#### THE HARBOUR COMMISSIONER'S STUDY

– an exhibition about the Port of Copenhagen based on By & Havn's unique archives



The special exhibition about Lynetteholm is located alongside the Harbour Commissioner's Study, which is By & Havn's permanent exhibition about the Port of Copenhagen.

The Study Collection gives visitors a taste of By & Havn's extensive archive of photographs, drawings, videos and stories. Watch films on the microfilm reader and discover the huge bookcase where rolls and document folders are arranged according to a special division of various districts. Using a touch screen, you can select some of the rolls and 'unfold' their contents on the screen before you. You can, for example, examine the exquisite details in the original drawings of the first Knippel Bridge from 1620, or indeed the most recent version, from 1934.

You can also look at some of the many harbour projects which never came to fruition. What would Copenhagen be like now, for example, if, back in the day, they had carried though plans to construct a broad canal through Amager as the port's primary seaway for cargo ships?

The Study Collection also demonstrates how the geography of Copenhagen has dramatically changed over the years owing to land reclamation.

Discover, among other things, how Frihavnen was established to the north in 1891–1894, Kalvebod was dammed to the south from 1939–1943 and Nordhavn was expanded by a million square meters in 2012–2021.

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### EXCAVATING THE PAST AT LYNETTEHOLM

SINCE SEPTEMBER 2021 - I.E. MORE THAN SIX MONTHS BEFORE CONSTRUCTION WORK AT LYNETTEHOLM STARTED - AR-CHAEOLOGISTS FROM THE VIKING SHIP MUSEUM IN ROSKILDE HAVE CARRIED OUT ARCHAEOLOGICAL INVESTIGATIONS ON THE SEABED AROUND LYNETTEHOLM TO SECURE HISTORICAL FINDS. IN COLLABORATION WITH BY & HAVN, THE MUSEUM'S MARINE ARCHAEOLOGISTS HAVE EXAMINED JUST OVER 2,000 LOCATIONS DURING EXCAVATIONS ON THE SEABED IN THAT PART OF THE PORT OF COPENHAGEN WHERE LYNETTEHOLM IS BEING ESTABLISHED. IN PARALLEL WITH THIS EXCAVATION WORK, THE MUSEUM'S MARINE ARCHAEOLOGISTS HAVE ALSO EXAMINED THE SEABED SOUTH OF PRØ-VESTENEN, WHERE A CHANNEL KNOWN AS 'SVÆLGET' HAS BEEN DEEPENED IN CONNECTION WITH THE CONSTRUCTION OF LYNETTEHOLM.

IN THE AREA NEAR THE PORT OF COPEN-HAGEN, MARINE ARCHAEOLOGISTS HAVE FOUND A MULTITUDE OF MINOR OBJECTS SUCH AS STONE AGE SPLINTERS AND ARROWHEADS AS WELL AS CHALK PIPES, BOTTLES, LIGNITE AND SHOES THAT HAVE PROBABLY FALLEN INTO THE WATER DUR-ING THE MANY DECADES WHEN SHIPS HAVE BEEN LOADED IN THE PORT.

### TWO WRECKS RAISED

AMONG THE MORE INTERESTING FINDS ARE TWO WRECKS THAT WERE FOUND IN THE SAILING CHANNEL. 'SVÆLGET', A GOOD XX METRES FROM LYNETTEHOLM. ONE OF THE WRECKS HAS BEEN DATED AS FAR BACK AS 1329, WHILE THE OTHER, WHOSE HOLD WAS FULL OF BRICKS, IS THOUGHT TO BE FROM THE END OF THE 18TH OR BE-GINNING OF THE 19TH CENTURY. THE RAISING OF THE SHIPS BEGAN IN MARCH 2023, AFTER WHICH THE REMAINS OF THE WRECKS WERE TAKEN TO THE VIKING SHIP MUSEUM IN ROSKILDE. HERE, THEY ARE BEING EXAMINED IN MORE DETAIL TO DISCOVER MORE ABOUT THE HISTORY OF THE SHIP AND COPENHAGEN'S HISTORY AS A PORT CITY.

### ENVIRONMENT

BEFORE THE CONSTRUCTION OF LYNET-TEHOLM WAS POLITICALLY ADOPTED, AN ENVIRONMENTAL IMPACT ASSESSMENT OF THE CONSTRUCTION PROJECT WAS PREPARED IN RELATION TO NOISE, TRAFFIC AND SAILING, AS WELL AS THE MARINE EN-VIRONMENT, WILDLIFE ETC. ASSESSMENTS INCLUDED HOW THE CONSTRUCTION OF THE NEW PENINSULA WILL AFFECT WATER QUALITY AND SUB-SURFACE WILDLIFE, AND WHAT PRECAUTIONS MUST BE TAKEN. WHILE THE WORK TO BUILD AND FILL LYNETTEHOLM IS IN PROGRESS, BY & HAVN WILL CONTINUOUSLY MONITOR THE WATER QUALITY AND ANIMAL AND PLANT LIFE IN THE AREA, TO ENSURE THAT ALL ENVIRON-MENTAL CONSIDERATIONS ARE MET. THE MONITORING PROGRAM IS AN APPROX-IMATELY 30-YEAR PROGRAMME WITH MEASURING STATIONS ON THE SEABED, WHERE NEW KNOWLEDGE AND RESULTS WILL LEAD TO CONTINUOUS ADJUST-MENTS.



### COASTAL LANDSCAPE AS STORM-SURGE PROTECTION

A SPECIAL EXHIBITION ABOUT LYNETTEHOLM



THE HARBOUR COMMISSIONER'S STUDY AND THE SPECIAL EXHIBITION ABOUT LYNETTEHOLM ARE OPEN DAILY FROM 9 A.M. TO 3 P.M. FREE ENTRY

> ADDRESS: NORDRE TOLDBOD 3 1259 KØBENHAVN K TEL: 3376 9800 E: INFO@BYOGHAVN.DK BYOGHAVN.DK/UDSTILLING

PLEASE CONTACT US BY EMAIL IF YOU WISH TO ARRANGE A GROUP VISIT TO THE EXHIBITION.

THE SPECIAL EXHIBITION ARISES FROM THE PARTNERSHIP OF BY & HAVN, DMI AND COWI (AS WELL AS SUB-CONSULTANTS ARKITEMA AND TREDJE NATUR).

### WELCOME TO BY & HAVN'S SPECIAL EXHIBITION ABOUT LYNETTEHOLM

THE EXHIBITION FOCUSES ON HOW COPENHAGEN HAS CHOSEN TO MEET FUTURE CLIMATE CHANGE WITH NA-TURE-BASED STORM-SURGE PROTECTION. A DESIGN WHICH EM-PLOYS LYNETTEHOLM'S STONE DAMS AND COASTAL LANDSCAPE RATHER THAN HIGH DYKES TO PROTECT AND FUTURE RISES IN SEA LEVELS.

#### COPENHAGEN'S NEW PENINSULA

IN JUNE 2021, A BROAD POLITICAL MAJORITY IN THE DANISH PARLIAMENT PASSED THE ACT ON THE CONSTRUC-TION OF LYNETTEHOLM. LYNETTEHOLM WILL CONTRIBUTE TO:



LYNETTEHOLM FORMS ONE STRETCH OF A COMPREHENSIVE STORM-SURGE PROTECTION PLAN FOR THE CAPITAL CITY. THE PENINSULA WILL SERVE AS STORM-SURGE PROTECTION FROM REFSHALEØEN TO NORDHAVN IN THE PORT OF COPENHAGEN.



LYNETTEHOLM WILL BE FILLED WITH SOIL RECYCLED FROM CONSTRUCTION PROJECTS IN AND AROUND COPEN-HAGEN. INCOME FROM RECEIVING THE SOIL ACTUALLY CO-FINANCES CON-STRUCTION OF THE PENINSULA ITSELF.



IN THE LONGER TERM, LYNETTEHOLM IS ENVISIONED TO BE A NEW URBAN DIS-TRICT AS WELL AS THE CITY'S NEW NAT-URAL AREA. THE NEW URBAN DISTRICT WILL ITSELF BE PROTECTED BY THE PENINSULA'S COASTAL LANDSCAPE.

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INFRASTRUCTURE

INCOME FROM THE URBAN DEVELOP-MENT OF LYNETTEHOLM WILL CONTRIB-UTE TO CO-FINANCING THE METRO AND RING ROAD TO THE PENINSULA, WITH VEHICULAR TRAFFIC BEING DIRECTED AROUND CENTRAL COPENHAGEN.

POLITICALLY ADOPTED IN THE ACT ON CONSTRUCTION OF LYNETTEHOLM



# COPENHAGEN'S NEW PENINSULA

ON 4TH JUNE 2021, A BROAD POLITICAL MAJORITY IN THE DANISH PARLIAMENT PASSED THE ACT ON THE CONSTRUC-TION OF LYNETTEHOLM.

THROUGH THE ACT, BY & HAVN RE-CEIVED THE TASK OF CONSTRUCTING LYNETTEHOLM BY FILLING A SPECIFIC AREA IN THE PORT OF COPENHAGEN WITH RECYCLED SOIL FROM THE CITY'S CONSTRUCTION PROJECTS. CONSTRUCTION OF THE PERIMETER OF PHASE 1 WAS COMPLETED IN APRIL 2023 AND WORK ON THE EXTENDED PERIMETER OF PHASE 2 IS EXPECTED TO START IN OCTOBER 2023.

READ MORE ON THE WALL AND WATCH HOW THE WORK ON LYNETTEHOLM IS DEVELOPING: LIVE VIA WEBCAM.

# ENVIRONMENTAL MONITORING

IT IS IMPORTANT TO TAKE GOOD CARE OF THE ENVIRONMENT IN MAJOR CONSTRUCTION PROJECTS. FOR THIS REASON, BY & HAVN CONSTANTLY MONITORS HOW THE CONSTRUCTION OF LYNETTEHOLM AFFECTS THE NATURAL ENVIRONMENT IN THE AREA WHERE BUILDING IS TAKING PLACE. HOW THIS IS DONE HAS BEEN DETER-MINED BY THE AUTHORITIES.

READ MORE ON THE SIGN.

### THE TEAM BEHIND LYNETTEHOLM

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LYNETTEHOLM IS A CRUCIAL PIECE IN THE FUTURE STORM-SURGE PRO-TECTION OF COPENHAGEN, AND EVERY SINGLE DETAIL IN THE PROJECT HAS BEEN DEVELOPED WITH THE ASSISTANCE OF EXPERTS IN THEIR RESPECTIVE FIELDS.

PRESS THE SCREEN AND MEET SOME OF THE MANY EMPLOYEES WHO WORK WITH LYNETTEHOLM EVERY DAY, ENSURING THAT THE PENIN-SULA IS CONSTRUCTED IN THE BEST WAY POSSIBLE.

# COPENHAGEN'S 2 RECLAIMED LAND

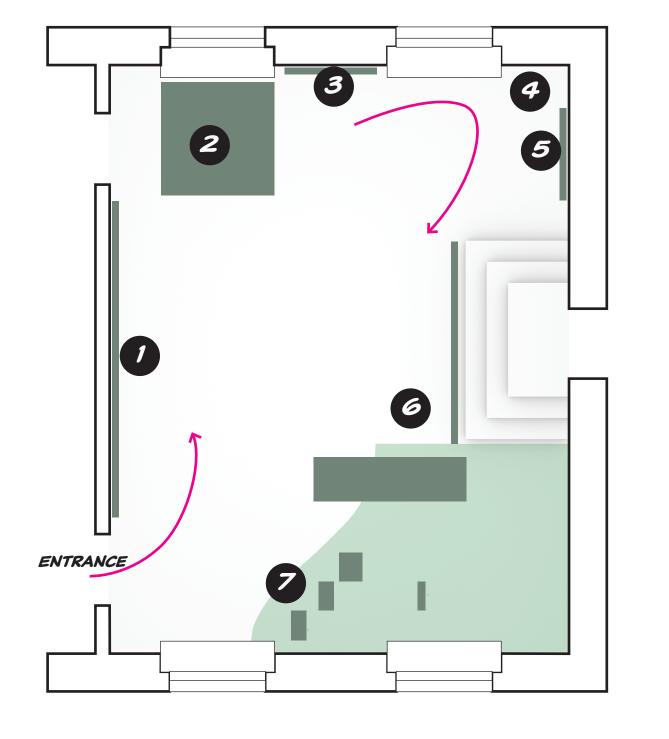
WITH ITS 275 HECTARES, LYNETTE-HOLM WILL BE ONE OF THE LARGEST CONSTRUCTION PROJECTS IN DENMARK'S HISTORY. BUT THE IDEA OF BUILDING LAND ON WATER IS BY NO MEANS NEW. IN FACT COPENHAGEN HAS DEVELOPED IN PRECISELY THIS WAY FOR CENTURIES. TODAY, 11% OF ALL COPENHAGENERS LIVE ON RECLAIMED LAND – AND RECLAIMED LAND MAKES UP 29% OF COPENHAGEN'S AREA AS A WHOLE. SEE THE FLOOR MAP.

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## THE WORLD'S SEA LEVELS ARE RISING

ACCORDING TO THE LATEST FORECASTS, WATER LEVELS IN ØRESUND WILL RISE BY UP TO 60 CM TOWARDS 2100.

SUCH A RISE IN WATER LEVELS WILL HAVE SERIOUS CONSEQUENCES FOR COPENHAGEN, WHERE THE METRO IN PARTICULAR, AND OTHER CRITICAL IN-FRASTRUCTURE, WILL BE THREATENED IF LOW-LYING PARTS OF THE CITY ARE FLOODED.



# COASTAL LANDSCAPE AS STORM-SURGE PROTECTION

THERE ARE MANY WAYS OF MEETING THE CHALLENGE OF PROTECTING CITIES AGAINST STORM SURGES. EVERYTHING FROM TRADI-TIONAL DYKES TO ELEVATED QUAY-SIDES.

LYNETTEHOLM PROVIDES A COASTAL LANDSCAPE WHICH IS DESIGNED TO TAKE THE ENERGY OUT OF THE WAVES. IN THIS WAY, LYNETTEHOLM HELPS PROTECT COPENHAGEN AGAINST FU-TURE STORM SURGES.

READ MORE ON THE WALL ABOUT THE FORECASTS AND LISTEN TO OCEANOGRAPHER JACOB WOGE NIELSEN FROM DMI TALK ABOUT WHAT THEY WILL MEAN FOR COPENHAGEN.



LYNETTEHOLM IS LITERALLY BEING BUILT FROM SURPLUS SOIL FROM CONSTRUCTION SITES IN AND AROUND COPENHAGEN.

HAVING A SOIL LANDFILL IN COPEN-HAGEN MEANS THAT THE DISTANCE THE SOIL NEEDS TO BE TRANSPORT-ED FROM CONSTRUCTION SITE TO LANDFILL IS LIMITED, AND THIS HELPS TO REDUCE THE CO2 EMISSIONS FROM THE TRUCKS THAT TRANSPORT SOIL TO LYNETTEHOLM. SCAN THE QR CODE AND SEE THE ENTIRE SPECIAL EXHIBITION ONLINE.



ON THE LARGE BANNER, YOU CAN SEE HOW NATURE-BASED STORM-SURGE PROTECTION WORKS. THE MODEL SHOWS A SECTION OF THE COASTAL LANDSCAPE, WHILE ON THE SCREEN, LANDSCAPE ARCHITECT FROM COWI, RIKKE FROST GEERT-SEN, TALKS ABOUT HOW THE LAND-SCAPE WILL BE MADE.