn in Kvadraturen. The side wings of the building are the only surviving facades with visible timber that were made during the masonry force in the 18th century.

¹ Roede 2016: 88

Brannmuseet 2019

Citizen fire corps:

The fire scheme issued by the King in Copenhagen 24th. February 1714 was the beginning of the Civil Fire Corps in Christiania. All the male inhabitants of the city could be enrolled in the service which accounted for the city's fire preparedness. The Civil Fire Corps got new rules in 1847. The Corps had 1880 men with officers, non-commissioned officers and crew divided into spray Corps and demolition Corps. The spray Corps had deployed hand-powered firefighters in strategic locations in the city, where the crew was distributed as a runway crew, Fire Master, Beam Master, assistant and fire fighters. As with the fire sprays, fire cans were deployed for the Water Corps and Fire chopper for the demolition Corps. As well as ladders axes and lanterns.¹

Fire Guard:

In 1780, a permanent fire guard was established. The fire brigade consisted of ten security guards, which the chief fire officer had under his command during daytime. The security force was located in a dedicated watch room in an older military guard building. The fireguard was at the beginning of the 1800-century staffed up to 20-24 men and patrolled both day and night.²

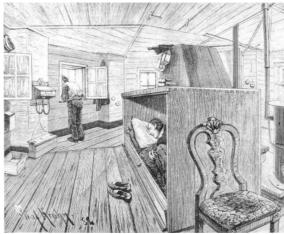
Church towers were used as fire observation points. When a fire was discovered, the watch men rang the bells and hang out a red flag from the church's' towers. In case of big fires, it was shot warning shots from Akershus fortress.

When Our Savior's Church received its new tower in 1851, it was an excellent opportunity to build the Tower Watch Room on the top floor. The octagonal room gave a good overview and opportunity to detect fire. With simple means the tower guard could identify fire- and smoke development and warn the firefighter through telephone line.³

Permanent Fire Corps:

At night 14th. April 1858 one of the largest fires in Oslo city's history took place. The civilian fire crew took an unusual long time to organize and starting the extinguishing after the fire shots went off. The civilian fire crew proved to be strong in numbers, but ineffective as 41 houses burned down. The civil fire crew showed great unwillingness and reluctance which led to meeting too late by the fire. Thousands of people lost their homes. The fire revealed major deficiencies besides an unwilling fire corps, lousy water supply and leaky wooden pipes. This resulted in the creation of a new and contemporary waterworks. Another fire took place in 1859 which 15 lives were lost, before the city council made a decision to create a permanent, paid fire service in 1860. 1st. January 1861 36 men were distributed to the main Fire Station, Grønland and Sagene. The Civil fire Corps existed as a reserve force until the year of 1894.

The first fire station was completed in the years of 1855-56 in Karl Johans Street. It was built in the Romanesque architecture according to the plans of city conductor Grosch. The stations in Grønland and Sagene were only extra buildings that were leased out to the Fire Corps.⁴ The main fire station was the city's main station for the next 80 years. In 1940 the fire station at Hammerborg was built and became the new main fire station in Oslo.⁵



(Borg 2009: s. 20) Watchtower room, Vår frelsers Kirke



(Borg 2009: s. 94) Main fire station at Stortorvet, 17. mai 1897



(Borg 2009: s. 13) The new main fire station, 1946

¹ Borg 2009: 5

² Borg 2009: 6

³ Borg 2009: 19-20

⁴ Borg 2009: 7-9

Borg 2009:32

OSLO Main Fire Station

Adress: Arne Garborgs plass 1 **Building completed: 1941**Architect: The City Architect

The main fire station's coverage area today is the town hall, Aker Brygge, the Royal palace, St. Hanshaugen, Sofienbergparken, Lodalen, Åkebergveien and the old town down to the sea.¹

When Oslo main fire station was built in 1941, it was planned for war. The station was built in heavily reinforced concrete, fundamental for large shaking and decorated with bricks. The building should accommodate all practical functions for the fire brigade in one place: The administration, the Telegraph guard, technical departments, the civil Air protection Centre command, garage, the radio and hose department, as well as the smoke diving department. The building provided attractive apartments to the administrative managers and key personnel, which in return would make them operational and available at all times. The station's preparedness was good, with full emergency preparedness. For example, the fire manager had an elevator that went directly into his apartment, which during office hours were always available outside his office, ready to bring him down to the fire truck at an emergency.²

The main fire station was never used as planned. Norway was already was occupied in 1941 and the station was used for offices of municipal agencies that had lost their office buildings for German purposes. The fire station, which was originally planned in detail for fire-related work was too small and never worked as planned. The fire school, established during the war, had classrooms and offices at the main fire station. When the situation began to normalize and occupants moved out of the offices at Hammersborg, the time had run out for the station. There was a need to reorganize and rationalize of the functions of the station.³



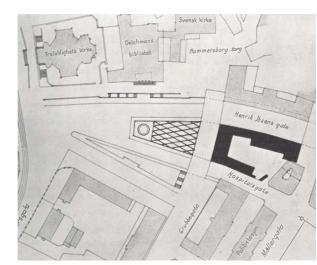
(Harstad 1945) Oslo Main fire station, with almost perfect emergency conditions and front square



(Oslobilder 1942) Fire stations exercise pool and Hammersborg park



(Harstad 1950) Deichmanske main library, and Trefoldighets church



(LPO: s.38)
Situation plan, front square with good emergency conditions

Per Borg describes the environmental qualities of Oslo main fire station and Arne Garborgs Place as special before the station was laid under cover, when the government quarter was built. The station had a front with 6 emergency gates against a square with cobbled stone, and emergency conditions described as almost perfect by Borg. At the end of the cobbled front square stood a large fountain with water-spraying "jet-pipes" that the station used as a practice pool. Close the fountain was a small park and all summer the kids came from Hammersborg and played at the big fountain and on the green lawn. The station was described as the public-friendly and open.⁴

On one side of the station was the Military Hospital with magnificent flowerbeds and on the other side was the Deichmanske Library.⁵

Brann- og Redningsetaten 2011

² Borg 2009: 89-90

³ Borg 2009: 90

⁴ Borg 2009: 92

⁵ Borg 2009: 91

BRISKEBY FIRE STATION

Address: Industrigata 3 **Building completed: 1963**

Architect: Sverre Marstein at the city Architect's office

Briskeby Fire station's coverage area today is mainly the area west of Oslo City Hall, Bygdøy, Skøyen, Frognerparken, the Pilestredet to Parkveien. When the fire station was built in 1963, it was planned to take over the emergency response from the stations at Hegdehaugen and Solli on the west side of Oslo.

Briskeby fire station was apart from the main fire station at Arne Garborgs Place, the first modern fire station within the old city limits. Everything was adapted to the operational and technical needs. The paper, Morgenbladet, describes the station consisting of a "main-building" offices, welfare rooms, classrooms, technical facilities and garage with automatic exit gates. The building should also accommodate the smoke diving department with its laboratory, added to Briskeby for practical reasons and separated from the daily operations.

A huge gym was described as the station's pride. The hall, built on the entire 220 sq. m., with high ceilings and equipped with a stage and a machine room for display of film. It was planned to be able to accommodate teaching and the station had a classroom that the fire school would use, and room for practical exercises was important. The hall was also planned to be rented out if possible. The reporter of the paper described the fire brigade as interested in this, but that it would not be done to a large extent. The gym was built with a small gallery and fitted with wardrobes and showers.

Offices, guard rooms and welfare rooms were placed in the building's 1st floor. The rooms were described as very simple but functional i design. Both the the welfare rooms, as well as a hobby rooms were equipped for carpentry and motor repairs. In this way the crew could lower their shoulders and use the time on duty when there was no other action in a meaningful way. A well-equipped kitchen was also important since the crew could not leave the station.

Fire Master Borge stresses how well the Briskeby fire station covered the crew's needs, comparing the conditions they had had at Hegdehaugsveien Fire Station when he joined the agency in 1927. "We had two small rooms where we both ate, slept and washed ourselves with cold water. It was O.K. in a way, but it is clear that it seems history when looking at what our crews are doing today. It is not luxurious at Briskeby Fire Station, but the station is well planed and covers our needs"

The command room that received messages via the main station was located overlooking the garage and with a radio connection all over the house. Behind the station there was located a training area. This space was large enough to be used by both regular crew and fire school students, and had also a practice tower that both parts used to exercise. The training area functioned as a roof over a large basement, disposed of the civil defense and associated with a sand silo, used by the Public Road Company. The paper Morgenbladet described that the building functions were planned as a whole unit, and not interfering with the environment. Also, the Fire Master housing was integrated in the plan. The residence was a horizontal divided villa with two apartments, adapted into the existing residential environment that existed around the station.²



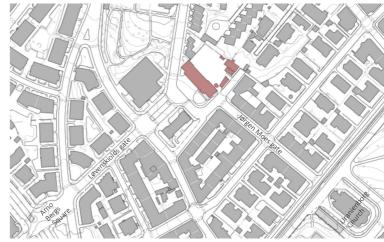
(Foss 2016)
Car gates mark at the top of a gentle hill the end of Løvenskiolds gate. Strategic location with good emergency conditions.



(Centric 2007)
Main entrance facing Uranienborg Church



(Lange u.å.)
Sightline towards Uranienborg Church.



Situation plan, The station marks an en end of Jørgen Moes gate and Løvenskiolds gate.

¹ Brann- og Redningsetaten 2010

² Morgenbladet 1963: 5

GRORUD FIRE STATION

Address: Lower Rommen 2 Building completed: 1973

Architect: Odd Østbye, Tore Kleven and Øyvind Almaas (ØKAW)

Grorud Fire Station's coverage area today is Groruddalen north of Nedre Kallbakkveien and right up against the city border in the north towards Nittedal, Skedsmo and Lørenskog. The station is equipped to handle forest fires and serves as a backup station for the rescue Department of the Main Fire Station. When the station was built in 1973, it was to secure the growing population of Groruddalen.¹

When the station was built, the plot was limited by the road Fossumveien, road Nr 5357, the Metro and a new industrial area. The western part of the area was impossible to build up on due to power lines. The fire station and the District Centre for technical agencies demanded large areas for the fire crew's exercises, storage and parking, which were located in front of the building south on the plot.²
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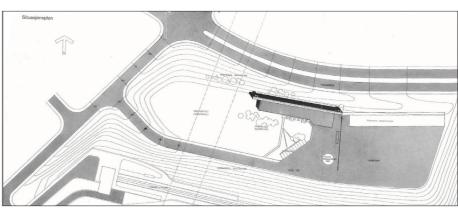
The station relates to the given situation by constructing a huge, curved concrete wall that function as a noice shields to the heavy traffic. The curved concrete wall captures the light from the south and opens with a transparent façade with both living rooms and functional rooms facing the the view from the front room.

ØKAW writes in the project that the building is drawn with a "technical" touch outward. Ventilation ducts are not exposed, but have a precise design, and are located as beautiful, proportional objects, where the building function provides a richness to the closed functional, concrete façade. The curvatures of the roof, with its function to let in the light for the crew rooms, is a practical approach the same way as the ventilation ducts functions. It gives an aesthetic look to the building.

In order to maintain the technical touch, but at the same time give the station an atmosphere of being a "home", which the fire officer could identify with, the main façade is dressed in aluminum plates with a plastic core. The aluminium plates are internally covered with pine veneer. Also, the curved concrete wall is covered inside with the pine veneer, which heats the light that radiates it. The architects allowed the steel structure to be part of the detail design both inside and outside of the building. The steel construction opens up to the front square in contrast to the heavy concrete façade at the rear edge. The fire station's convenient function became easy to see through the transparent façade. Ulf Grønvold describes the layout of the rooms, with crew and technical rooms at the rear, embraced by concrete, and functional open spaces in the front with the use of steel, as both heavy and light.³



(Mo 2009)



(Byggedirektøren 1972) Situation plan, turning back against the traffic and opens up towards Groruddalen

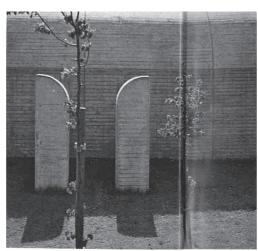
Brann- og Redningsetaten 2011

Byggedirektøren 1972: 4

³ Grønvold 1984: 418



(Grønvold 1984: s. 423) Main facade clad in aluminum plates, as well as exterior steel structures maintain a technical "touch"



(Grønvold 1984: s. 423) Proposed ventilation ducts



(Havran 2000) Interior clad in pine veneer heats up the light



(Kvalviknes 1970) Steel structures inside, exposed through car gates



Detailed steel structures inside



SMESTAD FIRE AND AMBULANCE STATION

Address: Dalsveien 1 **Building Completed: 2011**Architect: Link Arkitekter

Smestad's coverage area is the district from Frognerparken to Sognsveien, and all the way to the city border west towards Bærum municipality. Smestad Fire and ambulance station is Oslo municipality's only station where the two emergency services are located together. The two agencies share some common areas, but are located on each floor, have separated emergency services and wagon halls. The fire department uses 2/3 of the building, because the fire department at Smestad is responsible for maintenance on cars and smoke diving equipment for the entire fire and rescue agency in Oslo. It requires a lot of space.

The fire and ambulance station are located in the middle of a residential area. Before the fire station was built there was a municipal recycling centre in Dalsveien 1, which was problematic for the residential area. Architect Karlsøen says that the residents therefore were strong opponents in building the new station. The old Smestad Fire Station, which was closed in 2004, was situated one kilometer east of the new station, in the Ullernchausseen 26. The new station at Dalsveien 1 has considerably more traffic and proximity to more housings than the old station.²

In the journal "Mur og Betong" the station is described primarily as very functional. The design of the building is characterized by the shape of the plot, good access, the neighborhood and enough space for the trucks and cars to maneuver. The building follows Dalsveien's curved shape and function as a closed noise shield in both the north and west direction. Except for the gymnasium which has an open, protruded Seder wooden facade with lots of glass. It was given that the building had to follow Dalsveien to ensure that there was enough space at the front of the station to the large emergency vehicles. Entrepreneur and engineer Gunnar M. Backe describes that the plot was challenging to build on due to too little space and the and proximity to the neighbors.³

The building is divided into two sections in order to follow Dalsveien. The curved building contains crew rooms, living rooms and offices, while the rectangular part consists of wagon hall, a garage and and storehouses. Main entrance is placed between the two sections of the building. The rectangular building has a covered space for the alignment of containers. By placing main entrance and crew rooms closest to the entrance from Dalsveien, it gives space to the fire trucks and cars to maneuver.⁴

The square at the forefront of the station that Karlsøen refers to as parking area has a very introvert and closed expression. The front square is encircled by a transparency screen made of wood along the "Solskinnsveien" where the station borders to the existing villa buildings and on the other side to a solid granite wall against the road Ring 3.

Trond Joelson writes in the journal "Byggeindustrien" that there is nothing directly expressed in the building explaining that it is a fire station, if you overlook the gates to the wagon halls. He writes "In the old days, fire stations could be easily identified by the fire hose tower that was used for drying the fire hoses. Today there is fully automatic washing and cleaning machines that do this job". 5



(Karlsøen 2011: s. 15) Curved volume, functions as a noise shield towards Dalsveien.



(Karlsøen 2011: s. 13)
Curved volume with bedroom and living room



(Karlsøen 2011: s. 17)
Rectangular volume with car gates and practical functions



(Karlsøen 2011: s. 13) Situation plan, closed front square

¹ Brann- og Redningsetaten 2011

² Joelson 2011

³ Joelson 2011

⁴ Karlsøen 2011: 12

⁵ Joelson 2011

Society's opinion of the Fire Corps today

The fire station has a vital function for our city and can be seen as a supporting element of the community, with the main task of facilitating the fire officer who will save human life, extinguish fire and prevent our buildings from burning down into ruins.

We have all experienced fire trucks that are driving at great speed and full sirens to perform rescue work. The emergency situation requires the crew to get enough attention so they can escape and perform their work in no time. During any emergency, the time the fire crew could use to move means the difference between life and death or preventing buildings burning down. In a big city like Oslo, with an increasing number of emergency responses, we notice fire trucks on a daily basis.

The location of the stations is essential for the crew to move fast. Although the stations are located centrally in our cities, it is not well known to all residents. The immediate proximity to the traffic hubs, and risky situations, makes the stations largely more isolated from the rest of the city than what they have been before. Per Borg describes in 2008 the Main Fire Station in Oslo as follows: "The station, which was formerly public-friendly and open, has, in a very clear necessity, been given locked doors and gates without the right codes, almost impenetrable to ordinary mortals." Before the government quarter was added to Arne Garborg's place, the main station had a great location with its six emergency gates, with a beautiful, paved square in front, and with emergency conditions that were almost perfect. When the government quarter was built, the wagon halls were put under a traffic lid. Borg describes the situation of the fire station and its working environment as a disaster. Arne Garborgs place was reduced to a dark, dusty traffic tunnel, where a direct exit into Ring 1 now carries risks, because passing cars come at high speed. The station's front space is sharply reduced, and the fountain has been replaced with an air tower.

The new fire station at Smestad is also more introvert in the expression than the old station that was closed in 2004. Where the old station met the city with a front area and a beautiful hose tower, the new station is hidden and introvert in its expression. Briskeby Fire Station is an example of a station that mirrors its building functions in a conscious way, which helps to provide a reciprocity in which both the station and surrounding buildings receive something from each other. This is unlike the Oslo's Main Fire Station today and Smestad Fire and Ambulance station, where the building functions appears to be a barrier and has been wrapped up because of changes in the surrounding environment

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(Oslobilder 1942)

OSLO MAIN FIRE STATION, 1942

The facade opens up with car gates towards Arne
Garborgs square



OSLO MAIN FIRE STATION, 2010
Car gates covered inside a tunnel, when building the government quarter



(Teigens fotoatelier) **OLD SMESTAD FIRE STATION**Ullernchausseen 26, closed down in 2004.

With front square and hose tower facing the road



THE NEW SMESTAD FIRE STATION, 2011Location 1 km west from old Smestad Fire Station. The building body insulates the square with brick façade and stone walls from existing residential buildings and road.

CURRENT SITUATION



(Brann- og redningsetaten 2015: s. 12)

Station structure Oslo municipality:

- 1. Main fire station
- 2. Briskeby
- 3. Sagene
- 4. Bryn
- 5. Smestad
- 6. Kastellet
- 7. Grorud



Station structure in downtown Oslo:

1. Main fire station

- 2. Briskeby
- 3. Sagene
- 4. Bryn

Status of today's fire stations:



1. Main fire station

Closing down to make way for the new Government Quarter. Replaced with a new main fire station at Bryn, as well as a new city center fire station planned in Bjørvika.



2. Briskeby

Planning total rehabilitation of the main building, side buildings, residential area, exercise tower and garage facilities including parking decks.



3. Sagene

Recently rebuilt and underwent exterior and interior rehabilitation, as well as a new roof.



4. Bryn

Demolished for giving space for the new main fire station, incorporated with new offices for the water and wastewater service.



5. Smestad

Built new in 2011, combined fire and ambulance station. Replaced old smestad fire station, which closed down in 2004.



6. Kastellet

Built in 1928, it will undergo minor upgrading in the near future.



7. Grorud

Got a new building on the site that meets the requirements that the existing building dont have capacity to take care of.

TASK DESCRIPTION: FJORD CITY FIRE STATION

Intention:

When looking at the fire station's development, it is noteworthy that the stations have become more introvert in its expression and that functional requirements are more important than the architecture and the station's presence in the city. This may result in worse working conditions for the fire crew and can at the same time influence how people think about and understand the importance of fire safety. I want to explore the fire station where the building's practical and functional requirements do not compromise with central and nice locations and surroundings in the city. The fire station, in my opinion, will be a functional building where the emergency response, fire exercises and fire crew on duty work in a symbiosis with the city centre's population. The fire station building function should seen as both nice and useful in the city centre rather than be associated with blue lights, noise, danger, high speed and wrong located. In this way, our firefighters can gain reputation, be proud of their jobs, and Oslo City gets a fire station that we know, relate to and are proud of.

Establishment of a new Centre station in connection with the relocation of a new main fire station to Bryn:

Oslo Main Fire Station is today in the area planned for the new Government Quarter and must therefore be moved for these reasons:1

- Prevented accessibility by emergency response, as the fire station is incorporated within the Government Quarter's security zone
- Location means that the main fire station shares the same threat picture as the Government Quarter. (example: 22nd of July 2011)
- In the program plan for the Government Quarter project, the Main Fire Station is included for government purposes from the year 2024
- The current situation today where the fire trucks have a direct exit to Ring 1 carries risks, because passing cars comes at high speed.
- Work related to the demolition and construction of the new Government Quarter will weaken the station's ability to cope with emergencies
- The fire station is both technically and functionally outdated.

In an investigation of a new fire structure plan in Oslo, it is concluded that it will be appropriate to move the Main Fire Station to Bryn because it indicated that the population growth will take place south-east in Oslo, in the directions where Bryn is located. Existing stations in the area, Kastellet and Bryn will not have enough capacity to handle emergencies in the future.

Because the existing fire station plot on Bryn is strategically located close to Oslo city centre and the major roads, it will provide flexibility in emergency cases and it is there for a good location for a main fire station.²

When the main fire station is moved out of downtown Oslo, the emergency preparedness of the inner part of downtown Oslo and the harbour area will no longer be secured. Therefore, a new city centre fire station will be needed within easy reach to the port and to the Oslo city centre.³

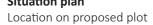
Brann-og Redningsetaten 2015: 13-14

² Brann-og Redningsetaten 2015: 76

³ Brann-og Redningsetaten 2015: 39

Plot proposal in KVU for new city center fire station







Todays situation



Own reasons for choosing the fortress area as a plot:

- Direct exit to the main road network in the city center
- The plot is in a historical context with a protected cultural heritage: The military Hospital, the Harbour warehouse and Akershus fortress.
- Border to the harbour promenade in front. The fire station become visible to the public.
- The plot is also at the forefront of Grev Wedels square which is an attractive park area associated with the military hospital.

Planprogram, new city centre fire station - Proposal done in the KVU

Functions	Capacity	Comments
Garage space big trucks	3	Ladder truck, hose vagon, smoke-/chem/divertruck
Garage space small trucks	2	
Carwash and clean zone	1	Wide car wash hall, clean and dirty zone
Living area firemen	14 people	3 hose vagon, 5 divertruck, 2 laddertruck, 2 harbour car, 2 rescue
Sports and sports hall	14 people	Sportshall 10x20 m + weight room
Cantine	14 people	
Office space	6 people	

(Brann- og redningsetaten 2015: s. 40)

Bibliography

Borg, P. (2009). Brannalarmen går: De gamle brannstasjonene og litt om dagliglivet der. Oslo: Brannmuseet i Oslo.

Brannmuseet (u.å.). Det gamle Oslo. Hentet fra: http://brannmuseet.no/historie/

Brann- og eksplosjonsvernloven. (2002). Lov om vern mot brann, eksplosjon og ulykker med farlig stoff og brannvesenets redningsoppgaver (LOV-2002-06-14-20). Hentet fra: https://lovdata.no/dokument/NL/lov/2002-06-14-20

Briskeby brannstasjon (2010). About. Hentet fra: https://www.facebook.com/Briskeby-brannstasjon-111815248890329/

Grorud brannstasjon (2011). About. Hentet fra: https://www.facebook.com/pg/Grorud-brannstasjon-197145960360046/about/?ref=page_internal_

Grønvold, U. (1984). Mutteren og muren. Byggekunst, 1984(8), s. 417-448.

Grønvold, U. & Havran, J. (2000). Priset arkitektur 1904-2000: Bygninger belønnet med A.C. Houen fonds diplom. Oslo: Arkitekturforl.

Hovedbrannstasjonen (2011). About. Hentet fra: https://www.facebook.com/pg/Hovedbrannstasjonen/about/?ref=page_internal

Joelson, T. (2011, 23. August. Sist endret: 2013, 27. November). Smestad brann- og ambulansestasjon. Hentet fra: http://www.bygg.no/article/76287

Karlsøen, T. (2011). Smestad brann- og ambulansestasjon. Mur+betong, nr. 3-2011, s. 12-17. Hentet fra: https://murbetong.no/wp-content/uploads/converted/joomdocs/1103-smestad-brann.pdf

Morgenbladet. (1963, 18. Februar). Moderne brannstasjon for Oslo Vest, Imponerende anlegg innvies idag. s. 5. Hentet fra: https://www.nb.no/items/d6620fe7d11e4d000af9919e7a09c418?page=3&searchText=briskeby%20brannstasjon

Oslo byggedirektøren. (1972). Byggeprosjekter i Oslo kommune: Grorud Brannstasjon (18). Oslo: Kommunen.

Oslo kommune. (2015, 27. Mai), KVU for fremtidig stasjonsstruktur i Oslo sentrum. Offentlig utredning. Oslo: Brann- og redningsetaten.

Roede, L. (2016, 29. Mai). Creolbyen Christiania: Byggeskikker i en flerkulturell by. Arkitektur N, nr. 8-2015, s. 88. Hentet fra: https://arkitektur-n.no/artikler/kreolbyen-christiania

Schia, E. & Keller, K. (1994). *Middelalderbyen i Oslo: En rekonstruksjon*. Oslo: Wiliam

Smestad brann- og ambulansestasjon (2011). About. Hentet fra: https://www.facebook.com/pg/Smestad-brann-og-ambulansestasjon-215231421883969/about/?ref=page_internal

Illustrations

Centric, M. Briskeby brannstasjon. [Bilde]. (2007). Hentet fra: https://www.flickr.com/photos/16782093@N03/3336497428

Foss, J. A. Briskeby brannstasjon i midten. [Bilde]. (u.å.). Hentet fra: https://hiveminer.com/Tags/nikon1%2Cvisitnorway

Harstad, K. Deichmanske Bibliotek- Trefoldighetskirken. [Bilde]. (1950). Hentet fra: https://digitaltmuseum.no/011014592119/oslo-deichmanske-bibliotek-trefoldighetskirken

Harstad, K. Oslo. Hovedbrannstasjonen, Arne Garborgs plass. [Bilde]. (1945).

Hentet fra: http://www.oslobilder.no/OMU/OB.F04018a?fuzzy=1&query=%22fengsel%22&without_pictures=1&rows=24&sort_by=&page=1&count=280&search_context=1&pos=21

Helliesen, H. L. (1895). Hjørnet Kirkegt.- Prinsensgt. [Maleri]. Hentet fra: https://digitaltmuseum.no/021045471524/hjornet-kirkegt-prinsensgt-papirkunst

Kvalviknes, O. Grorud brannstasjon. [Bilde]. (1970). Hentet fra: http://www.oppdaggroruddalen.no/Omraader/Vestli/Grorud-brannstasjon

Lange, B. Uranienborg kirke. [Bilde]. (u.å.). Hentet fra: https://kiim.net/2013/02/03/frogner/uranienborg/

LPO. Opprinnelig situasjonsplan, Oslo hovedbrannstasjon. [Bilde]. (u.å.). Hentet fra: https://www.regjeringen.no/globalassets/upload/fad/vedlegg/bst/naerliggende omraader.pdf

Mo, Ø. Grorud brannstasjon. [Bilde]. (2009). Hentet fra: https://www.aftenposten.no/meninger/debatt/i/8BJV1/Harverk-pa-Rommen#&gid=1&pid=2

Oslobilder. Arne Garborgs plass brosteinbelagt med grøntanlegg og fontene med lekende og plaskende barn. [Bilde]. (1942). Hentet fra: http://www.oslobilder.no/BAR/A-20145/Uaa/0011/024

Oslobilder. Arne Garborgs plass brosteinbelagt med grøntanlegg og fontene. [Bilde]. (1942).

Hentet fra: http://www.oslobilder.no/BAR/A-20145/Uaa/0011/026?query=oslo+hovedbrannstasjon&page=2&count=121&search context=1&pos=119

Suhr, P. Great fire of Hamburg. [Maleri]. (1842). Hentet fra: https://en.wikipedia.org/wiki/Great_fire_of_Hamburg

Teignes fotoatelier. Smestad brannstasjon. [Bilde]. (u.å.). Hentet fra: http://www.oslobilder.no/KFS/DEX T 0928 004

Wikipedia. Hovedbrannstasjonen sett fra Deichman bibliotek. [Bilde]. (2010). Hentet fra: https://no.wikipedia.org/wiki/Oslo_hovedbrannstasjon#cite_ref-1